First LCS Gun System Demonstration Held at NSWC Dahlgren

By Naval Sea Systems Command Office of Corporate Communications

WASHINGTON – The Navy rolled out the first Surface Warfare Mission Package (SUW MP) for the Littoral Combat Ship (LCS) in a ceremony on July 11 at Naval Surface Warfare Center Dahlgren, Va. Congressman Rob Wittman (R-Va.-1), Vice Adm. Paul Sullivan, Commander, Naval Sea Systems Command, Vice Adm. David Architzel, Principal Deputy, Assistant Secretary of the Navy (Research, Development, and Acquisition), Rear Adm. Victor G. Guillory, Deputy Director of Surface Warfare, Office of the Chief of Naval Operations, Mr. James E. Thomsen, Principal Civilian Deputy Assistant Secretary of the Navy for Acquisition Workforce and Capt. Michael R. Good, Program Manager for Littoral Combat Ship Mission Modules spoke at the event.

One of three interchangeable modules (anti-submarine warfare, surface warfare and mine warfare), the SUW MP is designed to provide warfighting capability in the SUW mission area against small boats. Capabilities of SUW MP will include: two 30mm Gun Mission Modules (GMMs) and Non Line of Sight – Launch System (NLOS-LS) Mission Modules (NMMs). The SUW MPs also include two Vertical Takeoff and Landing Tactical Unmanned Aerial Vehicles (VTUAVs), and a MH-60R helicopter.

SUW MP will integrate with LCS to provide a flexible capability to rapidly detect, track and prosecute small-boat threats, giving the on-scene commander the capability to protect local assets and move a force quickly through a strategic waterway.

"The capability the Surface Warfare Mission Package, as well as the Mine Warfare and Anti-Submarine Warfare Packages, brings to LCS is truly unprecedented. Never before has the Navy built a ship, complimented with three modular mission packages, that is as versatile and responsive to emerging warfighting requirements. The lessons learned for LCS mission modules need to be captured and utilized from here forward for every surface combatant and amphibious ships we design for the U.S. Navy," said Sullivan.

Rollout included the first modularized gun system capabilities demonstration of the Mk 46 30mm gun. With its standardized networking interfaces the Mk 46 30mm gun saves the Navy more than $4 million per platform in re-engineering costs.

The Mk 46 30mm gun system is a two-axis stabilized chain gun that can fire up to 200 rounds per minute. This system uses a forward-looking infrared sensor, a low light television camera and laser rangefinder with a closed-loop tracking system to optimize accuracy against small, high-speed surface targets. The gun can be mounted forward and/or aft of an LCS’ island to support different mission requirements and can be operated locally at the gun's weapon mount or fired remotely by a gunner in the ship's Combat Information Center.

“The SUW MP demonstrates the Navy’s commitment to design ships and systems that are more modular, affordable and adaptive to a future Navy with ship classes that deliver effective capability to fight in blue, green and brown water environments,” said Capt. Mike Good, Program Manager LCS Mission Modules.

SUW MP is on schedule and budget for delivery to the U.S. Navy. The next phase commences with software integration from the gun to the Mission Package Computing Environment (MPCE) and includes land based end-to-end testing of the gun at NSWC Dahlgren.
LCS is a fast, agile, focused-mission platform designed for operation in near-shore environments yet capable of open-ocean operation. It is designed to defeat asymmetric "anti-access" threats such as mines, quiet diesel submarines and fast surface craft. The first LCS, Freedom, is scheduled for commissioning in 2008.

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