Federal Agency Name: Air Force Research Laboratory, Materials and Manufacturing Directorate, Functional Materials Division, AFRL/RXE

Broad Agency Announcement Title: AFRL/RX Functional Materials Open BAA

Broad Agency Announcement Type: AMENDMENT 04

Broad Agency Announcement Number: FA8650-22-S-5002

Assistance Listing Number (ALN; previously, Catalog of Federal Domestic Assistance (CFDA) Number): 12.800 Air Force Defense Research Sciences Program

THIS IS AN **ANNUAL NOTICE** OF AVAILABILITY OF OPEN BROAD AGENCY ANNOUNCEMENT (BAA) AS REQUIRED BY FEDERAL ACQUISITION REGULATION (FAR) 35.016. White Papers are still being accepted against this BAA ***until 26 October 2028 3:00 PM Wright-Patterson AFB, OH local time***. Please see the initial BAA Announcement and Amendments for further details on submitting your White Papers.

THE PURPOSE OF THIS AMENDMENT IS TO:

1. Update the technical point of contact (POC):

   Address technical questions to the Technical POC: Marc Martin, marc.martin@us.af.mil

2. Update the schedule:

   Schedule:
   a. The anticipated Period of Performance for each award will be between 12 to **72** months, determined by individual contract award. This includes:
   - **Technical Effort:** 9 to **69** months, and
   - **Final Reporting:** 3 months.

   b. Options: Authorized; to be determined on individual contract award.
   c. Data Items: Specified on individual CDRL(s).
   d. Software: To be determined on individual contract award.
   e. Hardware: To be determined on individual contract award.

3. Direct readers to check for updates to herein references to the FAR and its supplements**:**

   Other Requirements:
   a. This announcement incorporates Federal Acquisition Regulation (FAR) and supplement provisions and clauses by reference. The full text of provisions and clauses can be found at www.acquisition.gov. **Check for updates at FAR Overhaul - FAR Part Deviation Guidance also located at www.acquisition.gov**.

NOTE: Changes and/or updates with this Amendment are underlined for ease of reading.

2-STEP BROAD AGENCY ANNOUNCEMENT
OVERVIEW INFORMATION

North American Industry Classification System (NAICS) Code: The acceptable NAICS code are:

> ***541713 (Research and Development in Nanotechnology)****, and the small business size standard is* ***1,000*** *employees, or*
>
> ***541714 (Research and Development in Biotechnology (except Nanobiotechnology)****, and the small business size standard is* ***1,000*** *employees, or*
>
> ***541715 (Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)****, and the small business size standard is* ***1,000*** *employees, or*
>
> ***541715 (Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) with the Aircraft, Aircraft Engine and Engine Parts exception)****, and the small business size standard is* ***1,500*** *employees, or*
>
> ***541715 (Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) with the Other Aircraft Parts and Auxiliary Equipment exception)****, and the small business size standard is* ***1,250*** *employees, or*
>
> ***541715 (Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology) with the Guided Missiles and Space Vehicles, Their Propulsion Units and Propulsion Parts exception)****, and the small business size standard is* ***1,300*** *employees.*

Federal Agency Name: Air Force Research Laboratory, Materials and Manufacturing Directorate, Photonics, Electronics & Soft Matter AFRL/RXE (formerly Functional Materials Division, AFRL/RXA)

Broad Agency Announcement Title: AFRL/RX Functional Materials Open BAA

Broad Agency Announcement Type: Availability of BAA Annual Posting

Broad Agency Announcement Number: FA8650-22-S-5002, Amendment 04

Assistance Listing Number (ALN) (previously, Catalog of Federal Domestic Assistance (CFDA) Number): 12.800 Air Force Defense Research Sciences Program

THIS WILL BE A TWO-STEP SOLICITATION:

> **<u>First Step</u>: WHITE PAPER DUE DATE AND TIME:** White Papers **may be submitted at any time upon issuance of this BAA until <u>26 October 2028</u> 3:00 PM Wright-Patterson AFB, OH Local time**. **<u>Only White Papers are due at this time</u>.**
>
> **<u>Second Step</u>: PROPOSAL DUE DATE AND TIME:** To be provided in the Requests for Proposals sent to offerors that submit White Papers considered to meet the needs of the Air Force.
>
> **NOTE:** ***White Paper/Proposal receipt after the due date and time shall be governed by the provisions of FAR 52.215-1(c)(3)***.

Submission: White Papers must be submitted electronically to the AFRL/RXE Open BAA Mailbox at **AFRL.RXE.OpenBAA@us.af.mil**.

Solicitation Request: Air Force Research Laboratory, Materials & Manufacturing Directorate, Wright-Patterson Air Force Base is soliciting White Papers as described below. White Papers shall be addressed to the Contracting POCs listed below and submitted to AFRL.RXE.OpenBAA@us.af.mil. This is an unrestricted solicitation. Small businesses are encouraged to propose on all or any part of this solicitation. The NAICS codes and the small business size standards are listed on Page 2. White Papers/Proposals submitted shall be in accordance with this announcement. *There will be no other solicitation issued in regard to this requirement*. It is noted that for ease of reference this BAA will be republished at yearly intervals for updates.

Type of Contract/Instrument: The Air Force reserves the right to award the instrument best suited to the nature of research proposed. Accordingly, the Government may award any appropriate Contract Type under the FAR or Other Transaction (OT) for Prototype, Grant, Cooperative Agreement, or OT for Research. The Air Force may also consider award of an appropriate technology transfer mechanism if applicable. It is anticipated that awards under this BAA will generally be Cost Plus Fixed Fee (CPFF). Cost Reimbursement contracts require successful offerors to have an accounting system considered adequate for tracking costs applicable to the contract.

Estimated Program Cost: NTE $75M per individual award

Anticipated Number of Awards: The Air Force anticipates awarding multiple awards for this announcement. However, the Air Force reserves the right to award zero, one, or more contracts for all, some or none of the solicited effort based on the offeror's ability to perform desired work and funding fluctuations.

Brief Program Summary: Air Force Research Laboratory, Materials & Manufacturing Directorate is soliciting White Papers and potentially technical and cost proposals under this announcement that support the needs of the Functional Materials and Applications mission. Functional Materials technologies range from materials and scientific discovery through technology development and transition are of interest. Descriptors of Materials and Manufacturing Directorate technology interests are presented in the context of functional materials core technical competencies and applications.

Communication Between Prospective Offerors and Government Representatives: Dialogue between prospective offerors and Government representatives is encouraged until submission of proposals. 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.

Address technical questions to the Technical POC (UPDATED WITH AMENDMENT 4): Marc Martin, marc.martin@us.af.mil

Address contracting questions to the Contracting POC: Email AFRL.RXE.OpenBAA@us.af.mil (primary) or WP.AFRL.RQKMA_DL@us.af.mil (alternate)

FULL TEXT ANNOUNCEMENT

I. **Program Description:** Air Force Research Laboratory, Materials & Manufacturing Directorate is soliciting White Papers (and later technical and cost proposals if after the Government's review of the White Paper it is determined that the White Paper has the potential to best meet the Air Force's needs) on the following research effort:

1. **Statement of Objective/Description of Technical Area(s):** The Functional Material Open BAA seeks to exploit innovative functional materials being developed by academia and the defense and commercial industrial base that enable new warfighting capabilities, significantly improve the effectiveness of warfighters and their current and future systems and solve urgent operational needs. Desired improvements include the development of transformative and next generation technologies, reliability and maintainability, life cycle cost, and size, weight and power (SWaP). The maturity of the material technologies range from scientific discovery through the development, maturation, demonstrations and transition of these materials into components, subsystems and systems. The work may include studies, research, experiments, characterization, processing and development of proof-of-concepts and prototype hardware and software including models, tools and methodologies. The following research areas are of interest.

a. **Photonic Materials Core Competencies:**

(i) ***Optical Materials and Processes (OM&P) Research*:** The OM&P research area involves the exploration, development and maturation of optical materials and processing that produce, convert, and move photons to enhance electromagnetic (EM) capabilities with improved size weight and power (SWaP) characteristics. It is of interest to manipulate photons via interaction with bulk, plasmonic, electro-optic and structured optical materials in order to derive new or improved responses in efficiency, power, frequency conversion and modulation speed. This research leverages the materials and processes competencies of photonic materials characterization, active optical materials development, structured novel materials and electromagnetic characterization of thin films, to provide materials solutions to imaging, sensing, communication and electronic warfare (EW) challenges. Specific research thrusts include, but are not limited to**:** 1) Additive functional electromagnetic, 2) Dynamic plasmonics and metamaterials, 3) Ceramic active optics. Specific projects of interest include**:** 1) Materials to enable novel distributed sensing schemes, 2) Additive manufacturing of photonic systems, 3) High rate laser processing of ceramic optical materials, 4) Design/Optimization of structured materials through computational electromagnetic and, 5) Nano-to-macro optical characterization.

(ii) ***Hardened Materials and Processing (HM&P) Research*:** The HM&P research area involves the development of new and improved materials by scientific investigation, fabrication, understanding, prediction (through experiments and modeling) and laser characterization. The research leverages materials and processes competencies for controlling/ manipulating light that include electro-optic materials, nonlinear optical materials, thin film optical coatings, structural hardening materials, laser characterization/interaction with materials and coupled

theoretical/experimental materials design to develop new and improved materials and technologies. The incorporation of a multiscale integrated computation materials science and engineering approach, using Schrodinger's (atomistic approaches) and Maxwell's equations (Beam Propagation Methods) enables an understanding of the interaction of light with materials on micro- and macroscopic levels and enables assistance in materials design. Specific projects of interest include**:** 1) Investigation of structure property relationships of photonic material systems, 2) Fabrication, modeling and characterization of materials for development of fixed wavelength filters that utilize refractive and absorption interactions, 3) Development of responsive liquid crystal spectral filters, 4) Development, fabrication, characterization and testing of materials for thermal mitigation and, 5) Development of improved organic and inorganic nonlinear optical materials.

(iii) Photonic Materials Advanced Development**:** Evaluate and assess photonic materials technologies, interactions, and applications using unique and innovative solutions to improve survivability of sensors, structures, systems, and aircrew members for the national defense. Some of the key technical areas of interest include optical materials and processing, hardening materials and processing, Electro- Optic/Infrared (EO/IR) sensor protection, fixed and agile protection for the warfighter, structural protection, optical technology, and materials technology for lasers. This technology development may involve structural material testing, EO/IR materials development, sensor component characterization and testing, and space environment testing on sensors, components, and high energy laser materials interaction in a wide variety of configurations and materials which are designed for many different applications and performance parameters to include laboratory conditions, field or range conditions external to the laboratory, and simulated atmospheric, flight and space environments. The interaction of materials, structures, and sensor components and configurations of interest to the Department of the Air Force and DoD with external sources and environments is integral to the development of materials technologies appropriate for these applications. Materials of interest may include materials for structures, segmented/switchable technologies, integrated optics, and detector technologies, as well as materials and component configurations for sensing or imaging applications.

b. Nanoelectronic Materials Core Competencies:

(i) Nanoscale Transport Materials and Processes (NTM&P)**:** The NTM&P research area develops, explores, improves and matures nanoscale transport materials and their synthesis processes for use in a variety of electronics-based Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) applications. These applications are currently limited by low carrier concentration, low mobility, size, weight, and thermal management issues. The materials and processes associated with electronic materials are leveraged to achieve nanoscale engineered electron and phonon transport in radio frequency (RF) devices and sensors. Research and development projects that leverage the materials and processes competencies of nanostructured material synthesis, processing, integration and characterization and energy devices fabrication and characterization to

enable the development of high performance, lightweight, low cost energy conversion and storage devices and advanced flexible device concepts are also of interest within this core competency. These materials would be developed and evaluated for a variety of potential applications, including but not limited to RF, power management, encryption, and novel processing. Specific areas of interest in materials and processes include, but are not limited to magnetoelectric materials, ultra-wide bandgap semiconductors, memristor materials, 2D materials, engineered contacts, epitaxial lift-off techniques and heterogenous integration of dissimilar materials.

(ii) ***Quantum Semiconductor Materials and Processes (QSM&P)*****:** The QSM&P research area explores, develops, and matures inorganic materials and processes that exploit quantum effects for use in sensors and electronics. Applications for these enabling materials include, but are not limited to, enhanced long-range and multispectral infrared sensing, high-resolution infrared detection, next-generation hyperspectral imaging, optical communication, photonic- enabled systems, secure communications, electronic warfare, and computational materials such as quantum memory or transduction systems. Materials and processes are developed for fabricating novel materials based on exploiting electron, photon, and phonon confinement effects found in nanoscale materials with particular emphasis on precisely controlling of the size, composition, and location of the nanoparticles or layers. The range of materials to be investigated in this area includes, but is not limited to semiconductor materials, optical and electro-optical materials, dielectric materials and their heterostructures, nanomaterials, and quantum materials. Research and Development could include the design, synthesis, material growth, device fabrication/processing, and evaluation of new and/or modified material systems and new/improved laboratory test procedures, analytical, characterization, and modeling techniques to evaluate materials and device performance. Developing theoretical models and computational tools to guide experimental work of materials may cover a broad range of physical lengths from an atomistic level to a macro device level for integrated computational materials science and engineering (ICMSE) approaches in material research.

c. Soft Matter Materials Core Competencies:

(i) ***Polymer and Responsive Materials and Processing (PRM&P) Research*****:** The PRM&P research area focuses on the development of stimuli responsive materials and devices for hybrid electronic, sensing, and computing applications for human and AF systems integration. It leverages competencies in soft matter and nanostructured material synthesis, processing, integration, characterization and device fabrication techniques coupled with autonomous research and design tools such as artificial intelligence (AI), machine learning (ML), and additive manufacturing. Specific research thrusts include, but are not limited to**:** autonomous research and design tools to enable rapid materials discovery and optimization; architected and responsive materials capable of yielding responses to environmental or applied stimuli; and the development of strain-tolerant materials and devices for flexible/stretchable electronics, sensors, and devices that are mechanically reliable in AF unique extreme environments. This research is expected to lead to flexible/stretchable/

wearable electrode materials and sensors, novel manufacturing approaches that enable integration of multifunctional materials elements onto non-traditional substrates, and novel multifunctional responsive materials systems and architectures. Computational tools are utilized to guide material and device design and to predict material and device performance in efforts to accelerate or support understanding, development and delivery of flexible and soft matter material solutions to current and future AF systems. Specific projects of interest could include, but are not limited to, the following: 1) New materials chemistries, device architectures, and mechanical characterization of flexible/stretchable electronics, chemical and biological sensors, and tunable mechanical metamaterials; 2) Automated/autonomous research and design tools for materials synthesis (AI, ML, topology optimization, continuous flow chemistry, inline data acquisition and processing with real-time feedback); 3) Reservoir computing and materials for computing applications; 4) Structure/property relationships in stimuli responsive polymeric systems, flexible/stretchable electronic materials and devices, and 2D sensors; and 5) Integration approaches for electronic materials and 2D sensors into wearable and reliable devices.

***(ii) Biomaterials Materials and Processes (BM&P) Research*:** The BM&P research area seeks to accelerate materials development, protect assets from the environment, and enable airman performance. This research area harnesses materials and processes competencies in soft matter materials characterization, molecular and synthetic biology, microbiology, biochemistry, bioinformatics, machine learning, multiscale modeling, bioelectronics, bio- functionalization, and biological engineering to create materials not easily achievable through traditional chemical synthesis or additive manufacturing. The BM&P also utilizes bioinformatics of microbiomes to assess degradative capacity and risk to materials. Specific efforts include: 1) Development of high throughput screening tools to determine structure-property-processing relationships of biomaterials; 2) Study of biological-materiel interactions and interfaces; 3) Development of modeling and processing tools to predict and characterize biomaterial performance and material degradation; 4) Understanding and predicting biological degradation in AF-relevant environments; 5) Development of novel biodegradable materials; 6) The use of synthetic biology to enable manufacturing improvements, and 6) Engineering biological consortia for infrastructure creation; 7) characterization and prediction of biotic-abiotic interactions for sensing applications in Airman performance and environmental monitoring. Specific areas of interest include, but are not limited to**:** hierarchical and multi-functional materials, biosensors, biofilms, biodegradation, biomanufacturing, high throughput screening platforms and automated research.

2. **Within Scope Modifications:** Potential offerors are advised that due to the inherent uncertainty of research and development efforts, awards resulting from this announcement may be modified during performance to make within scope changes, to include but not limited to, modifications which increase overall contract ceiling amount.

3. **Deliverable Items:** DD Form 1423-1, Contract Data Requirements List (CDRL) will be utilized for contract awards. CDRL deliverables shall be determined on an award-by-award basis.
   a. Data Items: Refer to Attachment 5 in the List of Attachments.
   b. Software: Computational/modeling code, Data management plan, materials and processing digital data package as required.
   c. Hardware: Prototypes and demonstration components/systems as required; UIDs will be required if the hardware acquisition cost exceeds $5,000.
   d. Other: Material and chemical samples as required.

4. **Schedule (UPDATED WITH AMENDMENT 4):**
   a. The anticipated Period of Performance for each award will be between 12 to **72** months, determined by individual contract award. This includes:
      - **Technical Effort:** 9 to **69** months, and
      - **Final Reporting:** 3 months.
   b. Options: Authorized; to be determined on individual contract award.
   c. Data Items: Specified on individual CDRL(s).
   d. Software: To be determined on individual contract award.
   e. Hardware: To be determined on individual contract award.

5. **Other Requirements:**
   a. This announcement incorporates Federal Acquisition Regulation (FAR) and supplement provisions and clauses by reference. The full text of provisions and clauses can be found at www.acquisition.gov. **Check for updates at FAR Overhaul - FAR Part Deviation Guidance, also located at www.acquisition.gov. (UPDATED WITH AMENDMENT 4)**
   b. **Program Security Classification:** Up to and including SECRET shall be required depending on the White Papers received (refer to Attachment 4 – DD Form 254). If a DD254 is applicable, offerors must verify their Cognizant Security Office information is current with Defense Counterintelligence and Security Agency (DCSA) at www.dcsa.mil.
   c. **OPSEC:** All contractors shall participate in all activities associated with the disciplines of the organization's Industrial Security, Information Security, Personnel Security, Operations Security (OPSEC), Antiterrorism, and Program Protection programs, following appropriate measures in each program as required for this particular contract. These are required in an effort to reduce program vulnerability from successful adversary collection, exploitation of critical information, and violations of export control requirements. The prime contractor will ensure that all subcontractors, if required, conform to these requirements as required by the prime contractor. Guidance can be provided by AFRL/RX Security as needed.
   d. **Export Control:** Information involved in this research effort may be subject to Export Control (International Traffic in Arms Regulation (ITAR) 22 CFR 120-131, or Export Administration Regulations (EAR) 15 CFR 710-774). If effort may be subject to export control, then a Certified DD Form 2345, Militarily Critical Technical Data Agreement, will be required to be submitted with proposal.
   e. **Export-Controlled Items:** As prescribed by DFARS 225.7901-4, DFARS 252.225-7048, "Export-Controlled Item (JUN 2013)" is contained in this solicitation. This clause shall be contained in ALL resulting contracts.
   f. **Contractor Performance Assessment Reporting System (CPARS)** will apply to contract awards resulting from this BAA. Interim and final evaluations of contractor performance for contract awards will be prepared in accordance with AFFARS

5342.1503. The final performance evaluation will be prepared at the time of completion of work. In addition to the final evaluation, interim evaluation(s) will be prepared annually. Awardees will be requested to provide a POC to receive notifications of the opportunity to provide feedback. The contractor will be permitted 14 days to review the document and to submit additional information or a rebutting statement. If agreement cannot be reached between the parties, the matter will be referred to an individual one level above the Contracting Officer, whose decision will be final. Copies of the assessments, contractor responses, and review comments, if any, will be retained as part of the contract file, and may be used to support future award decisions for other procurements.

g. **Science and Technology (S&T) Protection:** See Attachment 10: Security Risk Review – AFRLI 61-113. However, the Government may require the offeror to submit additional information &/or a mitigation plan for any identified S&T protection risks. If the Government determines the offeror failed to provide adequate additional information; or an acceptable mitigation plan; or it is determined the offeror's S&T protection approach is high risk & does not provide adequate protection of S&T information, the Government may reject the proposal & withdraw it from consideration for award.

6. **Other Information:**
   a. **Government Furnished Property (GFP) Availability:** GFP is not anticipated to be provided on any resulting contract award. Should GFP be requested in a White Paper, in accordance with FAR 45.201(b), 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.
   b. **Base Support/Network Access:** Base Support is not anticipated to be made available under any resulting contract/assistance instrument. However, it may be considered on a case-by-case basis.
   c. **Multiple awards subject to Fair Opportunity are not anticipated.**
   d. **Data Rights Desired:**
      (1) Noncommercial Technical Data: Unlimited Rights
      (2) Noncommercial Computer Software (NCS): Unlimited Rights
      (3) NCS Documentation: Unlimited Rights
      (4) Commercial Computer Software Rights: Customary Commercial License consistent with Federal statutes and regulations

The Air Force Research Laboratory is engaged in the discovery, development, and integration of warfighting technologies for our air, space, and cyberspace forces. As such, rights in noncommercial technical data and NCS developed or delivered under this contract are of significant concern to the Government. The Government will therefore evaluate any restrictions on the use of noncommercial technical data, NCS, and NCS documentation which could result in transition difficulty or less-than full and open competition for subsequent development of this technology.

In accordance with DFARS 252.227-7013(b)(1) and 252.227- 7014(b)(1), the Government shall receive unlimited rights in all noncommercial technical data and computer software developed exclusively with Government funds.

In accordance with DFARS 252.227-7013(b)(2) and DFARS 252.227- 7014(b)(2), the Government shall receive Government Purpose Rights in all noncommercial technical data and computer software developed with mixed funding. "Developed

with mixed funding" means, "development was accomplished partially with costs charged to indirect cost pools and/or costs not allocated to a government contract, and partially with costs charged directly to a government contract. Offerors that propose delivery of noncommercial technical data, NCS, or NCS documentation subject to Government Purpose Rights should fully explain how a portion of the data was developed at private expense. Specifically, offerors must explain what noncommercial 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 program, and address whether those portions or processes are segregable.

Offerors that propose delivery of noncommercial technical data with Limited Rights, NCS with Restricted Rights, or NCS documentation with Limited Rights will be considered. Proposals should fully explain what noncommercial 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 and how the incorporation will benefit the program and whether those portions or processes are segregable.

Offerors shall include the data rights assertions as required by DFARS 252.227-7017*,* Identification and Assertion of Restrictions on the Government's Use, Release, or Disclosure of Technical Data or Computer Software. The assertions list is included in Section K and due at time of proposals. Assertions must be completed with specificity. Each assertion must identify the technical data or computer software to be delivered and the associated item, component, or process developed exclusively or partially at private expense to which it pertains. Nonconforming data rights assertion lists will not be accepted until submitted in accordance with DFARS 252.227-7017.

Terms used in this section are defined in the clauses at 252.227- 7013, Rights in Technical Data-Noncommercial Items, and 252.227- 7014, Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation.

e. Third Party Software (Commercial and Noncommercial):

If any such software, noncommercial or commercial, is not reasonably identifiable at proposal submission, it must still be approved by the contracting officer prior to incorporation. This obligation to obtain pre- approval by the contracting officer, as described above, continues throughout contract administration.

Noncommercial Computer Software:

DFARS 252.227-7014(d) describes requirements for incorporation of third party noncommercial copyrighted computer software and computer software documentation and is incorporated as follows:

The Contractor shall not, without the written approval of the Contracting Officer, incorporate any copyrighted computer software or computer software documentation in the software or documentation to be delivered under this contract unless the Contractor is the copyright owner or has obtained for the Government the license rights necessary to perfect a license or licenses in the deliverable software or

documentation of the appropriate scope set forth in DFARS 252.227-7014(b), and prior to delivery of such—

(1) Computer software, has provided a statement of the license rights obtained in a form acceptable to the Contracting Officer; or
(2) Computer software documentation, has affixed to the transmittal document a statement of the license rights obtained.

In addition, all noncommercial computer software will receive the appropriate level rights set forth in DFARS 252-7014(b), which could include: Unlimited rights, GPR, Restricted Rights, or specifically negotiated license.

Commercial Computer Software:

For commercial computer software, the Government will neither accept nor execute a DD Form 250 for such software deliverables until the Contractor obtains from all third party software suppliers and/or vendors (Licensor) licenses for any commercial computer software to be delivered that are consistent with Federal Statutes, Federal Case Law, and Federal Regulations.

The following is a non-exhaustive list of terms and conditions which are inconsistent with Federal law and shall not be included in the commercial computer software license agreement between the Licensor and the Government:

(1) The license shall not subject the Government to a contingent liability or a liability that is indefinite or indeterminate, including but not limited to**:** indemnification clauses, unilateral price increases, the right to attorney fees, automatic assessment of charges, or automatic renewal provisions. These provisions constitute obligations in advance or in excess of an appropriation and violate the Anti-Deficiency Act.
(2) The license shall be governed by Federal Statutes, Federal Case Law, and Federal Regulations, and shall not be subject to the laws or jurisdiction of any municipality, state, or foreign country. The license shall not bind the Government to litigation in a particular forum or venue or require the Government to participate in arbitration. The license shall not include non-substitution language that would preclude or limit the Government from using another vendor/reseller and/or product to fulfill Government requirements.
(3) The Licensor shall not have the authority to unilaterally terminate the license. All remedies available shall be consistent with the Disputes and Termination Clauses in the underlying basic contract.
(4) The Licensor shall not have the right to enter the premise or monitor Government networks for the purpose of auditing the use of the license.
(5) The Licensor shall not have the authority to control or otherwise influence any litigation between a third party and the Government. The United States Department of Justice has the sole authority to represent the Government in all litigation matters.
(6) The Licensor shall not use the fact that the Government is using the Licensor's products in any notification or advertisement to the public (e.g., no publicity rights permitted).
(7) The license shall not require automatic updates or give Licensor the authority to unilaterally replace the software.

[*IF APPLICABLE*] Additionally, the Contractor may be required to obtain licenses that comply with the following terms and conditions, based on the Government's needs:

(1) [*IF APPLICABLE*] The license shall not disclaim all warranties through use of an "as is" provision.

(2) [*IF APPLICABLE*] The license shall neither restrict the Government from using the product at various sites nor limit use of the product by various Government agencies or third parties performing work on behalf of the Air Force under the [PROGRAM NAME]. In performance of the [PROGRAM NAME], Government personnel as well as Government contractors may use the software, subject to any negotiated limits on number of users, as applicable.

(3) [*IF APPLICABLE*] The license shall not limit the Government's use of the software at other Government and Government contractor sites. The license shall authorize the Government to use the software at the following sites**:** [list].

(4) [*IF APPLICABLE*] The license shall not restrict the Government from copying or embedding elements of accessible code into other applications (e.g., nesting code, derivative works).

The Contractor may obtain agreement from the Licensor to insert the clause below in its respective software licenses intended to be transferred to the Government:

"In the event that any of the provisions of the [Software License] are determined to be inconsistent with Federal law or do not otherwise satisfy the Government's needs, the parties to the [Software License] hereby agree that such provisions shall be null and void as they pertain to the Government. Specifically, the following sections are hereby deleted from the [Software License] [and/or amended as indicated below]:
[Section X: deleted; Section Y: amended as follows […]"

If the Licensor will not agree to the terms and conditions cited herein and/or as contained in DFARS 227.72, the Contractor shall retain the current license on behalf of and for the benefit of the US Government if permissible under its license and such use will not subject the Government to the terms of the license. If the software in question is required to be delivered to the Government, the Licensor must grant the Government a sublicense that allows the Government to use the software to meet its requirements.

The Contractor shall provide documentation to clearly correlate or map any commercial computer software to be delivered to:

a) Contract Line Item Numbers (CLINS);
b) Contract Deliverables (CDRLS);
c) Paragraphs in the statement of work (SOW); and
d) Portions of any functional block diagrams and/or system architecture diagrams, so that it can be readily determined where certain commercial computer software corresponding to certain software license agreement(s) are physically located on the system to be delivered under the contract.

II. Award Information

1. **BAA Open Period:** This BAA is Open and effective until **26 October 2028**. Offerors should be alert for any BAA amendments.

2. **Anticipated funding** for the program (not per contract): Total funding for this BAA is approximately $500M with an individual contract award limit of $75M. This 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.

III. Eligibility Information

1. **Eligible Offeror:** This is an unrestricted solicitation. Small businesses are encouraged to propose.

2. **Cost Sharing or Matching:** Cost Sharing is not required.

3. **Federally Funded Research and Development Centers:** The following guidance is provided for Federally Funded Research and Development Centers (FFRDCs) contemplating submitting a proposal, as either a prime or subcontractor. 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 (with exceptions stated in DFARS 235.017-1(c)(4)). There is no regulation prohibiting an FFRDC from responding to a solicitation. 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, AFRL 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 a determination be made concerning the FFRDC's eligibility to receive an award.

4. **Government Agencies:** If a Government agency is interested in performing work, contact the Program Manager identified in the BAA. If those discussions result in a mutual interest to pursue your agency's participation, the effort will be pursued independent of this announcement.

5. **Other:**
   a. **Foreign Participation:** AFRL is authorized to exclude all foreign participation at the prime contractor level for the subject procurement. Foreign participation will be addressed for each White Paper that have the potential to best meet the Air Force's needs based on the White Paper evaluation information in Section V.
   b. **Notice to Foreign-Owned Firms:** Such firms are asked to immediately notify the Contracting Officer before deciding to respond to this announcement. Foreign contractors should be aware that restrictions might apply which could preclude their participation in this acquisition.
   c. **This acquisition involves data that are subject to Export Control laws and regulations**. Only contractors who are registered and certified with the Defense Logistics Agency and have a legitimate business purpose may participate in this solicitation. Contact the U.S./Canada Joint Certification Program Office, Defense

Logistics Agency, Logistics Information Services J34, HDI Federal Center, 74 Washington Avenue N., Battle Creek, Michigan 49037-3084, (1-800-352-3572) or the Joint Certification Program Office (JCO) at JCP-Helpdesk@dla.mil for further information on the certification process. You must submit a copy of your approved DD Form 2345, Militarily Critical Technical Data Agreement, with your proposal.

d. There are no limits on the number of White Papers/proposals an offeror may submit.

e. You may be ineligible for award if all requirements of this solicitation are not met on the White Paper (and later proposal) due date as identified above.

IV. White Paper / **Proposal and Submission Information**

1. **Overview:** This Announcement consists of a Two-Step Process described in detail below. White Papers/Proposals submitted shall be in accordance with this announcement. *There will be no other solicitation issued in regard to this requirement*. The Government intends to review White Papers/proposals and award some, all, or none of the proposals received without negotiation/discussion; however, the Government reserves the right to negotiate with those offeror(s) whose proposal is selected for funding.

   ONLY WHITE PAPER**S ARE BEING SOLICITED AT THIS TIME.**

   For additional information, a copy of the Broad Agency Announcement (BAA) Guide for Industry is located at https://www.afrl.af.mil/Portals/90/Documents/HQ/BAA%20Ind%20Guide%202020.pdf?ver=7AivkWvoUoptKgypgCuIvw%3d%3d.

2. **First Step (**White Paper**) Instructions:**

   a. **General:** The *FIRST STEP* requests the submission of a White Paper (to include a Quad Chart) 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 V 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 4 pages plus 1 page for the Quad Chart for a total submission of 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 to location specified in the Overview Information above.

c. **Format:** The White Paper will be formatted as follows:

(1) Section A**:** BAA Number, Title of Program/White Paper, Name of Company, Business Size, Company's Commercial and Government Entity (CAGE) number, Dun & Bradstreet (D&B) Data Universal Numbering System (DUNS) number, Company Contracting POC and Technical POC with appropriate telephone numbers, fax numbers, and email addresses for the POCs. **Add the following information for classified submissions:** Classified level at which company is cleared, contactor address for forwarding classified material (name, address, zip code), cognizant security office (name, address, zip code), and offeror's security officer's name and telephone number.

(2) Section B**:** Period of Performance and Task Objectives;

(3) Section C**:** Technical Summary and Proposed Deliverables; and

(4) Section D**:** Quad Chart including Cost of Task (Rough Order of Magnitude (ROM)).

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, and a proposed Statement of Work are not required at this point. Instructions for populating the Quad Chart template are below and additional guidance is attached to the BAA (refer to Attachment 2).

(1) Enter Project Title (use Arial 24 point), Principal Investigator (PI), intended functional material competency need and intended Air Force application need at the top center of the Quad Chart.

(2) Complete **all** sections of the Quad Chart.

(3) Upper Left: Objective, Description of Effort

(4) Lower Left: Program/Technical Approach, Challenges, Benefits of Proposed Technology

(5) Upper Right: List accomplishments, research efforts and contracts related to the proposed effort

(6) Lower Right: Major Goals/Milestones by FY, Cost by FY, Contact Information (PI name, organization, phone & e-mail address)

(7) Provide an estimate of annual cost in thousands of dollars ($K) per proposed year of effort. Programs/Projects can range from 1 to 5 years.

(8) Except for the title, all text should be Arial 12 point.

(9) Submit the Quad Chart with the White Paper. If the White Paper is selected for a full proposal, you will be asked to modify the Quad Chart to better reflect the proposal content.

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).

g. **White Paper/Proposal Content Summary:** You may be ineligible for award if all requirements of this solicitation are not met on the proposal due date.

h. **White Paper Due Date and Time:** See Overview Information at the beginning of the Announcement.

3. Second Step (Proposal) Instructions:
Note: *If you intend to submit a proposal for an assistance instrument, go to Attachment 1 which discusses how to find the assistance opportunity, prepare the cover page, and complete the certification. This section also provides the process for electronic submission of proposals for assistance instruments that may be submitted in addition to BAA Section IV Paragraph 3.a.(5).*

a. General Instructions:

(1) The ***SECOND STEP*** consists of offerors submitting a technical and cost proposal within **30** working days of the proposal request. After receipt, proposals will be reviewed in accordance with the award criteria in Section V. below. Proposals will be categorized and subsequently selected for negotiations.

(2) Offerors should apply the restrictive notice prescribed in FAR 52.215- 1(e) Instructions to Offerors—Competitive Acquisition. Offerors should consider proposal instructions contained in the Broad Agency Announcement (BAA) Guide for Industry, which can be accessed on line at https://www.afrl.af.mil/Portals/90/Documents/HQ/BAA%20Ind%20Guide%202020.pdf?ver=7AivkWvoUoptKgypgCuIvw%3d%3d. This guide is specifically designed to assist the offeror in understanding the BAA proposal process.

(3) Technical/management and cost/business volumes should be submitted in separate volumes and must be valid for 180 days.

(4) Proposals must reference the announcement number FA8650-22-S-5002 AND the relevant core technical competency/area of interest.

(5) The cost file(s) spreadsheets must be in Microsoft Excel and include the formulas for calculating cost element bases (i.e., G&A, O/H, etc.)

(6) Offerors are advised that only Contracting Officers are legally authorized to contractually bind or otherwise commit the Government.

(7) The cost of preparing proposals in response to this BAA 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.

(8) No classified technical proposals or cost volumes are expected. Offerors are encouraged to keep all elements of the proposal package unclassified. In the rare case where an offeror has a need to submit a classified appendix, please contact the technical POC for delivery instructions.

b. Technical/Management Proposal:

(1) Page Limitations: The following describes proposal page limitations:

a) The Technical/Management Proposal shall be limited to 20 pages plus 1 page for the Quad Chart (for a total limit of 21 pages). Technical/Management proposals and Statements of Work must be provided in Microsoft Word. Signed pages may be submitted in Adobe.

b) Font shall be standard 10-point business font Arial.

c) Character spacing must be "normal," not condensed in any manner.

d) 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.

e) 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.

f) Pages shall be numbered starting with the cover page being Page 1, and the last page being no greater than Page 21. 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.

g) The proposal page limit does not include the offeror's proposed Statement of Work (SOW); however, the same formatting rules apply to the SOW, which is limited to **10** pages.

h) **Please Note: The Government will check the proposal and SOW for conformance to the stated requirements**. **Any pages in excess of the stated page limitation after the format check will not be considered for review purposes.**

(2) The Technical/Management proposal(s) shall include a discussion of the nature and scope of the research and the technical approach. Additional information on prior work in this area, descriptions of available equipment, use of base support (if desired), data and facilities and resumes of personnel who will be participating in this effort should also be included as attachments to the technical proposal. This volume shall include a SOW detailing the technical tasks proposed to be accomplished under the proposed effort and suitable for contract incorporation. Do not include any proprietary information in the SOW. Refer to the BAA Guide for Industry referenced above to assist in SOW preparation. In addition to the contractor proposed SOW, a Government generated SOW attachment containing additional contracting requirements will be included in any resulting contracts.

(3) Any questions concerning the technical proposal or SOW preparation shall be referred to the Technical POC.

c. Cost/Business Proposal:

(1) Separate the proposal into a business section and cost section.

a) The business section should contain all business aspects to the proposed contract, such as type of contract, any exceptions to terms and conditions of the announcement including the model contract, any information not technically related, etc. Provide rationale for exceptions. (Refer to Attachment 6 – Model Contract)

b) Associate Contractor Agreements: Associate Contractor Agreements (ACAs) are agreements between contractors working on Government contracts that require 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.

c) Identify any technical data that will be delivered with less than unlimited rights.

d) Subcontracting Plans: For efforts to exceed $750,000, Subcontracting Plans shall be submitted in the cost/business proposal. Reference FAR 19.704 and DFARS 219.704 for subcontracting plan requirements. Small business concerns are exempt from this requirement. If an IDIQ contract arrangement is anticipated, the basis for the subcontracting plan should reflect the entire ceiling amount.

e) 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)," apply.

f) Completed Certifications and Representations (Section K) are due with the proposal. Certifications and Representations (Section K) will be provided to offerors requested to submit a full technical and cost proposal. Offerors may also be required to submit updated or supplemental Certifications and Representations based on the specifics of their proposal.

g) If an offeror proposes the use of Government Furnished Property (GFP), other than GFP identified in the BAA, the offer must specifically identify each piece of GFP in the Cost/Business Proposal and propose and substantiate a rental cost for evaluation purposes in accordance with FAR 45.202. Include the following information in the proposal:

(i) A list describing all Government property that the offeror or its subcontractors propose to use on a rent-free basis. 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);

(ii) The dates during which the property will be used 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;

(iii) The amount of rent that would otherwise be charged in accordance with FAR 52.245-9, Use and Charges; and

(iv) 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.

(2) **Cost Element Breakdown:** Clear, concise, and accurate cost proposals reflect the offeror's financial plan for accomplishing the effort contained in the technical proposal. As a part of its cost proposal, the offeror shall submit the information outlined below, together with supporting breakdowns. All direct costs (labor, material, travel, computer, etc.) as well as labor and overhead rates should be provided by contractor fiscal year (CFY). Detailed cost element breakdowns by Government Fiscal Year or calendar year are not required. The supporting schedules may include summary level estimating rationale used to generate the proposed costs. The cost element breakdown(s) should include the following if applicable.

a) **Direct Labor:** Direct labor should be detailed by number of labor hours by category of labor.

b) **Labor and Overhead Rates:** Direct labor hours, with their applicable rates, must be broken out and the bases used clearly identified. The source of labor and overhead rates and all pricing factors should be identified. For instance, if a Forward Pricing Rate Agreement (FPRA) is in existence, that should be noted, along with the Administrative Contracting Officer's (ACO's) name and telephone number. If the rates are based on current experience in your organization, provide the historical base used and clearly identify all escalation, by year, applied to derive the proposed rates. If computer usage is determined by a rate, identify the basis used and rationale used to derive the rate.

c) **Material/Equipment:** List all material/equipment items by type and kind with associated costs and advise if the costs are based on vendor quotes, data and/or engineering estimates; provide copies of vendor quotes and/or catalog pricing data.

d) **Subcontractor Costs:** Submit all subcontractor proposals and analyses with your cost proposal (See FAR 15.404-3(b)). If the subcontractor will not submit cost and pricing information to the offeror, this information must be submitted directly to the Government for analysis. On all subcontracts and interdivisional transfers, provide the method of selection used to determine the subcontractor and the proposed contract type of each subcontract. An explanation shall be provided if the offeror proposes a different amount than that quoted by the subcontractor. The offeror's proposal must:

(i) Identify principal items/services to be subcontracted.

(ii) Identify prospective subcontractors and the basis on which they were selected. If non-competitive, provide selected source justification.

(iii) Identify the type of contractual business arrangement contemplated for the subcontract and provide rationale
(iv) Identify the basis for the subcontract costs (e.g., firm quote or engineering estimate, etc.).
(v) Identify the cost or pricing data submitted by the subcontractor.
(vi) Provide an analysis of the proposed subcontract in accordance with FAR 15.404-3(b). Provide an analysis concerning the reasonableness, realism and completeness of each subcontractor's proposal. If the analysis is based on comparison with prior prices, identify the basis on which the prior prices were determined to be reasonable. The analysis should include, but not be limited to, an analysis of**:** materials, labor, travel, other direct costs and proposed profit or fee rates.

e) **Special Tooling or Test Equipment:** When special tooling, and/or test equipment is proposed, attach a brief description of items and indicate if they are solely for the performance of this particular contract or project and if they are or are not already available in the offeror's existing facilities. Indicate quantities, unit prices, whether items are to be purchased or fabricated, whether items are of a severable nature and the basis of the price. These items may be included under Direct Material in the summary format.

f) **Consultants:** When consultants are proposed to be used in the performance of the contract, indicate the specific project or area in which such services are to be used. Identify each consultant, number of hours or days to be used and the consultant's rate per hour or day. State the basis of said rate and give your analysis of the acceptability of the consultant's rate.

g) **Travel:** Travel costs must be justified and related to the needs of the project. Identify the number of trips, the destination and purpose. Travel costs should be broken out by trip with number of travelers, airfare, per diem, lodging, etc.

h) **Computer Use:** Detail the amount and kind of computer usage, the cost, and how the costs were derived.

i) **Facilities Capital Cost of Money:** If Facilities Capital Cost of Money is proposed, a properly executed DD Form 1861 is required.

j) **Project Funding Profile:** Offerors should include a project funding profile by Government Fiscal Year (GFY) (1 Oct through 30 Sept) for budgetary purposes. This will enable the Government to easily identify program funding needs by GFY.

k) If an offeror takes exceptions to the requirements called out in the announcement (e.g., base support, Government-furnished property (GFP), CDRLs), the exceptions should be clearly stated in the cost proposal.

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

m) Cost/Business proposals have no page limitations.

d. **Proposal Content Summary:** You may be ineligible for award if all requirements of this solicitation are not met on the proposal due date.

4. **Funding Restrictions:** None Anticipated. The cost of preparing proposals in response to this announcement is not considered to be 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 cost specified in FAR 31.205-18. Incurring pre-award costs for ASSISTANCE INSTRUMENTS ONLY is regulated by the DoD Grant and Agreements Regulations (DoDGARS).

5. **Other Submission Requirements:** White Papers shall be submitted to location specified in the Overview Information above. Proposals shall be submitted in accordance with the instructions provided in the Request for Proposal letter issued by the Contracting Officer after White Paper evaluation.

V. White Paper / Proposal Review Information

1. **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?

2. **SECOND STEP – Proposal Peer or Scientific Review Criteria:** Proposals will be reviewed against the criteria listed below. The technical aspect, which is ranked as the first order of priority, shall be reviewed based on the following criteria that are of **descending** order of importance.
   a. **Technical:**
      (1) Unique and innovative approach proposed to accomplish the technical objectives. New and creative solutions and/or advances in knowledge, understanding, technology, and the state of the art.
      (2) The potential for AFRL to transition the research and development deliverables to future Government needs. Any proposed restriction on technical data or computer software will be considered.
      (3) The offeror's understanding of the scope of the technical effort.
      (4) Soundness of the offeror's technical approach including whether the proposal identifies major technical risks, clearly defines feasible mitigation efforts, and demonstrates related experience and qualifications of technical personnel.
      (5) Availability of qualified technical personnel and their experience with the applicable technologies.
      (6) Availability, from any source, of necessary research, test, laboratory, or shop facilities.
   b. **Cost/Price:** The cost/price criterion includes the realism of the proposed cost. Cost/Price is a substantial factor, but ranked as the second order of priority. (If an offeror proposes the use of GFP other than any GFP identified in this BAA, and that proposed GFP provides the offeror an unfair competitive advantage, then FAR 45.202 requires rental equivalent be applied to the Cost Factor for evaluation purposes only). For those White Papers selected for full proposals, the submission

of certified cost or pricing data may be required from offerors for awards in excess of the TINA threshold of $2M.

3. **SECOND STEP / PROPOSAL – Review and Selection Process**
   a. **Categories:** Based on the Peer or Scientific Review, proposals will be categorized as Selectable or Not Selectable (see definitions below). The selection of one or more sources for award will be based on the Peer or Scientific Review, as well as importance to agency programs and funding availability.
      (1) **Selectable:** Proposals are recommended for acceptance if sufficient funding is available.
      (2) **Not Selectable:** Even if sufficient funding existed, the proposal should not be funded.

      Note**:** The Government reserves the right to award some, all, or none of proposals. When the Government elects to award only a part of a proposal, the selected part may be categorized as Selectable, though the proposal as a whole may not merit such a categorization.
   b. No other criteria will be used.
   c. Prior to award of a potentially successful offer, the Contracting Officer will make a determination regarding price reasonableness.

VI. Award Administration Information

1. **Award Notices:** Offerors will be notified whether their White Paper is recommended to submit a full technical and cost proposal on or about 30 days after receipt of the White Paper. The notification is not to be construed to mean that any contract or assistance award is assured, as availability of funds and successful negotiations are prerequisites to any award.

2. **Administrative and National Policy Requirements:** See Section I.

3. **Reporting:** Please see BAA Paragraph I.3.a., Contract Data Requirements List (CDRL).

VII. Other Information

1. **Acquisition of Commercial Items:** Based upon market research, the Government is not using the policies contained in Part 12, Acquisition of Commercial Items, in this solicitation. However, interested offerors may identify to the Contracting Officer their interest and capability to satisfy the Government's requirement with a commercial item within 15 days of this notice.

2. **Support Contractors:** Only Government employees will participate in Peer or Scientific Reviews. Offerors are advised that employees of commercial firms under contract to the Government may be used to administratively process proposals, monitor contract performance, or perform other administrative duties requiring access to other contractors' proprietary information. These support contracts include nondisclosure agreements prohibiting their contractor employees from disclosing any information submitted by other contractors or using such information for any purpose other than that for which it was furnished.

3. **Feedback Sessions:**
   a. **Contracts:** When requested, a Feedback Session will be provided with content

consistent with the procedures that govern BAAs (FAR 35.016). The process will follow the time guidelines outlined in the award notice described in Paragraph VI.1.

b. **Assistance Instruments:** When requested, an informal feedback session will be provided. The process will follow the time guidelines outlined in the award notice described in Paragraph VI.1.

4. **Item Unique Identification and Valuation**. It is DoD policy that contractors shall be required to identify the Government's unit acquisition cost for all deliverable end items for which Item Unique Identification applies. Therefore, proposals must clearly break out the unit acquisition cost for any deliverable items. See DFARS 211.274-3, Policy for Valuation, for more information. (Per DoD, "fully burdened unit costs" to the Government would include all direct, indirect, G&A costs, and an appropriate portion of fee). For more information, see the following website**:** http://www.acq.osd.mil/dpap/pdi/uid/index.html.

5. **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 https://ofccp.dol-esa.gov/preaward/pa_reg.html. 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.

6. **Updates of Publicly Available Information Regarding Responsibility Matters:** Any contract or assistance award that exceeds $600,000; and when 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."

7. In accordance with DFARS 215.408, when certified cost or pricing data is required, offerors will be required to complete the provision at DFARS 252.215-7009 Proposal Adequacy Checklist with their proposal (Refer to Attachment 3).

8. **White Paper / Proposal Reminders:** You may be ineligible for award if all requirements of this solicitation are not met on the proposal due date.
   a. ***Step One*****:** White Papers shall be submitted as specified in this announcement.
   b. ***Step One*****:** White Papers are due as specified in this announcement.
   c. ***Step One and Step Two*****:** White Paper and Proposal page limits are strictly enforced.
   d. ***Step One and Step Two*****:** White Papers and Proposals must be submitted in the format specified in this announcement.
   e. ***Step Two:*** Proposals are due to the Contracting POC.
   f. ***Step Two:*** The Cost/Business Proposal must contain all information described in the Cost/Business Proposal Submission Section.
   g. ***Step Two:*** Offerors other than small businesses must include a subcontracting plan.
   h. ***Step Two:*** Offerors who have Forward Pricing Rate Agreements (FPRA) or Forward Pricing Rate Recommendations (FPRR) should submit them with their proposal.
   i. ***Step Two:*** If a DD254 is applicable, offerors must verify their Cognizant Security Office information is current with Defense Counterintelligence and Security Agency (DCSA) at www.dcsa.mil.
   j. ***Step Two:*** If effort is subject to export control, offerors must submit a Certified DD Form 2345, Militarily Critical Technical Data Agreement, with proposal.

LIST OF ATTACHMENTS

1. Supplemental Instructions for Assistance Instruments Proposals
2. Quad Chart Guidance
3. Proposal Adequacy Checklist
4. Department of Defense Contract Security Classification Specification, DD Form 254
5. Contract Data Requirements List (CDRL), DD Form 1423-1
6. Model Contract
7. Security Program Questionnaire
8. Air Force Research Laboratory Security Risk Review – AFRLI 61-113
9. Representations, Certifications, and Other Statements of Offerors
10. AFRL Wright Research Site Security Requirements H-Clause