SMALL SATELLITE MISSION OPERATIONS

The Space Dynamics Laboratory (SDL) is on the cutting edge of the space industry’s shifting focus to small satellites and their robust return on investment. The cost-effectiveness of small satellites, their lower target risk, and faster acquisition time are often the primary considerations. An equally important consideration, however, is how to command, control, and communicate (C3) effectively with the satellite on orbit. Traditional larger spacecraft have historically used a unique, stand-alone C3 system developed in tandem with the spacecraft. SDL continues to maintain its footing at the forefront of small satellite operations by providing a turn-key C3 solution that is agile and able to accommodate any satellite and a diverse array of mission sets.

SDL’s satellite operations team has over 50 combined years of experience operating a multitude of educational, civil, and military satellite operations centers and can integrate customer satellites into a mission-ready C3 system. The team includes the operators and integrators who will work with the spacecraft engineers to achieve operational capability on orbit using an adaptable, web-enabled ground software suite developed in house. This system is supported by software engineers on site and communications hardware that is proven and in place, ready to save customer programs time and money. Access to multiple ground station networks will help ensure the timeliness and availability of mission data when it is needed. SDL’s operations team will integrate, test, and fly experiments and operational missions with the utmost professionalism. SDL takes care of flying the spacecraft so customers can focus on payload operations and data analysis.

FEATURES

- End-to-end integrated mission operations solution
- Customizable software to meet varied mission requirements
- Ability to support initial compatibility testing between spacecraft & ground networks
- In-house ground software support
- Scalable ground system architecture design
- Multiple ground network connectivity
- Access to a worldwide antenna network
- Capable of cost-efficient autonomous operations
- Simple interface for managing payloads
- Experienced team known for solving difficult technical challenges