Lockheed Martin Begins Critical Testing on Aegis System Equipped Vessel Antennas

Release From Lockheed Martin

In partnership with the Japan Ministry of Defense (JMOD) and Missile Defense Agency, Lockheed Martin completed initial light off of the Aegis System Equipped Vessel (ASEV)'s shipset 1 radar system on schedule, including all four AN/SPY-7(V)1 antennas in Moorestown, New Jersey's Production and Test Center (PTC).

This initial light off marks the beginning of a comprehensive testing phase, crucial to supporting the ship construction and commissioning schedule. The testing will validate the full SPY-7(V)1 radar system's performance, integrated with the Aegis, to ensure that it meets the highest standards of quality and capability.

Dive Deeper Into Testing

"By testing the complete SPY-7 radar system in a land-based facility, we're able to verify the SPY-7 radar's Ballistic Missile Defense and Integrated Air and Missile Defense capabilities meet warfighter needs ahead of shipboard installation, significantly reducing program deployment risk," said Chandra Marshall, vice president and general manager at Lockheed Martin.

Marshall added, "The complete SPY-7 radar system will be installed on Japan's ASEV ships, serving as a critical component of Japan's homeland defense."

What's Next

Following the completion of shipset 1 testing, Lockheed Martin, JMOD and the MDA will continue to drive progress on the program with milestones.

- Shipset 1 will perform further tracking exercises before being physically delivered to Japan next year.

- Shipset 2 will be sold off to the JMOD and begin testing and verification.

In a significant milestone, Lockheed Martin officially handed over all four AN/SPY-7(V) radar antennas for the first ASEV shipset to the JMOD in June. Although the antennas remained at our facility for testing, that on-time delivery demonstrated the maturity and production capacity of the SPY-7 radar, highlighting our commitment to delivering on schedule.

Across the globe, coming off the success of the first live track in December 2024, Navantia successfully integrated SCOMBA consoles end-to-end with Lockheed Martin's SPY-7(V)2 radar at the Aegis SCOMBA Integration Center in Moorestown, New Jersey. The SCOMBA combat system is now fully integrated with Aegis and SPY-7 and performing simulated engagements of live tracks.

On the domestic side, Lockheed Martin and the MDA successfully executed Flight Test Other-26a (FTX-26a). During FTX-26a, the Lockheed Martin-built Long Range Discrimination Radar successfully detected, tracked, and reported ballistic missile target data in a complex environment, demonstrating its ability to provide critical data to homeland defense systems.

In December 2024, Lockheed Martin's land-based version of the SPY-7 radar, known as TPY-6, successfully intercepted a mid-range ballistic missile as part of the Aegis Guam System

during a flight experiment Flight Experiment Mission-02.

The Big Picture

SPY-7 is growing and capable. As a highly adaptable, and scalable radar, it's being produced for multiple international partners, including Canada's River-Class Destroyers, Spain's F-110 Multi-Mission Frigates, and the US Missile Defense Agency's transportable, land-based Aegis Guam System (TPY-6) and land-based Long-Range Discrimination Radar.

The customer collaboration and successful milestones underscore the radar's versatility and ready-now capability, solidifying its position as a cornerstone of modern missile defense. As the SPY-7 radar continues to demonstrate its capabilities, it's clear that it will be providing 21st Century Security around the world to ensure our customers stay ahead of emerging threats.