

Lockheed Martin Selected To Integrate Missile Warning Onto EGS Via FORGE

Modernized satellite mission software will advance space resiliency and efficiency



BOULDER, Colo., Sept. 16, 2020— As part of the U.S. Space Force's effort to build a more flexible, resilient and survivable missile early warning system, while also reducing long-term sustainment and operations costs, control of our nation's advanced infrared surveillance satellites will soon be integrated via the Future Operationally Resilient Ground Evolution (FORGE) onto the next-generation ground system, the Government-owned, open-architecture, Enterprise Ground Services (EGS) system. FORGE and EGS are programs within the Cross-Mission Ground & Communications Enterprise directorate at Space and Missile Systems Center (SMC). The directorate was established to integrate and modernize tactical, operational, and data transport ground capabilities across the space enterprise.

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On Aug. 3, 2020, the Space Force's SMC awarded a \$51.2 million contract to Lockheed Martin (NYSE: LMT) to architect, design, develop, integrate, test and validate the Geosynchronous (GEO) Non-Integrated Tactical Warning and Attack Assessment (ITWAA) Ops Migration to EGS (GNOME) mission software that will help facilitate this transition.

GNOME will integrate Mission Management and Telemetry, Tracking, and Commanding (TT&C) for the [Space-Based Infrared System](#) (SBIRS) GEO 5 or GEO 6 satellite onto the EGS framework, as well as serve as a command and control (C2) pathfinder for the follow-on Next Generation Overhead Persistent Infrared (OPIR) satellites.

Lockheed Martin has worked in tandem with the U.S. military as its lead missile warning mission integrator for the past 20 years. The company has designed and launched four SBIRS GEO missile warning satellites; is modernizing the design of the [SBIRS GEO 5/6](#) spacecrafts to provide more resiliency and efficiency; is developing [Block 0 of the Next Generation OPIR GEO](#) missile warning satellites, and has served as lead sustainment and operations contractor.

“We understand the OPIR mission end-to-end because we developed, launched, and sustain it, both in space and on the ground,” said Maria Demaree, vice president and general manager, Lockheed Martin Space Mission Solutions. “We also understand that our nation's adversaries would also seek to defeat our defensive systems and are committed to developing advanced technology that always keeps us ahead of the threat.”

GNOME will be rapidly developed and integrated using [Agile software methodologies](#), which have a proven track record over a decade for many Lockheed Martin Space customers. Agile lets us deliver iterative features and fix bugs as we go. It dramatically improves the software engineering quality and delivery timelines while avoiding cost overruns that previous software delivery models sometimes face.

Lockheed Martin is the prime contractor for the Space Force's [Next Gen OPIR Block 0 GEO](#) satellites, which will provide improved missile warning capabilities that are more survivable and resilient against emerging threats. The U.S. Department of the Air Force implemented Next Gen OPIR as a rapid acquisition program in 2018. Lockheed Martin recently completed successful preliminary design reviews for two potential advanced sensor payload providers for the new system as well as successfully completing a similar review on ground systems.

For additional information, visit our website: www.lockheedmartin.com/onestepahead