HELIOS Laser Weapon Takes Step Toward Ship Integration



An artist rendering of the capability of the HELIOS system, once it is integrated on an Arleigh Burke-class destroyer. Lockheed Martin

MOORESTOWN, N.J. – Lockheed Martin and the U.S. Navy moved one step closer to integrating a laser weapon system onto an Arleigh Burke-class destroyer after successfully conducting a critical design review (CDR) for the High Energy Laser with Integrated Optical-dazzler and Surveillance (HELIOS) system, the company said in a release.

"Our adversaries are rapidly developing sophisticated weapons, and the threats to the U.S. Navy's fleet are getting more challenging," said Hamid Salim, vice president of advanced product solutions at Lockheed Martin Rotary and Mission Systems. "Our warfighters need this capability and capacity now to effectively counter threats such as unmanned aerial systems and fast-attack vessels."

This year, HELIOS will undergo system integration in Moorestown, New Jersey – the home of Aegis combat system development for 50 years. HELIOS will then be tested at the Wallops Island, Virginia, Navy land-based test site, which will reduce program risk before being delivered to a shipyard for integration into an Arleigh Burke destroyer next year. In addition to being built into a ship's structure, HELIOS will become an integrated component of its Aegis system.

"HELIOS will provide an additional layer of protection for the fleet – deep magazine, low cost per kill, speed of light delivery and precision response. Additional HELIOS systems will accelerate the warfighter learning curve, provide risk reduction for future laser weapon system increments and provide a stronger demand signal to the supply base," said

Brendan Scanlon, the HELIOS program director at Lockheed Martin Rotary and Mission Systems.

Lockheed Martin has more than 40 years of experience developing laser weapon systems. HELIOS leverages technology building blocks from internal research and development projects that continue to advance the Navy’s goal to field laser weapon systems aboard surface ships.