BlackSky Wins Next Phase of U.S. Navy Optical Inter-Satellite Link Research Contract

Contract furthers the design, development and evaluation of compatibility with Space Development Agency transport layer in support of tactical ISR missions

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HERNDON, Va. (July 28, 2025) – BlackSky Technology Inc. (NYSE: BKSY) won the next phase of a competitive U.S. Navy research contract to further develop optical inter-satellite link (OISL) terminal applications for its Gen-3 constellation. The OISL terminals are expected to increase the speed at which very high-resolution imagery and other high-volume space-based data travel directly between satellites before downlinking to ground stations.

“This important award directly supports BlackSky’s ability to deliver timely, high-impact intelligence that drive decisions all the way to the tactical edges of the frontline,” said Brian O’Toole, BlackSky CEO. “High-speed inter-satellite communication links are a critical innovation that makes BlackSky’s commercial remote sensing services a robust and viable option for fleet-wide tactical ISR operations.”

Under the development agreement, BlackSky will explore hardware and software design adaptations, novel operating concepts for commercial transport network nodes and establish new protocols for data movement. Future Gen-3 satellites will be equipped with optical inter-satellite link terminals compatible with both the Space Development Agency’s Transport Layer and commercial transport networks.

“Extending our Gen-3 capabilities with optical intersatellite link terminals will give customers reliable access to real-time earth imaging capabilities across the full range of warfighting scenarios. Enhanced Gen-3 satellites are expected to deliver data to end users 10 times faster than current systems, with data volumes five times greater than existing capabilities,” said O’Toole.

Laser-based OISLs create high-bandwidth, direct communication lines between satellites, reducing the time it takes to transmit and process data. In addition to reduced latency and decision making, OISLs can provide a more secure and resilient data transmission path, making them less susceptible to interference and jamming.