## Navy Discusses Plans for Limited Optional Manning for Large and Medium USVs



Sea Hunter, the developmental Medium Unmanned Surface Vehicle (MUSV), shown here in 2018. U.S. Navy photo ARLINGTON, Va. — The Navy has discussed plans for its forthcoming large and medium unmanned surface vehicles (USVs) to be optionally manned for limited purposes.

Capt. Pete Small, the Navy's Unmanned Maritime Systems program manager, speaking Jan. 13 at a Surface Navy Association convention webinar on the Navy's unmanned surface vehicles, said both the Large USV (LUSV) and Medium USV (MUSV) will have some capability for being manned for certain limited purposes, but not for their primary functions.

Small said the MUSV will be "essentially unmanned," but will be equipped with a pilot house for such short-term evolutions as getting underway from and returning to a pier, refueling and anchoring. However, the MUSV will have no berthing accommodations for personnel.

The LUSV, Small said, will in its initial construct feature a pilot house and will have accommodations for personnel who "might need to be onboard for a variety of reasons that do not necessarily include vessel operations." He said those reasons might include payload, security, test and evaluation, or in a CONOPS [concepts of operation]-driven environment."

The MUSV prototype now is under construction by L3Harris.

The Navy has six studies under contract to develop concepts for the LUSV and also is developing government-furnished equipment to be installed in the ship.

The primary role of the MUSV is envisioned to be intelligence, surveillance and reconnaissance.

The LUSV is envisioned to be fitted with missile launchers. Small said the Navy in 2021 will begin an analysis of alternatives for offensive surface fires of the LUSV.

The Navy's Surface Development Squadron One is operating the Sea Hunter developmental MUSV for experimentation. A second Sea Hunter, the Sea Hawk, is scheduled for delivery in 2021.

The service also is conducting experimentation with two optionally manned Project Overlord ships to develop and demonstrate autonomous operations at sea. Two more Overlord ships will be delivered in 2022 and 2023. Small said the Overlord USVs were "demonstrating increasingly autonomous operations."

"It is too early to say where we will end up across that portfolio, but we are investigating a range of options via our

prototyping efforts," Small said.