

FY 2027 University Center for High-Speed Aerothermoelasticity

NOTICE OF FUNDING OPPORTUNITY

Fiscal Year 2027

I. OVERVIEW INFORMATION

This is a special Notice of Funding Opportunity Announcement (NOFO) sponsored by the Air Force Office of Scientific Research (AFOSR), which will hereafter generally be referred to as "we, us, our, or AFOSR." The AFRL/AFOSR University Center for High-Speed Aerothermoelasticity intends to support a team of up to ten (10) investigators. The program's objective is to foster multidisciplinary, collaborative, high-impact basic research in science and engineering that addresses the future Air Force mission, particularly in the area of high-speed aerothermoelasticity.

Awards are made to U.S. institutions of higher education, where the principal investigator (PI) is employed on a full-time basis and holds a regular, non-contractor position. Researchers working at a Federally Funded Research and Development Center, or a Department of War (DoW) Laboratory are not eligible for this competition. For teaming purposes, at least one HBCU investigator is strongly encouraged.

Proposers are encouraged to confer with the designated AFOSR Program Officer(s) prior to submitting a full proposal. We will evaluate proposals using an internal review panel. AFOSR reserves the right to select and fund one or none of the proposals. AFOSR provides no funding for direct reimbursement of proposal development costs. Technical and budget proposals (or any other material) submitted in response to this NOFO will not be returned. It is the policy of AFOSR to treat all white papers and proposals submitted under this NOFO as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

White papers briefly summarizing the proposed institution's ideas are required. Submit white papers to our whitepaper portal, which is linked below. The points of contact (POCs) will coordinate to provide feedback on the white papers.

The proposals will need to include a data management plan, outlining how samples and data collected in the program will be stored and managed. This includes but is not restricted to issues such as standards for data and metadata collection, content and format, data archiving, database management, and data sharing within, outside the awardee and beyond the lifetime of the grant. This precondition is modeled on the National Science Foundation Data Management Plan requirement (e.g., https://www.nsf.gov/eng/data-management-plans).

IMPORTANT NOTE: Applicants should be alert for any amendments that may modify the announcement. Amendments to the original Notice of Funding Opportunity (NOFO) will be posted to the Grants.gov Webpage: https://www.grants.gov/.

Hyperlinks have been embedded within this document and appear as underlined, and or blue-colored words in the midst of paragraphs. The reader may "jump" to the linked section within this document by "clicking" (CTRL + CLICK, or CLICK).

Amendment 1 Makes updates to the following:

- **White Paper Submission Deadline is 8 January 2027: Deadline for electronic submission of white papers via the Qualtrics portal (by 11:59 PM Eastern).**

- **White Paper Feedback / Determination is 5 February 2027: Expected date by which the Government will respond with white paper determinations (before COB).**

II. BASIC INFORMATION

FEDERAL AWARDING AGENCY NAME

Air Force Office of Scientific Research
875 North Randolph Street, STE 325, Room 3112
Arlington, VA 22203

FUNDING OPPORTUNITY TITLE

AFRL/AFOSR Fiscal Year (FY) 2027 University Center for High-Speed Aerothermoelasticity

ANNOUNCEMENT TYPE

Initial Announcement

ANNOUNCEMENT NUMBER

FA955027S0001

CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NUMBER

12.800 Air Force Defense Research Sciences Program

The authorization to make awards under this funding opportunity may be found via the Assistance Listing (CFDA) Number on sam.gov.

FUNDING DETAILS

AFOSR intends to fund one (1) award, in the amount of $2,750,000 per year, for three (3) years. The expected value of each award is anticipated to be $8,250,000, with options to extend to five (5) years. The total amount of funding is based on the quality of proposals, the availability of funds, and the exercise of option periods, with a base amount of $8.25M that can reach up to $13.75M over five years if all options are exercised.

KEY DATES

Pre-proposal inquiries and questions, regarding white papers and the submission of those white papers, must be received in writing by electronic mail to the address(es) of this NOFO not later than **13 November 2026** at 11:59 PM Eastern Time to be considered. The Government will respond to any pre-proposal inquiries or questions via public posting, or individual responses, no later than COB on **11 December 2026.**

Whitepapers must be received by submitting to https://afosr.gov1.qualtrics.com/jfe/form/SV_eKuTqm9qezoDYep by **8 January 2027** at 11:59 PM Eastern Time to be considered. White paper evaluation is meant to initially assess the capability of a proposed effort and is NOT a selection process. White papers must be no more than five (5) pages in length. References and CV/bios will not count against the page limit. Please review this NOFO in its entirety prior to submitting a white paper.

The government will respond to the white paper determination before COB on **5 February 2027**.

Proposals must be received electronically through Grants.gov by **2 April 2027** at 11:59 PM Eastern Time to be considered.

We anticipate that we will notify proposers of selection or non-selection for award no later than **15 August 2027**. We anticipate awards to be made by **15 August 2027**, barring delays.

LEGAL REQUIREMENTS

Each award under this Announcement will be governed by the general terms and conditions in effect at the time of the award that conform to DoW's implementation of OMB guidance applicable to financial assistance, as follows:

a. For Universities and Non-Profit Entities, these terms and conditions are identified in Parts 1126 through 1138 of the DoDGARS (2 CFR Parts 1126 through 1138, which comprise 2 CFR 1100 Subchapter D).
b. For For-Profit Entities, requirements to be included in the general terms and conditions are identified in Part 34 of the DODGARS (32 CFR Part 34).
c. For All Entities, National Policy Requirements are identified in Part 1122 of the DoDGARS (2 CFR Part 1122).

Any resulting awards will be subject to the DoW Research and Development (R&D) General Terms and Conditions (Ts&Cs), located at: https://www.nre.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions. In addition, the AFRL Addendum to the DoW R&D General Ts&Cs and AFRL Award-Specific Ts&Cs (attached to this NOFO) include additional Ts&Cs that may be applicable to any resulting awards. This AFRL document is a supplement to the DoW R&D General Ts&Cs. To understand the entire AFRL requirement for a given article, the DoW R&D General Ts&Cs must be read in tandem with this document.

NATIONAL PRIORITY

In accordance with Executive Order 14332, all technical program descriptions contained in this NOFO reflect the basic research priorities for the Department of the Air Force and are defined to advance the administration and agency priorities (c.f., OMB memo M-25-34 "Fiscal Year 2027 Administration Research and Development Budget Priorities and Cross-Cutting Actions"). More information about the Department of the Air Force Priorities can be found at www.af.mil.

EXECUTIVE SUMMARY

The Air Force Office of Scientific Research, in partnership with the Air Force Research Lab (AFRL) Air Warfare Directorate (RA), intends to provide support for a multidisciplinary team of scientists and engineers at U.S. universities to establish a university-led Center for High-Speed Aerothermoelasticity. This multidisciplinary, basic research initiative focuses on investigating complex problem sets involving the fundamental physics at the intersection of high-speed fluid mechanics, thermal transport, and structural sciences. By supporting a balanced, integrated approach across computational simulation, theoretical modeling, and ground experimentation in these three areas, the Center will tackle critical aerothermoelasticity challenges for the Air Force mission and related challenges in science and engineering. This opportunity is a chance to work closely with the Air Force Research Lab Air Warfare Directorate (AFRL/RA) on computational simulations and ground and flight experiments in the field of high-speed aerothermoelasticity.

We seek unclassified proposals from a highly collaborative, qualified and responsible university-led team that bridges the traditional silos of fluid dynamics, thermal transport, and structural mechanics. The program requires an interdisciplinary roster of up to ten investigators (including computational and experimental leads) and strongly encourages partnership with Historically Black Colleges and Universities (HBCUs), in alignment with Executive Order 14283. Beyond technical discovery, the Center acts as a vital connection between academia and DoW scientists at facilities such as Wright-Patterson Air Force Base and the Arnold Engineering Development Center (AEDC). This ensures that breakthrough academic research translates into tangible capabilities for the Department of the Air Force (DAF) and access to a well-trained future aerospace workforce.

It is important that your proposal shows strength in as many of the evaluation areas as practical for maximum competitiveness.

The award shall be made to U.S. institutions of higher education, where the principal investigator is employed on a full-time basis and holds a regular, non-contractor position. We discuss this more in section C.1. Eligible Applicants. Researchers working at the Federally Funded Research and Development Centers and DoW Laboratories are not eligible for this competition.

AGENCY CONTACT INFORMATION

a) Technical Inquires and Questions

You should submit your questions in writing by electronic mail to the High-Speed Aerodynamics Program Officer, Dr. Amanda Chou at aerothermodynamics@us.af.mil. You should include the NOFO number in the subject line.

Please submit all inquiries in written format to ensure a response.

b) General Inquires and Questions

You must send all general questions and inquiries about this announcement by email. Your questions will generally be consolidated with other questions and posted on grants.gov so everyone gets the same information. We may provide an individual response by email if your question does not apply to everyone else.

AFOSR/RBKS2

GRANTS OFFICER Shelby Bonneville

Email: shelby.bonneville@us.af.mil

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A. PROGRAM DESCRIPTION

The Department of War and broader aerospace community face critical knowledge gaps regarding the physical behavior of structures subjected to extreme environments such as sustained high-speed flight. Historically, basic research has isolated aerodynamics, thermodynamics, and structural mechanics into separate, compartmentalized disciplines. However, as vehicle velocities scale into high-supersonic and hypersonic regimes, these distinct physical domains can become strongly coupled. An absence of understanding of these effects can lead to catastrophic consequences such as rapid material degradation, thermal buckling, and ultimately, vehicle loss.

The establishment of a university-led research center seeks to shatter these academic silos and encourage cross-discipline collaboration toward understanding the fundamental physics required to ensure success of related flight experiments at the Air Force Research Lab Air Warfare Directorate (AFRL/RA). Through the development of a cohesive research plan that encompasses both a focus on aerothermal and structural research in computational simulations, theory, and experiment, the establishment of this Center will not only aid in scientific discovery but establish strong connections between academia and the technical directorate. Participants in this center can expect to be directly embedded into a research ecosystem that encourages multidisciplinary collaboration and comprehensive approach to problem solving.

The Air Force Office of Scientific and Research (AFOSR) is soliciting proposals for research to establish a university-led Center for High-Speed Aerothermoelasticity. The topic area that we seek to support with this NOFO are complementary to those described in our open BAA entitled “Research Interests of the Air Force Office of Scientific Research” and do not fall completely within any one research program. The objective of this NOFO is to support a multidisciplinary university team conducting foundational basic research at the intersection of high-speed fluid dynamics, thermal transport, and structural mechanics. We seek to support multidisciplinary research efforts, creating synergies to speed DAF-relevant research and development

The efforts proposed must be basic research and the recipients of this award must be an institution of higher education as defined by 10 USC 2199. A team of one primary investigator (PI) with up to 9 other co-investigators is allowed: the team shall include one computational investigator, one experimental investigator, one fluid dynamicist, and one structural scientist. These need not be separate individuals; investigators will likely have overlapping qualifications to meet these criteria. Each faculty investigator is expected to support and mentor at least one graduate student under this award.

The main technical objective should focus on the basic research aspects of a series of flight experiments to be carried out by the Air Force Research Lab (AFRL) Air Warfare Directorate (RA) and complement the work being done. The university Center will focus on the fundamental physics governing high-speed aerothermoelasticity problems, targeting panel flutter, thermal buckling, and other fluid-thermal-structural interactions in realistic flight environments. These proposals should consider conditions relevant to reusable high-speed vehicles, where “high-speed” indicates a high supersonic and/or hypersonic cruise condition. The proposed work should be scoped to accomplish all objectives without the need for disclosure of or access to controlled unclassified information (CUI), even if the investigators otherwise have access to or are provided with CUI data as optional reference points.

The proposed work should include a strong component of understanding the underlying physics

responsible for aerothermoelastic phenomena in application to flight and include a theoretical framework to study the sensitivity of the phenomena to flight-relevant uncertainties, including but not limited to manufacturing tolerances, boundary layer state, and freestream conditions. The research concentration areas may include (1) new approaches toward generating surrogate models of both aerothermal and structural states (2) data assimilation or machine learning techniques to understand the driving physics between these interactions (3) effects of uncertainty and/or sensitivities of boundary and initial conditions in the driving physics for fluid-thermal-structure interactions (4) transitional boundary layer and/or nonuniform heating effects (5) application of modal decomposition methods to aid in the differentiation of aerothermal vs. mechanical effects (6) and any diagnostic development necessary to transition ground testing methods to flight experiments. Geometry of a flight-relevant panel to be studied, initial conditions, and boundary conditions for the analysis of the fluid-thermal-structural interaction will be provided by AFRL/RA. However, precise knowledge of these parameters should be used to only demonstrate or anchor physical findings, not be critical to the execution of the basic research and study of the underlying physics.

The awarded team will be expected to budget for travel to aid in the participation of review meetings, in-person ground testing, and integration activities with AFRL/RA at Wright-Patterson Air Force Base (WPAFB), Arnold Engineering Development Center (AEDC) in Tullahoma, TN, and/or the launch provider in Mojave, CA during the first two years of the award. Additional locations and short visits may be added in the course of the program. The awarded team should also expect to present their progress at an annual two- to three-day review to be held at WPAFB each year separate from the traditional program reviews.

Basic and applied research is defined in the DoW Financial Management Regulation:

Basic research is systematic study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications towards processes or products in mind. It includes all scientific study and experimentation directed toward increasing fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs. It is farsighted high payoff research that provides the basis for technological progress (DoD 7000.14-R, vol. 2B, chap. 5, para. 1.5.1).

Applied research is systematic study to understand the means to meet a recognized and specific need. It is a systematic expansion and application of knowledge to develop useful materials, devices, and systems or methods. It may be oriented, ultimately, toward the design, development, and improvement of prototypes and new processes to meet general mission area requirements. Applied research may translate promising basic research into solutions for broadly defined military needs, short of system development. This type of effort may vary from systematic mission-directed research beyond that in Budget Activity 1 to sophisticated breadboard hardware, study, programming and planning efforts that establish the initial feasibility and practicality of proposed solutions to technological challenges. It includes studies, investigations, and non-system specific technology efforts. The dominant characteristic is that applied research is directed toward general military needs with a view toward developing and evaluating the feasibility and practicality of proposed solutions and determining their parameters. Applied research precedes system specific technology investigations or development. Program control of the applied research program element is normally exercised by general level of effort. Program elements in this category involve pre-Milestone B efforts, also known as Concept and Technology Development phase tasks, such as concept exploration efforts and paper studies of alternative concepts for meeting a mission need (DoD 7000.14-R, vol. 2B, chap. 5, para. 1.5.2).

Detailed descriptions and the government point(s) of contact can be found below. The descriptions are intended to provide the applicant a frame of reference and are not meant to be restrictive to the possible approaches and component solutions to achieving the goals of the topic and the program. Innovative ideas addressing these research topics are highly encouraged.

Proposals from an investigator team from multiple university departments and universities are warranted to assemble the expertise necessary to address the topic. Teams are also highly encouraged to leverage collaborations with the technical directorate, where appropriate, to demonstrate an ability to develop solutions that can be eventually applied to a specific application. Proposals shall name one Principal Investigator (PI) as the responsible technical point of contact. Similarly, one institution shall be the primary awardee for the purpose of award execution. The PI shall come from the primary institution. The relationship among participating institutions and their respective roles, as well as the apportionment of funds including sub-awards, if any, shall be described in both the proposal text and budget.

Access to DoW Resources

Proposals may request access to AFRL facilities or DoD high performance computing resources in order to conduct the proposed research. If authorized, there is no cost to the research for these resources. Applicants are advised that routine access of educational institution researchers to AFRL buildings and facilities is limited to U.S. citizens. Individuals eligible for access are subject to background checks.

B. FEDERAL AWARD INFORMATION

The award is for three (3) years, with options to extend to five (5) years, funded up to $2,750,000 per year for a total of approximately $13,750,000. The award may be funded no more than $2,750,000 annually, regardless of if the overall amount is $13,750,000. To qualify for the additional 750,000 per year, the proposal must include three (3) investigators with full-time appointments at a Historically Black College or University (HBCU). No single HBCU investigator will be eligible for more than $250,000 per year. The proposers are highly encouraged to include at least one (1) HBCU investigator on each proposal and will be evaluated on the integration of investigators from HBCUs.

The projected start date is determined at the time of the award but is most likely projected no later than 15 August 2027 based on the availability of the president's budget.

We anticipate approximately one (1) award may be awarded under the authority of 10 U.S.C. 4001 in the form of grants, cooperative agreements, or contracts. We rely on discretionary appropriated funds for this program. Awards are only made if funds are available.

We select what kind of award instrument we can use based on requirements in the Federal Grant and Cooperative Agreement Act 31 U.S.C. 6301 – 31 U.S.C. 6308.

- A grant or cooperative agreement award may be made to U.S. institutions of higher education (IHE) or nonprofit organizations as described in 2 CFR 25.345

Awards are made under the authority of 10 U.S.C. 4001 in the form of grants, cooperative agreements, or contracts. We rely on discretionary appropriated funds for this program. We can only make awards if enough funds are made available. We select what kind of award instrument we can use based on requirements in the Federal Grant and Cooperative Agreement Act 31 U.S.C. 6301 – 31 U.S.C. 6308. Awards may take the form of contracts, grants, cooperative agreements, technology investment

agreements and other transaction agreements as appropriate. The following provides a brief description of potential instrument types:

- Grant. A legal instrument consistent with 31 U.S.C. 6304, is used to enter into a relationship:
  - The principal purpose of which is to transfer a thing of value to the recipient to carry out a public purpose of support of stimulation authorized by a law or the United States, rather than acquire property or services for the Federal Government's direct benefit or use.
  - In which substantial involvement is not expected between the Federal Government and the recipient when carrying out the activity contemplated by the grant.
  - No fee or profit is allowed.
- Cooperative Agreement. A legal instrument which, consistent with 31 U.S.C 6305, is used to enter into the same kind of relationship as a grant, except that substantial involvement is expected between the Federal Government and the recipient when carrying out the activity contemplated by the cooperative agreement. No fee or profit is allowed.

We reserve the right to select and fund for award all, some, part, or none of the proposals received in response to this announcement. There is no guarantee of an award.

C. ELIGIBILITY

C.1. ELIGIBLE APPLICANTS

C.1.a. General

You are eligible to submit an application if you are a qualified and responsible organization from academia. Academia includes educational institutions of higher education in the United States as defined at 10 U.S.C. 2199. Educational institutions mean a local educational agency, college, university, or any other nonprofit institution dedicated to improving science, mathematics, and engineering education. We review your application, proposal, and Office of Management and Budget (OMB) designated repositories of government-wide public and non-public data, including comments you have made, as required by 41 U.S.C. 2313 and described in 2 CFR 200.205 and 32 CFR 22.410 to assess risk posed by applicants, and confirm applicants are qualified, responsible, and eligible to receive an award.

As the individual Principal Investigator, you must hold a full-time, non-contractor permanent, career-competitive, or tenure-track position (based on your institution's definition) with your organization, or your proposal must include a letter from your organization stating that you will be considered for a permanent, career- competitive, or tenure-track non-contractor position if you currently hold a short-term appointment. This is in addition to the requirement you are a U.S. citizen, national, or permanent resident. You are not eligible to submit a proposal if you do not meet these requirements. You must have permanent residency at the time of proposal submission.

Individual awards are made to U.S. institutions of higher education, where the individual principal investigator is a U.S. citizen, national, or has permanent residency at time of proposal submission; employed on a full-time basis and holds a permanent position. All

PIs must meet all eligibility requirements.

C.1.b. Eligibility Notice for All Applicants

We review your application, proposal, and Office of Management and Budget (OMB) designated repositories of government-wide public and non-public data, including comments you have made, as required by 31 U.S.C. 3321 and 41 U.S.C. 2313 and described in 2 CFR 200.205 and 32 CFR 22.410 to assess risk posed by applicants, and confirm applicants are qualified, responsible, and eligible to receive an award. If we cannot determine you or your organization qualified and responsible, you are not eligible to receive an award. You are required to submit a white paper. White papers must be submitted by 8 January 2027, at 11:59PM EST. Upon the PO white paper review and feedback, an invitation to submit a full proposal may be extended.

You may submit more than one white paper to a single or multiple research discipline; but you must acknowledge so on each submission. White papers must be submitted electronically via https://afosr.gov1.qualtrics.com/jfe/form/SV_eKuTqm9qezoDYep. Detailed instructions are included on the submission page. For support, please contact the High-Speed Aerodynamics Program Manager at aerothermodynamics@us.af.mil. If you do not submit a white paper under this NOFO, you will be ineligible to submit a proposal.

C.1.c. Ineligible Entities

None of the following entity types are eligible to submit proposals as primary award recipients under this announcement.

- Federally Funded Research and Development Centers (FFRDCs)
- Department of War (DoW) Laboratories
- Individual persons or people

C.2. COST SHARING

We do not require cost sharing for proposals under this announcement (except as may be required for transactions other than contracts, grants, and cooperative agreements entered into under 10 U.S.C. 4021 and 10 U.S.C. § 4022). Cost sharing is not an evaluation or selection criterion.

C.3. GOLD STANDARD SCIENCE

C.3.a. Definition of Gold Standard Science

Gold Standard Science (GSS): In accordance with Executive Order (E.O.) 14303; GSS is science conducted in a manner that is:

(1) reproducible;
(2) transparent;
(3) communicative of error and uncertainty;
(4) collaborative and interdisciplinary;
(5) skeptical of its findings and assumptions;

(6) structured for falsifiability of hypotheses;
(7) subject to unbiased peer review;
(8) accepting negative results as positive outcomes; and,
(9) without conflicts of interest.

C.3.b. Expectation of Adherence to Gold Standard Science

AFOSR expects the highest standards of scientific rigor, integrity and adherence to appropriate tenets of GSS. For more on these standards and DoW expectations, see https://www.cto.mil/gold-standard-science-implementation-plan/.

To demonstrate compliance with E.O. 14332, applications/proposals shall:

(1) Include clear benchmarks for measuring success and progress towards relevant goals and a commitment to achieving GSS;
(2) Identify areas of demonstrating success in implementing GSS; and
(3) Include a commitment to complying with administration policies, procedures, and guidance respecting GSS.

By responding to this NOFO, you explicitly agree to the following statements:

(1) Our institution understands the definition of Gold Standard Science as outlined above.
(2) Our institution and all personnel involved in the proposed project will adhere to all administration policies, procedures, and guidance respecting Gold Standard Science in the execution of this project, if funded.

C.4. OTHER

C.4.a. Acknowledgement of Support and Disclaimer Requirements

You must include the G.2.g. Acknowledgement of Research Support on all materials created or produced under our awards.

You must include the G.2.h. Disclaimer Language on materials as required.

Our award document may provide additional instructions about specific distribution statements to use when you provide research materials to us. You are not eligible to submit a proposal if you cannot accept these terms.

C.4.b. Expectation of Public Dissemination of Research Results

We expect research funded by this announcement will be fundamental. We expect public dissemination of research results if you receive an award. This is a basic requirement for unclassified research results.

We intend, to the fullest extent possible, to make available to the public all unclassified, unlimited peer-reviewed scholarly publications and digitally formatted scientific data arising from research and programs funded wholly or in part by the DoW as described in the OUSW, AT&L Memorandum, "Public Access to Department of Defense-Funded Research" dated 09 Jul 2014.

We follow DoD Instruction 5230.24 and DoD Instruction 5230.27 policies and procedures to ensure broad dissemination of unclassified research results to the public and within the Government. The DoD Instruction 5230.27 policy and procedures allowing publication and public presentation of unclassified fundamental research results will apply to all research proposed under this competition unless the Program Officer gives you an explicit, written exclusion to these policies with the Grants or Contracting Officer's advice and consent. All exclusions must be authorized or required by law and must cite a valid legal authority.

You must provide a copy of all peer-reviewed publications developed or produced from research conducted with Air Force and Space Force funds to our Program Officer.

You are not eligible to submit a proposal if you cannot accept these terms, and by your submission, you agree to the terms set forth herein.

C.4.c. Disclosure of Conflict of Commitment and Conflict of Interest

In accordance with 42 U.S.C. § 6605 this announcement requires that all current and pending research support be disclosed at the time of proposal, for all Covered Individuals. Covered Individuals includes those individuals as defined in 42 U.S.C. § 6605 as well as those who are listed as key personnel on proposals including, but not limited to the principal investigator or co-principal investigators. Such disclosure will be updated annually during the performance of any research project selected for funding, and whenever Covered Individual(s) are added or identified as performing under this project.

Any decision to accept a proposal for funding under this NOFO will include full reliance on the applicant's statements. Failure to report fully and completely all sources of project support and outside positions and affiliations may be considered a material statement within the meaning of the federal False Claims Act, and constitute a violation of law.

The funding agency must conduct a pre-award conflict of interest/conflict of commitment review of any proposal selected for funding, as defined in the National Security Strategy for United States Government-Supported Research and Development (NSPM-33). Offerors are advised that any significant conflict of interest/conflict of commitment identified may be a basis for the rejection of an otherwise awardable proposal.

(1) **General Requirement for Disclosure**

You and your organization must disclose any potential or actual scientific or non-scientific Conflict of Interest(s) to us. You must also disclose any potential or actual conflict(s) of interest for any subrecipient you include in your proposal.

You must provide enough information for us to evaluate your disclosure. We may have to ask you more questions if we need more information.

At our discretion, we may ask you for a conflict-of-interest mitigation plan after you submit your proposal. Your plan is subject to our approval.

(2) **Scientific Conflict of Interest**

Scientific collaborations on research and development projects are generally the result of close collaboration prior to the submission of applications for support. Accordingly, virtually all of these collaborations might be considered to include a potential conflict of interest. The potential conflict is mitigated by the disclosure of these collaborations, and the list of current and pending support you provide for senior and key researchers.

C.5. AFOSR-SPECIFIC FUNDAMENTAL RESEARCH SECURITY REVIEW (FRSR) INFORMATION

(1**) Security Risk Review.** Each proposal submission will be subject to a risk-based Security Review, (FRSR), prior to selection for award. The FRSR is applied to federally funded research designed to help protect Department of the Air Force Science and Technology (S&T) by identifying possible vectors of undue foreign influence. AFRL will follow all policies and procedures outlined in Air Force Research Laboratory (AFRL) Instruction AFRLI 61-113, Science and Technology Protection for the Air Force Research Laboratory and Department of the Air Force Instruction DAFI 63-101/20-101, Integrated Lifecycle Management. The FRSR will be conducted in accordance with OUSD(R&E)'s "Policy for Risk Based Security Reviews of Fundamental Research."

(2) **Covered Individual**.

An individual who contributes to a substantive, meaningful way to the scientific development or execution of a research and development project proposed to be carried out with a research and development award from a federal research agency; and is designated as a covered individual by the federal research agency concerned. AFOSR further defines that all positions identified in the proposal are Covered Individuals and thereby subject to disclosure requirements and should have a corresponding Standard Disclosure Forms for Biosketch, Current and Pending (Other) Support, and Collaborators and Other Affiliations. *See* 42 U.S.C.§ 6605, Definitions. (Note: For purposes of a Notice of Funding Opportunity (NOFO) solicitation, "covered individuals" are all Senior/Key Personnel.)

(3) Security risk review for these subject proposals will be developed for all proposed Senior/Key personnel and "Covered Individuals".

These risk reviews will be based on information disclosed in a Research and Related Senior and Key Person Profile and Security Questionnaire. In addition, any accompanying or referenced documents, and publicly available information, will be utilized in risk reviews. Nationality or citizenship is not a factor in the security risk reviews.

(**4) External Engagements.** When considering all external engagements, AFRL incorporates a holistic decision-making process that encompasses technical and security factors. The security review method implemented by AFRL measures risk factors to identify the appropriate Risk Acceptance Level (RAL) within the organization. The objective analysis of the security risk factors is conducted to empower AFRL's S&T leaders to make risk-informed decisions. The review process looks at the risk factors indicated in the most up to date DoD Decision Matrix.

C.5.a. Actions Required by Applicants/Recipients at Proposal Submission

In accordance with AFRLI 61-113, S&T Protection, Applicants/Recipients are required to submit the following documentation with their proposal:

(1) Standard Form 424, "Research and Related Senior and Key Person Profile (Expanded) (Included in Application Package for all Covered Individuals);

(2) Common Disclosure Forms: Biosketch, Current and Pending (Other) Support, and Collaborators and Other Affiliations (to be submitted with SF-424);

(3) Security Program Questionnaire (*See* Appendix 1);

(4) "Privacy Act Statement" consent form for each Covered Individual that is also signed by the Applicants/Recipients as the Individual's Sponsors (*See* "Covered Individual" section below and Appendix 2);

(5) Certification(s) of Covered Individual's Research Security Training. AFOSR accepts and recommends the Research Security Training module on National Science Foundation (NSF) SECURE website; however, Universities may submit certifications from substantially similar training(s). AFOSR requires all Covered Individuals listed on the application for a research and development award to take the training in the 12 months prior to proposal submission. Upon acceptance of proposal, Covered Individuals must submit and maintain annual certifications showing this course was taken yearly.

(6) Compliance Attestation. You must certify your institution's compliance with OUSW's Research Protection policies as articulated in the most up to date OUSW DoD Component Decision Matrix to Inform Research Proposal Mitigation Decisions on official university letterhead, and attest

for the duration of the grant that the recipient confirms that the Covered Individuals participating in the grant are:

(1) not actively participating in a malign foreign talent recruitment program (MFTRP); and,

(2) not involved in active collaboration on fundamental research with a Section 1286 Prohibited Entity or employee of a Prohibited Entity.

For example: *[The University] certifies that the information provided is current, accurate, and complete. This includes, but is not limited to, information related to current, pending, and other support (both foreign and domestic) as defined in 42 U.S.C. §6605.*

[The University] also certifies that, at the time of submission, no Covered Individual listed is a party in a malign foreign talent recruitment program.

[The University] understands that misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§287, 1001, 1031 and 31 U.S.C. §§3729-3733 and 3802.

Signature: [Business Office, Provost, Dean, or someone with the authority to legally obligate the University]

Date:

In the event a security risk is identified, and the Government has determined the security risk exceeds the acceptable threshold and cannot be mitigated, the Applicant/Recipient will be notified and informed of the decline of award. The Government will provide an unclassified rationale for any rejection of a proposal due to security risks.

By submission of the required forms, the Applicant/Recipient agrees to comply with the following: To certify that each Covered Individual who is listed on the application has been made aware: 1) of all relevant disclosure requirements, including the requirements of 42 U.S.C. § 6605; and, 2) that false representations may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C.§§287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802. *See* National Science and Technology Council Guidance for Implementing National Security Presidential Memorandum 33 (NSPM-33) on National Security Strategy for United States Government-Supported Research and Development (January 2022).

By submitting this application, the proposer's research institution) Authorized Organizational Representative certifies that all key personnel have completed the Federally mandated research security training (RST). The National Science Foundation (NSF), in partnership with the National Institutes of Health (NIH), the Department of Energy (DOE) and the Department of War (DoW), has provided four online research security training modules as a resource to awardee organizations. Subsequently, the Safeguarding the Entire Community in the U.S. Research Ecosystem (SECURE) Center developed an updated and condensed version of the four modules. The condensed RST module is designed to meet the Government-wide RST requirement in section 10634 of the CHIPS and Science Act of 2022 (as in 42 U.S.C. § 19234). To that end, NSF, NIH, DOE, and DoW all recognize completion of the condensed module as compliant with their respective RST requirements.

Proposers may use any training that aligns with the guidelines set forth by the Executive Office of the President's Office of Science and Technology Policy, covering topics such as cybersecurity, international collaboration, foreign interference, and rules for the proper use of funds, disclosure, conflict of commitment, and conflict of interest. The condensed training modules developed by the NSF-funded SECURE Center are encouraged and available at https://www.secure-center.org/resources.

C.5.b. Actions Required by Covered Individuals. Federal law requires that all

current and pending research support, as defined by 42 U.S.C. §6605, must be disclosed at the time of proposal submission, for all covered individuals.

(1) Research and Related Senior/Key Personnel Profile (Expanded) to include:

- Biosketch Form; and,

- **Current and Pending (Other) Support.** AFOSR requires information on all current and pending support for ongoing projects and proposals. AFOSR accepts NSF's Current and Pending (Other) Support, https://www.nsf.gov/policies/nspm-33/common-form-cps. This document contains a list of an individual's proposed and active projects and sources of support. It is used by AFOSR to assess:

- The capacity of the individual to carry out the proposed research.
- Any potential scientific and budgetary overlap or duplication across projects.
- The potential the individual is overcommitting themselves with the proposed project.

What to include in your Current and Pending (Other) Support document:

- A brief outline of the information you will need to include is provided below.
- Identifying information.
- Organization and location.
- Projects/proposals, including the following:
- Project/proposal title.
- Status of support.
- Source of support.
- Primary place of performance.
- Start date.
- End date.
- Total award amount.
- Person-months (or partial person-months) per year committed to the project/proposed project.
- Overall objectives.
- Statement of potential overlap.
- In-kind contributions.
- Certification that the information you've provided is current, accurate and complete.
- Senior/key personnel are required to certify that the information is current, accurate and complete. This includes, but is not limited to, information related to current, pending and other support (both foreign and domestic).

(2) **Collaborators and Other Affiliations.** AFOSR accepts the template format required by NSF applicants, https://nsf-gov-resources.nsf.gov/files/coa_template.xlsx?VersionId=uaz022di3.2KKDC7uauIadw7yeI3Xf.1, for identifying this information. AFOSR uses Collaborators and Other Affiliations information during the merit review process to help manage reviewer selection. To expedite identification of potential reviewers, having a standard, searchable format for this information is essential. If you are using a Microsoft Excel document, you must submit it as a PDF document through Grants.gov. A brief outline of the information you will need to include is provided below.

- Your name and organizational affiliation.
- The names of anyone whose relationship to you precludes their service as a reviewer — including personal, family or business relationships — and what type of relationship you have with them.
- Names and organizational affiliations of your Ph.D. advisor and Ph.D. thesis advisees.
- Names and organizational affiliations of any co-authors or project collaborators in the last 48 months. Names of editorial boards, editors-in-chief and co-editors you have interacted with in the last 24 months. Do not list editors or reviewers you have interacted with because of a paper submission.

(3) Certification(s) of Research Security Training. *See* above, C.4.a(5).

(4) The Government will require an updated

disclosure whenever Covered Individuals are added or identified as performing under the funded project.

The Government may require an updated disclosure during the performance of any research project selected for funding.

(5) Covered Individuals are also required to sign the "Privacy Act Statement" and provide such signed statement to the Applicant/Recipient for submission with the proposal. *(See* Appendix 2).

Any decision to accept a proposal for funding under this announcement will include full reliance on the individual's statements. Failure to report fully and completely all sources of project support and outside positions and affiliations may be considered a material statement within the meaning of the False Claims Act, 31 U.S.C. 3729, and constitute a violation of Federal law.

C.5.c. Actions required by Applicants/Recipients during period of performance

(1) Applicant/Recipient will utilize a section of the Research Progress Performance Report (RPPR) to provide disclosure updates for Senior/Key Research Personnel and Covered Individuals. In addition, whenever a new covered individual(s) is to be added or identified as performing under the funded project, a new Research and Related Senior and Key Personal Profile (Expanded), Biosketch, Current and Pending (Other) Support, and Collaborators and Other

Affiliations forms and disclosures will be required prior to continued performance.

If, at any time, during performance of this award, the Applicant/Recipient learns that its Senior/Key Research Personnel and/or Covered Individual (including any sub awardee personnel who receive this designation) are or are believed to be participants in a Foreign Government Talent Program or have Foreign Components with a strategic competitor or country with a history of targeting U.S. technology for unauthorized transfer, the Applicant/Recipient will notify the Contracting/Grants/Agreements Officer within five (5) business days of awareness. Foreign Component is defined as performing any significant scientific aspect of a project outside the United States. This applies whether the activity is conducted by the recipient or a researcher at a foreign organization, regardless of whether grant funds are used.

(2) This disclosure must include specific information as to the personnel involved and the nature of the situation and relationship. The Government will review this information and conduct any necessary fact-finding or discussion with the Applicant/Recipient. The Government's determination on disclosure may include acceptance, mitigation, or termination of the award.

The Applicant/Recipient will be required to flow down this provision to all sub awardees who have personnel designated as Senior/Key Research Personnel or Covered Individual as a result of their involvement in the performance of the research.

Type of activity	**Documents requiring information**
Professional preparation (e.g., education and training).	• Biographical Sketch
Academic, professional or institutional appointments and positions, whether or not remuneration is received, and whether full-time, part-time or voluntary.	• Biographical Sketch
A list of products that demonstrate the individual's qualifications to carry out the project as proposed.	• Biographical Sketch
Current and pending (other) support: a. All resources made available, or expected to be made available, to an individual in support of the individual's research and development efforts, regardless of 1. whether the source is foreign or domestic; 2. whether the resource is made available through the entity applying for a research and development award or directly to the individual; or 3. whether the resource has monetary value; and b. includes in-kind contributions requiring a commitment of time and directly supporting the individual's research and development efforts, such as the	• Current and Pending (Other) Support

Type of activity	Documents requiring information
provision of office or laboratory space, equipment, supplies, employees or students.	
In-kind contributions with an estimated dollar value of $5,000 or more that support the research activity for use on the project/proposal being proposed.	• Current and Pending (Other) Support
In-kind contributions: i. with an estimated dollar value of $5,000 or more, ii. not intended for use on the project/proposal being proposed, and iii. have an associated time commitment.	• Current and Pending (Other) Support
Current or pending participation in, or applications to, programs sponsored by foreign governments, instrumentalities, or entities, including foreign government sponsored talent recruitment programs.	• Biographical Sketch • Current and Pending (Other) Support *(Appropriate placement in each document may be contract dependent)*
Consulting activities under the proposals and active projects section of the form when any of the following scenarios apply: 1. The consulting activity will require the senior/key person to perform research as part of the consulting activity; 2. The consulting activity does not involve performing research, but is related to the senior/key person's research portfolio and may have the ability to impact funding, alter time or effort commitments, or otherwise impact scientific integrity; or 3. The consulting entity has provided a contract that requires the senior/key person to conceal or withhold confidential financial or other ties between the senior/key person and the entity, irrespective of the duration of the engagement.	• Current and Pending (Other) Support
Postdoctoral scholars, students or visiting scholars who are supported by an external entity, whose research activities are not intended for use on the project/proposal being proposed and have an associated time commitment.	• Current and Pending (Other) Support
Travel supported/paid by an external entity to perform research activities with an associated time commitment.	• Current and Pending (Other) Support
Startup company based on non-organization-licensed intellectual property (IP).	• Current and Pending (Other) Support

Type of activity	Documents requiring information
Startup packages from other than the proposing organization.	• Current and Pending (Other) Support

D. APPLICATION CONTENTS AND FORMAT

D.1. ADDRESS TO REQUEST APPLICATION PACKAGE

All the application forms you need are available electronically on Grants.gov. From the "View Grant Opportunity" page, you can click on the "Package" tab to download the application package.

You can find the electronic application package on Grants.gov by searching for the announcement number shown on page one. We will not issue paper copies of this announcement.

Please contact us at afosr.baa@us.af.mil to request a reasonable accommodation for any accessibility requirements you may have.

D.2. APPLICATION CONTENTS

D.2.a. Pre-proposal Inquiries and Questions

If you need help with general matters, you should contact the individual listed in General Announcement Questions.

Your pre-proposal inquiries and questions should be submitted not later than 11:59 PM Eastern Daylight Time on **13 November 2026**. AFOSR may not be able to answer questions received later. The Government will respond to any pre-proposal inquiries or questions, either directly, or via public posting no later than COB on **11 December 2027**.

The Program Officer does not have the authority to make commitments for us. Grants and Contracting Officers acting within their warranted capacity are the only people authorized to make commitments for the Government.

D.2.b. White Paper Information

You are ***required*** to submit a white paper. White papers must be submitted by **8 January 2027, at 11:59PM EST**. Upon the PO white paper review and feedback, an invitation to submit a full proposal may be extended.

You may submit more than one white paper; but you must acknowledge so on each submission. White papers must be submitted electronically via https://afosr.gov1.qualtrics.com/jfe/form/SV_eKuTqm9qezoDYep. Detailed instructions are included on the submission page. For support, please contact the High-Speed Aerodynamics

Program Manager at aerothermodynamics@us.af.mil. **If you do not submit a white paper under this NOFO, you will be ineligible to submit a proposal.**

White Paper Format

- Paper Size – 8.5 x 11-inch paper
- Margins -1 inch
- Spacing – 1.5-line spacing
- Font- Times New Roman or Garamond 12 point
- Page Limitation – 5 pages maximum (excluding cover page, curriculum vitae, and references)

(i) White Paper and Curriculum Vitae Content

- The cover page should include the NOFO number, proposal research topic title (research discipline area), proposer's point of contact information (name, telephone number, email address)
- Identification of proposed research and issues
- Potential impact on DAF and DoD capabilities
- Potential team members and development plans
- Proposed technical approaches – hypothesis, theories, concepts, approaches, data measurements, and analysis, etc.
- All publications and presentations must be identified
- Curriculum Vitae are excluded from page count

D.2.c. The Application as a Whole

Your proposal must be submitted no later than **2 April 2027** at 11:59PM EST. You must submit your proposal electronically through Grants.gov. We will not accept or evaluate any proposal submitted by any means other than through Grants.gov.

You must use the electronic Standard Form (SF) 424 Research and Related (R&R) Form Family, OMB Number 4040-0001. The SF 424 (R&R) Application for Federal assistance form must be your cover page. No pages may precede the SF 424 (R&R).

You must mark your application with the announcement number.

A summary of what is required for a complete proposal is summarized below:

- We require the forms and attachments in **bold text** with **all applications**
- *Some applications* require the attachments in *italics*
- We provide more instructions in D.4. Component Pieces of the Application

R&R FORM, OMB No. 4040-0001	FIELD	ATTACHMENT
SF 424 (R&R) Application for Federal Assistance, including an authorized signature	**18.**	*If applicable, SF- LLL Disclosure of Lobbying Activities Per instructions*

		in G.2.a.
R&R Other Project Information Form	**7.**	**Project Summary / Abstract**
	8.	**Project Narrative**
	9.	**Bibliography & References Cited**
	10.	**Facilities and Other Resources**
	11.	**Equipment**
	12.	**Other Attachments**
R&R Senior / Key Person Profile Form (Expanded) for all Covered Individuals		**Biographical Sketch**
		Current & Pending Support
		Collaborators and Other Affiliations
		Training Certification(s)
		Compliance Attestation
		Privacy Act Disclosure Form (See Appendix 2)
R&R Personal Data Form		**None**
R&R Budget Form		**Budget Justification**
R&R Subaward Budget Attachments Form		**Subaward Budget**
R&R Project / Performance Site Locations Form		**None**

The SF 424 (R&R) must include the signature of an authorized representative from your organization. The signature is affixed electronically by Grants.gov upon submission. You are still required to submit any documentation, including disclosure of any unpaid delinquent tax liability or a felony conviction under any Federal law (see FAR 52.209-11).

This signature is considered the signature for the application as a whole.

D.2.d. Proposal Format

i. Paper Size – 8.5 x 11-inch paper
ii. Margins – 1 inch
iii. Spacing – 1.5-line spacing
iv. Font – Times New Roman or Garamond, 12 points
v. Page Limitation – No more than twenty (20) single-sided pages. The cover page, table of contents, list of references, letters of support, curriculum vitae and list of ongoing and pending research support are excluded from the page limitations. The pages of proposals exceeding the page limit may not be included in the evaluation.
vi. Attachments – Electronic Portable Document Format (PDF)
vii. Content – As described below

D.2.e. Proposal Length

No more than twenty (20) single-sided pages. This page count does not include the following sections: Project Summary/Abstract, Curriculum Vitae, and the Bibliography & References. You must not include elaborate brochures, reprints, or presentations beyond those sufficient to present a complete and effective proposal.

AFOSR will not consider more than the maximum number of pages in its evaluation; however, not all pages are counted. This list below is intended to help you understand how to calculate your page count.

NOT INCLUDED IN PAGE COUNT

- SF-424 (R&R) Application for Federal Assistance and all attachments
- R&R Budget and Budget Justification attachments, R&R Other Project Information Form, and all attachments
- Documents that support the budget or particular items of cost R&R Project/ Performance Site Locations Form
- Optional R&R Personal Data Form
- Budget related information is not included in the page count because AFOSR cannot make an award unless it can determine the cost of your proposal is reasonable and realistic and complies with 2 CFR 200 Subpart E - Cost Principles.
- Not having enough information in your proposal to understand if your costs are reasonable and realistic is the most common reason awards are delayed.

D.2.f. Marking Requirements for Confidential or Proprietary Information

You must mark your proposal and any proposal sections that contain proprietary or confidential information. You must use the protective legend found at RFO 52.215-1(e) Instructions to Offerors -- Competitive Acquisition (Mar 2026) modified to permit release to our outside evaluators.

We make every effort to protect the confidentiality of proposals, including any proposal evaluations; however, under Freedom of Information Act (FOIA) requirements, some or all proposal information may be subject to release.

Your entire proposal, or any portions thereof, without protective markings or otherwise identified as requiring protection will be considered voluntarily furnished to us without restriction and will be treated as such for all purposes.

D.2.g. Use of Generative Artificial Intelligence (GenAI) Tools

While the use of GenAI Tools is not prohibited, AFOSR strongly encourages disclosure the use of such tools in your proposal.

Any use of GenAI tools is at your own risk, and you are responsible for ensuring the use of GenAI tools in your proposal does not result in plagiarism, unauthorized use of intellectual property, or presentation of misinformation.

Please note that external reviewers are prohibited from using GenAI tools in the review process, and AFOSR Program Officers (POs) are prohibited from sharing proposal information with external GenAI tools. AFOSR POs have access to an approved firewalled internal GenAI tool (e.g., GenAI.mil) which they may use for internal proposal processing.

D.2.h. Electronic Form and Proposal Attachments

Your application and proposal attachments must be in electronic file formats. You should use the Portable Document Format (PDF) for your attachments. DO NOT password protect any attachments. The website Adobe Software Compatibility | Grants.gov provides additional important instructions.

D.3. GRANTS.GOV APPLICATION SUBMISSION

This section provides application submission and receipt instructions for AFOSR program applications. Please read the following instructions carefully and completely.

D.3.a. Electronic Delivery

AFOSR is participating in the Grants.gov initiative to provide the grant community with a single site to find and apply for grant funding opportunities. AFOSR encourages applicants to submit their applications online through Grants.gov.

D.3.b. How to Register to Apply through Grants.gov

Instructions: Read the instructions below about registering to apply for AFOSR funds. Applicants should read the registration instructions carefully and prepare the information requested before beginning the registration process. Reviewing and assembling the required information before beginning the registration process will alleviate last-minute searches for required information.

The registration process can take up to four weeks to complete. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required

application submission deadlines.

If individual applicants are eligible to apply for this grant funding opportunity, refer to: Applicant Registration | Grants.gov

Organization applicants can find complete instructions here: Organization Registration | Grants.gov

(1) ***Obtain and maintain ORCID for all key personnel***

All individuals listed on the Senior/Key Person form must have an Open Researcher and Contributor ID (ORCID). Please enter this information in the Research and Related Senior/Key Personnel Form (Expanded) under "Credential, e.g., agency login:" field.

As of September of 2024, the DoD is requiring all proposers to include a digital persistent identifier (DPI) for each senior/key person listed in a proposal and Covered Individual. The DoD will require proposers to include the ORCID number for each senior/key person and Covered Individual listed in a proposal for an assistance award for R&D and requires that you maintain your profile by keeping it updated with the most recent information/publications. ORCID numbers will be used since ORCID is currently the only DPI provider that meets the requirements for DPI common or core standards in the NSTC NSPM-33 implementation guidance.

For more detailed instructions for obtaining an ORCID number, refer to: How do I register for an ORCID ID? | ORCID

(2) ***Obtain a UEI Number***

All entities applying for funding, including renewal funding, must have a Unique Entity Identifier (UEI).

As of April of 2022, the federal government stopped using the DUNS number to uniquely identify entities registered in the System for Award Management (SAM). Entities doing business with the federal government will use a Unique Entity Identifier (UEI) created in SAM.gov. They will no longer have to go to a third-party website to obtain their identifier.
Active registrants will have their UEI assigned and viewable within SAM.gov; there is no action for registered entities to take at this time.

This transition allows Federal Agencies to streamline the entity identification and validation process, making it easier and less burdensome for entities to do business with the federal government.

For more detailed instructions for obtaining a UEI number, refer to: Entity Registration | SAM

(3) ***Register with SAM***

In addition to having a UEI number, organizations applying online through Grants.gov must register with the System for Award Management (SAM). All organizations must register with SAM in order to apply online. Failure

to register with SAM will prevent your organization from applying through Grants.gov.

For more detailed instructions for obtaining a UEI number, refer to: Entity Registration | SAM

(4) ***Create a Grants.gov Account***

The next step in the registration process is to create an account with Grants.gov. Applicants must know their organization's UEI number to complete this process. Completing this process automatically triggers an email request for applicant roles to the organization's E-Business Point of Contact (EBiz POC) for review. The EBiz POC is a representative from your organization who is the contact listed for SAM. To apply for grants on behalf of your organization, you will need the Authorized Organizational Representative (AOR) role.

For more detailed instructions about creating a profile on Grants.gov, refer to: Add Profile | Grants.gov

(5) ***Authorize Grants.gov Roles***

After creating an account on Grants.gov, the EBiz POC receives an email notifying them of your registration and request for roles. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the AOR role, thereby giving you permission to complete and submit applications on behalf of the organization. You will be able to submit your application online any time after you have been approved as an AOR.

For more detailed instructions about creating a profile on Grants.gov, refer to: Add Profile | Grants.gov

(6) ***Track Role Status***

To track your role request, refer to: Track Profile Role Status | Grants.gov

(7) ***Electronic Signature***

When applications are submitted through Grants.gov, the name of the organization's AOR that submitted the application is inserted into the signature line of the application, serving as the electronic signature. The EBiz POC **must** authorize individuals who are able to make legally binding commitments on behalf of the organization as an AOR; **this step is often missed and it is crucial for valid and timely submissions.**

D.3.c. How to Submit an Application to AFOSR via Grants.gov

Grants.gov applicants can apply online using Workspace. Workspace is a shared, online environment where members of a grant team may simultaneously access and edit different web forms within an application. For each funding opportunity announcement (FOA), you can create individual instances of a workspace.

Below is an overview of applying on Grants.gov. For access to complete instructions on

how to apply for opportunities, refer to: Submit Application | Grants.gov

(1) **Create a Workspace**

Creating a workspace allows you to complete it online and route it through your organization for review before submitting.

(2) **Complete a Workspace**

Add participants to the workspace, complete all the required forms, and check for errors before submission.

- Adobe Reader: If you decide not to apply by filling out web forms you can download individual PDF forms in Workspace so that they will appear similar to other Standard or administering agency forms. The individual PDF forms can be downloaded and saved to your local device storage, network drive(s), or external drives, then accessed through Adobe Reader.

  NOTE: Visit the Adobe Software Compatibility page on Grants.gov to download the appropriate version of the software at: Adobe Software Compatibility | Grants.gov

- Mandatory Fields in Forms: In the forms, you will note fields marked with an asterisk and a different background color. These fields are mandatory fields that must be completed to successfully submit your application.

- Complete SF-424 Fields First: The forms are designed to fill in common required fields across other forms, such as the applicant's name, address, and UEI number. To trigger this feature, an applicant must complete the SF-424 information first. Once it is completed, the information will be transferred to the other forms. **Note: The applicant's name is the Entity that is registered with SAM.gov.**

(3) **Submit a Workspace**

An application may be submitted through workspace by clicking the Sign and Submit button on the Manage Workspace page, under the Forms tab. Grants.gov recommends submitting your application package at least 24-48 hours prior to the close date to provide you with time to correct any potential technical issues that may disrupt the application submission.

(4) **Track a Workspace**

After successfully submitting a workspace package, a Grants.gov Tracking Number (GRANTXXXXXXXX) is automatically assigned to the package. The number will be listed on the Confirmation page that is generated after submission.

For additional training resources, including video tutorials, refer to: Applicant Training | Grants.gov

Applicant Support: Grants.gov provides applicants 24/7 support via the toll-free number 1- 800-518-4726 and email at support@grants.gov. For questions related to the specific grant opportunity, contact the number

listed in the application package of the grant you are applying for.

If you are experiencing difficulties with your submission, it is best to call the Grants.gov Support Center and get a ticket number. The Support Center ticket number will assist the administering agency with tracking your issue and understanding background information on the issue.

D.4. COMPONENT PIECES OF THE APPLICATION

D.4.a. SF 424 (R&R) Application for Federal Assistance Form

The SF 424 (R&R) Application for Federal assistance form must be your cover page. No pages may precede the SF 424 (R&R).

Complete all required fields in accordance with the "pop-up" instructions on the SF 424 (R&R) form. The completion of most fields is self-explanatory. You can turn on Grants.gov "Help Mode" to provide additional instructions for forms. "Help Mode" is turned on by the icon with the pointer and question mark at the top of the form.

We have special instructions for completion of several SF 424 (R&R) form fields in your application.

Our instructions are:

FIELD	INSTRUCTION
2.	You may leave "Applicant Identifier" blank
3.	You may leave "Date Received by State" and "State Application Identifier" blank
9.	You must list **Air Force Office of Scientific Research** as the Federal Agency if Grants.gov has not pre-populated this answer
16.	You should check "No." and "Program is Not Covered by Executive Order 12372"
17	Select "I Agree" to: Certify that all statements in the proposal, your, and Internal Confidentiality Agreements are true, complete, and accurate to the best of your knowledge. *See section G.2. Administrative and National Policy Requirements for more information and links to the full text of these items.*
18	You must attach the completed SF-LLL Disclosure of Lobbying Activities if your grant amount exceeds $100,000 and has lobbying activity to disclose. *See section G.2. Administrative and National Policy Requirements for more information and links to the full text of these items.*

D.4.b. R&R Other Project Information Form

Complete this form as indicated. You must include all necessary attachments.

FIELD	INSTRUCTION
1, 1a.	You must address all prospective human subject involvement by answering these questions. Additional documentation pursuant to National Policy and U.S. Air Force and Space Force standards is required for all proposals with human use research or involvement.
2, 2a.	You must address all prospective animal research and/or recombinant deoxyribonucleic acid (rDNA) involvement by answering these questions. Additional documentation pursuant to National Policy and U.S. Air Force standards is required for all proposals with animal or rDNA research or involvement.
4a.	For any proposal that has an actual or potential impact on the environment, answer yes and provide the answers and attachments required for fields 4b, 4c, and 4d. Additional documentation in accordance with National Policy and U.S. Air Force and Space Force standards is required for any proposal with an actual or potential impact on the environment.
7.	Attach your D.4.c. Publicly Releasable Abstract
8.	Attach your D.4.d. Project Narrative
9.	Attach your D.4.e. Bibliography and References Cited
10.	Attach a Facilities and Other Resources description document here if you need to supplement your D.4.d. Proposal Narrative facilities and resources section.
11.	You may supplement your D.4.h. Budget Justification by attaching an Equipment Justification here. Do not duplicate information included on your budget justification. If you attach an Equipment Justification, make sure you reference the attachment in your budget justification.
12.	Attach the D.4.i R&R Subaward Budget Attachments Form if applicable and not attached elsewhere. You should have budgets for all subawards proposed attached within this form before attachment. Attach all D.4.j Subaward Budget Justifications as applicable Attach your D.4.l. Data Management Plan here if applicable

D.4.c. Publicly Releasable Project Summary / Abstract

You must attach the Project Summary / Abstract to field 7 of the R&R Other Project Information form.

You must submit the "AFOSR Abstract" as an attachment with the proposal submission, this form's located on the "Related Documents" tab of grants.gov. You must provide a concise abstract of 300 words or less with your proposal (no more than 2000 characters). You must mark this abstract publicly releasable. Your abstract should use terms the public can understand to describe the research objective, technical approach, anticipated outcome, and potential impact of the specific research.

Enter the Project Summary / Abstract on the form as a single block of plain text. Do not use special formatting such as line breaks, tables, or superscript/subscript. Do not use special characters or symbols such as μ, λ, γ, π, &, :, /, \ , ", or ?.

Your abstract header should include the ***Program Officer's name and office symbol.***

If you receive an award, we must publish your abstract to a searchable website available to the general public in accordance with Public Law 113-235. The website address is https://discover.dtic.mil/submit-documents/

D.4.d. Project Narrative

You must attach the Project Narrative to field 8 of the R&R Other Project Information Form. The narrative must be complete and self-contained to qualify for review.

You must clearly describe your research, including your research objective and approach. Your project narrative will be evaluated using the section F.1. Criteria. You should show strength in as many of the evaluation and selection areas as practicable to demonstrate maximum competitiveness.

You must describe any environmental impacts of your research outside the laboratory in any appropriate narrative section, including how you will ensure compliance with environmental statutes and regulations.

Your narrative should include the following elements:

(1) **Statement of Objectives**

You must summarize your proposed research on a single page titled "Statement of Objectives." We may decide to incorporate your statement of objectives into the award as a description of the work instead of incorporating the whole technical proposal.

You should use active verbs when you prepare the statement of objectives, e.g., "conduct" research in a subject area, "investigate" a problem, "determine" to test a hypothesis.

(2) **Research Effort**

(a) You should describe the research you plan in detail. State the research objectives and approach, and the relationship and comparable objectives to research progress elsewhere. Describe your research team's knowledge in the field and discuss the nature of the expected results.

(b) The adequacy of this information will influence the overall evaluation in accordance with the criteria and procedures specified in section F. Application Review Information below.

(3) **Principal Investigator (PI) and Senior Personnel Time**

(a) You must provide estimate of time the principal investigator will devote to the research. Your estimate must include information pertaining to the proportion of time anticipated devoted to this research, to other research, and to other commitments of time such as sabbatical, extended leave, and teaching duties.

(b) State the number of graduate students for whom each senior staff member is responsible.

(c) If your principal investigator has current, pending, or expected research supported by other sponsors or agencies during the period you seek our support, state the title of the other research, the proportion of time to be devoted to it, the amount of support, name of agency, dates, etc.

You must attach a list of Current and Pending Support, Collaborators and Other Affiliations, Training Certification(s), and Compliance Attestation for each Covered Individual listed on the D.4.f. R&R Senior/Key Person Profile (Expanded) Form. Each abstract should include research title, objectives, approach, and budget for both present and pending research projects. Send any changes as they become known.

(4) **Your Facilities**

(a) Describe the facilities available for performing the proposed research, and any additional facilities or equipment the organization proposes to acquire at its own expense for the work.

(b) Indicate any government-owned facilities that will be used. Indicate any government-owned equipment possessed presently that will be used. The facilities contract number, or in absence of a facilities contract, the specifics of the facilities or equipment, and the number of the award under which they are accountable are required.

(c) Government Furnished Equipment

You may list any special Government-owned property or test equipment required to complete the research. When possible and practicable, give a description or title for each item, the current location, and an estimated cost as applicable. If you do not have information about individual items, group items you require by class and provide an estimate of values.

(5) **Your Demonstrated Success Implementing Gold Standard Science**

Describe your key personnel's and institution's demonstrated success in implementing Gold Standard Science, as defined in Section A.3 and in accordance with Executive Order 14303.

(6) **High Performance Computing Requirements**

You may be eligible to use DoD high performance computing resources at no cost to your research. You should address utilization of this program if you need high performance computing cycles to meet the needs of your research. This program provides access to a range of state-of-the-art high performance computing assets and user training opportunities that can be used in some of our awards; special terms and conditions apply. You can review the details, capabilities, and requirements of the program at www.hpc.mil.

Our Program Officers will help you establish an account if your proposal is selected for an award and can answer questions before you submit your proposal.

D.4.e. Bibliography and References Cited

You must attach your narrative Bibliography and References to field 9 of the R&R Other Project Information Form.

D.4.f. R&R Senior/Key Person Profile (Expanded) Form

You must attach a short biographical sketch and list of significant publications (vitae) for each Senior/Key Person. You must also attach a list of: Current and Pending Support, Collaborators and Other Affiliations, Training Certification(s), and Compliance Attestation as discussed in Principal Investigator (PI) and Senior Personnel Time.

You must list all key persons proposed for the research on the R&R Senior/Key Person Profile (Expanded) Form. Key persons are generally the PI, any Co-PIs (not allowed for this solicitation), and senior staff; however, our agency requires this form for all research personnel positions being funded by the grant. If a position is identified in the proposal, and hiring has not yet taken place, please do not leave areas of the form blank. Do not submit the additional name and corresponding forms until the individual has been identified or hired for the position. We use this information to evaluate the qualifications of you and your research team.

The "Credential, e.g., agency login" field will be used by DoD to track ORCID for each researcher. In addition to the required fields on the form, applicants must complete this field for all individuals that are identified on the form.

The "Degree Type and Degree Year Fields" will be used by DoD as the source for career information. In addition to the required fields on the form, applicants must complete these two fields for all individuals that are identified as having the project role of PD/PI or Co-PD/PI on the form. Additional senior/key persons and Covered Individuals can be added by

selecting the "Next Person" button.

D.4.g. R&R Budget Form

You must provide all information requested. You must estimate the total research project cost. You must categorize funds by year and provide separate annual budgets for projects lasting more than one year. A budget justification must be included.

You must identify a date no later than 15 August 2027 as the anticipated state date in your proposal and budget; however, the actual effective date is not final until an award is made. The budget may not exceed $150,000 annually. You must include enough budget related information in your proposal to support your costs as reasonable, allowable, and realistic, and in compliance with 2 CFR 200 Subpart E - Cost Principles.

Not having enough information in your proposal to understand if your costs are reasonable, allowable, and realistic is the most common reason awards are delayed.

D.4.h. Budget Justification

You must provide a detailed budget justification for each year that clearly explains the need for each item.

The entire budget justification and supporting documentation must be combined into a single file and attached to field L of the R&R Budget Form. The budget narrative submitted with the application must match the dollar amounts on all required forms. Please explain each calculation and provide a narrative that supports each budget category. This detailed budget justification must match the proposed budget categories. Each year of the budget justification narrative must stand alone; lump sum budget justifications are not allowed. If options are proposed, option detailed budget justifications must stand alone as well, no lump sum justifications allowed.

(1) You must itemize travel. Estimate the cost and purpose of each trip proposed, the number of trips, the number of travelers, the destination, the duration, and the basis for calculating costs such as airlines and hotels.

Below is a sample of the travel portion:

TRAVEL	Unit	Trips	Traveler	Nights	Days	Unit Cost	Total Travel
Airfare	roundtrip	1	1			$900.00	$900.00
Lodging	day	1	1	3		$75.00	$225.00
Per Diem	day	1	1		3	$40.00	$120.00

Automobile Rental	day	1	1		3	$45.00	$135.00
Subtotal Travel		**4**	**4**	**3**		**$1,060**	**$1,380.00**

(2) You must itemize materials/supplies. List all material/equipment by type and kind with associated costs. Indicate what your costs are based on, such as vendor quotes, historical data and/or engineering estimates. **You should include vendor quotes and/or catalog pricing data**.

(3) Proposals including request to purchase **equipment** must include equipment quotes or vendor agreements. "Equipment" is nonexpendable, tangible personal property with a unit cost of $10,000 or more having a useful life of more than 1 year, unless determined otherwise by recipient's internal policy. Items that do not meet the "equipment" definition can be included under supplies. List each piece of equipment to be purchased and provide description of how it will be used in the project. Budget narrative should explain why the equipment is necessary for successful completion of the project. Provide quotes in English Language (US Dollars) if available or indicate the basis of equipment cost. If you have any subaward(s), you should describe how you determined subaward costs were determined fair and reasonable. Your business office usually makes this determination.

(4) **DHHS/ONR Rate Agreement**: If you use a Government rate agreement to propose indirect cost rates and/or fringe benefit rates, you must attach a signed DHHS or ONR copy of the agreement you used to not delay the negotiation process.

(5) Helpful Cost Principle Reference Information

(a) Grant Applicants
- (i) 2 CFR 200, Subpart E – Cost Principles
- (ii) General Provisions for Selected Items of Cost in 2 CFR 200.420 through 2 CFR 200.475

(b) Contract Applicants
- (i) RFO Part 31 Contract Cost Principles and Procedures
- (ii) RFO 31.205 Selected Costs
- (iii) RFO Subpart 30.2 CAS Program Requirements if your organization does not have an exemption to CAS as described in 48 C.F.R. 9903.201-1 CAS applicability

D.4.i. R&R Project / Performance Site Locations Form

You must complete all information as requested. You must include the ZIP+4 for each performance location you list.

D.4.j. Data Management Plan

If your effort generates scientific data, you must include a Data Management Plan with your application. If you do, attach your Data Management Plan to field 12 of the R&R Other Project Information Form.

A data management plan is a document that describes which data generated through the course of the proposed research will be shared and preserved and how this will be done, explains why data sharing or preservation is not possible or scientifically appropriate, or why the costs of sharing or preservation are incommensurate with the value of doing so. See also: DoD Instruction 3200.12.

Your "Data Management Plan" should be two (2) pages or less in length and discuss:

(1) The types of data, software, and other materials to be produced in the course of the project, and include a notation marking items that are publicly releasable;

(2) How the data will be acquired;

(3) Time and location of data acquisition if they are scientifically pertinent;

(4) How the data will be processed;

(5) The file formats and the naming conventions that will be used;

(6) A description of the quality assurance and quality control measures during collection, analysis, and processing;

(7) If existing data are to be used, a description of their origins;

(8) A description of the standards to be used for data and metadata format and content;

(9) Plans and justifications for archiving the data;

(10) The timeframe for preservation; and,

(11) If for legitimate reasons the data cannot be preserved, the plan must include a justification citing such reasons.

D.5. INFORMATION YOU MUST SUBMIT IF SELECTED FOR POSSIBLE AWARD

We may request additional necessary information from you during negotiations, or as required for award considerations. You must respond promptly.

If you do not fully comply with our information requests by the time we are ready to make an award, we may determine that you are not qualified to receive an award and use that determination as a basis for making an award to another applicant.

If your proposal includes human, animal, or rDNA research or involvement you must submit all documentation requested during negotiations or you may not receive an award.

If selected for a contract award, a Section K Representations, certifications, and other statements of offerors or respondents will be provided for your completion, signature, and return. The

document will include representations and certifications that your organization has not completed as part of the SAM.gov registration, representations and certifications required by DoW Class Deviation(s), or that must be requested with each acquisition. The completed Section K will be incorporated into any resultant contract.

D.6. UNIQUE ENTITY IDENTIFIER (UEI), CAGE, AND SYSTEM FOR AWARD MANAGEMENT (SAM)

D.6.a. SAM Registration Required

As required in 2 CFR 25.110 all applicants, unless exempted, must:

(1) Be registered in SAM.gov before submitting its application;

(2) Provide a valid **UEI**; and

(3) Continue to maintain an active SAM registration with current information at all times any Federal award is active, or any application is under consideration by a Federal awarding agency.

A Commercial and Government Entity (CAGE) code is obtained or specified as part of the SAM registration process. A CAGE code is required.

D.6.b. SAM Exemption or Exceptions Not Available Under This Announcement

We will not issue an Agency level exemption to SAM registration under 2 CFR 25.110(a)(2) for applicants under this announcement.

You must comply with SAM registration requirements and include a UEI and CAGE code on your application or we cannot make an award.

Questions about SAM Registrations and Updates

You can get questions about SAM registration and entity updates answered by live chat at https://www.fsd.gov/gsafsd_sp and telephone at (866) 606-8220.

D.6.c. Consequences of Non-Compliance with SAM Registration Requirements

We cannot make an award to you unless you comply with SAM requirements. If you are non-compliant, we may determine you are not qualified to receive an award, and use that determination to make an award to someone else as authorized by 2 CFR 25.205(b). You cannot receive payments without an active SAM record and CAGE.

E. SUBMISSION DATES AND TIMES

E.1. PROPOSAL SUBMISSION

You must submit all pre-proposal inquiries and questions not later than 13 November 2026 at 11:59 PM EST. Responses will be posted by 11 December 2026 at 11:59 PM. You

should submit your questions in writing by electronic mail. You should include the announcement number in the subject line. Responses will be provided publicly, via Grants.gov, by 11 December 2026. The purpose of providing the response publicly is so everyone has the same information.

You must electronically submit your required white paper no later than 8 January 2027 at 11:59 PM EST to https://afosr.gov1.qualtrics.com/jfe/form/SV_eKuTqm9qezoDYep.

White paper evaluation is meant to initially assess the capability of a proposed effort. White papers must be no more than five (5) pages in length. References and CV/bios will not count against the page limit. Please review this announcement in its entirety prior to submitting a white paper.

The government will respond to the white paper determination before COB on 5 February 2027. Only those invited to submit a full proposal will be eligible for award and proposals must be received no later than 2 April 2027 at 11:59 PM EST.

E.1.a. How Proposal Submission Time is Determined

We use the system-generated Grants.gov time stamp to determine when you submitted your successfully validated proposal and the announcement your submission was associated with. Grants.gov policies and procedures for application submission and processing apply. ***We will only accept applications submitted electronically through Grants.gov.***

E.1.b. Grants.gov Tracking Number is Application Receipt

Grants.gov generates a confirmation page when you submit your application. A second confirmation is provided by email when your application has passed Grants.gov validations and the status is updated from received to validated. The confirmation page includes a system-generated Grants.gov tracking number; this serves as your receipt. You should keep a copy of all confirmations.

You can verify the submission time and application status with your tracking number through Grants.gov at Track My Application | Grants.gov

E.1.c. Effect of Missing the Proposal Submission Deadline

Grants.gov will not accept your proposal after the submission deadline. AFOSR will not accept proposals submitted other than electronically through Grants.gov.

E.1.d. Proposal Preparation Costs

Your proposal or application preparation costs are not considered an allowable direct charge to any award under this announcement. Your costs are, however, an allowable expense to the normal bid and proposal indirect cost as specified in 2 CFR 200.460 Proposal costs if you receive a grant or cooperative agreement, or RFO 31.205-18 Independent Research and Development and Bid and Proposal Costs for contracts.

E.1.e. Pre-Award Costs for Grants

You must request our approval prior if you need more than ninety (90) days pre-award cost authorization as described in 2 CFR 200.308(g)(1) and 2 CFR 200.458. **Your business office must provide this request in writing**. You must document why pre-award costs are necessary and essential for the research in the request, and identify a specific date for our Grants Officer to consider. We will only consider approval of a specific date of more than ninety days pre-award costs before an award is made.

Our grants include up to ninety (90) calendar days pre-award costs; however, the actual date costs become allowable is not final until an award is made. We recommend you ask for a specific date as described above to prevent misunderstandings.

All costs incurred before a grant or cooperative agreement award are at the recipient's risk as described in 2 CFR 200.308(g(2). We are under no obligation to reimburse your costs if for any reason you do not receive an award, or if your award is less than anticipated and inadequate to your pre-award costs.

E.1.f. Air Force Office of Scientific Research No-Cost Extension (NCE) Guidance

We require prior written approval to extend the period of performance, whether with or without additional funds, beyond the expiration date of the grant. We only grant no-cost extensions when they are truly warranted and properly documented. For an extension to be granted, all NCE requests must be received at least 30 days prior to the expiration of the grant's period of performance.

All Principal Investigators (PIs) business offices must submit NCE requests through the following website: https://afosr.gov1.qualtrics.com/jfe/form/SV_4UcsVbwxSaoic8S. AFOSR will no longer accept NCE requests via email. All requests that are submitted through other avenues will have to be re-routed through the above website.

The NCE request must include:

(1) Request letter from the business office on University's or Institute's Letterhead;

(2) Compelling reason(s) for the extension beyond using unexpended balances;

(3) Original end date and requested extension length;

(4) SF 425 Federal Financial report showing the unexpended funds remaining or the most recent SF 270 Request for Advance or Reimbursement; and,

(5) Statement indicating all required previous annual reports have been provided to AFOSR.

In no event will the period of performance be extended merely for the purpose of using unexpended balances. Every effort should be made to ensure work is completed on time.

E.1.g. Equipment Vesting

In accordance with 2 CFR 200.313 and the DoW Terms and Conditions PROP Article I. Section A., equipment title will be vested with the non-Federal entity upon purchase without further obligation to the government unless the terms and conditions of your

award specify otherwise.

E.2. OTHER SUBMISSION REQUIREMENTS

If Grants.gov rejects your electronic application submission for any reason, you must correct all errors and resubmit your application.

F. APPLICATION REVIEW INFORMATION

F.1. CRITERIA

You should show strength in as many of the evaluation and selection areas as practicable to demonstrate maximum competitiveness. Merit-based, competitive procedures will be used, in accordance with RFO 35.102(e) and 32 CFR 22.315.

Pursuant to E.O. 14303, *Restoring Gold Standard Science* "All proposals will be evaluated according to the weight of scientific evidence." "Weight of scientific evidence" means an approach to scientific evaluation in which each piece of relevant information is considered based on its quality and relevance, and then transparently integrated with other relevant information to inform the scientific evaluation prior to making a judgment about the scientific evaluation. Quality and relevance determinations, at a minimum, should include consideration of study design, fitness for purpose, replicability, peer review, and transparency and reliability of data."

F.2. REVIEW AND SELECTION PROCESS

F.2.a. Principal Evaluation and Selection Criteria

F.2.a.1 White Paper Evaluation Criteria

All white papers will be evaluated using the following two primary criteria listed below, which are of equal importance. These evaluations will entail a "weight of scientific evidence" approach (EO 14303)

(1) Technical merits of the proposed research and development.

(2) Potential relationship of the proposed research and development to DoW missions.F.2.a.2The Selection Review process will contain a 2-Step Evaluation/Review Process. A preliminary "Go/No-Go" review will be conducted to ensure the application/proposal meets the key submission requirements specified in the NOFO (*See also* E.O. 14332). If the application/proposal meets these requirements, it will proceed to the 2nd step, if it does not, it will be removed from consideration. The 2nd Step Evaluation will encompass the full evaluation consistent with RFO 35.102(e) and 32 CFR § 22.315.

Step 1: Initial Screening (Go/No Go Criteria)

(1) Proposal includes all documents and elements required by this BAA and the white paper will have been evaluated prior to propsal submission.

(2) Proposal incorporates all elements required for adherence to Gold Standard

Science (EO 14303) and EO 14332, including making a commitment to complying with administration policies, procedures, and guidance respecting Gold Standard Science.

(3) Proposal does not promote, encourage subsidize, or facilitate: (a) racial preferences or other forms of racial discrimination by the grant recipient, including activities where race or intentional proxies for race will be used as a selection criterion for employment or program participation; (b) denial by the grant recipient of the sex binary in humans or the notion that sex is a chosen or mutable characteristic; (c) illegal immigration; or (d) any other initiatives that compromise public safety or promote anti-American values.

(4) Proposal is relevant to the portfolio descriptions in this BAA , relevant to Air Force, Space Force and DoW needs, and consistent with administration priorities, to include the E.O. 14332 requirements32 CFR: Proposal demonstrably advances the President's policy priorities.

If the application/proposal meets programmatic review requirements, it will proceed to the Full Evaluation; if it does not, it will be removed from consideration. The Full Evaluation will encompass the full evaluation consistent with RFO 35.102(e) and DODGARS 22.315.

(5)

F.2.a.3: Full Evaluation/Review (Selection Criteria):

Primary Selection Criteria: Subject to funding availability, all applications/proposals will be reviewed using the following two primary criteria listed below, which are of equal importance. These evaluations will entail a "weight of scientific evidence" approach (E.O. 14303):

(1) Technical merits of the proposed research and development.

(2) Potential relationship of the proposed research and development to DOW missions.

Note: Technical merit includes the following considerations, consistent with the requirements of E.O. 14303 and 14332:

- The proposal is likely to produce immediately demonstrable results towards the stated goals of the proposed effort. According to DoDI 3210.1 and 32 CFR 34.2, the results of basic research should increase "fundamental knowledge and understanding in those fields of the physical, engineering, environmental, and life sciences related to long-term national security needs".

- The proposed effort has the potential for longer-term, breakthrough results, in a manner consistent with the funding opportunity announcement.

- The inclusion of clear benchmarks for measuring success and progress towards relevant research and development goals.

F.2.b. Additional Evaluation and Selection Criterion

Less important than the primary criteria but of equal importance to each other:

(1) The applicant's capabilities integral to achieving U.S. Air Force and Space Force objectives. This includes principal investigator's, team leaders, or key personnel's qualifications, related experience, facilities, or techniques or a combination of these factors integral to achieving U.S. Air Force and Space Force objectives, and the potential risk of this effort to the U.S. Air Force and Space Force.

(2) Impact and quality of participation and interactions from investigators: computational/ experimental researchers, fluid dynamicists/structural scientists, and HBCU investigator participation.

(3) Strength of the Data Management Plan.

F.2.c. Other Selection Criteria: Cost/Price: While of less importance to the Primary and Additional Evaluation criteria above, the realism of the proposed cost (to include cost sharing (if applicable), consideration of proposed budgets, and funding profiles), will be evaluated.

F.2.d. Risk Assessment. Risk assessments are performed prior to award with regards to Science & Technology (S&T) Protection and assessments IAW 2 CFR 200.206 as well as associated DoW, AFRL, and AFOSR policy**.**

No further evaluation criteria or criterion will be used for proposal selection.

F.2.e. Merit-based, Competitive Procedures

Proposals will be subjected to a peer and programmatic review. The peer review will use appropriate subject matter expert reviewers to assess technical merit and Air Force and Space Force relevance of the proposal.

The peer review will use external and appropriate subject matter expert reviewers to assess technical merit and Air Force and Space Force relevance of the proposal.

The programmatic review will use AFOSR Program Officers and subject matter experts to assess the technical quality of the proposal, relevance of the proposed research to the Program Objectives outlined in this NOFO, relevance of the work to Air Force, Space Force and DoW needs, consistency with administration priorities, and the potential of the research balanced against the available funding resources of a given portfolio.

Programmatic review includes review for compliance with BAA requirements, with regulatory requirements, and with EO 14030 and EO 14332.

Programmatic review evaluates demonstrated success in implementing Gold Standard Science in addition to the proposal's commitment to complying with administration policies, procedures,

and guidance respecting Gold Standard Science.

Programmatic review evaluates that the proposal does not promote, encourage, subsidize, or facilitate: (a) racial preferences or other forms of racial discrimination by the grant recipient, including activities where race or intentional proxies for race will be used as a selection criterion for employment or program participation; (b) denial by the grant recipient of the sex binary in humans or the notion that sex is a chosen or mutable characteristic; (c) illegal immigration; or (d) any other initiatives that compromise public safety or promote anti-American values.

Selection for award consideration will be made based on the outcome of these reviews.

F.3. We select proposals for possible funding on a competitive basis according to Public Law 98-369, the Competition in Contracting Act of 1984, 10 U.S.C. 4141, and 10 U.S.C. 4023 using the merit-based, competitive procedures described in 32 CFR 22.315, incorporated here by reference.DISCLOSURE OF ADMINISTRATIVE PROCESSING BY CONTRACTOR PERSONNEL

We use support contractor personnel to help us with administrative proposal processing. Our contractor personnel are employees of commercial firms that have a contract with us. We make sure all of our support contracts include nondisclosure agreements that prohibit disclosure of any information you submit to other parties.

F.4. NO GUARANTEED AWARD

We do not guarantee that any award will be made under this competition.

G. AWARD NOTICES

G.1. SELECTION NOTICES

G.1.a. Electronic Notification

If your proposal is selected for possible award, an email will be sent to the principal investigator.

G.1.b. Selection for Possible Award Does Not Authorize Work

Our selection notice is not an authorization to start work and is not an award guarantee. We will contact your business office to get answers to any questions we have about your proposal and negotiate specific award terms.

G.1.c. Federal Award Document

A grant, contract, and other transactions signed by a warranted Grants, Agreements, or Contracting Officer is the only official notice that an award has been made.

G.1.d. Electronic Federal Award Distribution

We send award documents to your business office by email. This is called award distribution. We always ask your business office to forward the award to the Principal Investigator indicated

on the award document.

G.2. ADMINISTRATION AND NATIONAL POLICY REQUIREMENT

G.2.a. Certification to Lobbying Activity

By checking "I Agree" on the SF 424 (R&R) block 17 you agree to fully comply with the Lobbying Disclosure Act of 1995, 2 U.S.C. § 1601 et seq. If your grant amount exceeds $100,000 you are certifying that you do not have lobbying activity to disclose. If you **have lobbying activity** that you must disclose under 31 U.S.C. 1352 as implemented by the DoD in 32 CFR Part 28 you must attach the completed SF-LLL Disclosure of Lobbying Activities. You can find instructions for completing this form at Forms | Grants.gov.

G.2.b. Unpaid Delinquent Tax Liability or a Felony Conviction under Any Federal Law – DoD Appropriations

By checking "I Agree" on the SF 424 (R&R) block 17 you represent that you are not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in timely manner pursuant to an agreement with the authority responsible for collecting the tax liability; and, that you represent that you are not a corporation that was convicted of a felony criminal violation under any Federal law within the preceding 24 months.

Note: If you do not represent to this you are ineligible to receive an award unless a Federal agency suspension and debarment official (SDO) has considered suspension or debarment and determined that further action is not required to protect the Government's interests.

The applicant therefore should provide information about its tax liability or conviction to the agency's SDO as soon as it can do so, to facilitate completion of the required consideration before award decisions are made.

G.2.c. Certification Regarding Disclosure of Funding Sources (Supplement to SF424 (R&R), block 17, Financial Assistance Certifications and Representations)

By checking "I Agree" on the SF 424 (R&R) block 17 you agree to abide by the following statement: "By signing this application, I certify the proposing entity is in compliance with Section 223(a) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 which requires that: (a) the PI and other key personnel certify that the current and pending support provided on the proposal is current, accurate and complete; (B) agree to update such disclosure at the request of the agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award; and (c) the PI and other key personnel have been made aware of the requirements under Section 223(a)(1) of this Act. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. code, Title 18, Section 1001)."

G.2.d. Certification of Gold Standard Science

By checking "I Agree" on the SF 424 (R&R) block 17, you agree to full comply with the administration policies, procedures, and guidance respecting Gold Standard Science, as specified in Executive Order 14303, "Restoring Gold Standard Science" and Executive Order 14332, "Improving Oversight of Federal Grantmaking."

G.2.e. Reporting of Matters Related to Recipient Integrity and Performance

You must report recipient integrity and performance information as required by Appendix XII to 2 CFR Part 200 – Award Term and Condition for Recipient Integrity and Performance Matters, incorporated here by reference. You should read the full text of this award term now using the link above to make sure you understand our requirements. You can find this term at http://www.ecfr.gov.

G.2.f. Agency Review of Risk Posed by Applicants

(1) We must review information available about you and entities included in your proposal through the Office of Management and Budget (OMB) designated repositories of government-wide eligibility qualification and financial integrity information. Our risk review is required by 31 U.S.C. 3321 and 41 U.S.C. 2313, and includes both public and non-public information. You must be qualified and responsible as described at 32 CFR 22.415 Standards to receive a grant award. Contract applicants must be responsible based on the requirements in RFO Subpart 9 Responsible Prospective Contractors.

(2) We must consider the non-public segment of SAM.gov Responsibility/Qualification Reports for all awards exceeding the current simplified acquisition threshold.

(3) At a minimum, the information in the system for a prior Federal award recipient must demonstrate a satisfactory record of executing programs or activities under Federal grants, cooperative agreements, or procurement awards; and integrity and business ethics. We will consider any comments you provide, in addition to the other information in the designated integrity and performance system, when making our risk judgment about your integrity, business ethics, and record of performance under Federal awards.

(a) We may make an award to a recipient who does not fully meet our standards as described at 2 CFR 200.206(a)(2) if it is determined that the information is not relevant to the current Federal award under consideration or there are specific conditions that can appropriately mitigate the effects of the non- Federal entity's risk in accordance with 2 CFR 200.208 Specific conditions.

(4) We must comply with the guidelines on government-wide suspension and debarment described in 2 CFR 200.214, and must require you to comply with these provisions for all work we fund.

These provisions restrict Federal awards, sub-awards and contracts with certain parties that are debarred, suspended or otherwise excluded from or

ineligible for participation in Federal programs or activities.

G.2.g. Cross-Cutting National Policy Requirements

You must comply with all applicable national policy requirements as a condition of award. Key national policy requirements may be found in the Grant Terms and Conditions | Office of Naval Research and 2 CFR Part 1122 - NATIONAL POLICY REQUIREMENTS: GENERAL AWARD TERMS AND CONDITIONS

G.2.h. Acknowledgement of Research Support

In accordance with the COST Act, 10 U.S.C. 4027, you must acknowledge support provided by the Department of War in all materials based on or developed under our awards and provide a clear statement indicating the dollar amount of funds received from the Department of War. The requirement extends to copyrighted and non-copyrighted materials published or displayed in any medium above 280 characters.

The following language must be used unless the award document provides different instructions:

"This material is based upon work supported by the Air Force Office of Scientific Research under award number FAXXXX-XX-X-XXXX, in the amount of [$ Value]."

You must require any sub-recipients or sub-contractors under your award to include this acknowledgement too. You may apply for a waiver of the acknowledgement requirement through your Grants Officer and requests for waivers will be considered on a case-by-case basis.

G.2.i. Disclaimer Language for Research Materials and Publications

Some materials based on or developed under our awards must include special disclaimer language. You must include this language in all materials except scientific articles or papers published in scientific journals unless your award document provides different instructions:

"Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Defense."

You must require any sub-recipients or sub-contractors under your award to include this acknowledgement too.

G.2.j. Grants and Cooperative Agreements - Uniform Administrative Requirements, Cost Principles, and Audit Requirements

Our grants are governed by OMB guidance, codified at 2 CFR 200 "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. These regulations are incorporated by reference into this announcement.

G.2.k. Grants and Cooperative Agreements - DoD Research and Development General Terms and Conditions

Our Grants and Cooperative agreements are subject to the current (at time of award) "DoD Research and Development General Terms and Conditions" (DoD T&C) found at Grant Terms and Conditions | Office of Naval Research. These terms and conditions are incorporated by reference into this announcement. We can provide a generic model grant or cooperative agreement upon request.

Any resulting awards will be subject to the DoD Research and Development (R&D) General Terms and Conditions (Ts&Cs), located at: https://www.nre.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions.

In addition, the AFRL Addendum to the DoD R&D General Ts&Cs and AFRL Award-Specific Ts&Cs (attached to this NOFO) include additional Ts&Cs that may be applicable to any resulting awards. This AFRL document is a supplement to the DoD R&D General Ts&Cs. To understand the entire AFRL requirement for a given article, the DoD R&D General Ts&Cs must be read in tandem with this document.

We may award commercial grants to for-profit organizations.

G.2.l. Conditions of Award for Recipients Other Than Individuals

You must agree to comply with the requirements at 2 CFR Part 182, Subpart B "Requirements for Recipients Other Than Individuals" as a condition of award.

G.2.m. NOTICE OF CYBERSECURITY MATURITY MODEL CERTIFICATION LEVEL REQUIREMENTS

The Air Force Office of Scientific Research (AFOSR) anticipates that the majority of grants and cooperative agreements awarded under this Broad Agency Announcement (BAA) will involve fundamental research. Consequently, it is expected that most awards will not require the generation, access, or safeguarding of Controlled Unclassified Information (CUI).

However, should a specific proposal or subsequent award require the handling, transmission, or protection of CUI, the appropriate Cybersecurity Maturity Model Certification (CMMC) level will be determined at the time the CUI is formally identified. If CUI is identified as a requirement for the performance of the research, the applicable CMMC level and corresponding compliance clauses—specifically referencing RFO DEVIATION 26-0025 Clause 252.204-7012 (Safeguarding Covered Defense Information and Cyber Incident Reporting) and RFO DEVIATION 26-00025 Clause 252.207-7021(Cybersecurity Maturity Model Certification Requirements)—will be explicitly incorporated into the resulting award documentation prior to execution.

G.2.n. Minimum Record Retention Requirements

You must keep records related to our awards for at least three (3) years after completion and the final Federal Financial Report is submitted. This requirement is described further in 2 CFR 200.334, incorporated here by reference. Contract awards have similar requirements.

H. POST-AWARD REQUIREMENTS AND ADMINISTRATION

H.1. MONITORING AND REPORTING PROGRAM PERFORMANCE

All of our awards require at least annual and final technical performance reports as required in 2 CFR 200.328. The DoD T&C REP Article I. Performance reporting will apply to grant or cooperative agreement awards. Some of our awards require more frequent technical reports.

You must provide your reports on time. Our awards include a schedule specifying the latest date for submission of each required report. Failure to provide required reports, or providing reports after required due dates, could lead to being considered ineligible for future awards.

You may use a SF 298 Report Documentation Page for interim progress reports.

You must use a completed SF 298 Report Documentation Page as the first page of the final report. You can download an electronic SF 298 from

https://www.gsa.gov/reference/forms/report-documentation-page

H.2. REPORTS

H.2.a. Technical Performance Report Format

Federal-wide Research Progress Performance Report (RPPR) Format (All grant awards)

We now use the Federal-wide Research Progress Performance Report (RPPR) for annual and final research performance reports. Annual RPPRs must articulate than awardee's (substantial) progress including a summary of work accomplished, which should include negative and positive results. The reporting requirements will be detailed in the grant award documents.

In addition to annual submission of RPPR, awardees will be required to annually re-certify their commitment to complying with the administration policies, procedures and guidance respecting Gold Standard Science and to report updates to their Conflicts of Interest and disclosures of all co-authors and collaborators.

H.2.b. Department of Defense (DD) Form 882 Report of Inventions and Subcontracts

(1) Invention Reports

(a) You must provide at least a final invention report on DD Form 882. We may ask for annual reports. Our award documents specify the due date. You can get the form at

http://www.dtic.mil/whs/directives/forms/eforms/dd0882.pdf.

(b) You must submit invention reports even if you do not have a patent to report.

(2) Sub-Award and Subcontract Reporting

You must use the DD Form 882 to tell us about any subawards or subcontracts. Your award will provide specific instructions. You can get the form at http://www.dtic.mil/whs/directives/forms/eforms/dd0882.pdf.

H.2.c. Standard Form (SF) 425 Federal Financial Report

Our awards require a final SF 425 Federal Financial Report. You can get the form at https://www.gsa.gov/forms-library/federal-financial-report#.

(1) If you request any advance payment(s) under your award or have scheduled payments, you must submit quarterly SF 425 reports for the life of the award. Our awards include specific instructions.

(2) You do not have to submit quarterly SF 425 reports if you only request payments by reimbursement.

H.2.d. Electronic Payment Requests and Electronic Payment

You must register to use Wide Area Workflow (WAWF) for payment. Payment requests shall be made electronically using an SF270 through the WAWF application in the Procurement Integrated Enterprise Environment (PIEE) e-Business Suite at https://piee.eb.mil/. The website includes registration instructions. All payments must be made using the electronic funds transfer (EFT) method.

To submit electronic payment requests you must register to use iRAPT in the Wide Area Workflow (WAWF) e-Business Suite at https://piee.eb.mil/. The website includes registration instructions.

If you have WAWF or iRAPT questions or problems, you can get help by telephone at (866) 618-5988, or the website

https://piee.eb.mil/xhtml/unauth/web/homepage/vendorCustomerSupport.xhtml.

H.2.e. Other Reports

Our Program Officers may ask for informal technical reports as needed. We use these informal reports for program purposes, such as preparation for meetings and other technical purposes. We highly recommend you provide this information in a timely manner by electronic mail directly to the Program Officer.

H.2.f. Electronic Submission of Reports

You must plan on submitting reports electronically. **You must submit most reports through the internet application detailed in the grant award document**. Some reports must be sent using electronic mail. Our award documents provide specific instructions that you must follow.

Note that the guidance and instructions for submitting technical reports will change in January 2026. This is due to a new PI portal coming on-line. At that time, we will disseminate instructions detailing how to create a portal account and submit reports. which will require a login.gov account. For those who are unable to create a login.gov account, a backup method will be available. More information will be provided at a later date.

I. OTHER INFORMATION

I.1. TECHNICAL INQUIRIES AND QUESTIONS

You must send all general questions about this announcement to us by email:

High-Speed Aerodynamics Program Manager
Email: aerothermodynamics@us.af.mil

Research specific technical questions must be submitted electronically via email to the AFOSR Program Officer. Email addresses are listed in the general BAA.

I.2. OMBUDSMAN

(1) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and others for this acquisition. 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 officer, grants officer, contracting officer, or source selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of protests or formal grant or contract disputes. The ombudsman may refer the party to another official who can resolve the concern.

(2) Before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the grants or contracting officer for resolution. Consulting an ombudsman does not alter or postpone the timelines for any other processes (e.g., agency level bid protests, GAO bid protests, requests for debriefings, employee-employer actions, contests of OMB Circular A-76 competition performance decisions).

(3) If resolution cannot be made by the GO, concerned parties may contact the AFRL Ombudsman, Technical Director, HQ AFRL/PK. The AFRL Alternate Ombudsman is the Deputy Director of Contracting, HQ AFRL/PK. Please send an email to afrl.pk.workflow@us.af.mil with the subject of "Ombudsman".

(4) The ombudsman has no authority to render a decision that binds the agency.

(5) Do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the grants or contracting officer.

I.3. GRANTS AND CONTRACTING OFFICERS AUTHORITY

(1) Grants and Contracting Officers acting within their warranted capacity are the only individuals legally authorized to make commitments or bind the Government.

(2) No other individuals are authorized to make commitments or otherwise bind us.

I.4. FUNDING OPPORTUNITIES

Funding is limited under the competition. As a result, otherwise meritorious proposals may not be

selected. If your proposal is not selected under the competition, you may resubmit your proposal under our most recent general broad agency announcement titled, "Research Interests of the Air Force Office of Scientific Research" as published on Grants.gov.

We post new funding opportunities throughout the year looking for today's breakthrough science for tomorrow's Air Force and Space Force. You can find more information about Air Force Office of Scientific Research interests and funding opportunities on our website at https://www.afrl.af.mil/AFOSR/.