Request for Information (RFI) - Air Force Life Cycle Management Center (AFLCMC) Advanced Aerial Refueling (AAR) Family of Systems (FoS)

Section I. Description

June 17 2022, Air Force Advanced Aerial Refueling (AAR) Family of Systems (FoS) Request for Information

Section II. Purpose/Background/Scope

Purpose: This is a Request for Information. The Air Force Materiel Command (AFMC), Air Force Life Cycle Management Center/Mobility and Training Aircraft Directorate (AFLCMC/WL) seeks vendor capability information in support of market research being conducted by AFLCMC/WLQ.

Responses to this notice are not offers and cannot be accepted by the Government to form a binding contract. This RFI constitutes neither a Request for Proposal (RFP), nor does it restrict the Government to an ultimate acquisition approach. This RFI should not be construed as a commitment by the government for any purpose. Requests for a solicitation will not receive a response. The government will not reimburse contractors for any cost associated with preparing or submitting a response to this notice. The government may, at its sole discretion, post and/or disseminate information submitted in response to this RFI in a public forum. Therefore, proprietary information and/or trade secrets shall not be included in responses. Advisory and Assistance Services (A&AS) contractors will be reviewing data submitted in response to this RFI; respective A&AS employees have standard Non-Disclosure Agreements available to the cognizant Government contracting offices.

This RFI will identify technologies to develop, integrate, test, and field new capabilities into the current and future tanker fleet. The respondents will not constrain technology readiness levels (TRL), integration timelines, or cost estimates at this time. Respondents will also identify the ability to accelerate technologies that are in the early stages of development.

Background: The USAF seeks to increase the tanker fleet's capabilities through integration of new technologies or adaptation of existing technologies on the KC-46 and KC-135. Tankers must incorporate broad operational enhancement and survivability capabilities, such as

connectivity/interoperability, real-time situational awareness (SA), and self-protection to meet future operational plan (OPLAN) and National Military Strategy requirements. Employing an AAR FoS approach enables near-term operational capability solutions to be incorporated into the current tanker fleet at the earliest opportunity, and identifies potential solutions that require further investment, development, and technology maturation.

Scope: This RFI is seeking industry input to identify potential capabilities/technologies for integration into the AAR FoS. Interested companies shall respond in accordance with (IAW) Section IV of this document. The Government will assess capability statements IAW the requirements set forth in Section III of this RFI notification.

AAR FoS is an evolutionary approach to add new capability to the current tanker fleet (KC-46A/KC-135R/T), while developing the overall requirements for a new tanker aircraft. The FoS process provides the Air Force a dual-path approach to most effectively implement solutions that improve tanker fleet operations.

Some new and mature technology capabilities will be integrated into the current fleet through product improvement programs. Other new technology capabilities in earlier stages of development will continue development and maturation through various Government and industry efforts.

Current and future tankers will be required to effectively command, control, and communicate globally, navigate accurately in degraded environments, and perform at a high operations tempo in contested environments. These FoS capabilities should provide connectivity: resilient line of sight (LOS) and beyond line of sight (BLOS) airborne connectivity with the future Joint All-Domain Command and Control (JADC2) environment; open architecture design, federated systems & data streams; and alternate positioning, navigation, and timing (PNT) options. These FoS capabilities should be threat informed to enhance survivability and mission effectiveness: increased situational awareness that enhances situational understanding, on-board electronic warfare (EW)/electronic attack (EA) and provide interoperability with off-board Autonomous Collaborative Platforms. These FoS capabilities should provide tankers agility: facilitating/expediting quick-turn operations, improved fuel efficiency, improved maintenance procedures, improved airfield access, reduced maintenance and logistics support requirements.

The combined AAR FoS paths of integrating available technology into the current fleet, along with continued maturation of additional new technologies, will help shape the requirements for future tanker aircraft.

Section III. Minimum Requirements: Typical capabilities/technologies may involve, but are not limited to, the following:

- Survivability (kinetic and non-kinetic defensive systems)
- Real-time Situational Awareness
- Connectivity/Data
- Interoperability
- Autonomous refueling operations as both tanker or receiver to manned and unmanned platforms in both boom and drogue configurations

Section IV. Instructions to Respondents:

If your company is interested in submitting information related to this acquisition, please note the following timeline and instructions.

Timeline:

RFI Release: June 17, 2022

Information Packages Due: July 1, 2022

All interested contractors must be registered in SAM.gov in order to be eligible for award of Government contracts.

Instructions:

1. If your company decides to respond to this RFI, please complete the questions below with typed responses and email to Jessica Cook, Jessica.cook.8@us.af.mil, (937-656-9168) and Sarah Izor, Sarah.izor@us.af.mil, (937-656-9356). Please use read and delivery receipts. Classified responses may be submitted to AMC/A8Z: Maj Sarah Spies, (618-229-4842), Maj Michael Dobransky, (618-256-8975), and Mr. Billy Watkins, (618-256-8026). Please call one of these individuals if a classified response warranted.
2. Please provide "whitepapers" on technology-specific solutions, practices/experience IAW the instructions in Section VI below.
3. Proprietary information/trade secrets shall not be included in the company response.

4. Interested companies shall submit responses below, tailored to the requirements on 8 ½" x 11" pages with the font no smaller than 10 point. Any supporting literature from your organization must be identified as such and explain what it supports.
5. All responses will be UNCLASSIFIED, however; if responses are at the CLASSIFIED level, please contact the points-of-contact in section 1 of these instructions.
6. Email submissions either directly to the Contracting Officers or via DoD-Safe are encouraged.

Any further questions regarding this RFI shall be directed to Jessica Cook, Jessica.cook.8@us.af.mil, (937-656-9168) and Sarah Izor, Sarah.izor@us.af.mil, (937- 656-9356).

Section V. Company Information:

The Government requests a response to the following:
1. Please provide the following business information for your company and for any teaming or joint venture partners:

   - Company Name
   - Address
   - Point of Contact
   - CAGE/DUNS Code
   - Phone Number
   - E-mail Address
   - Web Page URL
   - Based on the North American Industry Classification Systems (NAICS) Code 541512, Computer System Design Services size standard of 1500 employees, state whether your company is:

     - Small Business (Yes/No)
     - Woman Owned Small Business (Yes/No)
     - Small Disadvantaged Business (Yes/No)
     - 8 (a) Certified (Yes/No)
     - HUBZone Certified (Yes/No)
     - Veteran Owned Small Business (Yes/No)
     - Service- Disabled Veteran- Owned Small Business (Yes/No)
     - System for Award Management (SAM) (Yes/No)*

Section VI. Questions:

Please provide whitepaper(s) for each proposed solution. Whitepaper(s) shall not exceed five pages in length.

1. Describe your proposed solution and the specific capabilities/technologies of Section III that your solution is addressing.

   a. In describing your proposed solution, please provide any description as to whether your company considered any form of known standardized interface and/or open systems architecture structure

2. What is the TRL of the proposed technology? Provide justification for assessment.

3. Provide performance characteristics.

4. What are the estimated cost(s)? Please provide details on development, integration, production, and sustainment costs.

5. Provide estimated development, integration, and production schedules. Are there any schedule constraints (e.g., long lead, testing facilities, test equipment, etc.)?

6. Discuss your process for addressing any fit, form, function, and/or interface issues that may arise out of this effort.

7. Has the proposed solution been used in any U.S. DoD or non-DoD applications, or on any foreign partner's military or commercial aircraft?

8. Describe your approach to conducting test and evaluation in conjunction with government developmental and operational test organizations.