DEPARTMENT OF THE AIR FORCE

AIR FORCE RESEARCH LABORATORY

KIRTLAND AIR FORCE BASE NEW MEXICO

Science, Innovation & Technology Partnership Intermediary Agreement (SITPIA)

Funding Opportunity Announcement (FOA)

---

1. **Funding Opportunity Announcement (FOA) Number:** PIA-FOA-21-AFRL-0001

2. **Federal Assistance Number (CFDA):** 12.800 Air Force Defense Research Sciences Program

3. **AFRL Contracting Office:** Space Vehicles Directorate, RVKE

4. **Announcement Type and Key Dates:**

FOA Type	Initial FOA
FOA Issue Date	20 August 2021
FOA Questions Email To	Sara Telano, AFRL/RVKE, Contracting Specialist sara.telano@us.af.mil Karina Zubiate. AFLR/RVKE, Contracting Specialist karina.zubiate@spaceforce.mil
FOA Submission Deadline for Proposals	21 September 2021, 02:00 PM MST

This is a five year Funding Opportunity Announcement (FOA) accepting proposals from the date of publication for award of a Partnership Intermediary Agreement (PIA), subject to the availability of funds. Proposals may be submitted from the date of publication, until the initial submission deadline on 21, September 2021, 02:00 PM MST. All proposals must be submitted electronically through the Grants.gov government-wide electronic portal at https://www.grants.gov/. The Government reserves the right to enter into one, multiple or no agreements pursuant to this announcement.

Once the FOA has reached the five year period and/or funds are no longer available, the announcement will be modified to reflect the announcement as closed. This FOA will be reviewed on an annual basis to ensure awards are pertinent to the Government's needs and ceiling values.

5. **Registration Requirements:**

There are several one-time actions that must be completed in order to submit an application in response to this FOA (e.g., obtain a Data Universal Numbering System (DUNS) number from Dun & Bradstreet (D&B), register with the System for Award Management (SAM.gov), and register with Grants.gov). Recipients who are not currently registered with SAM.gov and/or Grants.gov should allow sufficient time to complete registration. It is suggested that the registration process be started as soon as possible. Questions relating to the Grants.gov registration process, system requirements, or application submission must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov.

Table of Contents

Section I-Funding Opportunity Description 3
A. Summary 3
B. Background 3
C. Program Description 3
D. Authorizations 5
Section II- Federal Award Information 5
A. Funding Amount and Period of Performance 5
B. Place of Performance 6
C. Minimum and Maximum Award Size Estimates 6
D. Type of Award Instrument 7
Section III- Eligibility Information 7
A. Eligible Applicants 7
B. Foreign Entities 8
C. Cost Sharing or Matching 9
D. Other 10
Section IV- Application and Submission Information 10
A. Address to Request Application Package 11
B. Content and Form of Application Submission 11
C. Unique entity identifier and System for Award Management (SAM) 18
D. Submission Dates and Times 18
E. Intergovernmental Review 19
F. Funding Restrictions 19
G. Submissions From Successful Recipients 20
H. Other Submission Requirements 20
Section V - Application Review Information 20
A. Criteria 20
B. Review and Selection Process 23
C. Notice of Selection and Awards 24
Section VI- Federal Award Administration Information 25
A. Federal Award Notices 25
B. Administrative and National Policy Requirements 25
C. Reporting 26
Section VII- Federal Awarding Agency Contact(s) 27
A. Questions 27
B. Contacts 27
Section VIII- Other Information 28
Section IX- Appendix, Attachments, and References 29

Section I-Funding Opportunity Description

A. Summary

The Department of Defense (DoD) Air Force Research Laboratory (AFRL) at Kirtland Air Force Base, New Mexico, is seeking innovative applications from interested Recipients to enter into five-year Partnership Intermediary Agreements (PIAs).

AFRL anticipates a total of $75,000,000.00 of Federal funding under this Funding Opportunity Announcement (FOA). The Government (AFRL) is seeking unclassified proposals that do not contain proprietary information. Proprietary information is defined as information that is not public knowledge and that is viewed as the property of the holder. The Government reserves the right to enter into one, multiple or no agreements pursuant to this FOA.

B. Background

The AFRL Tech Outreach Branch (RDOX) leads tech transfer and STEM education outreach activities for AFRL/RD and AFRL/RV in New Mexico. The Government is seeking Partnership Intermediary Agreements (PIAs) with entities that facilitate joint projects and accelerate technology transfer between the lab and the commercial market. These intermediaries help companies to identify federal technologies that can be licensed and commercialized; and work to increase the likelihood of successful cooperative activities between the lab, small businesses, academia and industry.

The Government has an interest in entering into one or multiple Partnership Intermediary Agreement(s), under the authority of 15 U.S.C. 3715, with a Partnership Intermediary, as defined in 15 U.S.C. 3715 (c), to provide services that stimulate and promote technology development, and outbound and inbound transfer of technology (T2).

C. Program Description

The Government seeks to fund the most creative, comprehensive, and impactful innovation-accelerating Recipients that support the DoD mission and can engage with other innovative-accelerating and entrepreneurially-focused organizations (both public and private). These organizations are critical to the growth of an innovation economy and help accelerate the launch, growth, and scale of businesses, ultimately resulting in the commercialization of new technologies and business models, and development of specialized skills, industries, and technology sectors of jobs in the United States.

The Government encourage applicants to create programs and/or projects that bolster Research and Development (R&D) innovation, increase the maturity and market readiness of DoD relevant technologies to prepare them for transfer and commercialization that support DoD needs, through regional engagement, including with other private actors—both for- and non-profit—as well as with educational institutions, small business firms, state and local entities that may provide additional resources. Through this FOA, AFRL seeks to support the following Program Goals and Objectives:

i. **Program Goals.** AFRL's goals for this program are:

1. Transfer technology developed for the AFRL into Commercial Markets.
2. Transition commercial and academic innovation for AFRL.
3. Foster partnerships between AFRL, industry, and academia.
4. Inspire and support the next generation of technology leaders in the United States.
5. Support and develop innovation internal and external to AFRL.

ii. Program Objectives. AFRL's program objectives are:

1. **Patent and intellectual property (IP) management**—assist with the development and execution of licenses and the development or management of patents and the broader IP portfolio including, but not limited to:
    - Intellectual property – develop strategies and campaigns that provide a legal and proper assignment of rights pertaining to the technologies developed in the course of innovation research and development.
    - Plan, develop and/or implement tech marketing campaigns.
    - Venture capital – successfully access and secure venture capital opportunities for small business and non-traditional companies.
2. **Technology and market research**—conduct technology and market landscape or forecast studies to identify future directions for specific technologies, and provide broad situational awareness regarding the origins and development of a particular technology domain or industry including, but not limited to:
    - Tech scouting – access markets, extract pertinent technologies, and exploit opportunities to integrate existing technologies into the defense sector.
    - Horizon scanning – access markets, extract pertinent technologies, and exploit opportunities to integrate emerging technologies into the defense sector.
    - T2 (into government) - develop strategies and campaigns as a conduit to assist in transferring dual-use technologies into government.
3. **Collaboration spaces and business incubation**—Establish and/or manage physical and virtual spaces that serve as a collaborative environment to engage with non-DoD researchers and businesses. Support commercialization of DoD entity technologies or adapting commercial technologies to meet DoD needs including mentorship and bridge opportunities for entrepreneurs/innovators to turn S&T into workable products and services.
4. **Technology assessment activities** — support organizations with technology demonstrations, showcases, industry days, design sprints, hackathons, workshops, and other events including, but not limited to:
    - Accelerators – support economic development through accelerated growth and maturation of entrepreneurs and non-traditional businesses in and around the defense industry.
    - Develop and implement a promotion and marketing plan for the effective technology transfer of AFRL-New Mexico's technologies and to highlight collaborative activities to state and local governments, academia, and the private sector, etc.
    - Prize competitions—plan and implement prize competitions.
5. **RDT&E collaboration activities**—support organizations with the development, coordination, and problem-solving activities in support of RDT&E collaboration activities. Including, but limited to:
    - Support of IP management and government/industry/academia agreements.
    - Conduct training on tech transfer processes and mechanisms.
    - Execute annual tech transfer awards and recognition programs.
6. **Prototyping and manufacturing capabilities**—support organizations with prototyping, facilitating development of prototypes, and advancing DoD's manufacturing capabilities including, but not limited to:

- Operating an on-base makerspace and supporting programming for a mobile makerspace.

7. **Science, technology, engineering, and mathematics (STEM) education outreach**- Develop and manage K-12 STEM education outreach programs to inspire learners to consider STEM careers, including, but not limited to:
    - Executing the DoD Starbase program in New Mexico.
    - Executing the NDEP Career STREAM Program in New Mexico.
    - Executing K-12 STEM missions including Mission to Mars and Rocket Launch.
8. **SBIR and STTR support programs**—Support the Small Business Innovation Research (SBIR) and the Small Business Technology Transfer (STTR) programs by performing technology scouting to identify and recruit small businesses to those programs.
9. **Regional economic development** – Engage with other entities in the region, such as universities and regional economic development groups, State, local State or local government, or a nonprofit entities, etc., to build their networks and contributions to the Space and Directed Energy innovation ecosystems within AFRL.

NOTE: Recipients are required to respond to ALL the above Program Objectives as part of the Project Narrative or Technical Volume. However, the Recipient may propose additional programs and/or projects objectives that bolster R&D innovation, increase the maturity and market readiness of DoD relevant technologies to prepare them for transfer and commercialization that support DoD needs.

D. Authorizations

The Government has an interest in entering into one or multiple Partnership Intermediary Agreements, under the authority of 15 U.S.C. 3715, with a Partnership Intermediary, as defined in 15 U.S.C. 3715 (c).

Awards made under this announcement will fall under the purview of 2 CFR Part 200 and DOD Research and Development (R&D) Terms and Conditions (March 2021).

The Government provides no funding for direct reimbursement of application development costs. Technical applications and budgets (or any other material) submitted in response to this FOA will not be returned. This FOA is intended for applications that provide strategic solutions and that meet the evaluation criteria specified in this FOA.

The Government reserves the right to cancel this notice, either before or after the closing date. In the event the Government cancels this solicitation or a Recipient is not selected for an award, the Government is under no obligation to pay for any costs associated with preparing or submitting an application to this FOA.

The Government will not issue paper copies of this announcement. A formal Request for Applications, solicitation, and/or additional information regarding this announcement will not be issued.

Section II- Federal Award Information

A. Funding Amount and Period of Performance

As previously stated, AFRL anticipates a total of $75,000,000.00 of Federal funding under this FOA, subject to the availability of funds. The Government reserves the right to select for award all, some, or

none of the applications in response to this announcement and reserves the right to enter into one, multiple or no agreements pursuant to this FOA. Proposed efforts may vary in size and complexity, however, shall not exceed a period of performance of 60 months in length.

The anticipated Period of Performance as follow:

- Technical Effort: 60 months from contract award date.
- Final Reports: 3 months (after end of technical effort).
- Total Effort: 63 months from contract award date.

The Government anticipates making awards that will run up to 60 months in length, comprised of multiple budget periods. The overall effort is expected to be made up of numerous projects and/or programs, continuation will be contingent upon several elements, including satisfactory performance and Go/No-Go decision reviews. At the Go/No-Go decision points, the Government may evaluate Recipient's performance, schedule adherence, the extent to which milestone objectives are met, compliance with reporting requirements, and overall contribution to the program goals and objectives. As a result of this evaluation, AFRL may, at its discretion, authorize the following actions:

1. Continue to fund the program/project, contingent upon the availability of funds;
2. Recommend redirection of proposed effort;
3. Place a hold on Federal funding, pending further supporting data; or
4. Discontinue funding because of insufficient progress, change in strategic direction, or lack of funding.

The Government expects projects to be completed within the proposed performance period. Any requests for no-cost extensions must be fully justified and submitted no later than 60 days before the end of the period of performance. All requests shall be approved by the Grants and Agreements Officer in coordination with the designated Program Manager.

The anticipated period of performance for five year proposals is:
01 December 2021 through **01November 2026**.

B. Place of Performance

Anticipated places of performance include but are not limited to AFRL's Air Force Materiel Command (AFMC), installations located at:

- Directed Energy Directorate (RD), Kirtland AFB, NM
- Space Vehicles Directorate (RV), Kirtland AFB, NM

C. Minimum and Maximum Award Size Estimates

The Government anticipates a total of $75,000,000.00 of Federal funding under this FOA, subject to the availability of funds. The Government reserves the right to fund, in whole or in part, any, all, or none of the proposals submitted in response to this FOA. Proposed efforts may vary in size and complexity, however, shall not exceed a period of performance of 60 months in length.

- Floor (i.e., the minimum amount for an individual award made under this announcement): There is no floor for this FOA, however, Recipients should carefully consider their proposed cost for total period of performance of five-years.

- Ceiling (i.e., the maximum amount for an individual award made under this announcement): The maximum amount for a proposed effort will be $55,000,000.00. Applicants for larger amounts may be considered based on funding availability.

The Government may establish more than one budget period for each award and fund only the initial budget period(s). Funding for all budget periods, including the initial budget period, is NOT guaranteed and is subject to the availability of appropriated funds. Before the expiration of the initial budget period(s), the Government may perform a performance and/or Go/No-Go decision review.

D. Type of Award Instrument

Awards will take the form of a Partnership Intermediary Agreement, subject to the availability of funds.

Any assistance instrument awarded under this announcement will be governed by the award terms and conditions that conform to DoD's implementation of OMB guidance in 2 C.F.R. 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards; 32 C.F.R., National Defense, DoD Research & Development General Terms and Conditions (March 2021) located at: https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions, and FAR Part 31, Contract Cost Principles.

Section III- Eligibility Information

A. Eligible Applicants

To be considered for evaluation, an applicant's submission must meet the criteria set forth below. If the application does not meet these eligibility requirements, it will be considered ineligible and removed from further evaluation.

Applicant Eligibility. To be eligible to apply under this FOA, the applicant must:

1. Be a Public and State controlled institution of higher education in the State of New Mexico; and
2. Have a strong graduate education program with an emphasis on science, technology, engineering, and mathematics (STEM) research.

The FOA goals and objectives include promoting a skilled and productive U.S. workforce, spurring economic development, job creation, support, R&D innovation, technology transfer, technology assessment activities and assist in transferring dual-use technologies into government. AFRL is seeking proposals from New Mexico Public or State research universities that share AFRL's desire to improve New Mexico's education landscape, have a legacy of operating in New Mexico, have insights into the unique NM education and economic development ecosystems, and have broad and deep contacts and connections in the state of New Mexico.

Sub-recipient and/or Sub-awardee Eligibility. The following types of domestic entities are eligible to participate as sub-recipients or sub-awardees under this FOA:

1. Institutions of higher education;
2. For-profit entities;
3. Non-profit entities;
4. State, local and tribal governments; and

5. Small Business enterprises.

Per 15 US Code 3715(c) “Partnership Intermediary” defined:

For purposes of this section, the term “partnership intermediary” means an agency of a State or local government, or a nonprofit entity owned in whole or in part by, chartered by, funded in whole or in part by, or operated in whole or in part by or on behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms, institutions of higher education as defined in section 1141(a) 1 of title 20, or educational institutions within the meaning of section 2194 of title 10, that need or can make demonstrably productive use of technology-related assistance from a Federal laboratory, including State programs receiving funds under cooperative agreements entered into under section 5121(b) of the Omnibus Trade and Competitiveness Act of 1988 (15 U.S.C. 278l note).

Defense laboratories, military universities, and warfare centers, as well as other Department of Defense and civilian agency, are not eligible to receive awards under this FOA and must not submit proposals in response to this FOA. Federally Funded Research & Development Centers (FFRDCs), including Department of Energy National Laboratories, are not eligible to receive awards under this FOA. However, teaming arrangements between FFRDCs and eligible principal Recipients are allowed so long as they are permitted under the sponsoring agreement between the Government and the specific FFRDC. Please note, the Recipient, if successful, shall be the responsible authority regarding the settlement and satisfaction of all contractual and administrative issues, including but not limited to, disputes and claims arising out of any agreement between the Recipient and the FFRDC contractor.

To prevent the bias and unfair competitive advantage resulting from conflicting rules, Recipients must identify in their application any organizational conflict of interests which may exist. If a Recipient has an actual or potential organizational conflict of interests, the application must identify the organizational conflict of interests and the mitigation plan to address it.

NOTE: If the application does not meet these eligibility requirements, the application will be considered ineligible and removed from further evaluation. AFRL will not make eligibility determinations about potential applicants prior to the date on which applications to this FOA must be submitted. The decision whether to submit an application in response to this FOA lies solely with the applicant.

B. Foreign Entities

Foreign entities will not be considered for this award. All prime recipients receiving funding under this FOA must be incorporated (or otherwise formed) under the laws of a state or territory of the United States.

Information Regarding Non-U.S. Citizens Assigned to AFRL’s Programs or Projects. In an effort to continue improving AFRL’s security posture, better manage risks to the critical mission areas, and better align contractor access requirements, AFRL will not allow individuals who are non-U.S. citizens to work within AFRL facilities or to have access to US Government IT networks, unless a waiver requested has been granted by the Grants and Agreements Officer. Individuals requiring access to USAF bases, AFRL facilities, and/or access to U.S. Government Information Technology (IT) networks in connection with the work on the proposed effort must be U.S. citizens. For the purpose of base and network access, possession of a permanent resident card (“Green Card”) does not equate to U.S. citizenship. This requirement does not apply to foreign nationals approved by the U.S. Department of Defense or U.S.

State Department under international personnel exchange agreements with foreign governments. It also does not apply to dual citizens who possess U.S. citizenship, to include Naturalized citizens.

In the event a Recipient is unable to hire a U.S. citizen due to a rare, highly-specialized, needed expertise, a waiver request must be submitted from the organization to the Grants and Agreements Officer. Any waivers to this requirement must be granted in writing by the Grants and Agreements Officer prior to providing access. Specific format for waiver request will be provided upon request from the Grants and Agreements Officer. The above requirements are in addition to any other contract requirements related to obtaining a Common Access Card (CAC).

For purposes of the paragraph above, if an IT network/system does not require AFRL to endorse a Recipient's application to said network/system in order to gain access, the organization operating the IT network/system is responsible for controlling access to its system. If an IT network/system requires an U.S. Government sponsor to endorse the application in order for access to the IT network/system; AFRL will only endorse the following types of applications; consistent with the requirements above:

(1) Contractor employees who are U.S. citizens performing work under this award.

(2) Contractor employees who are non-U.S. citizens and who have been granted a waiver.

Please note that, any additional access restrictions established by the IT network/system owner apply.

C. Cost Sharing or Matching

Cost Sharing or Matching is required. The applicant's cost share requirement will be based on the total cost of the project and must come from non-federal sources unless otherwise allowed by law. Every cost share contribution must be allowable and allocable under the applicable federal cost principles, and must be verifiable upon submission of the application.

The Prime Recipient(s) is free to determine how best to allocate the cost share requirement. Cost share may be provided by the prime recipient, sub-recipients, sub-awardees, or third parties (entities that do not have a role in performing the scope of work). Vendors/contractors may not provide cost share. The amount contributed by individual contributors may vary, as long as the cost share requirement for the project as a whole is met.

Recipients may choose from the following cost share options:

Options	Minimum Requires Cost Share
Option 1	10%
Option 2	15%
Option 3	20%

Applicants are encouraged to refer to 2 CFR 200.306, DoD Research & Development General Terms and Conditions (March 2021), and FAR Part 31, Contract Cost Principles, for additional cost sharing information.

To assist applicants in calculating proper cost share amounts, AFRL has included a cost share information sheet and sample cost share calculation as Appendices A to this FOA.

D. Other

System of Award Management (SAM): To be eligible for an award, the Recipient must be registered in the System of Award Management (SAM) before submitting its application; provide a valid unique entity identifier in its application; and continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency. Organizations are now required to send a notarized letter with their Employee Identification Number (EIN) in conjunction with the SAM registration process. If the organization does not have either an Employer Identification Number (EIN) or Tax Identification Number (TIN), allow at least 2 weeks to receive this information from the U.S. Internal Revenue Service. Recipients should allow 3 to 4 weeks to complete the entire SAM registration process. If a Recipient has not fully complied with the requirements by the time the AFRL is ready to make a Federal award, the AFRL may determine that the Recipient is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another Recipient. Additional information and step-by-step registration directions are detailed in the SAM User Guide and other General Services Administration (GSA) training materials in the Help area at https://www.sam.gov/.

Profit or Fee: Profit or fee is unallowable under this FOA.

Project Abstract: A project abstract is required with the application and must be publically releasable as specified by this document.

White papers or Letter of Intent: White papers or Letter of Intent are NOT required or encouraged for this FOA and will NOT be reviewed.

Section IV- Application and Submission Information

The Government seeks only Full Applications that meet the eligibility requirements of Section III - Eligibility Information. AFRL will not consider or review ineligible applications. Full Applications submitted under this FOA must seek to address unclassified efforts. No classified applications shall be submitted.

Full Applications must conform to the following content and form requirements, including maximum page lengths (described below) and must be submitted via Grants.gov. AFRL will not review or consider applications submitted after the applicable deadline, or incomplete submissions. AFRL will not extend deadlines for Recipients who fail to submit required information and documents due to server/connection congestion.

The application must conform to the following requirements:

- Must be submitted in Adobe PDF format unless stated otherwise;
- All pages must be formatted to fit on 8.5 x 11 inch paper with margins not less than one inch on every side, with font not smaller than 11 point;
- References must be included as footnotes or endnotes in a font size of 10 or larger. Footnotes and endnotes are counted toward the maximum page requirement;
- Page numbers must be included in the footer of every page; and

- Each submission must not exceed the specified maximum page limit, including cover page, charts, graphs, maps, and photographs when printed using the formatting requirements set forth above and single spaced. If Recipients exceed the maximum page lengths indicated below, AFRL will review only the authorized number of pages and disregard any additional pages.

AFRL urges Recipients to carefully review their application and to allow sufficient time for the submission of required information and documents. Applications that pass the initial eligibility review will undergo comprehensive technical merit review according to the criteria identified in Section V- Application Review Information of the FOA.

NOTE: Titles given to the Applications should be descriptive of the efforts and should NOT be a copy of the title of this announcement.

A. Address to Request Application Package

Recipients shall be aware of the following:

- Applications will be reviewed only if (1) are received electronically through https://www.grants.gov/; and (2) meet the eligibility requirements of Section III - Eligibility Information.
- All relevant material and announcements and/or information to this FOA will be made available at https://www.grants.gov/. It is the responsibility of the Recipient to check Grants.gov for updates.
- Recipients are responsible for making sure the application is submitted, received, and validated by Grants.gov before the application deadline. If application package is submitted late, the application will be ineligible for consideration.
- The Government will not issue paper copies of this announcement. A formal Request for Proposals (RFP), solicitation, and/or additional information regarding this announcement will not be issued.

B. Content and Form of Application Submission

i. Component Pieces of The Application

Through Grants.gov, applicants must complete the mandatory Grants.gov forms in accordance with the instructions provided on the forms and the additional instructions below. Files/documents that are attached to the forms must be in Adobe Portable Document Format (.pdf) unless otherwise specified in this announcement.

ii. Required Forms/Documents

All Recipients, including sub-recipients or sub-awardees, must complete the mandatory forms and any applicable optional forms (e.g., SF-LLL- Disclosure of Lobbying Activities) in accordance with the instructions provided below.

1. Application for Federal Assistance SF-424 (Research and Related)

In Grants.gov, complete this form first as the forms are designed to fill in common required fields across other forms. Complete all of the required fields in accordance with the "pop-up" instructions on the form. This form is also mandatory for all sub-Recipients or sub-recipients as summarized in Subsection 12. below.

2. Project/Performance Site Location(s)

In Grants.gov, indicate the primary site where the work will be performed. If a portion of the project will be performed at any other site(s), identify the site location(s) in the blocks provided. If there are more than two site locations (i.e. sub-Recipients), attach a single file titled "Additional Site Locations.pdf" with the relevant information and click on "Add Attachment," at the bottom of the Project/Performance Site Location(s) form to attach.

3. Project Abstract

The project abstract must contain a summary of the proposed activity suitable for dissemination to the public. It should be a self-contained document that identifies the name of the Recipient, the Project Director(s), the project title, the objectives of the project, a description of the project, milestones listed by year (is applicable), technical approaches, anticipated outcome of the effort, if successful, and impacts on DoD capabilities.

This document must not include any proprietary or sensitive business information as the Government may make it available to the public after awards are made. The project abstract must not exceed **one (1) page** when printed using standard 8.5" by 11" paper with 1" margins (top, bottom, left and right) {single spaced} with font not smaller than 11 point. The project abstract must be marked by the Recipient as "Approved for Public Release".

4. Project Narrative or Technical Volume to include:

The project narrative or technical volume must not exceed **30 pages**, including cover page, table of contents, charts, graphs, maps, photographs, and other pictorial presentations, when printed using standard 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right) [select single or double spaced]. **EVALUATORS WILL REVIEW ONLY THE NUMBER OF PAGES SPECIFIED IN THE PRECEDING SENTENCE.** The font must not be smaller than 11 point. Do not include any Internet addresses (URLs) that provide information necessary to review the application because the information contained in these sites will NOT be reviewed.

Recipient's applications must consist of a clear description of the strategy, technical approach and justification being proposed. Do not include proprietary or confidential information. This section should describe the relevance of the proposed effort to the goals and objectives of the FOA.

EXCLUDED from the Project Narrative or Technical Application 30 pages limit are: Statement of Work (SOW), budget justification workbook, resumes, and letters of commitment or support.

The Project Narrative or Technical Volume must include the following sections:

Section/Page Limit	Description
Cover Page (1 Page Maximum)	The cover page must include the following information: • FOA Number: PIA-FOA-21-AFRL-0001 • Proposed Title of Application • Identity of prime Recipient and complete list of sub-Recipients, if applicable • Technical contact (name, address, phone, email address) • Administrative/business contact (name, address, phone, email address) • Proposed period of performance (identify both the base period and any options, if applicable) • Total proposed budget (identify both the base period and any options, if applicable)

Table of Contents (2 Page Maximum)	A listing of the sections within the application, including corresponding page numbers.
Project Schedule and Milestones (2 Pages Maximum)	A summary of the schedule of events and milestones (Gantt Chart or similar). The Recipient must provide a detailed schedule for the entire proposed effort, including task and subtask durations, milestones, and go/no-go decision points, etc. The Recipient should provide appropriate milestones throughout the program or project to demonstrate success, where success is defined as technical achievement rather than simply completing a task. To ensure that milestones are relevant, Applicants should follow the SMART rule of thumb, which is that all milestones should be Specific, Measurable, Achievable, Relevant, and Timely.
Program or Project Overview	The Program or Project Overview must contain the following information: • Background: The Recipient should discuss the organization's background, including its history, successes, and current operating status (i.e., the technical baseline) relevant to the proposed effort. • Goals and Objectives: The Recipient should explicitly identify the targeted improvements and the critical success factors in achieving these goals and objectives. • Impacts: The Recipient should discuss the impact that the Government funding would have on the proposed effort. The Recipient should specifically explain how DoD funding, relative to prior, current, or anticipated funding from other public and private sources, is necessary to achieve the proposed goals and objectives.
Program Description	The Program Description must contain the following information: • Relevance and Outcomes: The Recipient should provide a detailed description of the program, including the principles and objectives that it will pursue during the project. This section should describe the relevance of the proposed program to the Goals and Objectives of the FOA (Section I-Funding Opportunity Description). The Applicant should clearly specify the expected outcomes of the project. • Feasibility: The Recipient should demonstrate the feasibility of the proposed program and capability of achieving the anticipated project goals, including a description of previous work done and prior results. • Innovation: The Recipient should describe specific innovation of the proposed program, the advantages of proposed program over current and emerging programs, etc.

Management Plan	The Recipient must detail the organization's proposed management plan. This may include, but is not limited to:
	• The overall approach to and organization for managing the work.
	• The roles and responsibilities of each team member.
	• The technical and management aspects of the management plan, including systems and practices, such as financial and project management practices.
	• The approach to project risk management to include:
	  ○ Financial/Cost risk and mitigation
	  ○ Technical risk and mitigation
	  ○ Other
	• A description of how project changes will be handled.
	• How communications will be maintained among project team members.

Technical Qualifications and Resources	The Recipient's must detail the organization's daily operational plan on the proposed effort. This may include, but is not limited to: • Where applicable, relationships and communication plan with any sub-recipients, sub-awardees, consultants, or collaborators of the proposed effort. • Describe the team's unique qualifications and expertise, including those of key sub-recipients, sub-awardees, consultants, etc. • Describe the team's existing equipment and facilities that will facilitate the successful completion of the proposed project; include a justification of any new equipment or facilities requested as part of the project. • This section should also include relevant, previous work efforts, demonstrated innovations, and how these enable the applicant to achieve the project objectives. • Describe the time commitment of the key team members to support the project. • For multi-organizational or multi-director projects, describe succinctly: ○ The roles and the work to be performed by each Project Director and Key Participant

	○ Business agreements between the applicant and each Project Director and Key Participant ○ How the various efforts will be integrated and managed ○ Process for making decisions on scientific/technical direction ○ Publication arrangements ○ Intellectual Property issues ○ Communication plans
Regional Engagement Strategy and Implementation Plan	The Recipient's must provide a regional engagement strategy with an implementation plan. The plan must include a description with all available evidence to support how the Recipient will foster a sustainable innovative and entrepreneurial environment through regional engagement. Elements of the plan may include, but are not limited to: • Partnerships and/or working relationships with regional entities—including state and local government as well as private sector entities (including for- and non-profits). • Access to prototyping, testing, and demonstration facilities. • A unique value proposition and description of the applicant organization's structural advantages in implementing the regional engagement plan (i.e., how the organization is built to be successful within a respective region). • A description of the plan's potential to be transferable to other innovation-accelerating organizations/regions. • A description of how the plan will yield an improvement in the organization's offerings as a resource to local and regional entrepreneurs and innovators, and how it will boost the regional innovation ecosystem's productivity. • The primary risk factors the Recipient anticipates mitigating or overcoming to successfully implement the regional engagement strategy.
Performance Measurement Plan	The Government considers it critically important to track Recipient's performance metrics during the award period. Therefore, the Recipient must provide to the Government data on the performance metrics of the propose effort. The Government will use this data to measure the performance of the awardee in terms of productivity and output throughout the duration of the program. Example of performance measurements, may include, but are not limited to: • Number of companies served and types of technologies, including names and locations. • Number of technologies vetted • Number of mentors or entrepreneurs-in-residence placed with clients • Number of partnership agreements facilitated: Between the awardee and AFRL, universities, state and local entities, and other private companies (both for profit and non-profit) and/or between the awardee's member startups and AFRL, universities, state and local entities, and other private companies (both for profit and non-profit) • Revenue generated by companies before and after being served • Number of patents awarded • Number of patents and disclosures filed • Number of jobs created or retained by client or graduated companies (full time, part time), including in low-income communities and among under-represented entrepreneurs Metrics and Evaluation. Discuss the metrics and evaluation plans for the proposed effort. Metrics and evaluation components may include, but is not be limited to: Anticipated data collection/results and format in which proposed metrics and evaluation data will be shared with the Government.
Go/No-Go Decision Plan	The Recipient must provide project-wide go/no-go decision plan. A go/no-go decision plan is a risk management tool and a project management best practice to ensure that, for the current phase or period of performance, technical success is definitively achieved and potential for success in future phases or periods of performance is evaluated, prior to actually beginning the execution of future phases or period of performance. Unless otherwise specified in the FOA, the minimum requirement is that each project must have at least one project-wide go/no-go decision point for each year (12-month period) of the project. The Recipient should also provide the specific technical criteria to be used to make the go/no-go decision. In addition to describing the go/no-go decision plan in the SOW and including them in the Project Schedule and Milestones schedule. The Government may review the Go/No-Go plan at any time during the life of the Award.
Statement of Work (Not part of the 30	The SOW is an outline of specific aims of the proposed effort that establishes the milestones during the performance period of the award. The SOW should contain sufficient detail to be informative as a

page limit, but not exceed 10 pages)	standalone document. Please note, the SOW will be incorporated into the award in lieu of incorporating the entire technical proposal. The SOW must not include any proprietary information. The SOW should fully describe the work to be accomplished and how the Recipient will achieve the milestones, will accomplish the final project goal(s), and will produce all deliverables. It is the Recipient's responsibility to prepare an adequately detailed task plan to describe the proposed effort and the plan for addressing the objectives of this FOA. At a minimum the SOW shall include the following areas: • Goals and Objectives: Concise detailed description of the specific activities to be conducted over the life of the proposed effort. • Task and Subtasks: Typically, structured with a hierarchy of performance period (approximately annual), task and subtasks, which is typical of a standard work breakdown structure (WBS) for any project. Each task and subtask is to have a task summary that describes the objectives, what work is to be accomplished, and relationship to project deliverables or expected results. • Schedule and Milestones. Appropriate schedule and milestones should be incorporated into the task and subtask structure. • Projected deliverables and/or expected results. NOTE: The SOW should support the proposed cost associated within the Budget Justification Workbook
Merit Review Criteria Discussion	The section should address each of the merit review criteria listed in Section V-Application Review Information. Provide sufficient information so that reviewers or evaluators will be able to evaluate the application in accordance with these merit review criteria.
Appendix 1 – Resume File (Not part of the 30 Page Limit)	Provide a resume for all personnel having a major role, to include sub-recipients, sub-awardees and/or consultants if they meet the definition of major role. A major role is any individual who contributes in a substantive, measurable way to the execution of the proposed effort. The biographical information for each resume must not exceed 2 pages when printed on 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right) [select single or double spaced] with font no smaller than 11 point and should include the following information, if applicable: • Education and Training. Undergraduate, graduate, and postdoctoral training; provide institution, major/area, degree, and year. • Professional Experience. Beginning with the current position list, in chronological order, professional/academic positions with a brief description. Provide the Resume File as an appendix to the Project Narrative or Technical Volume. Do not attach as a separate file.

5. **Budget Justification Workbook (Not part of the 30 Page Limit).** Applicants are required to complete the Budget Justification Workbook. The Prime Recipient must complete each tab of the Budget Justification Workbook for the project as a whole, including all work to be performed by the prime recipient and its sub-recipients and contractors, etc. The data fields in the "Instructions" tab of the Budget Justification Workbook will auto-populate as the applicant enters information into the Workbook. Applicants must carefully read the "Instructions" tab provided within the Budget Justification Workbook.

   Applications must include a cost proposal detailing direct labor (personnel), fringe benefits, travel, sub-recipients/subcontracts, consultants, equipment, materials and supplies, and other direct costs and indirect costs. The cost proposal, must provide a narrative explaining and justifying budget figures in enough detail so the Government can determine reasonableness. It must include all figures, calculations, and supporting documentation for determining cost allowance, allocation, and reasonableness. Justifications for costs must be explicitly stated. Recipients must categorize funds by year and provide separate annual budgets for projects lasting more than one year. Recipients must use the attached **Budget Justification Workbook** to complete their budgets. Recipients must provide a separate budget justification workbook for all sub-recipient or sub-awards that are expected to perform work.

Save the Budget Justification Workbook(s) as a separate file and click on "Add Attachment" on the Attachments form provided in Grants.gov.

6. **Letters of Commitment or Support (Not part of the 30 Page Limit).** Submit letters of commitment from all sub-recipient, sub-awardees and/or third parties who will be contributing a portion of any required cost share. If applicable, provide letters of support from all sub-recipients, sub-awardees, and consultants having a role in the proposed effort. The information for each letter of support must not exceed 2 pages when printed on 8.5" by 11" paper with 1 inch margins (top, bottom, left, and right) [select single or double spaced] with font no smaller than 11 point and should include the following information, if applicable:
   - Relationship and role in the proposed effort.
   - Extend of support in the proposed effort.

   Provide the Letters of Commitment or Support as a separate file and click on "Add Attachment" on the Attachments form provided in Grants.gov.

7. SF-424A Detailed Budget Information – Non Construction Programs (If applicable)

Complete the budget form attached to this announcement in accordance with the SF-424A Instructions provided in the document; each tab has detailed instructions. The Recipient must provide a separate budget for each year of support requested. The form will generate a cumulative budget for the total period of performance. The Recipient may request funds under any of the budget categories as long as the item and amount are necessary to perform the proposed work, meet all the criteria for allowance under the applicable Federal cost principles, and are not prohibited by the funding restrictions in this announcement.

8. Indirect Cost Rate Agreement (If applicable)

If applicable, provide a copy of the latest negotiated indirect cost rate agreement. An entity that has never received a negotiated indirect cost rate, may elect to charge a de minimis rate of 10% of modified total direct costs (MTDC) which may be used indefinitely. If chosen, this methodology once elected must be used consistently for all Federal awards until such time as an entity chooses to negotiate for a rate, which the non-Federal entity may apply to do at any time. (See 2 CFR 200.414 for detailed information).

Save the rate agreement as a separate.pdf file and click on "Add Attachment" on the Attachments form provided in Grants.gov.

9. Systems of Award Management Lobbying Form/Certification Regarding Lobbying

Recipients and sub-Recipients may not use any Federal funds to influence or attempt to influence, directly or indirectly, Congressional action on any legislative or appropriation matters. In the System for Award Management (SAM.gov), complete the Certification Regarding Lobbying information to certify that no appropriated funds have been used for lobbying activities. This information is also mandatory for all sub-recipients or sub-awardees as determined in subsection 12. below.

10. SF-LLL - Disclosure of Lobbying Activities (If applicable)

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the, Recipients must complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying."

This form is also required (if applicable) for all sub-recipients or sub-awardees as determined in subsection 12. below.

11. Environmental Checklist

Recipients must complete Attachment I, AF Form 813 Request for Environmental Impact Analysis. Save the questionnaire in a single file named “Env.pdf” and attach to the Attachments Form in Grants.gov by clicking “Add Attachment.”

12. Sub-recipient File(s) and Budget Justification (if applicable)

If sub-recipients or sub-awards are proposed, the following documents are mandatory as captured above:

- Application for Federal Assistance SF-424 (R&R)
- SF-4242A Detailed Budget Information – Non-Construction Program
- Budget Justification Workbook
- Indirect Cost Rate Agreement
- In SAM.gov complete the Lobbying Form/Certification Regarding Lobbying
- SF-Disclosure of Lobbying Activities (if applicable); and
- Assurances – Non-Construction Programs form, please see note above.

Sub-recipient Budget Justification (if applicable). Applicants must provide a separate budget justification for each sub-recipient that is expected to perform work estimated to be more than $250,000 of the total work effort. The budget justification must include the same justification information described in the “Budget Justification” section above. If other entities/collaborators will receive funding under the proposed project, a determination must be made if they will be a sub-recipient, sub-awardee or a contractor. Please reference 2 CFR 200 for guidance on making the determination.

13. Attachments Forms and Grants.gov Workspace

In Grants.gov, Recipients must create a Workspace, which allows the application components to be completed online and routed through the Recipient organization for review prior to submission. Once the Workspace has been created, participants (grant team members) can be added and the required forms can be completed and reviewed before submitting. For access to complete instructions on how to apply for opportunities, refer to https://www.grants.gov/web/grants/applicants/apply-for-grants.html.

Summary of Required Forms/Documents:

All applications must include the following mandatory forms/documents:

Name of Document	Format	Attach to	Mandatory
1. Application for Federal Assistance SF-424 (R&R)	Grants.gov Form	N/A	Yes
2. Project/Performance Site Location(s)	Grants.gov Form	N/A	Yes
3. Project Abstract	PDF	Attachments Forms	Yes
4. Project Narrative File(s) or technical volume (to include: Appendix 1 - Resume File)	PDF	Attachments Forms	Yes
5. Budget Justification Workbook (Not part of the 30 Pg Limit)	Excel (xlsx)	Attachments Forms	Yes
6. Letters of Commitment or Support	PDF	Attachments Forms	Yes
7. SF-424A Detailed Budget Information – Non Construction Programs	Grants.gov Form	Attachments Forms	If Applicable
8. Indirect Cost Rate Agreement	PDF	Attachments Form	Yes
9. SAM.gov Lobbying Form/Certification Regarding Lobbying	SAM.gov	N/A	Yes
10. SF-LLL Disclosure of Lobbying Activities	Grants.gov Form	N/A	If Applicable
11. Environmental Checklist	PDF	Attachments Form	Yes
12. Sub-Recipient File(s) and Budget Justification (if applicable)	PDF	Attachments Form	Yes

NOTE: If the required forms summarized in the table above are not provided by the Recipient (to include mandatory sub-recipients documents), the Recipient's package may be deemed non-responsive during the initial review and may not be forwarded for merit review. See Section V below for details regarding the initial review.

C. Unique entity identifier and System for Award Management (SAM)

Each Recipient (unless the Recipient is an individual or Federal awarding agency excepted from those requirements under 2 C.F.R. § 25.110(b) or (c), or has an exception approved by the Federal awarding agency under 2 C.F.R. § 25.110(d)) is required to:

i. Be registered in SAM before submitting its application;
ii. Provide a valid unique entity identifier in its application; and
iii. Continue to maintain an active SAM registration with current information at all times during which it has an active Federal award or an application or plan under consideration by a Federal awarding agency.

AFRL may not make a Federal award to a Recipient until the Recipient has complied with all applicable unique entity identifier and SAM requirements and, if a Recipient has not fully complied with the requirements by the time the Federal awarding agency is ready to make a Federal award, the Federal awarding agency may determine that the Recipient is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another Recipient.

D. Submission Dates and Times

Proposals may be submitted any time from the FOA issue date, until the final submission deadline for applications; proposals will be evaluated as they are received.

Final Submission Deadline for proposals is no later than 21 September, 2021 2:00 PM MST.

Applications received after the Final Submission Deadline for proposals and specified time will be deemed late and will not be accepted for review. Recipients are encouraged to transmit applications well before the deadline. All proposals must be submitted electronically through the Grants.gov Government-wide electronic portal at https://www.grants.gov/.

APPLICATIONS RECEIVED AFTER THE FINAL SUBMISSION DEADLINE WILL NOT BE REVIEWED OR CONSIDERED FOR AWARD.

E. Intergovernmental Review

This effort is not subject to Executive Order 12372 - Intergovernmental Review of Federal Programs.

F. Funding Restrictions

Availability of Funds. Funding for all awards and future budget periods are contingent upon the availability of funds appropriation for the purpose of this effort and the availability of future-year budget authority.

Cost Principles. Costs must be allowable, allocable and reasonable in accordance with the applicable Federal cost principles referenced in 2 CFR part 200 and FAR Part 31.

Pre-Award Costs. Pre-award costs are incurred at the Recipient's risk. The Government is under no obligation to reimburse such costs if for any reason the Recipient does not receive an award or if the award is made for a lesser amount than the Recipient expected.

Performance of Work in the United States. All work performed under this FOA must be performed in the United States. If the prime recipient fails to comply with the Performance of Work in the United States requirement, AFRL may deny reimbursement for the work conducted outside the United States and such costs may not be recognized as allowable.

Foreign Travel. Foreign travel costs are not allowable under this FOA unless approval has been granted by the Grants and Agreements Officer.

Construction. AFRL generally does not fund projects that involve major construction (i.e., construction of new buildings, major renovations, or additions to existing buildings). Recipients are required to obtain written authorization from the Grants and Agreements Officer before incurring any major construction costs.

Equipment and Supplies. Property disposition reports will be required at the end of a project if the current fair market value of property exceeds $5,000 in accordance to 2 CFR 200.

Invoice Review and Approval. Recipients may be required to provide some or all of the following items with their requests for reimbursement:

- Summary of costs by cost categories;
- Timesheets or personnel hours report;
- Invoices/receipts for all travel, equipment, supplies, contractual, and other costs;
- Explanation of cost share for invoicing period; and
- Other items as required by AFRL.

G. Submissions From Successful Recipients

If selected for negotiation of an award, the Government reserves the right to request additional or clarifying information for any reason deemed necessary, including, but not limited to:

- Indirect cost information
- Other budget information or financial breakdown information
- Project Narrative details or technical proposal information

H. Other Submission Requirements

APPLICATIONS MUST BE SUBMITTED THROUGH GRANTS.GOV TO BE CONSIDERED FOR AWARD. Submit electronic applications through the "Apply for Grants" function at https://www.grants.gov/web/grants/applicants.html. Problems completing the registration process or submitting application, call Grants.gov at 1-800-518-4726 or send an email to support@grants.gov.

Section V - Application Review Information

Awards under this FOA will be made to Recipients on the basis of the evaluation criteria listed below and the availability of funds to support the proposed effort. The Government reserves the right to request and require additional supporting information and documentation after it makes the selection determination. The Government reserves the right to remove Recipients from award consideration if the parties fail to reach agreement on award terms, conditions, or cost/price within a reasonable time; or if the Recipients fail to provide requested or required additional information in a timely manner. The primary basis for selecting applications for award will be technical merits, and the availability of funds to support the proposed effort.

A. Criteria

1. Initial Review Criteria

Prior to a comprehensive merit evaluation, the Government will perform an initial review to determine the following factors:

- The Recipient's eligibility for an award in accordance with Section III of the FOA.
- Submission of the mandatory forms/documents required in accordance with Section IV of the FOA and/or Grants.gov.
- Funds availability.

Applications that fail to pass the initial review criteria may not be forwarded for merit review and may be eliminated from further consideration.

2. Merit Review Criteria

All applications passing the initial review will be evaluated against the merit review criteria shown below. All criterions listed below are of equal importance. The merit review criteria involve consideration of the following:

- Criterion 1: Approach, Innovation, and Impact
- Criterion 2: Administration, Implementation and Management
- Criterion 3: Organizational Team and Resources
- Criterion 4: Cost/Price Proposal

Criterion 1: Approach, Innovation, and Impact

This criterion involves consideration of the following:

- Adequacy and feasibility of the Applicant's approach to achieving the funding opportunity announcement's stated goals and objectives of Section I-Funding Opportunity Description.
- Extent to which the proposed regional engagement strategy and implementation plans and integration of collaborators is innovative and has the potential to advance R&D efforts into commercial marts.
- Extent to which the task descriptions are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed effort will succeed.
- The degree to which the proposed program or project supports a technologically-diverse DoD programs.
- Extent to which the proposed program or project is likely to help accelerate the launch, growth, and scale of businesses, ultimately resulting in the commercialization of new technologies and business models, and development of specialized skills, industries, and technology sectors of jobs in the United States.
- Extent to which the proposed project will accelerate transformational technological advances in areas that industry by itself is not likely to undertake because of technical and financial uncertainty.

Criterion 2: Administration, Implementation and Management

This criterion involves consideration of the following:

- Discussion and demonstrated understanding of the key technical risk areas involved in the proposed work and the quality of the mitigation strategies to address them.
- The level of clarity in the definition of the metrics, and milestone, and relative strength of the quantifiable metrics, milestones, and mid-point deliverables defined in the application, such that meaningful interim progress can be tracked and measured.
- Appropriateness, rationale, and completeness of the proposed Statement of Work (SOW).
- Degree to which the tasks described are clear, detailed, timely, and reasonable, resulting in a high likelihood that the proposed Statement of Work (SOW) will succeed in meeting the project goals.
- Degree to which the approach and critical path in the Go/No-Go have been clearly described and thoughtfully considered.

Criterion 3: Organizational Team and Resources

This criterion involves consideration of the following:

- Degree to which the proposed team and available resources demonstrate the ability to facilitate and expedite further development and commercial deployment of energy and related technologies.
- The sufficiency of the facilities to support the work.
- Degree to which the proposed work enables new and expanding market segments.
- Degree to which the proposed work identifies and/or makes progress on new/existing concepts.
- The potential of the program or project outcomes to advance best practices among various sectors, and to increase commercialization rates through local and regional engagement.

- The strength of the Applicant's approach to promote sustained movement of technologies into the marketplace beyond the award period.
- Level of participation by project participants as evidenced by letter(s) of commitment or support and how well they are integrated into the Applicant's proposed effort.

Criterion 4: Cost/Price Proposal

Cost/Price will not be given a specific rating, however it will be carefully considered in performing an integrated assessment of the proposal leading to selection of the best value. Specifically, the reasonableness of the proposed project and objectives and the degree to which the proposed project, including proposed cost share, optimizes the use of DoD funding to achieve programmatic objectives.

3. Standards for Application Evaluation

The primary purpose of a merit review is to provide an independent assessment of the technical or scientific merit of an eligible and responsive application. Merit reviews are performed by person(s) who have knowledge and expertise in the technical or scientific fields identified in the FOA. The rating system is structure to assist the reviewers in providing information to the selection official(s) by allowing for the ranking or sorting of applications by an evaluation standard.

Rating Scale:

The scoring of each criterion shall be based on the strengths and weaknesses of the Application.

- A strength is an aspect of an Application that, when compared to the stated evaluation criterion, appears to positively affect the probability of successful mission accomplishment of the potential award.
- A weakness is an aspect of an Application that, when compared to the stated evaluation criterion, appears to negatively affect the probability of successful mission accomplishment of the potential award.

To assist in assigning an appropriate score, the following ratings will be used as a guideline:

Rating	Descriptive Statement
Outstanding	Recipient fully addresses all aspects of the criterion, convincingly demonstrating that it will meet the Government's requirements, and demonstrates no weaknesses.
Good	Recipient fully addresses all aspects of the criterion, convincingly demonstrating a likelihood of meeting the Government's requirements, and demonstrates only a small number of weaknesses.
Poor	Recipient does not address all aspects of the criterion nor is evidence presented indicating the likelihood of successfully meeting the Government's requirements. A number of weaknesses are demonstrated and clearly outweigh any strengths presented.

NOTE: Only proposals rated Outstanding or Good may be considered for Award, subject to the availability of funds.

B. Review and Selection Process

1. Merit Review

Overview

As indicated above, the evaluation process consists of multiple phases. Prior to a comprehensive merit evaluation as discussed in Section V(A)(2), the Government will perform an Initial Review to determine the following factors:

- The Recipient's eligibility for an award in accordance with Section III of the FOA.
- Submission of the mandatory forms/documents required in accordance with Section IV of the FOA.

As stated previously, at the end of the Initial Review, a thorough merit evaluation will take place in accordance with Section V(A)(2) of this FOA. The merit evaluation of eligible submissions are conducted by reviewers that are experts in the subject matter of the FOA.

Pre-Selection Clarifications

The Government may determine that pre-selection clarifications are necessary from one or more Recipients. These pre-selection clarifications will solely be for the purposes of clarifying the application, and will be limited to information already provided in the application documentation. The pre-selection clarifications may occur before, during or after the merit review evaluation process. Information provided by a Recipient that is not necessary to address the pre-selection clarification question will not be reviewed or considered. Typically, a pre-selection clarification will be carried out through either written responses to the Government's written clarification questions or video or conference calls with the Government's representatives.

The information provided by Recipients to the Government through pre-selection clarifications is incorporated in their applications and contributes to the merit review evaluation and the Government's selection decisions. If the Government representative contacts a Recipient for pre-selection clarification purposes, it does not signify that the Recipient has been selected for negotiation of award or that the Recipient is receiving an award. The Government will not reimburse Recipients for expenses relating to the pre-selection clarifications, nor will these costs be eligible for reimbursement as pre-award costs.

Options (if applicable)

The Government will evaluate options for award purposes by adding the total cost for all options to the total cost for the basic requirement. Evaluation of options will not obligate the Government to exercise the options during award performance. The Government may elect to divide any resulting award into option periods or may elect to combine proposed option periods at the discretion of the Government.

Successful Recipients

Receipt of a notification for award negotiations does not authorize the Recipient to commence performance of the proposed effort. If an application is selected for award negotiations, it is not a commitment by the Government to issue an award. Recipients do not receive an award until award negotiations are complete and the Grants and Agreements Officer executes the funding agreement.

The award negotiation process may take approximately 60-90 days. Recipients must designate a primary and a secondary point-of-contact with whom the Government will communicate to conduct award negotiations. The Recipient must be responsive during award negotiations (i.e., provide requested documentation) and meet the negotiation deadlines. If the Recipient fails to do so or if award negotiations are otherwise unsuccessful, the Government may cancel the award negotiations and rescind the Selection. The Government reserves the right to terminate award negotiations at any time for any reason.

2. Selection

The Government reserves the right to select all, part, or none of the proposals received in response to this FOA**.**

3. Discussion and Awards

The Government may enter into discussions with a selected Recipient for any reason deemed necessary, including but not limited to: (1) the budget is not appropriate or reasonable for the requirement; (2) only a portion of the application is selected for award; (3) the Government needs additional information to determine that the recipient is capable of complying with the requirements in 2 C.F.R. Part 200, FAR Part 31 and/or (4) special terms and conditions are required. Failure to satisfactorily resolve issues identified by the Government will preclude award to the Recipient**.**

C. Notice of Selection and Awards

1. Recipient Integrity and Performance Matters

AFRL, prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, the Government is required to review and consider any information about the Recipient that is in the designated integrity and performance system accessible through SAM (see 41 U.S.C. 2313).

The Recipient, at its option, may review information in the designated integrity and performance systems accessible through SAM and comment on any information about itself that a Federal awarding agency previously entered and is currently in the designated integrity and performance system accessible through SAM.

The Government will consider any comments by the Recipient, in addition to the other information in the designated integrity and performance system, in making a judgment about the Recipient's integrity, business ethics, and record of performance under Federal awards when completing the review of risk posed by Recipients as described in 2 C.F.R. § 200.205.

2. DoD Required Elements

In accordance with 2 C.F.R. § 200.205, AFRL may conduct a risk assessment of all potential recipients. In addition to the elements listed in 2 C.F.R. § 200.205, DoD components may include other criteria to determine various types of risk, such as protocols for the protection of intellectual property, controlled information, key personnel, and information about critical technologies relevant to national security, human subjects and Personally Identifiable Information (PII), as listed in the notice of funding opportunity.

Section VI- Federal Award Administration Information

A. Federal Award Notices

Recipients whose applications are recommended for award may be contacted by a Grant and Agreements Officer and/or Contracting Specialist to discuss additional information required for award. This may include representations and certifications, revised budgets or budget explanations, certificate of current cost or pricing data, subcontracting plan for small businesses, and/or other information as applicable to the proposed award.

The notification e-mail must NOT be regarded as an authorization to commit or expend funds. The Government is not obligated to provide any funding until a Government Contracting Officer or Grants Officer, as applicable, signs the award document. The award document signed by the Contracting Officer or Grants Officer is the official and authorizing award instrument.

The Government shall promptly notify in writing each Recipient whose application has not been selected for award or whose application cannot be funded because of the unavailability of funds. Recipients who do not receive an award are not entitled to a debrief.

B. Administrative and National Policy Requirements

Registration Requirements

There are several one-time actions before submitting an application in response to this FOA, and it is vital that Recipients address these items as soon as possible. Some may take several weeks, and failure to complete them could interfere with a Recipient's ability to apply to this FOA, or to meet the negotiation deadlines and receive an award if the application is selected. These requirements are as follows:

- System for Award Management. Register with the SAM at https://www.sam.gov/SAM/
- DUNS Number. Obtain a DUNS number (including the plus 4 extension, if applicable) at http://fedgov.dnb.com/webform
- Grants.gov. Register in Grants.gov (http://www.grants.gov) to receive automatic updates when Amendments to this FOA are posted.

Award Administrative Requirements

The administrative requirements for DoD grants and cooperative agreements are contained in 2 C.F.R. Part 200, 32 C.F.R. Part 22, and FAR Part 31.

The National Environmental Policy Act

Federal agencies making grant or cooperative agreement awards and recipients of such awards must comply with various environmental requirements. The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321-4370(a), requires that agencies consider the environmental impact of "major Federal actions" prior to any final agency decision. With respect to those awards which constitute "major Federal actions," as defined in 40 C.F.R. 1508.18, Federal agencies may be required to comply with NEPA and prepare an environmental impact statement (EIS), even if the agency does no more than provide grant funds to the recipient. Questions regarding NEPA compliance should be referred to the Program Manager(s).

C. Reporting

If the Federal share of any Federal award may include more than $500,000 over the period of performance, the post award reporting requirements, Award Term and Condition for Recipient Integrity and Performance Matters (2 U.S.C. 200 Appendix XII), are applicable as follows:

Reporting of Matters Related to Recipient Integrity and Performance

If the total value of the currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds $10,000,000 for any period of time during the period of performance of this Federal award, then the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under section 872 of Public Law 110-417, as amended (41 U.S.C. § 2313). As required by section 3010 of Public Law 111-212, all information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

Deliverables/Reports

At a minimum, Recipient shall acknowledge that the following deliverables and/or Reports are required under this FOA:

a. **Quarterly Financial Progress Reports** – A template will be provided to each starting at Award. This report will include information on current expenses and invoices for the time period.
b. **Quarterly Technical Progress Report–** A template will be provided to each starting at Award. This report will include information on programmatic developments to include major successes or major problems that warrant AFRL's attention. Quarterly Reports are required within 15 calendar days after the end of reported quarter period: 3/31, 6/30, 9/30, and 12/31 and must include a point of contact for the Government to obtain additional information if necessary.
c. **Annual Reports –** A template will be provided to each starting at Award. A complete annual Performance Progress Report is mandated by AFRL. This report will be due a year from the date of the Award. This report will include information about the organization and program specifics (overview, metrics, budget information, accomplishments, etc.).
d. **Annual Financial Assistance Certs and Reps Report–** A template will be provided to each starting at Award. This report will be due a year from the date of the Award.
e. **Audit Reports-** If an Institution of Higher Education, non-profit organization, or state/local government is a Prime Recipient or sub-recipient and has expended $750,000 or more of Federal funds during the non-Federal entity's fiscal year, then a single or program-specific audit is required. For additional information, please refer to 2 C.F.R. § 200.501 and Subpart F- Audit Requirements. If a for-profit entity is a Prime Recipient or sub-recipient and has expended $750,000 or more of Federal funds during the entity's fiscal year, an annual compliance audit performed by an independent auditor is be required. For additional information, please refer to 2 C.F.R. § 1103 and Subpart F-Audit Requirements. Recipients and sub-recipients (if applicable) should propose sufficient costs in the proposed budget to cover the costs associated with the audit.
f. **Final Report-** Detail the full programmatic accomplishments summarized from prior reports and a forecast for ongoing program sustainability and contribution to DoD and education and needs as the funding ends. Include, as feasible, examples of educational materials produced, success stories, accomplishments, links to digital materials, and other resultant material from the award.

g. **Property Reports.** In accordance with 2 CFR 200. These reports may include SF-428, Tangible Personal Property and SF-429, Real Property Status Report.

Other Reports
Subject to the proposal, other reports may include but are not limited to:

- Scientific and Technical Reports
- Kick-off meeting reports and associated data
- Presentations materials, reports and associated date
- Conferences reports and associated data

NOTE: Copies of publications and presentations shall be submitted in accordance with the terms and conditions of the award.

Section VII- Federal Awarding Agency Contact(s)

A. Questions

All questions or requests for clarifications are due in writing via email to the Contracting Specialists listed below. Questions may be posted on Grants.gov to benefit all interested Recipients. Please do NOT include any proprietary information in the questions. Recipients are encouraged to periodically check Grants.gov during the response period for additional postings. Email questions or request for clarifications for this FOA must use the following subject title: PIA-FOA-21-AFRL-0001_Questions

The Government will try to respond to a question within five calendar days, unless a similar question and answer have already been posted on Grants.gov. Questions and comments concerning this FOA shall be submitted not later than 07 September 2021. Questions submitted after that date may not allow the Government sufficient time to respond.

Questions relating to the registration process, system requirements, how an application form works, or the submittal process must be directed to Grants.gov at 1-800-518-4726 or support@grants.gov. Questions relating to the SAM registration process must be directed to Federal Service Desk Contact Information at 1-866-606-8220 or www.fsd.gov. AFRL representatives cannot answer Grants.gov or SAM registration questions.

B. Contacts

Points of Contact (POCs)

	Grants & Agreements Officer	Contracting Specialist	Contracting Specialist
Name	Jennifer B. Jaramillo	Sara Telano	Karina Zubiate
Email	jennifer.jaramillo@us.af.mil	sara.telano@us.af.mil	karina.zubiate@spaceforce.mil
Office	AFRL/RVKE	AFRL/RVKE	AFRL/RVKE
Phone	505-846-7040	505-853-7353	505-846-4577
	Program Manager	**Program Manager**	
Name	Matthew O'Brien	Gabriel Mounce	
Email	matthew.obrien.27@us.af.mil	gabriel.mounce.3@us.af.mil	
Office	505-846-5028	505-846-6079	

Section VIII- Other Information

A. Amendments
Amendments to this announcement will be posted on Grants.gov. However, Recipients will only receive an email when an amendment is posted on this site if the Recipient is registered for email notifications for this FOA in Grants.gov. The Government recommends registration as soon after the release of the FOA as possible to ensure notice of any amendments or other FOAs.

B. Ombudsman
An ombudsman has been appointed to hear and facilitate the resolution of concerns from recipients, potential recipients, and others for this requirement. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman does not affect the authority of the Program Manager(s), Grants and Agreements Officer, or any other responsible Approving Official. Further, the ombudsman does not participate in the evaluation of proposals, the award process, or the adjudication of protests or formal disputes. The ombudsman may refer the party to another official who can resolve the concern.

Before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the Grants and Agreements Officer for resolution. Consulting an ombudsman does not alter or postpone the timelines for any other processes (e.g., agency level protests, GAO protests, requests for debriefings, employee-employer actions, contests of OMB Circular A-76 competition performance decisions). If resolution cannot be made by the Grants and Agreements Officer, concerned parties may contact the AFRL ombudsmen:

Primary: AFRL Director of Contracting
Secondary: AFRL Deputy Director of Contracting
Phone: 937-904-9700
Email: AFRL.PK.OfficeAccount@us.af.mil

The ombudsman has no authority to render a decision that binds the agency. Do not contact the ombudsman to request copies of the announcement, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the Grants and Agreements Officer.

C. Assistance Instrument Payment Process
The Wide Area WorkFlow (WAWF) application has been designated as the Department of Defense standard for electronic invoicing and payment. To facilitate this effort for Universities and Nonprofit Organizations with awards administered by the Office of Naval Research (ONR) Regional Offices, the WAWF website is available to assist at https://wawf.eb.mil/. All parties doing business with ONR are strongly encouraged to register to participate in the WAWF program. By submitting invoices and receiving reports online—through electronic data interchange (EDI) or file transfer protocol (FTP)—invoices and reports are routed, reviewed and processed electronically, resulting in more efficient payment. For additional information on registration and the electronic payment process visit https://wawf.eb.mil/

Electronic submission of payment requests requires the Awardee to register in WAWF and have the appropriate CAGE code activated. Please note, that each Awardee must be registered in SAM and have an Electronic Business Point of Contact (EBPOC) set up to approve new registrations within their Institution. Electronic Business Point of Contact (EBPOC) is responsible for activating the CAGE code in

WAWF by calling 1-866-618-5988. Once the Awardee's CAGE Code is activated, the EBPOC will self-register in WAWF (https://wawf.eb.mil) and follow the instructions for a group administrator. The ONR Regional Offices will assist in this process.

D. Retention of Submissions
The Government expects to retain copies of all and Full Applications and other submissions. No submissions will be returned. By applying to for funding, Recipients consent to AFRL retention of their submissions.

F. Property
Any Awards resulting from this announcement may contain articles for governing management and disposition of property as contained OMB guidance in 2 C.F.R. 200 and/or DoD Research & Development General Terms and Conditions (March 2021).

Section IX- Appendix, Attachments, and References

Appendices

- Appendix A, Cost Share Information
- Appendix B, Sample Cost Share Calculation For Blended Cost Share Percentage

Attachments

- Attachment I, AF Form 813 Request for Environmental Impact Analysis (as applicable, subject to the Recipients proposal)
- Attachment II, Budget Justification Workbook
- Attachment III, DD254

References

- Air Force Technology Transfer and Transition PIA's Partnership Intermediary Agreements (PIAs): https://www.aft3.af.mil/
- Code of Federal Regulations: https://www.ecfr.gov/
- DoD Research & Development General Terms and Conditions (March 2021) located at: https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions
- Federal Acquisition Regulations: https://www.acquisition.gov/