

REQUEST FOR INFORMATION (RFI)

Notice Type: Special Notice

Synopsis: Request for Information (RFI) for Government-Off-The-Shelf (GOTS) / Non-Developmental Item (NDI) Radar Electronic Attack (EA) Systems and Commercial-Off-The-Shelf (COTS) RF Enablers for Group 2-3 Unmanned Aircraft Systems (UAS)

FEDERAL AGENCY NAME:

Department of the Air Force, Air Force Materiel Command
AFRL – Technology Transition Office
[address]

1.0 GENERAL INFORMATION

1.1 THIS IS A REQUEST FOR INFORMATION (RFI) ONLY.

This RFI is issued solely for information and planning purposes and does not constitute a Request for Proposal (RFP) or a promise to issue an RFP in the future. This request for information does not commit the Government to contract for any supply or service whatsoever. Further, the Air Force is not at this time seeking proposals and will not accept unsolicited proposals. Responders are advised that the U.S. Government will not pay for any information or administrative costs incurred in response to this RFI. All costs associated with responding to this RFI will be solely at the interested party's expense. Not responding to this RFI does not preclude participation in any future RFP, if any is issued. If a solicitation is released, it will be synopsisized on the SAM.gov website. It is the responsibility of the potential offerors to monitor this site for additional information pertaining to this requirement.

1.2 FEEDBACK.

Submission of an abstract is voluntary. Respondents are advised that AFRL is under no obligation to provide feedback with respect to any information submitted under this RFI.

1.3 REGULATORY GUIDANCE.

This publication constitutes a Request for Information (RFI) as defined in Federal Acquisition Regulation (FAR) 15.201(e), “RFIs may be used when the Government does not presently intend to award a contract, but wants to obtain price, delivery, other market information, or capabilities for planning purposes. Responses to these notices are not offers and cannot be accepted by the Government to form a binding contract.”

2.0 REQUEST FOR INFORMATION (RFI)

The Air Force Research Laboratory, Tech Transition Office AFRL/RR, in coordination with the Information and Spectrum Warfare Directorate (AFRL/RI), is seeking information from industry to improve USAF understanding of domestic market capabilities and identify qualified vendors to collaborate with. Specifically, AFRL is investigating technologies small enough to be installed on Group 2-3 unmanned aircraft systems (UAS) across two core pathways:

1. **Integrated GOTS/NDI Systems:** Existing Government-Off-The-Shelf (GOTS) or Non-Developmental Item (NDI) radar electronic attack (EA) systems that have been proven or demonstrated for military use.
2. **COTS Modular Enablers & Building Blocks:** Commercial-Off-The-Shelf (COTS) hardware, open software-defined architectures, and high-performance RF components. AFRL is highly interested in innovative commercial building blocks—including Radio Frequency System on Chip (RFSoc) technology, high-speed analog-to-digital converters, and edge compute chips—that can support receive, process, and transmit capabilities in a variety of active and passive military scenarios.

Responses to this RFI will help identify domestic (US-only) businesses with technologies and technical expertise capable of collaborating with AFRL to develop, adapt, and validate technologies as well as tactics, techniques, and procedures (TTPs) necessary to advance the degradation of threat radar capabilities.

Eligibility and Compliance (ITAR/EAR)

To protect critical defense technologies, participation in this market research is restricted to **domestic (US-only) businesses**. Respondents must demonstrate strict compliance with the **International Traffic in Arms Regulations (ITAR)** and **Export Administration Regulations (EAR)**. Foreign nationals are strictly prohibited from working on or participating in any phase of these development, integration, and evaluation efforts.

Technical Challenge

The technical challenge involves delivering robust, affordable, and lightweight radar EA capabilities, or modular RF components supporting such capabilities, within the strict Size, Weight, Power, and Cost (**SWaP-C**) constraints of Group 2-3 UAS. Target victim systems include surveillance, fire control, and missile radars.

If proposing an integrated GOTS/NDI system or a COTS component architecture, the system/hardware should support operations in all or part of the following frequency ranges:

- **Surveillance and Early Warning:**
 - **HF Band (3–30 MHz):** Over-the-horizon (OTH) radars for strategic early warning and tracking large-area air movements.
 - **VHF/UHF Bands (30–1000 MHz):** Long-range search and early warning; highly effective at detecting aircraft.
 - **L-Band & S-Band (1–4 GHz):** Long-to-medium-range volume surveillance, air traffic coordination, and initial target acquisition.
- **Tracking and Engagement:**
 - **C-Band & X-Band (4–12 GHz):** Medium-to-high resolution tracking, target illumination, and fire-control guidance for surface-to-air missiles (e.g., systems like the Sentinel or Patriot/LTAMDS radars).

For integrated systems, EA techniques of interest include basic barrage noise as well as more sophisticated methods, such as coherent techniques and collaborative cognitive control across a network of heterogeneous EA systems (e.g., an EA SWARM). For component-level COTS proposals, the hardware must be capable of supporting these complex, software-defined waveforms and active processing techniques.

Open Standards Compatibility

To ensure modularity and ease of integration into future architectures, AFRL seeks hardware and sensor solutions that are compatible with open industry and military standards, specifically:

- **Sensor Open Systems Architecture (SOSA)**
- **Open Mission Systems (OMS)**

Additionally, AFRL is seeking specific technical feedback regarding:

1. **Effective Operational Range:** For integrated systems, the physical distance envelope where the proposed EA systems are effective (conceptually active from xx km out to xx

km from the victim radar). For COTS components, the estimated operational range supportable based on achievable output power and sensitivity.

2. **Logical Pricing Structure:** Estimated cost profiles structured to allow comparison, broken down into:

- Hardware cost per unit (COTS component or GOTS system).
- Integration support based on labor categories × number of Full-Time Equivalents (FTEs).
- Development/customization costs based on labor categories × number of FTEs.

3. **Technology Readiness Level (TRL):** Identification of current TRL based on the **GAO Technology Readiness Assessment Guide** definitions for the proposed capability, along with any historical DoD or government testing conducted.

4. **Development & Demonstration Timeline:** Assessment of how quickly a prototype can be developed, tested, and demonstrated (incorporating design reviews, ground tests, and flight tests). The program targets a 3–4 year window, with the expectation that vendors can start physical prototyping and demonstrations within the 2nd to 3rd year.

5. **Existing Government Contracting Vehicles:** Identification of whether the respondent is currently performing similar work on any active DoD/government contracting vehicles, including contract numbers, contracting officers, and program managers.

3.0 REQUEST FOR INFORMATION (RFI) ABSTRACTS

3.1 CONTENT AND FORMAT

NO CLASSIFIED INFORMATION SHOULD BE INCLUDED IN THE INITIAL RFI RESPONSE. All initial submissions must be unclassified.

- **Waveform/Algorithm Restriction:** Respondents are strictly instructed **not** to submit specific jamming waveforms, threat-specific technique libraries, or proprietary algorithms that may be classified.
- **CUI Marking:** If appropriate, vendors are instructed to mark their proprietary or sensitive unclassified responses as **Controlled Unclassified Information (CUI)** in accordance with DoD guidelines.
- **Classified Submissions & Follow-ups:** If a respondent determines that a classified addendum or follow-up is necessary to provide complete and accurate information, they must state this intent in Section A of their response and coordinate with the Technical Points of Contact (TPOCs) in Section 6.0 to request a secure channel/facility for classified submission.

Responses shall be submitted in Microsoft Office Word format, double-spaced, using a font size no smaller than 11-point, and are limited to 15 pages (excluding Section A).

Submissions must be structured as follows:

- **Section A: Cover Page & Experience Summary** *(Not included in page count)*
 - Company/organization name, street address, and CAGE code (if applicable).
 - Names, emails, and telephone numbers of key points of contact (POCs). For partnerships, please provide the lead POC.
 - A brief capability statement summarizing the company's experience and expertise in electronic warfare, RF systems, or UAS integration.
 - Statement of US-only ownership/citizenship and ITAR/EAR compliance posture.
 - (Optional) Indication of request for secure follow-up to provide classified details.
- **Section B: Technical Summary** *(Subject to page limits)*
 - **Product Solution:** Detailed description of the proposed GOTS/NDI radar EA system OR the proposed COTS modular RF enablers (e.g., RFSoc boards, edge compute architectures). Explain how the offering operates within or supports the target frequency bands and technical challenges.
 - **Open Standards Compliance:** Detail how the proposed solution aligns with and implements **SOSA** and/or **OMS** open architectures.
 - **SWaP-C Compliance:** Detail the system's size, weight, power draw (average and peak), and cost demands. Explain how these physical parameters fit within the strict limits of Group 2-3 UAS, enabling the Government to evaluate host-platform compatibility and endurance impacts.
 - **EA Techniques & Capabilities:** For systems, detail the techniques utilized (e.g., barrage noise, coherent spoofing, swarming/collaborative control). For COTS components, detail the compute/processing capabilities to support software-defined EW techniques.
 - **Operational Range Performance:** Explicitly address the system's effectiveness (or component support limits) from *xx* km out to *xx* km from the victim radar, outlining any performance degradation over distance.
 - **Technology Readiness Level (TRL) & Prior Testing:** Detail the self-assessed TRL using the **GAO TRL Assessment Guide** definitions, and summarize any prior

DoD/government testing conducted on this solution.

- **Development & Prototyping Timeline:** Outline a prototype timeline showing how the design, design reviews, ground tests, and flight tests can be scheduled to support prototyping and demonstrations starting in years 2 or 3 of a 3-4 year window.
- **Structured Cost & Pricing (ROM):** Provide a Rough Order of Magnitude (ROM) structured logically as follows:
 1. Hardware cost per unit.
 2. Integration support (labor categories × FTEs).
 3. Anticipated development costs (labor categories × FTEs).
 4. Estimated life-cycle costs.
- **Existing Contracting Vehicles:** List any active DoD/government contracting vehicles under which similar work is being performed, including contract numbers, contracting officers, and program managers.
- **Air Force Advantage:** Explain the potential operational and strategic advantages of your solution to the USAF.

3.2 ADDITIONAL INFORMATION

The submitted documentation and content thereof becomes the property of the U.S. Government and will not be returned. It does not commit the Government to reply to information received.

3.3 PROPRIETARY INFORMATION

This notice is part of Government market research. Information received as a result of this request will be considered as sensitive and will be protected as such. Responses to this RFI should not include any proprietary information, and the level of distribution should be clearly marked on all included information. The Government will safeguard all information received and protect it from unauthorized disclosure. If a response requires proprietary information to be included for completeness, the responder should contact the Submission point of contact prior to responding to the RFI.

4.0 SPECIAL CONSIDERATIONS

Multiple abstracts within the scope of this RFI announcement may be submitted by each responder.

5.0 SUBMISSION

RFI abstract responses are due 6 Nov 2026, 1700 EST

6.0 AGENCY CONTACTS

Verification of government receipt or questions of a technical nature can be directed to the cognizant technical points of contact (TPOCs):

- **Primary TPOC:** 2d Lt Ian Xu, ian.xu.1@us.af.mil
- **Secondary TPOC:** Maher, John, john.maher.2@us.af.mil
- **Secondary TPOC:** Zulch, Peter, peter.zulch@us.af.mil

Questions of a contractual or business nature shall be directed to the cognizant Contracting Officer:

- **Contracting Officer:** Ryan Sims
- **Email:** ryan.sims.2@us.af.mil