ONR Announcement N00014-22-S-F008

FUNDING OPPORTUNITY ANNOUNCEMENT (FOA)

FY2023 Department of the Navy (DoN) Historically Black Colleges and Universities/Minority Institutions (HBCU/MI) Program

Deadlines

White Paper Inquiries and Questions
02 September 2022 (Friday)

White Papers must be received no later than
07 September 2022 (Wednesday) at 5:00 PM Eastern Time

Application Inquiries and Questions
07 December 2022 (Wednesday)

Applications must be received no later than
14 December 2022 (Wednesday) at 11:59 PM Eastern Time
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I. Overview of the Research Opportunity

This publication constitutes a Funding Opportunity Announcement (FOA) as contemplated in the Department of Defense Grants and Agreements regulations (DoDGARS) 32 CFR 22.315(a). The Office of Naval Research (ONR) reserves the right to fund all, some, or none of the proposals received under this FOA. ONR provides no funding for direct reimbursement of proposal development costs. Technical and budget proposals (or any other material) submitted in response to this FOA will not be returned. It is the policy of ONR to treat all white papers and proposals submitted under this FOA as sensitive competitive information and to disclose their contents only for the purposes of evaluation.

Hyperlinks have been embedded within this document and appear as underlined, blue-colored words. The reader may “jump” to the linked section by clicking the hyperlink.
A. Overview

1. Federal Awarding Agency Name

   Office of Naval Research
   One Liberty Center
   875 N. Randolph Street
   Arlington, VA 22203-1995

2. Funding Opportunity Title

   Funding Opportunity Announcement (FOA) FY2023 Department of Navy (DON) Historically Black Colleges and Universities/Minority Institutions (HBCU/MI) Program

3. Announcement Type

   Initial

4. Funding Opportunity Number

   N00014-22-S-F008

5. Catalog of Federal Domestic Assistance (CFDA Numbers)

   12.300 Title: Department of Defense (DoD), Department of the Navy, Office of the Chief of Naval Research, Basic and Applied Research

6. Key Dates

<table>
<thead>
<tr>
<th>Event</th>
<th>Date (MM/DD/YEAR)</th>
<th>Time (Local Eastern Time)</th>
</tr>
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<tr>
<td>Questions Regarding Eligibility and Technical Requirements **</td>
<td>09/02/2022 (Friday)</td>
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<tr>
<td>White Papers Due</td>
<td>09/07/2022 (Wednesday)</td>
<td>5:00 PM Eastern Time</td>
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<td>Notifications of Initial Navy Evaluations of White Papers*</td>
<td>11/09/2022 (Wednesday)</td>
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<tr>
<td>Questions for Grants Officer Regarding Proposal Submission**</td>
<td>12/07/2022 (Wednesday)</td>
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<tr>
<td>Invited Proposal Due Date</td>
<td>12/14/2022 (Wednesday)</td>
<td>11:59 PM Eastern Time</td>
</tr>
<tr>
<td>Notification of Selection for Award *</td>
<td>03/29/2023 (Wednesday)</td>
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<tr>
<td>Start Date of Grant*</td>
<td>07/01/2023 (Friday)</td>
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   *These dates are estimates as of the date of this announcement.

   **Questions submitted after the Q&A deadline may not be answered.
IMPORTANT NOTE: White Papers are MANDATORY. Proposal submission is by invitation only.

7. Grants Officer

The Grants Officer for this announcement is identified in Section G.2.
II. DETAILED INFORMATION ABOUT THE RESEARCH OPPORTUNITY

A. Program Description

The Department of Navy (DoN) Historically Black Colleges and Universities/Minority Institutions (HBCU/MI) Program aims to increase the quantity and quality of minority professionals in science, technology, engineering, and mathematics (STEM) in the defense community. Research conducted at Minority-Serving Institutions (MSIs) for the DoN HBCU/MI Program:

- Enhances the research and educational capabilities of HBCU/MIs in scientific and engineering disciplines critical to the defense mission of the U.S. Navy and U.S. Marine Corps,
- Encourages cross-institutional, collaborative efforts that explore innovative solutions to naval science and technology (S&T) challenges, and
- Increases the engagement of students, including underrepresented minorities, in STEM fields important to the U.S. Navy and U.S. Marine Corps.

This FOA is executed under policy and guidance of the DoN HBCU/MI Program and is administered by the Office of Naval Research (ONR). Competitive white papers and full invited proposals submitted to this FOA must clearly and succinctly describe efforts that advance basic naval-relevant S&T, engage faculty and students in STEM discovery, and expand the research capacity of participant institutions.

The technical content of any proposed effort must contribute to the S&T mission and vision of the DoN and must align with the Naval Research Development Framework. Key areas of interest are listed in the remainder of this section.

Information, Cyber, and Spectrum Superiority
An increasingly interconnected force with more rapid and effective decision-making is enabled by persistent sensing, advanced data analytics, digital integration, and assured spectrum access. In that regard, this research area spans three strategic areas:

- Assured Command and Control (C2)
- Electromagnetic Maneuver Warfare (EMW)
- Full Spectrum Cyber technologies

Assured Command and Control (C2): Assured C2 is enabled by persistent sensing, timely intelligence, and decision support tools that will accelerate “data to decisions” timelines. Leveraging machine reasoning and data analytics, an end-to-end approach achieves protected data transport, resilient networking, and assured apps and services that result in trusted information and actions. The need for increased spectral efficiency and diversity, coupled with the information domain, is critical to our naval freedom of maneuver on a global scale.

Electromagnetic Maneuver Warfare (EMW): EMW efforts include electromagnetic spectrum management technologies and techniques that fluidly combine communications, surveillance electronic warfare (EW), and electronics to understand and shape the battlespace. Ultra-wide bank systems, which continuously monitor the spectrum, are needed to facilitate optimized use.

Intrinsically secure and resilient computing systems with robust computational and communications architectures will provide the capability to manipulate and interpret rapidly growing amounts of data
support of C2, Combat Systems (CS), and Intelligence Surveillance, and Reconnaissance (ISR) effects. Assuring secure access to the full spectrum is essential to operate at will or deny adversary access in more complex and dynamic future EMW environments.

Full Spectrum Cyber technologies: Full-spectrum Cyber approaches must be developed to protect our networks, data, information systems, and real-time control systems. Total platform cyber protection is becoming an essential element of Information Warfare. Cyber technologies provide the ability to assess and counter potential threats. Future information systems must provide agile capabilities for achieving and maintaining communications and data integrity in rapidly evolving, dispersed, and disadvantaged environments. Computational architectures need more resilient information infrastructure through assured system design, automated defensive tools for advanced persistent threats, hardening of the hosts, and data assurance.

Applicable Research Interests:

- Advanced RF Electronics and Materials
- Communications and Networking
- Computational Methods for Decision Making
- Data Science and Analytics
- Electronic Warfare
- Sensors and Sensor Processing
- Machine Learning, Reasoning, and Intelligence
- Resource Optimization
- Precision Navigation and Timekeeping

**Undersea Battlespace and Maritime Domain Access**

Enables maritime domain access for naval forces to operate in contested ocean environments through undersea threat neutralization and maritime battlespace awareness. Assuring access to the global maritime domain begins with the ability to sense and predict ocean environmental properties in support of both tactical and strategic naval operations. Remote sensors (including space), autonomous ocean observation, and prediction/forecasting capability provide a distinct advantage for commanders who rely on accurate predictions and actionable information.

Distributed and networked surface and underwater sensors provide real-time data and predictions for improving battlespace awareness and decision-making.

Unmanned and autonomous underwater vehicles will provide increasing support to core naval missions in antisubmarine warfare (ASW), mine warfare (MIW), explosive ordnance disposal, and naval special warfare.

The objective is to provide next-generation sensors and autonomous platforms to augment traditional naval vessels. These novel capabilities will allow greater capacity and provide greatly increased warfighting capabilities.

Forecasting for safety of naval operations is also a critical mission that requires ongoing research to account for the changing dynamics in the open-ocean, Arctic, and littorals. Major subjects include:

- understanding and synthesis of ocean-atmosphere-land processes and interactions,
- real-time environmentally adaptive sensors, data processing and systems that can be distributed and operated effectively (without perfect knowledge), and
- Modeling support for the maritime warfare areas such as sensing, tracking, navigation,
communications, neutralization and exploitation.

The foundation of maritime access is built upon strong, geophysical models for atmosphere and ocean monitoring/prediction—knowledge of the battlespace is a key warfighting advantage.

Applicable Research Interests:

- Arctic and Global Prediction
- Littoral Geosciences and Optics
- Marine Mammals and Biology
- Marine Meteorology
- Maritime Sensing
- Ocean Acoustics
- Ocean Engineering and Marine Systems
- Physical Oceanography
- Research Facilities
- Space Environment
- Undersea Signal Processing

**Mission Capable, Persistent, and Survivable Sea Platforms**

Concepts, systems, and component technologies that improve the performance and survivability of naval ships/submarines in an increasingly distributed yet interconnected force are critical. New platforms will need to deliver advanced weapons, as well as increased mobility and survivability. Power and energy for surface ships is a key, enduring investment for the efficiency of legacy platforms, while enabling the power requirements of future electric weapons. High-power electric weapons and sensors have advanced significantly, creating technical requirements for dramatic increases in energy management and pulsed power.

Computational tools that model the platform’s interaction with the anticipated operational environment are essential to the development of integrated designs and protections such as stealth, counter-directed energy weapons, tactical decision aids, electronic warfare, and hard-kill systems.

Undersea dominance remains a priority as the Navy designs and builds the next generation of strategic and tactical submarines. Resurgence by peer adversaries in ultra-quiet submarine technology is closing the gap in undersea warfare.

Platform mobility and survivability is critical to successful operational strategies calling for more distributed forces. Advancements in materials, acoustics, and intelligent control are required in addition to hydro-, electro-, and computational mechanics. Advancements in countermeasures for ships and submarines are also critical.

Platforms will become more self-sustaining to extend endurance and forward presence while reducing the logistics tail for fuel. Future platforms must have reduced sustainment requirements and be easier to maintain. Efforts are focused on platform interfaces as well as platform efficiency to reduce sustainment needs. Enhanced interface standards and modularity provide flexibility, ease of maintenance, and upgrades.

Finally, affordability permeates all modernization concepts. The development of validated design tools capable of rapidly and accurately analyzing and evaluating novel platforms with advanced system performance characteristics is a high priority.
Applicable Research Interests:

- Naval Engineering
- Advanced Naval Power Systems
- Advanced Survivable Sea Platforms
- Unmanned Sea Platforms, Autonomy, and Power
- Advanced Naval Materials
- Undersea Weapons, Counter-Weapons, and Energetics
- Sea Platform Environmental Quality
- Corrosion Control

**Warfighter Performance**

People underpin all missions. Advances in autonomy, human-machine teaming, command and control, training and education, human performance optimization, protective equipment, medicine, neurosciences, and bio-engineered systems will ensure their advantage. People are the most critical element of military performance. As technology progresses, so must manpower and personnel technologies to enhance recruitment, retention and force structure through advanced selection, development and assessment tools. A healthy force that is both cognitively and physically resilient is essential.

Training and education needs are met through research to modernize and accelerate learning. These technologies create a technical foundation for agile, deployable, compact, affordable, integrated cross-platform, multi-mission training that aligns to point-of-need.

Ongoing naval warfighter health and survivability efforts optimize state-of-the-art health, fitness, performance, life-saving and sustaining technologies. Warfighter effectiveness is enhanced with human systems design and decision support research to provide commanders with an environments to inform allocation of forces to best effect. Warfighter advantage is further achieved through model-based performance assessment and simulation technologies using live, virtual and constructive elements.

In addition, Sailors and Marines will need technologies to help make complex decisions quickly, with limited and/or uncertain information. Rapid assimilation and action on diverse, complex and/or ambiguous information will require new analytical tools. Naval warfare challenges posed by nontraditional adversaries can be addressed by integrating social, political, economic, ethnic and religious factors in training and decision-support systems.

Warfighter effectiveness and efficiency can also be enhanced through bioengineered and biorobotic systems. Bioengineering bridges the science of biology and the art of naval engineering, such as, biomechanics and fluid mechanics of underwater propulsion; artificial muscle-based actuators and their neural control for the advancement of autonomous systems; and, finally, synthetic biology offers the potential to design purpose-specific organisms for environmental sensing, production of needed high-value materials, tissue cell growth, or possibly, information processing in autonomous systems.

Applicable Research Interests:

- Undersea Medicine
- Biological Sciences
- Biorobotics
- Capable Manpower
- Command Decision Making
- Force Health Protection
- Human-Robot Interaction
- Noise-Induced Hearing Loss
- Training and Simulation

**Aviation, Force Projection, and Integrated Defense**

Sea-based aviation, including platform and weapons research, is focused on new or enhanced capabilities to define against, and/or deter, disable, damage, defeat, or destroy adversaries at extended ranges and speeds. Offsetting technologies must continue to provide naval forces with an edge. In the future battlespace, electric weapons with deep magazines and low cost-per-kill will be required to engage large numbers of threats simultaneously.

Directed-energy systems will be used in layered defense to counter ISR capabilities, defeat or destroy threats, both before and during combat.

Networked weapons will improve the probability to kill and reduce the need for multiple weapons targeting the same platform. Advanced warhead materials will decrease the size of rounds. Electromagnetic realigns will allow more, smaller, and longer-range rounds.

Future naval fire efforts include targeting, decision support and precision strike by air, surface, undersea, and expeditionary forces.

Improved aerodynamic control will allow unprecedented maneuverability for unconventional aircraft designs. Advanced aircraft power and propulsion technologies, such as variable-cycle advanced technology, will provide more efficient operation over a wider range of flight conditions. They will also enable technologies for providing the power and thermal management of electric weapons for next-generation aircraft. Advances in structures and materials will allow for reduced life-cycle costs as well as stronger and lighter airframes.

Autonomous systems will reduce operational risk and improve mission performance. For today’s missions, autonomy can improve manning effectiveness and provide options for mission tasks. For future missions, autonomy can provide new persistent, pervasive, and rapid response capabilities to do tasks that would be unaffordable or impractical today.

**Applicable Research Interests:**

- Directed Energy (DE) and Counter-DE
- Aerodynamics
- Flight Dynamics and Control
- Propulsion
- Structures and Materials
- Energetic Materials
- Hypersonics
- Autonomy

As an important note, the research areas presented in this section provide insight into key naval S&T challenges of interest but should not be considered an exhaustive list of eligible topics.
Applicants are **strongly encouraged** to discuss their research ideas with a cognizant Naval Technical Point of Contact (to include a Subject Matter Expert, Program Officer, or Program Manager) in advance of white paper submission. Such discussion should aim to clarify the content and breadth of priority research areas and enhance the match between the DoN’s research needs and the approach/direction of the effort. Naval Technical Points of Contact should be affiliated with a Navy command, warfare center or lab to include the Office of Naval Research (ONR), the Naval Sea Systems Command (NAVSEA), the Naval Information Warfare Systems Command (NAVWAR), or U.S. Naval Research Laboratory (NRL) as examples. A list of most ONR Technical Points of Contact (TPoCs) and their contact information can be found at: https://www.onr.navy.mil/our-research/our-program-managers

B. **Federal Award Information**

1. **Eligibility for Competition**

   Proposals for supplementation of existing projects are **NOT** eligible to compete with applications for new Federal awards under this FOA.

2. **Contracted Fundamental Research**

   With regard to any restrictions on the conduct or outcome of work funded under this FOA, ONR will follow the guidance on and definition of “contracted fundamental research” as provided in the Under Secretary of Defense (Acquisition, Technology and Logistics) Memorandum of 24 May 2010. The memorandum can be found at https://www.acq.osd.mil/dpap/dars/pgi/docs/2012-D054%20Tab%20D%20OUSD%20(ALT)%20memorandum%20dated%20May%2024%202010.pdf. As defined therein the definition of “contracted fundamental research,” in a DoD contractual context, includes research performed under grants and contracts that are (a) funded by RDT&E Budget Activity 1 (Basic Research), whether performed by universities or industry or (b) funded by Budget Activity 2 (Applied Research) and performed on campus at a university.

   Pursuant to DoD policy, research performed under grants and contracts that are (a) funded by Budget Activity 2 (Applied Research) and NOT performed on-campus at a university or (b) funded by Budget Activity 3 (Advanced Technology Development) or Budget Activity 4 (Advanced Component Development and Prototypes) does not meet the definition of “contracted fundamental research.” In conformance with the USD (AT&L) guidance and National Security Decision Directive 189 found at https://fas.org/irp/offdocs/nsdd/nsdd-189.htm, ONR will place no restriction on the conduct or reporting of unclassified “contracted fundamental research,” except as otherwise required by statute, regulation or executive order. The research shall not be considered fundamental in those rare and exceptional circumstances where the applied research effort presents a high likelihood of disclosing performance characteristics of military systems or manufacturing technologies that are unique and critical to defense, and where agreement on restrictions have been recorded in the contract or grant. For certain research projects, it may be possible that although the research being performed by the prime contractor is restricted research, a subcontractor may be conducting “contracted fundamental research.” In those cases, it is the prime contractor’s responsibility in the proposal to identify and describe the subcontracted unclassified research and include a statement confirming that the work has been scoped, negotiated, and determined to be fundamental research according to the prime contractor and research performer.

   Normally, fundamental research is awarded under grants with universities and under contracts with industry. Non-fundamental research is normally awarded under contracts and may require restrictions.
during the conduct of the research and DoD pre-publication review of such research results due to subject matter sensitivity. Potential applicants should consult with the appropriate ONR Technical POCs to determine whether the proposed effort would constitute fundamental or non-fundamental research.

3. **Funded Amount and Period of Performance**

Under this FOA, approximately three (3) awards are anticipated. The estimated total value of each award is $450,000, subject to the availability of funds. Each individual award will be up to a maximum of $150,000 per year, with one-year option periods, for a maximum of up to three (3) years. Option years will be funded incrementally based on applicant performance and adherence to established execution benchmarks. The $150,000 per year limit includes all funds awarded to the university, including indirect costs. White papers and full proposals with budgets that exceed $450,000 will be considered non-responsive.

Projects selected for funding must be completed within the 3-year performance period. Any requests for no-cost extensions (NCEs) must be fully justified and submitted sufficiently no later than 90 days before the end of the period of performance. Automatic NCEs will not be approved. No applications for renewal or supplemental awards will be considered under any circumstance.

4. **Instrument Type**

Only grants will be awarded under this announcement. Any grant awarded under this announcement will be governed by the award terms and conditions that conform to DoD’s implementation of Office of Management and Budget (OMB) guidance applicable to financial assistance. The DoD Terms and Conditions and the ONR Addendum and ONR Programmatic Requirements are located at [https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions](https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions).

   a. **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 or stimulation authorized by a law or the United States, rather than to acquire property or services for the Federal Government’s direct benefit or use.
      • 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.

5. **Model Grants**

The model grants at the link below are only provided as examples. In the event of any conflict between these examples and current 2 CFR 200 Uniform Guidance or ONR clauses, current 2 CFR 200 Uniform Guidance or ONR clauses will govern.

Examples of model grants can be found on the ONR website at the following link:

C. Eligibility Information

1. Eligible Applicants

Current and pending support disclosed in this application may render an applicant ineligible for funding. Prior to award and throughout the period of performance, DoD may continue to request updated continuing and pending support information, which will be reviewed and may result in discontinuation of funding. See Section F. 2.1., Certification Regarding Disclosure of Funding Sources.

Awards under this FOA will only be made to U.S.-based Minority-Serving Institutions (MSIs) of higher education with degree granting programs in science, technology, engineering, and mathematics (STEM). As provided in 10 U.S.C. § 4144 eligibility for this competition is only open to the following institutions:

A. Institutions of higher education eligible for assistance under Title III or V of the Higher Education Act of 1965 (20 U.S.C. 1051 et seq.); and
B. Accredited post-secondary MSIs that are recognized by the Department of Education (DoED) as one of the following:
   - Alaskan Native or Native Hawaiian-Serving Institutions (ANNH);
   - Asian American and Native American Pacific Islander-Serving Institutions (AANAPISI);
   - Hispanic-Serving Institutions (HSI);
   - Historically Black Colleges and Universities (HBCU);
   - Native American-Serving Non-Tribal Institutions (NASNTI);
   - Predominantly Black Institutions (PBI);
   - Tribal Colleges and Universities (TCU).

For MSIs that are not formally designated as an HBCU or TCU (Tribal Colleges and Universities), enrollments, accreditation, and other factors may affect eligibility in any given year. To demonstrate that both criterion 1.A. and 1.B. (above) are satisfied, MSIs that are not formally designated as an HBCU or TCU must submit a letter from the DoED certifying eligibility for Title III or Title V assistance and MSI status; this letter must be applicable for the current academic year. The eligibility letter will not be included in the page limit (see Section II. D. 2.). If a current eligibility letter is not submitted with the initial white paper for institutions that are not HBCUs or TCUs, the applicant will be deemed ineligible and the white paper will not be reviewed.

The Principal Investigator (PI) and all proposed personnel must be U.S. citizens as of the due date for white paper submission (see Section I. A. 6.). In addition, the PI must have a full-time tenured, tenure-track, or tenure-track equivalent academic appointment at one of the seven MSI types listed above in Section II.C.1.B.

This is a single PI award. No Co-PIs and no sub-awards will be permitted.

Budget allocation specifications for this award includes restrictions on PI support, materials, equipment, and supplies. See Section II. D. 5 for more detailed information.

2. Cost Sharing or Matching
Cost sharing is not expected and will not be used as a factor during the merit review of any application hereunder. However, the Government may consider voluntary cost sharing if proposed.

D. Application and Submission Information

1. Address to Request Application Package

This FOA may be accessed from the sites below. Amendments, if any, to this FOA will be posted to these websites when they occur. Interested parties are encouraged to periodically check these websites for updates and amendments.

- Grants.gov (www.grants.gov)

2. Content and Form of Application Submission

   a) General Information

   All submissions will be protected from unauthorized disclosure in accordance with applicable law and DoD/DoN regulations. Applicants are expected to appropriately mark each page of their submission that contains proprietary information.

   Titles given to the submissions should be descriptive of the work they cover and not be merely a copy of the title of this announcement.

   This FOA competition is implemented in two stages:

   First – Prospective awardees MUST begin by submitting a white paper.

   Second – Based on assessment of the white paper, applicants will either be invited or not invited to submit a grant application.

   b) White Papers

      i. Format

      - Paper size – 8.5x11-inch
      - Margins – 1 inch
      - Spacing – single-spaced
      - Font – Times New Roman, 12-point
      - Page limit – 5 pages, single-sided

      NOTE: The following components are excluded from the 5-page limit:
      - Cover page
      - Cited references,
      - PI’s curriculum vitae (CV),
      - Eligibility certification letter for MSIs that are not formally recognized by the Department of Education (DoED) as an HBCU or TCU. In particular, to be eligible for this opportunity, the institution must be an
ii. Content

White papers shall include the following:

- **Cover Page (MANDATORY):** The Cover Page can be found at [https://www.onr.navy.mil/work-with-us/how-to-apply/submit-grant-application](https://www.onr.navy.mil/work-with-us/how-to-apply/submit-grant-application) for grant submissions. FedConnect will not accept a white paper unless the Cover Sheet is included. The Program Officer’s information is a required field on the cover sheet. The Program Officer listed should be the cognizant Navy TPoC the applicant discussed their research ideas in advance of white paper submission. If the applicant did not have an opportunity to discuss their research idea in advance, the Program Officer should be listed as Anthony C. Smith, Sr.

- **Summary (0.5 Page Maximum):** A one- to two- paragraph summary of the proposed effort. The summary should succinctly describe the research problem and objectives, technical approach, naval relevance, and anticipated outcomes of the research. A brief discussion of how the proposed effort will advance the state of the art should also be included. The summary should not include any proprietary or confidential information and should be suitable for public release.

- **Technical Concept (1.5 Page Maximum):** A description of the research including the objective, proposed approach, and technology innovation. Discussion of the project idea, technical rationale, and approach should clearly yet succinctly identify the naval S&T challenge(s) addressed, describe the methods that will be applied, and outline key limitations/constraints of the proposed solution. The applicant’s capacities should be discussed as they relate to achieving success in the project and it should be clear how the proposed project will advance the state of the art in the context of related work. As a reminder, cited references will not be included in the 5-page limit of the white paper.

- **Student Engagement Strategy (1.0 Page Maximum):** A description of the plan to fully integrate undergraduate students, graduate students, post-docs, or some combination of each in planned research activities. A pool of students should be identified and a detailed discussion of their expected roles and contributions should be provided. This section should explicitly list the number of students who will contribute to the project at each level. Competitive white papers will provide an explicit list of tasks for each student who will contribute to the project.

- **Future Naval Relevance (1.0 Page Maximum):** A description of potential naval relevance and contributions of the effort toward addressing specific naval S&T challenges. Applicants are strongly encouraged to communicate with a Navy TPoC about the naval relevance of their proposed work prior to white paper submission. Such discussion should aim to clarify the content and breadth of priority research areas and enhance the match between the DoN’s research needs and the approach/direction of the effort. In this section of the white paper, applicants must address whether they have discussed the proposed research effort with a Navy TPoC, provide the individual’s name and contact information, and list the affiliated Navy command, warfare center or lab. For evaluation purposes, failure to provide contact information and discussion results will be evaluated as an indicator that there was no contact with a Navy TPoC. If an applicant tried to engage a Navy TPoC and did not
receive a response, that should be explicitly stated in this section. As a reminder, competitive white papers will also include the outcome of discussions; namely, whether a white paper was encouraged, if the initial approach was modified as a result of the discussion, or some other outcome.

- **Rough Order of Magnitude (ROM) (1.0 Page Maximum):** An overview of proposed costs. The ROM should be segmented into categories of salaries and benefits, materials and supplies, travel, costs associated with student participation (i.e., tuition and fees, etc.) and indirect costs. A table that summarizes projected costs per category per year and provides the totals of columns/rows is highly encouraged.

- **Curriculum Vitae (1.5 Page Maximum):** The white paper must include the abbreviated CV of the Principal Investigator. The CV will not be included in the 5-page limit of the white paper but must not exceed the 1.5 page maximum.

- **MSI Status Certification Letter:** Since enrollment, accreditation, and other factors may affect an institution’s eligibility for designation as an MSI, colleges and universities that have not been designated as an HBCU or TCU (namely, ANNH, AANAPISI, HSI, NASNTI, or PBI) must submit a copy of the DoED letter certifying eligibility for Title II or Title V assistance for the current academic year and MSI designation. The certification letter will not be included in the 5-page limit of the white paper.

### iii. Submissions

ONR utilizes FedConnect for the submission of white papers. FedConnect is a web portal that bridges the gap between government agencies and performers to streamline the process of doing business with the government. Through this portal, performers will be able to review opportunities and submit white papers. To access FedConnect go to [https://www.fedconnect.net/FedConnect/default.htm](https://www.fedconnect.net/FedConnect/default.htm).

1. **How to register for FedConnect**

FedConnect how to guide can be found at [https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_ready_set_go.pdf](https://www.fedconnect.net/FedConnect/Marketing/Documents/FedConnect_ready_set_go.pdf).

   a. **Register with SAM:** All organizations applying online through FedConnect must register with the System for Award Management (SAM) and will receive a unique entity identifier (UEI) number. Failure to register with SAM will prevent your organization from applying through FedConnect. SAM registration must be renewed annually. If you have not registered in SAM, go to [https://www.sam.gov/SAM/](https://www.sam.gov/SAM/).

      If you are the first person in your organization to register in FedConnect, your SAM Marketing Partner ID (SAM MPIN) will also be required. It is the number that is set up by your organization as part of the registration in SAM.gov.

   b. **Create a FedConnect account:** The next step in the registration process is to create an account with FedConnect.

2. **FedConnect Assistance**
If you need assistance, the FedConnect Support Team is standing by to assist you.

Email: fcsupport@unisonglobal.com
Phone: 1-800-899-6665
Hours: Monday – Friday, 8 a.m. to 8 p.m. EDT. Closed on Federal holidays.


Do not use the Message Center within FedConnect to submit questions, please email the technical point of contact identified in Section G Federal Awarding Agency Contacts.

c) **Full Proposals**

Prospective applicants must complete the mandatory forms in accordance with the instructions provided on the forms and the additional instructions below. Files that are attached to the forms must be in Adobe Portable Document Format (.PDF); cannot contain macros; and cannot be password protected. **If your attachments are not PDFs, contain macros or are password protected, they will not pass ONR’s automated acceptance check and will need to be resubmitted.** Block 2, “Type of Application” on the SF 424 should be marked “New” on the resubmission.

i. **Format for Technical Proposal**

- Paper size – 8.5 x 11 inch
- Margins – 1 inch
- Spacing – single-spaced
- Font – Times New Roman, 12-point
- Page Limit – Technical Proposal: No more than 15 single-sided pages
  - NOTE: The following components are excluded from the page limit
    - Cover Page
    - Table of Contents
    - Project Overview
    - Responsibility
    - Data Management Plan
    - Bibliography & Referenced Cited
    - Facilities & Other Resources
    - Equipment
    - Current/Pending Project Submissions
    - PI’s Curriculum Vitae (CV)
  - There are no page limitations for the budget.

ii. **Content**

**NOTE:** The electronic file name for all documents submitted under this FOA must not exceed 68 characters in length, including the file name extension.

**Mandatory SF-424 Research and Related (R&R) Family Forms**

The mandatory forms are found at [https://www.grants.gov/web/grants/forms.html](https://www.grants.gov/web/grants/forms.html)
(1) SF-424 (R&R)

The SF-424 (R&R) form must be used as the cover page for all proposals. Complete all required fields in accordance with the “pop-up” instructions on the form and the following instructions for specific fields. Please complete the SF-424 first, as some fields on the SF-424 are used to auto-populate fields on other forms. Guidance: https://www.grants.gov/web/grants/forms/r-r-family.html.

The completion of most fields is self-explanatory with the exception of the following special instructions:

• **Field 3 - Date Received by State**: Leave Blank

• **Field 4a - Federal Identifier**: For new proposals, enter N00014. If the application is a renewal or expansion of an existing award, enter the ONR award number.

• **Field 4b - Agency Routing Number**: Enter 340 [Smith, Anthony]
  - **Note**: There is a space between the code (in the example above, the code is represented as 340) and the first [ and between the , and the First Name. There is no space between the first [ and the last name.
  - Applicants who fail to provide a Program Officer Code identifier may receive a notice that their proposal is rejected.

• **Field 4c - Previous Grants.gov Tracking ID**: If this submission is for a Changed/Corrected Application, enter the Grants.gov tracking number of the previous proposal submission; otherwise, leave blank.

• **Field 5 – Application Information**: Email address entered by the grantee on the SF424 application to create the EDA notification profile. ONR recommends that organizations provide a global business address.

• **Field 7 - Type of Applicant**: Complete as indicated: If the organization is a Minority Institution, select “Other” and under “Other (Specify)” note that the institution is a Minority Institution (MI).

• **Field 9 - Name of Federal Agency**: List the Office of Naval Research as the reviewing agency. This field is pre-populated in Grants.gov.

• **Field 11 – Descriptive Title of Applicant’s Project**: Include the FedConnect White PaperTracking Number provided to the applicant by FedConnect.

• **Field 14 – Project Director/Principal Investigator**: Email address entered by the grantee on the SF424 application to create the EDA notification profile.

• **Field 16 - Is Application Subject to Review by State Executive Order 12372 Process?**: Choose “No”. Check “Program is Not Covered by Executive Order 12372.”

• **Field 17 – Certification**: All awards require some form of certifications of compliance with national policy requirements. 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 (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances and agree to
comply with any resulting terms if I accept an award. 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).

- Field 19 – Authorized Representative: Email address entered by the grantee on the SF424 application to create the EDA notification profile.

(2) PROJECT SUMMARY/ABSTRACT

The project summary/abstract must identify the research problem and objectives, technical approaches, anticipated outcome of the research, if successful, and impact on DoD capabilities. Use only characters available on a standard QWERTY keyboard. Spell out all Greek letters, other non-English letters, and symbols. Graphics are not allowed and there is a one page or 4,000-character including spaces limit whichever is less.

Do not include proprietary or confidential information. The project summary/abstract must be marked by the applicant as “Approved for Public Release”. Abstracts of all funded research projects will be posted on the public DTIC website: https://dodgrantawards.dtic.mil/grants

As an important note: the project summary/abstract is distinct from the Project Overview described below in the next section (Field 8).

(3) RESEARCH AND RELATED OTHER PROJECT INFORMATION

- Fields 1 and 1a – Human Subject Use: Each proposal must address human subject involvement in the research by completing Fields 1 and 1a of the R&R Other Project Information form. For proposals containing activities that include or may include “research involving human subject” as defined in DoDI 3216.02, prior to award, the Applicant must submit the required documentation under “Use of Human Subjects in Research” (Section F).

- Fields 2 and 2a – Vertebrate Animal Use: Each proposal must address animal use protocols by addressing Fields 2 and 2a of the R&R Other Project Information form. If animals are to be utilized in the research effort proposed, the applicant must submit the documents described under “Use of Animals” (Section F).

- Fields 4a through 4d – Environmental Compliance: Address these fields and briefly indicate whether the intended research will result in environmental impacts outside the laboratory, and how the applicant will ensure compliance with environmental statutes and regulations.

Federal agencies making grant or cooperative agreement awards and recipients of such awards must comply with all applicable environmental planning and regulatory compliance requirements. The National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. § 4321 et seq. for example, requires that agencies consider the environmental impact of “major Federal actions” prior to any final agency decision. With respect to those awards which constitute “major Federal actions,” as defined in 40 CFR 1508.18, federal agencies may be required to comply with NEPA and prepare environmental planning documentation such as an environmental impact statement (EIS), even if the agency does no more than provide grant funds to the recipient. Most field research funded by ONR, however, constitute activities covered by a NEPA categorical exclusion that do not require preparation of further environmental planning documentation. This is particularly true with regard
to basic and applied scientific research conducted entirely within the confines of a laboratory, if the research complies with all other applicable safety, environmental and natural resource conservation laws. Questions regarding NEPA or other environmental planning or regulatory compliance issues should be referred to the technical point of contact.

- **Field 7 – Project Summary/Abstract:** Leave Field 7 blank; complete Form SF 424 Project Abstract. If an error message occurs when leaving Block 7 blank, upload the Project Abstract.

- **Field 8 – Project Narrative:** Clearly describe the research, including the objective and approach to be performed, keeping in mind the evaluation criteria. Attach the entire proposal narrative to R&R Other Project Information form in Field 8. To attach a Project Narrative to Field 8, click on “Add attachment” and attach the technical proposal as a single PDF file. Save the file as “Technical Proposal” as typing in the box is prohibited.

The technical proposal must describe the research in sections as described below:

- **Cover Page (not included in page limit):** This must include the words “Technical Proposal” and the following:
  - FOA Number: N00014-2X-S-F008;
  - Title of proposal;
  - Research area addressed
  - PI’s name, telephone number, and e-mail address;
  - PI’s Institution and the Institution’s MSI Status;
  - Naval TPoC

- **Table of Contents (not included in page limit):** An alphabetical/numerical listing of the sections within the proposal, including corresponding page numbers.

- **Project Overview (not included in page limit):** A one-page overview of the proposal. Note, the project overview is different from the Project Summary/Abstract. The overview must include a succinct discussion of the proposed research, a statement of naval relevance, and a statement of student engagement; each statement must be preceded by an appropriate heading. The discussion of the proposed research must succinctly describe the problem addressed, research objectives, proposed approach, and expected outcomes. The statement of naval relevance must describe how the proposed work will address a well-defined naval S&T challenge. The statement of student engagement must provide an overview of the number of students who will contribute to the project, distinguish whether students will be undergraduate students, graduate students, post-docs or some combination of each and discuss how students will advance implementation of the proposed work.

- **Technical Approach (included in page limit):** The scientific or technical concepts that will be investigated, providing the complete research plan. The technical approach must describe what is innovative about the proposed research, discuss the proposed approach in relation to alternate approaches, and describe the results, new knowledge, or insights that will result from successful completion of the project.

- **Future Naval Relevance (included in page limit):** A description of potential naval relevance and contributions of the effort to the agency’s specific mission.
- **Project Schedule and Milestones (included in page limit):** A summary of the schedule of events and milestones. A Gantt chart or other summarizing visual is encouraged for this section.

- **Student Engagement Strategy (included in page limit):** A description of how undergraduate students, graduate students, post-docs, or some combination of each will be fully integrated into the proposed research activities, contribute to the proposed research, and advance the proposed effort. A pool of students must be identified and an explicit discussion of the expected roles, tasks, and contributions to research outcomes of each individual student should be provided. This section should explicitly state the number of students who will contribute to the project at each level.

- **Management Approach (included in page limit):** A description of the overall management approach and rationale for participation of key team members. Describe the planned relationships with any collaborators. This is a single PI award; if there are collaborators, explain how the proposed team fits the single PI structure. If appropriate, briefly describe how the anticipated schedule aligns with the management approach.

- **Principal Investigator Qualifications (not included in page limit):** A discussion of the qualifications of the proposed Principal Investigator and any other key personnel.

- **Responsibility (not included in page limit):** Applicants must provide the following information to ONR in order to assist in ONR’s evaluation of the applicant’s responsibility:
  - Describe how you have adequate resources or the ability to obtain such resources as required to complete the activities proposed.
  - Describe how you have the ability to comply with the grant conditions, taking into account all existing and currently prospective commitments of the applicant, nongovernmental and governmental.
  - Describe your performance history; specifically, your record in managing Federal awards and the extent to which any previously awarded amounts will be expended prior to future awards.
  - Describe your record of integrity and business ethics.
  - Describe qualifications and eligibility to receive an award under applicable laws and regulations.
  - Describe your organization, experience, accounting, and operational controls and technical skills, or the ability to obtain them (including as appropriate such elements as property control systems, quality assurance measures, and safety programs applicable to the efforts to be performed).

- **Data Management Plan (not included in page limit):** A data management plan is a document that describes which data generated through the course of the proposed research will be shared and preserved, how it will be done, or 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](https://www.dod.mil/Portals/1/Documents/Manpower+Personnel/DoD%20Instruction%203200.12.pdf).
  - In no more than 2 pages, discuss the following:
    - The types of data, software, and other materials to be produced.
- How the data will be acquired.
- Time and location of data acquisition, if scientifically pertinent.
- How the data will be processed.
- The file formats and the naming conventions that will be used.
- A description of the quality assurance and quality control measures during collection, analysis, and processing.
- A description of dataset origin when existing data resources are used.
- A description of the standards to be used for data and metadata format and content.
- Appropriate timeframe for preservation.
- The plan may consider the balance between the relative value of data preservation and other factors such as the associated cost and administrative burden. The plan will provide a justification for such decisions.
- A statement that the data cannot be made available to the public when there are national security or controlled unclassified information concerns (e.g., “This data cannot be cleared for public release in accordance with the requirements in DoD Directive 5230.09.”)

- **Field 9 – Bibliography & Referenced Cited:** Upload your Bibliography/Referenced cited as a single PDF.

- **Field 10 – Facilities & Other Resources:** Describe facilities available for performing the proposed research and any additional facilities the applicant proposes to acquire at its own expense. Indicate government-owned facilities already possessed that will be used. (Additional equipment will not be provided unless the research cannot be completed by any other practical means.)

- **Field 11 – Equipment:** Describe any equipment available or any additional equipment the application proposes to acquire at its own expense. Indicate government owned equipment that will be use. Justify the need for each equipment item. (Additional equipment will not be provided unless the research cannot be completed by any other practical means.)

- **Field 12 – Other Attachments:** Optional, as necessary

**Grants do not include the delivery of software, prototypes or other hardware deliverables.**

**(4) RESEARCH AND RELATED BUDGET**

The applicant must use the Grants.gov forms (including the Standard Form (SF) Research and Related (R&R) Budget Form) from the application package template associated with the FOA on the Grants.gov web site located at http://www.grants.gov/. If options are proposed, the cost proposal must provide the pricing information for the option periods; failure to include the proposed costs for the option periods will result in the options not being included in the award. The applicant shall provide a detailed cost breakdown of all costs, by cost category.

A separate Adobe .pdf document shall be included in the application that provides appropriate justification and/or supporting documentation for each element of cost proposed. This document shall be attached under Section K. “Budget Justification” of the Research and Related Budget form. Click “Add Attachment” to attach.
• Part 1: The itemized budget should include the following. All costs should be rounded to the nearest dollar.

• Direct Labor – Individual labor categories or persons, with associated labor hours and unburdened direct labor rates. Provide escalation rates for out years.

• Administrative and Clerical Labor – Salaries of administrative and clerical staff are normally indirect costs (and included in an indirect cost rate). Direct charging of these costs may be appropriate when a major project requires an extensive amount of administrative or clerical support significantly greater than normal and routine levels of support. Budgets proposing direct charging of administrative or clerical salaries must be supported with a budget justification which adequately describes the major project and the administrative and/or clerical work to be performed.

• Fringe Benefits and Indirect Costs (Facilities and Administration (F&A), Overhead, G&A, etc.) – The proposal should show the rates and calculation of the costs for each rate category. If the rates have been approved/negotiated by a Government agency, provide a copy of the memorandum/agreement. If the non-Federal entity has never received a negotiated indirect cost rate, they may elect to charge a de minimis rate of 10% of modified total direct costs or provide sufficient detail to enable a determination of allowability, allocability and reasonableness of the allocation bases, and how the rates are calculated. See 2 CFR 200.414(f) regarding the use of a de minimis rate.

• Travel – The proposed travel cost must include the following for each trip: the purpose of the trip, origin and destination if known, approximate duration, the number of travelers, and the estimated cost per trip must be justified based on the organizations historical average cost per trip or other reasonable basis for estimation. Such estimates and the resultant costs claimed must conform to the applicable Federal cost principles. Applicants may include travel costs for the Principal Investigator to attend the peer reviews described in Section II of this FOA.

• Subawards/Subcontracts – No subawards are allowed in response to this FOA.

• Consultants – Provide a breakdown of the consultant’s hours, the hourly rate proposed, and any other proposed consultant costs, a copy of the signed Consulting Agreement or other documentation supporting the proposed consultant rate/cost, and a copy of the consultant’s proposed statement of work if it is not already separately identified in the prime applicant’s proposal.

• Materials & Supplies – Provide an itemized list of all proposed materials and supplies including quantities, unit prices, and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).

• Recipient Acquired Equipment or Facilities – Equipment and/or facilities are normally furnished by the Recipient. If acquisition of equipment and/or facilities is proposed, a justification for the purchase of the items must be provided. Provide an itemized list of all equipment and/or facilities costs and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists). Allowable items normally are limited to research equipment not already available for the project. General purpose equipment (i.e., equipment not used exclusively for research, scientific or other technical activities,
such as personal computers, laptops, office equipment) should not be requested unless they will be used primarily or exclusively for the project. For computer/laptop purchases and other general purpose equipment, if proposed, include a statement indicating how each item of equipment will be integrated into the program or used as an integral part of the research effort. Applicants must provide vendor quotes for any proposed capital equipment costs.

- **Other Direct Costs** – Provide an itemized list of all other proposed other direct costs such as Graduate Assistant tuition, laboratory fees, report and publication costs, and the basis for the estimate (e.g., quotes, prior purchases, catalog price lists).

The funds provided by ONR generally **may not** be used to pay for food or beverages as a direct cost except in exceptional circumstances. The funds shall not be used for food or beverages unless:

- The grant proposal contains a request for such funding that is fully supported factually in accordance with the cost principles of the relevant OMB Circular, and
- The Grants Officer determines that the funding is a reasonable, allocable, allowable expense under the relevant cost principles.

- **Fee/Profit** – Fee/profit is unallowable under assistance agreements at either the prime or subaward level but may be permitted on contracts issued by the prime awardee.

### (5) RESEARCH AND RELATED SENIOR/KEY PERSON PROFILE (EXPANDED)

To evaluate compliance with Title IX of the Education Amendments of 1972 (20 U.S.C. § 1681 Et. Seq.), the Department of Defense is collecting certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in STEM disciplines. In addition, the National Defense Authorization Act (NDAA) for FY 2019, Section 1286, directs the Secretary of Defense to protect intellectual property, controlled information, key personnel, and information about critical technologies relevant to national security and limit undue influence, including foreign talent programs by countries that desire to exploit United States' technology within the DoD research, science and technology, and innovation enterprise.

The R&R Senior/Key Person Profile (Expanded) form will be used to collect the following information for all senior/key personnel, including Project Director/Principal Investigator and Co-Project Director/Co-Principal Investigator, whether or not the individuals' efforts under the project are to be funded by the DoD:

- **Degree Type and Degree Year fields as the source for career information.**

- **Current and Pending Support** shall include a list of all current projects the individual is working on, in addition to any future support the individual has applied to receive, regardless of the source. Upload this document by clicking “Add Attachment.” The following information shall be included for each current or pending project:
  - Title and objectives
  - The percentage per year to be devoted to the other projects
o The total amount of support the individual is receiving in connection to each of the other research projects or will receive if the other proposals are awarded
o Name and address of the agencies and/or other parties supporting the other research projects
o Period of performance for the other research projects

- Upload the biosketch/CV/resume to the Biographical Sketch field.

Additional senior/key persons can be added by selecting the “Next Person” button. Note that, although applications without these fields completed may pass Grants.gov edit checks, if ONR receives an application without the required information, ONR may determine that the application is incomplete and may cause it to be returned without further review. DoD reserves the right to request further details from the applicant before making a final determination on funding the effort.

(6) RESEARCH AND RELATED PERSONAL DATA

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

3. Unique Entity Identifier (UEI) and System for Award Management (SAM)

All applicants submitting proposals or applications must:

a) Be registered in SAM prior to submission;
b) Provide a valid UEI number in each application or proposal it submits to the agency;
c) Maintain an active SAM registration with current information at all times during which it has an active Federal award or an application under consideration by a Federal awarding agency; and

SAM may be accessed at https://www.sam.gov/SAM.

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

4. Submission Dates and Times

See Section A.6 above, “Key Dates” for information.
5. **Funding Restrictions**

Budget allotments for PI support, to include salary and fringe benefits, must not exceed 15% of the total budget. In addition, PI salary requests must not exceed 3 months of support per year of funding.

Budget allotments for materials, equipment, and supplies should not exceed $7500 combined, per year of funding. Allotments that exceed $7500 per year of funding must be accompanied by a justification.

Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019 (Public Law 115-232) prohibits the head of an executive agency from obligating or expending loan or grant funds to procure or obtain, extend, or renew a contract to procure or obtain, or enter into a contract (or extend or renew a contract) to procure or obtain the equipment, services, or systems prohibited systems as identified in section 889 of the NDAA for FY 2019.

1. In accordance with 2 CFR 200.216 and 200.471, all awards that are issued on or after August 13, 2020, recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

   (1) Procure or obtain;
   (2) Extend or renew a contract to procure or obtain; or
   (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

   (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

   (ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

   (iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

2. In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained.

COVERED FOREIGN COUNTRY means the People’s Republic of China.

6. Other Submission Requirements

Grants.gov Application Submission and Receipt Procedures

This section provides the application submission and receipt instructions for the Office of Naval Research (ONR) program applications. Please read the following instructions carefully and completely.

a. Electronic Delivery

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

b. How to Register for Grants.gov

i. Instructions: Read the instructions below about registering to apply for ONR 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.

Organizations must have an active System for Award Management (SAM) registration, and Grants.gov account to apply for grants. If individual applicants are eligible to apply for this funding opportunity, then you may begin with step 3, Create a Grants.gov Account, listed below.

Creating a Grants.gov account can be completed online in minutes, but SAM registrations may take additional time. Therefore, an organization's registration should be done in sufficient time to ensure it does not impact the entity's ability to meet required application submission deadlines.

Complete organization instructions can be found on Grants.gov here:
https://www.grants.gov/web/grants/applicants/organization-registration.html

1) Register with SAM: All organizations applying online through Grants.gov must register with the System for Award Management (SAM). Failure to register with SAM will prevent your organization from applying through Grants.gov. SAM registration must be renewed annually. For more detailed instructions for registering with SAM, refer to:

2) Create a Grants.gov Account: The next step in the registration process is to create an account with Grants.gov. Follow the on-screen instructions or refer to the detailed instructions here at:
https://www.grants.gov/web/grants/applicants/registration.html

3) Add a Profile to a Grants.gov Account: A profile in Grants.gov corresponds to a single applicant organization the user represents (i.e., an applicant) or an individual applicant. If you work for or consult with multiple organizations and have a profile for each, you may log in to one Grants.gov account to access all of your grant applications. To add an organizational profile to your
Grants.gov account, enter the UEI Number for the organization in the UEI field while adding a profile. For more detailed instructions about creating a profile on Grants.gov, refer to https://www.grants.gov/web/grants/applicants/registration/add-profile.html

4) **EBiz POC Authorize Profile Roles:** After you register with Grants.gov and create an Organization Applicant Profile, the organization applicant's request for Grants.gov roles and access is sent to the EBiz POC. The EBiz POC will then log in to Grants.gov and authorize the appropriate roles, which may include the Authorized Organization Representative (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 assigned the AOR role. For more detailed instructions about creating a profile on Grants.gov, refer to https://www.grants.gov/web/grants/applicants/registration/authorize-roles.html

5) **Track Role Status:** To track your role request, refer to: https://www.grants.gov/web/grants/applicants/registration/track-role-status.html

ii. **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.**

c. **How to Submit an Application to the Office of Naval Research via Grants.gov**

White Papers must **NOT** be submitted through the Grants.gov application process. White paper submissions must be submitted through FedConnect.

All attachments to grant applications submitted through Grants.gov must be in Adobe Portable Document Format. Proposals with attachments submitted in word processing, spreadsheet, or any format other than Adobe Portable Document Format will not be considered for award.

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: https://www.grants.gov/web/grants/applicants/apply-for-grants.html

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. The Workspace progress bar will display the state of your application process as you apply. As you apply using Workspace, you may click the blue question mark icon near the upper-right corner of each page to access context-sensitive help.

   a. **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 ONR 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: https://www.grants.gov/web/grants/applicants/adobe-software-compatibility.html

b. 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.

c. Complete SF-424 Fields First: The forms are designed to fill in common required fields across other forms, such as the applicant 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 transfer to the other forms.

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. Using the tracking number, access the Track My Application page under the Applicants tab or the Details tab in the submitted workspace.

For additional training resources, including video tutorials, refer to: https://www.grants.gov/web/grants/applicants/applicant-training.html

Applicant Support: Grants.gov provides applicants 24/7 support via the toll-free number 1-800-518-4726 and email at support@grants.gov. (Foreign applicants should contact 1-606-545-5035.) For questions related to the specific grant opportunity, contact the number listed in the application package of the grant for which you are applying.

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

d. Timely Receipt Requirements and Proof of Timely Submission

i. Online Submission.

All applications must be received by **11:59 PM Eastern time on 12/14/2022**. Proof of timely submission is automatically recorded by Grants.gov. An electronic date/time stamp is generated within the system when the application is successfully received by Grants.gov. The applicant AOR will receive an acknowledgement of receipt and a tracking number (GRANTXXXXXXXX) from Grants.gov with the successful transmission of their application. Applicant AORs will also receive the official date/time stamp and Grants.gov Tracking number in an email serving as proof of their timely submission.
When the Office of Naval Research successfully retrieves the application from Grants.gov, and acknowledges the download of submissions, Grants.gov will provide an electronic acknowledgment of receipt of the application to the email address of the applicant with the AOR role. Again, proof of timely submission shall be the official date and time that Grants.gov receives your application. Applications received by Grants.gov after the established due date for the program will be considered late and will not be considered for funding by the Office of Naval Research.

Applicants using slow internet, such as dial-up connections, should be aware that transmission can take some time before Grants.gov receives your application. Again, Grants.gov will provide either an error or a successfully received transmission in the form of an email sent to the applicant with the AOR role. The Grants.gov Support Center reports that some applicants end the transmission because they think that nothing is occurring during the transmission process. Please be patient and give the system time to process the application.

E. Application Review Information

1. Criteria

The primary basis for selecting proposals for acceptance will be technical merit, importance to agency programs, and fund availability. To the extent appropriate, cost realism and reasonableness will also be considered when selecting proposals. ONR reserves the right to request and require any additional information and documentation after it makes the type of award instrument determination. ONR reserves the right to remove Applicants from award consideration when the parties fail to reach agreement on award terms, conditions, and cost/price within a reasonable time, or when the Applicant fails to timely provide requested or required additional information.

Applicant’s white papers and full proposals will be evaluated against the following criteria:

   (1) **Naval Relevance**: The priority of the naval S&T challenge addressed, the value/benefit of the proposed research to the Navy, and the identification of a cognizant Navy TPoC will be evaluated. Highly competitive proposals will draw clear, well-defined links between high-priority naval S&T challenges and the proposed solution.

   (2) **Technical Merit and Project Implementation**: The research significance, approach, and methodology will be evaluated. The proposal should clearly describe how the project advances knowledge and provide a detailed schedule for accomplishing research objectives. Highly competitive proposals will clearly describe inherent limitations in the approach and/or methodology proposed; provide a well-planned, realistic timeline for project milestones; and include a budget that reflects realistic, reasonable, and justifiable costs.

   (3) **Student Engagement Strategy**: The clarity of the engagement strategy and the level of detail used to describe how undergraduate students, graduate students, post-docs, or some combination of each will contribute to project advancement will be evaluated. Highly competitive proposals will identify a viable talent pool and, in addition to describing specific tasks that students will undertake, will also describe how students will benefit from their involvement in the project. In addition, the number of students included at each level must be explicitly stated.
(4) **Personnel Qualifications:** The applicant’s capabilities, related experience, and facilities will be evaluated. Highly competitive proposals will clearly describe the Principal Investigator (PI)’s qualifications, applicable experience on similar projects, and access to equipment.

(5) **The availability of funds:** This criterion does not apply to white papers.

In addition, per NDAA 2021 Section 1062, beginning October 1, 2024, DoD may not fund institutions of higher education (as defined by 20 USC 1002) that host a Confucius Institute, other than amounts provided directly to students as education assistance, unless a waiver is provided. A Confucius Institute is defined as a cultural institute directly or indirectly funded by the Government of the People’s Republic of China.

Criteria 1, 2, 3, 4 and 5 are equally important.

2. **Review and Selection Process**

   a. **Evaluation**

   Proposals will not be evaluated against each other since they are not submitted in accordance with a common work statement. ONR’s intent is to review all proposals received as soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons.

   ONR’s scientific/technical community is heavily involved in the review of proposals, submitting initial recommendations to the DoN HBCU/MI Program Director. The ultimate recommendation for award proposals is made by the DoN HBCU/MI Program Director.

   Recommended proposals will then be forwarded to the ONR Contracts and Grant Awards Management office. Any notification received from ONR that indicates that the Applicant’s full proposal has been recommended does not ultimately guarantee an award will be made. This notice indicates that the proposal has been selected in accordance with the evaluation criteria stated above and has been sent to the Grant’s Department to conduct cost analysis, determine the Applicant's responsibility, to confirm whether funds are available, and to take other relevant steps necessary prior to making an award.

   b. **Options**

   The Government will evaluate options for award purposes by adding the total cost for all options to the total cost for the basic requirement. Evaluation of options will not obligate the Government to exercise the options during contract or grant performance. The Government reserves the right to exercise options at time of award.

   c. **Evaluation Panel**

   Technical and cost proposals submitted under this FOA will be protected from unauthorized disclosure. The cognizant Program Officer and other Government scientific experts will
perform the evaluation of technical proposals. Restrictive notices notwithstanding, one or more support contractors may be utilized as subject-matter-expert technical consultants. However, proposal selection and award decisions are solely the responsibility of Government personnel. Each support contractor’s employee having access to technical and cost proposals submitted in response to this FOA will be required to sign the ONR Non-Disclosure Agreement (NDA) for Contractor Support prior to receipt of any proposal submissions. This NDA includes third-party beneficiary language giving the submitter of proprietary information a right of direct action against the contractor employee and/or his/her employer in the event that the NDA is violated.

3. **Recipient Qualifications**

   a. **Recipient Qualifications**

      The Grants Officer is responsible for determining a recipient’s qualification prior to award. In general, a Grants Officer will award grant, cooperative agreements, or TIAs only to qualified recipients that meet the standards at 32 CFR 22.415. To be qualified, a potential recipient must:

      i. Have the management capability and adequate financial and technical resources, given those that would be made available through the grant or cooperative agreement, to execute the program of activities envisioned under the grant or cooperative agreement;

      ii. Have a satisfactory record of executing such programs or activities (if a prior recipient of an award);

      iii. Have a satisfactory record of integrity and business ethics; and

      iv. Be otherwise qualified and eligible to receive a grant or cooperative agreement under applicable laws and regulations. Applicants are requested to provide information with proposal submissions to assist the Grants Officer’s evaluation of recipient qualification.

   b. **FAPIIS**

      In accordance with Office of Management and Budget (OMB) guidance in parts 180 and 200 of Title 2, CFR, it is DoD policy that DoD Components must report and use integrity and performance information in the Federal Awardee Performance and Integrity Information System (FAPIIS), or any successor system designated by OMB, concerning grants, cooperative agreements, and TIAs’s as follows:

      If the total Federal share will be greater than the simplified acquisition threshold on and Federal award under a notice of funding opportunity (see 2 CFR 200.88 Simplified Acquisition Threshold):

      i. The Federal awarding agency, prior to making a Federal award with a total amount of Federal share greater than the simplified acquisition threshold, will review and consider any information about the applicant that is in the designated integrity and performance system accessible through SAM (currently FAPIIS) (see 41 U.S.C. 2313);

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

iii. The Federal awarding agency will consider any comments by the applicant, in addition
to the other information in the designated integrity and performance system, in making
a judgment about the applicant’s integrity, business ethics, and record of performance
under Federal awards when completing the review of risk posed by applicants as
described in 2 CFR 200.205 Federal awarding agency review of risk posed by
applicants.

F. Federal Award Administration Information

1. Federal Award Notices

a) Email

All applicants will receive a notification email advising if their proposal has been selected or not
selected for award.

Applicants whose proposals are recommended for award may be contacted by a Grant Specialist to
discuss additional information required for award. This may include representations and
certifications, revised budgets or budget explanations, and/or other information as applicable to the
proposed award.

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

The award document signed by the Grants Officer is the official and authorizing award instrument.

b) Electronic Document Access (EDA)

Office of Naval Research (ONR) award/modification documents are only available via the
Department of Defense (DoD) Electronic Document Access System (EDA) within the Procurement

2. Administrative and National Policy Requirements

a) Export Control

Applicants should be aware of recent changes in export control laws. Applicants are responsible for
ensuring compliance with all U.S. export control laws and regulations, including the International Traffic
in Arms Regulation (ITAR)(22 CFR Parts 120 - 130) and Export Administration Regulation (EAR) (15
CFR Parts 730 – 774), as applicable. In some cases, developmental items funded by the Department of
Defense are now included on the United States Munition List (USML) (22 CFR Part 121) and are
therefore subject to ITAR jurisdiction. In other cases, items that were previously included on the USML
have been moved to the EAR Commerce Control List (CCL). Applicants should address in their
proposals whether ITAR or EAR restrictions apply to the work they are proposing to perform for ONR.
The ITAR and EAR are available online at http://www.ecfr.gov/cgi-bin/ECFR?page=browse. Additional information regarding the President’s Export Control Reform Initiative can be found at https://export.gov/ecr/index.asp.

Applicants must comply with all U.S. export control laws and regulations, including the ITAR and EAR, in the performance of any award or agreement resulting from this FOA. Applicants shall be responsible for obtaining any required licenses or other approvals, or license exemptions or exceptions if applicable, for exports of hardware, technical data, and software (including deemed exports), or for the provision of technical assistance.

b) Requirements Concerning Live Organisms:

i. Use of Animals:

The DoD policies and requirements for the use of animals in DoD-supported research are described in the current version of DoD Instruction 3216.01, Use of Animals in DoD Conducted and Supported Research and Training and its implementing instruction, DHA-MSR 6025.02, “The Care And Use Of Animals In DoD Research, Development, Test, And Evaluation (RDT&E) Or Training Programs,” the version of which is current at the time of award. If animals are to be utilized in the research effort proposed, the Applicant must submit a Full Appendix or Abbreviated Appendix (see Guidance link below) with supporting documentation (such as copies of Institutional Animal Care and Use Committee (IACUC) Approval, IACUC Approved Protocol, and most recent United States Department of Agriculture (USDA) Inspection Report) prior to award. For assistance with submission of animal research related documentation, contact the ONR Animal Use Administrator at (703) 696-4318. Guidance: https://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/animal-use

ii. Use of Human Subjects in Research:

1. Applicants must protect the rights and welfare of individuals who participate as human subjects in research awarded pursuant to this FOA and must comply with the requirements of the Common Rule at 32 CFR part 219 (the DOD implementation of 45 CFR part 46) and applicable provisions of DoD Instruction 3216.02, Protection of Human Subjects and Adherence to Ethical Standards in DoD-Conducted and -Supported Research (April 15, 2020, the DON implementation of the human research protection program contained in SECNAVINST 3900.39E Change 1, (or its replacement), 10 USC 980 “Limitation on Use of Humans as Experimental Subjects,” and when applicable, Food and Drug Administration (FDA) and other federal and state law and regulations.

2. For proposals containing activities that include or may include “research involving human subjects” as defined in DoDI 3216.02, prior to award, the Applicant must submit documentation of:
   a. Approval from an Institutional Review Board (IRB) (IRB-approved research protocol, IRB-approved informed consent document, documentation showing the IRB considered the scientific merit of the research and other material considered by the IRB); proof of completed human research training (e.g., training certificate for the principal investigator, and institutional verification that the principal investigator, co-investigators, and research support personnel have received appropriate training to be considered qualified to execute
the research); and the Applicant’s Department of Health and Human Services (DHHS)-issued Federal Wide Assurance (FWA#), including notifications of any FWA suspensions or terminations.

b. Any claimed exemption under 32 CFR 219.104), including the category of exemption, supporting documentation considered by the Applicant’s institution in making the determination (e.g., protocol, data collection tools, advertisements, etc.). The documentation shall include a short rationale supporting the exemption determination. This documentation should be signed by the IRB Chair or IRB vice Chair, designated IRB administrator or official of the Applicant’s human research protection program.

c. Any determinations that the proposal does not contain activities that constitute research involving human subjects or contains only activities that are deemed not to be research under 32 CFR 219.102(1), including supporting documentation considered by the Applicant’s institution in making the determination. This documentation should be issued by the IRB Chair or IRB vice Chair, designated IRB administrator or official of the Applicant’s human research protection program.

d. Documentation must be submitted to the ONR Human Research Protection Official (HRPO), by way of the ONR Program Officer. The HRPO retains final judgment on whether the documentation satisfies the use of human subjects in research requirements. For assistance with submission of human subject research related documentation, contact the ONR Human Research Protection Official (HRPO) at (703) 696-4318.

e. Grant awards and any subawards or modifications will include a statement indicating successful completion of the HRPO review. Research involving human subjects must not be commenced under any contract award or modification or any subcontract or grant subaward or modification until awardee receives notification from the Contracting or Grants Officer that the HRPO has approved the assurance as appropriate for the research under the award or modification and that the HRPO has reviewed the protocol and accepted the IRB approval or determination for compliance with Federal, DoD and DON research protection requirements. The Government will not reimburse or otherwise pay for work performed in violation of this requirement. See, DFARS 252.235-7004. Guidance: http://www.onr.navy.mil/About-ONR/compliance-protections/Research-Protections/Human-Subject-Research.aspx

c) Biosafety and Biosecurity Requirements:

   Applicants must comply with applicable provisions of the current version of DODM 6055.18, Safety Standards for Microbiological and Biomedical Laboratories, including ensuring compliance with standards meeting at least the minimum applicable requirements of the current edition of Centers for Disease Control and Prevention, “Biosafety in Microbiological and Biomedical Laboratories (BMBL),” and National Institutes of Health, “The NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines).”

d) Research Involving Recombinant (rDNA) or Synthetic Nucleic Acid Molecules:

   Applicants must not begin performance of research within the scope of “The NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines)” until receiving notice from the Contracting or Grants Officer that ONR has reviewed and accepted the Applicant’s documentation. In order for ONR to accomplish that review, an applicant must provide the Contracting or Grants Officer, generally as part of an original proposal prior to award, sufficient documentation to enable the review, including:

   (1) A written statement that the Applicant is in compliance with NIH Guidelines. This statement
should be made by an official of the institution other than the Principal Investigator and should be on university or company letterhead.

(2) Evidence demonstrating that the proposed research protocol has been approved (or determined exempt from the NIH Guidelines) by an Institutional Biosafety Committee (IBC); and a copy of the Department of Health and Human Services (DHHS) Letter of Approval of the IBC, or the most recent letter from DHHS stating the IBC is in compliance with the NIH Guidelines. For assistance with requirements involving countries outside the United States, please contact the ONR HRPO at (703) 696-4318.

e) Institutional Dual Use Research of Concern:

As of September 24, 2015, all institutions and United States Government (USG) funding agencies subject to the United States Government Policy for Institutional Oversight of Life Sciences Dual Use Research of Concern must comply with all the requirements listed therein. If your research proposal directly involves certain biological agents or toxins, contact the cognizant Technical Point of Contact. U.S. Government Science, Safety, Security (S3) guidance may be found at http://www.phe.gov/s3/dualuse.

f) Department of Defense High Performance Computing Program:

The DoD High Performance Computing Program (HPCMP) furnishes the DoD S&T and RDT&E communities with use-access to very powerful high performance computing systems. Awardees of ONR grants and other assistance instruments may be eligible to use HPCMP assets in support of their funded activities if ONR Program Officer Approval is obtained and if security/screening requirements are favorably completed. Additional information and an application may be found at https://www.hpc.mil/.

g) Project Review Meetings and Program Review Meetings:

Individual Project Review Meetings between the ONR sponsor and the performer may be held as necessary. Project Review Meetings typically last approximately one day. Typically, there are 2 in-person Project Review Meetings each year. Additional Project Review Meetings are likely, but these will be accomplished by video telephone conferences, telephone conferences, or web-based collaboration tools.

In addition to Project Review Meetings, Program Review Meetings may be held to provide a forum for reviews of the latest results from individual project experiments and any other incremental project progress towards major demonstrations. Program Review Meetings are generally held once per year and last two to three days.

For cost estimating purposes, applicants should assume that in FY22 most of the reviews will be virtual and in FY23 and beyond 40% of the review meetings will be at or near ONR, Arlington VA, and 60% will be held at other government or non-government facilities within the continental United States.

ONR offers the use of its facilities for a Program Review Meeting to discuss the status of programs related to the subject of this proposal. Such meetings may include attendees representing multiple research efforts. The meetings will discuss only “contracted fundamental research” as provided in the Under Secretary of Defense (Acquisition, Technology and Logistics) Memorandum of 24 May 2010, the results of which are open to the public. No fee will be charged Program Review Meeting
attendees. ONR understands it will not be asked to host a Performance Review Meeting more than once per year, if at all.

Applicants are not required to include the foregoing term in their proposals, and whether they do or not will not affect their selection for award.

**h) Federal Funding Accountability and Transparency Act of 2006:**

The Federal Funding Accountability and Transparency Act of 2006 (Public Law 109-282), as amended by Section 6202 of Public Law 110-252 and expanded by the Digital Accountability and Transparency Act of 2014 (Public Law 113-101), requires that all agencies establish requirements for recipients reporting information on subawards and executive total compensation as codified in 2 CFR Part 170. Any company, non-profit agency or university that applies for financial assistance (either grants, cooperative agreements or TIAs) as either a prime or sub-recipient under this FOA must provide information in its proposal that describes the necessary processes and systems in place to comply with the reporting requirements identified in 2 CFR Part 170 Appendix A. Entities are required to meet reporting requirements unless an exception or exemption applies. Please refer to 2 CFR Part 170, including Appendix A, for a detailed explanation of the requirements, exceptions, and exemptions.

**i) Financial Assistance Certification:**

The Federal Assistance Certifications Report is an attestation that the entity will abide by the requirements of the various laws and regulations and the supplemental at Section F.2.iv above. Therefore, as applicable, you are still required to submit any documentation, including the SF LLL Disclosure of Lobby Activities (if applicable), and disclosure of any unpaid delinquent tax liability or a felony conviction under any Federal law.

**j) Certifications Regarding Restrictions on Lobbying:**

Grant awards greater than $100,000 require a certification of compliance with a national policy mandate concerning lobbying. Grant applicants shall provide this certification by electronic submission of SF424 (R&R) as a part of the electronic proposal submitted via https://www.grants.gov/ (complete Block 17). The following certification applies likewise to each grant seeking federal assistance funds exceeding $100,000:

1. No Federal appropriated funds have been paid or will be paid by or on behalf of the applicant, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, the applicant shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,”
in accordance with its instructions.
(3) The applicant shall require that the language of this certification be included in the award
documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under
grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose
accordingly.

This certification is a material representation of fact upon which reliance was placed when this
transaction was made or entered into. Submission of this certification is a prerequisite for making or
entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the
required certification shall be subject to a civil penalty of not less than $10,000 and not more than
$100,000 for each such failure.

\[ k \] Certifications Regarding the Prohibition on Using Funds with Entities that Require Certain
Internal Confidentiality Agreements (Grant Information Circular (GIC) 19-02 November 2019)
(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 (1) to the statements contained in the list
certifications and (2) that the statements herein are true, complete and accurate to the best of my
knowledge. I also provide the required assurances and agree to comply with any resulting terms if I
accept an award. 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).

The certification reads as follows:
By submission of its proposal or application, the applicant represents that it does not require any of its
employees, contractors, or subrecipients seeking to report fraud, waste, or abuse to sign or comply
with internal confidentiality agreements or statements prohibiting or otherwise restricting those
employees, contractors, subrecipients from lawfully reporting that waste, fraud, or abuse to a
designated investigative or law enforcement representative of a Federal department or agency
authorized to receive such information.

\[ l \] Certification Regarding Disclosure of Funding Sources (Supplement to SF424, 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
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).”

\[ m \] Conflict of Interest

Applicants for assistance are required to comply with 2 CFR 200.318(c), Codes of Conduct, to
prevent real or apparent conflicts of interest in the award and administration of any contracts by
which a recipient or subrecipient purchases property or services, supported by federal funds.
(1) General Requirement for Disclosure

You and your organization must disclose any potential or actual scientific or nonscientific conflict of interest(s) to us. You must also disclose any potential or actual conflict(s) of interest for any identified sub recipient you include in your application. 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 application. 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, these collaborations should be considered when considering potential conflicts 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. Therefore, you must include in your list of current and pending support all collaborators, even if they did not formally provide support.

n) Code of Conduct

Applicants for assistance are required to comply with 2 CFR 200.318(c), Codes of Conduct, to prevent real or apparent conflicts of interest in the award and administration of any contracts supported by federal funds. This provision will be incorporated into all assistance instruments awarded under this FOA.

o) Peer Review

In the case of proposals funded as basic research, ONR may utilize peer reviewers from academia, industry, and Government agencies to assist in the periodic appraisal of performance under the awards, as outlined in ONR Instruction 3966.1A. Such periodic peer reviews monitor the quality of funded basic research efforts. The reviews are used in part to determine which basic research projects will receive continued ONR funding. Peer reviewers who are not U.S. Government employees must sign nondisclosure agreements before receiving full or partial copies of proposals and reports submitted by the basic research performers. Applicants may include travel costs for the Principal Investigator (PI) to attend the peer review. Peer reviews may consider information derived from individual project or program review meetings (see FOA Section F.2.a.viii for further guidance).

p) Prohibition on Procurement of Foreign-Made Unmanned Aircraft Systems

Commercial Off The Shelf Unmanned Aircraft Systems (COTS UAS) may not be purchased pursuant to this grant or contract or other transaction agreement for prototype until a waiver per the Deputy Secretary of Defense Memorandum "Unmanned Aerial Vehicle Cybersecurity Vulnerabilities," May 23, 2018 is obtained by the cognizant ONR Program Officer.

(1) A waiver is not required when the research is supported via a grant award AND it is unclassified and funded with either basic research funds (i.e., 6.1) or applied research funds
(i.e., 6.2) and performed on campus by a university. A waiver must be obtained for all other grants and assistance agreements.

(2) Notwithstanding 1.a. above, a waiver is required for all efforts (regardless of award or funding type) that involve interactions with military personnel, DoD property, or DoD facilities; work conducted by US Government laboratories, UARCs, or FFRDCs; or are Public Aircraft Operation (PAO), classified, or explore specific military utility. For these efforts, a Cyber Security waiver or Authority to Operate (ATO) and Cyber Vulnerability Assessment must be obtained.

(3) A waiver is required for all contract awards and other transaction agreements. For these efforts, a Cyber Security waiver or ATO and Cyber Vulnerability Assessment must be obtained.

Prospective performers or current performers are required to notify the cognizant ONR Program Officer of any anticipated COTS UAS purchase that may be subject to waiver at time of white paper, proposal submission or award changes. Performers shall provide documentation specifying the details including the type of drone, effort, location, etc.

Performers will agree to cooperate and provide additional information as requested to support the waiver and cyber vulnerability assessment.

In no event shall federal funding be expended or purchase made pursuant to any award subject to waiver requirement, unless and until performer is notified by ONR that the waiver, cyber vulnerability and other requirements have been met.

3. Reporting

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

i. Reporting of Matters Related to Recipient Integrity and Performance
   a) General Reporting Requirement. If the total value of your currently active grants, cooperative agreements, and procurement contracts from all Federal awarding agencies exceeds $10,000,000 for any period of time during the period of performance of this Federal award, then you as the recipient during that period of time must maintain the currency of information reported to the System for Award Management (SAM) that is made available in the designated integrity and performance system (currently the Federal Awardee Performance and Integrity Information System (FAPIIS)) about civil, criminal, or administrative proceedings described in paragraph 2 of this award term and condition. This is a statutory requirement under 41 U.S.C. 2313. All information posted in the designated integrity and performance system on or after April 15, 2011, except past performance reviews required for Federal procurement contracts, will be publicly available.

ii. Proceedings about Which You Must Report. Submit the information required about each proceeding that:
a) Is in connection with the award or performance of a grant, cooperative agreement, or procurement contract from the Federal Government;
b) Reached its final disposition during the most recent five-year period; and
c) Is one of the following:
   1) A criminal proceeding that resulted in a conviction, as defined in paragraph 5 of this award term and condition;
   2) A civil proceeding that resulted in a finding of fault and liability and payment of a monetary fine, penalty, reimbursement, restitution, or damages of $5,000 or more;
   3) An administrative proceeding, as defined in paragraph 5 of this award term and condition, that resulted in a finding of fault and liability and your payment of either a monetary fine or penalty of $5,000 or more or reimbursement, restitution, or damages in excess of $100,000; or
   4) Any other criminal, civil, or administrative proceeding if:
      a. It could have led to an outcome described in paragraph 2.c. (1), (2), or (3) of this award term and condition;
      b. It had a different disposition arrived at by consent or compromise with an acknowledgment of fault on your part; and
      c. The requirement in this award term and condition to disclose information about the proceeding does not conflict with applicable laws and regulations.

iii. Reporting Procedures. Enter in the SAM Entity Management area the information that SAM requires about each proceeding described in paragraph 2 of this award term and condition. You do not need to submit the information a second time under assistance awards that you received if you already provided the information through SAM because you were required to do so under Federal procurement contracts that you were awarded.

iv. Reporting Frequency. During any period of time when you are subject to the requirement in paragraph 1 of this award term and condition, you must report proceedings information through SAM for the most recent five-year period, either to report new information about any proceeding(s) that you have not reported previously or affirm that there is no new information to report. Recipients that have Federal contract, grant, and cooperative agreement awards with a cumulative total value greater than $10,000,000 must disclose semiannually any information about the criminal, civil, and administrative proceedings.

v. Definitions. For purposes of this award term and condition:

a) Administrative proceeding means a non-judicial process that is adjudicatory in nature in order to make a determination of fault or liability (e.g., Securities and Exchange Commission Administrative proceedings, Civilian Board of Contract Appeals proceedings, and Armed Services Board of Contract Appeals proceedings). This includes proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include audits, site visits, corrective plans, or inspection of deliverables.

b) Conviction, for purposes of this award term and condition, means a judgment or conviction of a criminal offense by any court of competent jurisdiction, whether entered upon a verdict or a plea, and includes a conviction entered upon a plea of nolo contendere.

c) Total value of currently active grants, cooperative agreements, and procurement contracts includes—
1) Only the Federal share of the funding under any Federal award with a recipient cost share or match; and
2) The value of all expected funding increments under a Federal award and options, even if not yet exercised.

b. Post Award Reporting Requirements

The post award reporting requirements can be found under the relevant ONR Addendum to the DoD R&D General Terms and Conditions and ONR Programmatic Requirements located at the following link: https://www.onr.navy.mil/work-with-us/manage-your-award/manage-grant-award/grants-terms-conditions.

G. Federal Awarding Agency Contacts

All UNCLASSIFIED communications shall be submitted via e-mail to the Technical Point of Contract (POC) with a copy to the designated Business POC, as designated below.

Comments or questions submitted should be concise and to the point, eliminating any unnecessary verbiage. In addition, the relevant part and paragraph of the Funding Opportunity Announcement (FOA) should be referenced. The due date for submission of the white paper and/or full proposal will not be extended.

1. Questions of a technical nature should be submitted to the cognizant TPoC across naval entities including the Office of Naval Research (ONR), the Naval Sea Systems Command (NAVSEA), the Naval Information Warfare Systems Command (NAVWAR), the U.S. Naval Research Laboratory (NRL), to discuss their research ideas in advance of white paper submission. A list of most ONR TPoCs and their contact information can be found at: https://www.onr.navy.mil/our-research/our-program-managers

2. Questions regarding eligibility and non-technical issues should be submitted to

   Mr. Anthony C. Smith, Sr.
   Program Officer
   ONR CODE 34
   Office of Naval Research
   875 North Randolph Street
   Arlington VA 22203-1995
   E-mail Address: don_hbcufoa@navy.mil

3. Questions regarding Grants proposal submissions should be submitted to:

   Anastasia Lenfest
   Office of Naval Research
   ONR Code 253
   One Liberty Center
   875 N. Randolph Street
Arlington, VA  22203-1995
Email Address: Anastasia.E.Lenfest.civ@us.navy.mil