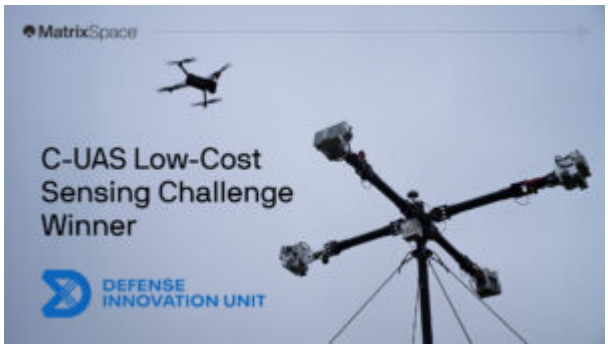
DIU, JIATF-401, USNORTHCOM, US ARMY Announce Winner for C-UAS Low-Cost Sensing Challenge



Defense Innovation Unit (DIU), in close collaboration with U.S. Northern Command (USNORTHCOM), Joint Interagency Task Force 401 (JIATF-401), U.S. Army, U.S. Navy, U.S. Marine Corps, and U.S. Indo-Pacific Command, announced top-performing solutions for the Counter-small Unmanned Aircraft System (C-sUAS) Low-Cost Sensing (LCS) challenge. MatrixSpace Inc. has been selected as the overall winner and will receive the top award of $500k. In addition, the top three performers following the overall winner will each receive award amounts of $100k in recognition of their performance: Guardian RF, Hidden Level, Inc., and Teledyne FLIR Defense.

The selected systems secured a place among the 10 finalists who advanced to live testing during USNORTHCOM’s Falcon Peak 25.2 exercise, outperforming 115 submissions. The system demonstrated capability in detection, classification, localization, scalability, cost, and integration readiness.

“Small UAS threats are evolving faster than traditional acquisition cycles, and meeting that challenge requires capabilities that can be deployed at speed and scale. The selected solutions show how commercial innovation can

strengthen our layered defense – delivering affordable sensing that we can field widely, adapt quickly, and keep the warfighter ahead of the threat," said David Payne, Acting Director of DIU's Autonomy Portfolio.

A Scalable, Distributed Approach to Counter-UAS Sensing

The LCS challenge, launched in May 2025, was designed to complement exquisite sensor systems by identifying emerging technologies that enable broad, distributed, and resilient sensing architectures. During FP 25.2, the ten selected finalists demonstrated solutions spanning radio frequency passive detection, active radar, acoustic sensing, optical and infrared modalities, and hybrid systems. These technologies collectively showed potential cost savings of 50–80 percent in total cost of ownership, while still meeting key coverage and performance requirements for C-sUAS defense. During live testing, vendors were evaluated against a variety of small UAS flown both individually and in coordinated multiples, employing diverse communication protocols. Finalists were not informed which platforms or profiles they would be tested against, ensuring performance was measured under realistic, un-scripted, and operationally relevant conditions.

Evaluated by experts and end-users, against a rigorous selection criteria, challenge winners differentiated themselves by demonstrating tailored technical strengths, high performance against threat-representative UAS targets and demonstrating a cost-effective architecture enabling deployment at scale across fixed, mobile, and austere environments.

Pathway to Transition

As the top-performing solutions, the selected winners will share the LCS challenge prize pool of $800,000 and will be eligible for potential follow-on opportunities, including Other Transaction (OT) agreements, and other contract types,

in order to expedite direct transition into operational use.

“JIATF 401 [Joint Interagency Task Force 401] has one measure of effectiveness: quickly deliver state-of-the-art C-UAS capability to the warfighter at home and abroad,” said Brig. Gen. Matt Ross “Our partnership with DIU contributes to warfighter lethality and homeland defense.”

About the LCS Challenge

The Counter-sUAS Low-Cost Sensing (LCS) challenge sought to identify emerging sensor solutions that could:

- expand detection coverage,
- reduce total lifecycle cost,
- integrate seamlessly into joint C2 architectures, and
- provide the resilience and redundancy required to counter small UAS threats.

Launched in May 2025, the challenge drew participation from traditional and nontraditional vendors across the country, representing the full spectrum of sensing modalities. The Falcon Peak 25.2 exercise provided a realistic environment to evaluate these capabilities under operationally relevant conditions.

For more information about DIU’s work accelerating commercial technology into the Department of Defense, visit **www.diu.mil**.