



Coast Guard air crews prepare the Fire Scout unmanned aircraft system for flight on Coast Guard Cutter Bertholf near Los Angeles, Dec. 5, 2014. The Coast Guard Research and Development Center has been testing unmanned systems and platforms for the last three years. U.S. Coast Guard photo by Petty Officer 2nd Class Luke Clayton.

Acquisition Update: Coast Guard Crews Continue UAS Research With Joint Fire Scout Demonstration

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Coast Guard Research and Development Center collaborated with the Naval Air Systems Command to conduct a demonstration of the Fire Scout unmanned aircraft system aboard Coast Guard Cutter Bertholf earlier this month.

This demonstration is the latest RDC initiative aimed at understanding UAS capabilities and their compatibility with cutter and manned aircraft operations. The Coast Guard is using this information as it reviews proposals to advance its strategy for unmanned surveillance for the national security cutters.

"UAS have the potential to significantly increase the surveillance range and capabilities of our Coast Guard cutters, and this demonstration will help to inform the service on the best way to proceed forward with the acquisition of the right unmanned capability in the future," said Lt. Cmdr. Dan Broadhurst, the Coast Guard UAS platform manager.

Fire Scout is an unmanned autonomous helicopter used primarily by the Navy for reconnaissance, situational awareness and aerial support for ground, air and sea forces.

Bertholf, like all of the 418-foot national security cutters, is designed to deploy with a complement of manned helicopters, UAS or a mixture of manned and unmanned

capabilities. Bertholf's crew and the demonstration team conducted evaluations that included launch and recovery operations, radar capabilities demonstrations, data and imagery transmissions and dynamic interface tests.

The NSC hosted several specialists during the demonstration, including engineers, pilots, data analysts and others, along with two Fire Scouts and a control station filling both of the NSC's hangars.

The recent exercise was the third UAS demonstration conducted aboard an NSC.

The RDC is building upon the Navy's UAS research to achieve cost efficiencies, make use of prior experience and promote commonality when the Coast Guard chooses to acquire its own UAS capability.

"The Navy's been developing the Fire Scout program for years," said William Posage, the UAS project manager for the RDC. "It's a very high-performing system, but a very expensive system. We wouldn't have been able to do this demonstration without them helping us."

The Navy will also benefit from this new configuration. The mobile control station developed for this demonstration provides flexibility to respond rapidly to taskings and has the potential to drive down future integration costs.

The Coast Guard is interested in a UAS that can remain on station for extended periods, expand maritime domain awareness and disseminate actionable intelligence on maritime hazards and threats.

Over a period of eight days, the teams conducted numerous flights, ranging from "yo-yo tests" – where the Fire Scout hovers approximately 15 feet from the flight deck, lands and repeats – to demonstrating radar capabilities and conducting "wave-off" maneuvers to evaluate operations above the flight deck in various wind conditions.