

**RECORD VERSION**

**STATEMENT BY**

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**BEFORE THE**

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COMMITTEE ON ARMED SERVICES  
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**ON SMALL UAS AND COUNTER-SMALL UAS: GAPS, REQUIREMENTS, AND  
PROJECTED CAPABILITIES**

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## **INTRODUCTION**

Chairman Wittman, Ranking Member Norcross, and Distinguished Members of the Subcommittee, thank you for your invitation today. I am here to highlight the importance of the development of Counter Small Unmanned Aircraft Systems (C-sUAS) capabilities and their integration across the Joint Force.

I serve in two roles: First, as the Director of the Joint C-sUAS Office, also called the JCO, which supports the Department of Defense (DoD) Executive Agency assigned to the Secretary of the Army for Countering Groups 1, 2 and 3 UAS, also known as small -UAS; Second, as the Headquarters, Department of the Army lead for air and missile defense requirements and operations, which includes the Army C-sUAS. These roles inform my perspective on the development of capabilities at scale and their integration across the Joint Force to support the Warfighter.

## **THE SMALL UNMANNED AIRCRAFT SYSTEMS THREAT**

The small UAS (sUAS) threat is present and constantly evolving. Conflicts in the Middle East and Ukraine have demonstrated how advances in hardware, software and tactics have enhanced speed and range while making drones more autonomous, more easily acquired, and deadlier. Moreover, the proliferation of drones is significantly greater and more universally employed than were Improvised Explosive Devices (IEDs) in select conflict zones. Unlike IEDs, sUAS threats can actively surveil and target as well as deliver effects, which further increases the need for detection and defeat options. Finally, a critical consideration for Service members and leaders is that sUAS threats are not limited to operational environments abroad. In the Homeland, drones have become more prevalent, as has the potential threat.

The DoD generally identifies categories or groups of UAS based on size, operating altitude, and speed. Groups 1 and 2 UAS are considered small -- weighing less, operating at lower altitudes, and flying at lower speeds. Group 3 UAS represent the transition between small and large UAS. Large Group 4 and 5 UAS represent a more traditional air defense threat owing to their greater size, operating altitude, and

speed. While these groupings help broadly categorize UAS, characteristics such as fixed- versus rotary-wing, operator control methods, and on-board navigation capabilities can be critical to determining the correct defeat mechanisms against UAS threats.

## **COUNTER SMALL UNMANNED AIRCRAFT SYSTEMS**

There is no silver bullet for implementing C-sUAS. Effective C-sUAS requires a layered defense, with a system-of-systems approach, consisting of both traditional air defense and C-sUAS-specific capabilities that can be sustained over time and integrated into a common Command and Control (C2) system with sufficient capacity to address the volume of the threat. This layered system-of-systems approach involves the integration of domain awareness sensors linked to a broad range of kinetic and non-kinetic effects. Just as important as the materiel solution, truly effective C-sUAS systems must consider non-materiel solutions such as training, doctrine, and policy.

## **THE JOINT COUNTER SMALL UNMANNED AIRCRAFT SYSTEMS OFFICE (JCO)**

The JCO leads DoD's efforts and connects all stakeholders, to include the Combatant Commands, Services, Office of the Secretary of Defense (OSD) & Joint Staff, the Interagency, industry, allies and partners, on all things C-sUAS. For example, the JCO is currently supporting USD (A&S) on the FY25 NDAA directed Section 925 C-sUAS Task Force. Among the JCO's specific responsibilities on behalf of our Warfighters is the oversight and synchronization of integrated plans, Joint requirements, technologies, training concepts, and doctrine to focus resources while minimizing duplication and redundancy.

## **MATERIEL DEVELOPMENT APPROACH**

To address the materiel development component of C-sUAS solutions, the JCO employs a two-pronged approach that focuses on assessing existing capabilities and developing future capabilities. Both approaches are informed by rigorous and classified capability gap analysis and validated C-sUAS requirements to address current and future threats. The first of these approaches evaluates current industry capabilities to

identify existing solutions that can address specific problem sets. The JCO hosts technology demonstrations where industry partners showcase advanced C-sUAS capabilities that mitigate gaps, inform requirements, and promote innovation. The second materiel development approach involves investing in promising Service-led Research, Development, Test, and Evaluation (RDT&E) efforts to accelerate system development under programs of record and/or prototypes.

## **INDUSTRY-TECHNOLOGY DEMONSTRATION PROGRAM**

Fully instrumented JCO-funded demonstrations are crucial in assessing the state of current industry solutions. They bridge current and future threats, support Warfighter lethality on today's battlefield, and will enhance Warfighter capabilities into the future. Previous demonstrations have focused on technologies such as low collateral effects, low-cost handheld systems, high-powered microwave (HPM) capabilities, Group 3 One Way Attack detect, track, identify, and defeat, as well as sUAS swarm defeat. Our upcoming demonstration, later this month at the Yuma Proving Ground in Arizona, will focus on assessing dismounted systems against Group 1 UAS as well as short-range Group 3 UAS defeat within a contested electromagnetic environment.

The technology demonstrations undertaken by the JCO and its Joint Service and industry partners have been largely successful. The systems identified by these demonstrations have proven their worth overseas in detecting, tracking, identifying, and defeating sUAS attacks; although we acknowledge that the U.S. homeland is a different operating environment. Every JCO demonstration has led to a Service transition or informed a decision for a Service or Combatant Command to pursue or divest itself of a proposed capability.

## **DOD CAPABILITIES PORTFOLIO MANAGEMENT REVIEW (CPMR)**

The JCO collects and prioritizes C-sUAS gaps in coordination with other enterprise stakeholders through the DoD Capabilities Portfolio Management Review (CPMR) process. The CPMR provides a high-level Joint review of the DoD's entire C-sUAS portfolio and is used to inform future C-sUAS materiel and non-materiel

investments. The CPMR results drive C-sUAS Joint operational requirements to better align with global operating environments, objective performance parameters, and defined measures of success for future capabilities.

## **TECHNOLOGY VS. COST WHEN ADDRESSING THE THREAT**

We aim to outpace the sUAS threat. However, the breadth, speed of adaptation, and quantity of the threat requires the development of affordable solutions, and our efforts must be done with a goal of lowering costs. The development of technologies such as directed energy prototypes and next-generation interceptors promise enhanced lethality at a lower cost per intercept. Continued support of the JCO and its demonstrations will be critical to ensure that RDT&E efforts continue to accelerate these new and cost-effective solutions.

Though lower cost per intercept is a fundamental element in our materiel development approach, it cannot be our sole consideration. To counter more technologically advanced threats requires enhanced capabilities to protect critical and valuable assets. The lives of Service members and citizens, ships, operations centers, airbases, logistical concentrations, etc. represent interests that we as a military and nation must defend. In the defense of these assets, we still require a mix of capabilities that can address the most advanced UAS threats now and into the future.

## **CONCLUSION**

With a proven record, the JCO is the DoD C-sUAS lead and remains committed to supporting Warfighters in the Services and Combatant Commands, as well as government-wide stakeholders from across the C-sUAS enterprise. I sincerely thank you for this opportunity, as well as your interest and continued investment in countering this evolving and growing threat abroad and at home.