MISSION:
Deliver collaborative and innovative technical capabilities for responsive and cost-effective research, product development, and life-cycle systems engineering solutions

Who We Are:
- Government ~ 3,107
- Military - 21
- Contractors ~ 6,468
- PhDs - 131
- Masters – 1,024
- 17 University/College Professors
- 2 Senior Research Scientists

What We Do:
- Basic and Applied Research
- Technology Development
- Future Systems Development
- Fielded Systems Support
- Rapid Prototyping
- Obsolescence Management
- Technology Refresh

Who We Support:
FY13 Final ($2,483M)
- Aviation S&T: $125M
- Missile S&T: $174M
- PEO Aviation: $617M
- Other PEOs: $162M
- Others Related: $838M
- MDA: $175M
- AMCOM: $90M
- PEO Missiles & Space: $302M

What We Manage:
- FY14 Funding > $2.4B
- Over 2.6M square feet in RDTE space
- 266 Facilities-Redstone and Offsite
- Additional unique test facilities and wind tunnels across US

Expert engineering and laboratory capabilities to develop, transition, and sustain technology solutions for a wide variety of DoD customers
AMRDEC’s S&T Work Builds the Base for Engineering Services
— These Two Sides Work Hand in Hand to Build Knowledge and Expertise —

SCIENCE & TECHNOLOGY PROGRAMS

- Precision Navigation and Timing
- Missile Seekers
- Rocket and Turbine Propulsion
- Air Defense
- Vehicle Active Protection
- Fire Control Air Defense Radar Technology
- Target Acquisition Systems
- Aerodynamics and Structures
- Platform and Weapons Systems Integration
- Missile Condition Based Maintenance
- Manufacturing Technology
- AMCOM Corrosion Program

TECHNOLOGIES

- SMART BUYERS
- SKILLED PERSONNEL
- LEVERAGED FACILITIES

REAL WORLD NEEDS

- UNFORESEEABLE REQUIREMENTS
- TRANSITION OPPORTUNITIES
- LEVERAGED FACILITIES

85% OF ALL REVENUES

ENGINEERING SERVICES

- Life Cycle Systems Engineering
- Software Engineering - Accredited Level 4 CMM
- High-Fidelity System Level Simulations
- Independent Product / Process Assessment
- Airworthiness Qualification and Release Authority
- Sustainment Engineering Support
- Rapid Prototype Engineering / Integration
- Production / Quality / Reliability Engineering
- AMCOM Corrosion Program
- Technical / Acquisition Management

85% OF ALL REVENUES
Foster Innovation and Accelerate/Mature Technology to Enable Future Force Capabilities While Exploiting Opportunities to Rapidly Transition Technology to the Current Force

**CURRENT FORCE**
- Guided Multiple Launch Rocket System
- TOW Bunker Buster
- Predator/HELLFIRE

**ENHANCING THE CURRENT FORCE**

**FUTURE FORCE**
- Small Organic Precision Munition (SOPM)
- Low-Cost Tactical Extended Range Missile
- Close Combat Missile Modernization
- Extended Area Protection & Survivability
- LOW-cost, Extended Range Air Defense

**ENABLING THE FUTURE FORCE**
AMRDEC Missile S&T
Capability Areas and Leads

**GROUND DOMAIN**

**PROTECTION**
Protect the force and selected geopolitical assets from aerial attack, missile attack and surveillance
- Air Defense
- Area Protection
- Platform Protection

**FIRE SUPPORT**
Destroy, neutralize, or suppress the enemy by cannon, rocket, and missile fire and to help integrate fire support assets into combined arms operations

**GROUND TACTICAL (CLOSE COMBAT)**
Direct fire weapons, supported by indirect fire, air-delivered fires, and nonlethal engagement means to decide the outcome of battles and engagements

**AVIATION WEAPONS**
Find, fix, and destroy the enemy through fire and maneuver; and to provide combat, combat service and combat service support in coordinated operations as an integral member of the combined arms team

**AIR DOMAIN**
TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.
Weapons Development and Integration Directorate
Missile S&T Roadmaps

**NEAR-TERM**
- GROUND TACTICAL
  - Lethal Miniature Aerial Munition System (LMAMS) SOPM, DFP & cUAS

**MID-TERM**
- PROTECTION
  - Air Defense
  - Low-Cost Extended-Range Air Defense (LOWER-AD)

**FAR-TERM**
- FIRE SUPPORT
  - Tail Control GMLRS
  - Low-Cost Tactical Extended Range Missile

- AVIATION WEAPONS
  - HELLFIRE+ Technology Insertion
  - MMT Lightweight Multi-Role

- PLATFORM PROTECTION
  - Future Close Combat Missile
  - Highly Maneuverable Field Artillery

- MINIATURE HIT-TO-KILL
  - Miniature Hit-to-Kill
AMRDEC Fuze Development

- Electromechanical Fuzes
- Electronic Fuzes
- Rocket Motor ISDs

- Tailorable Effects
- Shock-Survivability
- Laser Prox Development & RF Prox Integration

Arming Environments
Target ID/Sensor Info
Detonation Mode/Selection Logic
Safe & Arm
FIRESET
FIRESET
FIRESET
DET
DET
DET

Small Boat 75 degrees
Range about 2 m

TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.
AMRDEC Fuze Engineering

System Integration

Endgame Analysis Support

Test Hardware Development

Plus a variety of engineering services:
- Independent technical analysis & program support
- Fuze & ISD safety certification process support
- FESWG
- DoD Fuze IPT
- JFTP and JMP (TCG X)
- Source Selection Evaluation Boards
- Failure Review Boards
- Prime & supplier ECP reviews
- Hazard Analysis Working Groups / Test Readiness Reviews