

MQ-8 Fire Scout Unmanned Aircraft System (UAS)

In April 2021, the Navy started the FOT&E of the MQ-8C Surface Warfare Increment but the test was delayed due to a Fleet-wide operational pause of MQ-8B and MQ-8C flights from Navy vessels.



System Description

The MQ-8C is a helicopter-based tactical unmanned aerial system designed to support intelligence, surveillance, and reconnaissance, surface warfare, and mine countermeasures payloads. The air vehicle is a modified Bell 407 airframe intended to support Littoral Combat Ship (LCS) missions, but can also operate from other suitably equipped ships.

Program

The MQ-8 Fire Scout is an Acquisition Category IC program that entered Milestone C in 2QFY17. The MQ-8C has three expected increments of capability: the Endurance Baseline Increment, Surface Warfare Increment, and Mine Countermeasures Increment. The Navy accepted 38 Endurance Baseline Increment MQ-8Cs and has no additional procurement planned.

Major Contractor

Northrop Grumman – San Diego, California.

Test Adequacy

In FY21, the Navy conducted land-based testing of the Surface Warfare Increment that included overland surveillance, intelligence gathering, and maritime search and surveillance. The land-based test phase will inform the evaluation of the AN/ZPY-8 radar's ability to provide actionable radar images and location for overland contacts of interest, as well as the radar's ability to detect, track, classify, and localize maritime contacts.

In April 2021, the Navy started the Surface Warfare Increment FOT&E as employed from an LCS. The test was delayed due to problems detailed in the Controlled Unclassified Information edition of this report. The Navy

intends to resume FOT&E following the resolution of those problems.

Performance

Effectiveness

Not enough data are yet available to provide a preliminary assessment of the Surface Warfare Increment of MQ-8C operational effectiveness as employed from an LCS.

Suitability

Not enough data are yet available to provide a preliminary assessment of the Surface Warfare Increment of MQ-8C operational suitability as employed from an LCS.

Survivability

Not enough data are yet available to provide a preliminary assessment of the Surface Warfare

Increment of MQ-8C survivability in a cyber-contested environment. The Navy has been leveraging development test and evaluation results to prepare the MQ-8C for a Cooperative Vulnerability and Penetration Assessment and an Adversarial Assessment that will occur after a new software release.

Recommendations

The Navy should:

1. Resolve problems that delayed FOT&E to successfully resume and complete FOT&E.
2. Complete operational testing of the Surface Warfare Increment of MQ-8C prior to deployment on LCS.