

## **NGA, NRO, USSPACECOM plan for threats to commercial satellites**

*Joint agreement outlines framework for protection of commercial space assets in a congested – and contested – environment.*

The National Geospatial-Intelligence Agency, the National Reconnaissance Office and U.S. Space Command recently signed a first-of-its-kind agreement outlining a framework to enable the protection of commercial remote sensing space assets vital to the nation’s intelligence collection mission.

The Commercial Space Protection Tri-Seal Strategic Framework brings together the three organizations to jointly share threat information and conduct other measures to avoid or reduce harm to commercial satellites from potential threats.

“This agreement is additional recognition of how valuable commercial image providers have become in the space environment,” said Frank Avila, acting director, NGA Commercial Operations. “Our commercial vendors give us the flexibility to strategically consider all available capabilities—whether government or commercial—to make sure we can get the right data to the right place at the right time.”

This is the first comprehensive agreement between the intelligence community and USSPACECOM on how to bring commercial vendors into the information-sharing process to help ensure effective joint collaboration and cooperation from the minute an event happens, with near real-time information sharing about any risks and threats to NRO-contracted commercial space capabilities.

### **Growing use of commercial satellites**

The global commercial satellite industry continues to grow exponentially, with the launch of hundreds of commercially-built satellites into orbit in the last few years and thousands more planned in the near future.

Similarly, the U.S. intelligence and defense communities increasingly rely on commercial satellites to add resiliency to U.S. capabilities and provide commercial imagery and other services to complement and extend the reach of government-owned space assets.

The unclassified, shareable nature of commercial imagery makes it an especially valuable source for information sharing with U.S. partners and allies. For example, it has played a significant role in the Russia-Ukraine conflict. NGA and NRO have applied tailored tasking and acquisition strategies to maximize collection over the region, working with partners and commercial suppliers to expand user access and enable the rapid dissemination of commercial imagery.

Of course, the growing impact of those commercial resources has also increased adversaries’ attention on them. As commercial providers expand their space-based capabilities, their assets face higher risk of targeted interference.

“Space is an extremely contested environment, and it’s only getting more so,” said Pete Muend, director of NRO’s Commercial Systems Program Office. “That’s true not only for government systems operating in space, but for our commercial systems as well.”

## Preparing for potential threats

The new framework begins to address those concerns and helps ensure NRO-contracted commercial imagery providers are aware of—and can plan for—threats within a more congested and contested space environment. It also facilitates communication about potential threats between the government entities and commercial providers.

Overall, the framework defines the roles and responsibilities of NGA, NRO and USSPACECOM in three critical areas—threat information sharing, anomaly investigation and response and collection strategies:

- Threat information sharing between the U.S. government and the commercial sector creates a better understanding of the space domain in general and the threats to collection assets specifically.
- Anomaly reporting, investigation and response are needed to inform appropriate and timely actions in the face of current and emerging threats.
- Commercial imagery collection strategies may need to be adjusted if threats require a change to commercial collection postures.

“This cornerstone agreement advances U.S. Space Command’s space domain awareness through additional, non-traditional sources of information,” said Mr. Victor Vigliotti, Chief of Commercial Integration Branch at U.S. Space Command. “The lessons learned from implementing this historic framework will enhance the U.S. government’s ability to bi-laterally share time-sensitive threat information with commercial providers—enabling the rapid dissemination of threat information across the commercial space enterprise.”

U.S. Space Command will lead threat information sharing with NRO-contracted commercial imagery providers and the NRO Operations Center for space events, counterspace attack and USSPACECOM warning problems. The command will also lead investigations into anomalies reported by commercial imagery providers, in coordination with NGA, NRO and other organizations as appropriate.

By delineating roles and responsibilities in these areas, NGA, NRO and USSPACECOM ensure their organizations effectively identify, assess and adapt to threats against commercial imagery collection. This framework also helps ensure NRO-contracted commercial imagery providers are properly informed of emergent and imminent threats to their space assets, enabling providers to make informed decisions to best support collection operations and benefit them in their support of U.S. government and non-governmental customers.

Over the next six months, NGA, NRO and USSPACECOM will jointly complete concepts of operations and standard operating procedures for implementing the framework and improving commercial satellite protection going forward.

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