

# Coast Guard Begins Testing USVs off Hawaii



A concept photo of the unmanned surface vehicle that will be demonstrated by Spatial Integrated System in the maritime domain awareness technology evaluation by the Coast Guard Research and Development Center this summer. U.S. Coast Guard ARLINGTON, Va. – The U.S. Coast Guard Research and Development Center (RDC) has begun testing and evaluation of unmanned surface vehicles (USVs) off the south shore of Oahu, Hawaii, the Coast Guard 14<sup>th</sup> District said in a release.

The testing is scheduled to run from Oct. 7 through Nov. 5. The testing will be conducted in partnership with local Coast Guard units.

“The tests will focus on autonomous vessel systems from Saildrone and Spatial Integration Systems, in addition to a USCG owned autonomous research vessel made by Metal Shark,” the release said.

“This evaluation will examine each vessel’s ability to provide persistent maritime domain awareness, especially in remote areas of the oceans. While potentially applicable to many Coast Guard missions, there is potential these technologies will help enable the Coast Guard to better protect critical natural living marine resources from Illegal, Unreported, and Unregulated [IUU] fishing and other illicit activities.”

The Coast Guard awarded two contracts on Feb. 7, 2020, totaling nearly \$1.8 million, for USVs. Approximately \$1.1 million goes to Saildrone Inc. of Alameda, California, and approximately \$660,000 to Spatial Integrated System Inc. of Virginia Beach, Virginia. The USVs will be contractor-owned/contractor-operated during the testing and evaluation.

The testing will be used to examine “the operational utility of the USV, including feasibility, costs and benefits,” the Coast Guard said. “Following the completion of the evaluation, the RDC will publish a report with recommendations for potential future actions for the Coast Guard.”

Last month, Boston-based Sea Machines Robotics, partnered with shipbuilder Metal Shark Boats, of Jeanerette, Louisiana, supplied the RDC with a new Sharktech 29 Defiant USV (see [SeapowerMagazine.org](http://SeapowerMagazine.org), Sept. 29).

The Defiant is a “29-foot, welded-aluminum monohull pilothouse vessel that comes equipped with the Sea Machines SM300 autonomous-command and remote-helm control technology, offering the USCG capabilities including transit autonomy, collaborative autonomy, collision avoidance and remote vessel monitoring,” Sea Machines said in a release.

“During demonstrations scheduled for October off the coast of Hawaii, the RDC team will test and evaluate the Sharktech vessel’s autonomous capabilities for their potential in supporting USCG surveillance, interdiction, patrol and other missions. Following the Hawaii demonstrations, the autonomous vessel will be returned to the RDC’s New London facility, where it will be used in additional testing to investigate application to various Coast Guard missions.”