

Navy Awards Raytheon Contract for AQS-20C Mine-Hunting Sonars



The AN/AQS-20C Towed Mine-hunting Sonar is streamed into Gulf of Mexico waters of the Naval Surface Warfare Center Panama City Division (NSWC PCD) Gulf test range. Developmental Testing was completed on Feb. 12, 2019. The testing marks completion of incorporating the 'Charlie' variant sonar sensor modernization. *U.S. NAVY / Eddie Green*

ARLINGTON, Va. – The U.S. Navy has awarded Raytheon Technologies a contract to upgrade some AQS-20A towed sonars to the AQS-20C configuration.

The Naval Sea Systems Command awarded Raytheon a \$66.5 million firm fixed-price contract for engineering, design, development, production, integration and testing to physically upgrade 10 legacy AQS-20A mine hunting sonars to the AN/AQS-20C configuration.

The AQS-20 is a variable-depth, underwater mine-detection sonar designed to give a strike group an organic capability to detect, classify and localize bottom, close-tethered and volume mines. The AQS-20A also is fitted with an electro-optical sensor to identify underwater objects.

The sonar is deployed while the helicopter is in a hover and then towed undersea to scan the water in front and to the sides of the aircraft, as well as the sea bottom for anti-shipping mines. The sonar and E0 sensor provide high-resolution images of mines and mine-like objects as well as high-precision location information. The AQS-20A is a component of the Remote Multi-Mission Vehicle and the Airborne Mine-Neutralization System in the mine warfare mission package of the LCS. It entered LRIP in 2005; 25 units were

delivered.

The AQS-20C features four imaging sonars – including a synthetic aperture sonar that provides the highest possible resolution for acoustic identification – and an imaging laser system that hunt for mines in the entire water column over a large area in a single pass. The system detects, classifies, localizes and identifies mines on the seabed, near-bottom moored mines, volume mines and near-surface mines. Classification is accomplished within the body of the system using advanced algorithms and signal processing. With the Barracuda mine neutralizer, an AQS-20C can complete the search to engage in a single pass.

The AQS-20C is being integrated on the MCM Unmanned Surface Vehicle for mine hunting from an LCS. Delivery of 10 units began in summer 2018. Developmental test began in late 2018. IOC was achieved in late 2018. Developmental test with the LCS was completed in 2019. Raytheon Co. had delivered 10 AQS-20Cs to the Navy by January 2020.