Leidos Capabilities Supporting the Space Industry

For more than 60 years, Leidos has supported deep space exploration and human spaceflight with technical expertise in IT, engineering, and science. Throughout our history, we have developed a strong understanding of the scientific environment and R&D capabilities needed to support public and private sector space exploration and human spaceflight missions. Building on this critical foundation, Leidos offers agile, affordable, and mission-oriented solutions delivered by experienced staff with track records of success at NASA centers, the Department of Defense, and the engineering and scientific community.

As a company, Leidos brings enterprise-wide capabilities to the space industry. We continually invest in the people, processes, and innovative technologies serving this important customer segment and have developed and fostered formal programs including Internal Research and Development (IRAD); Employee Resource Groups devoted to technical skills and training; Communities of Practice; and STEM-centric employee, intern, and community-based initiatives that contribute and shape how we design and deliver customer solutions.

LEIDOS BY THE NUMBERS

60+ YEARS
Of Support Provided to NASA and the Space Industry

#1
Government IT
Washington Technology

56%
Employees with STEM Degrees

20%
Employees who are Military Veterans

AUTOMATED OBJECT DETECTION FROM IMAGERY
Characterization and geo-location of objects in imagery with 24x7 near real-time alerting and published results to Structured Observation Management (SOM) data stores/workflows

CLOUD-BASED IMAGERY EXPLOITATION
Data ingestion, optimization, access, tiling, and high-performance Session Initiation Protocol (SIPS) compliant imagery rendering

COMMERCIAL LEO
Requirements definition, planning, payload design, mission integration, data analytics, human factors engineering, space food development, radiation analysis, and autonomous software design

COMPLEX LOGISTICS
Planning, coordination, preparation, and packing of standardized containers for all International Space Station (ISS) cargo missions by international partner and commercial cargo vehicles

CYBER DEFENSE
Assessment, training, roadmaps, integrated tool solutions, measures of effectiveness, fact-based data analytics, visualization, resiliency, and automation to support analytical workflows

ENVIRONMENTAL, HEALTH AND SAFETY
Environmental planning and engineering; regulatory compliance; operational safety; occupational health and industrial hygiene; construction management; deactivation and decommissioning; sustainability; energy upgrades; and emergency spill response

FOOD DEVELOPMENT & PACKAGING
R&D, production, and efficient packaging of safe, nutritious, and palatable food that sustains ISS crew while meeting safety and health requirements

HOSTED PAYLOADS
Development of Wide Field of View (WFOV) staring Overhead Persistent InfraRed (OPIR) sensors for missile detection, onboard processing, and data analytics

HUMAN HEALTH & RADIATION
Development of state-of-the-art radiation monitoring systems, critical assessments of spacecraft shielding, and 24x7 console support for the Human Research Program for 16+ years

KEY MANAGEMENT
Design and development of cryptographic key management systems to update secure satellite communication encryption systems and enable compatibility with DoD Key Management Infrastructure (KMI) Capabilities

MISSION & ENTERPRISE IT
Modernization of the full spectrum of IT including virtual collaboration, cloud/data center solutions, network/ application services, asset management, and service desk

MISSION PLANNING AND ANALYSIS
Development of tools for planning missions; mission data processing; targeting, planning, evaluation; and dissemination for space EO/IR systems

PLAN/TRAIN/FLY
Development of human spaceflight operations capability, with direct support to mission preparations, crew, flight controller, instructor, and analyst training, and real-time mission execution

SCIENCE & RESEARCH MANAGEMENT
Delivery of medical services, food services, research, technology development, engineering, operations, and flight hardware development to support health, safety, and productivity of crews in space

SENSOR PAYLOAD DEVELOPMENT
Design and development of active and passive space and airborne electro-optical sensor systems to support the OPIR enterprise, space situational awareness, and earth observation

SPACE HUMAN FACTORS
Human-centered design (HCD) for space-related hardware and software – including ergonomics, human-computer interaction, acoustics, and lighting – with expertise in requirements, prototyping, human-in-the-loop testing, human performance evaluation, and peer-reviewed space human factors research

SPACE MISSION INTEGRATION & OPERATIONS
Design, develop, operate, and sustain mission control and training systems with expertise in ground/large-scale satellite command and control and telemetry

STRUCTURED OBSERVATION MANAGEMENT
Big data harvesting of feature information contained in images

SYSTEM ON A CHIP
Custom, high-performance, reprogrammable processor intended for computationally intensive real-time software applications

SYSTEMS & SPECIALIZED ENGINEERING
Systems design, engineering, development, fabrication, integration, testing and verification including concepts of mission operations and in-space satellite servicing

ABOUT LEIDOS
Leidos is a Fortune 500® information technology, engineering, and science solutions and services leader working to solve the world's toughest challenges in the defense, intelligence, homeland security, civil, and health markets. The company's 32,000 employees support vital missions for government and commercial customers. Headquartered in Reston, Virginia, Leidos reported annual revenues of approximately $10.19 billion for the fiscal year ended December 28, 2018.

FOR MORE INFORMATION
leidos.com/space

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