

Northrop Grumman Laser Weapon System Completes Deployment on USS Portland



Amphibious transport dock USS Portland (LPD 27) transits the Gulf of Aden, Dec. 13, with a Solid State Laser – Technology Maturation Laser Weapons System Demonstrator Mark 2 MOD 0 on board. The Office of Naval Research selected Portland to host the laser weapon technology in 2018. *U.S. MARINE CORPS / Lance Cpl. Patrick Katz*

NATIONAL HARBOR, Md. – The Laser Weapon System Demonstrator deployed on the U.S. Navy's amphibious platform dock ship USS Portland (LPD 27) has completed its first deployment as the Portland returned to its homeport of San Diego in March.

Donna Howland, Northrop Grumman's acting business development director for Directed Energy and program manager Laser Weapon System – Demonstrator, told *Seapower* April 6 the Navy said it was "able to exercise the high-energy laser in the 5th Fleet

in December 2021.”

The single LWSD was installed on Portland in October 2019 and was first lit-off in December 2019. The Portland deployed for the Indo-Pacific and Central Command areas of responsibility in August 2021.

The 150-kilowatt LWSD is mounted on the superstructure of the Portland and is integrated with the ship’s combat information center, where a control console is installed. Northrop Grumman made the Tactical Laser Core Module of the system, while the U.S. government made the system’s energy and thermal storage modules.

Northrop Grumman continues to provide test and sustainment support for the LWSD, for which it is under contract through fiscal 2022, Howland said, who noted that the company is working on a follow-on sustainment contract.

During the deployment on the Portland, the LWSD was operated and maintained completely by Sailors. No company employees were on board to support the system. The company provided training on the system before the deployment and developed a three-volume operation and maintenance manual for Sailors to use on the ship, she said.

Howland said the company is looking forward to working with the Office of Naval Research to provide next-generation directed energy systems.

“We are excited about the MOSA [Modular Open System Architecture] that the Navy is looking at,” she said. “We really are a proponent of this as we believe it will improve the health of the supply chain and base to support directed energy as we move these systems from science fiction to science fact.”