

**BROAD AGENCY ANNOUNCEMENT
FA8650-21-S-2205, Call 0001
Air Force Research Laboratory
Aerospace Systems Directorate, Aerospace Vehicles Division**

BROAD AGENCY ANNOUNCEMENT TITLE: Collaborations for Innovative Research on Aerospace Structure (CIRAS)

BROAD AGENCY ANNOUNCEMENT NUMBER: FA8650-21-S-2205

PROPOSAL CALL ANNOUNCEMENT (Call) TITLE: Qualifying Additively Manufactured Airframe Structure (QAMAS)

PROPOSAL CALL ANNOUNCEMENT (Call) NUMBER: 0001

I. PROGRAM DESCRIPTION

Background:

All requirements of Broad Agency Announcement (BAA) FA8650-21-S-2205 apply unless specifically amended and addressed in this Call. The baseline BAA contains information applicable to all Calls issued under the BAA and provides information on the overall program, proposal preparation and submission requirements, proposal review and evaluation criteria, award administration, agency contacts, etc.

The BAA consists of a Two-Step process. This Call is the FIRST STEP.

This Call is a request for White Papers.

The objective of the Call is to foster innovative research in technology and methods to understand design considerations for AM parts for primary structures to cost effectively address two of these five requirements: (3) developing mechanical properties and design allowables, and (4) verifying that the performance of the final parts is predictable. The initial focus would be for limited life (attritable) aircraft with only hundreds of hours of life or less. Following those results, the focus would shift to typical Air Force operations with thousands of hours of life or more.

Call is specific to additive manufacturing (AM). Focus areas include the following:

- The size, shape, orientation, frequency, and location of discontinuities in the part,
- Anisotropy of strength and fatigue properties, and
- Residual stresses.

See Attachment 1, Statement of Objectives, for more information.

Also, for planning purposes, the following information is provided:

Estimated Program Cost: \$300,000

Schedule: The total anticipated period of performance is 24 months; (21 months technical period of performance 3 months delivery of final report).

First Step (White Paper) Instructions:

- a. General: The *FIRST STEP* requests a white paper and a rough order of magnitude (ROM) cost. The white paper shall include a discussion of the nature and scope of the research and the offeror's proposed technical approach. The Government will review the white papers in accordance with the *FIRST STEP* Peer or Scientific Review criteria, set forth in Section II below. Based on this review, the Government will determine which of them have the potential to best meet the Air Force's needs. Offerors will be notified of the disposition of their white paper. It is anticipated that Government review of the white papers submitted will take **30** working days. Those offerors submitting white papers assessed as meeting Air Force needs will be asked to submit a technical and cost proposal. Those offerors not requested to submit a technical and cost proposal will be notified but may, however, still elect to submit a technical and cost proposal. An offeror submitting a proposal without first submitting a white paper **will not** be eligible for an award. The cost of preparing white papers in response to this Solicitation is not considered an allowable direct charge to any resulting or any other contract; however, it may be an allowable expense to the normal bid and proposal indirect cost as specified in FAR 31.205-18.

- b. Page Limitation: The White Paper shall be limited to 5 pages, prepared and submitted in Word format. Font shall be standard 10-point business font Arial. Character spacing must be "normal," not condensed in any manner. Pages shall be double-spaced (must use standard double-space function in Microsoft Word), double-sided (each side counts as one page), 8.5 by 11 inches, with at least one-inch margins on both sides, top and bottom. All text, including text in tables and charts, must adhere to all font size and line spacing requirements listed herein. Font and line spacing requirements do not have to be followed for illustrations, flowcharts, drawings, and diagrams. These exceptions shall not be used to circumvent formatting requirements and page count limitations by including lengthy narratives in such items. Pages shall be numbered starting with the cover page being Page 1, and the last page being no greater than Page **5**. The page limitation covers all information including indices, photographs, foldouts (counted as 1 page for each 8.5 by 11 portion) tables, charts, appendices, attachments, resumes, etc. The Government will not consider pages in excess of these limitations.

Offerors should submit the White Paper electronically (email) to the Contracting POCs, identified in the Overview Information.

- c. Format: The white paper will be formatted as follows:
- (1) Section A: BAA Number, Title of Program, Name of Company, Business Size, Company's Commercial and Government Entity (CAGE) number, Dun & Bradstreet (D&B) Data Universal Numbering System (DUNS) number, Contracting POC and Technical POC with appropriate telephone numbers, fax numbers, and email addresses for the POCs.
 - (2) Section B: Period of Performance and Task Objectives;
 - (3) Section C: Technical Summary and Proposed Deliverables; and
 - (4) Section D: Cost of Task (Rough Order of Magnitude (ROM)).
 - (5) Section E: Quad Chart. The Quad chart should include Objective, Description of Effort, List of Related Accomplishments/Research Efforts/Contracts, Program Technical Approach, Challenges, Benefits of Proposed Technology, Major Goals/Milestones by FY, Cost by FY, Contact Information. See Attachment 4 for the Quad chart Guidance and Template. The Quad Chart Guidance includes font and text formatting.
- d. Technical Portion: The technical portion of the white paper shall include a discussion of the nature and scope of the research and the offeror's proposed technical approach/solution. It may also include any proposed deliverables. Resumes, descriptions of facilities and equipment, a proposed Statement of Work are not required at this point.
- e. Cost Portion: The cost portion of the white paper shall include a ROM cost estimate. No detailed price or cost support information should be forwarded; only a time-phased bottom line figure should be provided.
- f. Other Information: Multiple white papers within the purview of this announcement may be submitted by each offeror. If the offeror wishes to restrict its white papers, they must be marked with the restrictive language stated in FAR 52.215-1(e).

II. White Paper Review Information

FIRST STEP – White Paper Peer or Scientific Review Criteria: The Government will review White Papers to determine which of them have the potential to best meet the Air Force's needs based on the following criteria, which are listed in **equal** order of importance:

- a. Is the technical approach consistent with the technologies listed in the BAA?
- b. Is the research of interest to the Government?

c. Is appropriate funding available?

III. White Paper Reminders:

- a. **Step One:** White Papers are due to the Contracting POC.
- b. **Step One:** White Papers are due per individual Call announcement.
- c. **Step One:** White Paper page limits are strictly enforced.
- d. **Step One:** White Papers must be submitted in the format specified.

IV. WHITE PAPER DUE DATE AND TIME:

White papers are due 25 August 2021 NLT 2:00 pm. Local time.

V. White Paper Submission Information:

Due to COVID-19 and the current state of telework, white papers are to be sent **via electronic means only** to the following individuals:

- a. **Contract Negotiator (Primary POC):** Ms. Joycelyn Roux, AFRL/RQKPC, joycelyn.roux@us.af.mil
- b. **Contracting Officer (Secondary POC):** Ms. Jodonna Alvarez, AFRL/RQKPC, jodonna.alvarez@us.af.mil

If the interested party anticipates the white paper will contain Controlled, Unclassified, Information, then the interested party must request a DoD SAFE link drop from the above 2 individuals no later than 7 days prior to receipt of white papers.

ATTACHMENT:

Attachment 1: Call 0001, Statement of Objectives (SOO)