

OPERATIONALLY  
RESPONSIVE SPACE

# ORS



## Operationally Responsive Space-1

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

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-1 is the first operational satellite for the ORS Office and an important milestone to demonstrate the capability to meet emerging and persistent warfighter needs in operationally relevant timelines.

#### Mission:

ORS-1 was initiated at the direction of the Commander, U.S. Strategic Command and the DoD Executive Agent for Space to address a U.S. Central Command (USCENTCOM) need for enhanced battlefield awareness. ORS-1 is the first and only dedicated space intelligence capability for USCENTCOM, introducing Operationally Responsive Space as a new paradigm for the Department of Defense.

#### Partners:

Space Vehicle: Goodrich (Prime), ATK  
 LV: Orbital Sciences Corporation  
 C2 system: Lockheed Martin, USAF 50th Space Wing  
 Tasking System: NRL/General Dynamics  
 Mission Data Processing: US Army  
 Ground Antenna: L3 Communications  
 Launch: Wallops Flight Facility & Mid-Atlantic Regional Spaceport

#### Major Milestones:

|                              |        |
|------------------------------|--------|
| Program Approval             | Oct 08 |
| Build Decision               | Jul 09 |
| ORS-1 Launched               | Jun 11 |
| Combatant Command Acceptance | Sep 11 |
| Accepted for Operations      | Jan 12 |

#### Significant Accomplishments:

Demonstrated Rapid Acquisition: Contract awarded in less than 3 weeks

Maximized use of existing systems and architecture  
 AFSPC's Multi-Mission Space Operations Center Ground Support Architecture for command and control U2 payload and TacSat-3 Bus  
 Space Qualified Common Data Link (reduction in size, weight, power)

Standardized spacecraft to ground interfaces for payload, tasking, and scheduling using the Virtual Mission Operations Center

Demonstrated Rapid Development & Deployment: 32 months

Earned early combatant command acceptance: less than 90 days after liftoff

Named ONE OF NATION'S TOP NEW TECHNOLOGIES BY C4ISR

#### Results:

ORS-1 provides USCENTCOM an assured ISR capability that cannot be preempted by support to other users. It is an enabler for sustaining operations and objectives in a highly volatile region and is laying the path for future rapid reaction space systems. The team doggedly adhered to a "**good enough to win**" approach to deliver a capability that was affordable, rapid, and risk tolerant.