C4ISR

Acquisition Directorate

The Coast Guard is developing and integrating improved C4ISR capabilities, including electronic equipment and computer systems on Coast Guard cutters.

BENEFITS

- Ensures effective electronics systems for full range of Coast Guard missions
- Improves interoperability with partner agencies, other U.S. military units and allied nations
- Provides radio, satellite and internal communications
- Improves sensor capabilities, including enhanced radar and infrared scanners
- Standardizes equipment on Coast Guard cutters
- Lowers long-term maintenance costs through efficient design

C4ISR TEAMS CURRENTLY SUPPORT MANY PROGRAMS, INCLUDING:

- National security cutter
- Offshore patrol cutter
- 270-foot medium endurance cutter service life extension program
- Fast response cutter
- Polar security cutter
- Waterways commerce cutter
- Tactical Cryptology Afloat recapitalization

For updates on C4ISR, visit the https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Programs/C4ISR-Programs/C4ISR/

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PROGRAM DESCRIPTION

The Coast Guard's advanced command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) systems aid in carrying out law enforcement, environmental protection and search and rescue missions. Increased mission demand in the Arctic, as well as growing counterterrorism and homeland defense responsibilities, require additional investments in building mission-capable C4ISR functionalities.

Through operationally focused and intelligence-infused systems, the Coast Guard is developing and integrating C4ISR solutions that enable Coast Guard assets to be interoperable with the Department of Homeland Security; the Department of Defense (DOD); and state, local and coalition partners. The Coast Guard's newest C4ISR systems provide significant performance improvements over legacy systems, with superior situational awareness and tactical combat system integration. Through collaboration with other acquisition programs and the sustainment community, the Coast Guard is providing standardized and interoperable C4ISR baselines across existing and future assets. These efforts increase reliability and lower costs throughout the system life cycle.

The Coast Guard is acquiring and integrating enhanced electronic sensors, computer networks, data processing and information-sharing equipment. This enables Coast Guard operators to perform mission tasks, develop situational awareness and improve coordination with U.S. agencies and allied nations. C4ISR solutions also provide command and control equipment, which allows cutter crews to navigate; maneuver; target and fire weapons; collect and analyze sensor and intelligence data; and support ship operations. Additionally, the service is acquiring advanced communication, intelligence and information-sharing capabilities for Coast Guard cutters, enabling the seamless transmission of voice and data communications via radio and satellite.

The Coast Guard's legacy C4ISR acquisition program was a multi-year effort to design, develop and integrate the equipment used on Coast Guard assets. This included surface assets and initial missionization of long range surveillance aircraft (HC-130J) and medium range surveillance aircraft (HC-144).

In 2017, the C4ISR program successfully deployed a certified version of the Sea Commander Command and Control System – fully compliant with the latest DOD cyber security requirements based on the Navy's Aegis Combat System – to all operational national security cutters (NSCs) and the Coast Guard's Training Center Petaluma. The Sea Commander system provides sensor information, target tracking, weapons control and other tactical capabilities for the NSC. All operational cutters had a common Sea Commander hardware and software baseline for the first time, which lowered life cycle costs for both the acquisition and sustainment communities.

The formal C4ISR program completed all planned acquisition activities in 2019, and oversight of the delivered capabilities on NSCs 1 through 8 were transitioned to the sustainment community. C4ISR remains a focus for the Acquisition Directorate and specialized teams now manage a broad portfolio of discrete projects that directly support other Coast Guard major acquisition programs.

In addition to continued development of Sea Commander versions for NSCs under construction, the program is developing and delivering a scalable command and control software system called SeaWatch, an enterprise navigation and situational awareness tool used across multiple new and legacy surface platforms. A new version of SeaWatch was recently delivered to the offshore patrol cutter program to meet the detailed design requirements for the program's acquisition milestone. The new version is likewise compliant with DOD's cyber security requirements.