



OPERATIONALLY
ORS
RESPONSIVE SPACE



Operationally Responsive Space-1

Assured Space Power Focused on Timely Satisfaction of Joint Force Commanders' Needs

ORS-1 is the Operationally Responsive Space Office's first operational prototype satellite. Rapidly developing and fielding ORS-1 is an important step to demonstrate the capability to meet emerging and persistent warfighter needs on operationally relevant timelines. ORS-1 was initiated as a result of requirements from the Commander of US Strategic Command (USSTRATCOM) to the ORS Office to support US Central Command (USCENTCOM). The ORS Office's executing agent for this effort is the Space and Missile Systems Center's Space Development and Test Directorate at Kirtland, Air Force Base, New Mexico.

Significant Accomplishments:

- Contract Awarded in less than three weeks from approval from Executive Agent for Space
- Maximizes use AFSPC's Multi-Mission Space Operations Center Ground Support Architecture for command and control
- Standardized spacecraft to ground interfaces for payload, tasking, and scheduling using the Virtual Mission Operations Center
- Space qualifying Common Data Link for reduction in size, weight and power
- Total development & deployment is ~30 months

Key Milestones:

Program Approval	Oct 08
Preliminary Design Review	Mar 09
Critical Design Review	Jun 09
Mirror Fabrication	Dec 09
Bus Delivery	Apr 10
Factory Compatibility Test	Sep 10
Payload Space Vehicle Integration	Nov 10
Acoustic Test	Dec 10
Thermal Vacuum Test	Mar 11
Ship Space Vehicle	Apr 11

The Operationally Responsive Space (ORS) Office was established in May 2007 by the Deputy Secretary of Defense and Executive Agent for Space as a proactive step to adapt space capabilities to changing national security requirements, and to be an agent for change across the community. ORS is taking a new approach to risk and mission assurance to rapidly deploy capabilities that are 'good enough' to satisfy warfighter needs across the entire spectrum of operations, through peace, conflict, and all levels of crisis.

ORS-1 Team Members:

- Air Force Space Command 1st Space Operations Squadron, Schriever AFB, CO – Mission Operations
- Goodrich Corporation, Danbury CT: Prime contractor and payload developer
- ATK Space Systems, Beltsville MD: Subcontractor & Spacecraft bus developer – Design based on TacSat-3
- L-3 Communications, Salt Lake City, UT: Common Data Link & Ground Station
- Orbital Sciences Corporation, Scottsdale AZ: Launch provider – Minotaur I launch vehicle
- NASA Wallops Flight Facility, Virginia and Mid-Atlantic Regional Spaceport, Virginia
- Other Mission Partners: US STRATCOM, USCENTCOM, AF Space Command, US Army, Naval Research Labs, Lockheed Martin, General Dynamics, Aerospace Corp and TASC