



Acquisition Directorate



HC-144A Medium Range Surveillance Aircraft

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HC-144A Medium Range Surveillance Aircraft

The USCG Acquisition Directorate is committed to delivering and supporting state-of-the-market platforms and systems that are affordable, efficient and mission-capable.

Medium Range Surveillance Aircraft (MRS): Project Description

The Ocean Sentry, HC-144A, is the first all-new aircraft delivered to the Coast Guard as part of the Deepwater Program's progressive modernization and recapitalization of aging legacy assets.

Capability

Mission Pallet

The HC-144A's mission pallet contributes to the overall "Maritime Domain Awareness." With the Deepwater Command-and- Control (C2) System, the aircraft can serve as an effective platform for on-scene commander functions. Information collected by the aircraft is transmitted to the Coast Guard's shore-based Maritime Domain Awareness Center, which in turn posts relevant data to a common operational picture shared by command centers, cutters and aircraft in the area.

Endurance

Greater endurance allows the aircrew to remain on station longer, collect more information, support other assets, and track targets for longer periods of time. The aircraft will be particularly

effective at locating targets in large search areas and vectoring other assets to complete the mission. More fuel efficient than the HU-25 Guardian, the aircrew can remain on-scene until an intercept is made by surface vessels.

The HC-144A, greater endurance translates to operational effectiveness. The Ocean Sentry can stay airborne longer—taking into consideration variables like total weight—about seven to nine hours useful time, vs. four hours maximum in a HC-25 Falcon, about twice the operational flight time."

Mission Flexibility

The aircraft's design allows it to be reconfigured for a variety of missions, while retaining at least minimum functionality with the aircraft's sensors.. Its hydraulically operated rear ramp allows for easy roll-on and roll-off of provisions. The aircraft also can be quickly reconfigured for such missions as medical evacuation and the transport of passengers and time-sensitive supplies.

Mission Systems Pallet

The HC-144A's Mission System Pallet (MSP) brings a new era of C4ISR to USCG aviation and

Mission execution begins here.

Maritime Domain Awareness. The first three pallets is undergoing Tempest and E3 testing. A few added capabilities are:

- Enhanced operational awareness implemented via installation of the USCG Common Operational Picture
- Greatly improved surveillance sensors Automatic Identification System (AIS)
- Improved surveillance radar performance
- New electro-optical surveillance systems (visible light and infrared)
- Mission system data recording
- New Law Enforcement Communications Suite
- Enhanced encryption capabilities

Status

The Coast Guard accepted the fifth HC-144A Ocean Sentry Maritime Patrol Aircraft in July, 2008. This fifth aircraft will supplement the four previously delivered aircraft as the HC-144A begins a formal Operational Test and Evaluation (OT&E) process prior to entering operational service for the Coast Guard in 2009.

Key elements of that process are listed below:

- OT&E, Phase 1, "Test Planning and Preparation," and Operational Testing Readiness Review was completed May 2008.
- OT&E, Phase Two, "Data Collection," is scheduled for June through November 2008.
- OT&E, Phase Three, "Analysis and Reporting," is scheduled for December 2008 through mid-February 2009.

Characteristics

Number Planned: 36

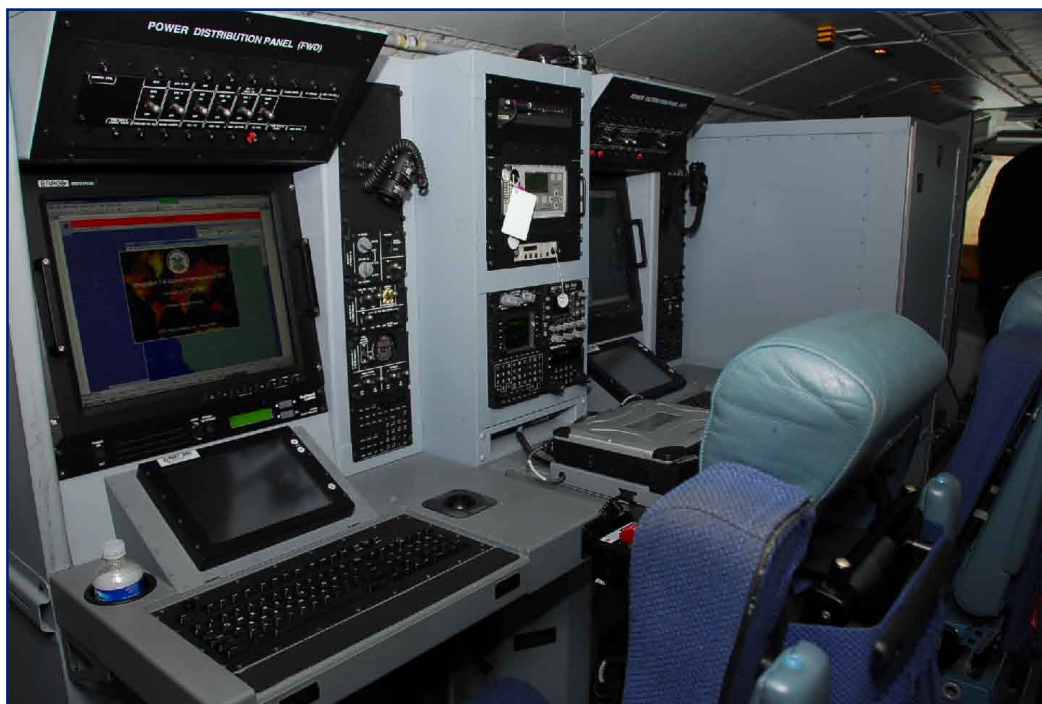
Speed: Maximum Cruising 236 kts

Range: 2,305 nm (MPA Configured)

Crew: 2 (Officers),
3 (Enlisted)



HC-144A Interior, Troop Transport Configuration.



HC-144A Mission System Pallet (C4ISR Suite).