

GA-ASI Completes UAV ASW Demonstration of Sonobuoy Dispensing and Remote Processing



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SAN DIEGO – General Atomics Aeronautical Systems Inc. (GA-ASI) recently completed development and test of the world's first self-contained anti-submarine warfare (ASW) capability for an unmanned aircraft system, the company said in a Jan. 19 release.

On Nov. 24, GA-ASI successfully demonstrated an A size sonobuoy carriage, release, process and control from a company-owned MQ-9A Block 5 on a U.S. Navy Pacific test range. Using a satellite communications link, GA-ASI remotely processed bathythermal and acoustic data from deployed A size

Directional Frequency Analysis and Recording (DIFAR-AN/SSQ-53G), Directional Command Activated Sonobuoy System (DICASS-AN/SSQ-62F) and Bathythermograph (BT-AN/SSQ-36B) sonobuoys and accurately generated a target track in real time from the Laguna Flight Operations Facility located at Yuma Proving Grounds.

The MQ-9A Block 5 successfully deployed one BT, seven DIFAR, and two DICASS buoys to initiate prosecution and continuously track a MK-39 Expendable Mobile ASW Training Target over a three-hour period. Target track was generated using General Dynamics Mission Systems-Canada's UYS-505 Sonobuoy Processing Systems. GA-ASI is developing this first-of-its-kind capability for its new MQ-9B SeaGuardian UAS in partnership with the U.S. Navy under a Cooperative Research and Development Agreement with Naval Air Systems Command, Patuxent River, Maryland.

"This demonstration is a first for airborne ASW. The successful completion of this testing paves the way for future development of more anti-submarine warfare capabilities from our MQ-9s," said GA-ASI President David R. Alexander. "We look forward to continuing collaboration with the U.S. Navy as they explore innovative options for distributed maritime operations in the undersea domain."

GA-ASI first demonstrated a sonobuoy remote processing capability in 2017 from an MQ-9A. Since then, GA-ASI has added a Sonobuoy Management & Control System (SMCS) to monitor and control deployed sonobuoys, and developed a pneumatic sonobuoy dispenser system (SDS) capable of safely carrying and deploying 10 U.S. Navy-compliant A size or 20 G size sonobuoys per pod. The MQ-9B SeaGuardian has four wing stations available to carry up to four SDS pods, allowing it to carry and dispense up to 40 A size or 80 G size sonobuoys, and remotely perform ASW anywhere in the world.

In a standard configuration, SeaGuardian's endurance exceeds

18 hours, encompassing a mission radius of 1,200 nautical miles with eight hours of on-station time for submarine prosecution, providing a low-cost complement to manned aircraft for manned-unmanned teaming operations. GA-ASI has already received orders for this MQ-9B SeaGuardian ASW capability from two separate foreign customers and anticipates demand to be extremely strong for the MQ-9B SeaGuardian with its high-end maritime capabilities and low cost relative to legacy manned maritime platforms.