

Acquisition Update: Coast Guard Issues RFP For C-130J Missionization With Minotaur

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The Coast Guard issued a request for proposal March 9, 2015, to incorporate the next-generation Minotaur Mission System Suite in its C-130J long range surveillance aircraft. The firm fixed price contract would include options for missionization of up to five new C-130J aircraft and retrofit modifications of seven legacy mission system suite aircraft. Written proposals are due by June 3, 2015.

“The award of this contract will represent a major milestone in Coast Guard acquisition,” said Josh Lyons, the Acquisition Directorate’s acting long range surveillance program manager. “This contract takes advantage of the Coast

Guard’s strong partnership with the U.S. Navy and other government agencies. It focuses on installation of the system, leveraging the engineering design and logistics management skills within the Coast Guard and our government partners.”

Missionization includes post-production modification of new C-130J aircraft to incorporate the specialized equipment necessary to carry out Coast Guard missions. This process includes installation of radar; sensors; and other command, control, communications, computers, intelligence, surveillance and reconnaissance equipment that enables the aircrew to collect and process surveillance information for transmission to shore and surface operators. Minotaur will be the processor used to integrate those specialized systems.

The search for a standardized and supportable baseline mission system for Coast Guard aircraft became necessary because of increasing unavailability of major hardware components and software obsolescence issues with the current mission system suite.

The Coast Guard investigated alternatives that could be maintained and upgraded by the service and identified the Naval Air Systems Command Ocean Surveillance Initiative’s Minotaur mission control system as the best option. Minotaur “is truly the most advanced system out there,” said Joe Baker, who heads the Mission Systems Integrated Project Team at Coast Guard headquarters. Minotaur provides a tailored user interface with software that reduces operator workload and increases operational efficiency. Its speed and memory capability are major improvements to the processors currently being used on the Coast Guard’s fixed-wing aviation assets.



The Coast Guard uses HC-130J aircraft for a wide variety of missions including search and rescue, cargo and personnel transport, law enforcement and international ice patrol. The Minotaur mission system suite integrates the specialized equipment needed to carry out those missions. U.S. Coast Guard photo.

Since Minotaur is an open-architecture, government-owned system, future updates of outdated systems will be easier. “Migrating to an open architecture makes our command, control, communications and computer information upgrades more affordable and gives the government more control,” Baker said. Partnering also leads to greater cost savings. The Minotaur system is currently used on some Navy and Customs and Border Protection aircraft so the Coast Guard can leverage Department of Defense logistics, including maintenance, training and spare parts, resulting in lower life cycle costs.

“The HC-130J can remain airborne longer than other Coast Guard aircraft; with the MSS+ capability it is the most powerful surveillance aircraft in our inventory and can serve its role effectively and efficiently,” Lyons said.

The Coast Guard is developing Minotaur prototypes for the HC-130J and for the HC-144A, one of the service’s medium range surveillance aircraft. NAVAIR is analyzing missionization options for the C-27J medium range surveillance aircraft.

The Minotaur prototype HC-130J aircraft – which is being completed by NAVAIR under a previously awarded military interdepartmental purchase request – is scheduled to start missionization in May, with disassembly and reconfiguration slated to take about six months. The service hopes to conduct evaluation flights of the prototype aircraft in early 2016.