



QUALITY ♦ EXPERIENCE ♦ INNOVATION
FOR SUSTAINABLE HUMAN SPACE EXPLORATION

Space Lab Technologies, LLC (Space Lab®) is a Colorado based small minority owned business that provides advanced technology development, research, and engineering services for human space exploration. We believe that ingenuity, creativity, and passion combined with domain experience and engineering integrity are the ingredients for successful innovation. Our engineers have extensive industry experience developing payloads and support systems for various platforms, such as space habitats, small satellites, high altitude balloons, and sub-orbital rockets. We have a quality focused approach to developing technical solutions, leveraging broad expertise in science, engineering, & project management. Space Lab brings bold ideas to new destinations and sustainable solutions for humanity's greatest journey.

Core Competencies:

HABITATION SYSTEMS

- Space Agriculture
- Thermal Control
- Air Revitalization
- Water Recovery
- Environmental Monitoring
- Spacesuit Components
- Crew Accommodations
- Crew Interfaces
- Human Factors Design
- Space Architecture

SPACE SYSTEMS

- High Rate Telemetry
- RF Systems & Antennas
- Structures & Deployment
- Vacuum Systems
- Attitude Determination
- Power Systems
- Command & Data Handling
- Ground Data Systems
- Test Support Systems
- Rad Hard Electrometers

Engineering Services & Facilities:

- Project Management
- Research & Feasibility Studies
- Model Based Systems Engineering
- Requirements Management
- Mechanical Design & Analysis
- Electrical Design & Analysis
- Process Engineering
- Human Centered Design
- Reliability Engineering
- Advanced Simulation*
- Fabrication & Integration**
- Test System Development
- Verification & Validation
- Operations Support
- Flight Data Analysis

*HP Z8 36-core Workstation (72 virtual processors, 768 GB RAM) for structural, thermal, electromagnetic, & CFD analyses using MATLAB®, COMSOL®, & SolidWorks® (CAD Premium & Simulation Premium)

**3D printing capabilities with standard & high temp filaments (e.g., PEEK, Ultem®, Carbon Fiber) & SLA resins

Space Lab also conducts cutting edge research in space plasmas, radiation, μ g fluid physics, & plant sciences.

Differentiators:

- *Sustainable solutions* for long term deep space exploration
- *Multidisciplinary engineering* expertise (mechanical, electrical, software, environmental, astronautical)
- *Highly reliable* flight hardware & ground systems
- *Rapid prototyping* and proof of concept capabilities
- *Customized solutions* for mission-specific applications
- *Experienced Innovators*: >\$3 million in 3 years from 11 NASA SBIR/STTR, NASA STMD, and other research grants.
- Certified small-disadvantaged business (SDB) – minority owned

Primary NAICS (SIC) Codes:

- Physical, Engineering, and Life Sciences - 541715
- Navigational, Measuring, Electromedical, and Control Instruments Manufacturing – 3345XX
- Radio & Television Broadcasting and Wireless Communications Equipment – 334220
- All Other Telecommunications – 517919
- Other Scientific and Technical Consulting Services – 541690
- Engineering Services – 541330



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