

# Acquisition Update: Coast Guard To Upgrade Ocean Sentries

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The Coast Guard is upgrading its HC-144A Ocean Sentry medium range surveillance aircraft to address obsolescence issues, improve situational awareness and increase overall mission effectiveness. Upon completion of this modification, called the Ocean Sentry Refresh, the aircraft will be designated HC-144B.

The key change is replacement of the cockpit control and display unit, which is used in flight management and serves as the primary avionics computer for communication control, navigation and equipment monitoring. The new CDU features active matrix display, a more powerful processor and other updated technologies that increase both performance and reliability. It also has the capabilities needed to comply with global air traffic management requirements, and its updated keyboard is easier to use in bad weather.



The Coast Guard Aviation Logistics Center upgraded CGNR 2307 to create the prototype HC-144B. Its first flight as a Bravo model took place Oct. 30, 2014. U.S. Coast Guard photo.

“The Refresh consolidates control of communications and navigation to provide the aircrew with maximum situational awareness and usability,” said Lt. William Towers, with the Acquisition Directorate’s aviation program. “With an endurance of more than 10 hours, as well as extensive sensor, cargo and passenger capabilities, the HC-144B will enable the Coast Guard to fulfill its maritime patrol, drug and migrant interdiction, disaster response, and search and rescue missions more effectively.”

The Coast Guard Aviation Logistics Center in Elizabeth City, North Carolina, worked with CDU supplier Rockwell Collins to integrate the systems and create a prototype configuration on board CGNR 2307. A second aircraft, CGNR 2306, has been upgraded to validate and verify the flight test results. The Coast Guard Aviation Training Center in Mobile, Alabama, also is involved in the developmental test and evaluation process and is developing pilot and crew syllabuses and assessing mission capabilities.

The HC-144 OSR certification requires three testing phases: laboratory (which includes software and hardware system integration and individual unit integration evaluations), ground and flight. The project is in the third phase, conducting flight testing under four flight conditions.

A schedule for upgrading the entire fleet of 18 HC-144s has not been finalized. Each Ocean Sentry will be upgraded to a Bravo model prior to or in conjunction with installation of the Coast Guard next-generation Minotaur mission system suite.