MISSILE DEFENSE

Comprehensive Technology Solutions

The United States' missile defense mission requires Government partners who provide a high level of expertise to solve technical problems. The Space Dynamics Laboratory (SDL) is a long-term, strategic Government partner providing comprehensive missile defense technology solutions. SDL's experienced staff and state-of-the-art facilities support a full range of research, development, test, and engineering needs. Most importantly, SDL's mission-focused, customer-driven culture ensures we meet and often exceed customer requirements.

WIDE-RANGING EXPERTISE

SDL's expert staff provides the following capabilities:

- Innovative research
- Specialized subject matter expertise
- Independent analysis & testing
- Rapid prototyping & technology maturation

TRUSTED PARTNER

As a University Affiliated Research Center (UARC), SDL maintains essential engineering, research, and development capabilities for the Department of Defense. SDL is the UARC of choice for sensors, space systems, ground systems, and multi-domain C2 and cyber solutions, and we apply that expertise to the missile defense mission.

UARC
TRUSTED PARTNER

As a nonprofit UARC, SDL is uniquely positioned to solve problems of national importance. The UARC status means that SDL:

- Offers streamlined, responsive contracting
- Serves objectively in the public interest
- Provides unlimited Government rights to SDL-developed data & technology
- Fosters long-term, collaborative, trusted partnerships

UTAH STATE UNIVERSITY
SPACE DYNAMICS LABORATORY®

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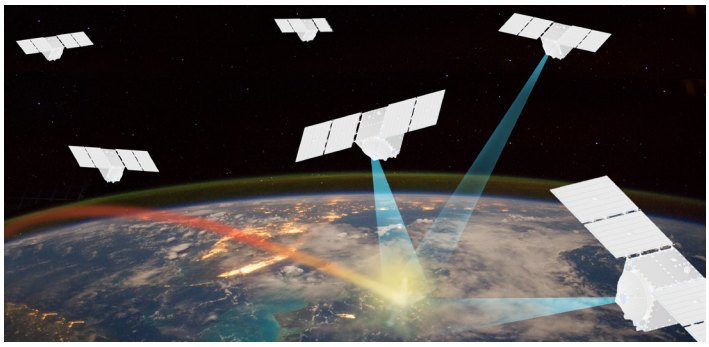
MISSILE DEFENSE Comprehensive Technology Solutions



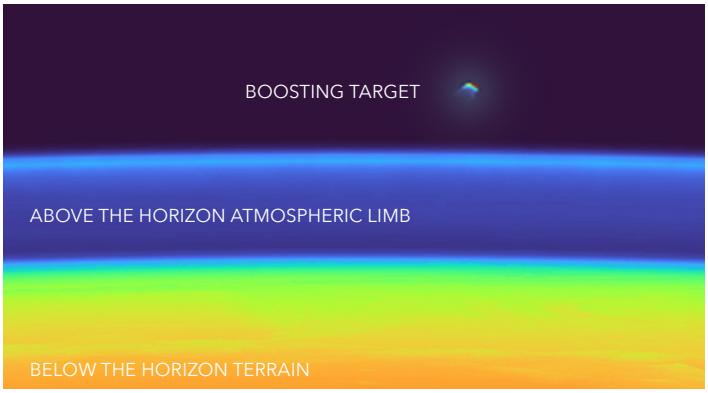
EXPERTISE & CAPABILITIES

Missile Defense Mission Engineering, Analysis & Technical Expertise

- Independent system evaluation
- Requirements & architecture analysis
- EO/IR sensor expertise
- Natural space environment & survivability assessment
- Digital engineering/model-based systems engineering
- Cybersecurity & software evaluation

Missile Defense Technology Development

- Mission architecture trades/analysis
- Requirements & technical risk management
- Concept research, development & prototyping
- Component & subsystem qualification
- Sensor & ground system design, development, integration, test & calibration
- System performance analysis & verification



Full Mission Architecture Performance Modeling, Simulation & Analysis

- Analytical tool development (e.g., atmospheric effects)
- Sensor modeling & radiometry (e.g., focal plane, optics)
- Digital spectral-band scene generation
- Artificial intelligence & machine learning-enabled tools & methods
- Mission data processing performance analysis
- Infrared missile detection/tracking algorithm development
- Model verification & validation

Hypersonic Vehicle & Component Research, Analysis & Testing

- Hypersonic vehicle optical materials testing
- Transmission, emissivity & wavefront error
- Full wavelength spectrum at very high temperatures
- Inherent optical properties measurement
- Emissivity measurement for non-optical materials
- Multiple applications across missions

NATIONWIDE CUSTOMER SUPPORT

SDL is headquartered in North Logan, UT. Our missile defense customers are also served by field offices and embedded support staff located in Huntsville, AL; Albuquerque, NM; Colorado Springs, CO; Los Angeles, CA; and Washington, DC.

SDL