

# **TECHNICAL CENTER**



Innovate, demonstrate, test and deliver!

The U.S. Army Space and Missile Defense Command Technical Center provides science, technology, test and evaluation expertise to enable warfighter dominance today and in the future. As part of the Army science and technology enterprise, the Technical Center contributes to operational readiness, enabling the warfighter to prevail in conflicts.

The Director for Research and Technology executes science and technology, and research and development through three subordinate directorates; Space and High Altitude, Missile Defeat, and Research.

The Director for Engineering and Test serves as the center's chief engineer and manages systems engineering and test execution through two subordinate directorates – Systems Engineering and Test. The Director for Engineering and Test also oversees three systems

integration labs for directed energy, long-range hypersonic and tactical space systems.

The Ronald Reagan Ballistic Missile Defense Test Site Directorate manages the RTS, part of the Department of Defense Major Range and Test Facility Base, located on Kwajalein Atoll in the central Pacific Ocean.



- Research, development, test and evaluation within core competencies
- · Execute systems engineering
- End-to-end test planning and support to Technical Center Department of Defense stakeholders
- Research and develop critical technologies for transition
- Manage and operate the Ronald Reagan Ballistic Missile Defense Test Site
- Conduct space operations and space surveillance to support U.S. Space Command



The Technical Center collaborates and synchronizes its efforts across the Army with program executive offices, centers of excellence, combatant commands, other services, industry and academia. The Technical Center is geographically distributed in many sites, with its primary offices located at Redstone Arsenal, Alabama. Other locations are the Reagan Test Site located at U.S. Army Garrison-Kwajalein Atoll, Republic of the Marshall Islands, and the Reagan Test Site Operations Center located in Huntsville, Alabama.

On a daily basis, the civilians, Soldiers and contractors of the Technical Center focus on achieving their vision of "Innovating and Transforming the Future Army." This contributes to the command's ability to enable dominant multi-domain combat effects, protect the homeland and support strategic success – wherever and whenever required.

### **DIRECTED ENERGY**

The Technical Center is the Army lead for highenergy laser technology development. This technology applies to multiple mission areas and can help address existing operational capability gaps. High-energy lasers can be a low-cost, effective complement to kinetic energy to address rocket, artillery and mortar threats; unmanned aerial systems; and cruise missiles. The Technical Center is also exploring high-power microwave technology for use in defeating unmanned aerial systems and improvised threats.

#### **TACTICAL SPACE TECHNOLOGIES**

As the Army lead for space and high-altitude science and technology, the Technical Center develops, matures and transitions critical space-enabled capabilities that directly support Army and joint warfighter needs. Space is a critical enabler for multidomain operations, and the Technical center is focused on technologies to interdict adversary access to space as well as ensuring the warfighter's ability to exploit the space domain for enhanced situational awareness, communications, navigation, and targeting.

## **TEST SUPPORT**

The Technical Center is an invaluable part of the Army test and evaluation enterprise providing end-



to-end flight test planning, design, development, integration, and test execution, along with transportable and configurable launchers and unique low-cost target solutions. The team provides missile testing capabilities to include a suite of low-cost ballistic missile targets for use in developmental and operational air and missile defense testing as well as mission planning, mission execution, test resource coordination, and architecture development to support complex, large-scale operational test events focused on meeting requirements on time and at an economical cost to the user – the warfighter. It also conducts hypersonic flight test planning to meet Army and Navy customer requirements.

# **REAGAN TEST SITE**

The Ronald Reagan Ballistic Missile Defense Test Site is a vital national asset providing live-fire developmental and operational flight testing of offensive and defensive missile systems, equatorial satellite launch capability, space object tracking and characterization, and atmospheric science research. The unique range and test facility is located 2,300 miles west-southwest of Hawaii in the U.S. Army Garrison-Kwajalein Atoll, Republic of the Marshall Islands. The Reagan Test Site provides test support to the Missile Defense Agency, the U.S. Air Force, the National Aeronautics and Space Administration and others. Additionally, the Reagan Test Site supports the command's space missions in support of U.S. Strategic Command.

