SPACE ENVIRONMENT TECHNOLOGIES AND SCIENCE (SETS)
BROAD AGENCY ANNOUNCEMENT (BAA)
FULL TEXT ANNOUNCEMENT

18 December 2023

NAICS: 541715 Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)

FEDERAL AGENCY: Air Force Research Laboratory, Geospace Environment Impacts and Applications Branch, 3550 Aberdeen Avenue SE, Kirtland AFB, NM 87117.

BROAD AGENCY ANNOUNCEMENT TITLE: Space Environment Technologies and Science (SETS) Program

BROAD AGENCY ANNOUNCEMENT TYPE: Closed BAA with Calls, One-Step or Two-Step

PROPOSAL DUE DATE AND TIME: This BAA will remain for a period of 8 years from the date of publication. **NO PROPOSALS OR WHITE PAPERS SHOULD BE SUBMITTED AGAINST THIS BASELINE BAA**. Proposal or white paper due dates and times will be specified in each Call. Proposals or white papers received after the due date and time specified in the Call shall be governed by the provisions of FAR 52.215-1(c)(3). It should be noted that Air Force observes strict emailing security procedures. These email security procedures are NOT considered an interruption of normal Government processes, and proposals or white papers received after the above stated date and time because of security delays will be considered “late”.

GENERAL INFORMATION:

I. **PROGRAM DESCRIPTION:**

A. **Statement of Objectives:** The Air Force Research Laboratory (AFRL) Space Vehicles Directorate (RV) Geospace Technologies Division (RVB) Geospace Environment Impacts and Applications Program is seeking sources capable of supporting the program’s research in space and environmental impacts technologies. Additionally, the program is interested in understanding and quantifying the impact of the space environment on Department of Defense and national security systems and in achieving a capability to specify, predict, mitigate, and exploit the effects of the space environment that can disrupt or degrade operational systems. Topics of particular interest include advanced environmental observing systems and specification and prediction models of solar activity, ionospheric conditions, magnetospheric activity, thermosphere, satellite drag and the reentry environment, cislunar environment, effects on communication, command, and control systems; effects on positioning, navigation, and timing (PNT) systems; effects on radar systems, and effects on spacecraft. Sources that enable future operational systems to meet performance, reliability, maintainability, supportability, and affordability goals, or which enhance performance or significantly reduce cost, schedule, or risk of existing technologies, are of particular interest.

The Space Environment Technologies and Science (SETS) Program encompasses 5 technical areas which may be used in any combination per Call. These technical areas are as follows:

Topic Areas:

1. **Solar, Solar Wind, and Ionospheric Effects**
   The focus is to improve specification and prediction models of ionospheric conditions and phenomena that impact radio frequency signals such as for communications, PNT, and radar systems. Develop and couple advanced solar models with other space environment models such as ionospheric models to improve prediction capabilities. Develop novel approaches to and improve space- and ground-based solar, heliospheric, ionospheric, and magnetospheric instrumentation/data necessary to drive the models. Determine detailed association between environmental conditions and specific impacts on space systems and services. Characterize occurrences of specific environmental effects on space systems and services. Model the dynamics of the equatorial, subauroral, auroral, and polar ionosphere including small scale and irregular structure. Research and development of active experiment techniques, devices, delivery systems, diagnostics, models, and systems impacts.
2. **Thermosphere, Satellite Drag and the Reentry Environment**
   The focus is to develop empirical and physics-based models, sensors, and data products to accurately specify and forecast the neutral atmosphere and satellite drag to identify space objects that orbit the Earth, to provide precision orbit determination and prediction, including reentry predictions, to assess the likelihood of collisions.
3. **Plasma Physics and Chemistry**
   The focus is to investigate a variety of plasma states, from collisional to magnetized, as well as a variety of compositions, including typical atmospheric species as well as exotic neutral and ionized species and their reactions. Investigate plasma chemistry as related to the fundamentals of catalysis and energetic materials.
4. **Particle Effects and Radiation Belt Environment**
   The focus is to specify and predict effects of charged particles on space operations. Improve models of the fluxes of radiation belt and plasma particles in space for use in space system design, mission planning, and other applications of climatological specification. Improve models and analysis of spacecraft charging. Conduct laboratory work in materials and interactions with the environment. Analyze space effects experiment results such as those from the DSX mission. Multi-phenomenology monitoring to provide asymmetric force advantage in sensing, assessment, and attribution of threats and hazards. Develop novel technologies to protect low Earth orbiting (LEO) satellites from the effects of high-altitude nuclear explosions (HANE). Investigate radio waves, specifically very low frequency, propagation in the radiation belt environment. Advance understanding of the interplay between waves and particles that underlie radiation belt dynamics, enabling better specification, forecasting, and mitigation.

5. **Cislunar Environment**
   The focus is to develop models, sensors, and data products to accurately specify and forecast the Cislunar plasma and radiation environment in order to support the design and operation of vehicles in the cislunar environment depending upon orbit. Investigate environmental phenomenology of the Near-lunar environment including the radiation and plasma environment in the lunar wake as well as dust fountaining.

B. **Deliverable Items:** Hardware, software, or data will be identified at the Call level. The following data deliverables are representative of the types of data that may be required:

Final Scientific and Technical Reports

1. Hardware created
2. Software Created
3. Significant End Items
4. Monthly or Quarterly Status/Financial Reports
5. Monthly or Quarterly Technical Reports
6. Computer Program Documentation/Software User Manuals
7. Computer Program/Software source code
8. Presentation Materials
9. Patent Reports
10. Prototypes.

Data deliverables are subject to negotiations on each individual award.

C. **Schedule:** The period of performance will be stated in the Call.

D. **Organizational Conflict of Interest (OCI):** Organizational Conflict of Interest, if applicable, will be determined and addressed at the Call level.

E. **System for Award Management (SAM):** Unless an exemption in FAR 4.1102 applies, all offerors must:

1. Be registered in the System for Award Management (SAM) prior to submitting a white paper or proposal
2. Maintain an active SAM registration with current information at all times during the active award
3. Provide its Unique Entity Identification number in each application or proposal it submits to the agency

On-line registration instructions can be accessed from the SAM home page at www.sam.gov. Potential offerors that are notified to be eligible for an award must submit annual Electronic Representations and Certifications via the System for Award Management (SAM) website. These FAR and DFARS level representations and certifications are required in addition to the representations and certifications included in each Call. Before submitting the Electronic Representations and

Certifications, contractors must be registered in the Systems for Award Management (SAM) Database.

II. AWARD INFORMATION

A. **Anticipated Funding:** Anticipated funding for the program (not per contract or award):

FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	TOTAL
$6M	$12.3M	$12.1M	$12.5M	$13.4M	$14M	$14M	$14M	$98.5M

This funding profile is an estimate only and not a contractual obligation for funding. All funding is subject to change due to Government discretion and availability. Potential offerors should be aware that due to unanticipated budget fluctuations funding in any or all areas may change with little or no notice.

B. **Anticipated Number of Awards:** The Air Force anticipates awarding a minimum of one contract per specific Call. However, the Air Force does reserve the right to make multiple awards or no awards pursuant to a Call.

C. **Anticipated Period of Performance:** The period of performance will be determined for each contract award based on the requirements of the effort.

D. **Funding Restrictions:** The cost of preparing white papers and/or proposals in response to a Call is not considered an allowable direct charge to any resulting contract or any other contract but may be an allowable expense to the normal bid and proposal indirect costs specified in FAR 31.205-18(c), Independent Research and Development and Bid and Proposal Costs.

III. ELIGIBILITY INFORMATION

A. **Eligible Offeror**: This acquisition is unrestricted. All responsible sources capable of satisfying the Government's needs may submit a proposal or white paper. Small Businesses, Historically Black Colleges (HBCU), Minority Institutions (MI), Small Disadvantaged Business (SDB), Woman-Owned Businesses, and Service-Disabled Veteran-Owned Businesses are encouraged to submit; however, no part of this announcement will be a set-aside. Foreign or foreign-owned offerors are advised that their participation is subject to foreign disclosure review procedures. Foreign or foreign-owned offerors should immediately contact the contracting office point of contact identified in the Call for information if they contemplate responding. See paragraph E of this section for more details. All correspondence must reference the BAA number, the BAA title, and the Call number.

B. **Federally Funding Reseearch and Development Centers (FFRDCs):** DoD-sponsored FFRDCs that function primarily as research laboratories may respond to solicitations and announcements (Section 217, Pub. L. 103-337) (DFARS 235.017-1).

The following guidance is provided for other DoD sponsored and non-DoD sponsored FFRDCs contemplating submitting a proposal, as either a prime or subcontractor, against this BAA. FAR 35.017-1(c) (4) prohibits an FFRDC from competing with any non-FFRDC concern in response to a Federal agency request for proposal for other than the operation of an FFRDC. There is no regulation prohibiting an FFRDC from responding to a solicitation or announcement. However, the FFRDC's sponsoring agency must first make a determination that the effort being proposed falls within the purpose, mission, general scope of effort, or special competency of the FFRDC and that determination must be included in the FFRDC's proposal. In addition, the non-sponsoring agency must make a determination that the work proposed would not place the FFRDC in direct competition with domestic private industry. Only after these determinations are made would the FFRDC's eligibility to receive an award be considered.

C. **Government Agencies:** If a government agency is interested in performing work, it should contact the Program Office and Contracting Office identified in the Call. If those discussions result in a mutual interest to pursue the agency's participation, the effort will be pursued independent of this Broad Agency Announcement.

D. **Security Classifications:** Depending on the work to be performed, the Offeror may require a classified facility clearance and safeguarding capability; therefore, personnel identified must be cleared for access to information at the equivalent level of security at the time of award. In addition, the Offeror may be required to have, or access to, a certified and Government-approved facility to fulfil awarded work requirements. If a DD Form 254 is applicable, it will be specified in the Call with the applicable FAR clause. Offerors must verify their Cognizant Security Office information is current with Defense Counterintelligence and Security Agency (DCSA) at https://www.dcsa.mil/.

   Calls are anticipated to be unclassified. For Calls requiring access to classified information, offerors must have a valid U.S. security clearance of SECRET or higher in order to respond to the Calls because the Calls may include information classified at the SECRET or higher level which will be released only to offerors possessing the appropriate clearance. All classified material will be handled in accordance with E.O. 13526, National Industrial Security Program Operating Manual (NISPOM) DoD 5220.22-M, Industrial Security Regulation (DoD 5220.22-R), DoDM Industrial Security Program 5200.01 Volume 1 through 4, and AFI 16-1406.

E. **Foreign Participation:**

   1. Foreign or foreign-owned Offerors are advised that their participation is subject to foreign disclosure review procedures. Foreign or foreign-owned Offerors should immediately contact the contracting office focal point identified in the Call for information if they contemplate responding. Foreign contractors will not be permitted to participate at the prime contractor level if it is determined that the acquisition requires access to classified information.

   2. AFRL Policy on Employment of Non-US Citizen Contractors applies to this BAA. Contractor employees requiring access to USAF and/or USSF bases, AFRL facilities, and/or access to U.S. Government Information Technology networks in connection

with the work on this contract must be U.S. citizens. Possession of a permanent resident card ("Green Card") does not equate to U.S. citizenship. This requirement does not apply to foreign nationals approved by the U.S. Department of Defense or U.S. State Department under international personnel exchange agreements with foreign governments. Any waivers to this requirement must be granted in writing by the Contracting Officer prior to providing access. The above requirements are in addition to any other contract requirements related to obtaining a Common Access Card (CAC).

F. **Export Control:** Information involved in this research effort is subject to Export Control (International Traffic in Arms Regulations (ITAR) 22 CFR Parts 120-130, or Export Administration Regulations (EAR) 15 CFR Parts 730-774). A Certified DD Form 2345, Militarily Critical Technical Data Agreement, will be required to be submitted with the proposal. As prescribed by DFARS 225.7901-4, DFARS 252.225-7048, "Export-Controlled Items (JUN 2013)" will be contained in ALL resulting contract awards.

   DFAR 252.225-7048 Export Controlled Items (June 2013), is incorporated into this announcement and any contracts resulting from the Calls issued under this BAA.

G. **Government Furnished Property (GFP):** GFP, if applicable, will be identified at the Call level. If applicable, the contractor is responsible for all costs related to making the property available for use, such as payment of all transportation, installation, or rehabilitation costs in accordance with FAR 45.201(b).

   If GFP is included in the Call or requested in the white paper and/or proposal, the following clauses/provisions apply:

   i. FAR 52.245-1 Government Property (SEP 2021) or FAR 52.245-1, Alt II (APR 2012)
   ii. FAR 52.245-9 Use and Charges (APR 2012),
   iii. DFARS 252.211-7007 Reporting of Government-Furnished Property (MAR 2022),
   iv. DFARS 252.245-7001 Tagging, Labeling, and Marking of Government-Furnished Property (APR 2012),
   v. DFARS 252.245-7002 Reporting Loss of Government Property (JAN 2021)
   vi. DFARS 252.245-7003 Contractor Property Management System Administration (APR 2012)
   vii. DFARS 252.245-7004 Reporting, Reutilization, and Disposal (DEC 2017).

H. **Contractor Acquired Property (CAP)**: Offerors may propose CAP as necessary to fulfill the Government's need. Offerors should be aware that the Government will cross-check any proposed CAP with Government inventory for availability.

   The following clauses may be incorporated into any contracts requiring CAP as a result from this announcement:

   i. FAR 52.245-1 Government Property (SEP 2021)
   ii. DFARS 252.211-7003 Item Unique Identification and Valuation (JAN 2023)
   iii. DFARS 252.245-7004 Reporting, Reutilization, and Disposal (DEC 2017)

I. **Government Furnished Information (GFI):** GFI, if applicable, will be identified at the Call level.

If applicable, technical data or computer software provided to the Contractor as Government-furnished information (GFI) under this contract may be subject to restrictions on use, modification, reproduction, release, performance, display, or further disclosure. The Contractor will take all reasonable steps to protect the technical data or computer software against any unauthorized release or disclosure. GFI provided could consist, but not limited to Technical Specifications, Manuals, Drawings, Test Data, and Software.

If GFI is included in the solicitation or requested in the proposal, the following clause applies:

DFARS 252.227-7025 Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends applies (JAN 2023)

J. **Base Support /Network Access:** Base support/Network Access may be provided under any resulting contract and will be specified in the individual Call.

K. **Data Rights:** Will be identified at award; Potential data rights that may be required are:

i. Technical Data: Unlimited Rights or Government Purpose Rights
ii. Non-Commercial Software (NCS): Unlimited Rights or Government Purpose Rights
iii. NCS Documentation: Unlimited Rights or Government Purpose Rights
iv. Commercial Computer Software Rights: Customary License, etc.
v. Third Party Software (Commercial and Noncommercial)

The terms Unlimited Rights, Government Purpose Rights, Limited Rights and Specifically Negotiated License Rights in technical data are as defined in DFARS Clause 252.227-7013. The terms Unlimited Rights, Government Purpose Rights, Restricted Rights and Specifically Negotiated License Rights in NCS and NCS documentation are as defined in DFARS Clause 252.227-7014. The term Commercial Computer Software is as defined in DFARS Clause 252.227-7014.

AFRL is engaged in the discovery, development and integration of warfighting technologies for our air, space and cyber forces. As such, rights in technical data and non-commercial software (NCS) developed or delivered under any resulting contracts are of significant importance.

Per DFARS 227.7103-1, DoD policy is to acquire only the technical data and the rights in that data, necessary to satisfy agency needs.

Technical data, NCS and NCS documentation developed with mixed funding are expected to be delivered with at least Government Purpose Rights. Offerors that propose delivery of technical data, NCS, or NCS documentation subject to Government Purpose Rights should fully explain what technical data, NCS, or NCS documentation developed with costs charged to indirect cost pools and/or costs not allocated to a

Government contract will be incorporated, how the incorporation will benefit the project, and address whether those portions or processes are segregable.

Offerors are reminded that completion of DFARS Clause 252.227-7017 Identification and Assertion of Use, Release or Disclosure Restrictions (JAN 2023) is required under DFARS Clause 252.227-7013 Rights in Technical Data – Other Than Commercial Products and Commercial Services (MAR 2023) and DFARS Clause 252.227-7014 Rights in Other Than Commercial Software and Other Than Commercial Computer Software Documentation (MAR 2023). Data rights offered other than "Unlimited Rights," as defined in DFARS 227.7103-5, should be identified in DFARS Clause 252.227-7017. If no data rights are being asserted state "none" in the assertions. Assertions must be completed with specificity in regard to each item, component or process listed. Nonconforming assertions lists will be rejected.

DFARS Clause 252.227-7014(d) describes requirements for incorporation of third-party computer software (commercial and noncommercial). Any commercial software to be incorporated into a deliverable must be clearly identified in the proposal. Many commercial software licenses may not be acceptable to the Government, therefore commercial software licenses proposed for delivery to the Government must be approved by the Contracting Officer prior to award.

IV. APPLICATIONS AND SUBMISSION INFORMATION

A. General Application Package Information:

Proposals or white papers shall **NOT** be submitted against this baseline BAA. Individual Calls will be announced in SAM.gov with instructions to submit a response.

Do **NOT** submit classified information in the white paper or proposal. If submission of classified materials is contemplated, please immediately contact the contracting office point of contact identified in the Call for specific instructions for submitting a classified addendum.

Offerors that include in their white paper or proposals data that they do not want disclosed to the public for any purpose or used by the Government should mark restriction on disclosure and use of data. Technical and cost volumes should be submitted as separate volumes and must be valid for 180 days. Technical and cost volumes must reference the BAA announcement number **FA9453-23-R-X001**, Call number, and relevant research topic area(s).

Offerors should monitor SAM.gov regularly for any BAA amendments that may permit extensions to the proposal submission date or make other changes. Offerors are advised that only contracting officers are legally authorized to contractually bind or otherwise commit the Government.

The cost of preparing a response to Calls issued under this BAA are 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 costs as specified in FAR 31.205-18.

B. White Papers (two-step process) Content and Form of Submission:

1. Instructions White Paper Technical Volume:

a. White papers should capture innovative and technically sound approach to accomplish the Call's objective(s) and/or advances in knowledge, understanding, technology, and state-of-the-art. After the review of white papers, the Government will determine whether a formal proposal will be requested based on the evaluation criteria listed in section V, White Paper Evaluation Criteria. Offerors of those white papers evaluated as satisfying the technical merit factor (Section V, paragraph B) and for which it is determined there is sufficient funding available, will be sent a letter Request for Proposal (RFP) to submit a formal technical and cost/business proposal by the contracting point of contact. An RFP does not assure an offeror of a subsequent contract award. White papers not selected for full proposal submission will be disposed/destroyed in a manner that protects proprietary data.

b. Any questions concerning the white paper preparation shall be referred to the Contracting POC cited in the Call.

2. White Paper Cost/Business Volume (two-step process):

You may be ineligible for award if all requirements of this solicitation are not met on the whitepaper and/or proposal due date. The Cost/Business section which includes the ROM should provide top-level details on major cost items such as labor, special equipment that will need to be purchased, materials, and any subcontracts or other organizations' costs (to include Government furnished facilities, equipment, or personnel) for the proposed effort. The ROM cost section shall not exceed one page.

3. **White Paper Format:**

a. The white paper Technical volume shall be limited to five (5) pages unless otherwise stated in the Call and shall be prepared and submitted in Microsoft Word file format (cover page does not count towards the 5 page limit).
b. The white paper Cost/Business volume is limited to one (1) page Including the Rough Order of Magnitude (ROM) unless otherwise stated in the Call and shall be prepared and submitted in Microsoft Excel file format with formulas included.
c. Paper Size – 8.5 inch x 11 inch
d. Margins – one-inch on each side
e. Font - Calibri 11+ point font or equivalent to include tables, diagrams, and charts.
f. Any other information (e.g. captions, restrictive markings) shall not be smaller than Calibri 10 point font or equivalent.

Submission instructions will be stated in the individual Call.

C. **Proposal Content and Form of Submission (one-step process):** You may be ineligible for award if all requirements of this solicitation are not met on the white paper and/or proposal due date. Reference Section VIII for a checklist of the proposal requirements.

1. **Technical Proposal:** The proposal shall include a discussion of the following information: creative or innovative and technically sound approach to accomplish the Call's objective(s) and/or advances in knowledge, understanding, technology, state-of-the-art, and rationale of the offeror's technical approach and the relevance to the Space Vehicle Directorate mission area(s).

The Offeror shall provide any information on prior work in the topic areas, descriptions of available equipment, data and facilities as attachments to the technical proposal. This information will be used in the proposal evaluation to help determine the soundness of the technical approach. This volume shall include a Contractor Statement of Work (CSOW) detailing the technical tasks proposed to be accomplished under the proposed effort. The CSOW shall not have any company proprietary information contained within the document.

If Government Furnished Property is requested, please submit the following information with your offer:

a) A list or description of all Government property that the offeror or its subcontractors propose to use. The list shall identify the accountable contract under which the property is held and the authorization for its use (from the contracting officer having cognizance of the property).
b) The dates during which the property will be required for use (including the first, last, and all intervening months), and for any property that will be used concurrently in performing two or more contracts, the amounts of the respective uses in sufficient detail to support prorating the rent.
c) The amount of rent that would otherwise be charged in accordance with FAR 52.245-9, Use and Charges, and be used in the management of Government property, or existing property management plans, methods, practices, or procedures for accounting for property.
d) The voluntary consensus standard or industry leading practices and standards to be used in the management of Government property or existing property management plans, methods, practices, or procedures for accounting for property.

Any questions concerning the technical proposal or SOW preparation shall be referred to the contracting POC identified in the Call.

2. **Cost/Business Proposal (one-step process):**

a) Separate the proposal into a cost section and business section. The business section should contain all business aspects to the proposed contract such as: resumes of personnel who will be participating in this effort, contractual instrument type, and any exceptions to terms and conditions of the announcement, any information not technically related, etc. Provide rationale for exceptions. Identify any technical data that will be delivered with less than unlimited rights. Cost proposals have no page limitations; however, offerors are requested to keep cost proposals under 100 pages as a goal. The proposal shall be furnished with supporting schedules and shall contain a labor hour breakdown per task.
b) Subcontracting plans for efforts anticipated to exceed $750,000 shall be submitted along with the technical and cost proposals. Reference FAR 19.704,

DFARS 219.704, for subcontracting plan requirements. Small businesses are exempt from this requirement.

c) All direct costs (labor, material, travel, computer, etc.) as well as labor and overhead rates should be provided by contractor fiscal year (CFY). A separate breakout by Government Fiscal Year (GFY) is not required.
d) Submit fully-disclosed electronic cost spreadsheets with formulas. Include rate table for all direct and indirect rates that feed into the cost element summaries.

3. **Proposal Format (one-step process):**

a) The technical proposal shall be limited to thirty (30) pages unless otherwise stated in the Call and shall be prepared and submitted in Microsoft Word file format. The Statement of Work (SOW) does not count against the page limit (cover page does not count towards the 30page limit).
b) Cost/Business proposals have no page limitations; however, offerors are requested to keep cost proposals under 100 pages as a goal (Cost break-outs should be submitted in Microsoft Excel file format with the formulas, all other information should be provided in Microsoft Word).
c) Paper Size – 8.5 inch x 11 inch
d) Margins – one-inch on each side
e) Font - Calibri 11+ point font or equivalent, to include tables, diagrams, and charts. Any other information (e.g. captions, restrictive markings) shall not be smaller than Calibri 10 point font or equivalent.
f) The Technical proposal page limit does not include the offeror's proposed SOW; however, the same formatting rules apply to the SOW, which is limited to ten (10) pages.

Submission instructions will be stated in the individual Call.

D. **Proposal Submission Dates and Times:** Proposals submitted shall be in accordance with this announcement and any instructions in the individual Call for proposals. Proposals should be submitted in accordance with any modifications or amendments of the full text BAA and Call. Proposals received after the due date and time specified shall be Governed by the provisions of FAR 52.215-1(c)(3).

E. **Data Right Assertions:** It is anticipated that all data delivered under any resulting award will be delivered with unlimited rights; however, different rights may be negotiated as appropriate. The Offeror shall identify data rights assertions, licenses, patents, etc. that apply to any proprietary materials, technical data, products, software, or processes to be used by the prime or subcontractor(s) in the performance of this program and shall address acquisition of data rights or licenses or expected recoupment of development costs for those proprietary items that will be integral to any contracts awarded under this BAA. Any data delivered or anticipated to be delivered with less than unlimited rights must be reported in a separate, appropriately marked appendix to the final report of any awarded contract resulting from this BAA.

F. **Science & Technology (S&T) Program Protection** - For Proposal Responses Only Offerors that are submitting proposals shall submit as a part of the proposal submission:

1. A completed Standard Form (SF 424), Research and Related Senior/Key Person Profile (Expanded) Form for all Senior/Key Personnel proposed; and,
2. A Completed Security Program Questionnaire. Offerors may be asked to provide a mitigation plan for any identified S&T Protection risks. The Government reserves the right to determine an offeror unawardable on the grounds of unacceptable S&T Protection risk based on its review of the SF 424 and Security Program Questionnaire.

By submitting a proposal, the offeror certifies that it is in compliance with Section 223(a) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 which requires that: (a) the Principal Investigator (PI) and other key personnel certify that the current and pending support provided on the proposal is current, accurate and complete; (B) agree to update such disclosure at the request of the agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award; and (c) the PI and other key personnel have been made aware of the requirements under Section 223(a)(1) of this Act. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. code, Title 218, Section 1001). This is not required for white paper submissions.

G. **Other Submission Requirements:** Proposals must be submitted to the Contracting Point of Contact identified at the Call level.

V. EVALUATION CRITERIA AND APPLICATION REVIEW INFORMATION

A. **General Information:** Evaluations will vary based upon a one-step or two-step approach. Evaluations of Proposal/White Papers will be conducted by a peer or scientific review process using the criteria described below.

B. **White Paper Evaluation Criteria (two-step process):** The following criteria will be used to determine if a formal proposal will be requested. The Offeror's White Paper must satisfactorily address the Technical Merit factor identified below for the ROM to be evaluated for affordability. White papers that satisfy both the Technical Merit and affordability factors will be sent a Request for Proposal. The Government reserves the right to select all, part, or none of the white paper.

1. **Overall Scientific and Technical Merit:** The technical aspect is first order of priority and shall be evaluated based on the following criteria that are of equal importance. Offeror demonstrates innovation, knowledge, and application of state-of-the-art methods and/or technologies. Offeror provides problem statement, objectives and deliverables that are clearly defined. Objectives and expected results are anchored by theory, analysis, or data. Assumptions are logical, reasonable, and appropriate.

2. **Affordability:** Rough Order of Magnitude (ROM) cost estimate will be evaluated to determine if it is appropriate for the expected benefit. ROM's will be evaluated to determine if there is sufficient funding available. White papers that satisfy the technical merit and affordability factor and for which sufficient funding is determined to be available will be evaluated as affordable.

C. **White Paper Review and Selection Process (two-step process):** White papers will be evaluated and categorized as follows:

1. **Best Value:** Scientifically and technically sound approach relevant to mission needs and funding available.
2. **Valuable:** Scientifically and technically sound approach relevant to mission needs but no funding available.
3. **Not Recommended:** Not a scientifically and technically sound approach and/or not relevant to mission needs.

D. **Proposal Evaluation Criteria (one-step process):** The following criteria, which is listed in descending order of importance, will be used to determine whether one or more sources should be recommended for award. The Government reserves the right to select all, part, or none of the proposal received in response to a Call for award subject to the availability of funds.

1. **Overall Scientific or Technical Merit:** The technical aspect is first order of priority and shall be evaluated based on the following criteria that are of equal importance. Offeror demonstrates innovation, knowledge, and application of state-of-the-art methods and/or technologies. Offeror provides problem statement, objectives and deliverables that are clearly defined. Objectives and expected results are anchored by theory, analysis, or data. Assumptions are logical, reasonable, and appropriate.

2. **Relevance To Mission Needs Outlined in Topic Area Description:** The offeror must demonstrate that the proposed effort is logically mapped to one or more topic area needs. Offerors must demonstrate that the proposed effort provides valuable contribution to meeting one or more topic area needs. Offerors must demonstrate that the benefits appropriately off-set identified risks. The offer must demonstrate that the proposed cost meets mission needs.

3. **Soundness of The Offeror's Technical Approach:** The offeror must demonstrate that the technical approach is defined, logical and feasible. The offeror must provide a schedule, speed of delivery (tech readiness date) and required resources that are reasonable and appropriate. The offeror must provide proposed results that are measurable and testable. Offeror must demonstrate that key staff have appropriate qualifications to perform proposed effort.

E. **Proposal Review and Selection Process (one-step process):** Proposals will be evaluated and categorized as follows:

1. **Highly Recommended:** Well-conceived scientifically and technically sound proposal pertinent to accomplish goals and objectives. Proposals are recommended for acceptance (subject to availability of funds) and normally are displaced only by other Highly Recommended proposals.
2. **Selectable:** Scientifically or technically sound proposals that may need additional development. Proposals are recommended for acceptance if sufficient funding is

available, but at a lower priority than Highly Recommended proposals. To ensure a diversity of approaches, a Selectable proposal may be prioritized over a Highly Recommended proposal if the Selectable proposal presents a unique approach unlike any of the Highly Recommended proposals.

3. **Not Selectable:** Proposal is not technically sound or does not meet agency needs. Even if sufficient funding existed, the proposal will not be funded.

Prior to award of a potentially successful offer, the Contracting Officer will make a price fair and reasonableness and cost realism determination.

When the Government elects to award only part of a proposal, the selected part may be categorized as Highly Recommended or Selectable although the proposal as a whole may not merit such a categorization.

The Government reserves the right to change the evaluation criteria for a specific Call, if the evaluation criteria differs from the above, it will be stated in the Call.

VI. AWARD ADMINISTRATION INFORMATION

Award Notices: Offerors will be notified whether their proposal is recommended for award in writing. The notification of recommendation for award is not to be construed to mean the award of a contract is assured as availability of funds and successful negotiations are prerequisites to any award.

VII. AGENCY CONTACTS

Any correspondence must reference the BAA title and number. Questions of a technical nature shall be directed to the technical point of contact, as specified below:

Name: Capt. Tyler B. Hussey
Address: AFRL/RVBX
3550 Aberdeen Avenue
Kirtland AFB, NM 87117
Telephone: 505-853-6364
Email: tyler.hussey.1@us.af.mil

Questions of a contractual/business nature shall be directed as specified below:

Name: Mr. Ever Orozco-Perea, Contract Specialist
Address: AFRL/RVKB
3550 Aberdeen Avenue
Kirtland AFB, NM 87117
Telephone: 505-853-8173
Email: ever.orozco-perea@spaceforce.mil

Name: Mrs. Jessica Perez, Contracting Officer
Address: AFRL/RVKB
3550 Aberdeen Avenue
Kirtland AFB, NM 87117
Telephone: 505-846-0938

Email: jessica.perez.23@us.af.mil

Each Call will also include specific technical and contracting points of contact.

Ombudsman: The Ombudsman clause, DAFFARS 5352.201-9101 Ombudsman (JUL 2023) will be contained in any contracts resulting from Calls under this BAA. The AFRL Ombudsman is:

Ombudsman: Director of Contracting, HQ AFRL/PK.
Alternate Ombudsman is the Deputy Director of Contracting, HQ AFRL/PK.
Please send an email to afrl.pk.workflow@us.af.mil with the subject of “Ombudsman.”

VIII. OTHER INFORMATION

A. **Support Contractors:**

1. The Air Force Research Laboratory's Directed Energy (RD) and Space Vehicles (RV) Directorates have contracted for various business and staff support services some of which require contractors to obtain administrative access to proprietary information submitted by other contractors. Administrative access is defined as "handling or having physical control over information for the sole purpose of accomplishing the administrative functions specified in this contract or order, which do not require the review, reading, or comprehension of the content of the information on the part of non-technical professionals assigned to accomplish the specified administrative tasks."

2. The required administrative access will be granted to non-technical professionals. Examples of the administrative tasks performed include:

    a) Assembling and organizing information for R&D case files;
    b) Accessing library files for use by government personnel in the RD and RV Directorates; and

3. Offerors shall either complete paragraph (4) below or provide written objection to administrative access. Any objection to administrative access:
    a. Shall be provided in writing to the contracting officer within 10 days of RFP (or PRDA, BAA, etc., as appropriate) issuance; and
    b. Shall include a detailed statement of the basis for the objection.

4. I consent to administrative access, as defined above, by RD and RV business and staff support services contractors to any proprietary information submitted under this solicitation or delivered under any resulting contract.

B. **Communication:** Dialogue between industry and Government representatives is encourages prior to Call releases. After a Call has been released, communication and questions will be accepted in writing via email to the designated Government points of contact listed within the Call. Discussions with any of the points of contact shall not

constitute a commitment by the Government to subsequently fund or award any proposed effort. Only Contracting Officers are legally authorized to commit the Government.

C. **Wide Area Work Flow Notice:** Any contract award resulting from this announcement will contain the clause at DFARS 252.232-7003, Electronic Submission of Payment Requests and Receiving Reports (DEC 2018), which requires electronic submission of all payment requests. The clause cites three possible electronic formats through which to submit electronic payment requests. Effective 01 October 2006, the Department of Defense adopted Wide Area Work Flow (WAWF) as the electronic format for submission of electronic payment requests. Any contract resulting from this announcement will establish a requirement to use WAWF for invoicing and receipt/acceptance and provide coding instructions applicable to this contract. Contractors are encouraged to take advantage of available training (both web-based and through your cognizant DCMA office) and to register in the WAWF system. Information regarding WAWF, including the web-based training and registration, can be found at https://wawf.eb.mil/. WAWF requirement does not apply to Universities that are audited by an agency other than DCAA.

D. **Forward Pricing Rate Agreements:** Offerors who have forward pricing rate agreements (FPRA's) and forward pricing rate recommendations (FPRR's) should identify them in their proposal.

E. **Pre-Award Clearance:** Pursuant to FAR 22.805, a pre-award clearance must be obtained from the U.S. Department Of Labor, Employment Standards Administration, Office Of Federal Contract Compliance Program's (OFCCP) prior to award of a contract (or subcontract) of $10,000,000 or more unless the contractor is listed in OFCCP's National Pre-award Registry http://www.dol-esa.gov/preaward. This registry indicates that the contractor has been found to be "in compliance" within the past two years with The Equal Employment Opportunity (EEO) regulations that the OFCCP is mandated to enforce. The registry is updated nightly and facilities reviewed more than 2 years ago are removed and new ones are added. Award may be delayed if you are not currently listed in the registry and the contracting officer must request a pre-award clearance from the OFCCP.

F. **Limitations on Pass-Through Charges:** As prescribed in FAR 15.408(n)(1) & 15.408(n)(2), provisions 52.215-22, "Limitations on Pass Through Charges – Identification of Subcontract Effort (OCT 2009)," and 52.215-23, "Limitations on Pass-Through Charges (JUN 2020)," are contained in this solicitation. Any contract valued greater than the threshold for cost or pricing data threshold, except fixed price contracts awarded on the basis of adequate price competition resulting from this solicitation, shall contain the Clause at FAR 52.215-23 (or Alt I).

G. **Associate Contractor Agreements:** Associate Contractor Agreements (ACAs) are agreements between contractors working on Government contracts that specify requirements for them to share information, data, technical knowledge, expertise, or resources. The contracting officer may require ACAs when contractors working on

separate government contracts must cooperate, share resources, or otherwise jointly participate in working on contracts or projects. Prime contractor to subcontractor relationships do not constitute ACAs. For each award, the contracting officer will identify associate contractors with whom agreements are required.

H. **Post-Award Small Business Program Representation:** As prescribed in FAR 19.308, FAR Clause 52.219-28, "Post-Award Small Business Program Representation (SEP 2023)," is incorporated by reference in this solicitation. This clause will be contained in any contracts resulting from this solicitation. This clause requires a contractor to represent its size status when certain conditions apply. The clause provides detail on when the representation must be complete and what the contractor must do when a representation is required.

I. **Employment Eligibility Verification:** As prescribed by FAR 22.1803, FAR Clause 52.222-54, Employment Eligibility Verification (MAY 2022), is hereby incorporated by reference in this solicitation. Any contract awarded as a result of this BAA that is above the $150,000 and contains a period of performance greater than 120 days shall include this clause.

J. **Reporting Executive Compensation and First-Tier Sub-contract Awards:** As prescribed by FAR 4.1403(a), FAR 52.204-10 Reporting Executive Compensation and First-Tier Subcontract Awards (JUN 2020) is hereby incorporated by reference in this solicitation. Any contract valued at $25,000 or more, excluding classified contracts or contractors with individuals, must contain this clause.

K. **Updates of Publicly Available Information Regarding Responsibility Matters:** Any contract award that exceeds $500,000.00; and when an offeror checked "has" in paragraph (b) of the provision FAR 52.209-7, shall contain the clause/article, FAR 52.209-9 Updates of Publicly Available Information Regarding Responsibility Matters (OCT 2018).

L. **Contractor Business Systems:** DFARS 252.242-7005, Contractor Business Systems (FEB 2012), is hereby incorporated by reference.

M. **Proposal Content Checklist**: A proposal adequacy checklist can be found in DFARS 252.215-7009.