SOURCES SOUGHT SYNOPSIS (SSS)/ REQUEST FOR INFORMATION (RFI)

Unmanned Threat Emitter (UMTE) X Band Transmitter

19 May 2026

1. SYNOPSIS

The Air Force Life Cycle Management Center (AFLCMC), WNRC Directorate, Hill Air Force Base (HAFB), Utah is conducting market research seeking vendor interest for Unmanned Threat Emitter (UMTE).

This is a Request For Information (RFI) only. This RFI is issued solely for market research purposes. It 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 (AF) is not seeking proposals, nor will it accept unsolicited proposals at this time.

Respondents are advised that the United States 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. It is the responsibility of the potential offerors to monitor the Government's point of entry (www.sam.gov) for additional information pertaining to this requirement.

2. PURPOSE

The Government is conducting market research to identify potential industry sources capable of providing solutions to consolidate and replace obsolete, single-function transmitter systems. Currently, the Government relies on multiple ground-based threat emitter platforms (designated TK-1, TK-2 and TK-4) which utilize legacy transmitters.

These systems are facing diminishing manufacturing sources and material shortages (DMSMS), increasing sustainment costs, and excessive Size, Weight, Power, and Cooling (SWaP-C) footprint. The current configurations include:

- **TK-1 (1A and 1B), TK-4 (4A and 4B):** Utilize one Magnetron and one CW Klystron transmitter.
- **TK-2 (2A and 2B)**: Utilize two Magnetron transmitters.
    - **1A** 7.8-8.5 GHz, 85 dBm/325 kW peak power

- **1B** 6.95-7.00 GHz, 58 dBm/600W CW
- **2A** 14.6-15.2 GHz, 84 dBm/225 kW peak power
- **2B** 12.8-13.3 GHz, 350 kW peak power
- **4A** 2.9-3.0 GHz, 89 dBm/800 kW peak power
- **4B** 750-800 MHz, 75.5 dBm/37 kW peak power

The objective of this RFI is to explore current commercial off-the-shelf (COTS), modified COTS, or developmental technologies that can combine the functionalities of these legacy systems into a single, modernized, and supportable framework. The desired end-state is to remove obsolescence while utilizing one common transmitter.

3. ANTICIPATED CONTRACT ELEMENTS

The contract type has yet to be determined. However, it is anticipated that it will include a contract type mix of Firm Fixed Price (FFP) and Cost-Plus Fixed Fee (CPFF). There will be labor Contract Line-Item Numbers (CLINs), data deliverable CLINs. Other Direct Costs (ODCs) are anticipated.

4. SCOPE/REQUIREMENTS

Interested vendors are requested to provide a white paper or capability statement addressing the following areas, with the goal of meeting or exceeding the key performance parameters listed below:

- **Operating Frequency:** 6.5 GHz to 15.5 GHz
- **Ant Gain:** 36.2 dBi to 43.7 dBi
- **Power Amplifier (PA) Power Out:** 250 W and 53.98 dBm
- **Wave Guide Loss:** 1.15 dB
- **Effective Radiated Power (ERP):** A threshold of 85 dBm, with an objective of >88 dBm.
- **Pulse Width (PW):** 0.3 to 100 µSec.
- **Pulse Repetition Interval (PRI):** Minimum of 2.0 µSec.
- **Power:** Compatible with the existing 20kW nominal output power source.

Please address the following in your response:

- **Technical Approach:** Describe the proposed system architecture (e.g., TWT, GaN, or other solid-state solution) to consolidate the multiple legacy transmitters into a single unit. Include details on frequency coverage, waveform compatibility, output power capabilities, and modulation schemes.
- **SWaP-C Impact:** Provide estimated Size, Weight, Power, and Cooling metrics for the proposed solution. Highlight expected SWaP-C reductions and confirm compatibility with the existing pedestal footprints.
- **Interoperability & Open Architecture**: Detail how the solution aligns with a Modular Open Systems Approach (MOSA). Describe how the system will integrate with the existing pedestal/servo systems, RECU, baseband equipment, cryptographic devices, and legacy antenna infrastructures. A new, wide-band antenna and waveguide may be required.
- **Technology Readiness Level (TRL):** Identify the current TRL of the core technology and the proposed system. Provide an estimated timeline and roadmap to achieve TRL 8/9 for operational deployment
- **Sustainment & Obsolescence Management:** Explain the strategy for mitigating future DMSMS issues, supporting open-hardware initiatives, and maintaining the system over a 15-year lifecycle.
- **Cost and Schedule Estimates (ROM):** Provide a Rough Order of Magnitude (ROM) cost estimate for the proposed solution. This ROM should be for budgetary and planning purposes only. Please break down the estimate to the best of your abilities in the following categories:
    - **Unit Cost:** ROM for the proposed transmitter system, assuming an initial purchase of 23-25 units.
    - **Non-Recurring Engineering (NRE):** Anticipated NRE Costs for design, development and integration effort.
    - **Installation and Integration:** Estimated costs for on-site installation and checkout
    - **Schedule:** Provide a high-level notional schedule for the design, production and delivery of the first units.

5. ORGANIZATIONAL CONFLICT OF INTEREST

Organizational Conflict of Interest (OCI), as defined and discussed in FAR 9.5, *Organizational and Consultant Conflicts of Interest*, is a concern in all acquisitions across the Department of Defense. Early involvement with our industry partners is a key element of the OCI process, and it is critical for the Government to be able to identify any potential OCI issues as early as possible for acquisition. This would allow ample time to address and evaluate any potential OCI issues, if required, prior to contract award with minimal impact to critical acquisition schedules.

Interested Offerors are requested to evaluate any potential OCI issues regarding this requirement for modernized UMTE transmitters, and the contractor is encouraged to identify any OCI issues, as stated in FAR 9.5 to the Contracting Officer (CO). This will assist the CO in determining if the contractor will need to submit an OCI Mitigation Plan for any solicitation that might result from this notice.

6. ADDITIONAL ADMINISTRATIVE INFORMATION REQUESTED

The Contractor's RFI response shall be:

- **Page Limit:** 10 pages or less (cover page is not included in page count)
- **Format:** Submissions must be provided in PDF
- **Font:** One (1)-inch margins; Times New Roman 12 font
- **Classifications:** All responses must be UNCLASSIFIED. If proprietary data is included, it must be clearly marked

Provide the following business information for your company/institution and for any teaming or joint venture partners.

- **Company Name**
- **Address**
- **Point of Contact**
- **CAGE Code**
- **Phone Number**
- **E-mail Address**
- **Web Page Address**
- **Central Contractor Registration (CCR) (Yes/No)**
- **Specify whether your company is a U.S. or foreign-owned firm**
- **North American Industry Classification System Code (NAICS Code)**

- Recommend
Note: All interested contractors must be registered in SAM to be eligible for award of Government contracts. The Government reserves the right to consider a small business set-aside based upon responses hereto for any subsequent action.

Due Date: Responses **should be submitted electronically** to the Contracting Officer, Heather Ball, heather.ball@us.af.mil **by 18 July 2026, 1700, MST**. **Late responses may not be reviewed.**

7. SUBMISSIONS/QUESTIONS

If submitting company proprietary information or competition sensitive information, please make sure it is CLEARLY MARKED. To aid the Government, please segregate proprietary information to the maximum extent possible. All segregated proprietary information will be protected by the Government.

- What is your experience in providing the capability to accomplish the objective/requirements listed above? Include contract numbers, a brief description of the work performed, period of performance, agency/organization supported, and individual points of contact (Contracting Officers or Program Managers).
- How would the prime contractor account for government furnished property (GFP) in the possession of the prime, and all sub-contractors, in accordance with the Financial Improvement and Audit Readiness (FIAR) program?
- Does your company currently have any teaming agreements in place that will allow for successfully meeting the Government's requirements? In addition, please identify the roles associated with the teaming arrangement.
- Discuss any documents or data you will require to complete the objectives listed above, and briefly explain their purpose.
- What are the top five risks you see in accomplishing this effort?
- Provide a description of similar services offered to the Government and to commercial customers for the past three years.
- How long would it take you to submit a proposal?
- Provide other relevant topics, concerns, or information not addressed in this posting.

8. DISCLAIMER

THIS IS AN RFI ONLY. The information provided in this RFI is subject to change and is not binding on the Government. The AF has not made a commitment to procure any of the items or services discussed above, and release of this RFI should not be construed as such a commitment or as an authorization to incur cost for which reimbursement would be required or sought. All submissions become Government property and will not be returned.

Any questions should be directed to the Contracting Officer as identified above.

Attachment:
Legacy Transmitter Parameters
Legacy UMTE Drawing