

BROAD AGENCY ANNOUNCEMENT (BAA)

BAA-AFRL-RWK-15-0003

FEDERAL AGENCY NAME: Air Force Research Laboratory
Munitions Directorate
101 W. Eglin Blvd.
Eglin AFB, FL 32542-6810

BROAD AGENCY ANNOUNCEMENT TITLE: High Speed Strike Weapon (HSSW)

BROAD AGENCY ANNOUNCEMENT TYPE: Initial Announcement

BROAD AGENCY ANNOUNCEMENT NUMBER: BAA-AFRL-RWK-15-0003

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NUMBER(S): 12.800 AIR FORCE DEFENSE RESEARCH SCIENCES PROGRAM

WHITE PAPER DUE DATE AND TIME: This BAA will remain open through 30 September 2020 unless amended or superseded. It may be reissued and/or amended periodically, as needed. This BAA is set up in two parts: (1) Basic Open BAA, in which white papers may be submitted at any time during the open period. For these white papers, it is recommended that prior to submission, each submitter should consult with the technical POC to discuss the topic of interest; and (2) Call BAA, in which proposal call announcements may be issued by the Government in FedBizOpps under BAA-AFRL-RWK-2015-0003. The two parts of this BAA are explained in greater detail in separate sections below. White papers may be submitted at any time during the open period to afrl.rwk.baaworkflow@us.af.mil IAW the instructions in Section V.

BASIC OPEN BAA:

OTHER THAN WHITE PAPERS, NO PROPOSALS SHOULD BE SUBMITTED AGAINST THIS BASIC OPEN BAA. A letter requesting a proposal (RFP) will be issued by the Contracting Officer (CO) when needed after a technical review of a white paper. Due dates and times will be specified in each letter requesting a proposal issued by the CO in accordance with the instructions for proposals in response to white papers and calls provided in this document. There will be no other announcement issued for this requirement. Offerors should monitor the Federal Business Opportunities website at <http://www.fbo.gov> in the event this announcement is amended.

CALL BAA:

Periodically over the period of this BAA, proposal call announcements (CALLS) may be issued in FedBizOpps under BAA-AFRL-RWK-2015-0003 to request proposals for specific topics areas. Proposals in response to the CALLS will be accepted as specified in the individual CALLS and evaluated in accordance with the Proposal Review Information. Offerors should monitor the Federal Business Opportunities website at <http://www.fbo.gov> in the event this announcement is amended or CALLS are issued.

I. BACKGROUND – HIGH SPEED STRIKE WEAPON

As envisioned, a high speed weapon will assist the “Joint Force” Commander by providing a responsive capability enabling the application of force to achieve desired effects against a variety of targets in various environments. In addition, the ability to achieve effects rapidly over long distances provides the unique capability to hold targets in multiple areas of responsibility at risk, thus mitigating potential problems posed by unexpected events. Legacy weapons cannot always respond rapidly to evolving and emerging threat systems from relevant standoff distances.

The Air Force Research Laboratory’s (AFRL) response to this challenge is the High Speed Strike Weapon (HSSW) capability program. The program includes two demonstrations being conducted for an air-breathing vehicle and a boost glide vehicle that focus on near term enabling technologies that require flight testing. Longer term enabling/enhancing technologies will be matured to a Technology Readiness Level (TRL) of 5/6 under the HSSW technology maturation (Tech Mat) activities. This BAA addresses the Tech Mat activities ONLY. The HSSW Tech Mat areas include but are not limited to: Modeling, Simulation and Analysis (MS&A), Ordnance, Guidance Navigation and Control/Airframe, Propulsion, Materials and Structures/Manufacturing, and Conceptual Design and Systems Integration. The demonstration efforts will run in parallel with the Tech Mat efforts, each will provide data and information to eliminate duplication of efforts.

II. PROGRAM DESCRIPTION

This is a Broad Agency Announcement of the Air Force Research Laboratory, Munitions Directorate (AFRL/RW), under the provisions of Federal Acquisition Regulation (FAR) paragraph 6.102(d)(2) which provides for competitive selection of research proposals. Proposals submitted in response to this BAA that are selected for award are considered to be the results of full and open competition and in full compliance with the provisions of PL 98-369, the Competition in Contracting Act of 1984.

This acquisition is unrestricted. Small businesses are encouraged to propose on all or any part of this solicitation. The NAICS Code for this acquisition is 541712 (for Research and Development in the Physical, Engineering, and Life Sciences (except Biotechnology), and the small business size standard is 500 employees (1000 employees for Space Vehicles and Guided Missiles, their propulsion unit parts, and their auxiliary equipment and parts, 1000 employees for Aircraft Parts, and Auxiliary Equipment, and Aircraft Engine Parts, and 1500 employees for Aircraft).

The scope of this effort is multi-disciplined, to include the weapon technologies that will be impacted by the harsh environment of high speed flight. The objective of this BAA is to investigate, develop, design and demonstrate high speed weapon technologies to TRL of 5/6. These weapon technologies are critical for the successful development and production, to meet the future warfighter weapon requirements. For the purpose of this announcement, AFRL/RW intends to contract with private industry, non-profit organizations, and educational institutions for research in the HSSW critical technologies.

Efforts proposed under this BAA should be designed to demonstrate well defined and substantive research results.

Under some circumstances, we expect that narrowly focused proposals for specific research interests under the research areas outlined in this BAA may be required during the time of this open announcement. Under those circumstances, proposal call announcements (CALLS) may be issued in FedBizOpps under BAA-AFRL-RWK-2015-0003 to request proposals for specific topic areas. These subsequent CALLS will contain specific objectives and descriptions of the specific topic area to be addressed, anticipated period of performance, information peculiar to the specific topic area, and the expected dollar range for proposals received under a CALL. Proposals in response to a BAA CALL will be evaluated in accordance with the Proposal Review Information.

AFRL/RW contracts with educational institutions, non-profit organizations, and private industry for research in armament technology. This BAA is intended to cover, in general nature, all research areas of interest to the HSSW program. Offerors contemplating submission of a proposal should carefully examine this BAA, and are also strongly encouraged to contact the appropriate AFRL technical Point of Contact (POC) identified in this publication to ascertain the extent of interest AFRL/RW may have in a specific research project.

The High Speed Strike Weapon (HSSW) Tech Mat program is designed to reduce technical risk in several key areas for the eventual demonstration of an air-delivered weapon. The objective is to develop system/subsystem and component technologies to a maturity level sufficient for transition. Depending on the specific technology area, this development will entail component and/or breadboard validation in laboratory and/or relevant environment as well as system/subsystem model or prototype demonstration in a relevant environment.

The HSSW program is organized around a coordinated set of technology development programs grouped in six key research areas; Modeling, Simulation, and Analysis (MS&A), Ordnance, Guidance Navigation and Control/Airframe, Propulsion, Material/Structures and Manufacturing, and Conceptual Design and Systems Integration. The following narratives are intended to provide an abbreviated description of the prospective research areas. These descriptions furnish specific examples of areas of interest and the Directorate focal point(s).

RESEARCH AREA 1 – MODELING, SIMULATION, AND ANALYSIS (MS&A)

The goal of this work is to develop/modify and employ models used to analyze advanced high speed weapon concepts and their related concepts of employment to highlight technologies worthy of consideration for investment. The objective is to apply, modify and/or combine engineering, engagement (one-on-one), mission (few-on-few), systems-of-systems, campaign (many-on-many, military worth), level modeling techniques, tools, and analysis methods as well as virtual and constructive digital simulation which lend themselves to the quick and effective evaluation of advanced high speed weapon concepts. Concepts include, but are not limited to, intercommunicative weapons, novel damage mechanisms, lethal and novel destruct mechanisms, multiple targeting, and time critical delivery. Detailed modeling includes, but are not limited to, sensors, aerodynamics, autopilots, navigation and guidance schemes, propulsion, warheads, fuzes, datalinks, error filters, environment (wind, fog, dust), lethality, vulnerability, and threats. Scenario development and visualization at each level of MS&A is also sought.

Research into new simulation toolsets and architectures designed for this **purpose will** also be considered. Additionally, environmental factors that influence a weapons performance can be considered. This can include but are not limited to urban environments, collaborative simulation environments, A2AD type environments, scenario generation and infrastructure simulation common to environments that weapons may operate in. Some or all of the work performed under this BAA Research Area will be performed on-site (e.g. at the Government facility) and security clearances at the SECRET level will be required.

Technical POCs:

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Dr. James Weber
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RESEARCH AREA 2 – ORDNANCE

The objective in this area is to develop ordnance technologies capable of meeting the unique requirements and environments of high-speed delivery – extreme heating and vibration during cruise/glide/terminal phases, extreme target engagement conditions from the high terminal velocities, and high-g impact survivability - while exploiting the kinetic energy of the high speed terminal phase. It is envisioned the HSSW ordnance package may be smaller than the traditional ordnance it may require higher energy density and greater efficiency in transferring energy to target. Areas to be explored but are not limited to include fuze functionality, high temperature energetic formulations, conformal ordnance package, warhead case functionality, robust warhead lethality, and ordnance package integration.

Technical POC:

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RESEARCH AREA 3 – GUIDANCE, NAVIGATION & CONTROL /AIRFRAME

The objective in this area is to develop guidance methodologies needed to provide maximum range, minimum flight time and minimum target miss distance. The guidance associated with the weapon must be robust enough to overcome GPS degraded/denied

environments and adaptive enough to control deforming airframes within a time compressed trajectory. Areas to be explored but are not limited to include air data sensing, data links, optimizing guidance laws, robust/adaptive autopilots, and seeker/sensor techniques that could support the HSSW accuracy requirements in a GPS denied A2/AD environments. Of particular interest with respect to GN&C Research is the sensing and estimating (1) the weapon motion and attitude with respect to the air mass, (2) the missile body state of deformation, and (3) the target relative location from an electromagnetic wave transmitted through a corrupted radome/window and varying boundary layer air mass density while sensing on a deforming airframe moving at high speed. The engagement of stationary and relocatable targets must provide information for guidance in sufficient time to prosecute a target while in high altitude flight at high speeds. We anticipate that some level of data collection will be required in order to support development and analysis of a detailed RF/EO/IR seeker based concept.

Technical POC:

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RESEARCH AREA 4 – PROPULSION

The objective in this area is to evaluate and develop propulsion technologies to enable increased speed and effectiveness of the weapon. Areas to be explored but are not limited to include ramjet/scramjets, boosters, fuels, inlets, nozzles, predictive models that describes the aero-dynamic effects of the propulsion system is essential for control/autopilot development. Conceptual propulsion system designs will be developed and analyzed to identify issues, gain knowledge of technology impacts and technology interactions, and understand the impact of more advanced technology.

Technical POC:

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RESEARCH AREA 5 – MATERIAL/STRUCTURES AND MANUFACTURING

The objective in this area is to evaluate and develop materials that can be utilized in High Speed weapon concepts that will negate or take advantage of the effects of high speed long duration flight. Specifically the development of materials that will protect the integrity of the airframe structure while allowing the system and subsystems to function as designed. Areas to be explored but are not limited to include development of radome/window materials conducive with RF/EO/IR transmission, temperature resistant and lightweight materials for increased range and survivability. Anticipating that these

materials might be exotic and fragile, connecting and mounting issues must be addressed. Thermal management techniques and protection systems use materials, coatings and insulations to reduce the effects of the high speed environment on the components and sub-systems, including the airframe. Advances in Thermal management techniques would enable future HSSW system development.

Manufacturing is also a concern for future high speed weapon concepts. Areas to be explored but are not limited to include advanced additive manufacturing and processing techniques to drive down part count, logistics and cost.

Technical POC:

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RESEARCH AREA 6 – CONCEPTUAL DESIGN AND SYSTEMS INTEGRATION

The objective in this area is to develop system/subsystem level concepts to enhance or increase capability of a next-generation, air-launched weapon. This effort will explore the technology & performance trade space for design robustness. The focus will be on exploring system integration issues and design interactions between subcomponent technologies to enable improved terminal accuracy and overall weapon effectiveness. Areas to be explored but are not limited to include host platform integration, weapon system logistics, compressed carriage techniques, robust airframe designs, maintainability and system safety.

Technical POC:

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III. AWARD INFORMATION

A. Anticipated Funding: Note that there is no inherent funding associated with this Basic Open BAA. All funding is subject to change due to Government discretion and availability. All potential offerors should be aware that due to unanticipated budget fluctuations, funding in any or all areas may change with little or no notice.

Each CALL will have funding profiles specific to that effort. However, similarly, all 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 Type of Awards: The Air Force reserves the right to award the instrument best suited to the nature of the research proposed. A contract or assistance instrument

could be awarded as a result of this BAA as appropriate. We expect most awards with universities and non-profit organizations to be grants.

C. Evaluation and Award (Applicable to Both Basic Open BAA and BAA Call): Proposals are intended to be evaluated, and awards made, without discussions unless discussions are determined to be necessary. However, the Government may obtain clarifications to determine proposal acceptability. Discussions may be held with prospective awardees prior to award if needed. In the event the Government is unable to conclude negotiations with the apparent successful offeror(s), it reserves the right to conduct negotiations with another acceptable offeror. Offerors are cautioned that only Contracting Officers are legally authorized to obligate funds and commit the Government.

IV. ELIGIBILITY INFORMATION

A. Eligible Offeror/Applicants: This is an unrestricted solicitation. Small businesses are encouraged to propose on all or any part of this solicitation.

B. Foreign-owned Firms: 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 Section VIII for information if they contemplate responding. The subject line of all correspondence must reference the BAA number, title, and associated research area.

C. 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, 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 (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, 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 a determination be made concerning the FFRDC's eligibility to receive an award.

D. Government Agencies: If a Government agency is interested in performing work, offerors should immediately contact the contracting office focal point identified in Section VIII for information if they contemplate responding. If those discussions result in a mutual interest to pursue your agency's participation, the effort will be pursued independent of this announcement.

E. Cost Sharing or Matching: Cost sharing is not a requirement.

V. BASIC OPEN BAA SECTION

A. WHITE PAPER SUBMISSION INFORMATION:

1. Application Package: THIS ANNOUNCEMENT CONSTITUTES THE ONLY SOLICITATION and WE ARE SOLICITING WHITE PAPERS ONLY. DO NOT SUBMIT A FORMAL PROPOSAL AT THIS TIME. Those offerors whose white papers are found to be consistent with the intent of this BAA may later be invited to submit a technical and cost proposal. Offeror's white papers not selected may contact the technical POC for feedback on their submission. Debriefings will not be offered for white papers. An unfavorable white paper evaluation will bar the offeror from further consideration unless the white paper is subsequently revised and resubmitted. Revised white paper submissions will be reevaluated in accordance with the white paper evaluation criteria.

2. Content and Form of Submission of White Papers: **Offerors shall only submit Unclassified white papers for this BAA.** Offerors are required to submit either 1 electronic copy or 2 paper copies of a white paper that is 5 pages or less summarizing their proposed approach/solution. Any pages over the stated 5 page maximum will not be evaluated. The purpose of the white paper is to preclude unwarranted effort on the part of an offeror whose proposed work is not of interest to the Government. The format for the white paper is as follows:

a. Page Format:

- Paper Size - 8.5 inch x 11 inch
- Margins on every page shall be one-inch on top, bottom, left and right sides
- Font size shall be standard 12 point Times New Roman. Character spacing must be "normal," not condensed in any manner. All text, including text in tables, references, 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 double-spaced (must use standard double-space function in Microsoft Word)

b. Document Format:

Section A: Title, White Paper in response to Research Area Number (identify #), Period of Performance, Estimated Cost, Name/Address of Company, Commercial and Government Entity (CAGE) number, Dun & Bradstreet Data Universal Numbering System (DUNS) number, Technical and Contracting Points of Contact (phone, fax and email) (this section is NOT included in the page count).

Section B: Task Objective.

Section C: Technical Summary and Proposed Deliverables.

Section D: Rough Order of Magnitude (ROM) Cost

c. Multiple white papers within the purview of this announcement may be submitted by an offeror. If an offeror wishes to restrict access to his/her white paper, it must be marked with the restrictive language stated in FAR 52.215-1(e). In addition, respondents are

requested to provide their fax number, an e-mail address, and reference BAA-AFRL-RWK-2015-0003 with their submission.

3. Funding Restrictions: The cost of preparing white papers/subsequent proposals in response to this announcement 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 cost specified in

FAR 31.205-18. Incurring pre-award costs for ASSISTANCE INSTRUMENTS ONLY are regulated by the DoD Grant and Agreements Regulations (DODGARS).

4. Other Submission Requirements: If the offeror chooses to submit white papers in hard copy, they must be submitted directly to the contract specialist at the address at paragraph VIII(B). Documents should reference BAA-AFRL-RWK-2015-0003, a technical topic, and the name listed as a Technical POC for that Research Area. In lieu of 2 hard copies, electronic submissions may be sent to the Contracting Office at afrl.rwk.baaworkflow@us.af.mil.

B. WHITE PAPER / PROPOSAL REVIEW INFORMATION

1. **White Paper Evaluation Criteria:** The following two criteria will be used to determine whether full proposals will be invited based on the white paper submitted. The following criteria are listed in descending order of importance.

Evaluation Criteria:

1: An integrated, comprehensive, and unbiased assessment of the proposed technical approach to include scientific and/or technical merits/feasibility and the potential contributions of the effort to extending the scientific understanding associated with the technologies being pursued by the three AFRL Directorates and described in the 6 research areas of the BAA.

2: ROM commensurate with technical approach.

2. **Proposal Evaluation Criteria:** If white paper is selected for further consideration, the following evaluation criteria, listed in descending order of importance (cost/price is a substantial factor but second in priority), will be used to determine if a contract is to be awarded:

Technical Evaluation Criteria:

1: An integrated, comprehensive and unbiased assessment of the proposed technical approach to include scientific and/or technical merits/feasibility and the potential contributions of the effort to extending the scientific understanding associated with the technologies being pursued by the three AFRL Directorates and described in the 6 research areas.

2: The offeror's management/organizational capabilities, related experience, facilities, techniques, or unique combinations of these that are integral factors for achieving the proposed project objectives presented in the formal proposal.

3: The qualifications, capabilities, and experience of the proposed principal investigator, team leader, and other key personnel who are critical to achieving the proposed objectives presented in the formal proposal.

Cost/Price Evaluation Criteria (Substantial factor but second in priority): The reasonableness and realism of proposed costs and fees if any, the proposed cost share by the offeror if any, and the availability of funds (i.e., considering budgets and funding).

3. Proposal Risk Assessment: Proposal risk for technical, cost, and schedule will be assessed for formal proposals, should they be requested, as part of the evaluation of the above evaluation criteria. Proposal risk relates to the identification and assessment of the risks associated with an offeror's proposed approach as it relates to accomplishing the proposed effort. Tradeoffs of the assessed risk will be weighed against the potential scientific benefit. Proposal risk for schedule relates to an assessment of the risks associated with the offeror's proposed number of hours, labor categories, materials, or other cost elements as it relates to meeting the proposed period of performance.

4. Review and Selection Process: The evaluation described above will generally result in proposals being placed in one of the three categories below:

a. Category I: Demonstrates technical merit. Is important to agency programs. The offeror presents relevant experience and access to adequate resources. Risk is acceptable. The cost/price is reasonable and realistic. Proposals in Category I are recommended for acceptance (subject to availability of funds) and normally are displaced only by other Category I proposals.

b. Category II: Demonstrates technical merit; is important to agency programs; and presents relevant experience and access to adequate resources; but requires further development. Risk is acceptable. The cost/price is reasonable and realistic. Category II proposals are recommended for acceptance, but at a lower priority than Category I.

c. Category III: Does not demonstrate technical merit; does not meet agency needs; does not present adequate experience or resources; the risk level is unacceptable; or the cost/price is not reasonable or realistic.

C. AWARD ADMINISTRATION INFORMATION:

1. Award Notices (White Papers): Offerors of those white papers found to be consistent with the intent of this Basic Open BAA may be invited to submit a technical and cost proposal. Notification by email or letter will be sent by the Contracting Officer. Such invitation does not assure that the submitting offeror will be awarded a contract. Offerors of those white papers not selected for further consideration will be notified in the same manner. Prospective offerors are advised that only Contracting Officers are legally authorized to commit the Government. Offerors may request status of their white paper no earlier than 60 calendar days after submission.

2. Award Notices (full proposals): Offerors will be notified whether their proposal is recommended for award after evaluation of the proposal. The notification 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.

VI. CALLS BAA SECTION

Periodically, proposal call announcements (CALLS) may be issued in FedBizOpps under BAA-AFRL-RWK-2015-0003 to request proposals for Armament Technology topic areas. This is a one-step process and NO WHITE PAPER will be requested, PROPOSALS ONLY. These subsequent CALLS will contain specific objectives and descriptions of the specific topic area to be addressed, anticipated period of performance, information peculiar to the specific topic area, and the expected dollar range for proposals received under the CALL. Proposals in response to the CALL BAA will be accepted as specified in the actual CALL. Offeror's are advised that Adequate Price Competition may be applicable to CALLs issued against the BAA.

A. PROPOSAL SUBMISSION INFORMATION

1. Content and Form of Submission of Proposals: **Offerors shall review and adhere to the HSSW Security Classification Guide (SCG) prior to submitting proposals.**

a. Page Format:

- Paper Size - 8.5 inch x 11 inch
- Margins on every page shall be one-inch on top, bottom, left and right sides
- Font size shall be standard 12 point Times New Roman. Character spacing must be "normal," not condensed in any manner. All text, including text in tables, references, 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 double-spaced (must use standard double-space function in Microsoft Word)

b. Proposal Format:

Section A: Title, Proposal in response to BAA-AFRL-RWK-0003, Research Area Number (identify #), Period of Performance, Estimated Cost, Name/Address of Company, Commercial and Government Entity (CAGE) number, Dun & Bradstreet Data Universal Numbering System (DUNS) number, Technical and Contracting Points of Contact (phone, fax and email). This section is NOT included in the page count.

Section B: Technical Proposal. Please note that the page count(s) will be addressed in each proposal call announcement.

Section C: Price Proposal. Please note that the page count(s) will be addressed in each proposal call announcement.

Section D: Representations and Certifications. This section is NOT included in the page count.

Section E: Proposal Adequacy Checklist, if applicable. This section is NOT included in the page count.

2. Funding Restrictions: The cost of preparing proposals in response to this announcement 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 cost specified in FAR 31.205-18. Incurring pre-award costs for ASSISTANCE INSTRUMENTS ONLY are regulated by the DoD Grant and Agreements Regulations (DODGARS).

3. Other Submission Requirements: If the offeror chooses to submit proposals in hard copy, they must be submitted directly to the contract specialist at the address at paragraph VIII(B). Documents should reference BAA-AFRL-RWK-2015-0003, a technical topic, and the name listed as a Technical POC for that Research Area. In lieu of 2 hard copies, electronic submissions may be sent to the Contracting Office at afri.rwk.baaworkflow@us.af.mil.

4. Proposal due dates and times will be specified in each CALL. Proposals received after the due date and time specified in the CALL shall be governed by the provisions of FAR 52.215-1(c)(3). Offerors MUST monitor FedBizOpps <https://www.fbo.gov> in the event this announcement is amended or CALLS are issued. Offerors must monitor these systems to ensure they receive the maximum proposal preparation time for subsequent amendments as this is the official notification vehicle to request proposals.

5. Communications: Prospective offerors may contact the technical points of contact to verify interest in the effort to be proposed PRIOR to committing any resources to the preparation of any proposals in response to a CALL under this announcement. Discussions shall not include content or rating information of other offeror's proposals or White Papers. Discussions with the points of contact shall not constitute a commitment by the Government to subsequently fund or award any proposed effort. Questions outside the scope of the technical focal point, such as contract terms or conditions, or projected award schedule, should be referred to the Contracting Officer. Only Contracting Officers are legally authorized to commit the Government.

6. Estimated Program Cost: Each CALL will contain funding profiles specific to that effort. All 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. PROPOSAL REVIEW INFORMATION:

1. Proposal Evaluation Criteria: The following evaluation criteria, listed in descending order of importance (cost/price is a substantial factor second in priority), will be used to determine if a contract is to be awarded:

Technical Evaluation Criteria:

1: An integrated, comprehensive, and unbiased assessment of the proposed technical approach to include scientific and/or technical merits/feasibility and the potential contributions of the effort to extending the scientific understanding associated with the technologies being pursued by the three AFRL Directorates and described in the 6 research areas.

2: The offeror's management/organizational capabilities, related experience, facilities, techniques, or unique combinations of these that are integral factors for achieving the proposed project objectives presented in the formal proposal.

3: The qualifications, capabilities, and experience of the proposed principal investigator, team leader, and other key personnel who are critical to achieving the proposed objectives presented in the formal proposal.

Cost/Price Evaluation Criteria (Substantial factor but second in priority): The reasonableness and realism of proposed costs and fees if any, the proposed cost share by the offeror if any, and the availability of funds (i.e., considering budgets and funding).

2. Proposal Risk Assessment: Proposal risk for technical, cost, and schedule will be assessed for formal proposals, as part of the evaluation of the above evaluation criteria. Proposal risk relates to the identification and assessment of the risks associated with an offeror's proposed approach as it relates to accomplishing the proposed effort. Tradeoffs of the assessed risk will be weighed against the potential scientific benefit. Proposal risk for schedule relates to an assessment of the risks associated with the offeror's proposed number of hours, labor categories, materials, or other cost elements as it relates to meeting the proposed period of performance.

3. Review and Selection Process: The evaluation described above will generally result in proposals being placed in one of the three categories below:

a. Category I: Demonstrates technical merit. Is important to agency programs. The offeror presents relevant experience and access to adequate resources. Risk is acceptable. The cost/price is reasonable and realistic. Proposals in Category I are recommended for acceptance (subject to availability of funds) and normally are displaced only by other Category I proposals.

b. Category II: Demonstrates technical merit; is important to agency programs; and presents relevant experience and access to adequate resources; but requires further development. Risk is acceptable. The cost/price is reasonable and realistic. Category II proposals are recommended for acceptance, but at a lower priority than Category I.

c. Category III: Does not demonstrate technical merit; does not meet agency needs; does not present adequate experience or resources; the risk level is unacceptable; or the cost/price is not reasonable or realistic.

No further evaluation criteria will be used. Individual proposals will be evaluated against the evaluation criteria without regard to other proposals submitted under this BAA.

It is the policy of AFRL/RW to treat all proposals as privileged information, and to disclose the contents only for the purposes of evaluation. Those selected as a result of initial review will be subject to an extensive evaluation by highly qualified Government scientists. The offeror must appropriately indicate any limitation to be placed on disclosure of information contained in the proposal. Should portions of a proposal be incorporated into a resulting contract, that portion may be subject to release under the Freedom of Information Act unless exempt from release.

4. AWARD NOTICES: Offerors will be notified whether their proposal is recommended for award after evaluation of the proposal. The notification 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. TERMS APPLICABLE TO ALL BAA AWARDS:

A. Administrative and National Policy Requirements: Depending on the work to be performed, the offeror may require a classified facility clearance and safeguarding capability; therefore, personnel identified for assignment to a classified effort 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 have access to, a certified and Government-approved facility to support work under this BAA. Data subject to export control constraints may be involved and only firms holding certification under the US/Canada Joint Certification Program (JCP) (www.dlis.dla.mil/jcp) are allowed access to such data.

B. Reporting: Contractors should expect any contract or assistance instrument resulting from this BAA would contain the requirement to provide various types of periodic and final technical reports, and possibly cost and other reports.

C. Data Rights 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 contractor shall identify data rights assertions IAW DFARS 227.7103-3, 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.

D. Occupational Safety and Health (OSHA) and Voluntary Protection Program (VPP): Eglin AFB is in the process of pursuing recognition under the OSHA VPP. If required as a part of a resulting contract from this BAA, AFFARS 5352.223-9001 mandates that adequate health and safety requirements be identified in the contract. Contractors can gain more information regarding the OSHA VPP Program at

<http://www.osha.gov/dcsp/vpp/index.html>.

VIII. AGENCY CONTACTS

A. Questions of a technical nature shall be directed to the technical point of contact listed in Section II Research Areas, above.

B. Questions of a contractual/business nature shall be directed to the contract specialist:

Kendall Wagner
101 W. Eglin Blvd Ste. 337
Eglin AFB, FL 32542-6810
Phone: (850) 883-2681
Email: kendall.wagner@us.af.mil
Fax: (850) 882-9599

Note: Any correspondence should reference the BAA title, number, and research area in the Subject Line.

C. Questions regarding the HSSW Security Classification Guide (SCG) shall be directed to the HSSW program manager:

Mr. John E. Leugers
AFRL/RWPI
Phone: (850) 883-2502
Fax: (850) 883-2538
john.leugers@us.af.mil

D. In accordance with AFFARS 5301.9103, an Ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and others for this acquisition announcement. Before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the Contracting Officer listed above for resolution.

AFFARS 5352.201-9101 Ombudsman will be incorporated into all contracts awarded under this BAA. The Ombudsman is as follows:

Barbara Gehrs
Director of Contracting (AFRL/PK)
Phone: (937) 904-4407
Email: barbara.gehrs@us.af.mil

IX. OTHER INFORMATION PERTINENT TO AWARD OF CONTRACTS AND/OR ASSISTANCE INSTRUMENTS

A. Support Contractors: Only Government employees will evaluate the white papers/proposals for selection. The AFRL Munitions Directorate has 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 the administrative support contract, 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." These contractors have signed general non-disclosure agreements and organizational conflict of interest statements. The required administrative access will be granted to non-technical professionals. Examples of the administrative tasks performed include:

1. Assembling and organizing information for R&D case files;
2. Accessing library files for use by Government personnel; and
3. Handling and administration of proposals, contracts, contract funding and queries.

Any objection to administrative access must be in writing to the Contracting Officer and shall include a detailed statement of the basis for the objection.

B. Communication: 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.

C. Debriefings (Proposals Only): When requested, a debriefing will be provided. The debriefing process will follow the time guidelines set out in 10 USC 2305(b)(5), but the debriefing content may vary to be consistent with the procedures that govern BAAs (FAR 35.016).

D. 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, which requires electronic submission of all payment requests. Effective 1 October 2006, the Department of Defense adopted Wide Area Work Flow-Receipt and Acceptance (WAWF-RA), as the electronic format for submission of electronic payment requests. Any contract resulting from this announcement will establish a requirement to use WAWF-RA 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-RA system. Information regarding WAWF-RA, including the web-based training and registration, can be found at <https://wawf.eb.mil/>. Note: WAWF-RA requirement does not apply to universities that are audited by an agency other than DCAA.

E. Item Identification and Valuation: Any contract award resulting from this announcement may contain the clause at DFARS 252.211-7003, Item Unique Identification and Valuation (Dec 2013), which requires unique item identification and valuation of any deliverable item for which the Government's unit acquisition cost is \$5,000 or more; subassemblies, components, and parts embedded within an item valued at \$5,000 or more; or items for which the Government's unit acquisition cost is less than \$5,000 when determined necessary by the requiring activity for serially managed, mission essential, or controlled inventory. Also included are any DoD serially managed subassembly, component, or part embedded within a delivered item and the parent item that contains the embedded subassembly, component, or part. Per DFARS 211.274-3 policy for valuation, it is DoD policy that contractors shall be required to identify the Government's unit acquisition cost for all items delivered, even if none of the criteria for placing a unique item identification mark applies. Therefore, your proposal must clearly break out the unit acquisition cost for any deliverable items. Per DFARS 211.274-3 policy for valuation, "the Government's unit acquisition cost is the contractor's estimated fully burdened unit cost at time of delivery to the Government for cost type or undefinitized line, subline, or exhibit line items" (per DoD, "fully burdened unit costs" to the Government would include all direct, indirect, G&A costs, and an appropriate portion of fee). If you have questions regarding the unique item identification requirements, please contact the contracting point of contact listed above. For more information, see the following website: <http://www.acq.osd.mil/dpap/sitemap.html>. The contract will also include DFARS 252.211-7007, Reporting of Government-Furnished Property (Aug 2012).

F. Forward Pricing Rate Agreements: If formal proposals are requested, offerors who have Forward Pricing Rate Agreements (FPRAs) and Forward Pricing Rate Recommendations (FPRRs) should submit them with their proposals.

G. 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 Preaward Registry <http://www.dol-esa.gov/preaward>. This registry indicates that the contractor has been found to be "in compliance" within the past 2 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.

H. Limitations on Pass-Through Charges: Any contract award resulting from this announcement may contain the clause at FAR 52.215-23, Limitations on Pass-Through Charges (Oct 2009), which requires the contractor to identify in its proposal the percentage of effort to be performed by the prime contractor and the percentage expected to be performed by each subcontractor. If the contractor intends to subcontract more than 70% of the total cost of work under the contract or task order, then it shall identify the amount of the contractor's indirect costs and profit applicable to the subcontract work, and a description of the value added by the contractor. If any subcontractor intends to subcontract to a lower tier subcontractor more than 70% of the total cost of its work, then it shall identify the amount of the subcontractor's indirect costs and profit applicable to the lower tier subcontract work, and a description of the value added by the subcontractor.

I. Associate Contractor Agreements: Associate Contractor Agreements (ACAs) are agreements between contractors working on Government contract projects 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.

J. Post-Award Small Business Program Re-representation: As prescribed in FAR 19.309, FAR Clause 52.219-28, "Post-Award Small Business Program Re-representation (Jul 2013)," 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 re-represent its size status when certain conditions apply. The clause provides detail on when the re-representation must be complete and what the contractor must do when a re-representation is required.

K. Employment Eligibility Verification: As prescribed by FAR 22.1803, FAR Clause 52.222-54, Employment Eligibility Verification (Aug 2013), is hereby incorporated by reference in this solicitation. Any contract awarded as a result of this BAA that is above the Simplified Acquisition Threshold, and contains a period of performance greater than 120 days, shall include this clause. This clause provides the requirement of contractors to enroll as a Federal Contractor in the E-Verify program within 30 days after contract award.

L. Reporting Executive Compensation and First-Tier Sub-contract/Sub-recipient Awards: As prescribed by FAR 4.1403(a), FAR 52.204-10 Reporting Executive Compensation and

First-Tier Subcontract Awards (Jul 2013) 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. Any grant or agreement award resulting from this announcement may contain the award term set forth in 2 CFR, Appendix A to Part 25

<http://ecfr.gpoaccess.gov/cgi/t/text/textidx?c=ecfr&sid=c55a4687d6faa13b137a26d0eb436edb&rgn=div5&view=text&node=2:1.1.1.4.1&idno=2#2:1.1.1.4.1.2.1.1>.

M. Updates of Publicly Available Information Regarding Responsibility Matters: Any contract or assistance award that exceeds \$500,000.00; 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 (Jul 2013).

N. Contractor Business Systems: DFARS 252.242-7005, Contractor Business Systems (Feb 2012), is hereby incorporated by reference.

O. Enabling Clause: Any contract award resulting from this announcement will contain a special clause entitled "Enabling Clause between Prime Contractors and Service Contractors", when a prime contractor must agree to cooperate with a support contractor during the performance of this contract.

P. Provisions of the Federal Acquisition Regulation may be accessed electronically at this address: <http://farsite.hill.af.mil>

Q. System for Award Management (SAM) Registration: FAR 52.204-7, System for Award Management (SAM) (Jul 2013), and DFARS 252.204-7004, Alternate A, System for Award Management (SAM) (May 2013), are included by reference. SAM is the primary Government repository for prospective federal awardee information and the centralized Government system for certain contracting, grants, and other assistance related processes. It replaces CCR/FedReg, On-line Representations and Certifications (ORCA) and the Excluded Parties Lists System (EPLS). Contractors shall be registered in the SAM database prior to submitting an invoice and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation. Contractors may obtain information on registration and annual confirmation requirements via the SAM accessed through <https://www.acquisition.gov> or by calling 866-606-8220.

R. Government Approved Accounting System: An offeror must have a government approved accounting system prior to award of a cost-reimbursement contract per limitations set forth in FAR 16.301-3(a) to ensure the system is adequate for determining costs applicable to the contract. The acceptability of an accounting system is determined based upon an audit performed by the Defense Contract Audit Agency (DCAA).

S. Collection of Data Concerning Women in STEM under DoD Grants and Cooperative Agreements: To evaluate compliance with Title IX of the Education Amendments of 1972 (20 U.S.C. A§1681 Et. Seq.), the Department of Defense is collecting certain demographic and career information, **for grants and cooperative agreements**, to be able to assess the success rates of women who are proposed for key roles in

applications in STEM disciplines. To enable this assessment, each application must include the following forms completed as indicated:

RESEARCH & RELATED Senior/Key Person Profile (Expanded) (Ref. Attachment 1):

The Degree Type and Degree Year fields on the Research and Related Senior/Key Person Profile (Expanded) form will be used by DoD as the source of career information. In addition to the required fields on the form, applicants must complete these two fields for individuals that are identified as having the project role of PD/PI or Co-PD/PI on the form. Additional senior/key persons can be added by selecting the “Next Person” button.

RESEARCH & RELATED PERSONAL DATA Project Director/Principal Investigator and Co-Project Director(s)/Co-Principal Investigator(s) (Ref. Attachment 2):

This form will be used by DoD as the source of demographic information, such as gender, race, ethnicity, and disability information for the Project Director/Principal Investigator and all other persons identified as Co-Project Director(s)/Co-Principal Investigator(s). Each application must include this form with the name fields of the Project Director/Principal Investigator and any Co-Project Director(s)/Co-Principal Investigator(s) completed; however, provision of the demographic information in the form is voluntary. If completing the form for multiple individuals, each Co-Project Director/Co-Principal Investigator can be added by selecting the “Next Person” button. The demographic information, if provided, will be used for statistical purposes only and will not be made available to merit reviewers. Applicants who do not wish to provide some or all of the information should check or select the “Do not wish to provide” option.

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Place of Performance:

TBD
United States

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