U.S. ARMY
ACQUISITION PROGRAM PORTFOLIO

2024

THE ARMY OF TODAY, THE TECHNOLOGY OF THE FUTURE

EDITION: Q3FY24

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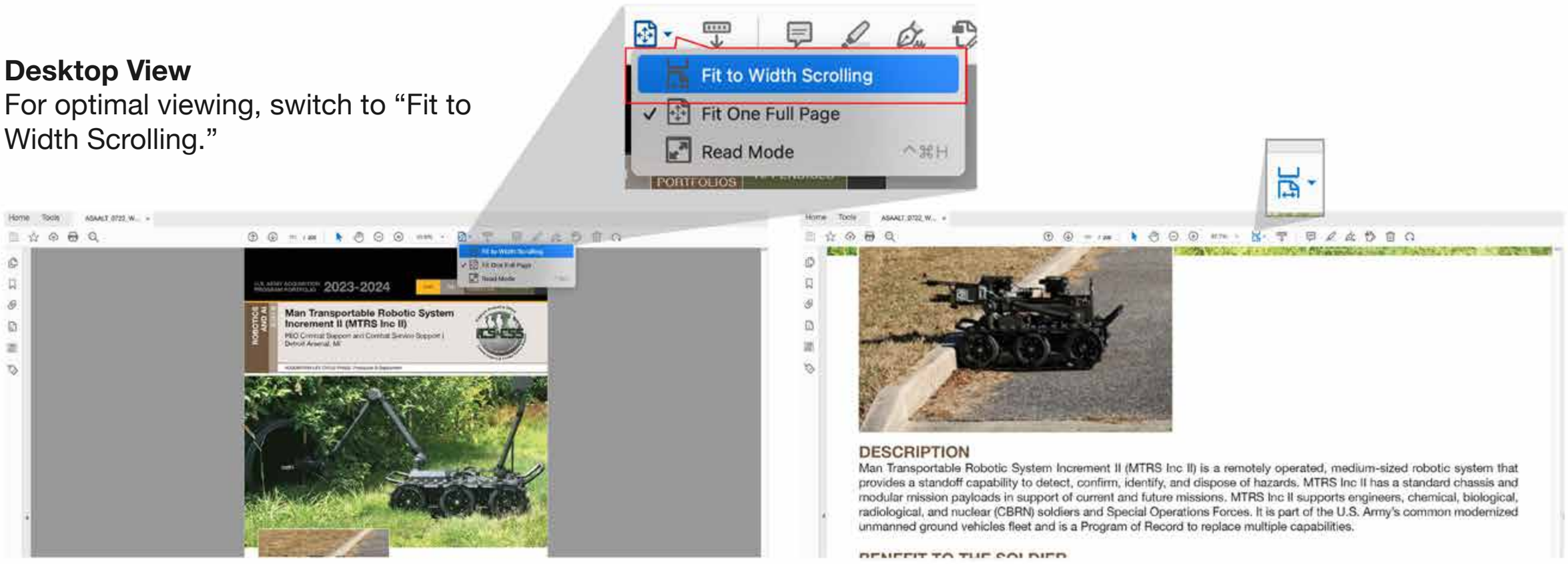

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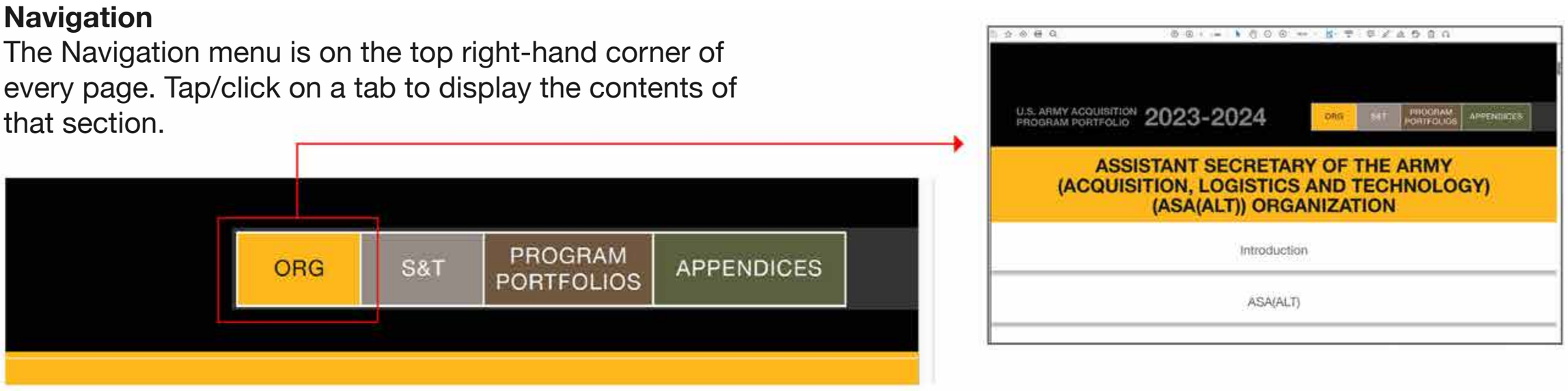

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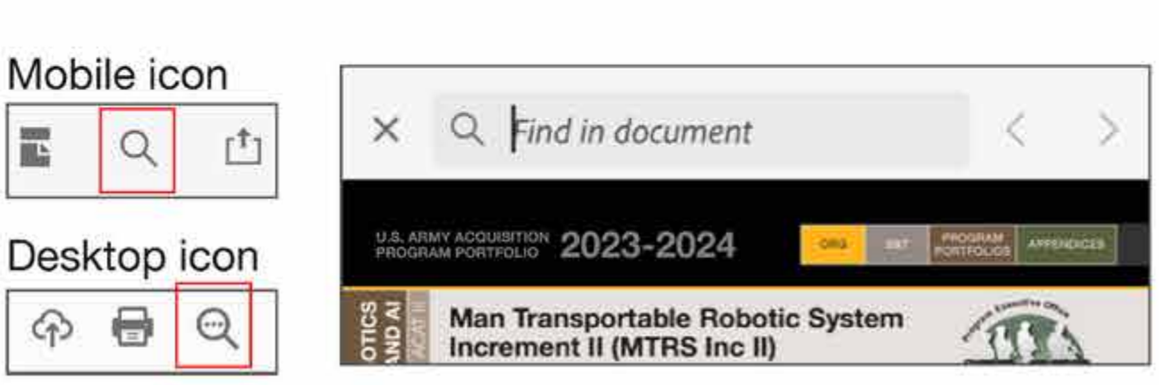


ASSISTANT SECRETARY OF THE ARMY (ACQUISITION, LOGISTICS AND TECHNOLOGY) (ASA(ALT)) ORGANIZATION

SCIENCE & TECHNOLOGY

PROGRAM PORTFOLIOS

AIR AND MISSILE DEFENSE

AMMUNITION

ASSURED MOBILITY

AVIATION

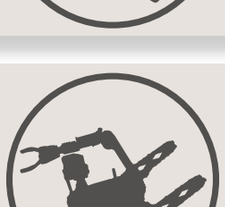
FIRES

INTELLIGENCE

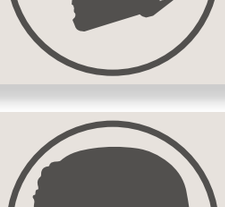
MANEUVER

MISSION COMMAND

PROTECTION



ROBOTICS AND ARTIFICIAL INTELLIGENCE (AI)



SOLDIER

SUSTAINMENT

SYNTHETIC TRAINING ENVIRONMENT

TRANSPORTATION

AIR AND MISSILE DEFENSE

Air and Missile Defense Planning and Control System (AMDPCS)

Army Integrated Air and Missile Defense (AIAMD)
Integrated Battle Command System (IBCS)

Directed Energy Maneuver-Short Range Air Defense (DE M-SHORAD)

Forward Area Air Defense Command and Control (FAAD C2)

Forward Area Air Defense System, Line-of-Sight, Rear
(Pedestal Mounted Stinger) – Avenger

Indirect Fire Protection Capability – High Energy Laser (IFPC-HEL)

Indirect Fire Protection Capability – High Power Microwave (IFPC-HPM)

Indirect Fire Protection Capability Increment 2 (IFPC Inc 2)

Iron Dome Defense System – Army (IDDS-A)

Lower Tier Air and Missile Defense Sensor (LTAMDS)

Maneuver-Short Range Air Defense Increment 3 (M-SHORAD Inc 3)

Phased Array Tracking Radar to Intercept of Target (PATRIOT)
Advanced Capability-3 (PAC-3)

Sentinel Aerial Surveillance Radar – AN/MPQ-64 A3 & AN/MPQ-64 A4
(Sentinel A3, Sentinel A4)

SGT STOUT

Stinger Block I with Proximity Fuze (PROX)

AMMUNITION

Ammunition – Large Caliber

Ammunition – Medium Caliber

Ammunition – Small Caliber

Artillery Ammunition

Artillery Fuzes and Propellant

Cannon-Delivered Area Effects Munition (C-DAEM) – Armor

Simulators, All Types (Battlefield Effects Simulators (BES))

ASSURED MOBILITY

Early Entry Fluid Distribution System (E2FDS)

High Mobility Engineer Excavator Type IV (HMEE-IV)

Military Bridging Systems

Robotic Mine Flail – M160

Small Multipurpose Equipment Transport Increment II (S-MET Inc II)

T-9 Medium Dozer with Winch and Tractor, Full-Tracked, T-9 Medium Dozer with Ripper

AVIATION

Apache Attack Helicopter (AH-64 E)

Black Hawk Utility Helicopter (UH/HH-60M)

Chinook Cargo Helicopter (CH-47F & CH-47F Block II)

Future Long Range Assault Aircraft (FLRAA)

Future Tactical Uncrewed Aircraft Systems (FTUAS)

Gray Eagle Uncrewed Aircraft System (MQ-1C)

High Accuracy Detection and Exploitation System (HADES)

Helicopter Launched Fire and Forget (HELLFIRE (HF))

Improved Turbine Engine Program (ITEP) – T901

Joint Air-to-Ground Missile (JAGM)

Launched Effects (LE) Short, Medium and Long Range (SR, MR, LR)

FIRES

155 mm Excalibur Projectiles

155 mm M777A2 Lightweight Towed Howitzer

Army Tactical Missile System (ATACMS)

Counterfire Target Acquisition Radar (AN/TPQ-53)

Guided Multiple Launch Rocket System (GMLRS) Dual-Purpose Improved Conventional Munition (DPICM)

High Mobility Artillery Rocket System (HIMARS) – M142

Joint Effects Targeting System (JETS)

Long-Range Hypersonic Weapon (LRHW)

Mid-Range Capability (MRC)

Multiple Launch Rocket System (MLRS) – M270A1 and M270A2

Precision Guidance Kit/Long Range – Precision Guidance Kit (PGK/LR-PGK)

Precision Strike Missile (PrSM)

Product Director Paladin (M109A6/M992A2 (A6) and M109A7/M992A3 (A7)

INTELLIGENCE

Distributed Common Ground System – Army (DCGS-A)

Electronic Warfare Planning and Management Tool (EWPMT)

Multi-Function Electronic Warfare – Air Large (MFEW-AL)

Next Generation Biometric Collection Capability (NXGBCC)

Tactical Intelligence Targeting Access Node (TITAN)

Third Generation Forward Looking Infrared (3GEN FLIR)

MANEUVER

Abrams Main Battle Tank

Air Soldier System (Air SS)

Armored Multi-Purpose Vehicle (AMPV)

Booker Combat Vehicle – M10

Bradley Fighting Vehicle – M2A4

Heavy Equipment Recovery Combat Utility Lift and Evacuation System (HERCULES) – M88A2

Infantry Squad Vehicle (ISV)

Robotic Combat Vehicle (RCV)

Stryker Brigade Combat Team (SBCT)

XM30 Combat Vehicle

MISSION COMMAND

Command Post Computing Environment (CPCE)

Command Post Integrated Infrastructure (CPI2)

Defense Enterprise Wideband Satellite Communications System (DEWSS)

Dismounted Assured Positioning, Navigation, and Timing (PNT) System (DAPS)

Global Combat Support System – Army (GCSS-Army)

Handheld, Manpack, and Small Form Fit (HMS)

Joint Battle Command – Platform (JBC-P)

Mounted Assured Positioning, Navigation, and Timing (PNT) System (MAPS)

Mounted Mission Command – Software (MMC-S)

Satellite Communications Family of Terminals (SATCOM FoT)

Signal Modernization (SigMod)

Sustainment Transport System (STS)

Tactical Electric Power (TEP)

Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

PROTECTION

Advanced Anticonvulsant System (AAS)

Aerosol Vapor Chemical Agent Detector (AVCAD)

Antiviral Therapeutics (AV TX)

Chemical, Biological, Radiological, Nuclear Dismounted Reconnaissance Systems (CBRN DRS)

Compact Vapor Chemical Agent Detector (CVCAD)

Joint Biological Agent Decontamination System (JBADS)

Joint Biological Tactical Detection System (JBTDS)

Joint Expeditionary Collective Protection (JECP)

Joint Service General Purpose Mask (JSGPM) – M53A1

Man-portable Radiological Detection System (MRDS)

Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU)

Service Equipment Decontamination System (SEDS)

Tactical Contamination Mitigation System (TCMS)

Uniform Integrated Protection Ensemble Family of Systems General Purpose (UIPE FoS GP)

ROBOTICS AND AI

Common Robotic System – Heavy (CRS-H)

Common Robotic System – Individual (CRS-I)

Man Transportable Robotic System Increment II (MTRS Inc II)

Project Linchpin (PL)

SOLDIER

Advanced Anti-Tank Weapon System – Medium (Javelin)

Common Remotely Operated Weapon Station (CROWS) – M153

Enhanced Night Vision Goggle – Binocular (ENVG-B)

Family of Weapon Sights – Crew Served (FWS-CS)

Integrated Visual Augmentation System (IVAS)

Mortar Weapon Systems

Nett Warrior (NW)

Small Arms – Crew Served Weapons (CSW)

Soldier Borne Sensor (SBS)

Soldier Protection System (SPS)

SUSTAINMENT

Force Provider Expeditionary (FPE)

Rapid Opioid Countermeasure System (ROCS)

SYNTHETIC TRAINING ENVIRONMENT

Cyber Environment Replication (CER)

Future Army System of Integrated Targets (FASIT)

Instrumentable-Multiple Integrated Laser Engagement System (I-MILES)

Intelligence and Electronic Warfare Tactical Proficiency Trainer Increment 1/Increment 2 (IEWTPT Inc 1/Inc 2)

Joint Land Component Constructive Training Capability (JLCCTC)

TRANSPORTATION

Army Watercraft Systems (AWS)

Enhanced Heavy Equipment Transporter System (EHETS)

Family of Medium Tactical Vehicles (FMTV) – A2

Joint Light Tactical Vehicle (JLTV)

Palletized Load System and Palletized Load System Extended Service Program (PLS/PLS ESP)

APPENDICES

Glossary of Terms

Points of Contact

Systems by Contractor

ASSISTANT SECRETARY OF THE ARMY (ACQUISITION, LOGISTICS AND TECHNOLOGY)

ASA(ALT)

ORGANIZATION

Introduction

The U.S. Army Acquisition Program Portfolio features several of our major weapon systems, equipment programs, and science and technology initiatives that are vital to today's military operations, as well as our efforts to deliver the Army of 2030 and beyond.

As outlined by the Army Acquisition Executive, our priorities are clear:

- Focus program execution on the rapid and responsible delivery of a sustainable capability to soldiers who operate as part of the Joint Force;
- Work to improve policies and practices regarding the acquisition of software;
- Heighten security in acquisition, especially cyber and supply chain security;
- Integrate realistic operational testing into Army programs, including rigorous cyber testing; and
- Ensure that our modernization efforts are closely coordinated with Congress.

Our focus across the Army Modernization Enterprise is on cooperation, coordination, and unity of effort.

This resource will give you a better understanding of our tireless efforts to provide soldiers with the most advanced capabilities while remaining mindful of our responsibility to America's taxpayers. Your feedback is welcome at usarmy.pentagon.hqda-asaalt.list.communications@army.mil.

Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT))

The Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT)) is a Presidentially appointed, Senate-confirmed position charged with three statutory roles: (1) the ASA(ALT), (2) the Army Acquisition Executive, and (3) the Senior Procurement Executive. Additionally, as prescribed in Department of the Army General Order 2020-01, the ASA(ALT) serves as Science Advisor to the Secretary of the Army and Senior Research and Development Official for the Army.

The Office of the ASA(ALT) is the single office for the acquisition function in the Headquarters, Department of the Army, and is subject to the authority, direction, and control of the Secretary of the Army to provide the Chief of Staff, Army support for acquisition matters.

ASA(ALT)'s 12 Program Executive Offices, 7 Deputy Assistant Secretaries, the Deputy for Acquisition and Systems Management, and 2 direct reporting units (Rapid Capabilities and Critical Technologies Office and U.S. Army Acquisition Support Center) operate in 6 locations nationwide.

ASA(ALT)'s team of skilled and dedicated acquisition experts seeks, develops, fields, and sustains effective capabilities that provide unmatched advantage across the competition continuum, enabling the Army to deter, fight, and win as part of the Joint Force today, in the Army of 2030, and beyond.

ASA(ALT) as the Army Acquisition Enterprise is focused on delivering the Army of 2030 and beyond by:

1. Modernizing, equipping, and sustaining the Army of 2030 to successfully conduct Multi-Domain Operations as part of an integrated, Joint Force

2. Executing all statutory and regulatory acquisition and procurement responsibilities

3. Fostering a diverse and professional workforce that enables an agile and innovative Acquisition, Logistics and Technology Enterprise

4. Cultivating better-equipped, capable, and interoperable Allies and Partners

ASA(ALT) Mission

Continuously modernize the U.S. Army, as part of the Joint Force, through rapid and timely development and delivery of soldier capabilities that deter adversaries and win our Nation's wars.

ASA(ALT) Vision

A premier team of multiple discipline professionals integrated and effectively operating across the spectrum of the Army Modernization Enterprise to ensure land and cyberspace dominance for the United States, our partners and allies.

ASA(ALT) Organization Chart

ASA(ALT)
Army Acquisition Executive &
Senior Procurement Executive

Deputy Chief of Staff
G-4

Deputy Chief of Staff
G-6

Chief Information Officer

Principal Military Deputy
& Director, Army Acquisition Corps

Principal Deputy

Sergeant Major

Deputy Assistant Secretary of the Army, Sustainment

Deputy Assistant Secretary of the Army, Defense Exports & Cooperation

Deputy Assistant Secretary of the Army, Plans, Programs & Resources

JPEO
Armaments & Ammunition

PEO
Aviation

PEO
Command, Control Communications–Tactical

PEO
Combat Support & Combat Service Support

Deputy Assistant Secretary of the Army, Research & Technology

Deputy Assistant Secretary of the Army, Procurement

Deputy for Acquisition & Systems Management

PEO
Enterprise Information Systems

PEO
Ground Combat Systems

PEO
Intelligence, Electronic Warfare & Sensors

PEO
Missiles & Space

Deputy Assistant Secretary of the Army, Strategy & Acquisition Reform

Deputy Assistant Secretary of the Army, Data, Engineering, and Software

PEO
Soldier

PEO
Simulation, Training & Instrumentation

JPEO
Chemical, Biological, Radiological & Nuclear Defense

Army Rapid Capabilities & Critical Technologies Office

Director
U.S. Army Acquisition Support Center

PEO
Assembled Chemical Weapons Alternatives

Deputy Assistant Secretaries of the Army (DASAs) and Deputy for Acquisition and Systems Management (DASM)

DASA for Acquisition Policy and Logistics (APL) develops and oversees Department of the Army life cycle logistics policies and procedures for total life cycle systems management of weapon and support systems. DASA(APL) is also assigned the role of Army Corrosion Control and Prevention Executive, and through the Environmental Support Office, provides expertise in environmental, safety, occupational health, energy, and corrosion control and prevention.

DASA Data, Engineering, and Software (DES) delivers acquisition systems engineering governance to the Army by synthesizing systems engineering best practices across the Program Executive Offices (PEOs) in support of ASA(ALT)'s mission. DASA(DES) is the Army Acquisition Executive's trusted agent in assessing and providing recommendations to programmatic and technical reviews in support of Milestone Decision Authority (MDA) and other investment decisions.

DASA for Defense Exports and Cooperation (DE&C) sets the strategic direction, develops policy, resources, and leads the Army's security assistance program, including Foreign Military Sales, export policy, and technology transfer. DASA(DE&C) also executes the Army's responsibilities to protect military technologies and prevent unauthorized proliferation of weapons, intellectual property, and sensitive information, ensuring that U.S. defense companies can compete in the global marketplace while maintaining our technological edge.

DASA for Plans, Programs and Resources (PPR) serves as Chief Financial Officer and Principal Advisor to the ASA(ALT) on budgetary and financial matters relating to Research, Development, Acquisition, and Operations and Maintenance for Army acquisition programs. DASA(PPR) plays a critical role in developing and implementing reform initiatives where efficiencies can be made to ensure sustainment of current systems through useful life while enabling Cross-Functional Teams to develop requirements for next generation systems.

DASA Procurement (P) serves as the Principal Advisor for Procurement to the ASA(ALT), executing the full range of responsibilities for the Senior Procurement Executive, Functional Chief, and the Senior Official for the Acquisition of Services. DASA(P) leads the contracting community of practice, which is comprised of more than 8,500 contracting professionals, both military and civilian.

DASA for Research and Technology (R&T) is the senior official responsible for oversight of science, research, and technology within the Department of the Army. DASA(R&T) serves as a science advisor to the Secretary of the Army and represents the Army in science, research, and technology matters to DOD, Congress, and non-DOD partners. DASA(R&T) is also responsible for Technology Readiness Assessments of Army Major Defense Acquisition Programs, advising the MDA at Milestone B in the determination of whether program technologies have acceptable levels of risk.

DASA Strategy and Acquisition Reform (SAR), working collaboratively with other elements of the modernization enterprise, is charged with developing long-term institutional transformation to meet the Secretary of the Army's Modernization, Readiness, and Reform Priorities. DASA(SAR) has principal responsibility to design and implement acquisition reform and modernization initiatives across the total life cycle of the Army's weapon and support systems to ensure continued materiel dominance in a near-peer adversary and multi-domain environment.

DASM leads executive program oversight and implementation of acquisition policy for materiel capabilities. DASM office is the direct link between the ASA(ALT) and assigned PEOs. DASM leads the ASA(ALT) portion of Army Program Budget Briefs to defend the Army's budget request to Congressional staffs; plans, executes, reports, and retains statutory and regulatory reviews for all acquisition programs; and assesses emerging status and regulation pertaining to acquisition and systems management to advise the ASA(ALT) and Army leadership.

Program Executive Offices (PEOs)

Joint Program Executive Office Armaments & Ammunition

Picatinny Arsenal, New Jersey

Joint Program Executive Office Armaments & Ammunition (JPEO A&A) leads the development, procurement, and fielding of lethal armaments and ammunition providing Joint warfighters and Allied Partners with overmatch capabilities to defeat current and future threats.

JPEO A&A programs support the Army's Modernization Priorities with active programs in Long Range Precision Fires; Next Generation Combat Vehicle; Future Vertical Lift; Assured Positioning, Navigation and Timing/Space; Soldier Lethality; and Air and Missile Defense Cross-Functional Teams under Army Futures Command.

JPEO A&A is also designated as the Single Manager for Conventional Ammunition (SMCA) Executor. The SMCA objective is to achieve the highest possible level of effectiveness and efficiency in the DOD logistics operations involving acquisition and supply of conventional ammunition to the U.S. Armed Forces.

JPEO A&A's seven subordinate offices conduct life cycle management of more than 600 Army programs, providing the Joint warfighter with superior munitions and armaments through a collaborative effort that leverages Government and industry partnerships. These offices include:

- Project Manager Combat Ammunition Systems (PM CAS)
- Project Manager Close Combat Systems (PM CCS)
- Project Manager Maneuver Ammunition Systems (PM MAS)
- Program Manager for Towed Artillery Systems (PM TAS)
- Project Director Joint Bombs (PD JB)
- Project Director Joint Services (PD JS)
- Directorate of Integration (DOI)

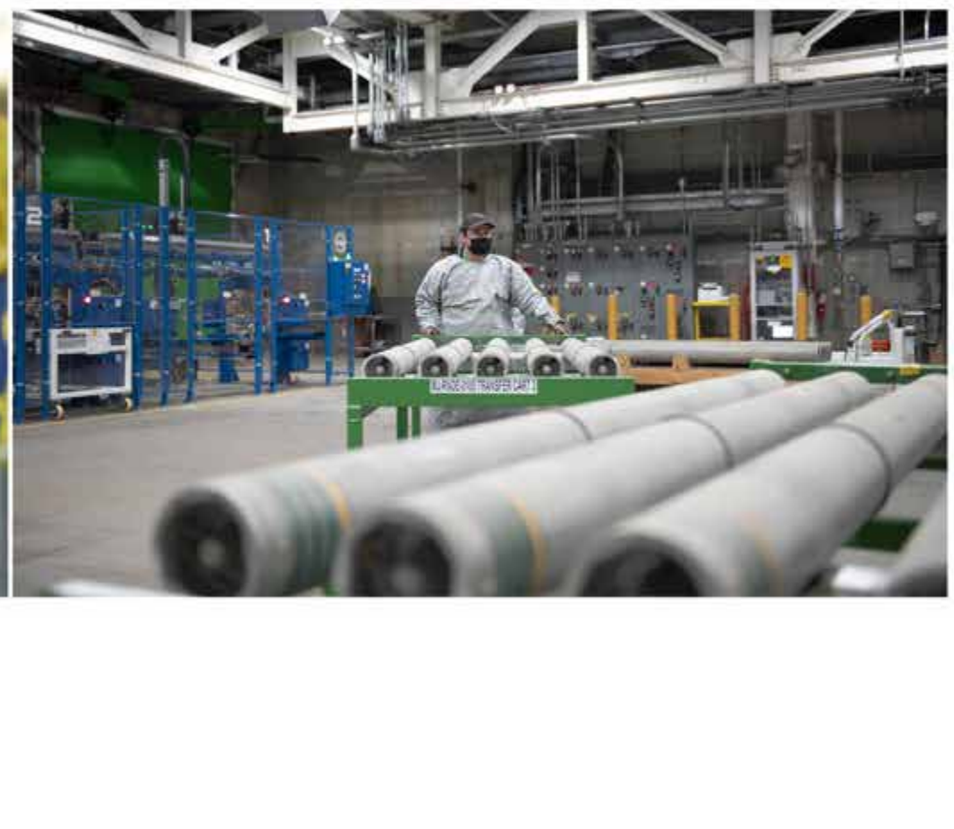


Program Executive Office, Assembled Chemical Weapons Alternatives

Aberdeen Proving Ground, Maryland

Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA) is responsible for the safe destruction of the remaining U.S. chemical weapons stockpile at U.S. Army Pueblo Chemical Depot in Colorado and Blue Grass Army Depot in Kentucky. Additionally, PEO ACWA maintains a supporting field office on Anniston Army Depot in Alabama.

PEO ACWA reports directly to the Under Secretary of Defense (Acquisition and Sustainment) through the Deputy Assistant Secretary of Defense (Threat Reduction and Arms Control), under the umbrella of the Department's Chemical Demilitarization Program as mandated by Congress in Public Law 105-261. After the destruction mission is complete, the program will manage a multiyear closure process.



Program Executive Offices (PEOs)

Program Executive Office Aviation

Huntsville, Alabama

Program Executive Office (PEO) Aviation serves the U.S. Army and the Nation by designing, developing, delivering, and supporting advanced aviation capabilities. PEO Aviation supports Army Readiness and Modernization by leading and executing life cycle management for all Army aviation weapons systems.

PEO Aviation's expertise includes requirements validation, program planning and budgeting, acquisition processes, materiel solution development, systems integration, production, training, fielding, and support for the capabilities the organization manages.

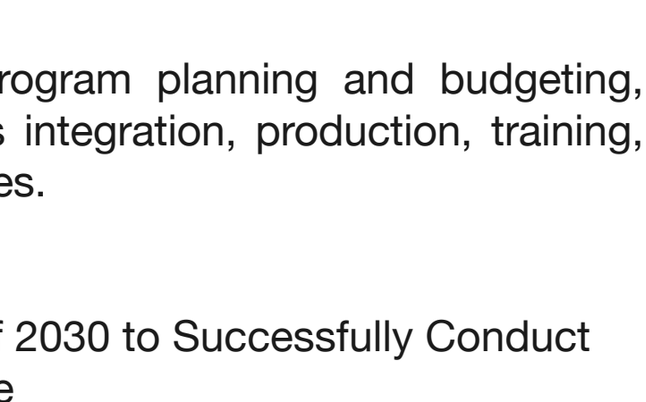
PEO Aviation has three primary objectives:

1. Modernize, Equip, and Sustain the Army Aviation Portfolio of 2030 to Successfully Conduct Multi-Domain Operations as Part of an Integrated Joint Force
2. Cultivate More Equipped, Capable, and Interoperable Allies and Partners
3. Foster a Diverse and Professional Workforce that Enables an Agile and Innovative Acquisition, Logistics, and Technology Enterprise

PEO Aviation evaluates its mission effectiveness to validate the right people, processes, and tools are in place to best enable the workforce. PEO Aviation is committed to ensuring that Army aviation is ready to "fight tonight" even while continuing to design and develop capabilities for the future.

PEO Aviation Project Offices include:

- Apache Attack Helicopter
- Aviation Mission Systems and Architecture
- Aviation Turbine Engines
- Cargo Helicopters
- Future Long Range Assault Aircraft
- Unmanned Aircraft Systems
- Utility Helicopters



Program Executive Office Command, Control, Communications-Tactical

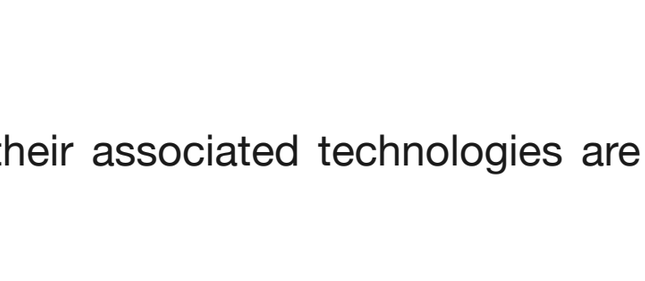
Aberdeen Proving Ground, Maryland

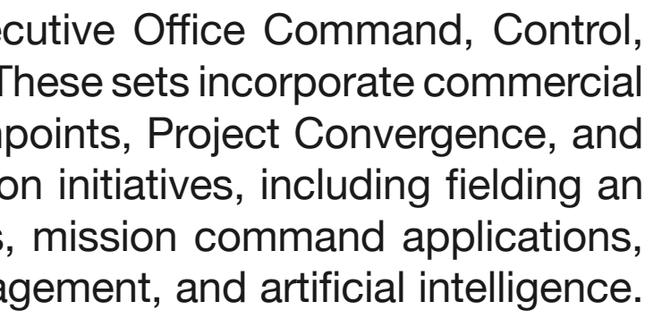
To achieve a unified U.S. Army network, capability sets and their associated technologies are fielded in two-year increments.

Each capability set, developed and managed by Program Executive Office Command, Control, Communications-Tactical (PEO C3T), builds on the previous set. These sets incorporate commercial solutions that are shaped by lessons learned from soldier touchpoints, Project Convergence, and other experimentation. PEO C3T supports network modernization initiatives, including fielding an integrated tactical network, enhanced satellite communications, mission command applications, sensor-to-shooter capabilities, advanced waveforms, data management, and artificial intelligence. PEO C3T is aligned with Army science and technology initiatives for transition into Programs of Record.

Through capability set fielding and development, the Army is enhancing the network to give Commanders multiple communication choices (both military and commercial networks). This approach makes the network more user-friendly, better protected against cyber and Electronic Warfare threats, and easier to share information with Coalition partners. The resulting technologies provide warfighters with improved capabilities and dominance in a contested and congested environment.

To incorporate real-time operational feedback and generate fewer prescriptive requirements, PEO C3T is utilizing the proven industry practice of development security operations and robust operational experimentation, which places developers side-by-side with soldiers in operational units to evaluate potential technology solutions.





Program Executive Offices (PEOs)

Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense

Aberdeen Proving Ground, Maryland

Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND) leads, manages, and directs the acquisition, fielding, and sustainment of CBRN sensors, protective equipment, medical countermeasures, specialized equipment for U.S. Special Forces, integration and information management systems, and defense-enabling biotechnologies.

JPEO-CBRND provides integrated layered CBRND capabilities to the Joint force across Combined Joint All-Domain Operations and focuses on integration initiatives that reduce risk, compress development timelines, and improve acquisition outcomes across the entire organization's portfolio.

JPEO-CBRND has Joint Project Managers (JPM) and Joint Project Leads (JPL) that manage the acquisition of CBRN defense equipment and medical countermeasures, including:

- JPM CBRN Medical
- JPM CBRN Protection
- JPM CBRN Sensors
- JPM CBRN Special Operations Forces
- JPL CBRN Integration
- JPL CBRND Enabling Biotechnologies

The JPMs and JPLs collaborate with internal and external partners to rapidly deliver CBRN defense solutions that are compatible and interoperable with current and future equipment. JPEO-CBRND's partnerships with government, academia, industry, and international allies make it possible to push the boundaries of innovation to quickly find solutions and put new capabilities in the hands of warfighters so they can operate in all denied environments.

Program Executive Office Combat Support & Combat Service Support

Detroit Arsenal, Michigan

Program Executive Office Combat Support & Combat Service Support (PEO CS&CSS) is responsible for the life cycle of approximately 20 percent of the Army's total equipment programs spanning the Engineer, Ordnance, Quartermaster, and Transportation portfolios.

PEO CS&CSS PM offices are: Expeditionary Energy and Sustainment Systems; Force Projection; Joint Program Office Joint Light Tactical Vehicles; Transportation Systems; and Project Lead Integration.

Within its responsibilities, PEO CS&CSS acquisition professionals and their support teams:

- Manage the full complement of processes associated with cost, schedule, and performance of a major portion of the Army's equipment programs
- Tailor and streamline program management initiatives using granted authorities, when appropriate, to bolster warfighter capability by accelerating modernized equipment to the field
- Execute Foreign Military Sales cases within its vast portfolio
- Collaborate with whole-of-DOD enterprise stakeholders and industry partners to assure optimal program management, equipment fielding, training, and support for the Joint warfighter, with a focus on the rapid transition of new technologies whenever practicable
- Consider and assess the complex conditions for modernization impacting PEO CS&CSS programs, including the National Defense Strategy, the Army's digital, climate, and Arctic strategies, the correlation of budget, the Program Objective Memorandum and Strategic Portfolio Analysis Review processes, as well as emerging commercial and organic industrial base considerations

Program Executive Offices (PEOs)

Program Executive Office Enterprise Information Systems

Fort Belvoir, Virginia

Program Executive Office Enterprise Information Systems (PEO EIS) is a critical provider, modernizing and managing the U.S. Army's network and enterprise business systems.

PEO EIS's diverse portfolio of 36 program offices and more than 71 acquisition programs supports and fields Army and DOD communications, logistics, medical, finance, personnel, training, and procurement systems for every domain, branch, unit, and soldier in the Army.

In December 2022, PEO EIS established a Chief Information Office (CIO) to align the PEO with the Army and DOD Digital Transformation Strategies and Priorities. The new CIO function serves to integrate the organization's previously standalone portfolios, the Business Mission Area and Enterprise Information Environment Mission Area. The PEO's six project management office portfolios – including the Army's data, finance and accounting, human capital and logistics, defensive cyber, enterprise services and network modernization-related programs – have been brought together, enabling the project managers to provide integrated solutions in support of the Army Data Plan, Cloud Plan, and Unified Network Plan.

From helping build and defend the unified network, to modernizing enterprise business systems, to providing artificial intelligence/machine learning-capable applications for data-driven decision-making, PEO EIS' solutions enable today's soldiers to become the Multi-Domain Operations-ready force of tomorrow.

Program Executive Office Ground Combat Systems

Detroit Arsenal, Michigan

Program Executive Office Ground Combat Systems (PEO GCS) is responsible for providing soldiers world-class affordable, effective, and sustainable ground combat equipment. Its Combat Vehicle Modernization strategy emphasizes two of the Army's top Modernization Priorities – Long Range Precision Fires and fielding the Next Generation Combat Vehicle.

PEO GCS is building a foundation for improved long range precision fires through the Extended Range Cannon Artillery (ERCA) Family of Vehicles. These vehicles, based on mobility and survivability upgrades to the Paladin M109A7 Self-Propelled Howitzer, will close many artillery capability gaps, and provide an avenue for further increases in range and effectiveness by allowing for future propellant and projectile improvements.

The Mechanized Combat Vehicle – XM30 answers the Army's second highest priority: fielding Next Generation Combat Vehicles. The XM30, a middle-tier rapid prototyping acquisition, will provide Armored Brigade Combat Teams a battlefield maneuver solution for soldiers seeking advantageous positions when involved in close combat. In addition, the XM30 is intended to control robotic and semiautonomous ground systems.

Other new ground combat vehicles include Booker Combat Vehicle – M10, which provides effective hard-hitting firepower that can accompany light maneuver forces on the field. The M10 will be the Army's first newly designed combat vehicle fielded in over four decades.

In addition to development of new systems, PEO GCS manages the modernization of the Army's legacy Combat Vehicle fleet with upgrades to the Bradley Fighting Vehicle, the Abrams Main Battle Tank, combat recovery systems like the M88A2, and the Stryker Family of Vehicles. In every case, PEO GCS is working to improve the ability to host the Army's future network. In cases where platforms cannot be upgraded, PEO GCS is leading the way in making sure obsolete vehicles are replaced with vehicles like the Armored Multi-Purpose Vehicle, which provides significant improvements in protection, mobility, and utility.

Program Executive Offices (PEOs)

Program Executive Office Intelligence, Electronic Warfare and Sensors

Aberdeen Proving Ground, Maryland

Program Executive Office Intelligence, Electronic Warfare and Sensors (PEO IEW&S) delivers sensors as well as processing, exploitation, and dissemination systems dedicated to providing decision dominance. With seven project managers located at Aberdeen Proving Ground, Maryland; Fort Belvoir, Virginia; and Redstone Arsenal, Alabama, the PEO for IEW&S leads a team that covers the gamut of military needs. As a key enabler for Multi-Domain Operations, the organization sits at the crossroads of multiple Army Modernization efforts.

PEO IEW&S' diversified portfolio supports a wide range of organizations throughout the Army and Joint partners, including the Army G2, Army CYBER Command, Cyber Center of Excellence (CoE), Commanding General Intelligence CoE, Intelligence and Security Command, Space & Missile Defense Command, Combat Capabilities Development Command (CCDC) Command, Control, Communications, Computers, Cyber, Intelligence, Surveillance, and Reconnaissance (C5ISR) Center, Army Research Lab, Army Futures Command, and many more.

PEO IEW&S Project Managers (PM) are as follows:

- PM Aircraft Survivability Equipment
- PM Cyber and Space
- PM Electronic Warfare and Cyber
- PM Intelligence Systems and Analytics
- PM Positioning, Navigation, and Timing (PNT)
- PM Terrestrial Sensors
- Project Director (PD) Sensors Aerial Intelligence

Program Executive Office Missiles and Space

Redstone Arsenal, Alabama

Program Executive Office Missiles and Space (PEO MS) is on the cutting-edge of the U.S. Army's Long Range Precision Fires, Air and Missile Defense, Hypersonic, Directed Energy, Counter-Unmanned Aerial Systems, and Aviation and Ground Missiles Modernization initiatives.

Of the Army's Modernization programs, five are managed by PEO MS: Integrated Air and Missile Defense Battle Command System, Precision Strike Missile, Maneuver-Short Range Air Defense, Indirect Fire Protection Capability, and the Lower Tier Air and Missile Defense Sensor. These critical Modernization programs will increase warfighter lethality and enhance force protection throughout the multi-domain battlespace.

PEO MS increases force protection and enhances warfighter lethality by developing, delivering, and sustaining air defense launch platforms and missiles, directed energy, radars and sensors, and command and control systems that provide warfighters with integrated offensive and defensive fires across all domains, beginning with target acquisition and culminating with target defeat.

PEO MS works in collaboration with Army Futures Command, Cross-Functional Teams, Centers of Excellence, other Services, and the defense industry to pursue opportunities for combined research and development on emerging technologies.

Program Executive Offices (PEOs)

Program Executive Office Soldier

Fort Belvoir, Virginia

Program Executive Office (PEO) Soldier rapidly delivers agile and adaptive, leading-edge soldier capabilities to provide combat overmatch today and be more lethal tomorrow. PEO Soldier's focus is making sure soldiers have enhanced capabilities in lethality, mobility, survivability, situational awareness, and sustainment. The PEO treats the soldier as an integrated weapons system and the squad as an integrated combat platform – from their uniforms to their personal protection, to their weapons. Soldiers of the future will have adaptive, agile, modular, and scalable equipment that will be optimized for the mission without sacrificing capability or performance.

PEO Soldier provides soldiers with capabilities designed to attain and maintain overmatch of peer and near-peer adversaries to meet the objectives of the National Defense Strategy. Investments in people and programs enable the organization to be agile and innovative in rapidly delivering capabilities that provide soldiers the decisive edge while also being good stewards of taxpayer funding.

PEO Soldier's Project Management (PM) and Project Director Offices provide the very best equipment to enable mission success.

- Assistant Program Executive Officer (APEO) Future and Integration
- PM Integrated Visual Augmentation System (IVAS)
- PM Soldier Lethality (PM SL)
- PM Soldier Survivability (PM SSV)



Program Executive Office Simulation, Training and Instrumentation

Orlando, Florida

Program Executive Office Simulation, Training and Instrumentation (PEO STRI) is the leader in delivering unmatched testing, training, and information operation capabilities enhancing the execution of more than 2.5 million training events across 260+ acquisition programs each year. The Army's priorities of people, readiness, and modernization are the backbone of the STRI mission.

With a diverse and highly qualified workforce of more than 1,100 military, civilian, and contracted personnel, PEO STRI works with industry, academia, other military services, and government partners to ensure soldiers have the high-fidelity, realistic training, testing, and threat products needed to remain the world's premier land fighting force.

PEO STRI has five Project Manager (PM)/Project Lead (PL) offices that help to align current and future programs with the Army's priorities: PM Synthetic Environment (PM SE); PM Soldier Training (PM ST); PM Cyber, Test and Training (PM CT2); PL Training Aids, Devices, Simulators, and Simulations (TADSS) Support Operations (PL TSO); and PL International Programs Office (PL IPO).

Focused on strengthening collaboration, streamlining acquisition, and investing in people to transform and modernize while building the Army of 2030, PEO STRI's top priorities include:

- Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT)
- Persistent Cyber Training Environment (PCTE)
- Synthetic Training Environment (STE)



Program Executive Offices (PEOs)

Army Rapid Capabilities and Critical Technologies Office

Redstone Arsenal, Alabama

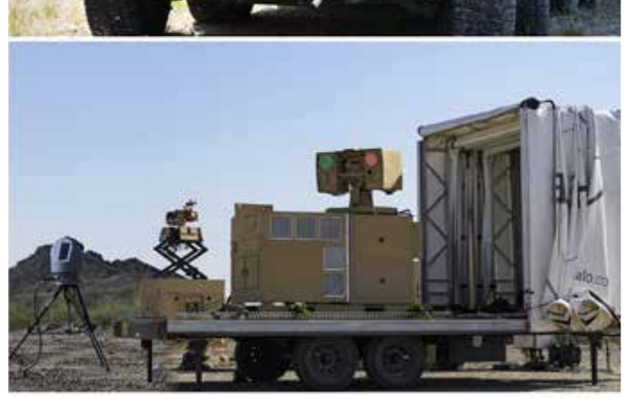
Army Rapid Capabilities and Critical Technologies Office (RCCTO) is chartered to execute rapid experimental prototypes and field combat capabilities. RCCTO delivers rapid prototypes in support of the Army Modernization and National Defense strategies.

RCCTO's efforts include signature outcomes like hypersonics, mid-range capabilities, and directed energy, and critical efforts in emerging and disruptive technology areas such as hybrid electric vehicle technologies and innovative capabilities.

RCCTO's charter allows rapid navigation or exemption from many traditional processes that govern Army materiel development. The organization leverages innovation by other government agencies, industry partners, and warfighter's feedback to deliver solutions on an accelerated timeline.

Early and reoccurring interactions with warfighters during development are critically important to enabling RCCTO to provide prototypes with residual combat capability. These prototypes allow Army soldiers to train with these capabilities.

- Counter-small Unmanned Aircraft Systems (C-sUAS)
- Directed Energy
- Emerging Technologies
- Hypersonics
- Mid-Range Capabilities



RCCTO also serves as the materiel and acquisition lead in support of the Joint C-sUAS Office (JCO), the DOD C-sUAS lead. The JCO, RCCTO, and Services participate in industry demonstrations to evaluate emerging technologies that close gaps, inform requirements, and promote innovation.

U.S. Army Acquisition Support Center

Fort Belvoir, Virginia

The U.S. Army Acquisition Support Center (USAASC) is a direct reporting unit of the ASA(ALT). USAASC enhances the readiness of the Army's warfighter by providing support to the Army Acquisition Workforce as well as the 12 PEOs responsible for the prototyping, procurement, and fielding of equipment for the Army.

USAASC has several key responsibilities, including:

- Conduct the Director of Acquisition Career Management (DACM) mission in support of the Army Acquisition Workforce
- Establish processes that facilitate communication, cooperation, information exchange, and collective decision-making between and among Army organizations, industry, academia, and other governmental entities
- Provide support to PEOs in the areas of resource management, human resources management, and program force structure support; and serve as the higher headquarters for Protection and Security

The USAASC director also serves as the DACM. Within USAASC, the Army DACM Office ensures a highly capable, agile, adaptive, and professional Army Acquisition Workforce in compliance with the Defense Acquisition Workforce Improvement Act.

Partner Organizations

U.S. Army Forces Command (FORSCOM) trains and prepares a combat ready, globally responsive Total Force to build and sustain readiness to meet Combatant Commander requirements. The end state is combat-ready and globally responsive Total Army Forces who are well-led, disciplined, trained, and expeditionary… ready now to deploy and win in Large Scale Combat Operations against near-peer threats.

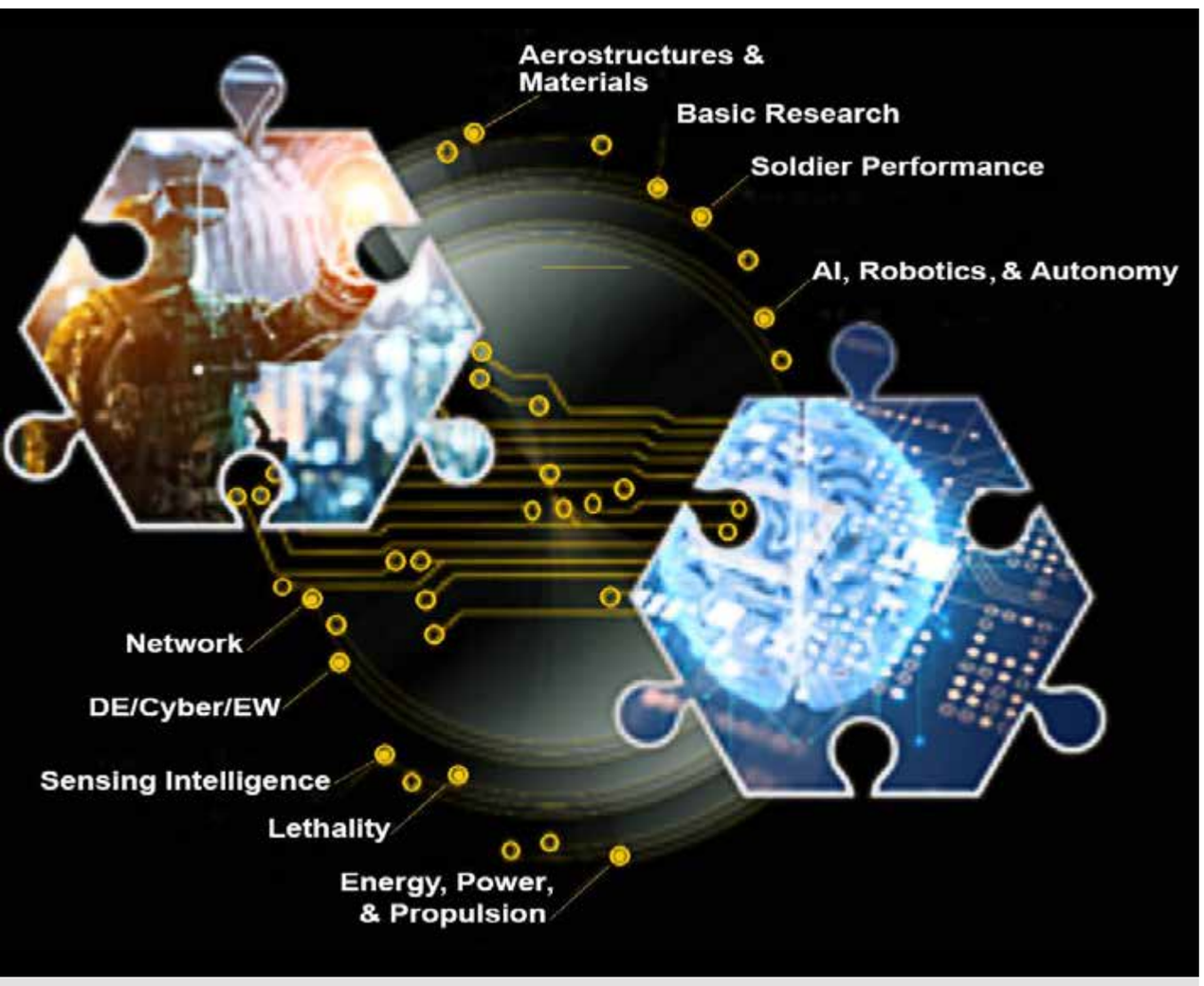
The purpose of the **U.S. Army Futures Command (AFC)** is to transform the Army to ensure war-winning future readiness. AFC develops and maintains the Future Operational Environment that informs Army research, concepts, experimentation, and requirements. AFC works across the Total Army to integrate these essential functions across the Doctrine, Organization, Training, Materiel, Leadership, Personnel, Facilities, and Policy to deliver and design formation-based capability and dominant land forces.

U.S. Army Materiel Command (AMC) is the Army's primary logistics and sustainment command, delivering precision sustainment and materiel readiness to an expeditionary global force from the Joint Strategic Support Area to the tactical point of contact. Installation and materiel readiness are the reasons AMC exists, ensuring the best equipped and sustained fighting force in the world.

U.S. Army Training and Doctrine Command (TRADOC) builds and sustains our highly trained, disciplined, and fit Army by acquiring the best people, training the most lethal Soldiers, developing the most professional leaders, guiding the Army's culture, and shaping the future force. We serve as a conduit bringing together all major commands to shape future Army design(s) and drive change across the Army.

SCIENCE & TECHNOLOGY

U.S. ARMY SCIENCE & TECHNOLOGY



Forging scientific discovery into integrated, transformational technologies to enhance Army and Joint operations.

U.S. ARMY SCIENCE AND TECHNOLOGY (S&T) OVERVIEW

The U.S. Army is committed to ensuring our soldiers remain the dominant land force across the full spectrum of conflict. Building upon this commitment, the Army's Science and Technology (S&T) program focuses on enabling the Army's Modernization Priorities, established by the Secretary of the Army, while addressing the full spectrum of existing and emerging threats to develop capabilities for Army 2040.

The Army S&T vision is to provide soldiers with the capabilities needed to deploy, fight, and win our nation's wars. The future operational environment will demand land power dominance with increased flexibility, adaptability, and speed of responsiveness. To address capability shortfalls and outpace anticipated threats, the Army's S&T program fosters invention, innovation, and demonstration of affordable technology solutions. It matures advanced technologies into cost-effective and sustainable solutions, pursues foundational technology developments and breakthroughs, leverages organic capacity and the capacity of our partners, and invests in fundamental science that will yield decisive advantages in the future.

ARMY S&T ENTERPRISE

The Deputy Assistant Secretary of the Army for Research and Technology (DASA(R&T)) supports the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA(ALT)) as the Service S&T Executive. DASA(R&T) provides Army Headquarters oversight of Research, Development, Test, and Evaluation (RDTE) budget activities (BA) 1-3 (Basic and Applied Research, and Advanced Technology Development) and select 6.4 (Technology Maturation Initiatives, Rapid Defense Experimentation Reserve) and 6.7 (ManTech) efforts. DASA(R&T) also develops and implements policies for the successful management of S&T laboratories, personnel, infrastructure, and technology transfer; governs the RDTE BA3 to BA4 transition process; and develops and defends Army S&T investment strategy.

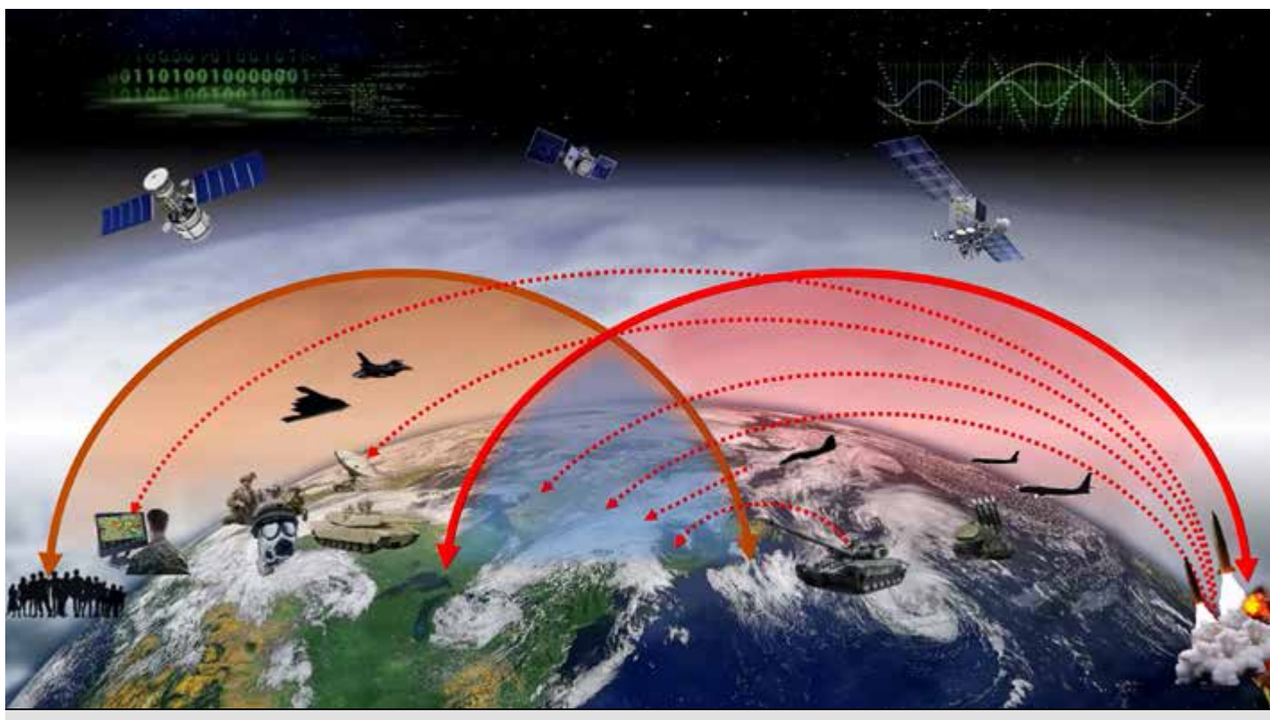
The Army S&T Enterprise spans across four Major Army Commands (MACOM): U.S. Army Futures Command (AFC), U.S. Army Corps of Engineers, U.S. Army Space and Missile Defense Command, and Headquarters, Department of the Army, G-1 (HQDA G-1). Army laboratories reach across 27 U.S. states. The 12 Army Science and Technology Reinvention Laboratories (STRLs) are: AFC Headquarters, U.S. Army Combat Capabilities Development Command (DEVCOM) Army Research Laboratory (ARL), DEVCOM Armaments Center (AC), DEVCOM Aviation and Missile Center (AvMC), DEVCOM Command, Control, Communication, Computer, Cyber, Intelligence, Surveillance, and Reconnaissance Center (C5ISR), DEVCOM Chemical Biological Center (CBC), DEVCOM Ground Vehicle Systems Center (GVSC), DEVCOM Soldier Center (SC), U.S. Army Medical Research and Development Command (MRDC), U.S. Army Research Institute (ARI) for Behavioral and Social Sciences, U.S. Army Space and Missile Defense Command Technical Center (SMDTC), and U.S. Army Engineer Research and Development Center (ERDC).

U.S. ARMY SCIENCE & TECHNOLOGY

U.S. Army Combat Capabilities Development Command (DEVCOM) is comprised of one research laboratory and seven centers, including ARL, Armaments Center, Aviation and Missile Center, Chemical Biological Center, C5ISR Center, Analysis Center, Ground Vehicle Systems Center, and Soldier Center. DEVCOM also has the Army Research Office, which manages the Army's basic and extramural research efforts.

DEVCOM leverages more than 700 Cooperative Research and Development Agreements (CRADAs) and more than 10 formal partnership mechanisms to exchange ideas, bring partners into our facilities, transfer knowledge and technologies, and rapidly explore innovation that meets the needs of the Army and DOD, both today and in the future of Multi-Domain Operations (MDO).

DEVCOM balances its portfolio across the entire capabilities development spectrum, leading efforts in the Army's nine research priorities, delivering the engineering required for new capabilities, as well as developing new technologies that support already fielded systems.

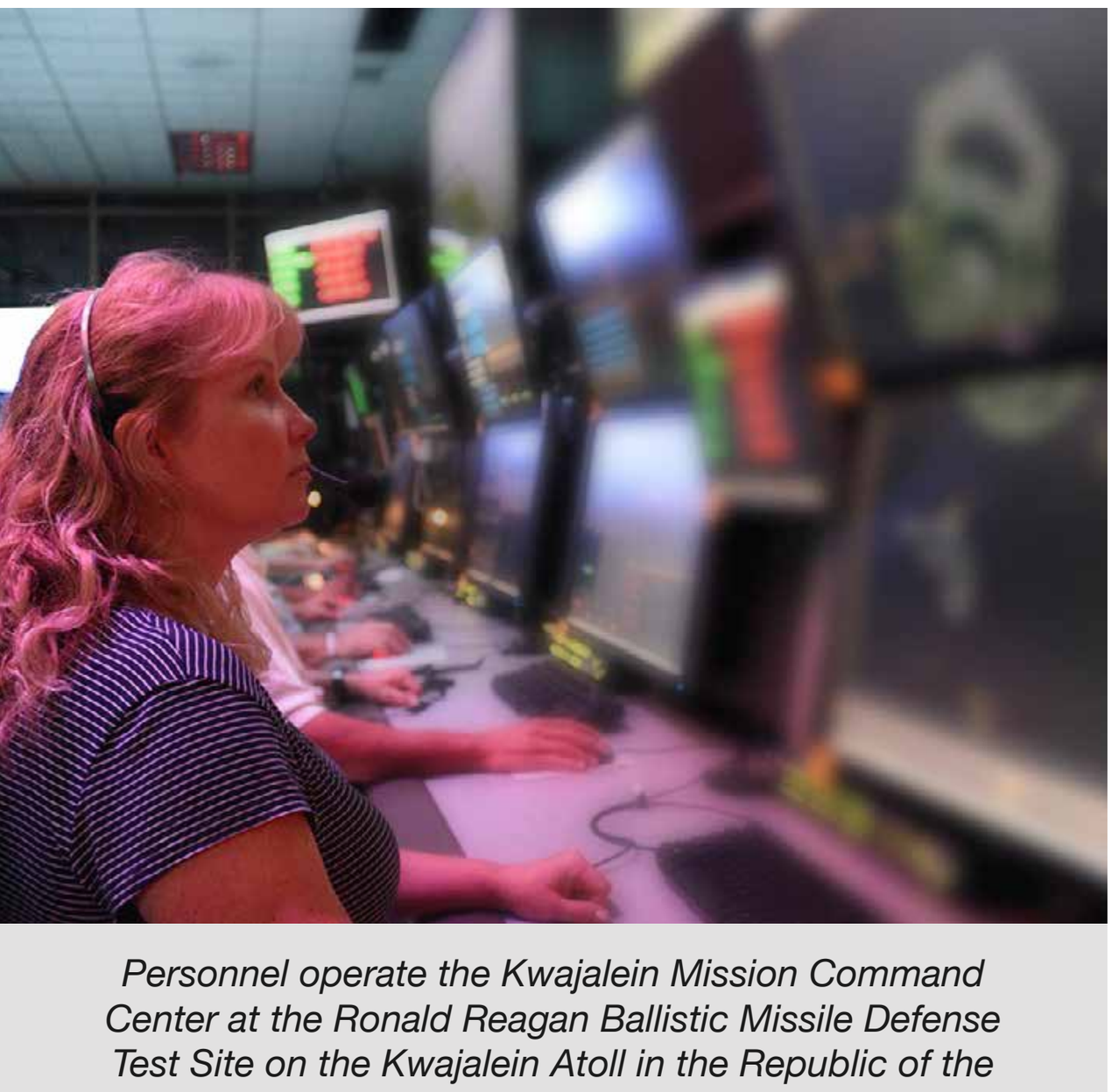


ERDC's geospatial research and engineering competency merges operational environment intelligence with geospatial mapping products to create superior situational awareness. (Photo courtesy of ERDC.)

U.S. Army Research Institute (ARI) for the Behavioral and Social Sciences' S&T research mission is to drive scientific innovation to enable the Army to acquire, develop, employ, and retain professional soldiers and enhance personnel readiness. ARI executes high-risk, high-reward fundamental research to develop state-of-the-art theory, methods, and models for personnel assessment, team and multiteam systems, leadership development, and learning to create the innovative concepts required to support the Army's future capabilities and needs. ARI is on the cutting edge of new analytic and modeling techniques to develop new methods and models of assessment, new approaches to identify current job requirements, and new career progression pathways.

U.S. Army Medical Research and Materiel Command (MRMC) performs core S&T research to develop medical solutions through medical research laboratories and institutes. These laboratories specialize in various areas of biomedical research including infectious diseases, combat casualty care, operational medicine, clinical and rehabilitative medicine, chemical and biological defense, combat dentistry, and laser effects. The laboratories are staffed with highly qualified scientists and support personnel.

U.S. Army Engineer Research and Development Center (ERDC) is the premier research and development center for the U.S. Army Corps of Engineers. ERDC discovers, develops, and delivers innovative solutions to the nation's toughest challenges in military engineering, installations and operational environments, civil works, geospatial research and engineering, and engineered resilient systems.



Personnel operate the Kwajalein Mission Command Center at the Ronald Reagan Ballistic Missile Defense Test Site on the Kwajalein Atoll in the Republic of the Marshall Islands. (Photo by Carrie Campbell, U.S. Army Space and Missile Defense Command.)

U.S. Army Space and Missile Defense Command Technical Center (SMDTC) supports the Joint warfighter by providing science, technology, and developmental and operational test capabilities to enable warfighter dominance today and in the future. As part of the Army S&T enterprise, SMDTC contributes to the current fight and enables the next generation to prevail in conflicts to come. SMDTC focuses on three essential tasks: executing S&T, research and development, and developmental and operational test support. It contributes to the success of the warfighter and Joint force in three major science and technology areas: directed energy, tactical responsive space and high altitude, and hypersonic and strategic weapons.

SMDTC also operates the Ronald Reagan Ballistic Missile Defense Test Site (RTS) on Kwajalein Atoll. As part of the Major Range and Test Facility Base, RTS provides one-of-a-kind sensor capabilities and contributing sensors for 24/7 space domain awareness. Additionally, SMDTC operates state-of-the-art systems integration laboratories and provides low-cost threat representative targets for missile defense testing.

U.S. ARMY SCIENCE & TECHNOLOGY

OVERVIEW OF ARMY S&T INVESTMENTS

The Army Modernization Priorities were established to regain overmatch and attain competitive advantage over emerging threats, competitors, and adversaries. The Army's S&T investments are aligned to address the Army's top modernization challenges to ensure competitive advantage against near-peer threats. These include:

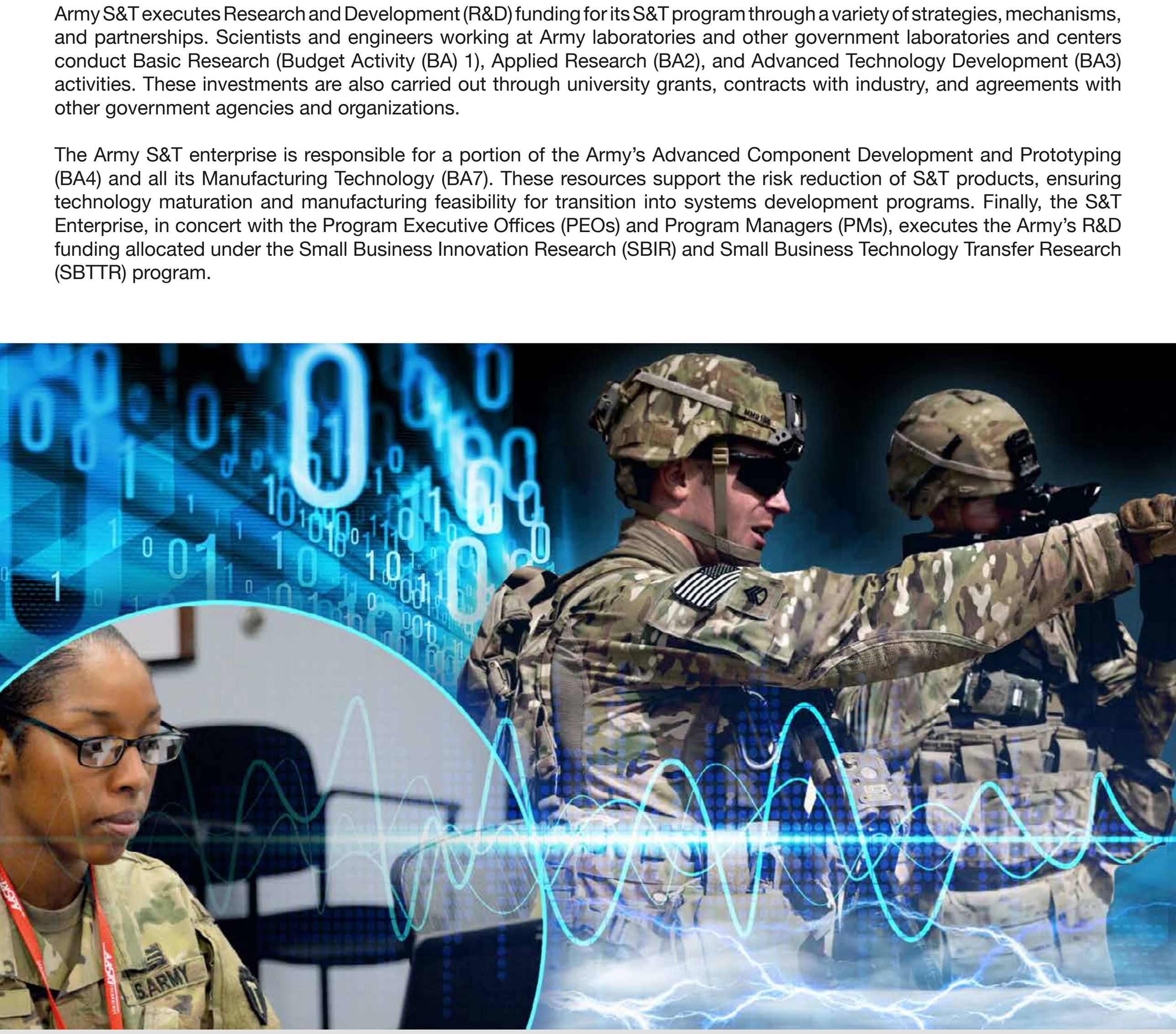
- Weapon Systems (Long Range Precision Fires and Air and Missile Defense)
- Ground (Next Generation Combat Vehicle)
- Aviation (Future Vertical Lift)
- Network Command, Control, Communications, and Intelligence (C3I)
- Soldier Lethality

Additionally, S&T investments that support and enable the current system and subsystems, as well as the Army Modernization Priority areas, include:

- Medical
- Technology Maturation (including Technology Maturation Initiatives: Rapid Defense Experimentation Reserve and ManTech)
- Basic Research

Army S&T executes Research and Development (R&D) funding for its S&T program through a variety of strategies, mechanisms, and partnerships. Scientists and engineers working at Army laboratories and other government laboratories and centers conduct Basic Research (Budget Activity (BA) 1), Applied Research (BA2), and Advanced Technology Development (BA3) activities. These investments are also carried out through university grants, contracts with industry, and agreements with other government agencies and organizations.

The Army S&T enterprise is responsible for a portion of the Army's Advanced Component Development and Prototyping (BA4) and all its Manufacturing Technology (BA7). These resources support the risk reduction of S&T products, ensuring technology maturation and manufacturing feasibility for transition into systems development programs. Finally, the S&T Enterprise, in concert with the Program Executive Offices (PEOs) and Program Managers (PMs), executes the Army's R&D funding allocated under the Small Business Innovation Research (SBIR) and Small Business Technology Transfer Research (SBTTR) program.



Army S&T provides advanced technology to the warfighter. (Photo illustration by Justin Rakowski, U.S. Army.)

U.S. ARMY SCIENCE & TECHNOLOGY

Army researchers, along with their collaborators, develop a novel computational model that allows robots to ask clarifying questions to soldiers, enabling them to be more effective teammates in tactical environments.

ARMY SCIENCE AND TECHNOLOGY PORTFOLIOS

WEAPON SYSTEMS

LONG RANGE PRECISION FIRES

Long Range Precision Fires investments will provide massed and mobile strike options at extended range and greater lethality to restore overmatch, improve deterrence, and disrupt anti-access/area denial (A2/AD) in Multi-Domain Operations (MDO). S&T products include:

- Hypersonic subsystem components
- Guidance and navigation for weapon systems
- Advanced energetics
- Air-breathing ramjet propulsion
- Advanced warheads
- Next-generation radar

Several S&T projects are developing key technologies and components for the Precision Strike Missile (PrSM) Program of Record (PoR), to ensure this system keeps pace with emerging threats.

Land-Based Anti-Ship Missile project delivers sensor and payload component technologies for engaging and defeating land and maritime platforms and systems. The PrSM Modular Payload project will develop and demonstrate enhanced lethality payloads to find and engage deep moved, moving, dispersed, and poorly located targets in areas with contested access, transitioning to future spirals of PrSM.

Long Range Maneuver Fires (LRMF) project will develop and demonstrate extended range missile technology to survive and penetrate future A2/AD environments and increase the operational range. LRMF will also transition technology to the PrSM PoR. Other enabling projects in energetics will improve range, speed, and lethality through new formulations and manufacturing techniques.

Advanced Hypersonics Technology program is developing component technology for the common hypersonic glide body for the Long Range Hypersonic Weapon and future hypersonic capability. Technologies include advanced aerostructures for improved performance, cost, and manufacturing throughput; datalink and dynamic kill chain integration; enhanced guidance, navigation, and control in global positioning system denied environments; and advanced thermal management.

Long Range Precision Fires provide extended range allowing an increased capability to support maneuver and counter enemy long range systems.

U.S. ARMY SCIENCE & TECHNOLOGY

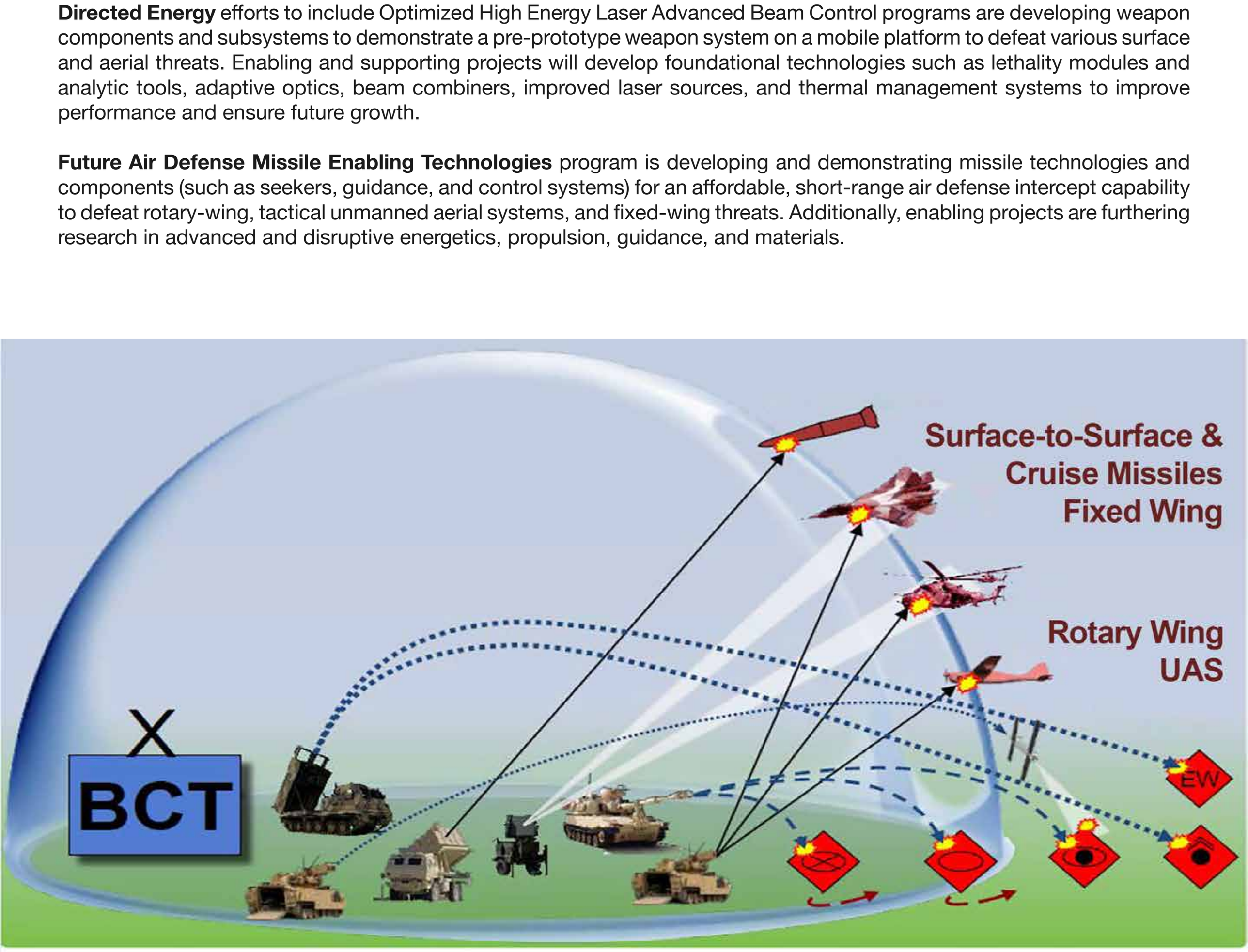
AIR AND MISSILE DEFENSE S&T

Air and Missile Defense S&T investments will increase force protection capabilities against evolving and emerging threats. Research and development transitions to the Maneuver – Short Range Air Defense (M-SHORAD) and Fire Protection Capability programs of record. S&T activities in this area seek to reduce missile defense cost, restore overmatch, survive volley-fire attacks, and operate within sophisticated A2/AD and contested domains, and focus on:

- Counter – small Unmanned Aerial Systems
- M-SHORAD
- Smaller and more affordable missiles
- High-Energy Lasers (HEL)
- Advanced seekers
- Advanced energetics and propulsion
- Next-generation radars and electronic protection

Directed Energy efforts to include Optimized High Energy Laser Advanced Beam Control programs are developing weapon components and subsystems to demonstrate a pre-prototype weapon system on a mobile platform to defeat various surface and aerial threats. Enabling and supporting projects will develop foundational technologies such as lethality modules and analytic tools, adaptive optics, beam combiners, improved laser sources, and thermal management systems to improve performance and ensure future growth.

Future Air Defense Missile Enabling Technologies program is developing and demonstrating missile technologies and components (such as seekers, guidance, and control systems) for an affordable, short-range air defense intercept capability to defeat rotary-wing, tactical unmanned aerial systems, and fixed-wing threats. Additionally, enabling projects are furthering research in advanced and disruptive energetics, propulsion, guidance, and materials.



Air and Missile Defense (AMD) S&T provides the brigade combat team (BCT) the capability to defend against enemy air attack at extended range. AMD detects and defeats enemy air defense threats, resulting in protection of Long Range Precision Fires (LRPF) assets, restored overmatch, and freedom of maneuver.

U.S. ARMY SCIENCE & TECHNOLOGY

GROUND

Ground technology ensures U.S. overmatch in offensive and defensive ground maneuver operations. S&T is focused on enabling crewed and uncrewed ground combat formations to enter austere environments, survive and defeat emerging threats, and sustain an operationally feasible footprint.

S&T investments include:

- Lethal precise overmatch
- Sensing for target engagement, navigation, and situational awareness
- Robotics, autonomy, and human-machine teaming
- Layered and collaborative survivability
  - Enhanced mobility and electrification
  - Force projection and protection

The Army's Ground Robotics and Autonomous Systems' investments develop teamed autonomous combat technologies to engage opposing forces while enabling combat platforms to traverse the battlefield over a variety of terrain, obstacles, and threats. Ground S&T integrates and develops robotic and autonomous ground vehicles able to fight with greater freedom of maneuver and increased standoff. Ground S&T also develops and enables flexible, adaptive, and robust team dynamics between soldiers and uncrewed assets.

Ground survivability efforts focus on avoiding enamy detection, disrupting incoming fires, and minimizing damage. Ground survivability also develops novel technologies to enable cooperative protection and adaptability to complex, emerging, and future threats to ground vehicles.

Ground S&T provides the Army with electrification architectures for silent mobility and watch, increased on- and off-board power, increased operational range, and reduced sustainment. Additionally, ground S&T enables modular open system architectures for power and data, and increases mobility to reduce noise signature, increase durability, and traverse more restrictive terrain.

Ground S&T develops technologies to enable force projection in austere environments with route planning, road assessment, and gap crossing; protection of critical assets and facilities; and detection, neutralization, and mitigation of explosive hazards.

Ground System Active Defense provides layered protection for ground vehicles.

Protection from advanced weapon effects and route planning for Arctic environments.

U.S. ARMY SCIENCE & TECHNOLOGY

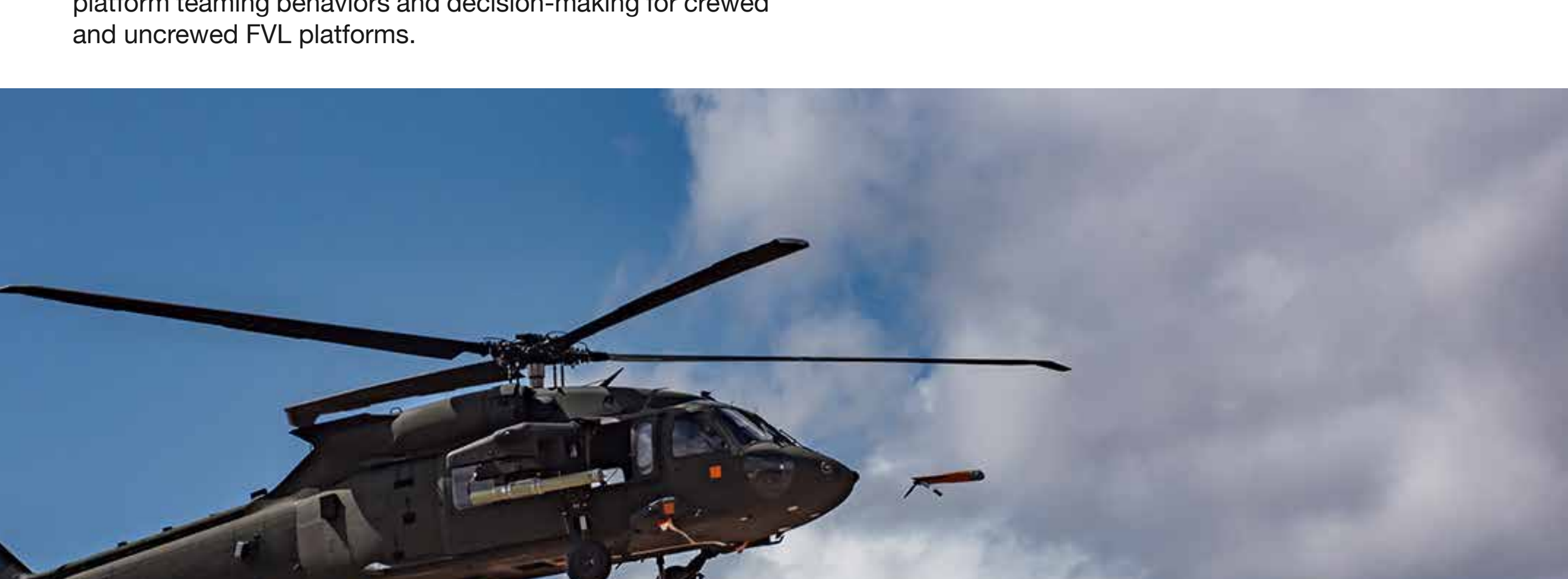
AVIATION

Aviation S&T provides research, development, demonstration, and transition of S&T products to provide the U.S. Army and Joint force with crewed, optionally crewed, uncrewed, and autonomous attack, reconnaissance, utility, and medical evacuation aviation platforms for high-speed and long-range operations. Army aviation platforms will need extended range and speed to maneuver into positions of advantage, actively engage threat formations, and survive in contested or A2/AD air space.

The aviation portfolio encompasses S&T projects that support Future Vertical Lift (FVL) research, technology development and demonstrations, and enable research that will provide technology to address long-term needs. The goal of aviation S&T is to provide longer range and persistence, improved payloads, and increased speed, survivability, and combat overmatch in the future A2/AD battlefield, with an overall lower cost of ownership. Aviation S&T investments include:

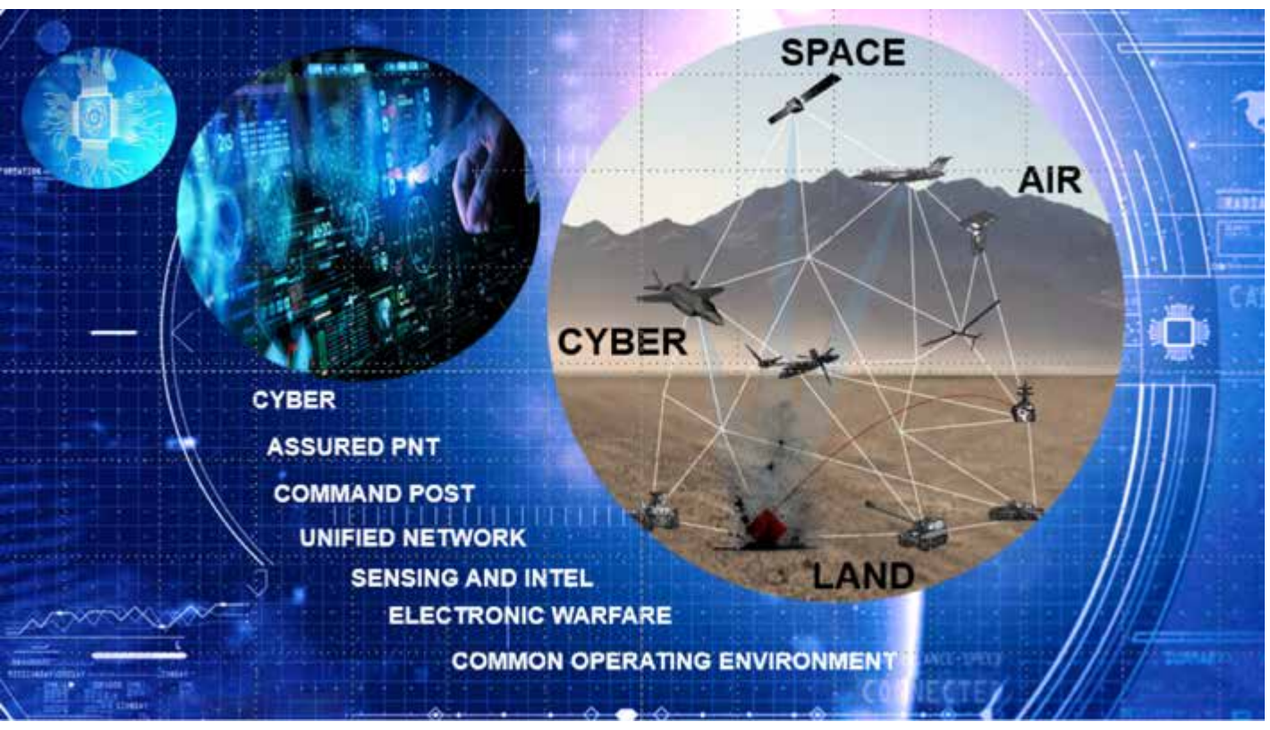
- Aviation concept designs and assessments
- Modular open systems approach with integrated mission systems
- Holistic aviation survivability
- Enhanced situational awareness
- Advanced power systems and thermal management
- Increased lethality
- Advanced Teaming and Air Launched Effects
- Improved structure and control systems
- Advanced multispectral multifunctional sensors

The Advanced Teaming and Air Launched Effects efforts are demonstrating the ability to launch unmanned aircraft systems (UAS) from crewed or uncrewed FVL platforms, control UAS from the cockpit or a crew station, and mixed platform teaming behaviors and decision-making for crewed and uncrewed FVL platforms.



Air Launched Effects Demonstration: Area-I Agile-Launched, Tactically Integrated, Unmanned System (ALTIUS) horizontal launch from a UH-60.

U.S. ARMY SCIENCE & TECHNOLOGY



NETWORK COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE (C3I)

The Network Command, Control, Communications, and Intelligence (C3I) portfolio advances state-of-the-art technologies that will enable the Army to effectively command and control its forces at all echelons in complex military environments where the Army's military supremacy is continuously challenged in all domains by capable nation-state actors. To address the Army's future operational challenges, the portfolio invests in innovative technological solutions that enhance the resiliency of the tactical network to operate in a dynamic, contested, and congested electromagnetic environment; provide data-driven tools for collection, processing, fusion, interpretation, and visualization of information; deny the adversary the ability to use the electromagnetic spectrum to its advantage; and use deep sensing to extend operations in time and space to create windows of opportunity that shape military operations.

C3I S&T portfolio spans eight research areas and four domains. Seven of the research areas are focused on providing innovative products to Army Programs of Record Modernization objectives and strategic investments that span from near- to far-term. The research areas are: Unified Network, Cyber, Electromagnetic Warfare, Common Operating Environment, Command Post, Assured-Position, Navigation, and Timing (A-PNT), and Sensing and Intel. The eighth research area, Enabling, invests in foundational research topics that advanced military scientific knowledge in support of C3I portfolio long-term objectives.

Unified Network delivers an integrated, ever-present, and accessible transport agnostic communication and information-sharing infrastructure that connects military units, platforms, and devices to support a common operational picture, enabling Commanders to command and control maneuver operations with efficiency and effectiveness. Investment areas include satellite communications (SATCOM), low Earth orbit (LEO), medium Earth orbit (MEO), geostationary orbit (GEO), 5G/6G, terahertz (THz), software-defined radios (SDRs), free-space optics, millimeter wave (mmW), and intelligent network operations.

Common Operating Environment (COE) provides a suite of technologies and architectures that automate manual processes, enable autonomous data discovery, sorting and processing, and rapid decision assistance to military Commanders. Investment areas include data-centric capabilities, visualization tools, data management, analytics using artificial intelligence/machine learning (AI/ML), data mesh, and cloud-based capabilities.

Cyber develops architectures, tools, and techniques to detect and defend against cyber intrusions in the Army's Tactical Network (Defensive Cyber) and provide non-kinetic effects (Offensive Cyber) to deny and disrupt adversary network communications. Areas of investment include advanced encryption techniques, Zero Trust, Identity, Credential, and Access Management, cyber decoys, offensive techniques, and automation.

Electronic Warfare (EW) develops and matures technologies that detect and geolocate adversary emissions, protect/obfuscate blue force activities and EW signatures against adversary C5ISR assets, and provide non-kinetic effects to disrupt and deny adversary's access to the electromagnetic spectrum. Areas of investments include geolocation techniques, multi-function radio frequency (RF) payloads, electronic attack techniques, RF smoke screens, distributed EW techniques, and resource managers.

Command Post (CP) enables the disaggregation of warfighting functions into modular, scalable, decentralized, and highly mobile nodes to increase maneuverability, survivability, reduce manpower requirements, and minimize set up/tear down time while maintaining mission command capabilities on the move. Areas of investments include wideband or multiband antennas, signature awareness and management, and high-bandwidth distributed communications.

U.S. ARMY SCIENCE & TECHNOLOGY

Assured Position, Navigation, and Timing delivers products that enable freedom of maneuver of Army formations in a Global Positioning System-denied and contested environment. This research area invests in trusted radio frequency (RF) signals and non-RF capabilities that provide reliable and resilient location and timing data to Army systems through modular and scalable sub-systems. Areas of investment include low-cost, small scale atomic clocks, quantum sensing, visual-based navigation, advance inertial measurement units, multisensor fusion, and multifrequency anti-jam/spoofing protection.

Sensing and Intelligence provides technologies that improve Army intelligence and deep sensing capabilities in collection, data processing, target development, and information analysis of signals intelligence (SIGINT), electronic intelligence (ELINT), communications intelligence (COMINT), and imagery intelligence (IMINT) in support of Multi-Domain Operations. Areas of investments include sensing, resource management, multifunction RF payloads, multiband steerable antenna arrays, automated target recognition (ATR) algorithms, and processing exploitation and dissemination (PED) techniques.

Enabling Research area invests in core technologies to support overarching C3I objectives in competency building and the preservation of technical areas outside the core research investments to continue support of future Army needs. Areas of investment include ultra-efficient microelectronics technologies that provide low size, weight, and power (SWaP) improvements for sensors and artificial intelligence (AI)-enabled applications, anti-tamper, adversarial AI, and novel AI/Machine Learning (ML) models development.

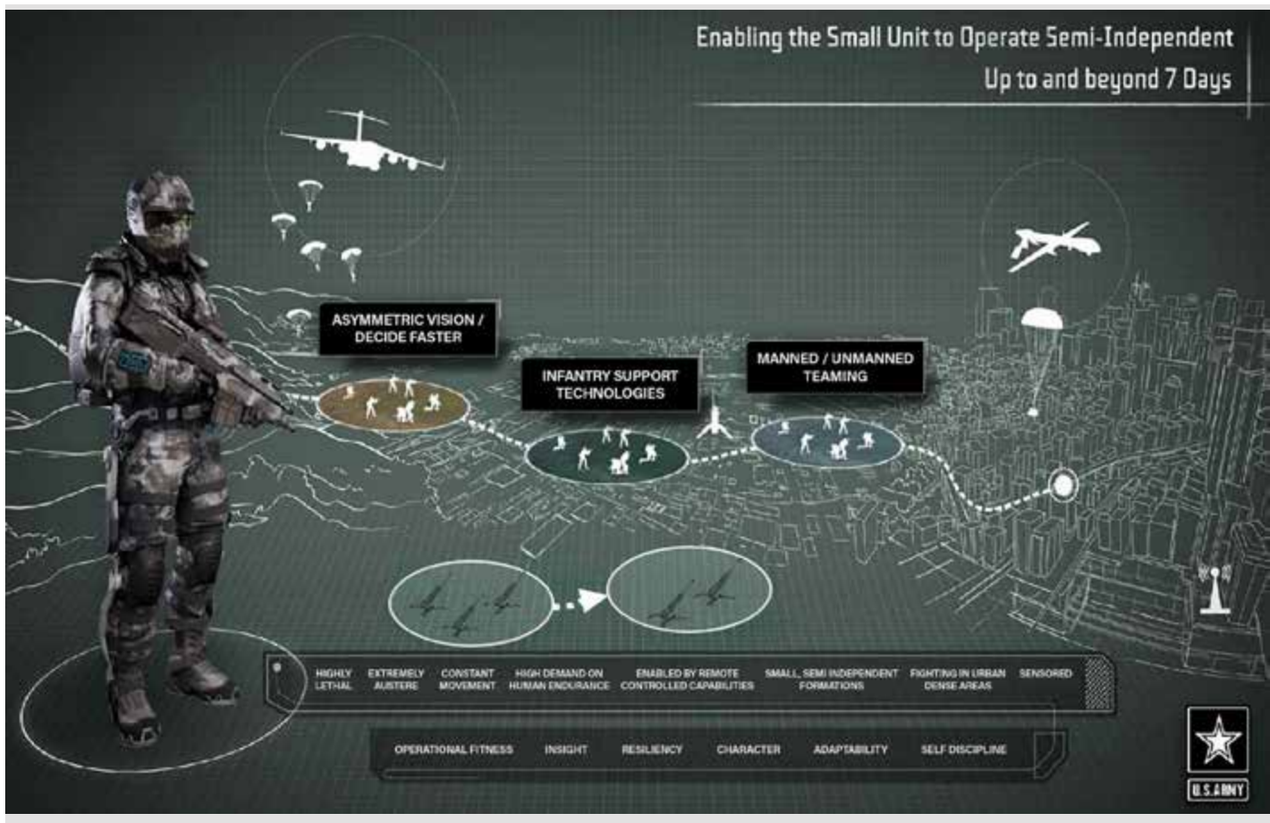
Army S&T investments will provide Joint Forces with an integrated Situational Awareness and Understanding of Adversary operations capability across command posts and platforms. These capabilities reduce cognitive costs to decision-making through all echelons, providing core services, applications, and warfighter functionality in the areas of cyber, fires, logistics, intelligence, airspace management, and maneuver.

U.S. ARMY SCIENCE & TECHNOLOGY

SOLDIER

Soldier investments are oriented to the discovery, innovation, and transition of S&T solutions that provide Army Close Combat Forces with improved lethality, communication, mobility, situational awareness, protection, survivability, training, and human performance required to ensure overmatch in dismounted combat. Soldier leads research, development, and demonstration of S&T solutions to improve individual and team performance, reduce tactical surprise, increase protection, and enhance lethality in close combat on an intensely lethal and distributed battlefield, and within complex, urban terrain. Investments focus on integrated, lightweight, and energy-efficient soldier-centric systems and equipment, decision-making, human performance research, and advanced training technologies. Areas of critical investment include:

- Next generation weapons and munitions with advanced fire control
- Enhanced indirect fire advanced technologies
- Integrated soldier architecture
- Advanced soldier protection
- Power and energy harvesting and distribution
- Optimized and enhanced soldier and squad performance
- Joint Combat Feeding advanced technologies
- Synthetic Training Environment (STE)



The future operational environment will push our soldiers to the extreme limits of their cognitive, physical, and emotional capabilities. Army S&T focuses on optimizing and enhancing the capabilities of soldiers and small units. These capabilities will be critical for the success of MDO.

STE advanced technology tools reduce the cost and time to develop models and behaviors for the Army's STE.

Next generation weapons and munitions with advanced fire control investments include research into lighter weight materials, improved ammunition, modular components, and enabling technologies such as integrated fire controls, optics, and sensors. Future weapons and munitions will need to defeat adversaries employing partial and full defilade to protect their positions and equipment, limiting the effects of direct-fire small arms and indirect fire systems. Therefore, Army S&T is focused on weapon system standoff and increased range performance while reducing the size and weight of counter-defilade capabilities, putting counter-defilade in the hands of soldiers and squads along with more lethal weapons.

Given the dynamic pace and required distances of large-scale combat operations, the 81mm Mortar System and Family of Munitions (FoM) do not meet the needs of current infantry organizations within an Infantry Brigade Combat Team. Legacy equipment is too heavy and incapable of sustaining the chamber pressure of advanced munitions required to pace current enemy threats. The Enhanced 81mm (E81) cannon FoM proves the light Infantry battalions' greater range and lethality than the current M252 mortar system by enabling the use of modern FoMs without overpressure risk. Modern FoMs increase range by 1,000+ meters, while preserving accuracy and reducing cannon wear. The E81 cannon utilizes the existing 81mm components and ancillary equipment, requires no additional manpower or training, and reduces maintenance man-hours and logistical burden.

As technology matures and is incorporated into soldier and small-unit equipment, and the future operational environment becomes increasingly arduous and complex for our ground forces, Soldier S&T seeks to configure an integrated soldier architecture that incorporates ergonomically designed systems and components developed through material research, component miniaturization, and capability integration. Advanced soldier protection technologies seek to provide our soldiers with lighter and more effective body armor, increased ballistic and blast head protection, integrated multifunctional environmental protection and camouflage, concealment, and decoy capabilities from elevated and ground-based sensors across the electromagnetic spectrum.

Power and energy harvesting and distribution is a critical research area that will contribute to this architecture through reduced weight, new and enhanced battery chemistries, and energy management approaches that can extend dismounted soldier mission duration.

Additionally, S&T investments in Joint Combat Feeding advanced technologies seek to enhance combat ration nutrient composition and optimize soldier nutrition to maximize cognitive and physical performance on the battlefield. These solutions will improve performance, recovery, and lethality across the DOD, as the Army is the executive agent for the Joint Combat Feeding program. Optimized and enhanced soldier and squad performance advancements focus on S&T solutions that improve cognitive and physical capabilities of our soldiers to enable them to fight and win in MDO.

S&T investments in STE combine advanced virtual reality technology with constructive and live environments to provide responsive and reconfigurable training that immerses human senses in mixed reality, including providing touch and feel to simulate objects such as obstacles and walls. New training technologies and environments are emphasized to allow soldiers to train and rehearse skills such as faster decision-making and to gain the advantage of speed over adversaries. Integrated with capabilities such as intelligent agents that challenge the soldier, STE will improve individual and team performance while reducing training time and cost.

U.S. ARMY SCIENCE & TECHNOLOGY

ARMY S&T ENTERPRISE PROGRAMS

ARMY SMALL BUSINESS INNOVATION RESEARCH AND ARMY xTECH PROGRAMS

Led by the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology (ASA(ALT) and in concert with the PEOs and PMs from across the Army enterprise, the Congressionally mandated Army Applied Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR) Program, and Army xTech Program works to:

- Connect with non-traditional small businesses to spur innovation
- Break down barriers and accelerate technology development for the Army
- Propel American business toward enduring commercial viability and success

The Army SBIR/STTR Programs help sustain the Army's Readiness and Modernization by stimulating economic competition, growth, and productivity across government and commercial markets. The program accomplishes this by awarding more than $408.5 million annually to innovative small businesses capable of solving critical Army priorities and transforming concepts into equipment in the hands of soldiers.

The Army xTech Program manages the Army's prize competitions to award and accelerate non-traditional technology solutions from non-traditional innovators to help solve current Army mission challenges. These programs identify the most advanced, unrivaled technologies in the private sector, and provide mechanisms to integrate these technologies into Army systems while operating at the pace of innovation, under the government's auspices of being transparent, fair, and equitable.

Army Applied SBIR Transition Broker Teams — comprised of acquisition officials, soldiers, and technical experts from across the Army enterprise — leverage technology scouting to determine which technologies respond to not only the Army's needs, but also small business needs. Our Transition Broker Teams focus on several technology ecosystems including autonomy, artificial intelligence and machine learning, clean technology, contested logistics and sustainment, immersive and wearable technology, and sensors.

The Office of the ASA(ALT)-led Army SBIR Contracting Center of Excellence (CCoE) injected innovation into the Army SBIR Program by awarding, administering, and positioning all Army SBIR Phase I and Phase II contracting resources under one centralized office. In Fiscal Year (FY) 23, the Army SBIR CCoE awarded 313 contract actions and obligated a total of nearly $242 million — marking an increase of 153% and 164%, respectively, compared to FY22. The SBIR CCoE also increased its flexibility and timeliness by cutting the average contract action time to 21 days for Phase I contracts and 32 days for Phase II contracts — highlighting an improvement of 34% and 6%, respectively, from FY22.

Launched in FY23, the Army SBIR CATALYST Program is an effort originally announced by the Under Secretary of the Army, Honorable Gabe Camarillo — alongside the Army Tech Marketplace, IP Cadre, Project VISTA, and xTechPrime competition — to incentivize partnerships between the Army and industry. In September 2023, the Army SBIR CCoE awarded five companies the first Army SBIR CATALYST contracts. The Army SBIR CATALYST Program provides selected firms nearly $15 million each to develop, mature, deploy, and transition technology prototypes under the Army SBIR Program. In October 2023, the director of Army Prize Competitions and Army Applied SBIR Program, Dr. Matt Willis, announced that the Army SBIR CATALYST Program will broaden eligibility to firms that previously received SBIR or STTR contracts from any federal agency, maximizing the coordination and transition between small businesses, technology integrators, and federal stakeholders via $75 million in total funding.

The Office of the ASA(ALT) launched the xTechPrime competition in April 2023 to empower small businesses and technology integrators to partner as teams to accelerate the transition of novel and often overlooked ideas. The competition sought to leverage the speed and creativity of nontraditional firms, and couple them with the resources and expertise of large integrators to drive technological growth across industry and the Army. The competition awarded nearly $1 million in cash prizes, and winning companies were invited to submit proposals for follow-on Direct to Phase II Army SBIR contracts totaling up to $28.5 million.

Participating Small Businesses – FY23	
Army SBIR	209
Army STTR	59

Total Army Obligations – FY23	
Army SBIR	$371.2 million
Army STTR	$37.3 million

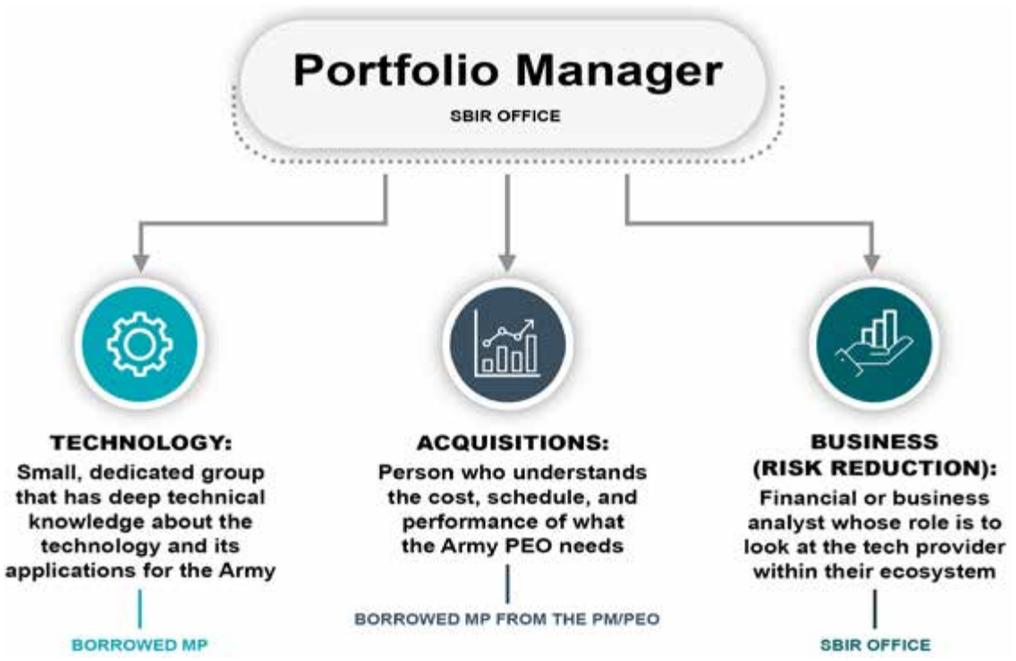
Total Solicitations Released – FY23	
Army SBIR	27
Army STTR	24

Total New Contracts Awarded – FY23	
Army SBIR	368
Army STTR	65

U.S. ARMY SCIENCE & TECHNOLOGY

Army SBIR New-Start Contracts – FY23				Army STTR New-Start Contracts – FY23			
Contract	**Total Obligated Amount**	**New Contracts Awarded**	**Firms Receiving Awards**	**Contract**	**Total Obligated Amount**	**New Contracts Awarded**	**Firms Receiving Awards**
Phase I	$31.6 million	188	91	**Phase I**	0	0	0
Phase II	$262.5 million	180	146	**Phase II**	$37.3 million	65	59
Total	$294.1 million	368	237	**Total**	$37.3 million	65	59

The Army SBIR Program is focused on maximizing transition of technology into Army programs and into the hands of the soldier.



Transition Broker Teams serve as a catalyst for economic growth, engaging the innovation ecosystem, identifying critical needs, injecting dual-use technologies, and transitioning them to Army programs.

U.S. ARMY SCIENCE & TECHNOLOGY

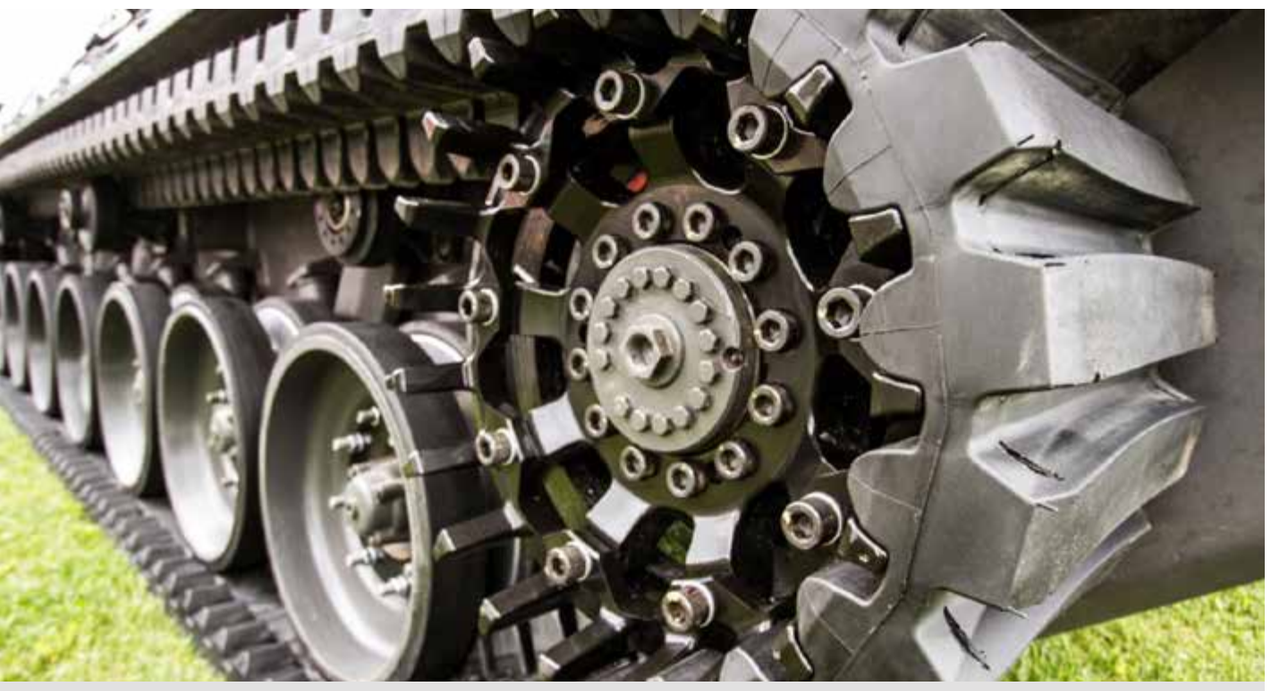
TECHNOLOGY MATURATION INITIATIVE

The Technology Maturation Initiative (TMI) program was established in 2012 to promote disruptive military innovation and experimentation for transition to Army Programs of Record (PoR). TMI focuses on partnership (S&T Laboratories/Centers and PEOs), prototyping, and transition to mature advanced technologies to meet PoR requirements. TMI works to manage Technology Maturation Risk Reduction and improve technology transition to PoRs utilizing BA4 funding. This program matures technologies through prototyping from Technology Readiness Level (TRL) 6 to TRL 7. Each TMI effort is executed jointly by an S&T Laboratory/Center and a PEO/PM.

TMI Projects are classified in one of three categories:

- Super-System projects prototype, integrate, and demonstrate emerging technologies that fill requirements to multiple PoR applications and/or across traditional PEO boundaries.
- Technology Product Prototyping projects mature technologies from S&T BA3 that have demonstrated at TRL 6, but they are experimental prototypes with higher risk (but potentially greater impact) than the baseline approach currently taken by a PoR.
- Emerging/Disruptive Technology Opportunity projects (from S&T, industry, or non-traditional sources) that require out-of-cycle funding to prototype and evaluate disruptive impact against PoR requirements (threshold or objective).

Universal 360-degree for Ground Combat Vehicles sensor technology, an example of a TMI Super-System project, can provide scalable architecture across PEO Ground Combat Systems platforms that provide advanced situational awareness for crew/dismounts and targeting information.



Composite rubber track on a 46-ton demonstrator vehicle. The Army is maturing manufacturing capability of the composite rubber track which enables lighter weight and better fuel efficiency, along with other operational benefits to ground maneuverability. (Photo courtesy of Soucy International – Defense.)

Army ManTech has a concentrated investment in the maturation and transition of components supporting the emerging and critical technology advancement of critical components for Directed Energy, including fast-steering mirrors, fiber couple diodes, combiners, optics, and optic coatings.

MANUFACTURING TECHNOLOGY (MANTECH)

The U.S. Army Manufacturing Technology (ManTech) program's mission is to support Army Readiness and Modernization Priorities by improving and maturing manufacturing technologies to ensure overmatch and fulfill national security objectives. The Army ManTech program addresses manufacturing solutions that enable and improve the efficiency and affordability of manufacturing processes to advance the Army's technological capabilities while reducing lifecycle costs for Army acquisition programs. The program's goal is to improve end-item affordability by addressing manufacturing and producibility risks and facilitating the maturation and transition of critical technologies to weapon system platforms.

The program has three objectives: 1) material development to meet performance requirements, 2) improve manufacturability and reduce the cost to PoRs, and 3) advance the organic industrial base. ManTech projects concentrate on efforts that mature technology readiness from a Manufacturing Readiness Level (MRL) 4 to MRL 7 and provide affordable and timely manufacturing solutions that address the Army's highest priority needs. Critical technology maturation and transition is accomplished by partnership between the Army S&T community, the PEOs and their supporting PMs, industrial partners, and the defense industrial base through effective, efficient, affordable, and adaptable manufacturing processes.

The Army ManTech program supports Army-wide manufacturing requirements with current coordinated efforts across the ASA(ALT); U.S. Army Materiel Command; U.S. Army Futures Command; U.S. Army Space and Missile Defense Command; U.S. Army Medical Research and Development Command; and the U.S. Army Rapid Capabilities and Critical Technologies Office. The Deputy Assistant Secretary of the Army for Research and Technology (DASA(R&T)) provides oversight and management of the Army ManTech program.

U.S. ARMY SCIENCE & TECHNOLOGY

BASIC RESEARCH

Army Basic Research seeks to advance the frontiers of fundamental S&T and drive long-term, game-changing Army capabilities through a multidisciplinary portfolio that links the Army's in-house researchers with the global academic community. Basic Research investments are the Army's primary drivers to enable leap-ahead technologies that will enhance soldier capability and increase soldier protection. These investments support the nine Priority Research Areas outlined in the 2019 Army Modernization Strategy. Activities are focused on discovering and understanding fundamental science through Army-led investigations and by assessing breakthrough innovations to advance overall scientific knowledge.

This work generates new knowledge for the Army to address diverse, rapidly evolving threats, while simultaneously attracting the country's most talented and gifted scientists and engineers to the future workforce.

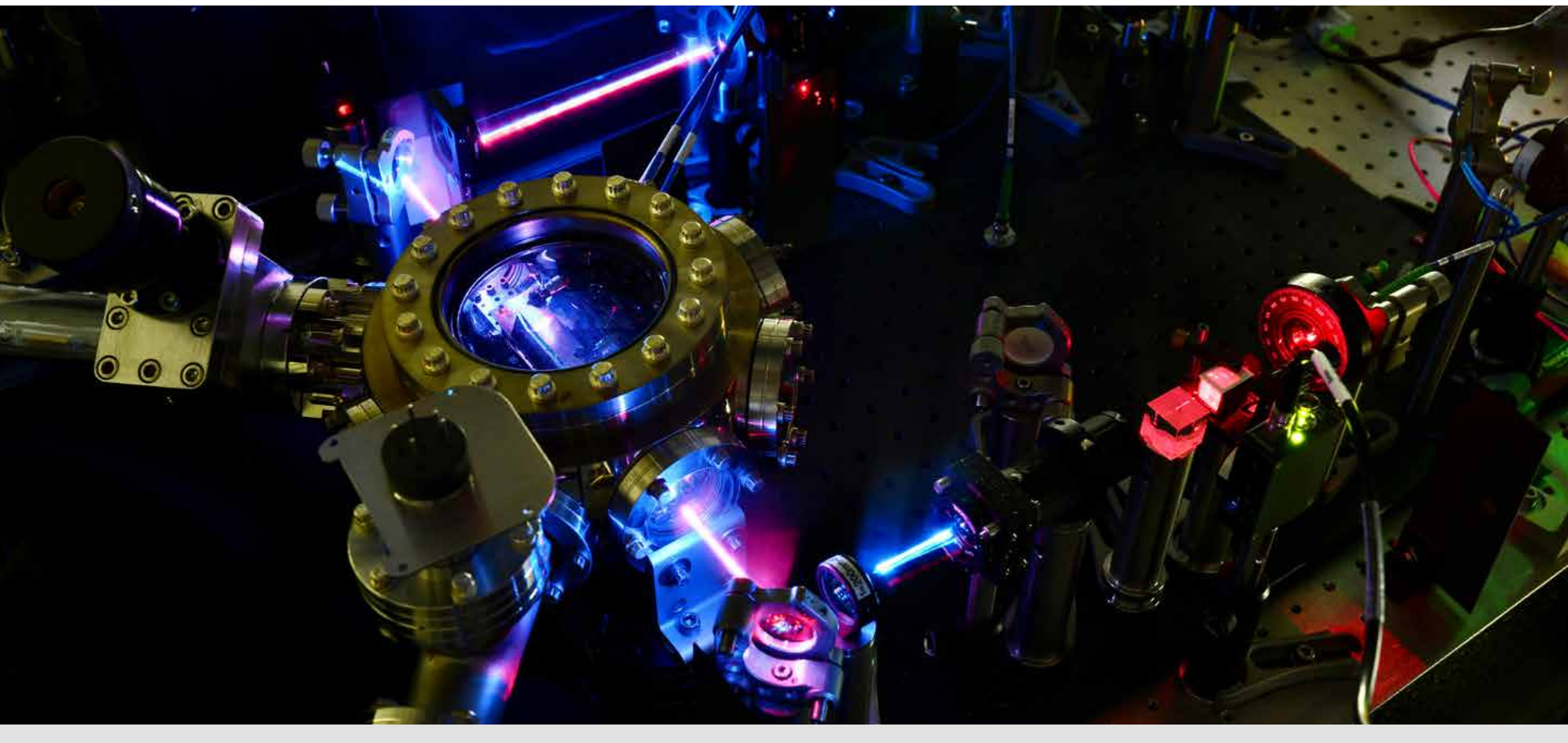
The Basic Research investment area leverages partnerships such as university affiliated research centers, collaborative research alliances, multidisciplinary university research initiatives, and the Single Investigator Program to exploit a range of research opportunities. Some major Army Basic Research efforts include:

Synthetic Biology
Synthetic biology is the creation of new biological systems or the redesign of existing biological systems. Army Basic Research in this area focuses on harnessing biology's capacity for custom/responsive materials development to support disruptive capabilities such as self-healing, adaptation, and protection.

Disruptive Energetics
Achieving the range and lethality necessary for the future battlefield requires new and powerful energetic materials and propulsive concepts. Army Basic Research in this area focuses on the discovery, synthesis, and experimental verification of these disruptive energetic materials and concepts. This research enables overmatching lethality and range of U.S. Army ordnance.

Artificial Intelligence
Artificial Intelligence (AI) is expected to strongly enhance performance of all technological components and Army systems. Army Basic Research in this area focuses on integration of AI algorithms and approaches to advancing distributive sensing, target recognition, and cooperative and distributed navigation and mobility. This research will enable optimal and highly coordinated operation of various Army units.

Quantum Effects and Quantum Information Sciences
Quantum science is the study of the behavior of matter and its interactions with energy on the scale of atoms and subatomic particles. Army Basic Research in this area focuses on generating advances in quantum science by investigating the ultimate performance limits of quantum sensors, clocks, networks, and information processing through distributed quantum entanglement. Quantum sensing, quantum navigation, quantum communications and networks, and processing have the potential to revolutionize Army technologies.



Experiments with quantum technologies may open the door to new battlefield devices that provide soldiers with key advantages against adversaries. Atoms in a glass cell probed by lasers can act as a microwave receiver in a completely different way than traditional metal antennas.

U.S. ARMY SCIENCE & TECHNOLOGY

CONCLUSION

The Army's Modernization Priorities and supporting S&T investment strategy provide a robust and unifying framework that postures the S&T program, workforce, laboratories, engineering centers, and industrial and academic partners to deliver disruptive technologies for Army and Joint force operational overmatch. To facilitate critical developments for the future, the Army will leverage the best and brightest from across the S&T Enterprise and bring together scientific professionals from government, academia, and industry to address the most challenging technical barriers and ensure competitive advantage to the U.S. Army and the Joint force.

Army scientists at work in Chemical Security Laboratory, Aberdeen Proving Ground, Maryland.

PROGRAM PORTFOLIO

AIR AND MISSILE DEFENSE

Air and Missile Defense Planning and Control System (AMDPCS)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Air and Missile Defense Planning and Control System (AMDPCS) offers integration of air and missile defense operations at all echelons and is comprised of several major subsystems that provide situational awareness; collaborative defense design; near real-time, three-dimensional air picture for the Commander; and receives, transmits, and forwards track data on multiple data links.

BENEFIT TO THE SOLDIER

- Provides soldiers with the ability to track aircraft inside and outside of their operational airspace at all echelons
- Identifies friend or foe platforms and reduces fratricide
- Allows collaboration and staff planning
- Provides early warning capabilities

PROGRAM STATUS

- **FY21–FY24:** Fielding

PRIME CONTRACTORS

Northrop Grumman Systems Corporation
Ultra Electronics

Army Integrated Air and Missile Defense (AIAMD) Integrated Battle Command System (IBCS)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Army Integrated Air and Missile Defense (AIAMD) Program represents a shift to a component-based acquisition approach which provides the most efficient way to acquire, integrate, and deploy Army Air and Missile Defense capabilities. The AIAMD Program is structured to enable the development of an overarching system-of-systems capability with all participating Air Defense Artillery components functioning interdependently to provide total operational capabilities. This is achieved by establishing the incremental AIAMD architecture and developing the Integrated Battle Command System that will network-enable multiple sensor and weapon components. An Integrated Fire Control Network, with established communications protocols, standards, and interface control documents that allow Joint access, provide fire control connectivity and enable distributed operations.

BENEFIT TO THE SOLDIER

- Provides the framework to distribute fire control quality data, commands, and messaging among components in near real-time to provide a coordinated and integrated response to complex threat raids
- Offers a dynamic defense design capability
- Mitigates coverage gaps and single points of failure
- Reduces manpower, operation, and support costs, while providing enhanced training capability

PROGRAM STATUS

- **FY21:** Milestone C
- **FY22:** Initial Operational Test and Evaluation
- **FY23:** Full-Rate Production

PRIME CONTRACTORS

Lockheed Martin Corporation
Northrop Grumman Systems Corporation
Raytheon

Directed Energy Maneuver-Short Range Air Defense (DE M-SHORAD)

Rapid Capabilities and Critical Technologies Office | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: TBD

DESCRIPTION

Directed Energy Maneuver-Short Range Air Defense (DE M-SHORAD) will be a complementary capability to M-SHORAD Inc 1. It is a three-soldier crew, Stryker-mounted, high-energy laser experimental prototype weapon system. DE M-SHORAD will support Multi-Domain Operations as part of the M-SHORAD Battery.

BENEFIT TO THE SOLDIER

- Provides protection from unmanned aircraft systems, rotary wing aircraft, and rockets, artillery, and mortar threats
- Supports C-17 aircraft transportability

PROGRAM STATUS

- **FY21:** Technology Readiness Level-7 Combat Shoot-Off Demonstration
- **FY22:**
  - System Performance Characterization Event
  - Initial Automotive Test and Evaluation
- **FY23:**
  - Prototype New Equipment Training Live Fire Exercise
  - Initial Developmental Testing
  - Prototype Platoon Delivery

PRIME CONTRACTORS

KBR/KORD Technologies

Forward Area Air Defense Command and Control (FAAD C2)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

Forward Area Air Defense Command and Control (FAAD C2) consists of common hardware, software, communications equipment, and shelters to meet the C2 and targeting needs of maneuver Air Defense Artillery battalions. It supports the Air and Missile Defense mission by providing real-time, correlated air tracks and command, control, and intelligence (C2I) information to higher, adjacent, and lower units. FAAD C2 interfaces with Joint and NATO systems and is integrated into the Army Mission Command systems through the Air and Missile Defense Workstation. FAAD C2 provides the Joint single-integrated air picture and is the selected C2I solution for Army Counter-Unmanned Aircraft Systems (C-UAS); Army Counter-Rocket, Artillery, Mortar; United States Marine Corps C-UAS; and Army Initial Maneuver-Short Range Air Defense (IM-SHORAD).

BENEFIT TO THE SOLDIER

- Provides a real-time correlated air picture of the battlespace with positive aircraft identification for early detection, warning, and response to forward deployed forces

PROGRAM STATUS

- **FY21:**
  - Software Sustainment Contract Awarded
  - Urgent Materiel Release
- **FY22:**
  - Army Interoperability Certification
  - Training
  - Full Materiel Release
- **FY23–FY24:**
  - Training and Testing
  - Urgent Materiel Release

PRIME CONTRACTORS

Northrop Grumman Systems Corporation

Forward Area Air Defense System, Line-of-Sight, Rear (Pedestal Mounted Stinger) – Avenger

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

Forward Area Air Defense System, Line-of-Sight, Rear (Pedestal Mounted Stinger) – Avenger Air Defense System is a lightweight, highly mobile, short-range, surface-to-air missile and gun weapon system mounted on an M1097A1 High Mobility Multi-Purpose Wheeled Vehicle. Avenger is designed to counter hostile, low-flying Unmanned Aerial Systems, cruise missiles, rotary-wing aircraft, and fixed-wing aircraft. Avenger, operated by two crewmen, is capable of day, night, and adverse weather operations, can be transported by a UH-60L helicopter or C-130 aircraft, is air-droppable (M45 version), and can shoot on the move. The system can also be operated by remote control from a protected position up to 50 meters away from the fire unit. The system employs a turret consisting of a gunner position, two missile launcher pods containing four Stinger missiles each, a Forward Looking Infrared radar, a Laser Range Finder, an Identification Friend or Foe system, and a very high rate of fire .50 caliber machine gun.

BENEFIT TO THE SOLDIER

- Lightweight, short-range air defense system

PROGRAM STATUS

- **FY22:** Fielding
- **FY23:**
  - Sustainment
  - Modification-Service Life Extension Program

PRIME CONTRACTORS

Boeing

Indirect Fire Protection Capability – High Energy Laser (IFPC-HEL)

Rapid Capabilities and Critical Technologies Office | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction, Engineering & Manufacturing Development, Production & Deployment

DESCRIPTION

Indirect Fire Protection Capability – High Energy Laser (IFPC-HEL) is a HEL prototype weapon system designed to fit on an Army truck, including onboard target tracking and integration with Army command and control systems.

BENEFIT TO THE SOLDIER

- Safe, reliable, and highly technical weapon system with regenerating power for munition replenishment
- Protects fixed and semi-fixed sites
- Greatly reduces logistical footprint
- Eliminates need to reload ammunition
- Offers rapid recharge time

PROGRAM STATUS

- **FY22:** Completed laboratory demonstration
- **FY23:** Contract Award for Prototyping

PRIME CONTRACTORS

TBD

AIR AND MISSILE DEFENSE

ACAT TBD

Indirect Fire Protection Capability – High Power Microwave (IFPC-HPM)

Rapid Capabilities and Critical Technologies Office | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction, Engineering & Manufacturing Development, Production & Deployment

DESCRIPTION

Indirect Fire Protection Capability – High Power Microwave (IFPC-HPM) is a solid-state, software-defined, HPM-phased array prototype weapon system which allows for quickly switching between and engaging multiple targets. The IFPC-HPM prototype operates standalone or integrated with Army command and control systems.

BENEFIT TO THE SOLDIER

- Provides fixed and semi-fixed defense
- Capable of rapid set-up and redeployment

PROGRAM STATUS

- **FY22:** Downselect
- **FY23:** Other Transaction Authority Award

PRIME CONTRACTORS

Epirus, Inc.

Indirect Fire Protection Capability Increment 2 (IFPC Inc 2)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

Indirect Fire Protection Capability Increment 2 (IFPC Inc 2) is a mobile, ground-based weapon system designed to acquire, track, engage, and defeat Unmanned Aircraft Systems (UAS), Cruise Missiles (CM), and Rocket, Artillery, and Mortars (RAM) projectiles. The IFPC Inc 2 capability will be developed in three blocks, each a separate acquisition program. The IFPC Inc 2 system supports the Threshold CM and UAS defeat mission. The objective counter-RAM mission employs both alternative kinetic and non-kinetic defeat solutions.

BENEFIT TO THE SOLDIER

- Provides an enduring solution to protect supported forces

PROGRAM STATUS

- **FY21:** Army Acquisition Executive Acquisition Decision Memorandum approval of Middle Tier of Acquisition (MTA) Pathway
- **FY23:** System Readiness Review and Testing
- **FY24:** MTA Rapid Prototype

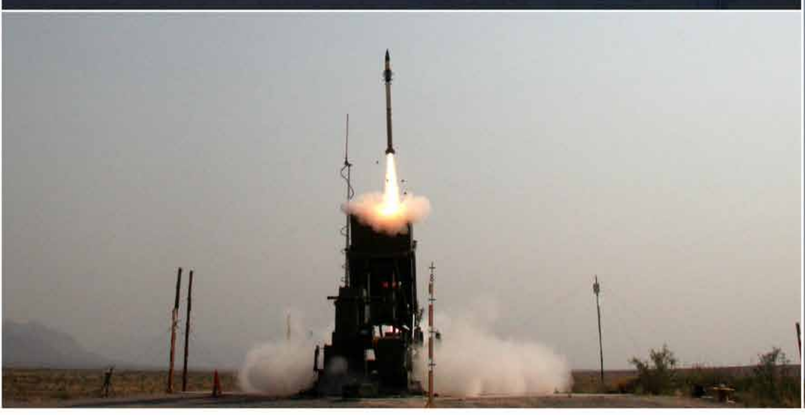
PRIME CONTRACTORS

Dynetics

Iron Dome Defense System – Army (IDDS-A)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Operations & Support



DESCRIPTION

Iron Dome Defense System – Army (IDDS-A) is an Israeli-developed system that provides an initial cruise missile defense capability. The U.S. Army, in conjunction with the Israel Missile Defense Organization, executed a government-to-government contract for the purchase of two stand-alone Iron Dome batteries as a rapid approach to delivering an interim Cruise Missile Defense (CMD) capability. IDDS-A will be interoperable with the Army's Integrated Air and Missile Defense open systems architecture and Army sensors. This ground-based weapon system mitigates high priority capability gaps in CMD and Counter-Unmanned Aircraft Systems. IDDS-A engages many simultaneous threats arriving from different azimuths and has a proven history against real-world threats.

BENEFIT TO THE SOLDIER

- Provides air defense protection to supported forces within fixed and semi-fixed locations

PROGRAM STATUS

- **FY22:** Deployment and Testing
- **FY23:**
  - Training completed
  - Delivery

PRIME CONTRACTORS

Israeli Ministry of Defense

Lower Tier Air and Missile Defense Sensor (LTAMDS)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

Lower Tier Air and Missile Defense Sensor (LTAMDS) supports the U.S. Army's Integrated Air and Missile Defense (IAMD) system of systems tailorable task force concept by providing a multifunctional sensor and reducing the operational footprint. The LTAMDS operates within the IAMD Battle Command System (IBCS) architecture and supports the air and missile defense mission within the lower-tier battlespace. As an IAMD sensor, LTAMDS deploys worldwide in defense of U.S. forces and key national interests protecting Joint and coalition strategic assets against tactical ballistic missiles, tactical air-to-surface missiles, cruise missiles, anti-radiation missiles, unmanned aircraft systems, and rotary wing and fixed wing air-breathing threats. Through IBCS, LTAMDS will interoperate with a range of Army and Joint sensors and effectors. LTAMDS supports the expansion of the battlespace for the PATRIOT Advanced Capability Missile Segment Enhancement interceptor.

BENEFIT TO THE SOLDIER

- 360-degree search, track, and engage capability
- Increases battlespace to protect larger defended asset list
- Improves capability to counter complex integrated attack
- Enhances classification, discrimination, and identification capability
- Reduces Operational and Sustainment costs

PROGRAM STATUS

- **FY22:**
  - Updated Acquisition Strategy approved
  - Prototype 3 Full-Sector Assembly complete
  - Testing
  - Product Improvement Contract Awarded
- **FY23:**
  - Developmental Testing and Evaluation

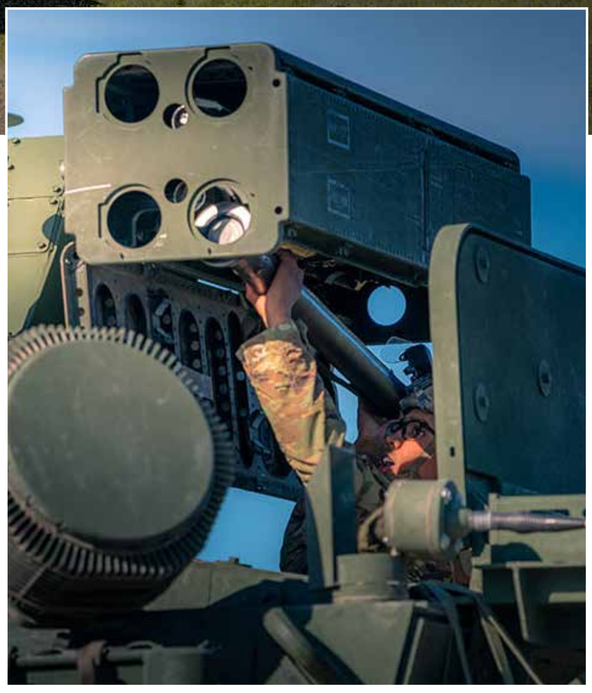
PRIME CONTRACTORS

Raytheon Technologies

Maneuver-Short Range Air Defense Increment 3 (M-SHORAD Inc 3)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Materiel Solution Analysis



DESCRIPTION

Maneuver-Short Range Air Defense Increment 3 (M-SHORAD Inc 3) is the U.S. Army's next generation interceptor to replace the legacy Stinger missile, with production starting in Fiscal Year 2027. The Army will also field new 30 mm proximity airburst ammunition to increase lethality against unmanned aerial systems.

BENEFIT TO THE SOLDIER

- Maintains compatibility with the Stinger vehicle universal launcher
- Maintains soldier-portable capability
- Reduces missile cost
- Meets insensitive munitions requirements

PROGRAM STATUS

- **FY21–FY22:** Production Capability Assessment
- **FY22:**
  - Middle Tier of Acquisition Rapid Prototyping
  - Industry Day
- **FY23:** Design Phase Contract Awarded

PRIME CONTRACTORS

DRS
General Dynamics Land Systems
Raytheon Missile Systems

Phased Array Tracking Radar to Intercept of Target (PATRIOT) Advanced Capability-3 (PAC-3)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Phased Array Tracking Radar to Intercept of Target (PATRIOT) Advanced Capability-3 (PAC-3) Missile Segment Enhancement is a high-velocity, hit-to-kill, surface-to-air missile capable of intercepting tactical ballistic missiles (TBM) and air-breathing threats. The PAC-3 missile provides the range, accuracy, and lethality to effectively defend against TBMs armed with weapons of mass destruction. The PAC-3 missile's leading-edge technology uses kinetic energy to engage targets through its hit-to-kill capability. The combination of a fast missile airframe response and high impulse side thrusters generates a more rapid missile altitude changes than are possible with actuator-driven aerodynamic control surfaces alone. The PAC-3 Cost Reduction Initiative missiles provide defense against complex evolving threats and are currently being fielded.

BENEFIT TO THE SOLDIER

- Provides area defense of critical protected assets
- Offers capability to current and future forces
- Critical in Multi-Domain Operations

PROGRAM STATUS

- **FY22:**
  - Production
  - Fielding
  - Software update
  - Urgent Materiel Release
  - Post-deployment build and Testing
- **FY23:**
  - Production Contract Award
  - Design Review and Testing

PRIME CONTRACTORS

Lockheed Martin Corporation Missiles and Fire Control

Sentinel Aerial Surveillance Radar – AN/MPQ-64 A3 & AN/MPQ-64 A4 (Sentinel A3, Sentinel A4)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Operations & Support

DESCRIPTION

Manned by a crew of two, the AN/MPQ-64 Sentinel is an advanced three-dimensional battlefield X-band, air defense, and phased array radar equipped to support beyond visual range engagements. The Sentinel system operates with the Forward Area Air Defense Command and Control system and the Integrated Air and Missile Defense Battle Command system to provide persistent air defense, surveillance, and fire control quality data against cruise missiles, unmanned aircraft systems, rotary wing and fixed wing aircraft, and rocket, artillery and mortar (RAM) threats. Sentinel provides air track awareness for prevention of fratricide in counter-RAM missions of U.S. and coalition forces.

BENEFIT TO THE SOLDIER

- Enables protection of U.S. and coalition forces as well as geopolitical assets
- Provides protection against various threats
- Offers simultaneous multi-mission capability supporting air defense and counter fires missions
- Hemispherically surveils, acquires, and tracks various threats
- Includes growth potential as a key design feature to allow the radar to respond to future evolving threats

PROGRAM STATUS

- **FY21:**
  - Production Contract Award and Testing
  - Software release
- **FY22:**
  - Software materiel release
  - User operation evaluation system Production Award
  - Soldier Touch Point event
  - Engineering and Manufacturing Development asset Delivery
  - Engineering Services Contract Award
  - Testing
- **FY23:**
  - Production completed
  - Milestone C decision
  - Low-Rate Initial Production

PRIME CONTRACTORS

Lockheed Martin Corporation
Raytheon Information Systems

SGT STOUT

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

SGT STOUT system is an urgent acquisition program designed to deliver air defense protection to Brigade Combat Teams, allowing freedom to maneuver. The system will counter a range of airborne threats to include rotary wing, fixed wing, and unmanned aircraft system threats. SGT STOUT is an air defense weapon system consisting of multiple ground-to-air missile launchers, sensors, and guns on a Stryker A1 combat vehicle.

BENEFIT TO THE SOLDIER

- Armed with Stinger Missiles, a 30 mm gun, and a M240 Coaxial Machine Gun
- Onboard radar sensor and electro-optical/infrared sensors

PROGRAM STATUS

- **FY21:** Fielding and weapon upgrades
- **FY23–FY24:** Fielding

PRIME CONTRACTORS

General Dynamics Land Systems

Stinger Block I with Proximity Fuze (PROX)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

Stinger Block I missile is an advanced, fire-and-forget, short-range, soldier-portable, air defense weapon system. It provides low-altitude defense for ground forces against attack or aerial observation by low-flying Unmanned Aircraft Systems (UAS), cruise missiles, and rotary and fixed wing aircraft. Stinger has extensive infrared counter-countermeasure capabilities and can engage targets from any aspect, including head-on. It carries a high-explosive, hit-to-kill warhead and is capable of firing from the shoulder, ground vehicles, helicopters, and UAS. Stinger weapon system also employs an Identification Friend or Foe device to assist the gunner in identifying friendly aircraft and arrives as a certified round, requiring no field testing or maintenance.

BENEFIT TO THE SOLDIER

- Fire-and-forget, combat-proven capability
- Multiple guidance systems
- Employed for homeland defense
- Provides a proximity capability and improved effectiveness against threats

PROGRAM STATUS

- **FY22:**
  - Production and Contract Awards
  - Stockpile Reliability Program (SRP) extension
  - Refurbishment
- **FY23:** SRP extension

PRIME CONTRACTORS

Raytheon Missiles & Defense

PROGRAM PORTFOLIO

AMMUNITION

Ammunition – Large Caliber

JPEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

Large Caliber Ammunition includes 105 mm, 120 mm, and 50 mm direct-fire ammunition. Platforms supported include the Abrams tank, the M10 Booker Combat Vehicle, and the XM30 Mechanized Infantry Combat Vehicle.

BENEFIT TO THE SOLDIER

- Provides warfighters with the necessary lethality required to defeat the enemy

PROGRAM STATUS

- **FY21:** Fielded, Manufactured, or began Development
- **FY22–FY24:** Full-Rate Production and Sustainment
- **FY24:** Type Classification – Standard, Full Materiel Release, or Full-Rate Production

PRIME CONTRACTORS

General Dynamics Ordnance and Tactical Systems
Northrop Grumman Defense Systems

Ammunition – Medium Caliber

JPEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

Medium Caliber Ammunition (MCA) includes 20 mm, 25 mm, 30 mm, and 40 mm armor-piercing, high-explosive programmable airburst, proximity airburst, smoke, illumination, and training cartridges with the capability to defeat multiple types of targets. These munitions provide overwhelming lethality in MCA and point- and area-target engagement.

BENEFIT TO THE SOLDIER

- Delivers capability to defeat materiel ground and aerial targets, and troops in the open and in defilade
- Supports multiple ground and air platforms
- Provides the warfighter with grenade training and tactical cartridges

PROGRAM STATUS

- **FY21:**
  - Continued Design, Production, and Sustainment
  - Urgent Materiel Release (UMR)
- **FY22:**
  - Contract Awards
  - UMR
- **FY23:**
  - Contracts Awarded
  - Milestone C
- **FY24:**
  - Family Buy 3 Award
  - Milestone C

PRIME CONTRACTORS

AMTEC
Day & Zimmermann
General Dynamics Ordnance and Tactical Systems
Northrop Grumman Defense Systems
Rheinmetall – Day & Zimmermann Munitions

Ammunition – Small Caliber

JPEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction, Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

Small Caliber Ammunition (SCA) includes .22 caliber, 9 mm, 5.56 mm, 6.8 mm, 7.62 mm, .50 caliber, and shotgun cartridges providing armor-piercing, enhanced performance, trace, and door-breaching capability to defeat multiple types of threats to the warfighter. SCA provides high-quality training ammunition over multiple calibers to enhance the overall readiness of the warfighter.

BENEFIT TO THE SOLDIER

- Improves lethality to defeat current and emerging threats
- Provides the warfighter with training ammunition that mimics combat ammunition within range constraints

PROGRAM STATUS

- **FY21–FY24:** Full-Rate Production (FRP)
- **FY21:** Second source Awarded
- **FY22:** Contracts Awarded
- **FY23:** Production restart
- **FY24:**
  - Fielding
  - FRP

PRIME CONTRACTORS

Black Hills Ammunition
Defense Technology Center
General Dynamics Ordnance & Tactical Systems
KAK Industry
Olin Winchester
Sig Sauer
Ultimate Training Munitions
Vista Outdoor

Artillery Ammunition

JPEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment

DESCRIPTION

The U.S. Army's Artillery Ammunition program includes 75 mm (used for ceremonies and simulated firings), 105 mm, and 155 mm projectiles, such as smoke and illumination, and bursting projectiles such as High Explosive (HE).

BENEFIT TO THE SOLDIER

- Unmatched firepower to the maneuver force Commander to defeat enemy targets at extended ranges
- Provides effective illumination via both visible light and infrared and smoke for obscuration

PROGRAM STATUS

- **FY21:**
  - Completed Initial Safety Test for Urgent Materiel Release
  - Completed Testing
- **FY23:**
  - Achieved Milestone C/Type Classification – Standard
  - Awarded Production Contracts
- **FY24:**
  - Capability Development Document
  - Testing
  - Design and conduct Manufacturing and Technology Assessments of prototypes

PRIME CONTRACTORS

Action Manufacturing
General Dynamics
General Dynamics Ordnance and Tactical Systems
Nammo

Artillery Fuzes and Propellant

JPEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment, Operations & Support

M739A1 PD/Delay Artillery Fuze

M762A1 Electronic Time (ET) Artillery Fuze (less booster)

M767A1 Electronic Time (ET) Artillery Fuze (with booster)

Modular Artillery Charge System, M231, and M232A2 Propelling Charges

DESCRIPTION

The U.S. Army's Artillery Fuzes and Propellant program supports 105 mm and 155 mm artillery ammunition cargo-carrying projectiles such as smoke and illumination, and bursting projectiles such as high explosive. This program includes bag propellant for the 105 mm semi-fixed cartridges and 155 mm Howitzers, as well as Modular Artillery Charge System for 155 mm Howitzers.

BENEFIT TO THE SOLDIER

- Provides unmatched firepower to the maneuver force Commanders to defeat enemy targets at extended ranges

PROGRAM STATUS

- **FY21:**
  - Contract Awards
  - Preliminary Design Reviews completed
  - Approved Acquisition Program Baseline
- **FY22:** Critical Design Reviews
- **FY23:**
  - Qualification efforts completed
  - Design and Testing
  - Contract Awards
- **FY24:**
  - Live-fire Demonstration
  - Contract and Delivery Order Awards
  - Testing and Systems Verification
  - Achieve Milestone C/Type Classification Standard

PRIME CONTRACTORS

Action Manufacturing
American Ordnance
AMTEC
Armtec Defense
BAE Systems
Conco
General Dynamics
General Dynamics Canada
L3 Harris Technologies, Inc.
Nammo
Northrop Grumman Systems Corporation

Cannon-Delivered Area Effects Munition (C-DAEM) – Armor

JPEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction

DESCRIPTION

Cannon-Delivered Area Effects Munition (C-DAEM) – Armor provides a hit-to-kill capability, enabling it to defeat moving and imprecisely located armored/mechanized targets at extended ranges.

BENEFIT TO THE SOLDIER

- Provides U.S. ground forces with a capability to effectively neutralize, damage, or destroy armored targets
- Provides a Global Positioning System degraded/denied environment capability
- Can be utilized by cannon artillery formations in all-weather 24/7

PROGRAM STATUS

- **FY23:** Capability Development Document signed/validated
- **FY24:**
  - Vehicle demonstrations
  - Army System Acquisition Review Council Planning Meeting

PRIME CONTRACTORS

Raytheon Missiles & Defense

AMMUNITION
ACAT IV

Simulators, All Types (Battlefield Effects Simulators (BES))

JPEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

Battlefield Effects Simulators (BES) provide pyrotechnic munitions that simulate gunfire, missile fire, artillery fire, burning vehicles, chemical attack, and anti-tank weapons fire. A few simulators are used in vehicle-mounted devices and on tank gunnery ranges during force-on-target training.

BENEFIT TO THE SOLDIER

- Provides soldiers with a realistic training environment replicating the battlefield with:
  - Flash and bang of exploding enemy and friendly munitions
  - Burning vehicles and equipment
  - Missile and rocket fire

PROGRAM STATUS

- **FY21–FY24:** Pre-Milestone C Engineering and Manufacturing Development

PRIME CONTRACTORS

Grucci
PR Tactical

PROGRAM PORTFOLIO

ASSURED MOBILITY

ASSURED MOBILITY

ACAT III

Early Entry Fluid Distribution System (E2FDS)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Early Entry Fluid Distribution System (E2FDS) complements the Inland Petroleum Distribution System (IPDS) pipeline by rapidly establishing new or extending existing pipeline traces.

BENEFIT TO THE SOLDIER

- Requires little to no engineer support to emplace the conduit or pump stations
- Pump stations are fully automated and have a variety of control options

PROGRAM STATUS

- **FY21:** Low-Rate Initial Production (LRIP) Test System Awarded
- **FY22:**
  - Production Qualification Test (PQT), Reliability, Availability and Maintainability Testing completed
  - Milestone C achieved
  - LRIP awarded
  - Full-Rate Production achieved
- **FY23:**
  - PQT Completed
  - Product Readiness Review/Program Configuration Management and system production configuration lock
- **FY24:** Conditional Materiel Release

PRIME CONTRACTORS

Leonardo DRS, Inc.

High Mobility Engineer Excavator Type IV (HMEE-IV)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

High Mobility Engineer Excavator Type IV (HMEE-IV) incorporates electric over hydraulic capability into the legacy HMEE-I configuration. HMEE-IVs repair and improve roads, trails, bridges, and airfields. The high mobility of the HMEE-IV provides earthmoving machines capable of maintaining pace with the Army's current combat systems. All HMEE-IV vehicles will have improved survivability and are diesel driven. HMEE-IV replaces the Small Emplacement Excavators.

BENEFIT TO THE SOLDIER

- Self-deployable
- Conducts light earthmoving, loading, and excavation
- Performs tasks including repair and improvement of roads, trails, bridges, and airfields
- Optional attachments (auger, forklift, sweeper, etc.) available to execute a wide range of mobility, counter-mobility, and general engineering missions
- Transportable on C-130 cargo aircraft (unarmored configuration)
- Air-droppable with Low Velocity Airdrop Kit (armored configuration)

PROGRAM STATUS

- **FY21–FY22:** Production and Fielding
- **FY23:**
  - Full Materiel Release
  - Production and Fielding continued
- **FY24:**
  - Begin Service Life Extension Program
  - Fielding activities continued

PRIME CONTRACTORS

JCB

Military Bridging Systems

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

Product Manager Bridging develops, acquires, fields, and sustains gap crossing and breaching solutions to meet current and future warfighter requirements for the engineer regiment as well as U.S. Allies and partners. The Military Bridging Systems portfolio consists of one Acquisition Category (ACAT) II and 10 ACAT III programs.

BENEFIT TO THE SOLDIER

- The Joint Assault Bridge is a sustainable system designated to replace the Armored Vehicle Launch Bridge system.
- The Heavy Assault Scissoring Bridge is a transportable, maneuverable, and rapidly emplaced bridge capable of spanning wet or dry gap obstacles (small streams, gullies, ravines, or enemy-placed obstacles).
- The Line of Communication Bridge supports continuous combat operations and provides Commanders with a semi-permanent bridge and the ability to reinforce existing bridges.
- The Rapidly Emplaced Bridge System enables warfighters to navigate over the world's landmasses cut by canals, ditches, and other significant impediments.
- The Common Bridge Transporter transports, launches, and retrieves all float and dry span bridging equipment.
- The Assault Breacher Vehicle provides crew protection and vehicle survivability while having the speed and mobility to keep pace with the maneuver force.
- The Bridge Erection Boat features a crew protection kit, supports rafting operations in fast water, and operates in high-particulate matter environments.
- The M15 Bridge Adapter Pallet provides the necessary locks, rollers, and guides to launch, retrieve, and transport the bridge equipment.
- The Dry Support Bridge is used in general support of the Division/Corps force pool.
- The Bridge Supplemental Set will support Multi-Role Bridge Company by employing long-term bridge anchorage systems, emplacing access/egress matting to enhance bridge site mobility/traction for emplaced bridges.
- The Improved Ribbon Bridge allows for crossings of faster waterways with higher banks and offers an option to rapidly close distances and move critical capabilities and supplies.

PROGRAM STATUS

- **FY21–FY22:** Programs in various stages of the acquisition lifecycle from Engineering & Manufacturing Development to Operations & Support
- **FY23:**
  - Contracts awarded
  - Full Materiel Release (FMR), Training, Production, Fielding, and Sustainment activities
- **FY24:** Full Operational Capability, Contract extension, and FMR

PRIME CONTRACTORS

Acrow Corporation of America
Acrow Global Limited
Amentum Services, Inc.
Anniston Army Depot
Birdon America Inc.
DRS Network & Imaging Systems, LLC
General Dynamics European Land Systems
GT Machining
Leonardo DRS, Inc.
Oshkosh Defense, LLC
Pearson Engineering Limited
Tobyhanna Army Depot
Williams Fairey Engineering Ltd.

Robotic Mine Flail – M160

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

M160 Robotic Mine Flail clears areas infested with land mines and counters the effects of mines that could impede the mobility of friendly forces, destroy systems, or cause personnel casualties. It protects soldiers against mine fragments and clears mines with the flailing motion of high-speed, rotating chained hammers.

BENEFIT TO THE SOLDIER

- Provides standoff protection to soldiers while clearing mines

PROGRAM STATUS

- **FY21:** Transition to Sustainment
- **FY23:** Develop and implement software updates

PRIME CONTRACTORS

DOK-ING

Small Multipurpose Equipment Transport (S-MET)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Small Multipurpose Equipment Transport (S-MET) is designed to offload weight from the dismounted soldier, squad, and small unit. S-MET will carry additional supplies and equipment as well as modular mission payloads increasing combat effectiveness.

BENEFIT TO THE SOLDIER

- Provides small units with the ability to support squad and platoon operations

PROGRAM STATUS

- **FY21:** Low-Rate Initial Production
- **FY22:** Pre-Production Qualification Testing completed
- **FY23:**
  - Conditional Materiel Release
  - First Unit Equipped
- **FY24:** Production and Fielding

PRIME CONTRACTORS

General Dynamics Land Systems

T-9 Medium Dozer with Winch and Tractor, Full-Tracked, T-9 Medium Dozer with Ripper

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

T-9 Medium Dozer is a medium drawbar, air-transportable, diesel-engine-driven crawler tractor with a dozer blade and optional winch (Type I) or ripper (Type II). T-9 Medium Dozer is a commercial vehicle with military modifications.

BENEFIT TO THE SOLDIER

- Builds and maintains air and ground lines of communication
- Enhances infrastructure and force protection for the warfighter

PROGRAM STATUS

- **FY21:** Awarded new Production Contract
- **FY22:** Fielding and Production continued
- **FY23:**
  - Full Materiel Release
  - Continued Fielding activities
- **FY24:**
  - Contracts Awarded
  - Procure E/H Dozers to fill shortages in the field
  - Continue Fielding activities

PRIME CONTRACTORS

Caterpillar

PROGRAM PORTFOLIO

AVIATION

AVIATION | ACAT I

Apache Attack Helicopter (AH-64 E)

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment





DESCRIPTION

Apache AH-64E is the U.S. Army's attack helicopter. It can destroy armor, personnel, and materiel targets in obscured battlefield conditions. Tactically, AH-64E provides significant warfighting advantages and multiplies the combat effectiveness of the entire fleet.

AH-64E New Build and Remanufacture programs are the Apache modernization efforts that provide additional joint interoperability, improved aircraft performance, increased lethality, enhanced situational awareness (SA), improved soldier survivability, and improved mission performance to support Multi-Domain Operations.

BENEFIT TO THE SOLDIER

- Security to ground forces, fixed-based operations, and aerial escorts
- Engages single or multiple enemy combatants to allow freedom of maneuver or protection
- Provides state-of-the-art aircraft survivability equipment and ammunitions
- Sends real-time SA of the environment and enemy forces to soldiers

PROGRAM STATUS

- **FY23–FY24:**
  - Fielding
  - Software/common configuration
  - Spike missile integration

PRIME CONTRACTORS

Boeing
General Electric
L3 Harris Technologies, Inc.
Lockheed Martin Corporation
Northrop Grumman Systems Corporation

AVIATION | ACAT I

Black Hawk Utility Helicopter (UH/HH-60M)

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

H-60M Black Hawk serves as the U.S. Army's front-line medium-lift utility helicopter, complementing the Future Long Range Assault Aircraft by supporting air assault and aeromedical evacuation operations. H-60 is a Joint Force capable platform, executing missions 24 hours a day in all environmental conditions. H-60 has multi-mission capabilities used to perform tactical transport, utility, search and rescue, airborne assault, command and control, medical evacuation, aerial sustainment, disaster relief, and firefighting missions.

BENEFIT TO THE SOLDIER

- Carries an external cargo hook load up to 9,000 lbs.
- Max speed of 151 knots (174 mph)
- Extended range with external stores fuel tanks
- Redundant critical components, advanced digital avionics, and high-speed machined cabin structure for enhanced rigidity and strength

PROGRAM STATUS

- **FY22:**
  - Deliveries completed
  - Awarded multiyear contract
- **FY23–FY25:** Fielding and integration

PRIME CONTRACTORS

General Electric
Sikorsky, a Lockheed Martin Company

AVIATION | ACAT IC

Chinook Cargo Helicopter (CH-47F & CH-47F Block II)

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment

DESCRIPTION

CH-47F Chinook is the U.S. Army's only heavy-lift cargo helicopter supporting combat and other critical operations, representing an essential element of Army of 2030. It has a suite of improved features such as an upgraded digital cockpit featuring the Common Avionics Architecture System, a new monolithic airframe with vibration reduction, and the Digital Automatic Flight Control System, which provides coupled controllability for operations in adverse environments (reduced visibility, brown out, or high winds).

The CH-47F Block II provides an increased payload and operational reach beyond the existing CH-47F capabilities as well as future growth potential. The Block II will enable the Army to better support the rapid response capability necessary for forcible and early entry contingency missions as well as tactical and operational nonlinear and noncontiguous simulations or sequential operations.

BENEFIT TO THE SOLDIER

- Transports forces and associated equipment
- Provides routine aerial sustainment of maneuver forces
- Secondary missions: medical evacuation, search and rescue, parachute drops, disaster relief, and aircraft recovery
- CH-47F Block II will provide additional capability to the field (greater reach, increased payload capacity, and an increased maximum gross weight to 54,000 pounds)

PROGRAM STATUS

- **FY23:**
  - Final Block I Production Contract Award
  - Block II System Verification Review completed
- **FY24:**
  - Block II Milestone C
  - Block II User Demonstration first Operational Unit flights

PRIME CONTRACTORS

Boeing
Collins Aerospace
Goodrich
Honeywell

Future Long Range Assault Aircraft (FLRAA)

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction

DESCRIPTION

Future Long Range Assault Aircraft (FLRAA) is the next generation vertical lift, tactical air assault, and medical evacuation aircraft, providing transformational increases in speed, reach, improved sustainability, maneuverability, agility, and survivability. FLRAA is critical to the U.S. Army aviation's capability to self-deploy to theater, move soldiers and supplies deep and fast in the maneuver battlespace, mitigate resupply challenges in a contested logistics environment, and present adversaries with multiple dilemmas. FLRAA reduces the demand for strategic air lift and maritime transport requirements.

BENEFIT TO THE SOLDIER

- Provides the Joint Force and soldiers with transformational capabilities in speed and reach
- Nearly doubles the range of the Army's current medical evacuation "Golden Hour" (the first hour after the occurrence of a traumatic injury)
- Critical to the Army's capability to self-deploy to theater and move soldiers and supplies deep and fast in the maneuver battlespace
- Transforms Army aviation by flying further and faster than any other Army vertical lift aircraft

PROGRAM STATUS

- **FY21:**
  - Middle Tier of Acquisition approved
  - Initial Design
  - Requirement and Functional Concept Reviews
- **FY23:** Weapon Systems Development Contract Award
- **FY24:**
  - System Requirements Review/System Functional Review
  - Preliminary Design Review
  - Capability Development Document

PRIME CONTRACTORS

Bell Textron, Inc.

AVIATION

ACAT II (PROJECTED)

Future Tactical Uncrewed Aircraft Systems (FTUAS)

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Middle Tier of Acquisition – Rapid Prototyping

DESCRIPTION

Future Tactical Uncrewed Aircraft System (FTUAS) is the brigade combat team's (BCT) key enabler to conduct future cross-domain reconnaissance and security operations with a rapidly deployable, runway-independent, and expeditionary UAS platform. The capability allows BCTs to collect, develop, and report near real-time actionable intelligence information and provides Commanders reaction time and decision space. FTUAS' Modular Systems Open Approach allows for continuous upgrades and technology insertions that improve performance, survivability, and sustainment technologies – staying ahead of the enemy.

BENEFIT TO THE SOLDIER

- Vertical take off and landing
- Organic sustainment (soldier field-level diagnostic and repair)
- Runway independent
- Reduced acoustic signature
- Smaller footprint
- On-the-Move Command and Control
- Components are two-person lift
- Rapid emplacement time
- CH-47 Chinook helicopter internally transportable
- Assured Position, Navigation, and Timing and data link encryption

PROGRAM STATUS

- **FY21:** Abbreviated Capability Design Document (A-CDD) approved
- **FY23:** Contract Award
- **FY24:** A-CDD update

PRIME CONTRACTORS

Griffon Aerospace
Textron Systems

Gray Eagle Uncrewed Aircraft System (MQ-1C)

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

The MQ-1C Gray Eagle Uncrewed Aircraft System (UAS) addresses the need for a long-endurance, lethal UAS that offers greater range, altitude, and payload flexibility over prior versions. The Gray Eagle aircraft is powered by a heavy fuel engine providing a longer service life that runs on common fuel found on the battlefield.

BENEFIT TO THE SOLDIER

- Provides the warfighter with dedicated, assured, multimission UAS capabilities

PROGRAM STATUS

- **FY23:** Developing Modernized MQ-1C Gray Eagle

PRIME CONTRACTORS

General Atomics Aeronautical Systems, Inc.

High Accuracy Detection and Exploitation System (HADES)

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Middle Tier of Acquisition Rapid Prototyping

DESCRIPTION

Deep sensing is the Secretary of the Army's top operational imperative. The High Accuracy Detection and Exploitation System (HADES) program will provide advanced aerial intelligence capabilities for Multi-Domain Operations (MDO) against peer and near-peer adversaries, addressing U.S. Army deep sensing needs in all phases of operations and throughout the depth of the future battlefield.

BENEFIT TO THE SOLDIER

- Facilitates integrated deterrence by complicating adversary decision calculus and provides operational freedom and flexibility for the U.S. Army, the Joint Force, and our Allies and partners
- Higher operating altitudes increase weapon system standoff and survivability in both the competition and conflict phases of MDO
- Performs long missions without refueling and is able to be on location worldwide within 48 hours
- Implementation of a modular open systems approach will ensure future sensors and capabilities are integrated more rapidly and affordably across the life cycle as the threat environment changes and technology advances

PROGRAM STATUS

- **FY21:** Research, Development, and Test and Evaluation
- **FY22:**
  - PEO Aviation designated as the Office of Primary Responsibility
  - PEO Intelligence, Electronic Warfare and Sensors designated as the Office of Coordinating Responsibility
- **FY23:** Middle Tier of Acquisition (MTA) Initiation Activities
- **FY24:**
  - MTA Rapid Prototyping Pathway
  - Award Contracts

PRIME CONTRACTORS

TBD

Helicopter Launched Fire and Forget (HELLFIRE (HF))

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Helicopter Launched Fire-and-Forget (HELLFIRE (HF)) Long Bow (LB) is a fire-and-forget missile using radar-aided inertial guidance. It is part of the Apache AH-64D Longbow system, which includes fire control radar and associated electronics designed to greatly increase the survivability of the host helicopter. HFLB provides the capability to conduct battle both day and night in adverse weather conditions and with battlefield obscurants present.

The HF II Multipurpose Warhead Missile provides the warfighter with the flexibility to carry one multipurpose missile providing the anti-armor, anti-personnel, and military operations on urban terrain lethality of the previous HF missile variants. Improvements over legacy HF II provides the U.S. Army with a multipurpose warhead and fully qualified rotary wing and unmanned aerial system missile that is also backwards-compatible with currently fielded aircraft.

BENEFIT TO THE SOLDIER

- Point-target precision strike capability

PROGRAM STATUS

- **FY21–FY24:**
  - Full-Rate Production
  - Sustainment

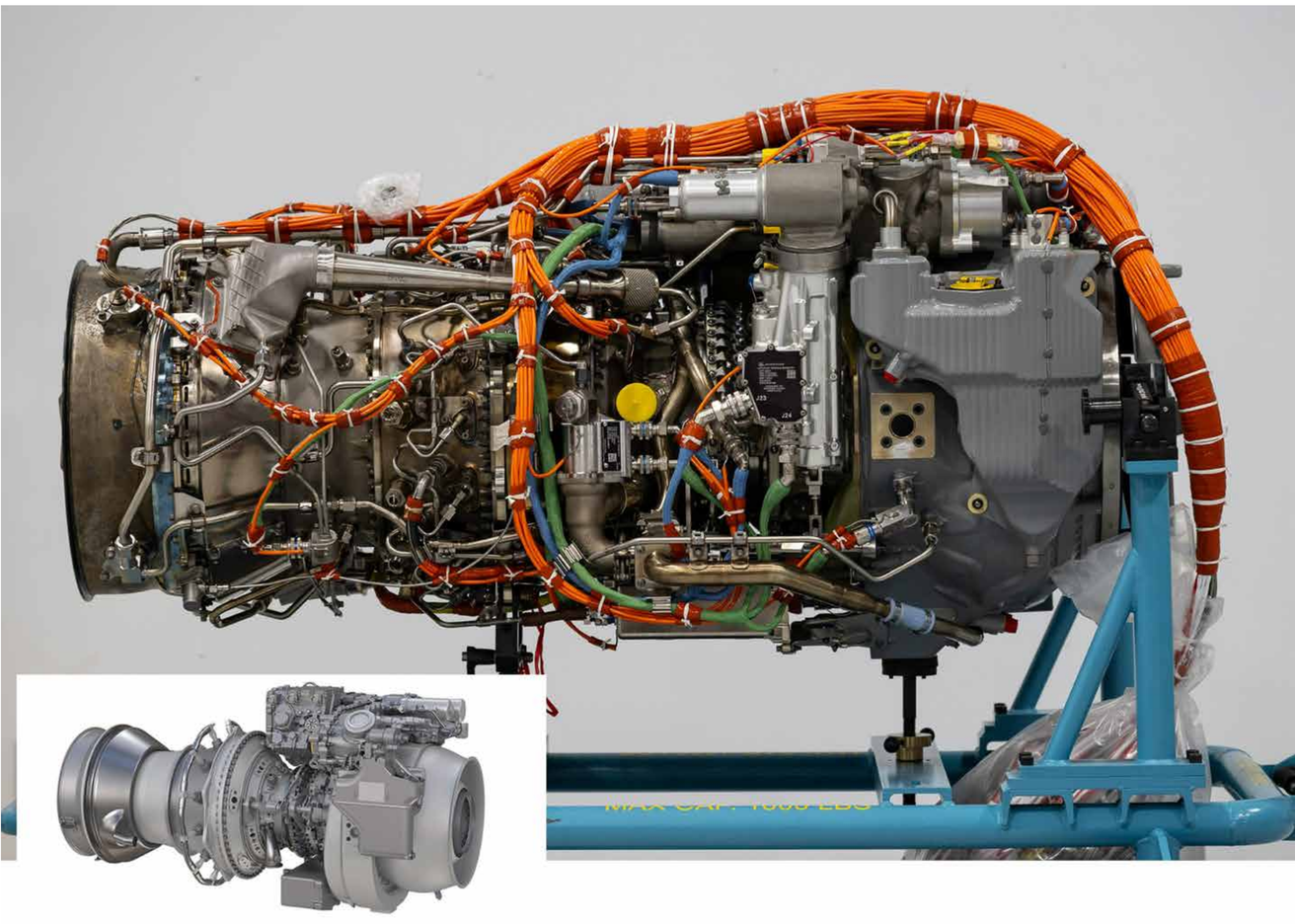
PRIME CONTRACTORS

Longbow, LLC (Joint Venture between Lockheed Martin Corporation and Northrop Grumman Corporation)
Lockheed Martin Missiles and Fire Control

Improved Turbine Engine Program (ITEP) – T901

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development



DESCRIPTION

The T901 Improved Turbine Engine will replace the current engines in the AH-64 Apache and H-60 aircraft fleets to provide more power with greater fuel efficiency. It is aligned with the DOD Operational Energy Strategy, the Army Climate Strategy, and the National Defense Strategy.

BENEFIT TO THE SOLDIER

- Supports Multi-Domain Operations (Army Aviation Reach, Lethality, and Survivability)
- Improves worldwide performance in high/hot conditions (6,000 feet/95° Farenheit)
- Increases range, payload, and endurance
- More power with greater fuel efficiency
- Increased utility/medical evacuation/attack loiter times

PROGRAM STATUS

- **FY21:** Critical Design Review
- **FY22:**
  - Preliminary Design Review
  - Testing
- **FY23:** Deliveries
- **FY24:** First installed engine ground run

PRIME CONTRACTORS

GE Aerospace

Joint Air-to-Ground Missile (JAGM)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Joint Air-to-Ground Missile (JAGM) System provides an improved capability for rotary wing aircraft and unmanned aerial systems. JAGM is an air-launched, precision-guided munition for use against high-value stationary, moving, and relocatable land and naval targets. JAGM utilizes a multimode seeker to provide precision point and fire-and-forget targeting day or night in adverse weather and battlefield-obscured conditions against a variety of countermeasures. A multipurpose warhead provides lethal effects against a range of target types, from armored vehicles, thin-skinned vehicles, and maritime patrol craft, to urban structures and field fortifications. JAGM delivers the Joint services a single air-to-ground missile with improved lethality, operational flexibility, and a reduced logistics footprint.

BENEFIT TO THE SOLDIER

- Point target precision strike capability

PROGRAM STATUS

- **FY21–FY22:** Low-Rate Initial Production
- **FY22:** Full-Rate Production (FRP) decision review
- **FY23:** Awarded FRP Contract

PRIME CONTRACTORS

Lockheed Martin Corporation

AVIATION | ACAT II

Launched Effects (LE) Short, Medium, and Long Range (SR, MR, LR)

PEO Aviation | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Rapid Prototyping and Rapid Fielding

DESCRIPTION

Launched Effects (LE) addresses numerous capability gaps in current formations and provides capabilities for the Army of 2030 to succeed in Multi-Domain Operations. LE leverages Army-wide collaboration with Maneuver, Aviation, Intelligence, Cyber, and Space and Missile Defense communities to integrate efforts across the Joint Force.

BENEFIT TO THE SOLDIER

- LE fully or partially mitigates the following capability gaps:
  - Aerial reconnaissance and security
  - Aerial sensing
  - Lethality
  - Suppression/destruction of enemy air defense
  - Protect aircraft and systems

PROGRAM STATUS

- **FY22:**
  - Middle Tier of Acquisition – Rapid Prototype signed
  - Contract Award
- **FY23:** First flight ground tests completed
- **FY24:**
  - Air vehicle drop
  - First flight tests complete
  - Projected Abbreviated-Capability Development Document approval

PRIME CONTRACTORS

Area-I
Aurora Flight Sciences
Collins Aerospace
Northrop Grumman Corporation
Technology Service Corporation

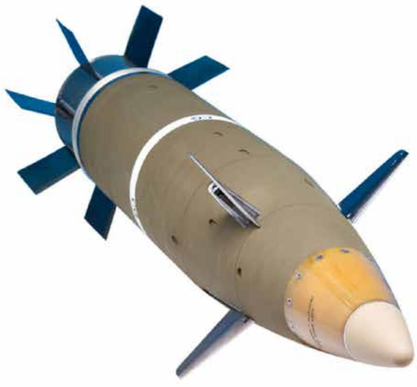
PROGRAM PORTFOLIO

FIRES

155 mm Excalibur Projectiles

Joint PEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Production & Deployment



DESCRIPTION

Excalibur is a fin-stabilized, canard-controlled, precision projectile. It conducts in-flight guidance and trajectory correction for precision attack, which enables a first-round effect on targets and reduces the number of rounds required to engage targets. The recent shaped trajectory upgrade increases scope of target engagements.

BENEFIT TO THE SOLDIER

- Provides first-round effects on target
- Reduces collateral damage
- Engages targets on reverse slopes
- Can be utilized by cannon artillery formations in all-weather and 24/7

PROGRAM STATUS

- **FY21–FY24:**
  - Option Awards
  - Regular Delivery
- **FY22–FY24:** Upgrades Assessed

PRIME CONTRACTORS

Raytheon Missiles & Defense

155 mm M777A2 Lightweight Towed Howitzer

Joint PEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

M777A2 Lightweight Howitzer provides direct, reinforcing, and general artillery fire support to maneuver forces. M777A2 is a towed 155 mm Howitzer jointly developed by the U.S. Army and Marine Corps to replace the M198 Howitzer.

BENEFIT TO THE SOLDIER

- Reduced weight, improved survivability, lethality, deployability, and mobility

PROGRAM STATUS

- **FY21:** Completed Operational Sustainment Review
- **FY22:** Testing, Acceptance, and Fielding of new production Howitzers
- **FY23:**
  - Awarded new Sustainment Contract
  - Acceptance and Fielding of new production Howitzers
  - Delivery
- **FY24:**
  - Qualification of upgraded Digital Fire Control System components
  - Published updates to the Operator Manual

PRIME CONTRACTORS

BAE Systems
Honeywell
Leonardo DRS, Inc.

Army Tactical Missile System (ATACMS)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

Army Tactical Missile System (ATACMS) Unitary variants are 24/7, all-weather precision missiles that expand the current ATACMS target set to include stationary point targets and targets within urban and complex environments using a high-explosive unitary warhead that limits collateral damage.

BENEFIT TO THE SOLDIER

- Provides area effects

PROGRAM STATUS

- **FY21–FY22:** Delivery

PRIME CONTRACTORS

Lockheed Martin Missiles and Fire Control

Counterfire Target Acquisition Radar (AN/TPQ-53)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Counterfire Target Acquisition Radar (AN/TPQ-53) is a highly mobile radar set that automatically detects, classifies, tracks, and locates the point of origin of projectiles fired from rocket, artillery, and mortar systems. It meets close combat range coverage requirements by providing a 90-degree search sector (stare mode) as well as 360-degree coverage that replaced the legacy AN/TPQ-36 and divested AN/TPQ-37 Firefinder radars. AN/TPQ-53 interoperates with the Advanced Field Artillery Tactical Data systems to provide the maneuver Commander increased counterfire radar flexibility. The AN/TPQ-53 is organic to brigade combat teams, field artillery brigades, and division artilleries. AN/TPQ-53 supports operational needs via a multi-mission capability with air surveillance and counterfire target acquisition performance. The system is a vital capability on today's battlefield.

BENEFIT TO THE SOLDIER

- Highly mobile with rapid emplacement and displacement
- Supports Long Range Precision Fires

PROGRAM STATUS

- **FY22–FY23:** Development, Fielding, and Sustainment

PRIME CONTRACTORS

Lockheed Martin Corporation

Guided Multiple Launch Rocket System (GMLRS) Dual-Purpose Improved Conventional Munition (DPICM)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Guided Multiple Launch Rocket System (GMLRS) Dual-Purpose Improved Conventional Munition (DPICM) provides a responsive, all-weather, rapidly deployable, long-range, surface-to-surface precision strike capability.

BENEFIT TO THE SOLDIER

- High rate of fire
- Rapid reload capability
- Insensitive Munitions Propulsion System increases system safety and launcher survivability

PROGRAM STATUS

- **FY21:** Modification Program initiated
- **FY22:** Extended Range GMLRS Modification entered System Qualification Phase

PRIME CONTRACTORS

Lockheed Martin Missiles and Fire Control

High Mobility Artillery Rocket System (HIMARS) – M142

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

M142 High Mobility Artillery Rocket System (HIMARS) launcher is a full-spectrum, combat proven, all-weather, 24/7 lethal and responsive precision-strike weapon system. HIMARS provides critical missile precision strikes, operational shaping fires, counter-fire, and close support destructive and suppressive fires. HIMARS is a C-130 and C-17 air transportable, wheeled, indirect fire, rocket/missile launcher capable of firing one pod of precision rockets/missiles from the current and future Multiple Launch Rocket System Family of Munitions, to include the Guided Multiple Launch Rocket System (GMLRS), Extended Range GMLRS, Army Tactical Missile System, and Precision Strike Missile. These munitions are capable of engaging targets with precision at ranges up to and in excess of 400 kilometers.

BENEFIT TO THE SOLDIER

- Supports Joint Forces

PROGRAM STATUS

- **FY22:** Full-Rate Production
- **FY23:**
  - Contract Award
  - Fielding and Delivery

PRIME CONTRACTORS

BAE Systems Land & Armaments/Global Tactical Systems
Letterkenny Army Depot
Lockheed Martin Missiles and Fire Control
Red River Army Depot

Joint Effects Targeting System (JETS)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Joint Effects Targeting System (JETS) Target Location Designation System is a U.S. Army-led Joint information program with the Air Force and Marine Corps to develop and field a one-man-portable, handheld capability to rapidly acquire, precisely locate, and accurately engage targets with precision-guided munitions. It also improves the effectiveness of engagement with unguided munitions.

BENEFIT TO THE SOLDIER

- Addresses a high-priority capability gap for a lightweight, highly accurate targeting system, allowing a single soldier to engage targets with precision munitions
- Provides crucial digital connectivity to request and control indirect fires and close air support
- Allows access to precision targeting in all operational environments

PROGRAM STATUS

- **FY22:**
  - Training and Fielding
  - Full Materiel Release
  - JETS II development Acquisition Decision Memorandum
- **FY23:**
  - Training and Fielding
  - Other Transaction Authority Prototyping Award
- **FY24:** Fielding

PRIME CONTRACTORS

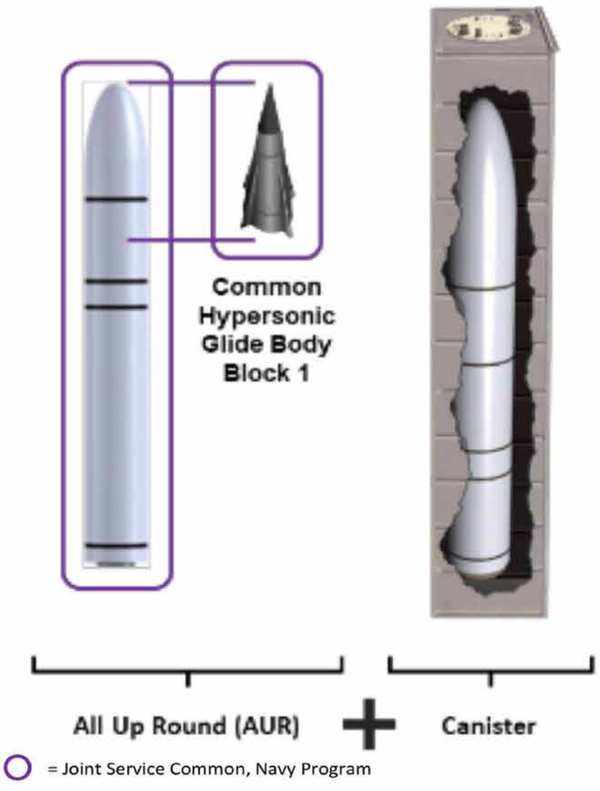
Leonardo DRS, Inc.

FIRES | ACAT TBD

Long-Range Hypersonic Weapon (LRHW)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction, Engineering & Manufacturing Development, Production & Deployment



Battery Operations Center (BOC) System

Transporter Erector Launchers (TEL)

DESCRIPTION

Long-Range Hypersonic Weapon (LRHW) is a ground-launched hypersonic capability to defeat various threats, suppress adversary long-range fires, and engage high-payoff, time-critical targets in support of Multi-Domain Operations.

BENEFIT TO THE SOLDIER

- Road mobile and air transportable
- Common with a U.S. Navy program

PROGRAM STATUS

- **FY21:**
  - Abbreviated Capability Development Document
  - Ground support equipment delivered
- **FY22:** Training
- **FY23:** Delivery
- **FY24:** Urgent Materiel Release

PRIME CONTRACTORS

Dynetics
Lockheed Martin Corporation

Mid-Range Capability (MRC)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Middle Tier of Acquisition Rapid Prototyping

DESCRIPTION

Mid-Range Capability (MRC) is a road-mobile, air transportable, ground-launched weapon system capable of conducting multi-domain offensive fires. MRC Ground Support Equipment for each battery consists of launchers, an operations center, support vehicle, and a reload capability. Each launcher is equipped with a deployment system capable of carrying four missiles. The deployment system and operations center are housed in 40-foot containers mounted on trailers containing generators, and towed by a M983A4 Heavy Expanded Mobility Tactical Truck. The support vehicle is an M1152A1 High Mobility Multipurpose Wheeled Vehicle and trailer capable of carrying and laying fiberoptic cables used to connect the operations center and launchers. The operations center includes weapon control systems, data system, and an automated coordination system.

BENEFIT TO THE SOLDIER

- Provides a combined operational capability to attack specific threat vulnerabilities to penetrate, disintegrate, and exploit targets critical to the Joint fight

PROGRAM STATUS

- **FY21:**
  - Other Transaction Agreement for Prototype Contract Awarded
  - Critical Design Review
- **FY22:** Prototype battery fabrication completed
- **FY23:**
  - Delivery and New Equipment Training (NET)
  - Flight Tests
  - Munitions Delivery
  - First Unit of Issue achieved
- **FY24:**
  - Middle Tier of Acquisition Rapid Prototyping program initiated
  - Delivery and NET
  - United States Army, Pacific Command exercise support

PRIME CONTRACTORS

Lockheed Martin Corporation

Multiple Launch Rocket System (MLRS) – M270A1 and M270A2

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

M270A1 Multiple Launch Rocket System (MLRS) is a full-spectrum, combat-proven, all-weather, 24/7, lethal and responsive, tracked precision strike weapon system organic or assigned to field artillery brigades (FAB). The M270A1 program consists of a modified M993A1 Bradley Carrier mounted with the M269 Launcher Loader Module. The M270A1 fires all MLRS Family of Munitions rockets and missiles, to include the Guided Multiple Launch Rocket System (GMLRS) and the Army Tactical Missile System. The Improved Armored Cab is currently in Production and when applied, the MLRS will become the M270A2. A common fire control system is in development and will be fielded with the M270A2. Once installed, the launcher will add the capability to fire the Extended Range GMLRS and the Precision Strike Missile. These munitions are capable of engaging targets with precision at ranges up to and in excess of 400 kilometers.

BENEFIT TO THE SOLDIER

- Provides 24-hour, all-weather, lethal, close- and long-range precision rocket and missile fire support
- Supports Joint forces, early-entry expeditionary forces, contingency forces, and FAB supporting brigade combat teams
- M270A2 provides improved crew protection

PROGRAM STATUS

- **FY22:**
  - Contract Awards
  - Production
- **FY23:**
  - Contract Awards

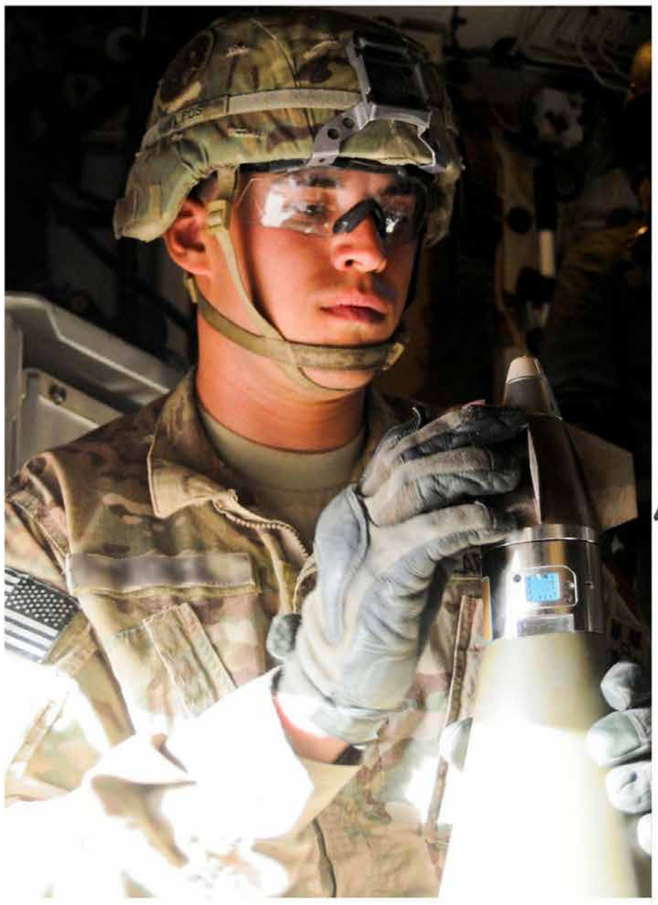
PRIME CONTRACTORS

Lockheed Martin Missiles and Fire Control

Precision Guidance Kit/ Long Range – Precision Guidance Kit (PGK/LR-PGK)

Joint PEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction, Production & Deployment



DESCRIPTION

Precision Guidance Kit (PGK) is a course correcting fuze for 155 mm artillery and contains fuzing functions to correct the inherent errors associated with ballistic firing solutions, reducing the number of artillery projectiles required to defeat targets. The PGK's precision capability allows operational Commanders to engage assigned targets in a Global Positioning System (GPS)-degraded environment and rapidly achieve desired effects while minimizing collateral damage. The Long Range Precision Guidance Kit (LR-PGK) will be the next generation course correcting fuze, providing additional capability in GPS-degraded environments and compatibility with the next generation 155 mm weapon systems and extended range projectiles.

BENEFIT TO THE SOLDIER

- Increases the effectiveness of high-explosive 155 mm conventional ammunition, providing first round effects on target
- Reduces collateral damage
- Improves accuracy, 20 m Continuous Evaluation Program at all ranges
- Reduces logistics burden for ammunition resupply

PROGRAM STATUS

- **FY24:** DODIC NA37 variant introduced, adding M-code GPS compatibility

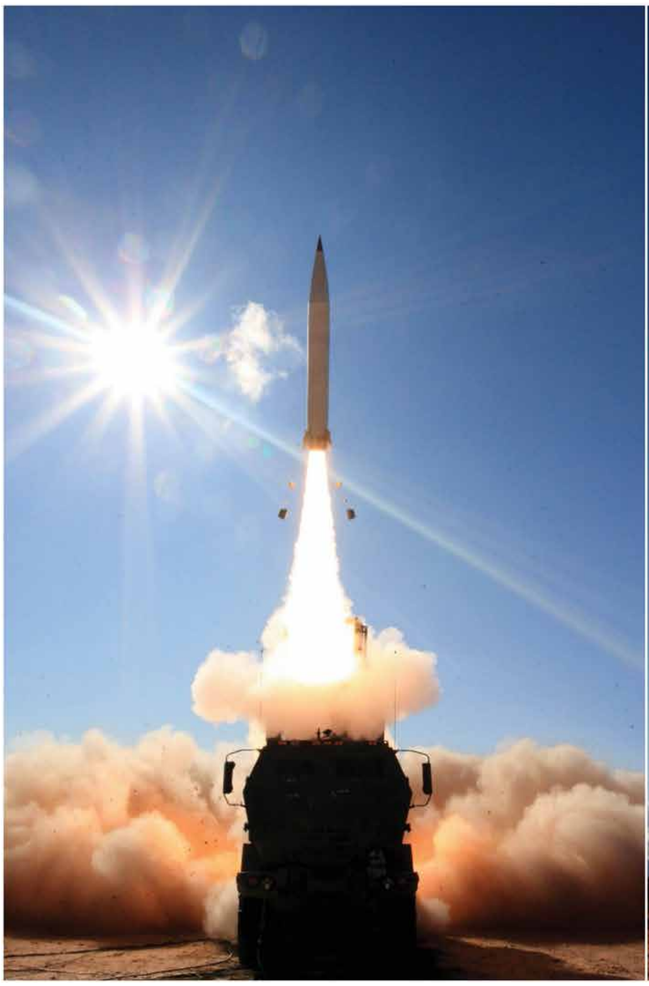
PRIME CONTRACTORS

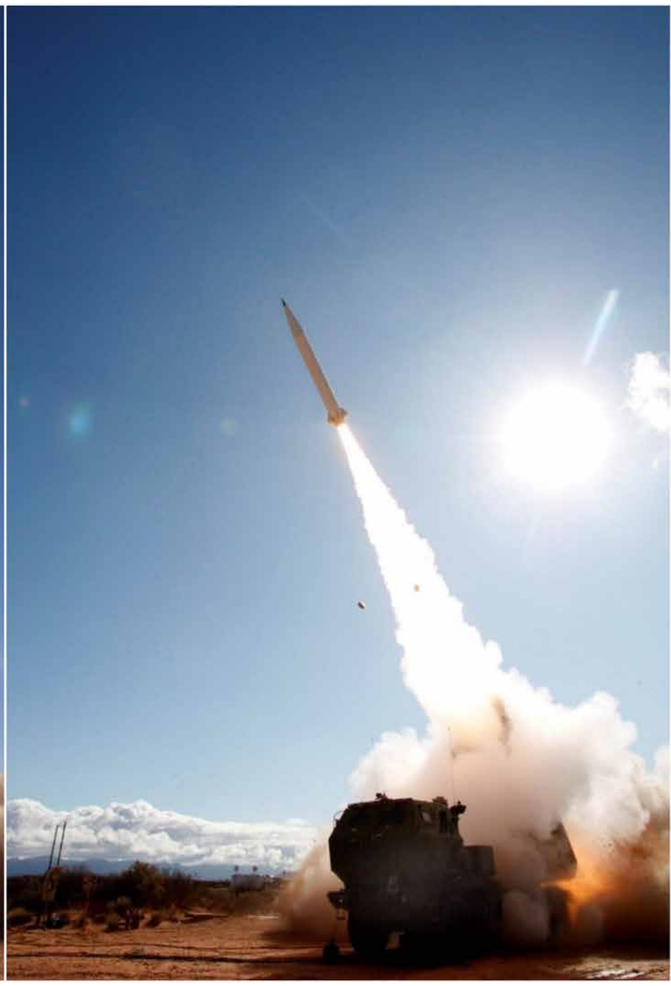
BAE Systems
General Dynamics – Ordnance Technology Systems
Northrop Grumman Systems Corporation

Precision Strike Missile (PrSM)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development





DESCRIPTION

Precision Strike Missile (PrSM) is a surface-to-surface, all-weather, precision strike, guided missile fired from the M270A2 Multiple Launch Rocket System and the M142 High Mobility Artillery Rocket System. The baseline missile will be developed and fielded to engage a wide variety of targets at ranges out to more than 400 kilometers, emphasize imprecisely located area and point targets, and comply with the 2008 DOD policy on cluster munitions and unintended harm to civilians. Primary emphasis for follow-on increments will include increased range, lethality, and engagement of time-sensitive, moving, hardened, and fleeting targets.

BENEFIT TO THE SOLDIER

- Insensitive munitions
- Cluster munitions compliant

PROGRAM STATUS

- **FY21:**
  - Directed Requirement approved
  - Joint Requirements Oversight Council validation
  - Milestone B
  - Early Operational Capability and Engineering Manufacturing Development Contract Award
- **FY22:** System Critical Design Review

PRIME CONTRACTORS

Lockheed Martin Missiles and Fire Control

Product Director Paladin (M109A6/ M992A2 (A6) and M109A7/ M992A3 (A7))

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

M109A7 Paladin Self-Propelled Howitzer (SPH) and M992A3 Carrier Ammunition Tracked are indirect fire weapon systems with the ability to deliver accurate, precision-guided, long-range, lethal, and non-lethal cannon fires capabilities to support large-scale combat Multi-Domain Operations. The upgrades improve mobility, survivability, power, and reliability through an entirely new hull and chassis and modernization.

BENEFIT TO THE SOLDIER

- Increases mobility, force protection, and survivability
- Offers growth potential for future increases in lethality and range

PROGRAM STATUS

- **FY23:**
  - Full Materiel Release
  - Contract Award
  - Fielded eighth Unit Equipped (UE) and ninth UE
- **FY24:**
  - Production Contract Option 5 awarded and Option 6 expected to be awarded
  - Production Contract, Undefinitized Contract Action expected to be awarded
  - Fielding to the tenth UE (complete) and eleventh UE (ongoing)

PRIME CONTRACTORS

BAE Systems

PROGRAM PORTFOLIO INTELLIGENCE

Distributed Common Ground System – Army (DCGS–A)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

Operational Intel Ground Station
OGS Corps/AEB

ADV

Intel Proc Center (V)2
Corps/DIV/BCT/BfSB/E-MIB

Fixed-MFWS
MI Bde/ASCC

Intel Proc Center (V)1

Tactical Intel Ground Station (TGS)
Corps/Div/BCT/E-MIB

Capability Drop 1
(CD1)

GEOINT WS

All Units
Intel Fusion Server
(IFS/TSI)

P-MFWS

Cross Domain Solution
(CDSS)

Capability Drop 2
(CD2)

DESCRIPTION

Distributed Common Ground System – Army (DCGS–A) provides processing, exploitation, and dissemination of near real-time intelligence data.

BENEFIT TO THE SOLDIER

- Provides Commanders an enhanced intelligence capability that allows for better synchronization of fires and maneuver
- Provides persistent/dynamic operational awareness
- Modernizes data management and intelligence production

PROGRAM STATUS

- **FY21:** Completed Fielding
- **FY22:** Operational Utility Assessment conducted
- **FY23:** Modernization and Fielding

PRIME CONTRACTORS

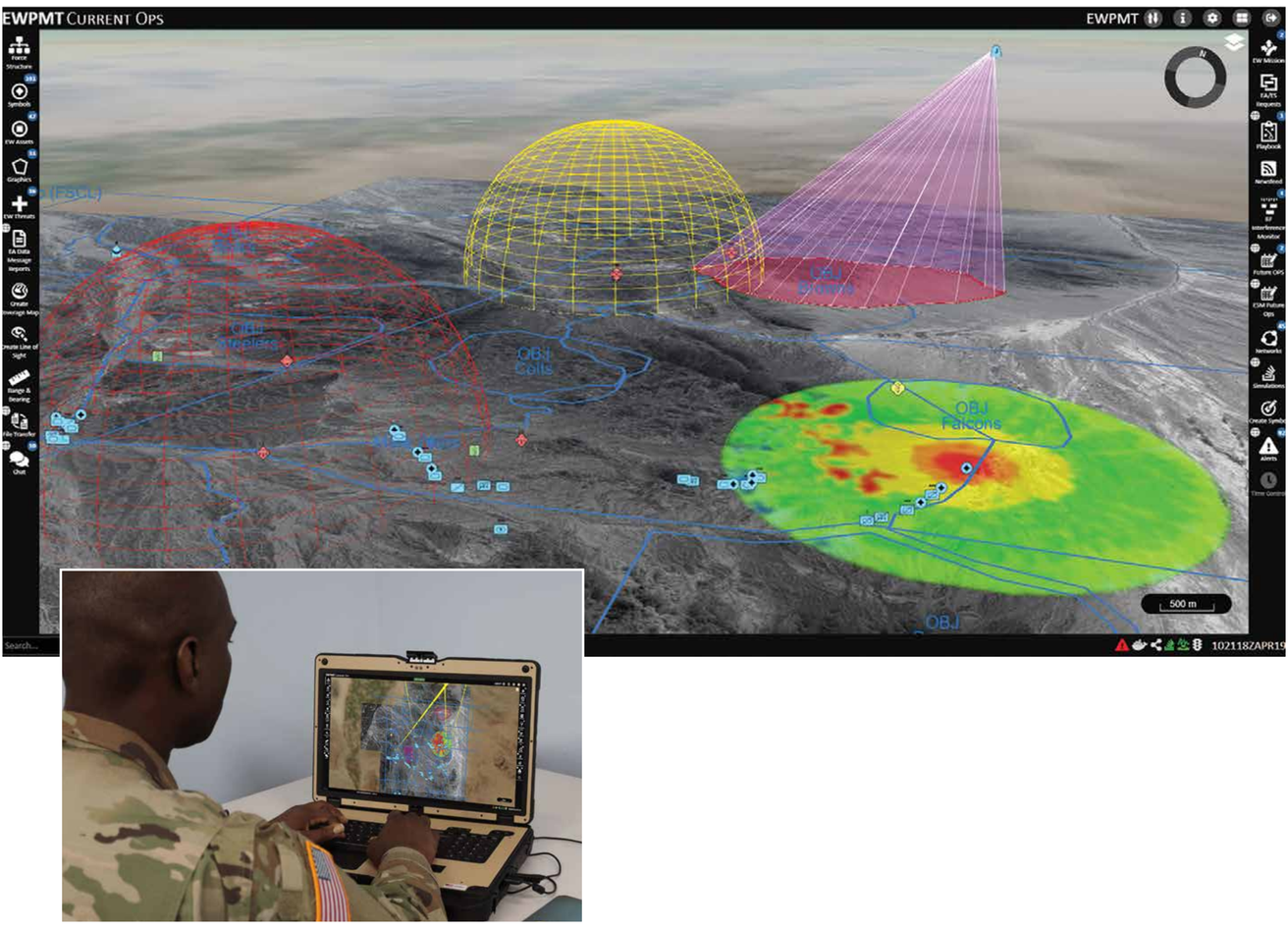
Boeing
Booz Allen Hamilton
CACI
Force Point
General Dynamics Mission Systems
L3 Harris Technologies, Inc.
MaxVision, Rugged Portable Computers, LLC
Palantir USG, Inc.
Raytheon Information Systems

INTELLIGENCE ACAT II

Electronic Warfare Planning and Management Tool (EWPMT)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Operations & Support



DESCRIPTION

Electronic Warfare Planning and Management Tool (EWPMT) provides major operations capabilities at varying levels of technical maturity. Future Operations mode provides the ability to plan, model, and simulate EW effects. Current Operations mode provides the means to receive geographical lines of bearing and other sensor data to produce visualizations of the electromagnetic operating environment, enabling situational awareness. EWPMT enables cyber and electromagnetic activities and provides data for the overall Mission Command Operational Picture. Future development includes a more refined ability to ingest Terrestrial Layer System and multifunction EW sensor data, provide positioning, navigation, and timing situational awareness, and the eventual means to command and control the sensors through EWPMT.

BENEFIT TO THE SOLDIER

- Gives Commanders a tool to visualize, control, manage, and dominate the electromagnetic spectrum to support Multi-Domain Operations
- Provides the ability to manage and remotely control EW assets
- Enhances targeting and enable maneuver
- Synchronizes EW and spectrum management operations

PROGRAM STATUS

- **FY21–FY23:** Units Equipped and supported with Operational Needs Statement
- **FY22:** Capability Set Test
- **FY23:**
  - Fielding, Training, Development, and Warfighter Support Contract Award
  - Delivery

PRIME CONTRACTORS

Raytheon

INTELLIGENCE
ACAT III

Multi-Function Electronic Warfare – Air Large (MFEW–AL)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

Multi-Function Electronic Warfare – Air Large (MFEW–AL) is a single, self-contained, airborne electronic warfare pod. MFEW–AL will support command and control, remote operations, and dynamic tasking.

BENEFIT TO THE SOLDIER

- Provides brigade combat team Commanders with an organic airborne offensive electronic warfare capability
- Delivers offensive electronic attack and electronic warfare support

PROGRAM STATUS

- **FY21:**
  - Milestone C approved
  - Operational Demonstrations and Soldier Touch Points (STP)
- **FY22:** Developmental Flight Tests
- **FY23:** Developmental Test and STPs

PRIME CONTRACTORS

Lockheed Martin Rotary and Mission Systems

INTELLIGENCE | ACAT III

Next Generation Biometric Collection Capability (NXGBCC)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Next Generation Biometric Collection Capability (NXGBCC) supports the U.S. Army's number one large-scale combat operations gap by using biometrics as a sensor to enable intelligence collection and analysis. It is the U.S. Army's enabler for Joint Forces to conduct force protection and military intelligence activities involving identification of combatants, managing enemy prisoners of war, civilian detainees, displaced persons, and refugees during large-scale combat operations. NXGBCC collects, matches, and stores biometrics in three minutes.

BENEFIT TO THE SOLDIER

- Provides the Biometrically Enabled Watchlist and match report to the soldier
- Offers force protection by enhancing access control
- Shares data with coalition partners
- Protects expeditionary forces while building combat power

PROGRAM STATUS

- **FY21:** Program initiated new strategy
- **FY22:**
  - Received Congressional funding approval
  - Awarded Delivery Order
- **FY23:**
  - Revised acquisition strategy approved
  - Awarded Delivery Order for procurement of test devices
- **FY24:**
  - Soldier Touch Point
  - Milestone C

PRIME CONTRACTORS

Booz Allen Hamilton
Ideal Innovations Incorporated (I3)

INTELLIGENCE
ACAT N/A

Tactical Intelligence Targeting Access Node (TITAN)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

Tactical Intelligence Targeting Access Node (TITAN) is a scalable and expeditionary intelligence ground station that supports Commanders across the entire Multi-Domain Operations/Joint All Domain Operations battlefield framework with capabilities tailored by echelon. TITAN leverages Space, High Altitude, Aerial, and Terrestrial Layer Sensors to provide target nominations directly to fires command and control networks as well as multidiscipline intelligence support to targeting and situational awareness in support of mission command.

BENEFIT TO THE SOLDIER

- Reduces sensor to shooter timelines
- Rapidly correlates targets from multiple sensor feeds
- Reduces cognitive burden on analysts through use of Artificial Intelligence/Machine Learning
- Expeditionary and survivable mobile system

PROGRAM STATUS

- **FY22:**
  - Middle Tier of Acquisition Rapid Prototyping initiated
  - Other Transition Authority (OTA) award for Competitive Prototyping Phase (CPP)
- **FY23:**
  - Demonstration Acceptance Test
  - Completion of CPP
- **FY24:**
  - Upselect and OTA award for Prototype Maturation Phase
  - Prototype First Unit of Issue

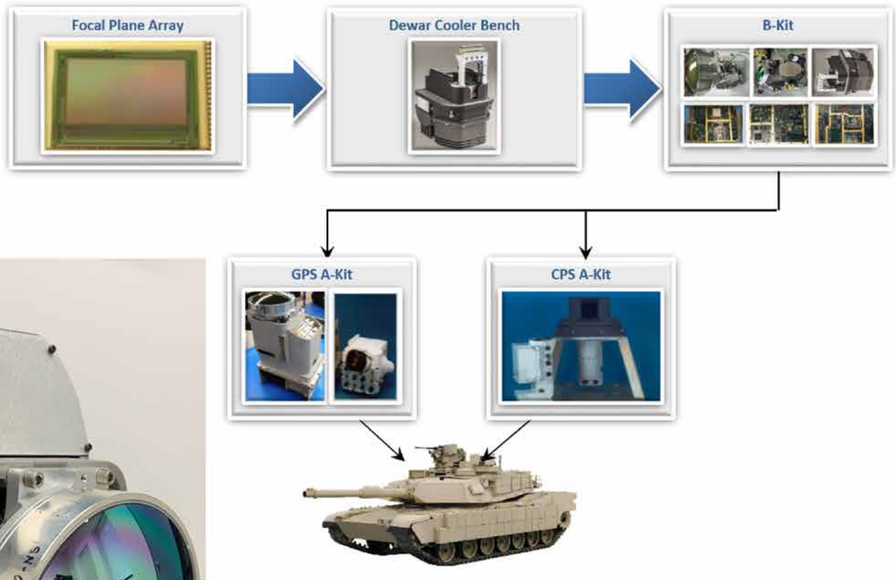
PRIME CONTRACTORS

Palantir USG, Inc.

Third Generation Forward Looking Infrared (3GEN FLIR)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development



DESCRIPTION

Third Generation Forward Looking Infrared (3GEN FLIR) is the next generation of reconnaissance, surveillance, and target acquisition (RSTA) sights to restore sensor overmatch through significant improvements in range and resolution. The 3GEN FLIR program incorporates high-definition dual-band mid-wave infrared and long-wave infrared sensing technology advancements into a common B-Kit for RSTA capabilities in day/night and degraded battlefield environments.

BENEFIT TO THE SOLDIER

- Significantly increases target identification compared to legacy Second Generation FLIR
- Increases lethality and survivability

PROGRAM STATUS

- **FY21:** B-Kit completed Engineering and Manufacturing Development
- **FY22:**
  - Awarded Low-Rate Initial Production Contract (LRIP)
  - Operational Assessment
- **• FY23:**
  - B-Kit LRIP Award
  - Milestone C
- **FY24:** Production Readiness Review Exit

PRIME CONTRACTORS

DRS
Raytheon Intelligence & Space

PROGRAM PORTFOLIO

MANEUVER

MANEUVER
ACAT IC

Abrams Main Battle Tank

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

The Abrams tank is the Army's primary ground combat system.

BENEFIT TO THE SOLDIER

- Provides the lethality, survivability, and fightability necessary to defeat advanced threats well into the future

PROGRAM STATUS

- **FY23:** System Enhancement Package v4 Development continues

PRIME CONTRACTORS

Allison Transmission
Anniston Army Depot
General Dynamics Land Systems
Honeywell
Joint Systems Manufacturing Center

MANEUVER ACAT II

Air Soldier System (Air SS)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Air Soldier System (Air SS) is flight crew life support and mission equipment comprised of:

- Aircrew combat vest with life preserver unit and personal restraint harness
- Nett Warrior – Aviation, a modified commercial-off-the-shelf tablet for cockpit use replacing the Electronic Flight Bag
- Rotary wing helmet that enhances situational awareness and safety for aircrews
- Heads-Up Display that provides key aircraft information to helmet-mounted displays

BENEFIT TO THE SOLDIER

- Improves aviation soldier survivability
- Increases flight crew situational awareness and mission effectiveness

PROGRAM STATUS

- **FY21:** Limited Procurement Decision
- **FY22:** Operational Assessment
- **FY23:** Various procurement decisions, Contract Awards, and Fielding
- **FY24:** Continued Fielding to Army Aviation

PRIME CONTRACTORS

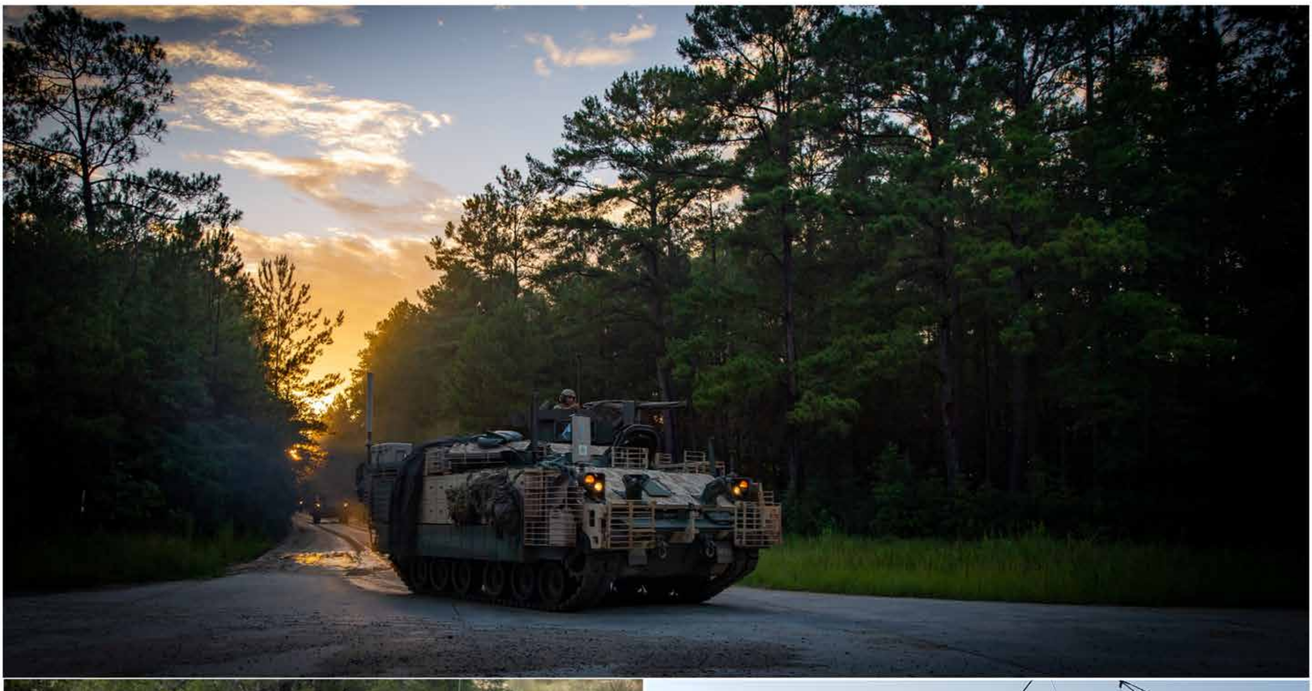
Government is the prime integrator and awards various contracts to multiple vendors providing components.

MANEUVER ACAT IC

Armored Multi-Purpose Vehicle (AMPV)

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment



DESCRIPTION

Armored Multi-Purpose Vehicle (AMPV) replaces the Armored Brigade Combat Team's (ABCT's) M113 Family of Vehicles addressing the M113's shortcomings in: survivability and force protection; size, weight, power, and cooling (SWAP-C); and ability to incorporate future technologies and the Army's Network. The AMPV provides Commanders with viable capabilities to maneuver across the full breadth of the ABCT battlefield.

BENEFIT TO THE SOLDIER

- Improves mobility, survivability, force protection, indirect fires, and medical evacuation capabilities

PROGRAM STATUS

- **FY22:**
  - Live Fire Testing and Evaluation
  - Initial Operational Test complete
- **FY23:**
  - Full-Rate Production Decision review
  - Initial Operating Capability
- **FY24:**
  - Fielding and Second Unit Equipped
  - Testing
  - Development

PRIME CONTRACTORS

BAE Systems

MANEUVER ACAT IC

Booker Combat Vehicle – M10

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The M10 Booker Combat Vehicle provides an overwhelming precision firepower to the infantry brigade, allowing it to neutralize enemy bunkers and light armored vehicle threats during offensive and defensive operations and maintain momentum and freedom of action against enemy forces.

BENEFIT TO THE SOLDIER

- Provides infantry brigade combat teams with mobile, protected direct fire capability

PROGRAM STATUS

- **FY21:**
  - Prototype Deliveries
  - Soldier vehicle assessment
  - Limited User Test
- **FY22:** Low-Rate Initial Production (LRIP) Contract Award
- **FY23:** LRIP begins
- **FY24:**
  - Developmental Test, Initial Operational Test and Evaluation, and Full-Up System-Level Test
  - LRIP 3 Award

PRIME CONTRACTORS

General Dynamics Land Systems

Bradley Fighting Vehicle – M2A4

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

M2A4 Bradley Fighting Vehicle is a digital, full-tracked, medium-armored vehicle that provides cross-country mobility, mounted firepower, communications, protection to mechanized infantry when mounted, and overwatch support when dismounted.

BENEFIT TO THE SOLDIER

- Ensures warfighters can continue to maintain combat overmatch battlefield capabilities

PROGRAM STATUS

- **FY22:** Bradley A4 First Unit Equipped
- **FY23:** Continue Bradley A4 Fielding
- **FY24:**
  - Track and Suspension Engineering Change Proposal installs complete
  - Initiated Bradley Iron Fist Production
  - Bradley A4E1 variant Production initiation

PRIME CONTRACTORS

BAE Systems
Cummins
DRS
Loc Performance
Renk America

MANEUVER ACAT I

Heavy Equipment Recovery Combat Utility Lift and Evacuation System (HERCULES) – M88A2

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

The M88A2 Heavy Equipment Recovery Combat Utility Lift and Evacuation System (HERCULES) provides towing, winching, and hoisting to support battlefield recovery operations and evacuation. HERCULES is the recovery workhorse of the armored brigade combat team.

BENEFIT TO THE SOLDIER

- Provides towing, winching, and hoisting to support battlefield recovery operations and evacuations

PROGRAM STATUS

- **FY21:** Production and Fielding
- **FY22:** Continued Production and Fielding
- **FY23:**
  - Conducted Development, Test, and Evaluation of M88A3
  - Awarded final Production Contract for M88A2
  - Continued Production and Fielding
- **FY24:**
  - Continued Test and Evaluation of M88A3
  - Initiated Test and Evaluation of M88A2 engine
  - Continued Production and Fielding

PRIME CONTRACTORS

BAE Systems

Infantry Squad Vehicle (ISV)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Infantry Squad Vehicle (ISV) provides enhanced tactical mobility for an infantry brigade combat team with its associated equipment to quickly move around the battlefield. This provides Commanders greater freedom of movement and action.

BENEFIT TO THE SOLDIER

- Provides flexibility for entry operations
- Counter threat anti-access strategies

PROGRAM STATUS

- **FY22:**
  - Conditional Materiel Release
  - Fielding
- **FY23:**
  - Fielding
  - Full-Rate Production
  - Initial Operational Test and Evaluation
- **FY24:**
  - Fielding
  - Development and Integration

PRIME CONTRACTORS

GM Defense

MANEUVER
ACAT N/A

Robotic Combat Vehicle (RCV)

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Middle Tier of Acquisition Rapid Prototyping and Software Acquisition Pathway

DESCRIPTION

The Robotic Combat Vehicle (RCV) has transitioned from a family of light, medium, and heavy variants to a single vehicle approach with a common RCV chassis. The development programs include Middle Tier of Acquisition (MTA) Rapid Prototyping and RCV Software Acquisition Pathway (SWP). RCV will inform Concepts of Operations, Tactics, Techniques, and Procedures maturation, Capabilities Development Document development, advanced autonomy and artificial intelligence algorithms, Force Design Updates, robotic and autonomous systems doctrine development, and inform follow-on production and fielding decisions. The RCV SWP program will focus on software capabilities for autonomous mobility, user interface, platform control, and payload control.

BENEFIT TO THE SOLDIER

- Extends the decision time and space of maneuver Commanders
- Hosts a variety of payloads that Commanders can tailor to their mission requirements
- Modular Open and Scalable Architecture(s) supports future software and hardware integration to deliver the most effective capabilities to formations.
- Pushes modular mission payload capabilities to the point-of-need
- Provides a dynamic variable that forces the threat to account for a wide spectrum of potential employment strategies, thus demonstrating a credible deterrence during competition

PROGRAM STATUS

- **FY21:** SWP Planning Phase Approval
- **FY22:** MTA Rapid Prototype Approval
- **FY23:**
  - SWP Execution Phase Approval and Prototype Demonstrator Task Assignment Awards
  - Full-System Prototype Phase I Awards
- **FY24:** Full-System Prototype Phase I Platform Prototype Deliveries

PRIME CONTRACTORS

General Dynamics Land Systems
McQ
Oshkosh Defense, LLC
Textron

MANEUVER ACAT IC

Stryker Brigade Combat Team (SBCT)

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

As the primary combat and combat support platform of the Stryker Brigade Combat Team (SBCT), the Stryker Family of Vehicles (FoV) is a strategically deployable brigade capable of rapid movement worldwide in a combat-ready configuration.

BENEFIT TO THE SOLDIER

- Provides the warfighter with a reliable, combat-tested platform that includes significant enhancements since the original Fielding in 2002
- Affords the warfighter a platform that provides quick response maneuvering, enhanced survivability, lethality, expanded fight versatility, and proven tactical agility

PROGRAM STATUS

- **FY21:** Fielding and Production Awards
- **FY22:** Double-V Hull A1 Production Award
- **FY23–FY24:** Fielding and Production Awards

PRIME CONTRACTORS

General Dynamics
Oshkosh Defense, LLC

XM30 Combat Vehicle

PEO Ground Combat Systems | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Materiel Solution Analysis

DESCRIPTION

XM30 Combat Vehicle will serve as the U.S. Army's Brigade Combat Teams and is tasked to maneuver and operate as part of a Joint combined arms team for the purpose of creating an advantageous position, relative to the enemy, to deliver a decisive strike while also controlling maneuver robotics and semi-autonomous systems. XM30 will replace the Bradley Fighting Vehicle.

BENEFIT TO THE SOLDIER

- Improves survivability against current and emerging threats to deliver soldiers into the fight and maneuver them to a point of positional advantage on the battlefield
- Provides mobility and can react to threats at tactically relevant speed

PROGRAM STATUS

- **FY21:** Preliminary Digital Design Awarded
- **FY22:**
  - Abbreviated Capability Development Document finalized
  - Request for Proposal Detailed Design/Prototype Build and Test released
- **FY23:**
  - Source Selection Evaluation Board
  - Preliminary Digital Design completed
  - Detail Digital Design and Prototype Build and Test Awards
  - Software Pathway Acquisition Decision Memorandum
- **FY24:**
  - Preliminary Design Reviews

PRIME CONTRACTORS

American Rheinmetall Vehicles LLC
General Dynamics Land Systems

PROGRAM PORTFOLIO

MISSION COMMAND

MISSION COMMAND

ACAT II

Command Post Computing Environment (CPCE)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Command Post Computing Environment (CPCE) is the U.S. Army's Program of Record for an easy-to-use common operating picture through a single mission command suite operated and maintained by soldiers. CPCE provides a software and server hardware framework upon which warfighter applications can be converged and future applications built.

BENEFIT TO THE SOLDIER

- Soldiers can access CPCE software via a standard web browser
- Provides a common geospatial solution (map) and common data services
- Reduces the training burden on soldiers
- Software infrastructure framework enables convergence and integration of future warfighting capabilities

PROGRAM STATUS

- **FY21:** Testing
- **FY22:**
  - Full Deployment Decision
  - Milestone B
- **FY23:** Critical Design Review
- **FY24:** Continuous Integration/Continuous Delivery construct adopted

PRIME CONTRACTORS

Systematic
Weapons & Software Engineering Center

Command Post Integrated Infrastructure (CPI2)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment

DESCRIPTION

The Command Post Integrated Infrastructure (CPI2) program improves mobility, scalability, and survivability of U.S. Army command posts to address the challenges posed by contemporary and future land conflict. Product Manager CPI2 leveraged soldier feedback from experimental units to test and refine the new CPI2 mobile CPs. CPI2 is currently equipping priority Divisions across the Army while developing next generation Command and Control On the Move (C2 OTM) solutions.

BENEFIT TO THE SOLDIER

- Leverages improvements in technology to reduce the current CP footprint and improve agility
- Consists of the integration of approved and fielded mission command information systems, government-off-the-shelf and commercial-off-the-shelf technology
- Provides ancillary equipment for fully outfitting the mobile CP

PROGRAM STATUS

- **FY21:** Milestone B
- **FY22:** Milestone C
- **FY23:**
  - Draft Request for Proposal Contracts
  - Testing and Fielding
- **FY24:**
  - Equipping Divisions
  - Gaining soldier feedback on C2 OTM

PRIME CONTRACTORS

Elbit Systems of America
General Dynamics Mission Systems
SCI Technology
Serco

Defense Enterprise Wideband Satellite Communications System (DEWSS)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment, Operations & Support




DESCRIPTION

The Defense Enterprise Wideband Satellite Communications (SATCOM) System (DEWSS) fields and sustains strategic satellite communication systems and satellite network control and planning systems for the Wideband Global SATCOM (WGS) satellite constellations. DEWSS includes two major capabilities:

- **Wideband Satellite Operations and Management System (WSOMS)** enables U.S. Strategic Command to efficiently plan and manage the WGS global SATCOM network to support mission-critical communications for DOD and Allied partners.
- **Enterprise Wideband Satellite Terminal System** fields large aperture satellite communication terminals and associated satellite modems, multiplexers, routers, and supporting telecommunications equipment for strategic SATCOM teleport facilities worldwide.

BENEFIT TO THE SOLDIER

- Highly available strategic military satellite communication systems enable warfighters to execute worldwide command and control of deployed forces

PROGRAM STATUS

- **FY21–FY23:**
  - Fielded several modernized SATCOM teleport terminals
  - Implemented Agile development framework for system enhancements
  - Established organic capability for integration, independent verification, and validation of subsystems
  - Awarded Development Contract
- **FY24:**
  - Field additional modernized terminals
  - Complete Critical Design Review
  - Development and Testing
  - Continuous development/continuous integration of WSOMS subsystems

PRIME CONTRACTORS

Boeing
IAP Worldwide Services, Inc.
L3 Harris Technologies, Inc.
Northrop Grumman Systems Corporation

MISSION COMMAND

ACAT III

Dismounted Assured Positioning, Navigation, and Timing (PNT) System (DAPS)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

The Dismounted Assured Positioning, Navigation, and Timing (PNT) System (DAPS) focuses on providing U.S. Army forces with unhindered access to assured/trusted PNT information. The capability enables Multi-Domain Operations (MDO) Army units to access and assure PNT information required to conduct PNT dependent tasks while operating in conditions with degraded or denied access. DAPS is a near-term and enduring capability.

BENEFIT TO THE SOLDIER

- Provides assured PNT to dismounted users by disseminating PNT to dependent devices in GPS-degraded environments
- Critical in Army MDOs that are impacted by Anti-Access/Area Denial conditions

PROGRAM STATUS

- **FY21:**
  - Materiel Solution Selection
  - Operational Assessment
- **FY22:**
  - Operational Assessment
  - Capability Development Document
- **FY23:**
  - Urgent Materiel Release
  - Testing
  - Milestone C Decision
  - Low-Rate Initial Production Contract Award

PRIME CONTRACTORS

TRX Systems, Inc.

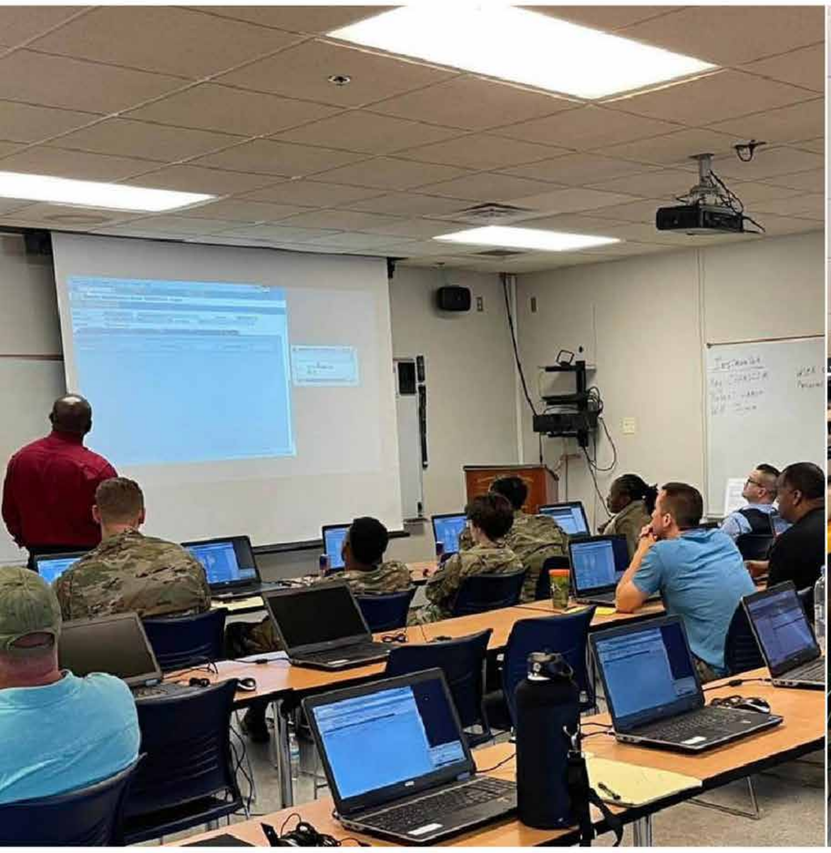
MISSION COMMAND

ACAT I

Global Combat Support System – Army (GCSS-Army)

PEO Enterprise Information Systems | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment, Operations & Support



DESCRIPTION

Global Combat Support System – Army (GCSS-Army) is an automated information system that serves as the primary tactical logistics enabler supporting U.S. Army and Joint transformation for sustainment. The program re-engineered former business processes to achieve end-to-end logistics and integration with applicable command and control and Joint systems. GCSS-Army uses commercial-off-the-shelf enterprise resource planning software products to support rapid force projection in the battlefield.

BENEFIT TO THE SOLDIER

- Responsive support at the right place and time
- Improved situational awareness with accurate and responsive information
- Better efficiency and visibility for users
- Financial auditability for Army

PROGRAM STATUS

- **FY19–FY22:** Incorporated enhanced capabilities into baseline
- **FY20:** Sustainment
- **FY21–FY22:**
  - Incorporated Aviation Data into Capability Drops
  - Trained and Fielded
- **FY23:**
  - Trained and Fielded
  - Incorporated data through five capability drops

PRIME CONTRACTORS

4M Research
InSAP
LMI

Handheld, Manpack, and Small Form Fit (HMS)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment




DESCRIPTION

Handheld, Manpack, and Small Form Fit (HMS) acquires affordable networking tactical radio systems that meet U.S. Army operational requirements while also meeting the needs of the Marine Corps, Navy, Air Force, and Special Operations Command. HMS radio systems provide extended voice and data communications to the tactical edge. These products provide simultaneous voice, data, and video communications; increase data throughput; are interoperable with legacy systems and end user devices; and provide tactical satellite communications.

BENEFIT TO THE SOLDIER

- Provides interoperable voice and data connectivity at the tactical level with an on-the-move and at-the-halt line-of-sight and beyond line-of-sight capability for dismounted personnel and platforms

PROGRAM STATUS

- **FY21:**
  - Initial Operational Test and Evaluation
  - Full-Rate Production
- **FY22:** Soldier Touchpoint
- **FY23:**
  - Fielding
  - Testing
  - Operational User Assessment
- **FY24:**
  - Fielding
  - Soldier Touchpoint

PRIME CONTRACTORS

Collins Aerospace
Domo Tactical Communications
L3 Harris Technologies, Inc.
Silvus Technologies
Thales Defense & Security, Inc.

Integrated Personnel and Pay System – Army (IPPS-A)

PEO Enterprise Information Systems | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

Integrated Personnel and Pay System – Army (IPPS-A) is live with all 1.1 million soldiers and Army human resource professionals across all three Army components. IPPS-A is a critical enabler supporting the Army's People Strategy and the transition to a 21st Century talent management system to optimize Army Readiness.

BENEFIT TO THE SOLDIER

- Supports the transformation of human resources practices within the Army, leading to more efficient processes
- Enhances the accuracy and auditability of personnel and pay data, reducing errors and discrepancies
- Ensures soldiers have easy and timely access to their personal and pay information
- Provides complete visibility over the entire force, maximizing the potential of soldiers

PROGRAM STATUS

- **FY23:** Deployment

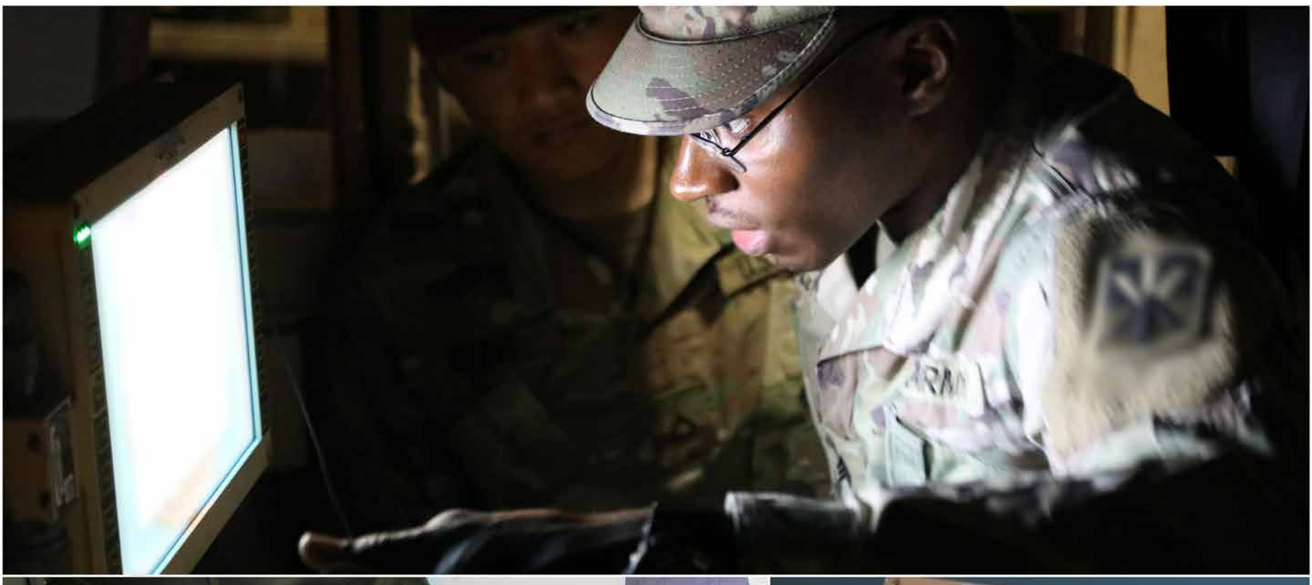
PRIME CONTRACTORS

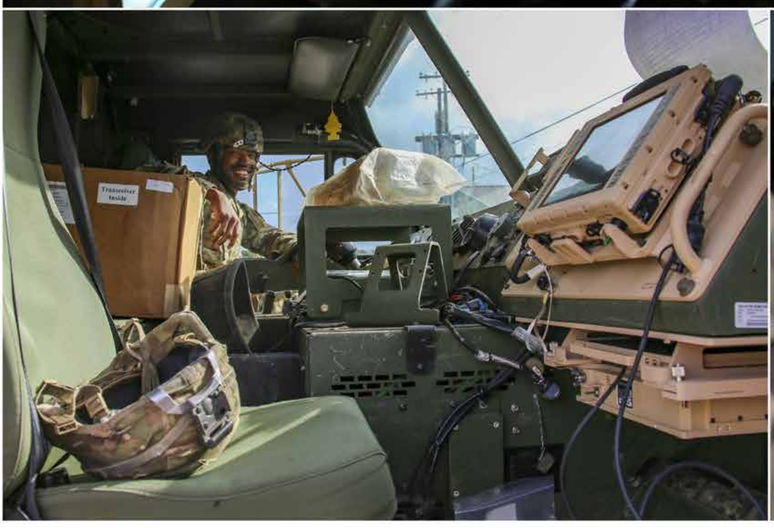
CACI

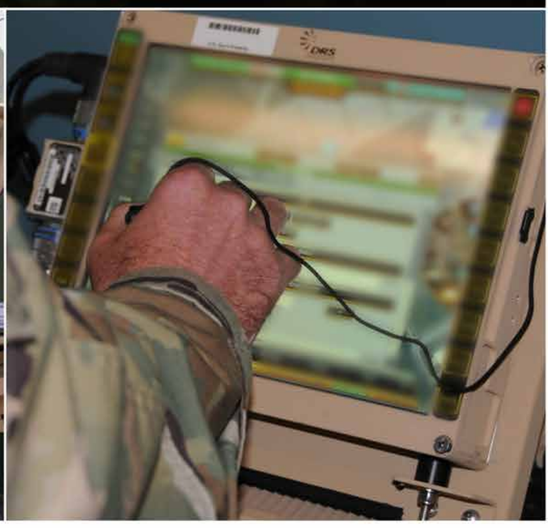
Joint Battle Command – Platform (JBC-P)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment







DESCRIPTION

The purpose of the Joint Battle Command – Platform (JBC–P) is to distribute accurate digital command and control and situational awareness at all echelons to the platform and dismounted domains, populating a common operating picture and reducing risk of fratricide.

BENEFIT TO THE SOLDIER

- Enables mission command and logistics functionality on vehicle variants and command post elements across all unit formation types
- Serves as mission command on-the-move

PROGRAM STATUS

- **FY21–FY24:**
  - Production and Deployment
  - Post Milestone C

PRIME CONTRACTORS

ACE Electronics
DRS
ViaSat

Mounted Assured Positioning, Navigation, and Timing (PNT) System (MAPS)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Mounted Assured Positioning, Navigation, and Timing (PNT) System (MAPS), a next generation capability, enables U.S. Army forces to shoot, move, and communicate in a contested Global Positioning System (GPS) environment. This includes distributing PNT information to multiple mounted platform vehicle systems.

BENEFIT TO THE SOLDIER

- Provides accurate/trusted PNT information
- Enhanced anti-jamming and anti-spoofing protections reduces reliance on GPS
- Distributes PNT data to multiple systems directly and via the network under all conditions

PROGRAM STATUS

- **FY21:** Limited User Test
- **FY22:**
  - Production Contract Award
  - Milestone C Brief
  - Maintainability Demonstration
  - Product Qualification Testing
- **FY23:**
  - Equipping
  - Initial Operational Test and Evaluation

PRIME CONTRACTORS

Collins Aerospace

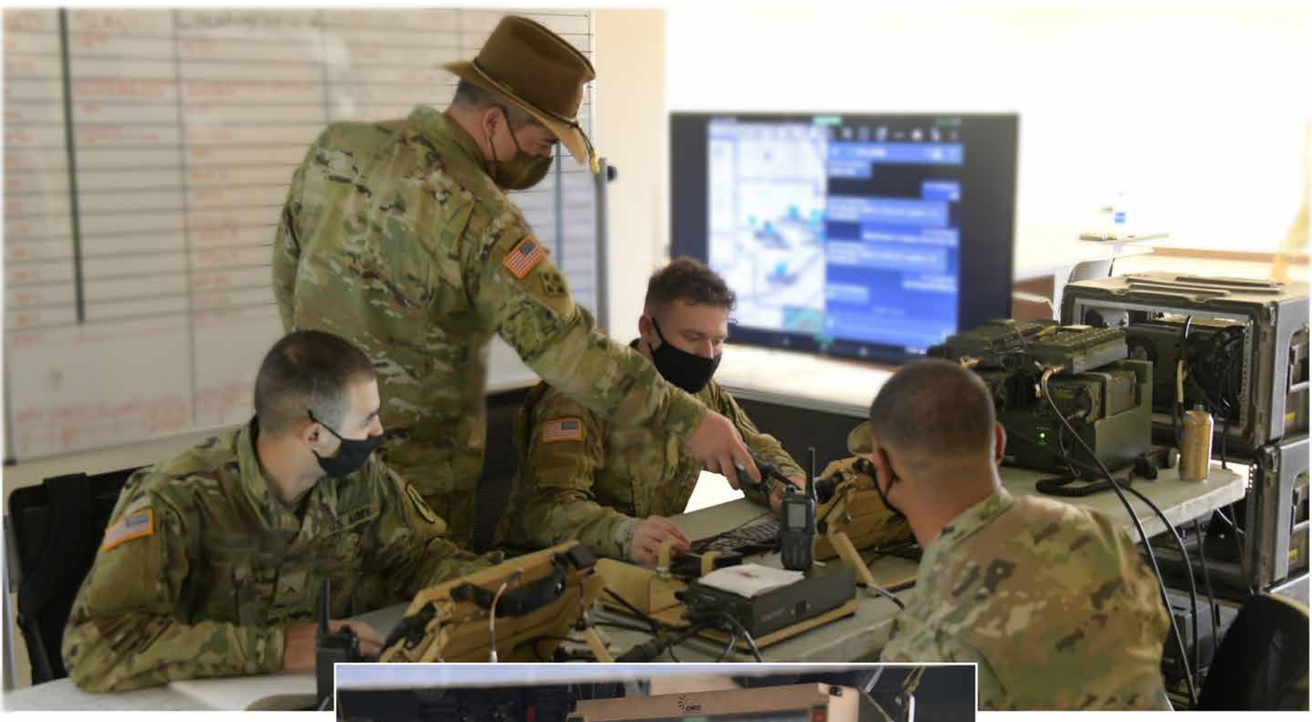
MISSION COMMAND

ACAT II

Mounted Mission Command – Software (MMC-S)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development



DESCRIPTION

Mounted Mission Command – Software (MMC-S) is designed to distribute accurate digital command and control and situational awareness at all echelons to the platform and dismounted domains, populating a common operating picture (COP), and reducing the risk of fratricide. MMC-S develops the Mounted Computing Environment capability that will converge warfighting function applications into its infrastructure.

BENEFIT TO THE SOLDIER

- Tactical Assault Kit based software solution provides a common look and feel to the handheld computing environment
- Provides open standards and the ability to leverage plug-ins across multiple computing environments
- Provides soldiers and Commanders a map-based COP of the battlefield
- Leverages an intuitive operating system that reduces the training burden on units and soldiers

PROGRAM STATUS

- **FY21–FY22:** Development and Test activities
- **FY23:**
  - Initial Operational Test and Evaluation
  - Full Deployment Decision
- **FY24:**
  - Full Deployment Decision
  - Fielding

PRIME CONTRACTORS

C5ISR Ultra

MISSION COMMAND

ACAT II

Satellite Communications Family of Terminals (SATCOM FoT)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Materiel Solution Analysis, Technology Maturation & Risk Reduction, Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

The U.S. Army's flexible, modular, scalable, and tailorable Satellite Communications (SATCOM) Family of Terminals (FoT) provides a variety of expeditionary terminals to units worldwide, to best support different formations, echelons, mission requirements, and locations.

The Army is working to standardize, consolidate, and significantly reduce the number of SATCOM terminals in its portfolio, with the ability to leverage existing systems to support different missions. The FoT acquisition strategy will continue to deliver the right array of terminal solutions to enable operational flexibility, cost savings, diversity, and enhanced capability to the warfighter in current and future Multi-Domain Operations (MDO).

BENEFIT TO THE SOLDIER

- Global mission command and voice, video, and data exchange in Army, Joint, and coalition MDO
- High-capacity bandwidth, range, and situational awareness
- Enables data-centric environment, decision dominance

PROGRAM STATUS

- **FY21–FY22:**
  - Procurement
  - Fielding Basis of Issue (BOI)
  - Fielding
- **FY23:**
  - SATCOM terminals at various stages including:
    - Materiel Development Decision
    - Milestone C
    - BOI
    - Procurement
    - Full Materiel Release
    - Fielding

PRIME CONTRACTORS

Amentum Services, Inc.
DTECH Labs
Envistacom
Fairwinds Technologies
GATR
JANUS Research Group
Klas
L3 Harris Technologies, Inc.
Linchpin Solutions
Lite Coms/AVL
Pacific Star Communications (PacStar)
Tampa Microwave

Signal Modernization (SigMod)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Materiel Solution Analysis, Technology Maturation & Risk Reduction, Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

The Signal Modernization (SigMod) program delivers innovative expeditionary commercial line-of-sight and beyond-line-of-sight communications and tactical network transport capabilities that enable Commanders to make rapid decisions in Joint coalition Multi-Domain Operations at every phase of operation. These easy-to-deploy, easy-to-operate systems increase signal path diversity, network resiliency, speed of maneuver, and operational flexibility. SigMod includes a variety of high-capacity radio systems, secure wireless systems, a vehicle-to-vehicle wireless solution, and several variants of Commercial Coalition Equipment that provide expeditionary coalition and commercial connectivity in support of both civil and military operations.

BENEFIT TO THE SOLDIER

- Adds multipath diversity, enhanced network primary, alternate, contingency, and emergency communications, and operational flexibility
- High-capacity radios and Tropo operate in satellite-denied environments with significant increase in bandwidth and range versus previous capability
- Significant size, weight, and power reduction
- Easy to operate and deploy; rapid set-up/tear down, enhances command post mobility and survivability

PROGRAM STATUS

- **FY21–FY22:**
  - Fielding
  - Full Materiel Release
  - Milestone C approval and Procurement
  - Sustainment
- **FY21:** Preliminary Design Review/Critical Design Review (PDR/CDR), Operational Demonstrations, and Testing
- **FY22:** Full-Rate Production and continued Fielding
- **FY23:**
  - Various programs completed Operational Assessment, Full-Rate Production, and Milestone C
  - PDR/CDR, Testing, and Fielding
  - Full Operational Capability
  - Transition to Sustainment

PRIME CONTRACTORS

BAE Systems
Blue Sky Mast
Klas
Pacific Star Communications (PacStar)
Sigma Defense
Silvus Technologies
Ultra Intelligence and Communications

Sustainment Transport System (STS)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Materiel Solution Analysis, Production & Deployment, Operations & Support

DESCRIPTION

Sustainment Transport System (STS) modernizes the way the U.S. Army exchanges logistics. The service established three new data transport programs known collectively as the STS: STS Satellite Communications, STS Line-of-Sight, and STS Wireless-Fidelity. STS will enable soldiers to utilize the critical sustainment tools that ensure U.S. forces always possess the supplies, personnel, medical, and force protection required in all environments and against any adversary.

BENEFIT TO THE SOLDIER

- Secure high-capacity global tactical network transport
- Easy to operate for general purpose users
- Easy to transport for rapid deployment and mobility
- Supports Army Enterprise Resource Planning solutions
- Enables both global and local data exchange

PROGRAM STATUS

- **FY21–FY22:** Requirements Development
- **FY23:**
  - Materiel Development Decision
  - Milestone C
- **FY24:** Low-Rate Initial Production

PRIME CONTRACTORS

TBD

Tactical Electric Power (TEP)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Rapid Prototyping Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

The Tactical Electric Power (TEP) Family of Systems provides a standardized family of tactical electric power sources to the DOD in accordance with DOD Instruction 4120.11, Mobile Electric Power Systems.

The TEP Family of Systems consists of a variety of generator set sizes.

- **Small Generators:** Military Tactical Generators, Tactical Quiet Generators (TQG), and Small Tactical Electric Power (STEP)
- **Medium Generators:** TQGs, Advanced Medium Mobile Power Sources (AMMPS), trailer-mounted Power Units (PU), Power Plants, and Microgrid
- **Large Generators:** TQGs and Large Tactical Power System (LTPS)
- **Prime Generators:** Deployable Power Generation and Distribution System (DPGDS) PU
- **Power Distribution:** Power Distribution Illumination Systems Electrical, Prime Power Distribution Systems
- The STEP, AMMPS, and LTPS are third generation TEP systems that will replace TQGs over time. The DPGDS PU is undergoing a recapitalization back to zero hours.

BENEFIT TO THE SOLDIER

- Increased system efficiency, reliability, mobility, and maintainability
- Significant reduction in fuel consumption
- Safe, versatile, portable, and modularly designed power distribution for rapid assembly

PROGRAM STATUS

- **FY21–FY24:** Production and Fielding
- **FY22:**
  - Rapid Prototyping Agreements awarded
  - Fielding
- **FY23:**
  - Full-Rate Production and Full Materiel Release Fielding
  - Milestone B with Program initiation; entered Engineering & Manufacturing Development
  - Transition to Sustainment
  - Production Rebuy Contract Award
  - Design Maturity Reviews
  - Production
- **FY24:**
  - Depot Activation Activities
  - Prototype Testing
  - Design Maturity Reviews
  - Qualification Testing completed
  - Transition to Sustainment
  - Production Rebuy Contract Award

PRIME CONTRACTORS

Advent Technologies
CTS
Cummins Power Generation
Dewey Electronics Corps
Fairwinds Technologies
HDT Global
Insight International Technologies
Letterkenny Army Depot
Marvin Land Systems
Moog, Inc.
Novatio Engineering
P2 Mission Solutions
PD Power Systems
Precision Combustion, Inc.
Red River Army Depot
Rock Island Arsenal
Tobyhanna Army Depot

Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

PEO Command, Control, Communications-Tactical | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

Tactical Network Transport (TNT) Modernization In Service (MIS) funding modernizes the Army's TNT (comprised of Tactical Network Transport At the Halt (ATH) and Tactical Network Transport On the Move (OTM)). TNT MIS provides technology insertion for tactical network transport and modernization of unsustainable/end-of-life commercial technology and other information technology (IT) component end-item equipment (switches, routers, servers, etc.) procured under tactical networking efforts to maintain the operational relevance of the Army's Tactical Network.

BENEFIT TO THE SOLDIER

- Enables global high-capacity mission command and voice, video, and data exchange
- Satellite communications and line-of-sight enable multipath diversity
- Enhances unit mobility cyber security and network operations; simplifies tactical network operational use and initialization; and reduces component size, weight, and power for the Army's ATH and OTM network nodes
- Incorporates Low Earth Orbit/Medium Earth Orbit satellites into the network configuration to improve network speed, capacity, and resiliency for tactical units

PROGRAM STATUS

- **FY21–FY22:**
  - Modernized Modified Work Order prototype pilots
  - Completed Fieldings and Technical Insertions
- **FY22:**
  - OTM Pilot
  - Network Integration Technology Enhancement (NITE)
- **FY23:** Continue NITE and Satellite Transportable Terminal Technical Insertions
- **FY24:** Fielding

PRIME CONTRACTORS

Booz Allen Hamilton
Cubic
Data Path, Inc.
General Dynamics
JANUS Research Group
Jardon and Hardon Technologies (JHT), Inc.
L3 Harris Technologies, Inc.
Leidos
MAG Aero
Microsoft

PROGRAM PORTFOLIO

PROTECTION

Advanced Anticonvulsant System (AAS)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Advanced Anticonvulsant System (AAS) treats seizures caused by exposure to traditional and non-traditional nerve agents and prevents subsequent neurological damage. The AAS is self-administered with an autoinjector that delivers an intramuscular dose of midazolam. Midazolam is more water-soluble than diazepam (the currently fielded medication to control nerve agent-induced seizures) and terminates nerve agent-induced seizures more quickly.

BENEFIT TO THE SOLDIER

- Provides lifesaving anticonvulsant medical countermeasures

PROGRAM STATUS

- **FY22:**
  - Full-Rate Production
  - Food and Drug Administration Approval
- **FY23:** Initial Operational Capability

PRIME CONTRACTORS

Rafa Laboratories, LTD

PROTECTION
ACAT III

Aerosol Vapor Chemical Agent Detector (AVCAD)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Aerosol Vapor Chemical Agent Detector (AVCAD) is a man-portable system to detect aerosol and vapor chemical agents. AVCAD also detects low-level off-gassing, or residual vapors, to prevent/mitigate health effects associated with low concentration exposures and performs remote alarm warning and reporting. AVCAD supports chemical and biological defense missions including monitoring, collective protection, base defense, decontamination, unmasking, and reconnaissance. AVCAD has a fixed site variant.

BENEFIT TO THE SOLDIER

- Provides a man-portable aerosol and vapor chemical detection capability

PROGRAM STATUS

- **FY21:** Authority to Operate approved
- **FY23:** Milestone C Low-Rate Initial Production

PRIME CONTRACTORS

Smiths Detection, Inc.

Antiviral Therapeutics (AV TX)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

Antiviral Therapeutics (AV TX) will evaluate a broad-spectrum antiviral therapeutic to treat against Marburg virus and other filoviruses.

BENEFIT TO THE SOLDIER

- Broad-spectrum antiviral therapeutic to treat disease caused by Marburg virus

PROGRAM STATUS

- **FY22:** Food and Drug Administration Type C Meeting
- **FY23:** Non-clinical studies

PRIME CONTRACTORS

Battelle Memorial Institute
Gilead Sciences, Inc.

PROTECTION
ACAT II

Chemical, Biological, Radiological, Nuclear Dismounted Reconnaissance Systems (CBRN DRS)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Chemical, Biological, Radiological, Nuclear (CBRN) Dismounted Reconnaissance System (CBRN DRS) provides CBRN and Explosive Ordnance Disposal (EOD) warfighters with a comprehensive suite of detection/identification, protection, sample collection, hazard marking, decontamination, and support capabilities during dismounted reconnaissance, sensitive site assessment, and render safe missions.

BENEFIT TO THE SOLDIER

- Provides a comprehensive, all-hazards dismounted reconnaissance and site assessment capability to protect against, detect, and decontaminate chemical warfare agents, biological warfare agents, toxic industrial chemicals, and other hazards

PROGRAM STATUS

- **FY22:** Full Operational Capability (CBRN systems)
- **FY24:** Full Operational Capability (EOD systems)

PRIME CONTRACTORS

L2 Defense
Teledyne FLIR

Compact Vapor Chemical Agent Detector (CVCAD)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction

DESCRIPTION

Compact Vapor Chemical Agent Detector (CVCAD) will be an unobtrusive, low-profile chemical detection capability that continuously and autonomously monitors and alerts the warfighter to an unsafe environment. CVCAD can be man-worn or used with unmanned aerial or ground systems to enable timely personnel protective action and other force protection decisions.

BENEFIT TO THE SOLDIER

- Alerts warfighters to the presence of chemical vapor hazards

PROGRAM STATUS

- **FY24:** Milestone B

PRIME CONTRACTORS

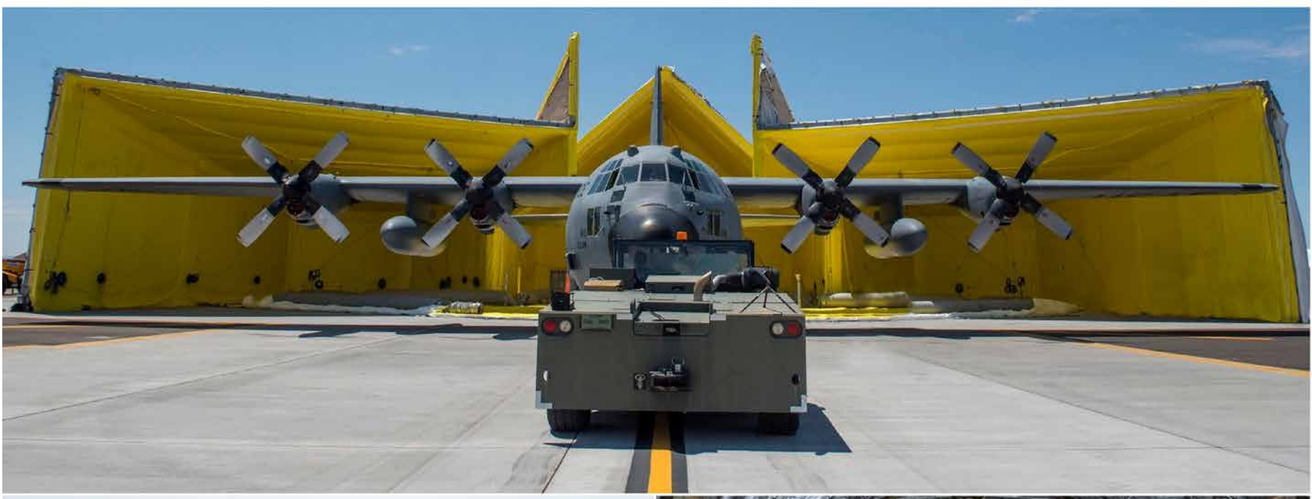
Collins Aerospace
General Electric
N5 Sensors, Inc.
Teledyne FLIR

PROTECTION
ACAT III

Joint Biological Agent Decontamination System (JBADS)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Operations & Support



DESCRIPTION

The Joint Biological Agent Decontamination System (JBADS) provides biological agent decontamination of the interior and exterior of large aircraft to safe levels.

BENEFIT TO THE SOLDIER

- Allows biologically decontaminated aircraft to return to service and enables mission continuation

PROGRAM STATUS

- **FY22:**
  - Full-Rate Production
  - Initial Operational Capability
- **FY23:**
  - Full Operational Capability

PRIME CONTRACTORS

AeroClave, LLC

PROTECTION
ACAT II

Joint Biological Tactical Detection System (JBTDS)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Joint Biological Tactical Detection System (JBTDS) provides the Joint warfighter detection, collection, and identification capability of biological warfare agent (BWA) aerosols to enhance battle space awareness, protect and preserve the force, and support time sensitive force protection decisions.

BENEFIT TO THE SOLDIER

- Provides field confirmatory BWA identification
- Enables Commanders to make time sensitive force protection decisions

PROGRAM STATUS

- **FY23:** Milestone C

PRIME CONTRACTORS

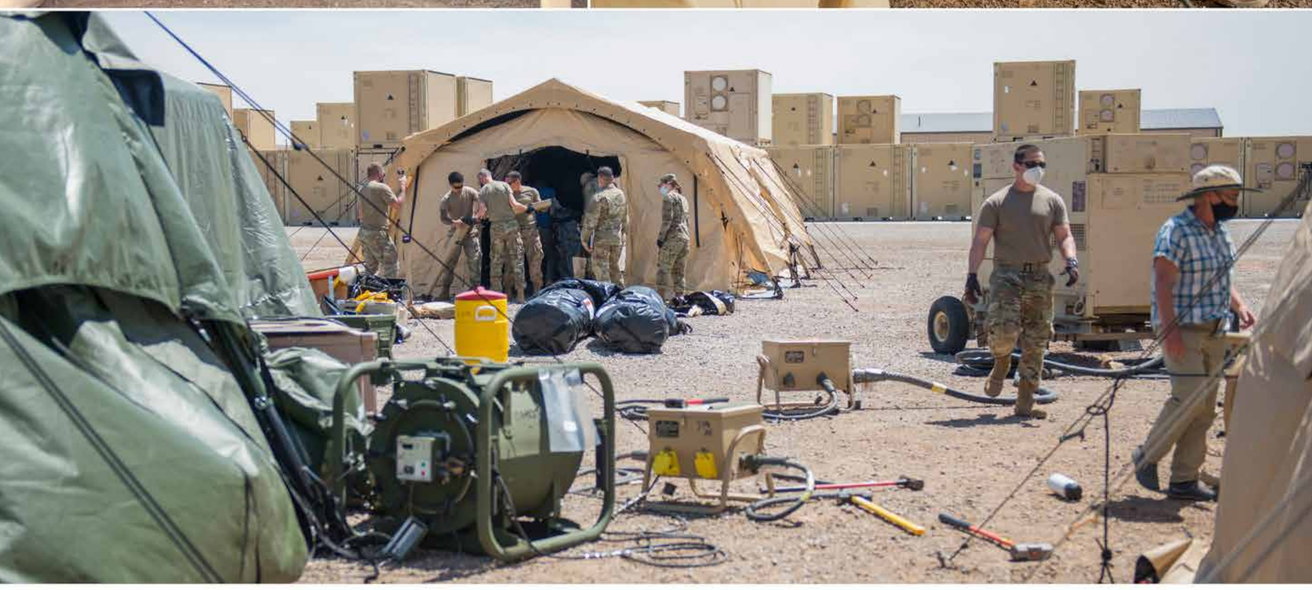
Chemring Sensors and Electronic Systems
MRI Global

PROTECTION | ACAT III

Joint Expeditionary Collective Protection (JECP)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment



DESCRIPTION

Joint Expeditionary Collective Protection (JECP) is a lightweight, compact, and modular family of transportable soft-sided shelter systems that provide a standalone collective protection resource in remote and austere locations.

BENEFIT TO THE SOLDIER

- Protects personnel groups of varying size and infrastructure from chemical, biological, radiological, and toxic industrial material contamination on the battlefield

PROGRAM STATUS

- **FY22:** Full-Rate Production
- **FY23:** Initial Operational Capability

PRIME CONTRACTORS

Leidos
Production Products Manufacturing & Sale

PROTECTION | ACAT III

Joint Service General Purpose Mask (JSGPM) – M53A1

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Joint Service General Purpose Mask (JSGPM) M53A1 is an above-the-neck chemical and biological protective respirator that provides protection against battlefield concentrations of chemical and biological agents, toxins, toxic industrial materials, and radioactive particulate matter. M53A1 is the first mask to be approved and certified by the National Institute for Occupational Safety and Health for both domestic response and military missions.

BENEFIT TO THE SOLDIER

- Approved for both domestic response and military support missions

PROGRAM STATUS

- **FY23:** Full Operational Capability

PRIME CONTRACTORS

Avon Protection Systems, Inc.

PROTECTION
ACAT III

Man-portable Radiological Detection System (MRDS)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Man-portable Radiological Detection System (MRDS) provides increased radiological and nuclear detection, localization, and presumptive and field-confirmatory identification. The system is networked to provide near real-time, tactical level situational awareness during Countering Weapons of Mass Destruction interdiction and elimination operations.

BENEFIT TO THE SOLDIER

- Increases the warfighter's awareness of radiological threats at the tactical level

PROGRAM STATUS

- **FY23:** Full-Rate Production
- **FY24:** Initial Operational Capability

PRIME CONTRACTORS

Advanced Measurement Technology, Inc.
Bruker Detection Corp.
General Dynamics
Veteran Corps of America

PROTECTION
ACAT III

Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

The Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU) provides maneuver formations the ability to conduct mounted CBRN reconnaissance and surveillance missions. NBCRV SSU detects and identifies hazards from traditional and emerging CBRN threats to achieve desired standoff distances.

BENEFIT TO THE SOLDIER

- Facilitates Commanders' proactive, risk-based decisions to ensure freedom of action and survivability

PROGRAM STATUS

- **FY24:** Low-Rate Initial Production Decision

PRIME CONTRACTORS

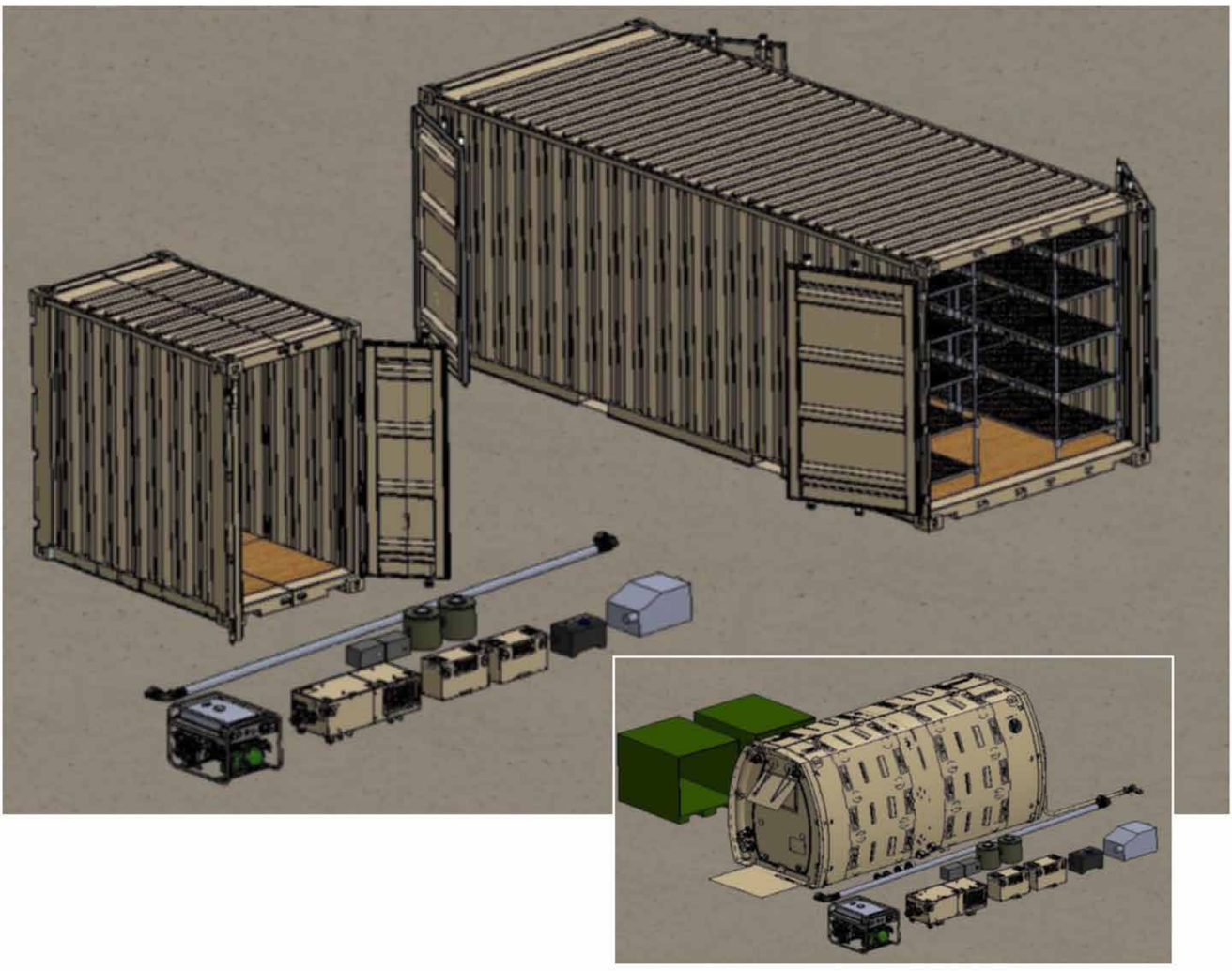
L2 Defense
MRI Global
Teledyne FLIR

PROTECTION
ACAT IV

Service Equipment Decontamination System (SEDS)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development



DESCRIPTION

The Service Equipment Decontamination System (SEDS) will provide contamination mitigation for equipment that have been exposed to chemical and biological contamination in hostile and non-hostile environments. SEDS will provide a far-forward capability to quickly decontaminate equipment to levels that permit unrestricted use.

When employed with other integrated contamination systems, SEDS will provide the Joint Force with the capability to recover contaminated equipment and maximize tactical flexibility and fighting strength by reducing the need for personal protective equipment.

BENEFIT TO THE SOLDIER

- Allows contaminated equipment to be returned to use with reduced need for personal protective equipment

PROGRAM STATUS

- **FY23:** Milestone B

PRIME CONTRACTORS

Integrated Solutions for Systems, Inc.

PROTECTION
ACAT III

Tactical Contamination Mitigation System (TCMS)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction

DESCRIPTION

The Tactical Contamination Mitigation System (TCMS) will provide a forward deployed contamination mitigation capability that allows more expeditious decontamination. TCMS will limit the spread and mitigate the effects of contamination and allow missions to continue at a high-operational tempo.

BENEFIT TO THE SOLDIER

- Enables more rapid decontamination and allows lowering of Mission Oriented Protective Posture levels sooner

PROGRAM STATUS

- **FY22:** Other Transaction Authority Prototype Award
- **FY23:** Milestone A

PRIME CONTRACTORS

Integrated Solutions for Systems, Inc.

PROTECTION
ACAT II

Uniform Integrated Protection Ensemble Family of Systems General Purpose (UIPE FoS GP)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

Uniform Integrated Protection Ensemble Family of Systems General Purpose (UIPE FoS GP) will provide individual percutaneous protection from operationally relevant chemical, biological, radiological, and nuclear and toxic industrial material threats. UIPE FoS GP will also allow the warfighter to operate in a contaminated environment with no or minimal degradation in performance.

BENEFIT TO THE SOLDIER

- Provides all general purpose Service Members with improved CBRN protection and reduced thermal burden in all combat theaters, and an improved fit, function, and integration with current combat kits and equipment

PROGRAM STATUS

- **FY21:** Milestone B
- **FY23:** Milestone C

PRIME CONTRACTORS

ReadyOne Industries, Inc.
SourceAmerica

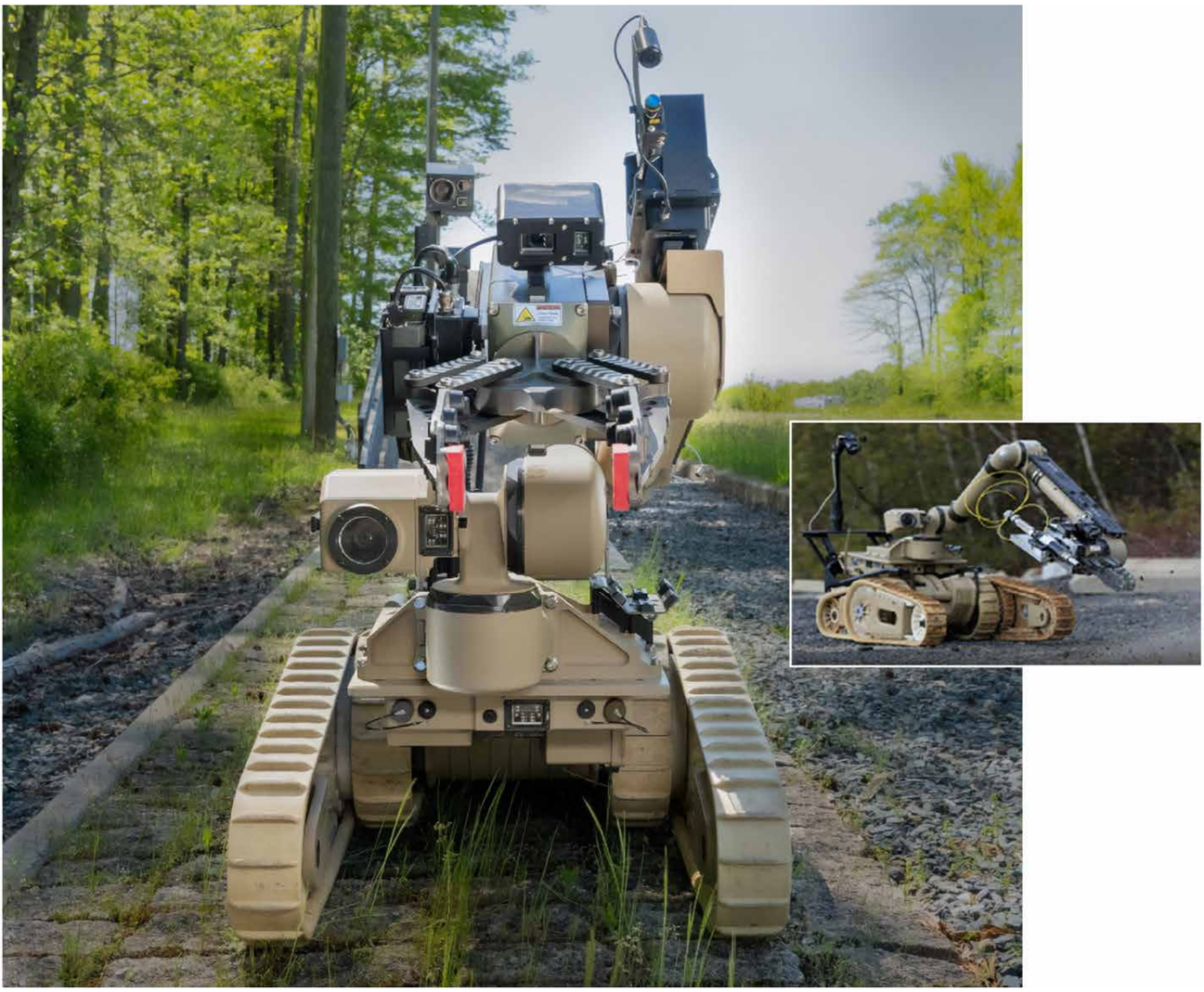
PROGRAM PORTFOLIO

ROBOTICS AND ARTIFICIAL INTELLIGENCE (AI)

Common Robotic System – Heavy (CRS-H)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment



DESCRIPTION

Common Robotic System – Heavy (CRS-H) is the U.S. Army's large-sized, modernized, vehicle transportable, common robotic platform capable of accepting various mission payloads. It enhances protection to the Explosive Ordnance Disposal (EOD) soldier in support of the range of military operations and homeland defense applications.

BENEFIT TO THE SOLDIER

- Enables EOD soldiers to interrogate hazardous devices in the range of military operations and homeland defense operations
- Provides enhanced capability to detect, identify, access, render safe, exploit, and achieve final disposition of heavy explosive ordnance

PROGRAM STATUS

- **FY21:**
  - Conditional Materiel Release
  - Full-Rate Production (FRP) Decision
  - First Unit Equipped
- **FY22:** FRP and Fielding
- **FY23:** Fielding Complete
- **FY24:**
  - Full Materiel Release
  - Transition to Sustainment

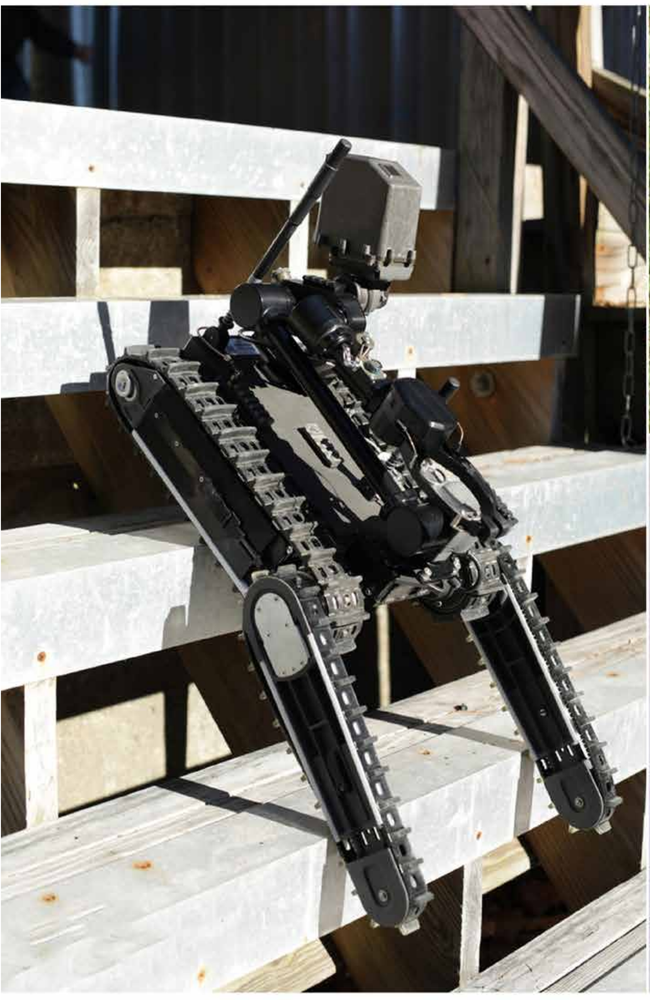
PRIME CONTRACTORS

Teledyne FLIR

Common Robotic System – Individual (CRS-I)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment



DESCRIPTION

Common Robotic System Individual (CRS-I) is the Army's small-sized, common platform, remotely operated, and soldier back-packable robotic system. CRS-I replaces the aging non-standard fleet of robots with a single solution and enables the warfighter to perform mobility missions.

BENEFIT TO THE SOLDIER

- Provides standoff for short-range intelligence, surveillance, and reconnaissance enhancing surveillance in the dark and in subterranean spaces
- Allows for remote clearance of dangerous zones

PROGRAM STATUS

- **FY21:**
  - Production Qualification Testing
  - Full-Rate Production (FRP) Decision
- **FY22:**
  - Conditional Materiel Release
  - First Unit Equipped
- **FY23:** FRP and Fielding
- **FY24:**
  - Full Materiel Release
  - Transition to Sustainment

PRIME CONTRACTORS

QinetiQ, Inc.

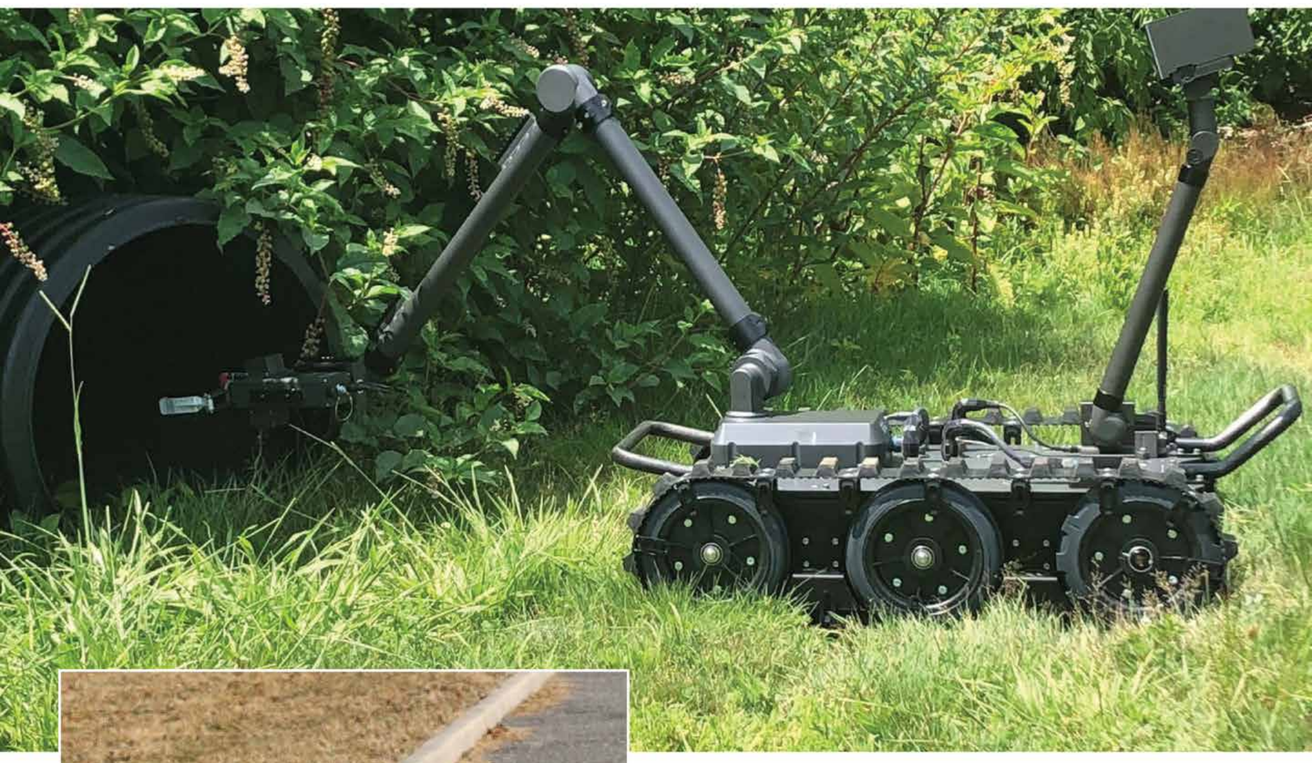
ROBOTICS AND AI

ACAT III

Man Transportable Robotic System Increment II (MTRS Inc II)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment



DESCRIPTION

Man Transportable Robotic System Increment II (MTRS Inc II) is a remotely operated, medium-sized robotic system that provides a standoff capability to detect, confirm, identify, and dispose of hazards. MTRS Inc II has a standard chassis and modular mission payloads in support of current and future missions. MTRS Inc II supports engineers, chemical, biological, radiological, and nuclear (CBRN) soldiers and Special Operations Forces. It is part of the U.S. Army's common modernized unmanned ground vehicles fleet and is a Program of Record to replace multiple capabilities.

BENEFIT TO THE SOLDIER

- Provides the warfighter a remote standoff ability
- Offers CBRN soldiers the capability to employ CBRN sensors from a distance
- Replaces the aging non-standard fleet with new robots featuring enhanced capabilities to clear obstacles and threats to improve survivability and the ability to maneuver

PROGRAM STATUS

- **FY23:** Full Materiel Release

PRIME CONTRACTORS

Teledyne FLIR

Project Linchpin (PL)

PEO Intelligence, Electronic Warfare and Sensors | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Software Acquisition Pathway Planning Phase

DESCRIPTION

Project Linchpin (PL) is a centrally managed Artificial Intelligence Operations and Services (AIOps+) ecosystem comprised of the pipelines, standardized approaches (e.g., AI risk framework), governance, design principles (traceability, observability/ orchestration, replaceability, and automated consumption (TORC)), and secure trusted environments and services. PL enables the Army to leverage large volumes of data and deliver secure trusted AI/machine learning capabilities affordably and at scale. PL supports the delivery of AI capabilities to customer programs within the PEO IEW&S portfolio and is scalable by design to support the Army at an enterprise level.

BENEFIT TO THE SOLDIER

- Provides an AIOps+ enterprise capability accelerating the delivery of trusted AI solutions to AI-enabled programs
- Enables AI capabilities across multiple modalities and use cases (computer vision, object detection, workflow optimization, aided target recognition, and support to autonomous systems)

PROJECTED ACTIVITIES

- **FY23:**
  - Acquisition Shaping Panel 1 and 1.5
  - TORC Broad Agency Announcements awarded
- **FY24:**
  - Initiation and Pilot Environment initiated
  - Software Acquisition Pathway Planning Phase
  - Impact Level 5 Pilot Environment initiated

PRIME CONTRACTORS

N/A

PROGRAM PORTFOLIO

SOLDIER

Advanced Anti-Tank Weapon System – Medium (Javelin)

PEO Missiles and Space | Redstone Arsenal, AL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Advanced Anti-Tank Weapon System – Medium (Javelin) provides U.S. Army, U.S. Marine Corps, and our allies a man-portable, fire-and-forget, medium range missile with enhanced situational awareness and precision direct-fire effects to defeat armored vehicles, fortifications, and soft targets in full spectrum operations. Javelin has a high kill rate against a variety of targets at extended ranges under day and night light conditions, battlefield obscurants, adverse weather, and multiple countermeasure conditions. Javelin's soft launch feature permits firing from a fighting position or an enclosure. The system consists of a reusable Command Launch Unit (CLU) with built-in test and a modular missile encased in a disposable launch tube assembly. Javelin provides enhanced lethality using a tandem warhead which will defeat all known armor threats. It is effective against both stationary and moving targets, and also provides defensive capability against attacking and hovering helicopters.

BENEFIT TO THE SOLDIER

- Provides fire-and-forget anti-armor capability
- Defeats personnel and equipment in fortifications and in the open
- CLU provides the soldier with the abilities of targeting and surveillance

PROGRAM STATUS

- **FY21–FY22:** Procurement, Development, and Testing
- **FY22:**
  - Awarded Low-Rate Initial Production (LRIP) Contract
  - CLU LRIP I
- **FY23:**
  - Conduct Operational Testing
  - CLU LRIP II
  - Begin Fielding
- **FY24:** CLU Full-Rate Production

PRIME CONTRACTORS

Joint Venture between Raytheon and Lockheed Martin Corporation

Common Remotely Operated Weapon Station (CROWS) – M153

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The M153 Common Remotely Operated Weapon Station (CROWS) allows for day and night operations while under armor and provides precision fire while stationary and on-the-move.

BENEFIT TO THE SOLDIER

- Provides enhanced target acquisition and lethality
- Offers targeting system, vector stabilization, color day camera, thermal camera, and laser rangefinder
- Provides auto scan, auto lead, auto focus, and auto tracker

PROGRAM STATUS

- **FY22:** Indefinite Delivery/Indefinite Quantity Contract for Production, Engineering, and Depot Services
- **FY23:** Fielding
- **FY24:** Production and Sustainment

PRIME CONTRACTORS

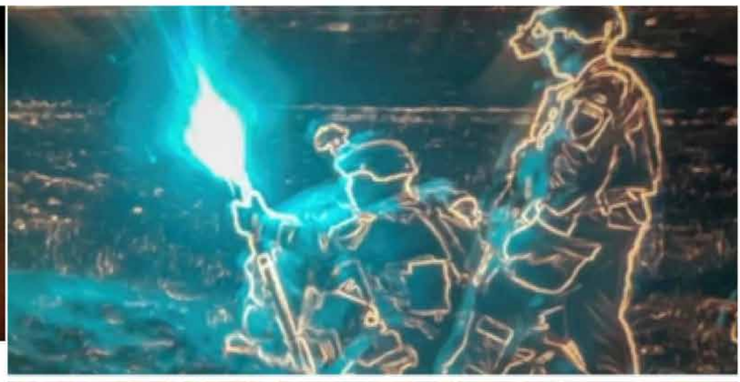
Kongsberg Defence and Aerospace

SOLDIER | ACAT III

Enhanced Night Vision Goggle – Binocular (ENVG-B)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Production & Deployment



DESCRIPTION

Enhanced Night Vision Goggle – Binocular (ENVG-B) is a helmet-mountable individual night vision device that displays images in high definition. ENVG-B can be used during low-/high-light levels, extreme weather conditions, and through battlefield obscurants. ENVG-B operates with the Family of Weapon Sights-Individual for a Passive Targeting capability. The ENVG-B allows the soldier to display navigational, targeting, and situational graphics as viewed from Nett Warrior.

BENEFIT TO THE SOLDIER

- Increased situational awareness and lethality
- Employed in all weather and light conditions
- Decreases soldier risk on the battlefield

PROGRAM STATUS

- **FY21–FY22:** Limited User Testing
- **FY23:** Materiel Release
- **FY24:**
  - First Unit Equipped
  - Full-Rate Production

PRIME CONTRACTORS

Elbit Systems of America
L3 Harris Technologies, Inc.

SOLDIER | ACAT III

Family of Weapon Sights – Crew Served (FWS-CS)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development

DESCRIPTION

Family of Weapon Sights – Crew Served (FWS-CS) is a thermal and visible imaging system. The Ballistic Calculator provides a ballistically adjusted reticle and video.

BENEFIT TO THE SOLDIER

- Increases first burst probability of hit and rapid target engagement
- Enhances machine gunner's ability to detect, recognize, and identify threats
- Provides protective eye relief standoff for heavy recoil weapons

PROGRAM STATUS

- **FY21:**
  - Milestone C
  - Low-Rate Initial Production (LRIP) Award
- **FY22:** Procurement
- **FY23:**
  - LRIP Award
  - Completed Type Classification – Standard and Full Materiel Release
  - Full-Rate Production Award

PRIME CONTRACTORS

Leonardo DRS, Inc.

SOLDIER | ACAT I

Integrated Visual Augmentation System (IVAS)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Middle Tier of Acquisition Rapid Prototyping

DESCRIPTION

Integrated Visual Augmentation System (IVAS) is a digital head and body worn system that provides a single platform soldiers can use to fight, rehearse, and train. IVAS includes new digital thermal imaging and low-light sensors along with a high-resolution, see-through waveguide display and processor. It will improve soldier sensing, decision-making, target acquisition, and target engagement through a next generation, 24/7 situational awareness device.

BENEFIT TO THE SOLDIER

- Provides the soldier with heightened mobility and increased lethality
- Offers situational awareness necessary to achieve overmatch against our current and future adversaries

PROGRAM STATUS

- **FY22:** Support Army Campaign of Learning
- **FY23:** Middle Tier of Acquisition Rapid Prototyping pathway
- **FY24:** Design refinement and Manufacturing processes for producibility
- **FY25:** Operational Test and Production Decision

PRIME CONTRACTORS

Microsoft

SOLDIER | ACAT III

Mortar Weapon Systems

JPEO Armaments & Ammunition | Picatinny Arsenal, NJ

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Mortar weapons provide organic, indirect fire support to the maneuver commander and are employed in all combat formations. The U.S. Army uses three calibers of mortar weapons, both mounted and dismounted: 60 mm, 81 mm, and 120 mm. All mortar weapon systems fire a full family of ammunition (high-explosive, infrared and visible light, smoke, and training).

BENEFIT TO THE SOLDIER

- Organic fire support
- Responsiveness
- Accurate fires
- Survivability

PROGRAM STATUS

- **FY21–FY24:** Continued Production, Fielding, and Deliveries
- **FY23:**
  - Awarded Production Contracts
  - Fielding Armored Multi-Purpose Vehicle Mortar Weapon Systems
- **FY24 and Beyond:** Continue Fielding

PRIME CONTRACTORS

Connetec, Inc.
Elbit Systems of America
Leonardo DRS, Inc.

Nett Warrior (NW)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Nett Warrior (NW) is an integrated dismounted leader Situational Awareness (SA) system used during combat operations. The system provides unparalleled SA to the dismounted leader, allowing for faster and more accurate decision-making in the tactical fight. With advanced navigation, SA, and information-sharing capabilities, leaders can avoid fratricide and are more effective and lethal in the execution of their combat missions. This allows the leader to easily see, understand, and interact in the method best suited to the user and the mission.

BENEFIT TO THE SOLDIER

- Enables rapid decision-making, reduces deliberate communications, and increases leaders' confidence in mission execution
- Provides overmatch operational capabilities to ground combat leaders and small-unit operations

PROGRAM STATUS

- **FY22–FY24:**
  - Testing
  - Procurement
  - Fielding
  - Software upgrades/technology refreshes
  - Training

PRIME CONTRACTORS

Amentum Services, Inc.
Augustine Consulting, Inc. (ACI)
Tobyhanna Army Depot

SOLDIER
ACAT III/IV

Small Arms – Crew Served Weapons (CSW)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support




DESCRIPTION

Small Arms – Crew Served Weapons (CSW) are operated by a crew of two or more warfighters enabling them and small units to engage targets with lethal fire to defeat or deter adversaries. U.S. Army Small Arms – CSW include the M2/M2A1 .50 Caliber Heavy Machine Gun, M240 7.62 mm Medium Machine Gun, M249 5.56 mm Squad Automatic Weapon, and the MK19 40 mm Grenade Machine Gun.

BENEFIT TO THE SOLDIER

- Provides the soldier enhanced target acquisition, lethality, and reliability
- Reduces the soldier's combat load while allowing easier handling and movement
- Improves weapon control, egress, and maneuver in close quarter combat
- Supports the warfighter in offense and defense

PROGRAM STATUS

- **FY21–FY23:** Fielding and Sustainment
- **FY24:**
  - Production and Sustainment
  - Fielding complete

PRIME CONTRACTORS

Fabrique National Manufacturing, LLC
FN America, LLC
General Dynamics Ordnance and Tactical Systems
US Ordnance

SOLDIER | ACAT IV

Soldier Borne Sensor (SBS)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Soldier Borne Sensor (SBS) is a small unmanned aerial system that enables squads and small tactical units to rapidly gain situational awareness (SA) with increased speed and reduced tactical risk. It provides real-time Electro-optical/Infrared video feed allowing leaders to develop situational understanding in complex and dynamic environments.

BENEFIT TO THE SOLDIER

- Increases SA to enhance decision-making and improves lethality
- Mitigates exposure by allowing operation from a concealed position
- Improves reconnaissance and scouting capability, increasing survivability

PROGRAM STATUS

- **FY22–FY24:** Fielding SBS Phase I Systems
- **FY23:** Phase II Prototype Testing
- **FY24:**
  - Phase II Production Contract Award
  - Production System Testing

PRIME CONTRACTORS

Teledyne FLIR

Soldier Protection System (SPS)

PEO Soldier | Fort Belvoir, VA

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Soldier Protection System (SPS) provides a modular, scalable, and integrated system of mission-tailorable ballistic protective subsystems at reduced weight.

BENEFIT TO THE SOLDIER

- Offers extended sizes to fit soldiers appropriately
- Provides the soldier with multiple levels of ballistic protection tailorable to a broad range of missions

PROGRAM STATUS

- **FY21–FY23:**
  - Production and Contract Awards
  - Fielding and Delivery
  - Full-Rate Production
- **FY23:**
  - Testing
  - Production
  - Full and Open Solicitations released
  - Transition to Sustainment

PRIME CONTRACTORS

APC/Ceradyne
Armor Express
Bethel Industries
Carter Enterprises
Engense Inc.
Florida Armor, LLC
Leading Technology Composites, Inc.
Point Blank Enterprises
Slate Solutions
TenCate Advanced Armor USA

PROGRAM PORTFOLIO SUSTAINMENT

Force Provider Expeditionary (FPE)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

Force Provider Expeditionary (FPE) is a modular base camp life support capability that supports 50-150 personnel. The program includes integrated power generation/distribution, water storage/distribution, wastewater collection/storage, shower water reuse, fuel storage, environmentally controlled billeting, food service, hygiene, and shower water recycling. When complexed to support 600 or more personnel, capability enhancement systems include the Morale, Welfare, and Recreation Kit, kitchen electric facility, administration complex, water management system, Quality of Life Kits, the wastewater evacuation tank trailer, containerized chapel, and prime power connection.

BENEFIT TO THE SOLDIER

- Provides force projection
- Scalable life support capability
- Highly mobile, rapidly deployable modular system
- Energy efficient technologies, easily sustainable

PROGRAM STATUS

- **FY24:** Currently deployed and in Production

PRIME CONTRACTORS

Berg Manufacturing
Hunter Defense Technologies (HDT)
Production Products Manufacturing & Sales, Co., Inc.
ReadyOne Industries
STS International

SUSTAINMENT | ACAT III

Rapid Opioid Countermeasure System (ROCS)

JPEO for Chemical, Biological, Radiological and Nuclear Defense | Aberdeen Proving Ground, MD

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

The Rapid Opioid Countermeasure System (ROCS) provides a Food and Drug Administration (FDA)-approved therapeutic medical countermeasure that protects the warfighter against operational exposure to opioids. ROCS is self-administered with an autoinjector that delivers naloxone as a rescue treatment to counteract opioid exposure. ROCS was the first and only DOD medical program to deliver a Service-wide capability using the Middle Tier of Acquisition pathway.

BENEFIT TO THE SOLDIER

- Allows impacted Service Members to remain ambulatory and move to higher levels of care

PROGRAM STATUS

- **FY22:**
  - FDA Approval
  - Rapid Prototype Delivery complete

PRIME CONTRACTORS

Kaléo, Inc.

PROGRAM PORTFOLIO

SYNTHETIC TRAINING ENVIRONMENT

Cyber Environment Replication (CER)

PEO Simulation, Training and Instrumentation | Orlando, FL

ACQUISITION LIFE CYCLE PHASE: Operations & Support

DESCRIPTION

Cyber Environment Replication (CER) supports the live training operational environment, which must portray emerging, hybrid, and future threats within operational doctrine and organizational tactics, techniques, and procedures (TTPs). CER also provides a live training ground for cyber forces to conduct critical training objectives.

BENEFIT TO THE SOLDIER

- Provides a proving ground for cyber forces to train critical TTPs against threat representative infrastructure
- Prepares brigade Commanders for Multi-Domain Operations presented by near-peer adversaries

PROGRAM STATUS

- **FY21:**
  - Deployment
  - Supported post-Full Operational Capacity
- **FY21–FY22:** Successful integration with another PEO STRI Program of Record
- **FY21–FY24:** Enduring network operations support

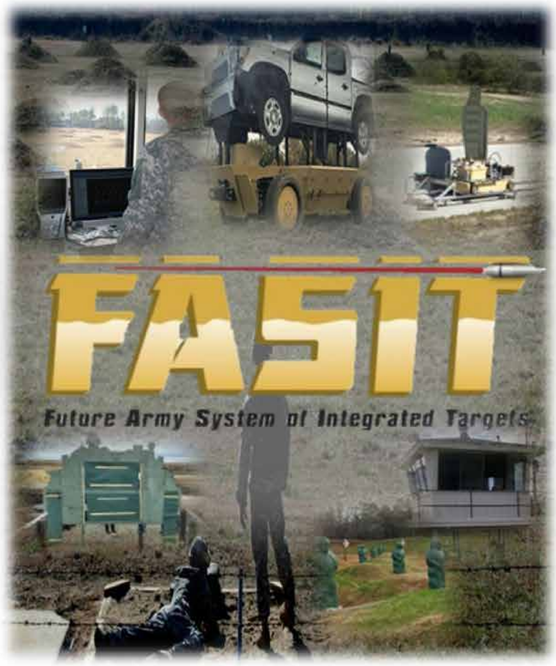
PRIME CONTRACTORS

Electronic Warfare Associates

Future Army System of Integrated Targets (FASIT)

PEO Simulation, Training and Instrumentation | Orlando, FL

ACQUISITION LIFE CYCLE PHASE: Technology Maturation & Risk Reduction, Engineering & Manufacturing Development, Production & Deployment, Operations & Support



DESCRIPTION

The Future Army System of Integrated Targets (FASIT) program will provide live-fire training systems capable of supporting U.S. Army automated ranges. FASIT's live-fire training systems include a single, government-owned, universal target control software capability for all ranges. It provides users a common look and feel; downrange presentation devices that interact with the control software and provide scoring feedback; battlefield/weapons effects devices that simulate combat situations, visuals, and sounds; and targets/silhouettes that provide visual, image intensification, and thermal representations of friendly/threat engagements.

FASIT supports skills qualification, sustainment training, and collective exercises during live-fire exercises at all levels.

BENEFIT TO THE SOLDIER

- Improves soldier lethality, readiness, and confidence through live-fire training
- Provides access to live-fire ranges worldwide
- Enhances training experience with state-of-the-art live-fire systems
- Standardizes live-fire range operation with singular range control software
- Challenges soldiers with unpredictable Trackless Moving Targets (TMT)

PROGRAM STATUS

- **FY22:**
  - Completed information technology equipment installations and upgrades
  - Completed Critical Design Review
  - Produced initial prototype units
- **FY22–FY23:** Low-Rate Initial Production (LRIP) and TMT Deployment
- **FY23:**
  - Acquisition Program Baseline established
  - Milestone C
  - LRIP
  - Modernization of training systems
- **FY24:** Full-Rate Production Decision

PRIME CONTRACTORS

ADA Technologies
Cornerstone Research Group
Digital Solid State Propulsion
General Dynamics Mission Systems
InVeris Training Solutions
JRM Technologies
Nokomis
Phoenix Defense
Pratt Miller Defense
SensorMetrix
Theissen Training System
Zel Tech

Instrumentable-Multiple Integrated Laser Engagement System (I-MILES)

PEO Simulation, Training and Instrumentation | Orlando, FL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

The Instrumentable-Multiple Integrated Laser Engagement System (I-MILES) program enhances the warfighter's ability to prepare for combat operations allowing training and assessment of individual and collective tasks during force-on-force operations. I-MILES provides realistic, real-time casualty effects for force-on-force tactical engagement training scenarios.

BENEFIT TO THE SOLDIER

- Provides mission-essential, skills-based training, and real-time casualty assessments
- Offers individual soldier and combat vehicle crew skills training during force-on-force training events
- Supports Home Stations and Combat Training Centers

PROGRAM STATUS

- **FY21–FY22:** Testing and Fielding
- **FY23–FY24:** Fielding

PRIME CONTRACTORS

Lockheed Martin Corporation

Intelligence and Electronic Warfare Tactical Proficiency Trainer Increment 1/Increment 2 (IEWTPT Inc 1/Inc 2)

PEO Simulation, Training and Instrumentation | Orlando, FL

ACQUISITION LIFE CYCLE PHASE: Inc 1: Operations & Support; Inc 2: Software Acquisition Pathway Planning Phase

DESCRIPTION

Intelligence and Electronic Warfare Tactical Proficiency Trainer Increment 1/Increment 2 (IEWTPT Inc 1/Inc 2) provides a realistic target environment for training Military Intelligence and Electronic Warfare (EW) analysts and system operators in multiple intelligence disciplines and tasks in a distributed, multi-domain simulation environment. It provides simulation/scenarios for home station training and applicable institutional training bases.

BENEFIT TO THE SOLDIER

- Enables key training to satisfy Military Intelligence Training Standards requirements
- Provides mission-essential skills-based training to intelligence collectors and analysts
- Supports individual, crew, and collective training across various intelligence and EW disciplines

PROGRAM STATUS

- **FY21:** Inc 2 entered Software Acquisition Pathway Planning Phase
- **FY23:**
  - Inc 2 Contact Award
  - Inc 2 Software Acquisition Pathway Execution
- **FY24:** Continue Software Acquisition Pathway Execution

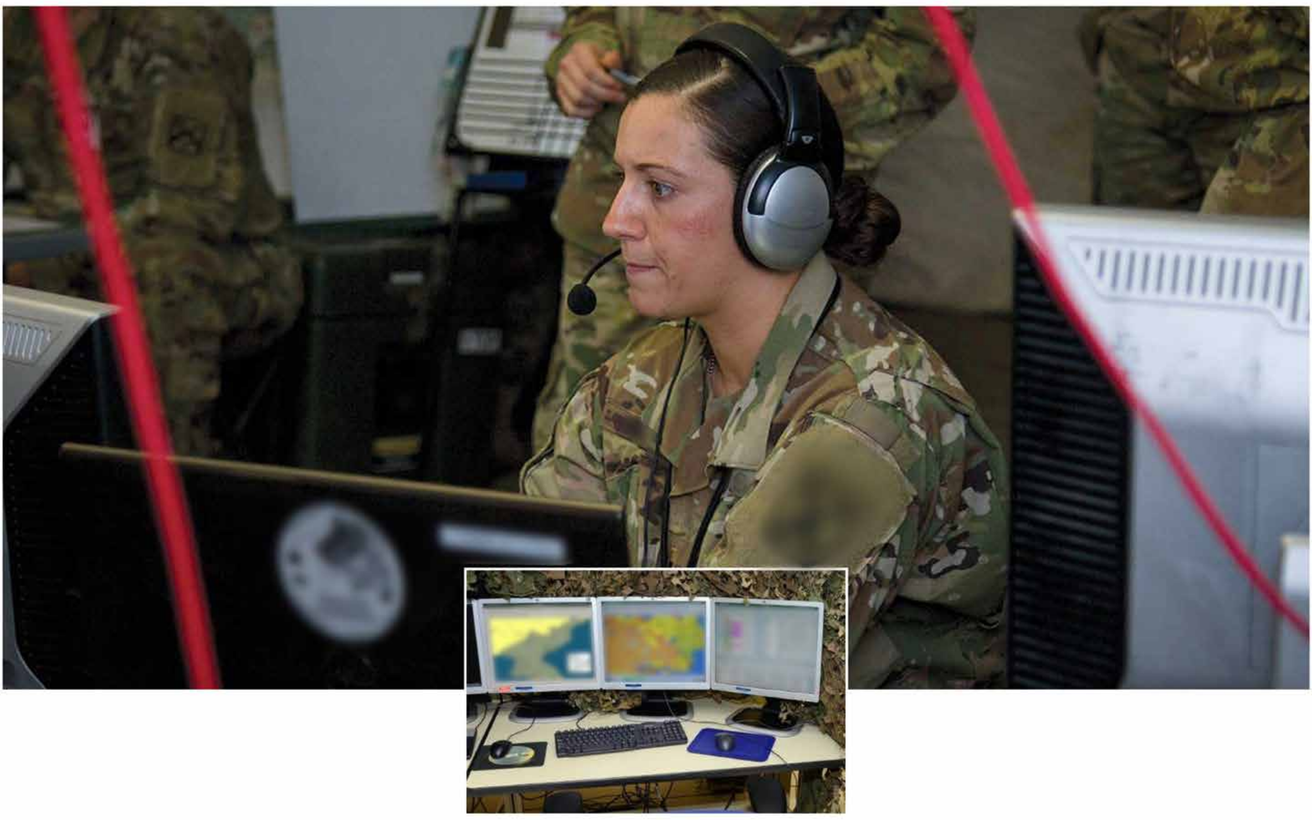
PRIME CONTRACTORS

General Dynamics Mission Systems

Joint Land Component Constructive Training Capability (JLCCTC)

PEO Simulation, Training and Instrumentation | Orlando, FL

ACQUISITION LIFE CYCLE PHASE: Production & Deployment



DESCRIPTION

Joint Land Component Constructive Training Capability (JLCCTC) supports Army Title X training worldwide for U.S. Army Commanders and their staff. JLCCTC trains Commanders and their staff in offensive, defensive, stability, and civil support operations. System capabilities include:

- Simulation of mission command systems
- Intelligence modeling capabilities
- Irregular warfare (insurgents, terrorists, car bombs/improvised explosive devices, civilians/refugees, etc.)
- Unmanned aerial vehicle visualization
- Logistics training (maintenance, supply, transportation, ammunition, personnel, etc.)
- Non-kinetic effects modeling
- After Action Review system
- Interface with the Air Force Simulation and the Air and Space Cyber Constructive Environment

BENEFIT TO THE SOLDIER

- Provides Army Commanders and their battle staff the capability to train in an operationally relevant, constructive simulation environment that simulates decisive action operations
- Provides capabilities across the range of warfighting functions in support of training for Active, Reserve, and National Guard units
- Automates tactical, technical, and procedural behaviors

PROGRAM STATUS

- **FY23:**
  - Completed Assessment and Validation activities
  - Fielding

PRIME CONTRACTORS

Phoenix Logistics, Inc.

PROGRAM PORTFOLIO

TRANSPORTATION

Army Watercraft Systems (AWS)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Engineering & Manufacturing Development, Production & Deployment, Operations & Support

DESCRIPTION

Army Watercraft Systems (AWS) expand Commanders' movement and maneuver options in support of unified land operations. The Army's current fleet enables Commanders to operate through fixed, degraded, and austere ports, conducting expeditionary sustainment, movement, and maneuver of forces for missions across the spectrum of military operations.

BENEFIT TO THE SOLDIER

- Provide responsive, cross-domain capability to move combat-configured forces, equipment, and sustainment supplies
- Create multiple, complex operational dilemmas for adversaries throughout all phases of operations

PROGRAM STATUS

- **FY21–FY22:** Prototype Build, Production, and Delivery
- **FY23–FY24:**
  - Full-Rate Production and Prototype Testing
  - Production and Delivery

PRIME CONTRACTORS

Bay Ship & Yacht Co.
Noblis
Vigor Works, LLC
Yokohama Engineering Works

TRANSPORTATION
ACAT III

Enhanced Heavy Equipment Transporter System (EHETS)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Enhanced Heavy Equipment Transporter System (EHETS) consists of the M1300 tractor and the M1302 semitrailer. The EHETS tractor is used in combination with the M1302 trailer to transport heavy tracked and wheeled vehicles. The M1300 is a lightened M1070A1 tractor featuring a powertrain upgrade. The M1302 trailer is an eight-axle flatbed trailer capable of hauling the heaviest Army-tracked payloads.

BENEFIT TO THE SOLDIER

- Capable of carrying the heaviest tracked payloads
- Upgraded M1300 powertrain provides increased payload and reliability

PROGRAM STATUS

- **FY22:** Awarded follow-on contract
- **FY23:** Trailer Production
- **FY24:**
  - Contract Award
  - Signed support agreement with Red River Army Depot
  - Continued Production and Delivery
  - Conditional Materiel Release
  - Full Materiel Release

PRIME CONTRACTORS

Broshuis BV
Oshkosh Defense, LLC
Red River Army Depot

TRANSPORTATION
ACAT IC

Family of Medium Tactical Vehicles (FMTV) – A2

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment, Operations & Support

DESCRIPTION

The Family of Medium Tactical Vehicles (FMTV) – A2 operates as a multipurpose transportation and unit mobility vehicle in Combat, Combat Support, and Sustainment units. The A2 incorporates new technologies and can transport a heavier payload over more difficult terrain in a shorter amount of time with greater protection than its predecessor.

BENEFIT TO THE SOLDIER

- Increased payload capacity for cargo variants
- Improved suspension and wheel capacity
- Upgraded vehicle data bus with a simplified electrical system
- Augmented crew survivability with armor protection

PROGRAM STATUS

- **FY22:**
  - Development Testing
  - Production
- **FY23:**
  - Follow-on Test and Evaluation
  - Full Materiel Release
- **FY24**
  - Conditional Materiel Release

PRIME CONTRACTORS

Oshkosh Defense, LLC

Joint Light Tactical Vehicles (JLTV)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Joint Light Tactical Vehicle (JLTV) Family of Vehicles is a U.S. Army-led, Joint-service program designed to replace a portion of each Service's light tactical wheeled vehicle fleets while closing existing capability gaps.

BENEFIT TO THE SOLDIER

- Protected, sustained, and networked mobility for personnel and payloads across the full range of military operations
- Improved off-road mobility, fuel efficiency, and reliability
- Transportable by lift assets to support operations across the range of military operations

PROGRAM STATUS

- **FY22:** Full Materiel Release
- **FY23:** Follow-on Production Contract Award
- **FY24:** Manufacturing Readiness Assessment

PRIME CONTRACTORS

AM General
Oshkosh Defense, LLC

TRANSPORTATION | ACAT I

Palletized Load System and Palletized Load System Extended Service Program (PLS/PLS ESP)

PEO Combat Support & Combat Service Support | Detroit Arsenal, MI

ACQUISITION LIFE CYCLE PHASE: Production & Deployment

DESCRIPTION

The Palletized Load System (PLS) is a heavy, multi-wheeled drive truck designed for cross-country movement of combat-configured loads of ammunition and other classes of supply. The PLS Extended Service Program is a Department of the Army supported Recapitalization program increasing the PLS fleet density in the field.

BENEFIT TO THE SOLDIER

- Operates across all tactical mobility levels in the combat zone supporting the Battlefield Distribution System in a variety of Combat Arms, Combat Support, and Sustainment units
- Assists Commanders by enabling more agile, flexible, and full-spectrum movement across the range of military operations throughout the battlefield

PROGRAM STATUS

- **FY21–FY22:** Production and Fielding
- **FY23:**
  - Contract Extension and follow-on Contract Award
  - Continued Production and Fielding
- **FY24:** Complete Production Verification Testing

PRIME CONTRACTORS

Oshkosh Defense, LLC

APPENDICES

Glossary of Terms

A

ACQUISITION CATEGORY (ACAT)

ACATs are established to facilitate decentralized decision-making, execution, and compliance with statutorily imposed requirements. The categories determine the level of review, decision authority, and applicable procedures. ACAT categories include: ACAT I, ACAT II, ACAT III, ACAT IV (Army, Navy, and Marine Corps only), and Abbreviated Acquisition Program (Navy and Marine Corps only).

ACAT I

ACAT I programs are Major Defense Acquisition Programs (MDAPs). A MDAP is a program that is designated by the Milestone Decision Authority (MDA). Dollar value for all increments of the program are estimated by the Defense Acquisition Executive (DAE) to require an eventual total expenditure for research, development, test, and evaluation of more than $525 million in Fiscal Year (FY) 2020 constant dollars or, for procurement, of more than $3.065 billion in FY20 constant dollars. ACAT I programs have three subcategories:

- ACAT ID, for which the Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) as the DAE makes a decision to become the MDA or designate another Office of the Secretary of Defense (OSD) official as the MDA. This decision would be based on one or more exceptions in Title 10 of the U.S. Code, section 2430(d) (10 U.S.C. 2430(d)). The DAE or designee will review ACAT ID programs.

- ACAT IC, for which the USD(A&S) delegated ACAT I MDA to the Head of the DOD Component or, if delegated, the Component Acquisition Executive (CAE). This designation (ACAT IC) is only for programs that reached Milestone A before October 1, 2016.

- ACAT IB, a MDAP for which the Service Acquisition Executive (SAE) is the MDA by operation of 10 U.S.C. 2430e, will be designated within the DOD as ACAT IB programs. The SAE of the Military Department that is managing a MDAP reaching Milestone A after October 1, 2016, will be the MDA for the MDAP and designated ACAT IB to differentiate these programs from ACAT ID programs or ACAT IC programs.

ACAT II

ACAT II programs are defined as those acquisition programs that do not meet the criteria for an ACAT I program but do meet the criteria for a major system as defined in 10 U.S.C. 2302(d). The dollar value as estimated by the DOD Component head would require an eventual total expenditure for research, development, test, and evaluation of more than $200 million in FY20 constant dollars, or for procurement of more than $920 million in FY20 constant dollars. The CAE, or the individual designated by the CAE, will review ACAT II programs as the MDA.

ACAT III

ACAT III programs are defined as those acquisition programs that do not meet the dollar value thresholds for ACAT II or above and are not designated a “major system” by the MDA. The MDA is designated by the CAE.

ACAT IV

ACAT IV programs not otherwise designated as ACAT III are designated as ACAT IV in accordance with Service policy. Decisions are made at the lowest appropriate level. The MDA is designated by the AAE and shall be at the lowest appropriate level, typically the Program Executive Officer level. However, MDA can be further delegated to the Colonel-level Program/Project Manager. The estimated costs for ACAT IV acquisition programs are below the thresholds for ACAT III acquisition programs.

ACQUISITION LIFE CYCLE PHASE

Acquisition Life Cycle: The relationship between the acquisition phases and work efforts, and key program events such as decision points and reviews. It employs acquisition processes that match the characteristics of the capability being acquired.

Acquisition Phase: All the tasks and activities needed to bring a program to the next major milestone occur during an acquisition phase. Phases provide a logical means of progressively translating broadly stated capabilities into well-defined, system-specific requirements and ultimately into operationally effective, suitable, and survivable systems. The acquisition phases for the systems described in this eBook include:

- Materiel Solution Analysis (MSA) Phase is the first phase of the Major Capability Acquisition process. The purpose of this phase is to conduct an Analysis of Alternatives (AoA) and other activities needed to choose the concept for the product that will be acquired, to begin translating validated capability gaps into system-specific requirements, and to conduct planning to support a decision on the acquisition strategy for the product. An AoA will be conducted, and the initial Acquisition Strategy and draft Capability Development Document (CDD) will be formulated. The CAE will select a Program Manager (PM) and establish a Program Office to complete actions associated with planning the acquisition program preparing for the next decision point. This phase ends when the necessary analysis and activities to support a decision to proceed to the next decision point/phase in the acquisition process is reached.

Glossary of Terms (Continued)

- Technology Maturation and Risk Reduction (TMRR) Phase is the second phase of the Major Capability Acquisition process. Its purpose is to reduce technology, engineering, integration, and life cycle cost risk to the point that a decision to contract for Engineering and Manufacturing Development (EMD) can be made with confidence in successful program execution for development, production, and sustainment. The phase includes activities intended to reduce specific risks associated with the product to be developed. Activities include additional design trades and requirements trades to ensure an affordable product and an executable development and production program. Capability requirements are matured and validated, and affordability caps are finalized during this phase. This phase normally includes competitive sources conducting TMRR activities to demonstrate new technologies in a relevant environment. A Preliminary Design Review prior to Milestone B will be conducted, unless waived by the MDA.

- The EMD Phase is the third phase of the Major Capability Acquisition process. The purpose of the phase is to develop, build, test, and evaluate a materiel solution to verify that all operational and implied requirements, including those for security, have been met, and to support production, deployment, and sustainment decisions. The program will complete all needed hardware and software detailed designs. A Critical Design Review establishes the initial technical baseline and assesses design maturity, design build-to or code-to documentation, and remaining risks. The EMD phase will end when the design is stable; the system meets validated capability requirements demonstrated by developmental, live fire (as appropriate), and early operational testing; manufacturing processes have been effectively demonstrated and are under control; software sustainment processes are in place and functioning; industrial production capabilities are reasonably available; program security remains uncompromised; and the program has met or exceeds all directed phase exit criteria and Milestone C entrance criteria per the MDA's direction.

- The Production and Deployment (P&D) Phase is the fourth phase of the Major Capability Acquisition process. The purpose of the P&D Phase is to produce and deploy requirements-compliant materiel solutions to receiving operating organizations. In this phase, the product is produced and fielded for use by operational units and encompasses a number of events: Low-Rate Initial Production (LRIP), personnel training, completion of developmental test and evaluation (if required), Initial Operational Test and Evaluation, and the Full-Rate Production (FRP) Decision or the Full Deployment Decision. All system sustainment and support activities are initiated if not already begun, and the appropriate operational authority will declare Initial Operational Capability when the defined operational organization has been equipped, trained, and determined to be capable of conducting mission operations. "Should cost" management and other techniques will be used to control and reduce cost.

- The Operations and Support (O&S) Phase is the fifth phase of the Major Capability Acquisition process. The purpose of the O&S phase is to execute the Product Support Strategy (PSS), satisfy materiel readiness and operational support performance requirements including personnel training, and sustain the system over its life cycle, including disposal. This phase has two major efforts: Sustainment and Disposal. The MDA-approved PSS is the basis for the activities conducted during this phase. The PM will deploy the support package and monitor its performance according to the PSS. At the end of its useful life, a system will be demilitarized and disposed of in accordance with all legal and regulatory requirements and policy relating to safety (including explosives safety), security, and the environment, in accordance with the PSS. Disposal planning will include consideration of retirement, disposition, and reclamation.

ACQUISITION PROGRAM

A directed, funded effort that provides a new, improved, or continuing materiel, weapon, information system, or service capability in response to an approved need. Acquisition programs are divided into categories that are established to facilitate decentralized decision-making, execution, and compliance with statutory requirements.

ADAPTIVE ACQUISITION FRAMEWORK (AAF)

A series of acquisition pathways to enable the workforce to tailor strategies to deliver better solutions faster. The AAF acquisition pathways provide opportunities for milestone decision authorities, decision authorities, and PMs to develop acquisition strategies and employ acquisition processes that match the characteristics of the capability being acquired.

B

BUSINESS SYSTEM CATEGORY (BCAT)

BCAT I:

- Priority Defense Business Systems (DBS) expected to have a total amount of budget authority over the period of the current Future Years Defense Program (FYDP) in excess of $250,000,000
- DOD Chief Management Officer (CMO) designation as priority based on complexity, scope, technical risk, and after notification to Congress
- Decision Authorities:
  - Requirements Validation/CMO Certification: DOD CMO or as delegated
  - MDA: DAE or as delegated (not below CAE)

Glossary of Terms (Continued)

BCAT II:

- DBS that do not meet criteria for BCAT I and are expected to have a total amount of budget authority over the period of the current FYDP in excess of $50M
- Decision Authorities:
  - Requirements Validation/CMO Certification: Military Department (MILDEP) CMO or as delegated; DOD CMO or as delegated for all other DOD Components
  - MDA: CAE or as delegated

BCAT III:

- DBS that do not meet the criteria for BCAT II
- Decision Authorities:
  - Requirements Validation/CMO Certification: DOD CMO or MILDEP CMO may designate as requiring certification
  - MDA: Same as category II and further delegation is encouraged

C

CROSS-FUNCTIONAL TEAM (CFT)
CFTs were established to narrow existing capability gaps by developing capability documents, informed by experimentation and technical demonstrations, to rapidly deliver requirements to the Army Acquisition System. The Army's Modernization Priorities, which are necessary for future Readiness and Multi-Domain Operations, are the focus of the CFTs' activity: (1) Long Range Precision Fires, (2) Next Generation Combat Vehicles, (3) Future Vertical Lift, (4) Army Network, (5) Air and Missile Defense, and (6) Soldier Lethality.

D

DEFENSE BUSINESS SYSTEM (DBS)
An information system that is operated by, for, or on behalf of DOD, including financial systems, financial data feeder systems, contracting systems, logistics systems, planning, and budgeting systems, installations management systems, human resources management systems, and training and readiness systems. A business system does not include a national security system or an information system used exclusively by and within the defense commissary system or the exchange system or other instrumentality of the DOD conducted for the morale, welfare, and recreation of members of the Armed Forces using non-appropriated funds.

DEMILITARIZATION AND DISPOSAL
Demilitarization is the act of destroying the military offensive or defensive capability inherent in certain types of equipment or materiel. The term includes mutilation, scrapping, melting, burning, or alteration designed to prevent the further use of this equipment and materiel for its originally intended military or lethal purpose. It applies equally to materiel in unserviceable or serviceable condition that has been screened through an Inventory Control Point and declared excess or foreign excess. Disposal is the second effort of the O&S Acquisition Life Cycle phase. At the end of its useful life, a system will be demilitarized and disposed of in accordance with all legal and regulatory requirements and policy relating to safety (including explosives safety), security, and the environment, in accordance with the PSS. Disposal planning will include consideration of retirement, disposition, and reclamation.

DEVELOPMENTAL TEST AND EVALUATION (DT&E)
DT&E includes any testing used to assist in the development and maturation of products, product elements, or manufacturing or support processes. It also includes any engineering-type test used to verify status of technical progress, verify that design risks are minimized, substantiate achievement of contract technical performance, and certify readiness for initial operational testing. Development tests generally require instrumentation and measurements and are accomplished by engineers, technicians, or soldier operator-maintainer test personnel in a controlled environment to facilitate failure analysis.

DIRECTED REQUIREMENT (DR)
If operational analysis and assessment of an Operational Needs Statement (ONS) or Joint Urgent Operational Need (JUON) solution or results of an Advanced Technology Demonstration (ATD) or Joint Capability Technology Demonstration (JCTD), indicate a specific, limited but necessary, urgent need exists, Headquarters, Department of Army, Deputy Chief of Staff G-8 may prepare and issue a DR and specify the funding source and priority. DRs are not recognized as a requirements document. A DR is designed to produce information in support of early acquisition and programming decisions. The scope

Glossary of Terms (Continued)

of a DR will be limited to addressing urgent operational needs that fall outside of the established Joint Capabilities Integration and Development System process, and if not addressed immediately, will seriously endanger personnel, or pose a major threat to the success of ongoing operations. A DR should not involve the development of a new technology or capability; however, the acceleration of an ATD or JCTD is within scope.

F

FULL OPERATIONAL CAPABILITY (FOC)
In general, FOC is attained when all units and/or organizations in the force structure scheduled to receive a system have received it and have the ability to employ and maintain it. The specifics for any particular system FOC are defined in that system's CDD, which identifies operational performance attributes of the proposed system and updated CDD.

FULL-RATE PRODUCTION (FRP) DECISION REVIEW
MDA review to assess the results of Initial Operational Test and Evaluation (IOT&E) and initial manufacturing and deployment to determine whether to approve proceeding to FRP or Full Deployment. Continuing into FRP or Full Deployment requires demonstrated control of the manufacturing process, acceptable performance and reliability, and the establishment of adequate sustainment and support.

I

INITIAL OPERATIONAL CAPABILITY (IOC)
In general, IOC is attained when some units and/or organizations in the force structure scheduled to receive a system have received it and have the ability to employ and maintain it. The specifics for any particular system IOC are defined in that system's CDD and updated CDD.

J

JOINT ACQUISITION PROGRAM
Any acquisition system, subsystem, component, or technology program with a strategy that includes funding by more than one DOD Component during any phase of a system's life cycle. The MDA decides whether to place the program under Joint acquisition management. The MDA should make this decision and, if appropriate, designate the lead executive DOD Component as early as possible in the acquisition process.

L

LIVE FIRE TEST AND EVALUATION (LFT&E)
LFT&E is a test process that provides a timely assessment of the survivability and/or lethality of a conventional weapon or conventional weapon system as it progresses through its design and development. LFT&E is a statutory requirement (Title 10 U.S.C. § 2366) for covered systems, major munitions programs, missile programs, or product improvements to a covered system, major munitions programs, or missile programs before they can proceed beyond Low-Rate Initial Production (LRIP).

LOW-RATE INITIAL PRODUCTION (LRIP)
LRIP is the first part of the P&D phase. LRIP is intended to result in completion of manufacturing development to ensure adequate and efficient manufacturing capability and to produce the minimum quantity necessary to provide production or production-representative articles for IOT&E, establish an initial production base for the system, and permit an orderly increase in the production rate for the system, sufficient to lead to FRP upon successful completion of operational (and live-fire, where applicable) testing.

M

MAJOR DEFENSE ACQUISITION PROGRAM (MDAP)
An acquisition program within the meaning of 10 U.S.C. 2430. The term "major defense acquisition program" means a DOD acquisition program that is not a highly sensitive classified program (as determined by the Secretary of Defense) and (A) that is designated by the Secretary of Defense as a MDAP; or (B) in the case of a program that is not a program for the acquisition of an automated information system (either a product or a service) that is estimated by the Secretary of Defense for all increments of the program to require an eventual total expenditure for research, development, test, and evaluation of more than $525 million in FY20 constant dollars or, for procurement, of more than $3.065 billion in FY20 constant dollars.

Glossary of Terms (Continued)

MAJOR MILESTONE
A major milestone is the decision point that separates the phases of an acquisition program. MDAP milestones include, as examples, the decisions to authorize entry into the EMD phase or FRP.

- **Milestone A:** Entry into the TMRR Phase
- **Milestone B:** Entry into the EMD Phase
- **Milestone C**: Entry into the P&D Phase

MAJOR SYSTEMS
A combination of elements that will function together to produce the capabilities required to fulfill a mission need. The elements may include hardware, equipment, software, or any combination thereof, but excludes construction or other improvements to real property. A system is considered a major system if the conditions of section 2302d of this title are satisfied, or the system is designated a "major system" by the head of the agency responsible for the system.

MIDDLE TIER OF ACQUISITION (MTA)
Sometimes referred to as Section 804 acquisition, MTA is established in Public Law 114–92, Section 804, and in DOD Instruction 5000.80. MTA is a rapid acquisition interim approach that focuses on delivering a capability in a period of 2-5 years with rapid prototypes and rapid fielding with proven technology. The approach is part of the AAF. The MTA pathway is used to rapidly develop fieldable prototypes within an acquisition program to demonstrate new capabilities and/or rapidly field production quantities of systems with proven technologies that require minimal development.

MILESTONE
The point at which a recommendation is made and approval sought regarding starting or continuing an acquisition program, e.g., proceeding to the next phase.

MILESTONE DECISION AUTHORITY (MDA)
Designated individual with overall responsibility for a program. The MDA will have the authority to approve entry of an acquisition program into the next phase of the acquisition process and shall be accountable for cost, schedule, and performance reporting to higher authority, including Congressional reporting.

- **DAE:** The individual responsible for supervising the Defense Acquisition System. The DAE takes precedence on all acquisition matters after the Secretary of Defense and the Deputy Secretary of Defense.
- **Army Acquisition Executive (AAE):** The individual solely responsible for acquisition matters within the Department of the Army and the single decision authority for all Army acquisition matters. The AAE is responsible for approving requests to initiate new acquisition programs and will do so only when they are supported by approved capability documents, requisite funding, and program documentation.
- **Program Executive Office (PEO):** A military officer or civilian individual assigned program responsibilities for the execution and management of ACAT II, III, and IV programs, or for any other program determined by the AAE to require dedicated executive management.

MODERNIZATION PRIORITIES
In December 2017, the U.S. Army established six modernization priorities with one simple focus: make soldiers and units more lethal. To be successful, ideas must be turned into actions through continuous experimenting and prototyping, improving acquisition business processes, pursuing appropriate commercial-off-the-shelf options, and improving training. Additionally, the Army's modernized capabilities must have interoperability with allies built-in. Based on these fundamentals, the Army's Modernization Priorities are:

- **Long Range Precision Fires:** Develop platforms, capabilities, munitions, and formations that restore U.S. Army dominance in range, lethality, mobility, precision, and target acquisition.
- **Next Generation Combat Vehicles:** Develop combat vehicles that integrate other close combat capabilities in manned, unmanned, and optionally manned teaming that leverages semi-autonomous and autonomous platforms in conjunction with the most modern firepower, protection, mobility, and power generation capabilities necessary to ensure that future combat formations can fight and win against any foe, in any environment.
- **Future Vertical Lift:** A set of manned, unmanned, and optionally manned platforms that can execute attack, lift, and reconnaissance missions on the modern and future battlefields at greater range, altitude, lethality, and payload.
- **Army Network:** An integrated system of hardware, software, and infrastructure that is sufficiently mobile, reliable, user-friendly, discreet in signature, expeditionary, and can be used to fight effectively in any environment where the electromagnetic spectrum is denied or degraded.
- **Air and Missile Defense:** A series of mobile integrated platforms, capabilities, munitions, and formations that ensure future combat formations are lethal while remaining protected from modern and advanced air and missile delivered fires, to include drones.

Glossary of Terms (Continued)

- **Soldier Lethality:** A holistic series of capabilities, equipment, training, and enhancements that span all fundamentals of combat: shooting, moving, communicating, protecting, and sustaining to ensure soldiers are more lethal and less vulnerable on the modern battlefield. This will include not only next generation individual and squad weapons, but also improved body armor, sensors, radios, and load-bearing exoskeletons. These efforts will be joined by research in improved human performance and decision-making.

MODIFICATIONS

A configuration change to the form, fit, function, or interface (F3I) of an in-service, configuration-managed, or produced Configuration Item (CI). Modifications are defined by their purpose. A capability modification alters the F3I in a manner that requires a change to the existing system, performance, or technical specification of the asset. Such modifications are accomplished to add a new capability or function to a system or component, or to enhance existing technical performance or operational effectiveness. A sustainment modification alters the F3I of an asset in a manner that does not change the existing system, performance, or technical specification of the asset. Such modifications correct product quality deficiencies, or to bring the asset into compliance with established technical or performance specification(s) associated with the asset. Sustainment modifications may improve the reliability, availability, maintainability, or supportability, and reduce its ownership costs.

O

OPERATIONAL TEST AND EVALUATION (OT&E)

OT&E is a field test, under realistic conditions, of any item (or key component) of weapons, equipment, or munitions for the purpose of determining the effectiveness and suitability of the weapons, equipment, or munitions for use in combat by typical military users, and the evaluation of the results of such tests.

P

PRE-MAJOR DEFENSE ACQUISITION PROGRAM (PRE-MDAP)

Pre-MDAP programs are in the MSA or Technology Development Phases preceding Milestone B of the Defense Acquisition System and identified to have the potential to become a MDAP.

U

URGENT MATERIEL RELEASE (UMR)

The UMR designation is used to meet an operational, training, or readiness need of a force or as directed by one of the Headquarters, Department of the Army (HQDA) or user requested documents identified in Army Regulation 770–3. This process is determined according to Operational Needs Statement (ONS) and must be authorized by an approved or validated HQDA, Modified Tables of Organization and Equipment or Tables of Distribution and Allowances, Mission Essential Equipment List ONS, or any other DCS, G-3/5/7 approved authorization or validation document. Once the immediate need is filled, the PM will withdraw the system and provide the appropriate disposition instructions.

ADDITIONAL RESOURCES

For additional information on acquisition terms, or terms not defined, please refer to DOD Directives, available on the Internet at http://www.esd.whs.mil/Directives/ issuances/dodd. For more information on the AAF, visit https://aaf.dau.edu/. The Defense Acquisition Guidebooks are available at https://aaf.dau.edu/guidebooks/

Points of Contact

JPEO Armaments & Ammunition
Picatinny Arsenal, NJ

- 155 mm Excalibur Projectiles
- 155 mm M777A2 Lightweight Towed Howitzer
- Ammunition – Large Caliber
- Ammunition – Medium Caliber
- Ammunition – Small Caliber
- Artillery Ammunition
- Artillery Fuzes and Propellant
- Cannon-Delivered Area Effects Munition (C-DAEM) – Armor
- Mortar Weapon Systems
- Precision Guidance Kit/Long Range – Precision Guidance Kit (PGK/LR-PGK)
- Simulators, All Types (Battlefield Effects Simulator (BES))

JPEO Chemical, Biological, Radiological and Nuclear Defense (CBRND)
Aberdeen Proving Ground, MD

- Advanced Anticonvulsant System (AAS)
- Aerosol Vapor Chemical Agent Detector (AVCAD)
- Antiviral Therapeutics (AV TX)
- Chemical, Biological, Radiological, Nuclear Dismounted Reconnaissance Systems (CBRN DRS)
- Compact Vapor Chemical Agent Detector (CVCAD)
- Joint Biological Agent Decontamination System (JBADS)
- Joint Biological Tactical Detection System (JBTDS)
- Joint Expeditionary Collective Protection (JECP)
- Joint Service General Purpose Mask (JSGPM) – M53A1
- Man-portable Radiological Detection System (MRDS)
- Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU)
- Rapid Opioid Countermeasure System (ROCS)
- Service Equipment Decontamination System (SEDS)
- Tactical Contamination Mitigation System (TCMS)
- Uniform Integrated Protection Ensemble Family of Systems General Purpose (UIPE FoS GP)

PEO Aviation
Redstone Arsenal, AL

- Apache Attack Helicopter (AH-64E)
- Black Hawk (UH/HH-60M)
- Chinook Cargo Helicopter and CH-47F Block II (CH-47F)
- Future Long Range Assault Aircraft (FLRAA)
- Future Tactical Uncrewed Aircraft Systems (FTUAS)
- Gray Eagle Uncrewed Aircraft System (MQ-1C)
- High Accuracy Detection and Exploitation System (HADES)
- Improved Turbine Engine Program (ITEP) – T901
- Launched Effects (LE) Short, Medium, and Long Range (SR, MR, and LR)

PEO Combat Support & Combat Service Support
Detroit Arsenal, MI

- Army Watercraft Systems (AWS)
- Common Robotic System – Heavy (CRS-H)
- Common Robotic System – Individual (CRS-I)
- Early Entry Fluid Distribution System (E2FDS)
- Enhanced Heavy Equipment Transporter System (EHETS)
- Family of Medium Tactical Vehicles (FMTV) – A2
- Force Provider Expeditionary (FPE)
- High Mobility Engineer Excavator Type IV (HMEE-IV)
- Infantry Squad Vehicle (ISV)
- Joint Light Tactical Vehicle (JLTV)
- Man Transportable Robotic System Increment II (MTRS Inc II)
- Military Bridging Systems
- Palletized Load System and Palletized Load System Extended Service Program (PLS/PLS ESP)
- Robotic Mine Flail – M160
- Small Multipurpose Equipment Transport (S-MET)
- T-9 Medium Dozer with Winch and Tractor, Full-Tracked, T-9 Medium Dozer with Ripper
- Tactical Electric Power (TEP)

Points of Contact (Continued)

PEO Command, Control, Communications-Tactical
Aberdeen Proving Ground, MD

- Command Post Computing Environment (CPCE)
- Command Post Integrated Infrastructure (CPI2)
- Defense Enterprise Wideband Satellite Communications System (DEWSS)
- Handheld, Manpack, and Small Form Fit (HMS)
- Joint Battle Command – Platform (JBC-P)
- Mounted Mission Command – Software (MMC-S)
- Satellite Communications Family of Terminals (SATCOM FoT)
- Signal Modernization (SigMod)
- Sustainment Transport System (STS)
- Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

PEO Enterprise Information Systems
Fort Belvoir, VA

- Global Combat Support System – Army (GCSS-Army)
- Integrated Personnel and Pay System – Army (IPPS-A)

PEO Ground Combat Systems
Detroit Arsenal, MI

- Abrams Main Battle Tank
- Armored Multi-Purpose Vehicle (AMPV)
- Booker Combat Vehicle – M10
- Bradley Fighting Vehicle – M2A4
- Heavy Equipment Recovery Combat Utility Lift and Evacuation System (HERCULES) – M88A2
- Product Director Paladin (M109A6/M992A2 (A6) and M109A7/M992A3 (A7))
- Robotic Combat Vehicle (RCV)
- Stryker Brigade Combat Team (SBCT)
- XM30 Combat Vehicle

PEO Intelligence, Electronic Warfare and Sensors
Aberdeen Proving Ground, MD

- Dismounted Assured Positioning, Navigation, and Timing (PNT) System (DAPS)
- Distributed Common Ground System – Army (DCGS-A)
- Electronic Warfare Planning and Management Tool (EWPMT)
- Mounted Assured Positioning, Navigation, and Timing (PNT) System (MAPS)
- Multi-Function Electronic Warfare–Air Large (MFEW-AL)
- Next Generation Biometric Collection Capability (NXGBCC)
- Project Linchpin (PL)
- Tactical Intelligence Targeting Access Node (TITAN)
- Third Generation Forward Looking Infrared (3GEN FLIR)

PEO Missiles and Space
Redstone Arsenal, AL

- Advanced Anti-Tank Weapon System – Medium (Javelin)
- Air and Missile Defense Planning and Control System (AMDPCS)
- Army Integrated Air and Missile Defense (AIAMD) Integrated Battle Command System (IBCS)
- Army Tactical Missile System (ATACMS)
- Counterfire Target Acquisition Radar (AN/TPQ-53)
- Forward Area Air Defense Command and Control (FAAD C2)
- Forward Area Air Defense System, Line-of-Sight, Rear (Pedestal Mounted Stinger – Avenger)
- Guided Multiple Launch Rocket System (GMLRS) Dual-Purpose Improved Conventional Munition (DPICM)
- Helicopter Launched Fire and Forget (HELLFIRE (HF))
- High Mobility Artillery Rocket System (HIMARS) – M142
- Indirect Fire Protection Capability Increment 2 (IFPC Inc 2)
- Iron Dome Defense System – Army (IDDS-A)
- Joint Air-to-Ground Missile (JAGM)
- Long-Range Hypersonic Weapon (LRHW)
- Lower Tier Air and Missile Defense Sensor (LTAMDS)
- Maneuver-Short Range Air Defense Increment 3 (M-SHORAD Inc 3)
- Mid-Range Capability (MRC)
- Multiple Launch Rocket System (MLRS) – M270A1 and M270A2
- Phased Array Tracking Radar to Intercept of Target (PATRIOT) Advanced Capability-3 (PAC-3)
- Precision Strike Missile (PrSM)

Points of Contact (Continued)

- Sentinel Aerial Surveillance Radar – AN/MPQ-64 A3 & AN/MPQ-64 A4 (Sentinel A3, Sentinel A4)
- SGT STOUT
- Stinger Block I with Proximity Fuze (PROX)

PEO Simulation, Training and Instrumentation
Orlando, FL

- Cyber Environment Replication (CER)
- Future Army System of Integrated Targets (FASIT)
- Instrumentable-Multiple Integrated Laser Engagement System (I-MILES)
- Intelligence and Electronic Warfare Tactical Proficiency Trainer Increment 1/Increment 2 (IEWTPT Inc 1/Inc 2)
- Joint Land Component Constructive Training Capability (JLCCTC)

PEO Soldier
Fort Belvoir, VA

- Air Soldier System (Air SS)
- Common Remotely Operated Weapon Station (CROWS) – M153
- Enhanced Night Vision Goggle – Binocular (ENVG-B)
- Family of Weapon Sights – Crew Served (FWS-CS)
- Integrated Visual Augmentation System (IVAS)
- Joint Effects Targeting System (JETS)
- Nett Warrior (NW)
- Small Arms – Crew Served Weapons (CSW)
- Soldier Borne Sensor (SBS)
- Soldier Protection System (SPS)

Rapid Capabilities and Critical Technologies Office
Redstone Arsenal, AL

- Directed Energy Maneuver-Short Range Air Defense (DE M-SHORAD)
- Indirect Fire Protection Capability – High Energy Laser (IFPC-HEL)
- Indirect Fire Protection Capability – High Power Microwave (IFPC-HPM)

Systems By Contractor

4M Research
- Global Combat Support System – Army (GCSS-Army)

ACE Electronics
- Joint Battle Command – Platform (JBC-P)

Action Manufacturing
- Artillery Ammunition
- Artillery Fuzes and Propellant

Acrow Corporation of America
- Military Bridging Systems

Acrow Global Limited
- Military Bridging Systems

ADA Technologies
- Future Army System of Integrated Targets (FASIT)

Advanced Measurement Technology, Inc.
- Man-portable Radiological Detection System (MRDS)

Advent Technologies
- Tactical Electric Power (TEP)

AeroClave, LLC
- Joint Biological Agent Decontamination System (JBADS)

Allison Transmission
- Abrams Main Battle Tank

AM General
- Joint Light Tactical Vehicle (JLTV)

Amentum Services, Inc.
- Nett Warrior (NW)
- Military Bridging Systems
- Satellite Communications Family of Terminals (SATCOM FoT)

American Ordnance
- Artillery Fuzes and Propellant

American Rheinmetall Vehicles LLC
- XM30 Combat Vehicle

AMTEC
- Ammunition – Medium Caliber
- Artillery Fuzes and Propellant

Anniston Army Depot
- Abrams Main Battle Tank
- Military Bridging Systems

APC/Ceradyne
- Soldier Protection System (SPS)

Area-I
- Launched Effects (LE) Short, Medium, and Long Range (SR, MR, and LR)

Armtec Defense
- Artillery Fuzes and Propellant

Armor Express
- Soldier Protection System (SPS)

Augustine Consulting, Inc. (ACI)
- Nett Warrior (NW)

Systems By Contractor (Continued)

Aurora Flight Services
- Launched Effects (LE) Short, Medium, and Long Range (SR, MR, and LR)

Avon Protection Systems, Inc.
- Joint Service General Purpose Mask (JSGPM) – M53A1

BAE Systems
- 155 mm M777A2 Lightweight Towed Howitzer
- Armored Multi-Purpose Vehicle (AMPV)
- Artillery Fuzes and Propellant
- Bradley Fighting Vehicle – M2A4
- Heavy Equipment Recovery Combat Utility Lift and Evacuation System (HERCULES) – M88A2
- Precision Guidance Kit/Long Range – Precision Guidance Kit (PGK/LR-PGK)
- Product Director Paladin (M109A6/M992A2 (A6) and M109A7/M992A3 (A7)
- Signal Modernization (SigMod)

BAE Systems Land & Armaments/Global Tactical Systems
- High Mobility Artillery Rocket System (HIMARS) – M142

Battelle Memorial Institute
- Antiviral Therapeutics (AV TX)

Bay Ship & Yacht Co.
- Army Watercraft Systems (AWS)

Bell Textron, Inc.
- Future Long Range Assault Aircraft (FLRAA)

Berg Manufacturing
- Force Provider Expeditionary (FPE)

Bethel Industries
- Soldier Protection System (SPS)

Birdon America Inc.
- Military Bridging Systems

Black Hills Ammunition
- Ammunition – Small Caliber

Blue Sky Mast
- Signal Modernization (SigMod)

Boeing
- Apache Attack Helicopter (AH-64E)
- Chinook Cargo Helicopter (CH-47F & CH-47F Block II)
- Defense Enterprise Wideband Satellite Communications System (DEWSS)
- Distributed Common Ground System – Army (DCGS-A)
- Forward Area Air Defense System, Line-of-Sight, Rear (Pedestal Mounted Stinger – Avenger)

Booz Allen Hamilton
- Distributed Common Ground System – Army (DCGS-A)
- Next Generation Biometric Collection Capability (NGXBCC)
- Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

Broshuis BV
- Enhanced Heavy Equipment Transporter System (EHETS)

Bruker Detection Corp.
- Man-portable Radiological Detection System (MRDS)

C5ISR Ultra
- Mounted Mission Command – Software (MMC-S)

CACI
- Distributed Common Ground System – Army (DCGS-A)
- Integrated Personnel and Pay System – Army (IPPS-A)

Systems By Contractor (Continued)

Carter Enterprises
- Soldier Protection System (SPS)

Caterpillar
- T-9 Medium Dozer with Winch and Tractor, Full-Tracked, T-9 Medium Dozer with Ripper

Chemring Sensors and Electronic Systems
- Joint Biological Tactical Detection System (JBTDS)

Collins Aerospace
- Chinook Cargo Helicopter (CH-47F & CH-47F Block II)
- Compact Vapor Chemical Agent Detector (CVCAD)
- Handheld, Manpack, and Small Form Fit (HMS)
- Launched Effects (LE) Short, Medium, and Long Range (SR, MR, and LR)
- Mounted Assured Positioning, Navigation, and Timing (PNT) System (MAPS)

Conco
- Artillery Fuzes and Propellant

Connetec, Inc.
- Mortar Weapon Systems

Cornerstone Research Group
- Future Army System of Integrated Targets (FASIT)

CTS
- Tactical Electric Power (TEP)

Cubic
- Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

Cummins
- Bradley Fighting Vehicle – M2A4

Cummins Power Generation
- Tactical Electric Power (TEP)

Data Path, Inc.
- Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

Day & Zimmermann
- Ammunition – Medium Caliber

Defense Technology Center
- Ammunition – Small Caliber

Dewey Electronics Corps
- Tactical Electric Power (TEP)

Digital Solid State Propulsion
- Future Army System of Integrated Targets (FASIT)

DOK-ING
- Robotic Mine Flail – M160

Domo Tactical Communications
- Handheld, Manpack, and Small Form Fit (HMS)

DRS
- Bradley Fighting Vehicle – M2A4
- Maneuver-Short Range Air Defense Increment 3 (M-SHORAD Inc 3)
- Third Generation Forward Looking Infrared (3GEN FLIR)
- Joint Battle Command – Platform (JBC-P)

DRS Network & Imaging Services, LLC
- Military Bridging Systems

DTECH Labs
- Satellite Communications Family of Terminals (SATCOM FoT)

Systems By Contractor (Continued)

Dynetics
- Indirect Fire Protection Capability Increment 2 (IFPC Inc 2)
- Long-Range Hypersonic Weapon (LRHW)

Elbit Systems of America
- Command Post Integrated Infrastructure (CPI2)
- Enhanced Night Vision Goggle – Binocular (ENVG-B)
- Mortar Weapon Systems

Electronic Warfare Associates
- Cyber Environment Replication (CER)

Engense Inc.
- Soldier Protection System (SPS)

Epirus, Inc.
- Indirect Fire Protection Capability – High Power Microwave (IFPC-HPM)

Evistacom
- Satellite Communications Family of Terminals (SATCOM FoT)

Fabrique National Manufacturing, LLC
- Small Arms – Crew Served Weapons (CSW)

Fairwinds Technologies
- Satellite Communications Family of Terminals (SATCOM FoT)
- Tactical Electric Power (TEP)

Florida Armor, LLC
- Soldier Protection System (SPS)

FN America, LLC
- Small Arms – Crew Served Weapons (CSW)

Force Point
- Distributed Common Ground System – Army (DCGS-A)

GATR
- Satellite Communications Family of Terminals (SATCOM FoT)

General Atomics Aeronautical Systems, Inc.
- Gray Eagle Uncrewed Aircraft System (MQ-1C)

GE Aerospace
- Improved Turbine Engine Program (ITEP) – T901

General Dynamics
- Artillery Ammunition
- Artillery Fuzes and Propellant
- Man-portable Radiological Detection System (MRDS)
- Stryker Brigade Combat Team (SBCT)
- Tactical Network Transport (TNT) At The Halt (ATH) And On The Move (OTM)

General Dynamics Canada
- Artillery Fuzes and Propellant

General Dynamics European Land Systems
- Military Bridging Systems

General Dynamics Land Systems
- Abrams Main Battle Tank
- Booker Combat Vehicle – M10
- Maneuver-Short Range Air Defense Increment 3 (M-SHORAD Inc 3)
- Robotic Combat Vehicle (RCV)
- SGT STOUT
- Small Multipurpose Equipment Transport (S-MET)
- XM30 Combat Vehicle

Systems By Contractor (Continued)

General Dynamics Mission Systems
- Command Post Integrated Infrastructure (CPI2)
- Distributed Common Ground Systems – Army (DCGS-A)
- Future Army System of Integrated Targets (FASIT)
- Intelligence and Electronic Warfare Tactical Proficiency Trainer Increment 1/Increment 2 (IEWTPT Inc 1/Inc 2)

General Dynamics Ordnance and Tactical Systems
- Ammunition – Large Caliber
- Ammunition – Medium Caliber
- Ammunition – Small Caliber
- Artillery Ammunition
- Small Arms – Crew Served Weapons (CSW)

General Dynamics – Ordnance Technology Systems
- Precision Guidance Kit/Long Range – Precision Guidance Kit (PGK/LR-PGK)

General Electric
- Apache Attack Helicopter (AH-64E)
- Black Hawk UH/HH-60M
- Compact Vapor Chemical Agent Detector (CVCAD)

Gilead Sciences, Inc.
- Antiviral Therapeutics (AV TX)

GM Defense
- Infantry Squad Vehicle (ISV)

Goodrich
- Chinook Cargo Helicopter (CH-47F & CH-47F Block II)

Griffon Aerospace
- Future Tactical Uncrewed Aircraft Systems (FTUAS)

Grucci
- Simulators, All Types (Battlefield Effects Simulators (BES))

GT Machining
- Military Bridging Systems

HDT Global
- Tactical Electric Power (TEP)

Honeywell
- 155 mm M777A2 Lightweight Towed Howitzer
- Abrams Main Battle Tank
- Chinook Cargo Helicopter (CH-47F & CH-47F Block II)

Hunter Defense Technologies (HDT)
- Force Provider Expeditionary (FPE)

IAP Worldwide Services, Inc.
- Defense Enterprise Wideband Satellite Communications System (DEWSS)

Ideal Innovation Incorporated (I3)
- Next Generation Biometric Collection Capability (NGXBCC)

InSAP
- Global Combat Support System – Army (GCSS-Army)

Insight International Technologies
- Tactical Electric Power (TEP)

Integrated Solutions for Systems, Inc.
- Service Equipment Decontamination System (SEDS)
- Tactical Contamination Mitigation System (TCMS)

InVeris Training Solutions
- Future Army System of Integrated Targets (FASIT)

Systems By Contractor (Continued)

Israeli Ministry of Defense
- Iron Dome Defense System – Army (IDDS-A)

JANUS Research Group
- Satellite Communications Family of Terminals (SATCOM FoT)
- Tactical Network Transport (TNT) At The Halt (ATH) And On The Move (OTM)

Jardon and Hardon Technologies (JHT), Inc.
- Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

JCB
- High Mobility Engineer Excavator Type IV (HMEE-IV)

Joint Systems Manufacturing Center
- Abrams Main Battle Tank

Joint Venture between Raytheon and Lockheed-Martin Corp.
- Advanced Anti-Tank Weapon System – Medium (Javelin)

JRM Technologies
- Future Army System of Integrated Targets (FASIT)

KAK Industry
- Ammunition – Small Caliber

Kaléo, Inc.
- Rapid Opioid Countermeasure System (ROCS)

KBR/KORD Technologies
- Directed Energy Maneuver-Short Range Air Defense (DE M-SHORAD)

Klas
- Satellite Communications Family of Terminals (SATCOM FoT)
- Signal Modernization (SigMod)

Kongsberg Defence and Aerospace
- Common Remotely Operated Weapon Station (CROWS) – M153

L2 Defense
- Chemical, Biological, Radiological, Nuclear Dismounted Reconnaissance Systems (CBRN DRS)
- Nuclear Biological Chemical Reconnaissance Vehicle Sensor Suite Upgrade (NBCRV SSU)

L3 Harris Technologies, Inc.
- Apache Attack Helicopter (AH-64E)
- Artillery Fuzes and Propellant
- Defense Enterprise Wideband Satellite Communications System (DEWSS)
- Distributed Common Ground System – Army (DCGS-A)
- Enhanced Night Vision Goggle – Binocular (ENVG-B)
- Handheld, Manpack, and Small Form Fit (HMS)
- Satellite Communications Family of Terminals (SATCOM FoT)
- Tactical Network Transport (TNT) At The Halt (ATH) And On The Move (OTM)

Leading Technology Composites, Inc.
- Soldier Protection Systems (SPS)

Leidos
- Joint Expeditionary Collective Protection (JECP)
- Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

Leonardo DRS, Inc.
- 155 mm M777A2 Lightweight Towed Howitzer
- Early Entry Fluid Distribution System (E2FDS)
- Family of Weapon Sights – Crew Served (FWS-CS)
- Joint Effects Targeting System (JETS)
- Military Bridging Systems
- Mortar Weapon Systems

Letterkenny Army Depot
- High Mobility Artillery Rocket System (HIMARS) – M142
- Tactical Electric Power (TEP)

Systems By Contractor (Continued)

Linchpin Solutions
- Satellite Communications Family of Terminals (SATCOM FoT)

Lite Coms/AVL
- Satellite Communications Family of Terminals (SATCOM FoT)

LMI
- Global Combat Support System – Army (GCSS-Army)

Loc Performance
- Bradley Fighting Vehicle – M2A4

Lockheed Martin Corporation
- Apache Attack Helicopter (AH-64E)
- Army Integrated Air and Missile Defense (AIAMD) Integrated Battle Command System (IBCS)
- Counterfire Target Acquisition Radar – AN/TPQ-53
- Instrumentable-Multiple Integrated Laser Engagement System (I-MILES)
- Joint Air-to-Ground Missile (JAGM)
- Long-Range Hypersonic Weapon (LRHW)
- Mid-Range Capability (MRC)
- Sentinel Aerial Surveillance Radar – AN/MPQ-64 A3 & AN/MPQ-64 A4 (Sentinel A3, Sentinel A4)

Lockheed Martin Missiles and Fire Control
- Army Tactical Missile System (ATACMS)
- Guided Multiple Launch Rocket System (GMLRS) Dual-Purpose Improved Conventional Munition (DPICM)
- Helicopter Launched Fire and Forget (HELLFIRE (HF))
- High Mobility Artillery Rocket System (HIMARS) – M142
- Multiple Launch Rocket System (MLRS) – M270A1 and M270A2
- Phased Array Tracking Radar to Intercept of Target (PATRIOT) Advanced Capability-3 (PAC-3)
- Precision Strike Missile (PrSM)

Lockheed Martin Rotary and Mission Systems
- Multi-Function Electronic Warfare – Air Large (MFEW-AL)

Longbow, LLC
- Helicopter Launched Fire and Forget (HELLFIRE (HF))

MAG Aero
- Tactical Network Transport (TNT) At The Halt (ATH) and On The Move (OTM)

Marvin Land Systems
- Tactical Electric Power (TEP)

MaxVision, Rugged Portable Computers, LLC
- Distributed Common Ground System – Army (DCGS-A)

McQ
- Robotic Combat Vehicle (RCV)

Microsoft
- Tactical Network Transport (TNT) At The Halt (ATH) And On The Move (OTM)
- Integrated Visual Augmentation System (IVAS)

Moog, Inc.
- Tactical Electric Power (TEP)

MRI Global
- Joint Biological Tactical Detection System (JBTDS)
- Nuclear Biological Chemical Reconnaissance Vehicle Senor Suite Upgrade (NBCRV SSU)

N5 Sensors, Inc.
- Compact Vapor Chemical Agent Detector (CVCAD)

Nammo
- Artillery Ammunition
- Artillery Fuzes and Propellant

Nobilis
- Army Watercraft Systems (AWS)

Systems By Contractor (Continued)

Nokomis
- Future Army System of Integrated Targets (FASIT)

Northrop Grumman Corporation
- Launched Effects (LE) Short, Medium, and Long Range (SR, MR, and LR)

Northrop Grumman Defense Systems
- Ammunition – Large Caliber
- Ammunition – Medium Caliber

Northrop Grumman Systems Corporation
- Apache Attack Helicopter (AH-64E)
- Air and Missile Defense Planning and Control System (AMDPCS)
- Army Integrated Air and Missile Defense (AIAMD) Integrated Battle Command System (IBCS)
- Artillery Fuzes and Propellant
- Defense Enterprise Wideband Satellite Communications System (DEWSS)
- Forward Area Air Defense Command and Control (FAAD C2)
- Precision Guidance Kit/Long Range – Precision Guidance Kit (PGK/LR-PGK)

Novatio Engineering
- Tactical Electric Power (TEP)

Olin Winchester
- Ammunition – Small Caliber

Oshkosh Defense, LLC
- Enhanced Heavy Equipment Transporter System (EHETS)
- Family of Medium Tactical Vehicles (FMTV) – A2
- Joint Light Tactical Vehicles (JLTV)
- Military Bridging Systems
- Palletized Load System and Palletized Load System Extended Service Program (PLS/PLS ESP)
- Robotic Combat Vehicle (RCV)
- Stryker Brigade Combat Team (SBCT)

P2 Mission Solutions
- Tactical Electric Power (TEP)

Pacific Star Communications (PacStar)
- Satellite Communications Family of Terminals (SATCOM FoT)
- Signal Modernization (SigMod)

Palantir USG, Inc.
- Distributed Common Ground System – Army (DCGS-A)
- Tactical Intelligence Targeting Access Node (TITAN)

PD Power Systems
- Tactical Electric Power (TEP)

Pearson Engineering Limited
- Military Bridging Systems

Phoenix Defense
- Future Army System of Integrated Targets (FASIT)

Phoenix Logistics, Inc.
- Joint Land Component Constructive Training Capability (JLCCTC)

Point Blank Enterprises
- Soldier Protection Systems (SPS)

PR Tactical
- Simulators, All Types (Battlefield Effects Simulators (BES))

Pratt Miller Defense
- Future Army System of Integrated Targets (FASIT)

Precision Combustion, Inc.
- Tactical Electric Power (TEP)

Systems By Contractor (Continued)

Production Products Manufacturing & Sales, Co., Inc.
- Force Provider Expeditionary (FPE)
- Joint Expeditionary Collective Protection (JECP)

QinetiQ, Inc.
- Common Robotic System – Individual (CRS-I)

Rafa Laboratories, LTD
- Advanced Anticonvulsant System (AAS)

Raytheon
- Army Integrated Air and Missile Defense (AIAMD) Integrated Battle Command System (IBCS)
- Electronic Warfare Planning and Management Tool (EWPMT)

Raytheon Information Systems
- Distributed Common Ground System – Army (DCGS-A)
- Sentinel Aerial Surveillance Radar – AN/MPQ-64 A3 & AN/MPQ-64 A4 (Sentinel A3, Sentinel A4)

Raytheon Intelligence & Space
- Third Generation Forward Looking Infrared (3GEN FLIR)

Raytheon Missiles & Defense
- 155 mm Excalibur Projectiles
- Cannon-Delivered Area Effects Munition Armor
- Stinger Block I with Proximity Fuze (PROX)

Raytheon Missile Systems
- Maneuver-Short Range Air Defense Increment 3 (M-SHORAD Inc 3)

Raytheon Technologies
- Lower Tier Air and Missile Defense Sensor (LTAMDS)

ReadyOne Industries, Inc.
- Force Provider Expeditionary (FPE)
- Uniform Integrated Protection Ensemble Family of Systems General Purpose (UIPE FoS GP)

Red River Army Depot
- Enhanced Heavy Equipment Transporter System (EHETS)
- High Mobility Artillery Rocket System (HIMARS) - M142
- Tactical Electric Power (TEP)

Renk America
- Bradley Fighting Vehicle – M2A4

Rheinmetall – Day & Zimmermann Munitions
- Ammunition – Medium Caliber

Rock Island Army Depot
- Tactical Electric Power (TEP)

SCI Technology
- Command Post Integrated Infrastructure (CPI2)

SensorMetrix
- Future Army System of Integrated Targets (FASIT)

Serco
- Command Post Integrated Infrastructure (CPI2)

Sigma Defense
- Signal Modernization (SigMod)

Sig Sauer
- Ammunition – Small Caliber

Sikorsky, a Lockheed Martin Company
- Black Hawk UH/HH-60M

Systems By Contractor (Continued)

Silvus Technologies
- Handheld, Manpack, and Small Form Fit (HMS)
- Signal Modernization (SigMod)

Slate Solutions
- Soldier Protection Systems (SPS)

Smiths Detection, Inc.
- Aerosol Vapor Chemical Agent Detector (AVCAD)

SourceAmerica
- Uniform Integrated Protection Ensemble Family of Systems General Purpose (UIPE FoS GP)

STS International
- Force Provider Expeditionary (FPE)

Systematic
- Command Post Computing Environment (CPCE)

Tampa Microwave
- Satellite Communications Family of Terminals (SATCOM FoT)

Technology Service Corporation
- Launched Effects (LE) Short, Medium, and Long Range (SR, MR, and LR)

Teledyne FLIR
- Chemical, Biological, Radiological, Nuclear Dismounted Reconnaissance Systems (CBRN DRS)
- Common Robotic System – Heavy (CRS-H)
- Compact Vapor Chemical Agent Detector (CVCAD)
- Man Transportable Robotic System Increment II (MTRS Inc II)
- Nuclear Biological Chemical Reconnaissance Vehicle Senor Suite Upgrade (NBCRV SSU)
- Soldier Borne Sensor (SBS)

TenCate Advanced Armor USA
- Soldier Protection System (SPS)

Textron
- Robotic Combat Vehicle (RCV)

Textron Systems
- Future Tactical Uncrewed Aircraft Systems (FTUAS)

Thales Defense & Security, Inc.
- Handheld, Manpack, and Small Form Fit (HMS)

Theissen Training System
- Future Army System of Integrated Targets (FASIT)

Tobyhanna Army Depot
- Military Bridging Systems
- Nett Warrior (NW)
- Tactical Electric Power (TEP)

TRX Systems, Inc.
- Dismounted Assured Positioning, Navigation, and Timing (PNT) System (DAPS)

Ultimate Training Munitions
- Ammunition – Small Caliber

Ultra Electronics
- Air and Missile Defense Planning and Control System (AMDPCS)

Ultra Intelligence and Communications
- Signal Modernization (SigMod)

US Ordinance
- Small Arms – Crew Served Weapons (CSW)

Systems By Contractor (Continued)

Veteran Corps of America
- Man-portable Radiological Detection System (MRDS)

ViaSat
- Joint Battle Command – Platform (JBC-P)

Vigor Works, LLC
- Army Watercraft System (AWS)

Vista Outdoor
- Ammunition – Small Caliber

Weapons & Software Engineering Center
- Command Post Computing Environment (CPCE)

Williams Fairey Engineering Ltd.
- Military Bridging Systems

Yokohama Engineering Works
- Army Watercraft Systems (AWS)

Zel Tech
- Future Army System of Integrated Targets (FASIT)

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