Sea-Air-Space: RTX's Barracuda Mine Destructor in Ocean Testing

Raytheon has been putting its Barracuda mine neutralization system in autonomous mission testing. *Photo credit: Raytheon*

Raytheon, an RTX company (Booth 911), has been putting its Barracuda mine neutralization system in autonomous mission testing, the company said in an interview with *Seapower*.

The Barracuda is a 26-pound, 48-inch-long anti-mine device housed in a tube the size of an A-size sonobuoy tube. When launched, the device is propelled by four small water jets that take the device to the datum of a suspected sea mine detected by the AQS-20C towed sonar. An acoustic communications data link buoy is released to which the device

is tethered. Target updates, such as GPS coordinates, are transmitted to the device, which approaches the sea mine. A sonar and a camera mounted in the nose of the device enables a man-in-the-loop operator – for now – to confirm the mine. The device then is steered to the mine and detonated. Each Barracuda is a one-shot charge.

An engineering development model (EDM) of the of torpedo-like munition has been going through two months of contractor testing in Narragansett Bay, said Bill Guarini, Raytheon's director for Requirements, Capabilities in the company's Naval Systems and Sustainment Unit. For the tests so far, the Barracuda is tethered to its controlling craft.

The contractor testing will continue through 2025 into 2026, Guarini said, with tests against a variety of mine shapes, including bottom, tethered, and near-surface mines. Development Testing to begin in 2026 and Operational Testing to be conducted in 2027, with low-rate initial production also scheduled to begin that year. Raytheon will provide 85 EDMs of the Barracuda for the Navy's tests.

The Barracuda is designed for both surface and air launch. The weapon will be deployed on the Mine Countermeasures Unmanned Surface Vehicle deployed on some Independence-class littoral combat ships. Separately from Raytheon, the Navy is having a Barracuda launcher developed for the MCM USV. A sonobuoy air-launch cannister also is a potential launcher for the Barracuda.