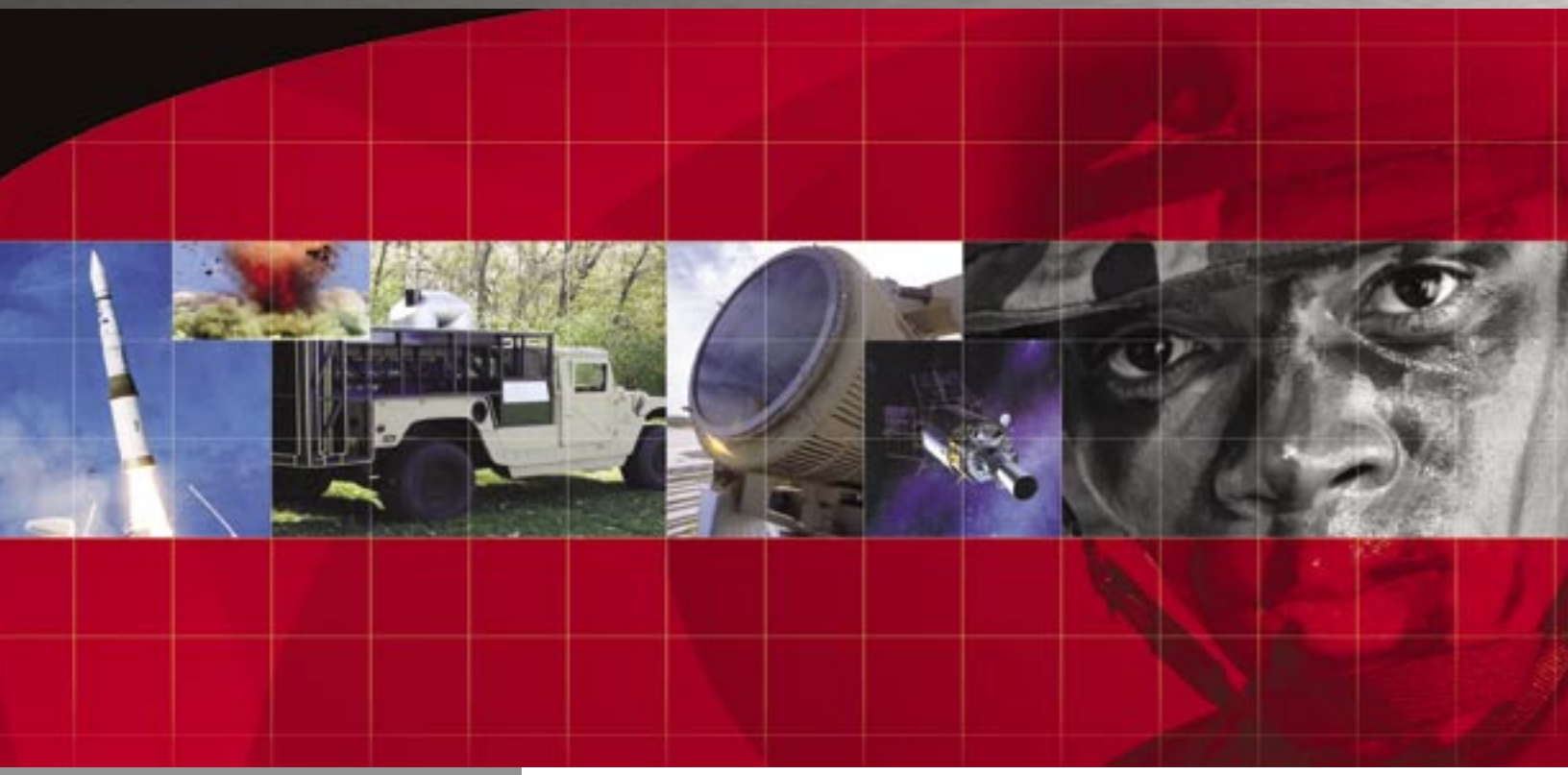
UNITED STATES ARMY
SPACE AND MISSILE
DEFENSE COMMAND

SMD–TC
Space and Missile Defense
Technical Center

SMD–TC

Advanced Technology for the Warfighter



Summary

- Manages and advances missile defense technology research and development
- Manages and advances space technology research and development
- Develops technology opportunities for international, academia, industry, and other government agencies cooperation and partnerships
- Plans and executes missile defense test and evaluation programs and related analysis
- Provides engineering resources and expertise in support of the Army Program Executive Office for Air, Space, and Missile Defense and the Missile Defense Agency

The Space and Missile Defense Technical Center develops and transitions space, missile defense, and other related technologies.

The Space and Missile Defense Technical Center (SMD-TC) conducts space, missile defense, and related technology research and development for the Army, the Missile Defense Agency (MDA), and other defense-related government agencies. The Technical Center pursues numerous opportunities for technical cooperatives and partnerships with academia, industry, and international organizations. Particular areas of technology development include radar, optics, interceptors, lasers, information systems, space control, and space applications. The Technical Center also provides data collection, mission planning and engineering analysis for Missile Defense Flight Tests. Other areas of expertise include systems engineering and safety.

SMD–TC

Space and Missile Defense Technical Center

SMDC
United States Army
Space and Missile Defense Command

The mission of the Space and Missile Defense Technical Center (SMD–TC) is to manage and advance missile defense and space technology research and development for the Army, the Missile Defense Agency (MDA), and defense-related government organizations; and to develop opportunities for cooperation and partnerships with international organizations, academia, industry, and other government agencies.

SMD–TC also provides engineering resources and expertise in support of the Army Program Executive Office for Air, Space, and Missile Defense and the MDA, specifically in support of: the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System, the Joint Tactical Ground System, the Ground-Based Midcourse Defense Joint Project Office, the Theater High Altitude Air Defense Project Office, the Lower Tier Project Office, the Arrow Project Office, the Target and Joint Program Office, and the High Altitude Airship.

- **Radar**

Across SMD–TC, multiple radar programs and technology concepts are in various stages of maturity. These include programs to increase radar range; to counter electronic countermeasures; to engage multiple targets; to improve countermeasure discrimination; to develop ultra light-weight radar power technology; and to detect, discriminate, and track in heavy clutter.

- **Optics**

SMD–TC is involved in the development of optical technologies. Current programs include: the Photo Conductor on Active Pixel, the Portable Optical Sensor Testbed, the Multi-application Focal Plane Arrays Program, and the Optical Data Analysis Program.

- **Interceptors**

SMD–TC is the historical and intellectual home of ballistic missile interceptor development. Technologies and concepts in various stages of development include: Miniature Kill Vehicles, Multisensor Seekers, Radiation-hardened Advanced Electronics, Advanced Data Fusion Algorithms, and High-G Solid Divert Propulsion.

- **Lasers**

SMD–TC is the Army lead in High Energy Laser development. SMD–TC is currently managing two laser programs: the Solid State High Energy Laser Technology Program and the ZEUS-HMMWV Laser Ordnance Neutralization System Program.

- **Systems Engineering & Safety**

This discipline is practiced and supported across the Technical Center by employing the Technology Program Management Model. Other missions include: the Survivability Program, Missile Production Safety Support; the Eagle Eyes Program (develop advanced signal processing devices that will detect nuclear material at extended ranges); and oversight of the DECADE Nuclear Test Chamber.

- **Information Technology**

Warfighters must process, communicate, protect, manage, and act upon information. SMD–TC is the command's technology proponent for Computer Network Operations and Information Technology Superiority. As such, SMD–TC manages the Wide Bandwidth Technology Program and the Missile Defense Data Center.

- **Space Technology**

SMD–TC is the Army lead in Space Control Technology Development (surveillance, negation, protection) and Space Technology Applications. Our engineers execute Space Surveillance Science and Technology Objective (STO) and the Overwatch Advanced Concept Technology Demonstration (ACTD).

- **Flight Test Support**

SMD–TC provides vital flight test services for the MDA. SMD–TC manages airborne test measurement platforms, data collection planning, data analysis, target signature development, radar/optical model development, and algorithm development for System Integration Tests, Hercules Flight Tests, Kinetic Energy (KE) Boost Phase Program, the Critical Measurements Program, and the Aerial Dispersion Experiment.

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