 SENSOR SOLUTIONS FOR SCIENCE & NATIONAL SECURITY

As a University Affiliated Research Center (UARC) and trusted agent of the Government, the Space Dynamics Laboratory (SDL) is committed to providing innovative, world-class sensor systems and supporting technologies to address the nation’s challenges. From electro-optical sensors and real-time data reconnaissance systems to small satellites and calibration services, SDL delivers the products and services to enable smarter decisions through the collection and analysis of data for science and military applications.

CORE CAPABILITIES

Sensors & Sensor Systems
- Electro-optical (hyperspectral, visible, infrared, ultraviolet)
- Autonomous & intelligent
- Stabilization, pointing & control
- Modeling & simulation
- Synthetic aperture radar (SAR)
- Light detection & ranging (LIDAR), Laser detection & ranging (LADAR)
- Space environments

Satellite Technologies
- Small/micro satellites
- Mission operations
- Command & control
- Spacecraft components
- Planning
- Navigation & analysis
- Flight software

Ground Systems
- Multi-domain command & control
- Data processing
- Data handling
- Data compression/decompression
- Data visualization
- Data exploitation
- Data fusion
- Data dissemination
- Sensor data acquisition
- Signatures & targets
- Fielding & support

Science & Engineering
- Phenomenology measurements
- Modeling & simulation
- Modular open systems architecture (MOSA)
- Space-rated instruments & payloads
- Cryo-systems, thermal design, development & handling
- Technology insertion (re-engineering)
- Miniaturization
- Principal investigator support

Calibration, Test & Evaluation
- Sensor calibration, characterization, test, evaluation & validation
- Environmental testing
- Flight testing
- Small satellite characterization
- Calibration support

Cyber Analytics & High Speed Networks
- Cybersecurity
- Network protocols & interfaces
- Data transport assurance
- Embedded processing

AT A GLANCE

- Founded in 1959
- Annual revenue for FY18 ~$118M
- Nonprofit 501(c)(3) owned by Utah State University
- Over 800 employees
- Approximately 140 university student employees
- 430+ spaceflight missions
- Satellite-based sensor systems
- Shuttle & ISS instruments
- Sounding rocket payloads
- 15+ years of providing UAV & aircraft-based sensor suites & in-theater C4ISR hardware & software systems
- Over 406,598 ft² of state-of-the-art facilities
- One of the original six University Affiliated Research Centers (UARCs)
- Registered to the ISO 9001:2015 standard
For more information about any of SDL’s programs, facilities, or capabilities, or to inquire about potential collaboration, please contact us:

Business Development: bd@sdl.usu.edu • General Information: info@sdl.usu.edu

SDL IS THE MISSILE DEFENSE AGENCY’S UNIVERSITY AFFILIATED RESEARCH CENTER (UARC)

UARCs are strategic DoD research centers associated with a university. Established in May 1996 by the Under Secretary of Defense for Acquisition and Technology (USD A&T)/Director, Defense Research, and Engineering (DDR&E), UARCs receive sole-source funding under the authority of 10 U.S.C. Section 2304(c)(3)(B). They also may compete for science and technology work unless precluded from doing so by their contracts with the DoD.

The role of a UARC is to:
· Serve as subject matter experts for core areas of expertise
· Ensure that essential engineering & technology capabilities of particular importance to the DoD are maintained
· Provide independent assessment & development of technology
· Respond to evolving DoD requirements
· Operate in the public interest, free from real or perceived conflicts of interest
· Develop government-owned solutions to problems of national importance

SDL’S STATE-OF-THE-ART FACILITIES

• Electro-optical sensor calibration/characterization equipment & facilities
• AI&T clean rooms & high bays with full contamination control services
• Space qualification & environmental testing
• Nano-sat test & qualification facility
• Comprehensive machine shop
• Electronics design & assembly labs
• Modeling, analysis & simulation
• Full service security office

SEVEN CUSTOMER-CONVENIENT LOCATIONS
• Albuquerque, NM
• Los Angeles, CA
• Washington, DC
• Huntsville, AL
• Bedford, MA
• Houston, TX
• Dayton, OH
• Logan, UT