

ADVANCED RESEARCH ANNOUNCEMENT (ARA) WITH CALLS
FA9453-21-S-0001
Air Force Research Laboratory/Space Vehicle Directorate

ANNOUNCEMENT OVERVIEW

CALL 007
17 JANUARY 2023

NAICS Code: The NAICS Code for this acquisition is **541715** for Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology), and the small business size standard is **1,000** employees.

Federal Agency Name: Air Force Research Laboratory, Space Vehicles Directorate and Directed Energy, Phillips Research Site

ARA Title: Space Technology Advanced Research - Fast-tracking Innovative Software and Hardware (STAR-FISH), Announcement, procurement for experimentation of space-flight and space-related signal, energy, and transportation technologies.

ARA Number: FA9453-21-S-0001

CALL Type: Two-Step Process, initial announcement

- a. **CALL Title:** Topic Area 1, Joint Emergent Technology Supplying On-Orbit Nuclear power (JETSON) Low Power Mission Application
- b. **CALL Number:** 007

White Papers and/or Proposal Due Date and Time: The Government is requesting White Papers at this time for the Topic Area identified above. White Papers addressing any other technology area identified in the basic Advanced Research Announcement (ARA) will not be accepted at this time unless a CALL for that specific area is posted. White Papers or proposals received after the due dates and times shall be governed by the provisions of FAR 52.215-1(c)(3). It should be noted that this installation observes strict security procedures to enter the facility. These security procedures are NOT considered an interruption of normal Government processes, and white papers or proposals received after the stated date and time in the CALL as a result of security delays will be considered “late.” Furthermore, if offerors utilize commercial carriers in the delivery of white papers or proposals, they may not honor time-of-day delivery guarantees on military installations. **Early submission is encouraged.**

Brief CALL Summary: See attachment 1, Statement of Objective “Joint Emergent Technology Supplying On-Orbit Nuclear power (JETSON) Low Power Mission Application”

Submission: Two-Step Process

- First Step: The due date and time for White Papers submitted in response to this CALL is **no later than (NLT) 17 February 2023, 12:00 PM (Mountain Standard Time (MST))**.

White Papers must be prepared using the provided Template, saved as a PDF and submitted via DoD Safe, (<https://safe.apps.mil/>) **NLT 17 February 2023, 12:00 PM (Mountain Standard Time (MST))**.

In order to submit the White Papers, please contact the Contracting Officer's, Shawn Capehart, email: shawn.capehart@spaceforce.mil, and Daniel "DJ" Alvarado, email: daniel.alvarado.12@spaceforce.mil, no later than three (3) work days prior to the submission deadline to receive a DoD Safe drop-off request. A drop-off request is valid for 14 days. Offerors will receive an automated email containing the instructions for uploading the file(s). If you did not receive an automated e-mail message for your drop-off request within 3 business days, please contact the Contracting Officer.

The Template can be accessed and downloaded from the following link: https://valideval.com/star_documents/ (please download a new copy of the template prior to submitting your white paper to ensure that you have the most current version.). Please note that for this call; the maximum length is 11 pages vs the stated 6 pages. **No classified white paper submission will be accepted.**

- Second Step: Proposal Due Date and Time – To be provided in "Requests for Proposals (RFP)" sent to offerors whose white papers are selected.

Announcement Request: Air Force Research Laboratory, Space Vehicles Directorate, Kirtland Air Force Base is soliciting white papers on the research effort described in Attachment 1 Statement of Objectives pursuant to the authority of 10 U.S.C. 2373, Procurement for Experimental Purposes.

Announcement Modifications: Reference ARA with CALLS, FA9453-21-S-0001, Announcement Overview and Full Text.

Type of Contract/Instrument: The Air Force anticipates awarding **Cost-Plus Fixed Fee contracts** as a result of this CALL, but also reserves the right to award the instrument best suited to the nature of research proposed.

Anticipated Number of Awards: The Air Force anticipates awarding one or more contracts. However, the Air Force does reserve the right to make one award, more than one award, or no awards pursuant to this CALL.

System for Award Management (SAM) Registration: Reference ARA with CALLS, FA9453-21-S-0001, Announcement Overview.

Points of Contact:

Technical Manager (Primary): Lt Col Thomas Nix, AFRL/RVS, thomas.nix@spaceforce.mil

Program Manager (Alternate): Mr. Michael Lopez, AFRL/RVS,
michael.lopez.44@spaceforce.mil

Contracting Officer (Primary): Mr. Shawn Capehart, AFRL/RVK,
shawn.capehart@spaceforce.mil

Contracting Officer (Alternate): Mr. Daniel “DJ” Alvarado, AFRL/RVK,
daniel.alvarado.12@spaceforce.mil

ADVANCED RESEARCH ANNOUNCEMENT WITH CALLS

FA9453-21-S-0001

Air Force Research Laboratory/Space Vehicle Directorate

FULL TEXT ANNOUNCEMENT

CALL 007

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Program Description:

1. Statement of Objectives/Description of Technical Areas:

Areas from the ARA with CALLS, FA9453-21-S-0001, Full Text:

Topic Area 1. Space Vehicle functionality and logistics: Enhance core spacecraft components and subsystems to enable game-changing improvements in agility, resilience, affordability, and performance for DoD spacecraft

See attachment 1, Statement of Objectives “Joint Emergent Technology Supplying On-Orbit Nuclear power (JETSON) Low Power Mission Application”

- 2. Announcement Modifications:** Reference ARA with CALLS, FA9453-21-S-0001, Announcement Overview and Full Text.

3. Deliverable Items:

- a. Data: See attached DD Form 1423-CDRLs dated 10 May 2021 (Attachment 2)
- b. Final Report: Final Scientific and Technical Report to be delivered under each award, 3 months after the end of the technical effort.

4. Other Requirements:

- a. Program Security Classification: It is anticipated that this effort will be performed at the Controlled Unclassified Information (CUI) level.

- b. OPSEC: Reference ARA with CALLS, FA9453-21-S-0001, Full Text, Section 4, paragraph b.
- c. Export Control: Reference ARA with CALLS, FA9453-21-S-0001, Full Text, Section 4, paragraph c.
- d. Export-Controlled Items: Reference ARA with CALLS, FA9453-21-S-0001, Full Text, Section 4, paragraph d.

ATTENTION: The anticipated contract will be structured as follows:

Base Effort – white papers must describe the overall approach for developing a conceptual design of an radioisotope power system driven spacecraft that addresses the technical objectives described in the Statement of Objectives (See Attachment 1).

Rough Order Magnitude (ROM) costs must be included for each individual phase of the effort.

5. Other Information:

- a. Government Furnished Property (GFP): GFP is not anticipated on this call. However, Government Property may be provided upon written request and if required. Reference ARA with CALLS, FA9453-21-S-0001, Full Text, Section 5, paragraph a.
- b. Base Support: Base Support is not anticipated on this CALL. However, Base Support may be provided upon written request and if required. Reference ARA with CALLS FA9453-21-S-0001, Full Text, Section 5, paragraph b.
- c. Available Base Facilities: Available Base Facilities is not anticipated on this CALL. However, Base Facilities may be provided upon written request and if required. Reference ARA with CALLS, FA9453-21-S-0001, Full Text, Section 5, paragraph c.
- d. Overseas Performance: Overseas Performance is not anticipated on this call.
- e. Data Rights Desired: The Government desires Unlimited Rights. Reference ARA with CALLS, FA9453-21-S-0001, Full Text, Section 5, paragraph e.

I. Award Information

1. Anticipated Number of awards: The Air Force anticipates awarding one or more contracts. However, the Air Force does reserve the right to make one award, more than one award, or no awards pursuant to this CALL.

2. Anticipated Award Date: Anticipated award date around June 2023.

3. Anticipated Funding: Anticipated funding for this CALL (not per contract or award) is as follows:

| | |
|---------|--------------|
| FY 2022 | \$16,000,000 |
| FY 2023 | \$0 |
| Total | \$16,000,000 |

This funding profile is an estimate only and will not be a contractual obligation for funding. Offerors should note that full funding for this effort is uncertain and may be largely affected by government fiscal year budgets that are yet to be established. The Government reserves the right to select all, part, or none of the proposals received in response to this CALL, subject to the availability of funds. All funding is subject to change due to government discretion and availability of funds.

4. Schedule: The period of performance for individual awards (base effort) resulting from this CALL is as follows:

| | |
|---------------------------------------|-----------|
| End of Technical Effort Not to Exceed | 24 Months |
| Plus (+) 3 Months of Final Report | 3 Months |
| Total Period of Performance | 27Months |

5. Within Scope Award Modifications: Reference ARA with CALLS, FA9453-21-S-0001, Full Text, Section I, paragraph 5.

6. Points of Contact:

Mr. Shawn Capehart (Primary)
Contracting Officer
AFRL/RVK
Kirtland AFB, NM 87117
shawn.capehart@spaceforce.mil

Mr. Daniel "DJ" Alvarado (Alternate)
Contracting Officer
AFRL/RVK
Kirtland AFB, NM 87117
daniel.alvarado.12@spaceforce.mil

Technical Manager:
Lt Col Thomas Nix
AFRL/RVS
thomas.nix@spaceforce.mil

Program Manager:
Mr. Michael Lopez
AFRL/RVS
michael.lopez.44@spaceforce.mil

II. Eligibility Information

- 1. Eligible Offeror:** Reference ARA with CALLS, FA9453-21-S-0001, Section II, paragraph 1.
- 2. Cost Sharing or Matching:** Cost Sharing or Matching is not required on this call.
- 3. Federally Funded Research and Development Centers:** Reference ARA with CALLS, FA9453-21-S-0001, Section II, paragraph 3.
- 4. Government Agencies:** Reference ARA with CALLS, FA9453-21-S-0001, Section II, paragraph 4.
- 5. Foreign Participation:** Foreign-Owned Offerors are not authorized to propose to this CALL as prime contractor.

The technology within this topic is restricted under the International Traffic in Arms Regulation (ITAR), 22 CFR Parts 120-130, which controls the export and import of defense related material and services, including export of sensitive technical data, or the Export Administration Regulation (EAR), 15 CFR Parts 730-774, which controls dual use items. U.S. Offerors must disclose any proposed use of foreign nationals (FNs), their country(ies) of origin, the type of visa or work permit possessed, and the statement of work (SOW) tasks intended for accomplishment by the FN(s). Offerors are advised FNs proposed to perform may be restricted under U.S. Export Control Laws due to the nature of the technical data. The Government may also require Offerors to provide additional information to assist the Government in evaluating the FNs.

Reference ARA with CALLS, FA9453-21-S-0001, Section II, paragraph 5.

- 6. Export Control:** Reference ARA with CALLS, FA9453-21-S-0001, Section II, paragraph 6.

III. White Paper and/or Proposal Submission Information

- 1. Overview:** This Announcement consists of Two-Step Process described in detail below. White papers and full proposals if requested by the Government—shall be submitted in accordance with the ARA with CALLS, FA9453-21-S-0001 and in accordance with the CALL 007.

The Government anticipates white papers and proposals will be **unclassified**.

Due to the dynamically evolving nature of US warfighter space needs, this announcement is subject to updates, revisions, or additional topic areas. Therefore, Offerors are highly encouraged to continually monitor Contract Opportunities (<https://sam.gov/>) to ensure they receive latest guidance to this announcement.

2. Two-Step (White Paper and Proposal) Submission Information

First Step (White Paper) Instructions:

- a. General: The *FIRST STEP* requests a white paper and a rough order of magnitude (ROM) cost estimate. All white papers may be kept on file for one year. 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. White Paper Format: White papers shall be submitted using the Microsoft Word Template located at the following link: https://valideval.com/star_documents/. Download the template, follow the instructions, save the white paper as a searchable PDF file (e.g. Adobe Acrobat® 7.0 or later), and submit document no later than (NLT) **12:00 PM MST 23 January 2023**. The Template may be revised from time to time, so please download a new copy prior to submitting your white paper to ensure that you have the most current version. **Please note that for this call; the maximum length is 11 pages vs the stated 6 pages. White papers that do not follow the most current version of the Template will be rejected with no further action from the Government.** DO NOT deliver any classified white papers to the email address listed above. Do not submit “zipped” files. If files contain links, the links must be intact and maintained through all revisions. Files shall not be read/write/password protected (i.e., must be unlocked, non-password protected, and/or unprotected).
- c. White Paper ROM Cost: Reference ARA with CALLS, FA9453-21-S-0001, Section III, paragraph 3(c).
- d. Other Information: Reference ARA with CALLS, FA9453-21-S-0001, Section III, paragraph 3(d).
- e. White Paper/Proposal Content Summary: Reference ARA with CALLS, FA9453-21-S-0001, Section III, paragraph 3(e).
- f. White Paper/Proposal Content Summary: Reference ARA with CALLS, FA9453-21-S-0001, Section III, paragraph 3(f).

Second Step (Proposal) Instructions: Reference ARA with CALLS, FA9453-21-S-0001, Section III, paragraph 3.

IV. Review Information

1. **Evaluation Criteria:** Reference ARA with CALLS, FA9453-21-S-0001, Section IV, paragraph 1.
2. **Relative Importance of Evaluation Criteria:** Reference ARA with CALLS, FA9453-21-S-0001, Section IV, paragraph 2.
3. **White Paper Review and Selection Process:** Reference ARA with CALLS, FA9453-21-S-0001, Section IV, paragraph 3.
4. **Proposal Review and Selection Process:** Reference ARA with CALLS, FA9453-21-S-0001, Section IV, paragraph 4.

V. Award Administration Information

1. Award Notices: Reference ARA with CALLS, FA9453-21-S-0001, Section V, paragraph 1.

VI. Other Relevant Information

Paragraphs 1-14: Reference ARA with CALLS, FA9453-21-S-0001, Section VI

2 ATTACHMENTS:

Attachment 1 Statement of Objectives for Topic Area

Attachment 2 DD Form 1423, Contract Data Requirements Lists (CDRLs)