

# TACTICAL DATA GROUND SYSTEMS

## End-to-End Data Processing Solutions

A cohesive ground data processing system is imperative for effective data flow between the air and ground. The Space Dynamics Laboratory (SDL) develops and supports robust ground data processing systems, solving technical challenges early on through comprehensive design, testing, and integration.

SDL has decades of experience developing and integrating solutions for near real-time data ingest, exploitation, and distribution for all branches of the US military. With SDL's hardware systems, users can receive, synchronize, route, and simulate data from various sensor sources, while data exploitation software systems enable rapid data processing, screening, and distribution through an easy-to-use interface. These highly modular systems are scalable for multiple platforms and algorithms to meet the customer's unique needs.

SDL's ground data processing team is experienced in compatibility testing and integration across ground networks. The team also assists with system accreditation and administration—including security, maintenance, and worldwide mission support—offering customers complete system implementation from a single expert partner.

### FEATURES

#### End-to-End Capabilities

- Full system development: from creative design and expert fielding to around-the-clock operations support

#### Data Receiver Hardware Systems

- Multiple sensor interfaces
- Customized links to multiple platforms
- Simulation functionality for training exercises
- Easy maintenance and troubleshooting

#### Data Processing Software Systems

- Near real-time ingest from multi-INT data sources
- Scalable framework
- Superior data conditioning
- Third-party algorithm integration, including machine learning
- Near real-time generation of analyst-ready products

#### Data Distribution

- Information distribution to multiple agencies
- Rapid data transfer across wide-area, high-latency networks



## WHY CHOOSE SDL?

As a nonprofit University Affiliated Research Center (UARC) designated by the US Department of Defense, SDL is in a unique position—free from real or perceived conflicts of interest—to provide independent assessment and innovative solutions. SDL has assisted the US and its allies in solving technical challenges for over 60 years.

## GROUND SYSTEM DEVELOPMENT LIFECYCLE

