

Closed Area of Interest (AoI) for SPEED CSO

1.0 Issued By

Program Office: AFIMSC/A9, JBSA-Kelly AFB

Contracting Office: AFICC/772 ESS/PKS, JBSA-Kelly AFB

2.0 AoI Identifiers

AoI Title: Base Oversight and Autonomous Response (BOAR) sUAS Framework

CSO AoI Number: Closed – 26 – 03. POC: Maj Billy Edenfield and TSgt Kyle Miller

AoI Release Date: 01/22/2026

Responses: See FA800325SC0001 for submission instructions in addition to paragraph 5.0 below

3.0 AoI Information

The Air Force Installation and Mission Support Center (AFIMSC) seeks innovative solutions for a scalable, open architecture framework for the autonomous beyond visual line of sight (BVLOS) operations of multiple unmanned systems to provide end users with vital multi-domain operational mission data and capability to sense, make sense, and/or act thru the AFIMSC SPEED Commercial Solutions FA800325SC0001. Interested parties are highly encouraged to review the SPEED CSO in its entirety to obtain more information on the process for submission and evaluation of the AoI responses.

This CSO AoI seeks to solicit innovative solutions that meet the objectives detailed in Section 4.0 below. The term ‘innovative’ is defined as any technology, process, or method, including research and development that is new as of the date of proposal submission; or any new application of an existing technology, process or method as of the proposal date.

This effort, aligned with Department of the Air Force and CDAO guidance, is essential for improving installation readiness, resilience, lifecycle management, and data-driven decision-making for Air Force installations.

This Area of Interest focuses on solutions that modernize legacy operations and programs while enabling the use of responsible Artificial Intelligence (AI) capabilities aligned with Department of the Air Force (DAF) and Department of War (DoW) enterprise strategies under the AFIMSC SPEED Commercial Solutions Opening FA800325SC0001.

The vendor shall ensure that all performance, technical solutions, and deliverables adhere to the strategic directives, mandates, and policies set forth by Air Force Materiel Command (AFMC), the Secretary of the Air Force for Acquisition, Technology and Logistics (SAF/AQ) and Chief Information Officer (SAF/CN), the Chief Data and Artificial Intelligence Officer (SAF/CDAO), Headquarters Air Force Directorate of Logistics, Engineering and Force Protection (A4), Air Force Installation and Mission Support Center

AFIMSC is not obligated to extend a request for proposal or make an award as a result of posting this AoI; all awards are subject to the availability of funds and successful negotiations.

This CSO AoI is not an authorization to begin performance, and in no way obligates the Government for any costs incurred by the Offeror associated with developing a Response. Prior to commencement of any activities associated with performance under this CSO AoI, the Government will issue a written directive or contractual document signed by the Contracting Officer with appropriate consideration established. ACC-RRAD reserves the right to modify the requirements of this CSO AoI.

The authority to issue this AoI is derived from the AFIMSC SPEED Commercial Solutions Opening FA800325SC0001., dated 16 September 2025. The CSO authority is Section 803 of the National Defense Authorization Act for FY2022, Public Law 117-807, and Class Deviation 2022-00007.

4.0 Scope of AoI

The Scope includes, but is not limited to:

- **Create integrated installation-wide planning & coordination:** all USAF installation functional organizations, operators, airspace authorities, and unmanned assets (sUAS, ASV, UGV) to eliminate siloed execution and improve mission efficiency, safety, and compliance during critical events.
- **Build an autonomous, scalable unmanned operations, BOAR framework:** that enables a minimal number of operators to control and manage maximum numbers of unmanned air, surface, and ground vehicles through automated mission execution, autonomous teaming, and swarm-capable operations.
- **Establish automated mission management & workforce optimization:** automated mission planning, platform selection, flight rotations, and launch triggers to reduce approval timelines, optimize asset utilization, and ease manpower constraints while allowing a single operator to manage multiple concurrent missions.
- **Aerospace deconfliction & airspace integration:** Provide automated airspace deconfliction by generating and submitting flight volumes and telemetry through CLUE, integrating all operational data into a Common Operating Picture (TAK), and shifting operators from manual coordination to mission oversight.
- **Sensor, vehicle, and system agnostic architecture:** Deliver an open, non-proprietary, standards-based system (e.g., MAVLink, IEEE, MIL-STD compliance) that integrates with existing USAF systems (TAK, UAS Tool, CLUE, FS-sUADS, IROC), allowing flexibility across platforms, sensors, and vendors.

4.1 AoI Background

Nearly every USAF installation has some type of sUAS program. Many installations either have or will add to their capabilities with Autonomous Surface Vehicles (ASV's) and Uncrewed Ground Vehicles (UGV's). While being governed by instructions issued by DAFMAN 11-501 (Small Unmanned Aircraft Systems Management) and DAFMAN 11-502 (Group(s) 1 and 2 Small Unmanned Aircraft Systems) instructions issued by the USAF Lead Agent for sUAS (AFSOC/A3OU) and local Concepts of Employment (CONEMPS), daily execution of the programs is conducted by installation functional organizations. As such, current execution is often planned in silos and leads to delays in operations while not delivering synergies that could be obtained by taking a more holistic, cross-functional approach to the use of all available installation-wide assets. Installations require a consolidated planning and coordination capability to integrate all functional organizations,

from individual operators to airspace approval authorities, and their owned assets into a comprehensive package that maximizes the availability and use of assets (human as well as mechanical/electronic) in a manner that promotes safety and flexibility while ensuring compliance with local and higher headquarters governance.

A comprehensive planning system allows for safer operations within the installation boundaries by ensuring physical and electromagnetic deconfliction of assets along with deconfliction of physical changes to the installation which could hinder remote operations. This is accomplished by maintaining knowledge of each functional organization's mission needs and balancing these needs against installation priorities and asset availability to assess the scope of capabilities required during any given time. Employing installation capabilities effectively allows for not only optimized use of sensors, delivery platforms and data conduits but also for an easing of staffing burdens as organizations, with advanced knowledge of planning needs, can more efficiently allocate capable personnel to both the BOAR mission and to other tasks falling outside the BOAR mission set. For example, an organization may have one or two qualified (trained and current on the type of sUAS/ASV/UGV required) sUAS operating teams available but the ops-tempo of that organization does not allow for dedicating those people full-time to an sUAS/ASV/UGV role. Autonomous mission planning would shorten the decision-making and approval timelines with the limited manpower available.

4.2 Technical/Capability Requirements

The high-level vision for BOAR is to develop a government purpose rights software framework for minimum numbers of operators controlling maximum numbers of unmanned vehicles, while providing reliable control of air space. The operators will be able to develop individual ad-hoc missions as required, as well as developing response triggers for automated airspace request and flight dispatch.

Key technical capability requirements in support of BOAR fall within three primary categories.

- Automated Mission Execution & Management
- Aerospace Deconfliction
- Sensor & System Agnostic Operations

1. Automated Mission Execution & Management

Outcome 1: The BOAR Autonomy system shall, via either manual operator initiation or automatically upon receipt of a launch trigger, establish a bi-directional connection with multiple uncrewed air, surface and/or maritime vehicles and their associated sensors for the purpose of commanding/directing their operations through autonomous teaming capability. Autonomous teaming for drones involves using AI and advanced software to enable multiple sUAS to work together collaboratively and autonomously toward a common mission at a minimum. This capability moves beyond the simple one to many "leader-follower" models to complex, coordinated tasks in dynamic environment. Autonomous swarm operations: multiple uncrewed aircraft working together intelligently to accomplish missions, with no direct human pilot control is desired.

Outcome 2: The BOAR Autonomy User Interface shall provide the capability for a single operator to manually control/direct the flight and sensor employment of a minimum of 3 distinctly separate missions simultaneously during launch/dispatch, mission activity and recovery phases.

Outcome 3: The BOAR Autonomy framework will provide automated platform selection to fit the mission need based on vehicle capability and flight endurance at a minimum. The ability to develop flight rotations to ensure mission coverage during operations exceeding the endurance of the selected vehicle is desired.

2. Aerospace Deconfliction

Outcome 1: Autonomously planned BOAR missions develop flight volume and telemetry to be transmitted via CLUE for aerospace approval, shifting the operator's role to mission confirmation rather than manual flight request creation and submission. This integration is to streamline flight approval, reduce delays, and improve efficiency by automatically generating and submitting flight approval requests within CLUE.

Outcome 2: BOAR will fuse all data received from external system feeds and manual operator inputs into an existing Common Operating Picture platform, TAK, for display on the BOAR Autonomy User Interface.

3. Sensor & System Agnostic Operations

Outcome 1: The BOAR framework shall be vehicle, sensor, system, and launch platform agnostic. Operators and installations need the flexibility to utilize a variety of sensors and not be limited to one manufacturer in a specific configuration.

Outcome 2: The BOAR framework will communicate through a non-proprietary protocol such as MAVLINK and allow for integration into the UAS Tool TAK plugin.

4.3 System Requirements

AOI will involve the following systems: Tactical Assault Kit (TAK), UAS Tool, Collaborative Low-Altitude UAS Integration Effort (CLUE), Field Static Small Unmanned Aerial Detection Systems (FS-sUADS), Installation Resilience and Operations Command and Control (IROC)

Communications, both voice and data, with and/or from the BOAR system shall be governed by current interface and protocol standards of the IEEE Standards Association and any applicable MIL-STD 188-XXX series guidance.

4.4 Aol Constraints

Vendors are expected to be cleared for access to government systems and networks necessitating a Government Common Access Card. Vendors will have the required permitting and licensing required to operate on federal properties and will obtain the proper clearance to ensure the successful operation and testing of unmanned assets.

5.0 Submission Requirements

A Spiral 1 Written Solutions Brief must be sent via e-mail submission with subject line stating Base Oversight and Autonomous Response (BOAR) sUAS Framework” to the POC listed in paragraph 6.0 by the date and time this AoI closes - [5:00 P.M. (CDT)] on 24 FEB 2026.

Spiral 1 Written Solutions Briefs received after the specified due date and time will be discarded and not be evaluated by the Government.

6.0 Points of Contact

Questions may be sent to:

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