Acquisition Update: Coast Guard Nets Historic Drug Interdiction During Most Recent Phase of Unmanned Aircraft System Technology Demonstrations

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The Coast Guard recently completed the second of three planned shipboard demonstrations of unmanned aircraft system (UAS) capabilities aboard the U.S. Coast Guard Cutter Bertholf. These exercises are part of an ongoing effort to explore UAS capabilities and shipboard handling techniques. The Coast Guard is using knowledge gained from these demonstrations to inform a future cutter-based UAS acquisition project.

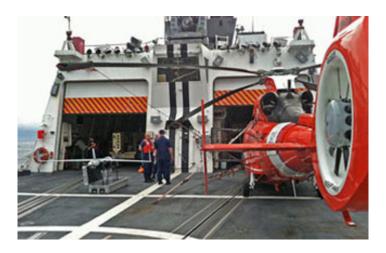
During the two-week deployment, the UAS demonstration team operated a ScanEagle UAS for more than 90 hours of flight time and aided in the interdiction of nearly 600 kilograms of cocaine – the first Coast Guard interdiction conducted with the support of an embarked UAS asset.



UAS team members - including Lt. Nathaniel Champlin (right), the first Coast Guard aviator certified to fly the ScanEagle UAS - ready the ScanEagle for operations as part of a demonstration conducted aboard the Coast Guard Cutter Bertholf. U.S. Coast Guard photo.

The ScanEagle was deployed by the Bertholf to provide real-time surveillance and location information of a suspected go-fast vessel. The UAS located the target vessel and maintained constant on-scene surveillance until the cutter-based MH-65D Short Range Recovery helicopter and Over the Horizon (OTH) cutter boats arrived to interdict and apprehend the vessel's crew. The seamless handoff between responding assets – including the U.S. Customs and Border Protection P-3 Maritime Patrol Aircraft that first spotted the target vessel – UAS, upgraded MH-65D, next-generation cutter boats and Bertholf, with the regular communication with shore commands, resulted in the successful operation.

The UAS evaluation was conducted by a team of technicians and aviators from Coast Guard Headquarters, the Coast Guard Research and Development Center (RDC), Coast Guard Air Station North Bend, Ore., and Insitu Inc.



UAS team members conducted UAS flight operations concurrently with MH-65D operations aboard the Bertholf during the latest phase of the UAS demonstration. U.S. Coast Guard photo.

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The entire test period included concurrent flight operations with a MH-65D stationed aboard the Bertholf. UAS testing included use of the daytime camera, the combination electro-optical/infrared camera, as well as auto detection software.

UAS evaluation is a key part of the Coast Guard's efforts to develop a comprehensive understanding of UAS requirements, capabilities and limitations and to oversee initial training for the first cadre of cutter-based UAS operators. Results from the demonstration project are being used to support Coast Guard decisions regarding operational requirements for a future cutter-based UAS acquisition. The Coast Guard has identified cutter-based UAS as a key component to enhancing the operational effectiveness of its major cutter fleet through on-demand, persistent surveillance capabilities.

The next phase of UAS demonstration will focus on quantitative data gathering aboard a National Security Cutter in early 2014.