

Lockheed Martin Successfully Completes Critical Design Review For Space Development Agency's Tranche 1 Transport Layer Satellites

Innovative satellite program on track to meet accelerated delivery schedule and advance to production stage.





Lockheed Martin's Tranche 0 Transport Layer satellites are seen in one of its processing facilities

LITTLETON, Colo., Aug. 07, 2023 – Lockheed Martin (NYSE: LMT) and the Space Development Agency (SDA) successfully completed the Critical Design Review (CDR) for SDA's Tranche 1 Transport Layer (T1TL) program. The integrated system review validated that Lockheed Martin's T1TL ground and space designs meet all mission requirements and can proceed to production.

The initial warfighting capability of the SDA's Proliferated Warfighter Space Architecture (PWSA), T1TL consists of 126 space vehicles divided into six orbital planes. Lockheed Martin is building 42 of those space vehicles for the transport layer constellation, which will provide assured, resilient, low-latency military data and connectivity worldwide to a full range of warfighter platforms using Link-16 waveforms and laser optical intersatellite links.

During the CDR, which took place eight months after a successful preliminary design review, Lockheed Martin and SDA worked closely to thoroughly validate the company's T1TL satellite and ground designs, to include supplier designs. The CDR included various design validation tests and a successful system optical communications terminal interoperability test, in addition to many other analyses.

"Between SDA's critical support and engagement and Lockheed Martin's lessons learned from our work on Transport Layer Tranche 0, we were able to achieve a precise review with successful results" said Chris Winslett, Lockheed Martin's director for the SDA Transport Layer programs. "The strength of our relationships and thoroughness of the review positions Lockheed Martin to deliver the T1TL satellites on time for SDA's 2024 launch."

For additional risk mitigation, Lockheed Martin 3D-printed a full-size replica of the Tranche 1 satellite vehicle testbed during the CDR to optimize assembly, integration and testing.

With the completion of CDR, Lockheed Martin now begins the integration and testing phase of the program, which will use the company's new, 20,000-square-foot small satellite processing facility that is designed for high-rate delivery, hosts dedicated test chambers, and can simultaneously accommodate multiple classes of missions. T1TL will be the first program to be hosted by the new facility, which helps transform our business operations to meet our customer's needs with speed and agility.

SDA also contracted Lockheed Martin to build 10 Tranche 0 Transport Layer (T0TL) satellites, which are ready for launch this summer. SDA's T0TL constellation serves as the first step toward building an interoperable, connected secure mesh network to support Joint All-Domain Operations.

Lockheed Martin has formed longstanding partnerships with the best minds in the industry, including small businesses, all with a laser focus of delivering high quality products at a highly competitive cost. The company works with a diverse supply base that can build common components without disruptions to cost or schedule, an approach that helps mitigate supply chain challenges and streamline production.

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

About Lockheed Martin

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