

MQ-8 Fire Scout



The Navy resumed evaluation of the MQ-8C Surface Warfare (SUW) Increment in November 2021, following a fleet-wide operational pause of all MQ-8 operations. In May 2022, the Navy commenced operational testing of MQ-8C SUW Increment as employed from a Littoral Combat Ship (LCS); however, the Navy truncated the test event after seven days due to system availability and high sea state. The Navy intends to complete operational test in FY23.

SYSTEM DESCRIPTION

The MQ-8C is a helicopter-based tactical unmanned aerial system designed to support intelligence, surveillance, and reconnaissance; SUW; and mine countermeasures (MCM) payloads. The air vehicle (AV) is a modified Bell 407 airframe intended to support LCS missions.

The MQ-8C SUW Increment consists of a Leonardo AN/ZPY-8 radar and associated Weapons Replaceable Assemblies, Minotaur software, and supporting AV and Mission Control Systems software. The AN/ZPY-8 radar capabilities include long- and short-range maritime search and detection, Inverse Synthetic Aperture Radar imagery, and Synthetic Aperture Radar imagery.

MISSION

Commanders employ LCS equipped with the MQ-8C SUW Increment to improve open ocean search and maritime target detection capability. From the LCS perspective, the SUW Increment provides an over-the-horizon detection capability by providing contact and track information for battlespace awareness. The system will also support the cueing of targets for employment of the Naval Strike Missile.

PROGRAM

The MQ-8 Fire Scout is an Acquisition Category IC program that entered Milestone C in 2017.

The MQ-8C has three expected increments of capability: the Endurance Baseline Increment, SUW Increment, and MCM Increment. The Navy accepted 38 Endurance Baseline Increment MQ-8Cs and has no additional procurement planned. DOT&E approved the Test and Evaluation Master Plan in February 2022.

The President's Budget 2023 included a significant divestment within the MQ-8 program that will remove from fleet inventory all MQ-8B AVs by the end of FY22 and reduce the MQ-8Cs from 38 to 10 AVs by the end of FY23. The Navy intends to use eight of the remaining AVs for fleet employment and two of the AVs for training and test events, respectively.

» MAJOR CONTRACTOR

- Northrop Grumman – San Diego, California

TEST ADEQUACY

In May and June 2022, the Navy conducted initial testing of the MQ-8C SUW Increment with employment from the USS Montgomery (LCS 8). However, the Navy truncated the event to seven days due to system availability and high sea state. Testing to date has been conducted in accordance with the DOT&E-approved test plan and observed by DOT&E. Additional test of the MQ-8C SUW Increment from an LCS is required to assess the MQ-8C's integration into the LCS combat systems

and its ability to support the LCS SUW mission. The Navy intends to complete operational test of the MQ-8C SUW Increment in 2QFY23.

PERFORMANCE

» EFFECTIVENESS

Not enough data are available to provide an assessment of the operational effectiveness of the MQ-8C SUW Increment as employed from LCS.

» SUITABILITY

Not enough data are available to provide an assessment of the operational suitability of the MQ-8C SUW Increment as employed from LCS.

» SURVIVABILITY

Not enough data are available to provide an assessment of the survivability of the MQ-8C SUW Increment in a cyber-contested environment. The Navy is leveraging developmental test and evaluation results to prepare the MQ-8C for a cooperative vulnerability and penetration assessment and an adversarial assessment that will occur after the last software release planned for FY23.

RECOMMENDATION

The Navy should:

1. Complete remaining operational test of the SUW Increment as soon as feasible.