UNMANNED AIRCRAFT SYSTEM

Acquisition Directorate

Imagery from the small unmanned aircraft system (sUAS) deployed on Coast Guard Cutter Stratton beginning in the acquisition's Analyze/Select phase to gather data to assess best use of the sUAS capability

HIGHLIGHTS

- Pursuing small UAS (sUAS) capability for the national security cutters (NSCs) as a nonmajor acquisition to provide persistent, tactical airborne intelligence, surveillance and reconnaissance capability to increase the NSCs' effectiveness
- Focusing on capabilities that are available in the current market
- Deployed ScanEagle sUAS beginning in the Analyze/Select phase of the sUAS for NSC acquisition to generate data, provide operational performance information and assist with the development of logistics plans, all of which will inform selection of sUAS capability across the entire NSC fleet

For updates on UAS, visit the program's website at https://www.dcms.uscg.mil/Our-Organization/Assistant-Commandant-for-Acquisitions-CG-9/Programs/Air-Programs/UAS/

U.S. COAST GUARD
April 2018
www.dcms.uscg.mil/acquisition

PROGRAM DESCRIPTION

An unmanned aircraft system (UAS) consists of an unmanned aircraft, its mission payloads, launch and recovery equipment, ground support equipment, and data and control links. The Coast Guard is preparing to employ UAS to augment its aircraft fleets and to expand the surveillance range of surface assets like the national security cutter (NSC).

The Coast Guard is interested in UAS that can remain on station for extended periods, expand maritime domain awareness and disseminate actionable intelligence on maritime hazards and threats. The service has focused its UAS acquisition efforts on evaluating technologically mature systems, seeking commonality with Homeland Security and Defense department programs, and applying other agencies' UAS experience.

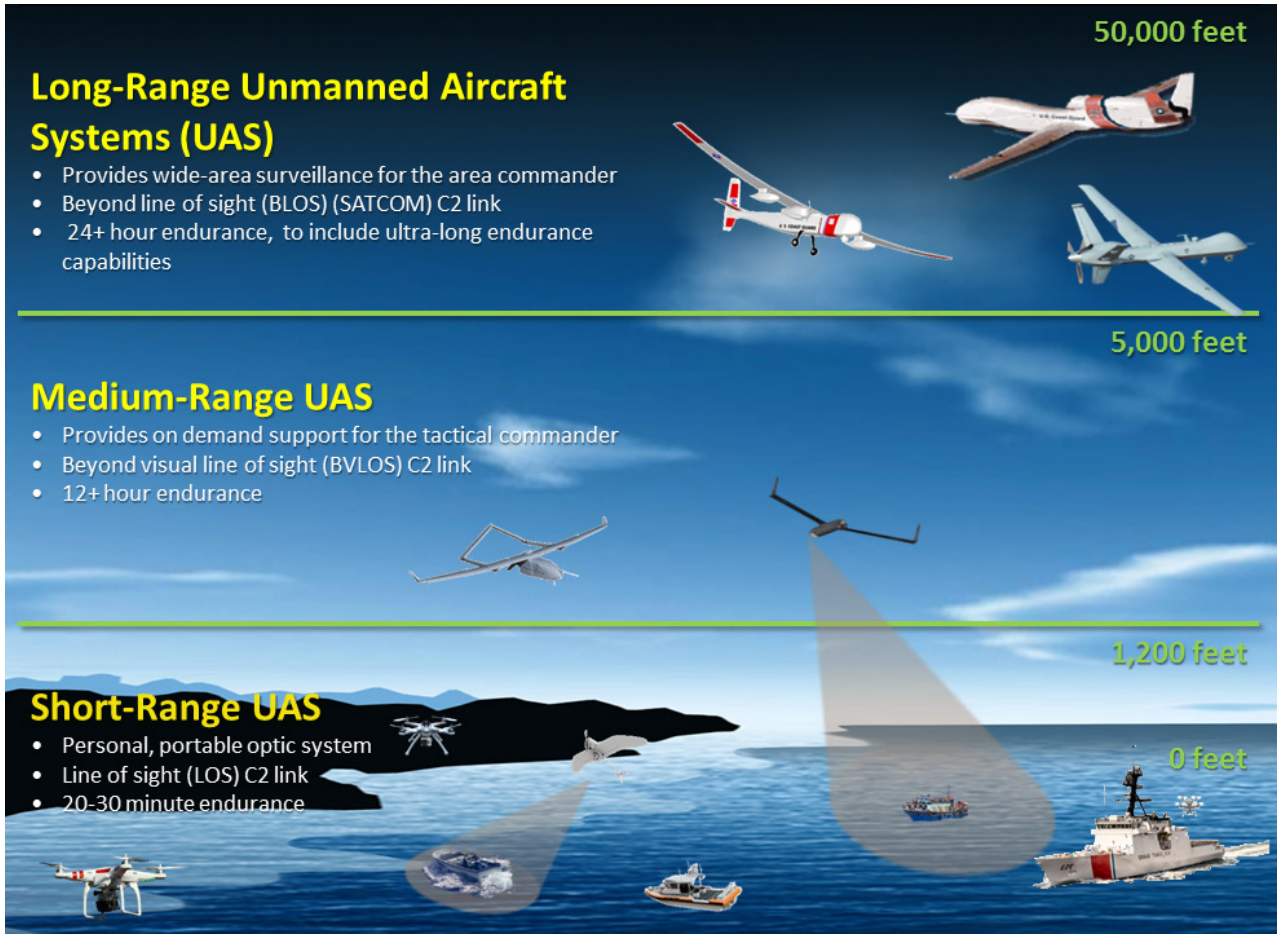
The Coast Guard is acquiring small UAS (sUAS) as a cost-effective approach to meeting the NSCs' operational need for a persistent airborne surveillance capability and has established a nonmajor acquisition program to acquire sUAS capability for the NSC fleet. To minimize risk, the Coast Guard has obtained sUAS capability on one NSC during the Analyze/Select phase of the acquisition via a pre-existing multiple award contract executed by the Naval Air Systems Command. The initial order awarded to Insitu Inc. on June 24, 2016, includes operation, integration, maintenance and sparing of a contractor-owned ScanEagle sUAS on Coast Guard Cutter Stratton – an NSC based in Alameda, California – for one year. The award included options for deployment of and data from the sUAS for up to three additional years beyond the base year.

The Coast Guard has employed the system on Stratton for three assessment patrols, one of which concluded in April 2018. The service has full ownership of the surveillance data obtained and has used the deployment data to refine the concept of operations and requirements for installing and integrating future systems across the NSC class. These data points informed the service's request for proposal for sUAS for NSC capability, released in February 2018. The contract award for the installation of sUAS capability on two NSCs and options to outfit the rest of the NSC fleet in future years is targeted for later in 2018.

(OVER)

LONG-TERM STRATEGY

Developed by the Office of Aviation Forces, the Coast Guard's long-term UAS strategy involves long-, medium- and short-range UAS to monitor activity across the 4.5 million square miles of the U.S. Exclusive Economic Zone.



Long-Range UAS (LR-UAS): The Coast Guard does not currently have any organic LR-UAS deployed in the field, but the service has been operating MQ-9 Guardians with Customs and Border Patrol since 2008 through a DHS UAS joint program office. The Coast Guard received $18 million in appropriations from Congress to examine the feasibility, costs and benefits of conducting intelligence, surveillance and reconnaissance (ISR) missions in transit zones using long-range/ultra-long endurance (LR/U-LE) UAS. The service plans to release a solicitation for LR/U-LE UAS technology demonstration and flight services requirements in spring 2018.

Medium-Range UAS (MR-UAS): The Coast Guard began operational assessment patrols with the ScanEagle UAS on Stratton in February 2017. Since deploying UAS on NSCs, the Coast Guard has seen a vast increase in ISR effectiveness. Cutter-based MR-UAS may be outfitted with electro-optical/infrared cameras, high-resolution daytime cameras, and visual detection and ranging surface surveillance sensors. The UAS are outfitted with standard Identification, Friend or Foe and Automatic Identification System receivers.

Short-Range UAS (SR-UAS): The Coast Guard currently does not have any SR-UAS deployed in the field. Requirements are currently under development. The platform provides man-portable, tactical sensors that can be cost-effective capabilities to meet many existing requirements.