PROGRAM ANNOUNCEMENT

THE DEPARTMENT OF DEFENSE (DoD)

FISCAL YEAR 2022

DEFENSE UNIVERSITY RESEARCH INSTRUMENTATION PROGRAM (DURIP)

AFOSR: FOA-AFRL-AFOSR-2021-0002
ARO: W911NF-21-S-0004
ONR: N00014-21-S-F002

FULL PROPOSAL DEADLINE

Friday, May 21, 2021 at 11:59 PM Eastern Daylight Time

SPECIAL NOTE: Applications must be ‘VALIDATED’ by Grants.gov by the application deadline which can take up to 48 hours after successful submission. See Timely Receipt Requirements and Proof of Timely Submission.

AMENDMENT 2: This amendment extends the full proposal deadline by one week, to May 21, 2021. This version of the funding opportunity announcement supersedes all others.

INQUIRIES AND QUESTIONS DEADLINE

Friday, April 23, 2021

Army Research Office

Office of Naval Research

Air Force Office of Scientific Research

in cooperation with

The Office of the Director for Basic Research in the Office of the Under Secretary of Defense
OVERVIEW INFORMATION

The Department of Defense (DoD announces the Fiscal Year 2022 Defense University Research Instrumentation Program (DURIP).

DURIP is designed to improve the capabilities of accredited United States (U.S.) institutions of higher education to conduct research and to educate scientists and engineers in areas important to national defense, by providing funds for the acquisition of research equipment or instrumentation. For-profit organizations are not eligible for DURIP funding. We refer to eligible institutions of higher education as universities in the rest of this announcement.

DURIP is part of the University Research Initiative (URI).

IMPORTANT NOTE: Applicants should be alert for any amendments that may modify the announcement. Amendments to the original funding opportunity announcement (FOA) will be posted to the Grants.gov Webpage: https://www.grants.gov/.

SUMMARY FUNDING OPPORTUNITY INFORMATION

1. FEDERAL AWARDDING AGENCY NAMES

   This Department of Defense program is administered by three (3) agencies:
   Army Research Office (ARO)
   Office of Naval Research (ONR)
   Air Force Office of Scientific Research (AFOSR)

2. FUNDING OPPORTUNITY TITLE

   Fiscal Year 2022 Defense University Research Instrumentation Program (DURIP)

3. ANNOUNCEMENT TYPE

   Initial Announcement

4. ANNOUNCEMENT NUMBER

   AFOSR: FOA-AFRL-AFOSR-2020-0002
   ARO: W911NF-21-S-0004
   ONR: N00014-21-S-F002

5. CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NUMBERS

   12.431 Basic Scientific Research (ARO)
   12.300 Basic and Applied Research (ONR)
6. KEY DATES

Proposals must be received electronically through Grants.gov by **Friday, May 21, 2021 at 11:59 PM Eastern Daylight Time.**

Pre-proposal inquiries and questions must be submitted not later than **Friday, April 23, 2021.**
TABLE OF CONTENTS

OVERVIEW INFORMATION .............................................................................................................................. 2

SUMMARY FUNDING OPPORTUNITY INFORMATION ................................................................................. 2

1. FEDERAL AWARDING AGENCY NAMES .......................................................................................... 2

2. FUNDING OPPORTUNITY TITLE ...................................................................................................... 2

3. ANNOUNCEMENT TYPE .................................................................................................................. 2

4. ANNOUNCEMENT NUMBER ........................................................................................................... 2

5. CATALOG OF FEDERAL DOMESTIC ASSISTANCE (CFDA) NUMBERS ............................................... 2

6. KEY DATES ...................................................................................................................................... 3

TABLE OF CONTENTS ....................................................................................................................................... 4

A. PROGRAM DESCRIPTION .................................................................................................................. 8

B. FEDERAL AWARD INFORMATION .................................................................................................. 9

C. ELIGIBILITY INFORMATION .......................................................................................................... 9

1. ELIGIBLE APPLICANTS ..................................................................................................................... 9

2. COST SHARING OR MATCHING ...................................................................................................... 9

3. OTHER ............................................................................................................................................ 9

   a. Types of Equipment and Instrumentation Eligible ........................................................................ 9

   b. Amount of Requested DoD Funding – $50,000 to $1,500,000 Unless Excepted ........................... 10

D. APPLICATION AND SUBMISSION INFORMATION ............................................................................. 10

1. ELECTRONIC DELIVERY ................................................................................................................. 10

2. HOW TO REGISTER TO APPLY THROUGH GRANTS.GOV .............................................................. 11

   a. Instructions .................................................................................................................................... 11

   b. Electronic Signature ....................................................................................................................... 12

3. HOW TO SUBMIT AN APPLICATION TO THE ADMINISTERING AGENCIES VIA GRANTS.GOV ...... 12

   a. Create a Workspace ....................................................................................................................... 12

   b. Complete a Workspace .................................................................................................................. 12

   c. Submit a Workspace ...................................................................................................................... 13

   d. Track a Workspace ......................................................................................................................... 13

4. CONTENT AND FORM OF APPLICATION SUBMISSION .................................................................. 13

   a. Pre-Proposal Inquiries and Questions Encouraged ....................................................................... 13

   b. The Application as a Whole ........................................................................................................... 14

   c. Proposal Format ............................................................................................................................. 15

   d. Proposal Length ............................................................................................................................. 15
e. Electronic Form and Proposal Attachments .......................................................... 16
f. Marking of Proposals with Confidential or Proprietary Information.......................... 16
g. Submission to Multiple Administering Agencies ...................................................... 16
h. Advance Preparation for Electronic Submission through Grants.gov ...................... 17
5. COMPONENT PIECES OF THE APPLICATION ...................................................... 17
   a. SF 424 (R&R) Application for Federal Assistance .................................................. 17
   b. SFLLL Disclosure of Lobbying Activities ............................................................... 20
   c. R&R Other Project Information Form ..................................................................... 20
   d. Publicly Releasable Project Summary/Abstract ....................................................... 21
   e. Project Narrative ...................................................................................................... 21
   f. Bibliography and References Cited ......................................................................... 22
   g. Facilities and Other Resources ................................................................................ 22
   h. R&R Senior/Key Person Profile Form ...................................................................... 22
   i. R&R Personal Data Form ......................................................................................... 23
   j. R&R Budget Form .................................................................................................... 23
   k. Budget Justification ................................................................................................. 23
   l. R&R Project/Performance Site Locations Form ....................................................... 24
   m. Information Successful Applicants Must Submit After Selection for a Possible Award 24
6. DUNS UNIQUE IDENTIFIER, CAGE, AND SYSTEM FOR AWARD MANAGEMENT (SAM) .... 24
   a. SAM Registration Required .................................................................................... 24
   b. Questions about SAM Registration and Updates .................................................... 24
   c. Consequences of Non-Compliance with SAM Registration Requirements ............ 24
7. SUBMISSION DATES AND TIMES ...................................................................... 25
   a. Pre-Proposal Inquiries and Questions Deadline ..................................................... 25
   b. How Submission Time for Pre-Proposal Inquiries and Questions is Determined ....... 25
   c. Effect of Missing Pre-Proposal Inquiries and Questions Deadlines ......................... 25
   d. Proposal Submission Deadline ............................................................................. 25
   e. Grants.gov Tracking Number is Application Receipt ............................................... 26
   f. Effect of Missing the Proposal Submission Deadline .............................................. 26
8. INTERGOVERNMENTAL REVIEW ..................................................................... 26
9. FUNDING RESTRICTIONS ............................................................................... 26
   a. Award Value Limits and Exceptions ..................................................................... 26
   b. DURIP Specific Funding Restrictions ................................................................... 27
c. Anticipated Announcement and Award Dates ................................................................. 27

d. Pre-Award Costs........................................................................................................... 28

e. Other Submission Requirements .............................................................................. 28

E. APPLICATION REVIEW INFORMATION .......................................................................... 28

1. CRITERIA .................................................................................................................... 28

   a. Evaluation Criteria ................................................................................................ 28

   b. No further evaluation criterion or criteria will be used for proposal selection ... 29

2. REVIEW AND SELECTION PROCESS ....................................................................... 29

   a. Merit-Based, Competitive Procedures ................................................................. 29

   b. Cost Analysis ........................................................................................................ 29

F. FEDERAL AWARD ADMINISTRATION INFORMATION .................................................. 29

1. SELECTION NOTICES ............................................................................................... 29

   a. Electronic Notification .......................................................................................... 30

   b. Selection for Possible Award Does Not Authorize Work .................................... 30

2. AWARD NOTICES ...................................................................................................... 30

   a. Federal Award Document ..................................................................................... 30

   b. Electronic of Mail Federal Award Distribution ..................................................... 30

3. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS .................................. 30

   a. Reporting on Matters Related to Recipient Integrity and Performance ................ 30

   b. Agency Review of Risk Pose by Applicants ......................................................... 30

   c. Cross-Cutting National Policy Requirements ....................................................... 31

   d. Equipment Vesting ............................................................................................... 31

   e. Uniform Administrative Requirements, Cost Principles, and Audit Requirements .... 31

   f. DoD Research and Development General Terms and Conditions ....................... 32

   g. Recipients Other Than Individuals ....................................................................... 32

   h. Minimum Record Retention Requirements .......................................................... 32

   i. Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019 32

4. REPORTING .................................................................................................................. 33

   a. Monitoring and Reporting Program Performance ............................................... 33

   b. Standard Form (SF) 425 Federal Financial Report .............................................. 33

   c. Electronic Payment Requests and Electronic Payment ........................................ 34

   d. Electronic Submission of Technical and SF 425 Reports .................................... 34

G. AGENCY CONTACTS .................................................................................................... 34

AFOSR: FOA-AFRL-AFOSR-2021-0002
ARO: W911NF-21-S-0004
ONR: N00014-21-S-F002
1. ADMINISTERING AGENCY CONTACTS ........................................................................................................ 34

H. OTHER INFORMATION ............................................................................................................................. 35

1. AIR FORCE OMBUDSMAN ..................................................................................................................... 35

2. GRANTS OFFICER’S AUTHORITY .......................................................................................................... 35
A. PROGRAM DESCRIPTION

This announcement seeks proposals from universities to purchase equipment and instrumentation in support of research in areas of interest to the DoD.

DoD interests include the areas of research supported by the Army Research Office (ARO), the Office of Naval Research (ONR), and the Air Force Office of Scientific Research (AFOSR), hereafter generally referred to collectively as “we,” “our,” “us,” or “administering agency.” We use “administering agency” to provide a generic reference to any of the administering agencies.

A central purpose of the DURIP is to provide equipment and instrumentation to enhance research related education in areas of interest and priority to the DoD. Therefore, your proposal must address the impact of the equipment or instrumentation on your institution’s ability to educate students through research in disciplines important to DoD missions.

Our areas of research interest are published at the following internet locations:

<table>
<thead>
<tr>
<th>ADMINISTERING AGENCY</th>
<th>HOW TO FIND OUR RESEARCH INTERESTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army Research Office</td>
<td>Select “Broad Agency Announcements” in the “For the Researcher” section to see the most recent ARL or ARO Core Broad Agency Announcement for Basic and Applied Scientific Research.</td>
</tr>
<tr>
<td><a href="http://www.aro.army.mil">http://www.aro.army.mil</a></td>
<td></td>
</tr>
<tr>
<td>Office of Naval Research</td>
<td>Select “Work With Us,” then “Funding Opportunities” and then click “BAAs, FOAs, and Special Program Announcements” from the menu on the left-hand side to see the Long Range Broad Agency Announcement for Navy and Marine Corps Science and Technology, N00014-21-S-B001.</td>
</tr>
<tr>
<td><a href="http://www.onr.navy.mil">http://www.onr.navy.mil</a></td>
<td></td>
</tr>
<tr>
<td><a href="http://www.wpafb.af.mil/afosr">http://www.wpafb.af.mil/afosr</a></td>
<td></td>
</tr>
</tbody>
</table>

You must refer to the websites cited above for detailed technical information and our technical goals. We encourage you to contact the Program Managers listed in the cited announcements before submitting proposals to explore research areas of mutual interest to you and us.

You may submit a single DURIP proposal to more than one administering agency; however, only one administering agency will fund it, if selected. There is no limit on the total number of different proposals you can submit. There is no limit to the number of awards a single applicant organization can receive under this competition. We discuss this again in sections C.3.b Amount of Requested DoD Funding and D.4.g Submission to Multiple Administering Agencies.
We reserve the right to select and fund for award, all, some, part, or none of the proposals received. There is no guarantee of award.

The authority for DURIP awards is 10 U.S.C. 2358 in accordance with 31 U.S.C. 6304.

B. FEDERAL AWARD INFORMATION

We intend to award approximately $48 million under this DURIP competition for fiscal year 2022, subject to availability of funds.

Each administering agency will make grant awards to fund the purchase of research equipment or instrumentation costing $50,000 or more that cannot typically be purchased within the budgets of single-investigator awards. We refer to this as major equipment or instrumentation for the remainder of the announcement. We generally cannot make any individual award that exceeds more than $1,500,000 in DoD funding unless your proposal qualifies for one of the two exceptions listed in section C.3.b Amount of Requested DoD Funding.

We can make awards to universities conducting, or demonstrably capable of conducting, research in areas of interest to the DoD with the new equipment or instrumentation proposed. DURIP awards are typically one year in length.

C. ELIGIBILITY INFORMATION

1. ELIGIBLE APPLICANTS

   Accredited U.S. Institutions of Higher Education

   This competition is open to accredited U.S. institutions of higher education with degree granting programs in science, mathematics, and/or engineering except for-profit educational institutions.

   To assess risk posed by applicants, we review your application, proposal, and Office of Management and Budget (OMB) designated repositories of government-wide public and non-public data, including comments you have made, as required by 31 U.S.C. 3321 and 41 U.S.C. 2313 and described in 2 CFR 200.205 and 32 CFR 22.410 to confirm you are qualified, responsible, and eligible to receive an award.

2. COST SHARING OR MATCHING

   We do not require cost sharing or matching for proposals under this announcement. You are not prohibited from including voluntary committed cost sharing or matching in your proposal. Cost sharing or matching is not an evaluation factor.

3. OTHER

   a. Types of Equipment and Instrumentation Eligible

      DURIP funds must be used for the acquisition of major equipment or instrumentation to augment current, or develop new, research capabilities to support research in the technical areas of interest to the DoD. Your proposal may request funding for more than one item if the requested items comprise a “system” that is used for a common research purpose. Requests for computing equipment for DoD-relevant research programs are appropriate and eligible for funding.
Proposals for purely instructional equipment or general-purpose computing facilities are not eligible for DURIP funding. We provide more detailed information about how DURIP funds may be used in section D.9. Funding Restrictions.

b. Amount of Requested DoD Funding – $50,000 to $1,500,000 Unless Excepted

With few exceptions, a DURIP award provides between $50,000 and $1,500,000 in DoD funding for the purchase of major equipment or instrumentation. We provide this information again in section D.9. Funding Restrictions.

(1) Exceptions

You may submit a proposal to purchase major equipment or instrumentation costing more than $1,500,000 under either of the following two (2) conditions:

Your proposal contains a firm commitment from your institution to provide voluntary committed cost sharing or matching so the cost to DoD remains $1,500,000 or less; or,

Your proposal request the administering agency that receives your proposal to grant an exception to the $1,500,000 maximum amount of DoD funding. At the administering agency’s discretion, your proposal may be considered if it is warranted by a priority defense research need or needs.

Exceptions to the $1,500,000 limit are expected to be rare.

We strongly recommend you communicate with the administering agency before you submit any formal proposal.

(2) You may submit a single DURIP proposal to more than one administering agency; however only one administering agency will fund it, if selected. There is no limit on the total number of different proposals you can submit.

(3) There is no limit to the number of awards a single applicant organization can receive under this competition. We discuss this again in section D.4.g. Submission to Multiple Administering Agencies. Selections are based on our criteria.

D. APPLICATION AND SUBMISSION INFORMATION

1. ELECTRONIC DELIVERY

The administering agencies are participating in the Grants.gov initiative to provide the grant community with a single site to find and apply for grant funding opportunities. The administering agencies encourage applicants to submit their applications online through Grants.gov.

We will not provide paper copies of this announcement, or accept paper applications.

You can also search Grants.gov using the administering agency CFDA Number.

<table>
<thead>
<tr>
<th>ADMINISTERING AGENCY</th>
<th>CFDA NUMBER AND TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army Research Office (ARO)</td>
<td>12.431 Basic Scientific Research</td>
</tr>
</tbody>
</table>
Office of Naval Research (ONR) | 12.300 Basic and Applied Research
---|---
Air Force Office of Scientific Research (AFOSR) | 12.800 Air Force Defense Research Sciences Program

*If you have any special accessibility requirements, please contact the appropriate person from [G.1. Agency Administrative Contacts](#) to request a reasonable accommodation.*

## 2. HOW TO REGISTER TO APPLY THROUGH GRANTS.GOV

### a. Instructions

Read the instructions below about registering to apply for administering agency’s funds. Applicants should read the registration carefully and prepare the information requested before beginning the registration process. Reviewing and assembling the required information before beginning the registration process will alleviate last minute searches for required information.

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

If individual applicants are eligible to apply for this grant funding opportunity, refer to: [https://www.grants.gov/web/grants/applicants/registration.html](https://www.grants.gov/web/grants/applicants/registration.html).

Organization applicants can find complete instructions here: [https://www.grants.gov/web/grants/applicants/organization-registration.html](https://www.grants.gov/web/grants/applicants/organization-registration.html)

1. **Obtain a DUNS Number:** All entities applying for funding, including renewal funding, must have a Data Universal Numbering System (DUNS) number from Dun & Bradstreet (D&B). Applicants must enter the DUNS number in the data entry field labeled “Organizational DUNS” on the Standard Form (SF)-424.

   For more detailed instructions for obtaining a DUNS number, refer to: [https://www.grants.gov/web/grants/applicants/organization-registration/step-1-obtain-duns-number.html](https://www.grants.gov/web/grants/applicants/organization-registration/step-1-obtain-duns-number.html).

2. **Register with SAM:** In addition to having a DUNS number, organizations applying online through Grants.gov must register with the System for Award Management (SAM). All organizations must register with SAM in order to apply online. Registrations in SAM now include the acceptance of Certifications and Assurances. Entities creating new registrations and existing entities completing their annual registration renewals will be required to review financial assistance representations and certification before their registration can be activated. Failure to register with SAM will prevent your organization from applying through Grants.gov.

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

For more detailed instructions about creating a Grants.gov account, refer to: https://www.grants.gov/web/grants/applicants/registration.html.

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

For more detailed instructions on creating a profile on Grants.gov, refer to: https://www.grants.gov/web/grants/applicants/registration/add-profile.html.

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

b. 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.

3. HOW TO SUBMIT AN APPLICATION TO THE ADMINISTERING AGENCIES VIA GRANTS.GOV

Grants.gov applicants can apply online using Workspace. Workspace is a shared, online environment where members of a grant team may simultaneously access and edit different webforms within an application. For each 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.

a. Create a Workspace

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

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

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

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.

(2) 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.

(3) 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 DUNS 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.

c. 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 application submission.

d. Track a Workspace

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

For additional training resources, including video tutorials, refer to: 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. For questions related to the specific grant opportunity, contact the number listed on the application package of the grant you are applying for.

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

4. CONTENT AND FORM OF APPLICATION SUBMISSION

a. Pre-Proposal Inquiries and Questions Encouraged
We encourage you to contact the Program Managers listed in our Broad Agency Announcements (BAAs) identified in section A. Program Description before submitting proposals to explore research areas of mutual interest to you and us.

If you need help with general questions or problems, the appropriate individual listed in section G. Agency Contacts should be contacted.

Your pre-proposal inquiries and questions should be submitted not later than **Friday, April 23, 2021**. We may not be able to answer questions received later. We discuss this more in section 7. Submission Dates and Times.

*Program Managers and technical contacts do not have the authority to make commitment for us. Grants Officers acting within their warranted capacity are the only people authorized to make commitments for the Government.*

b. **The Application as a Whole**

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

Your proposal must describe the research and related science and engineering education the equipment or instrumentation enables. Your proposal must adequately describe the research and research-related education so that we can assess relevance to our research priorities and DoD missions. You are encouraged to clarify the extent to which your research interests coincide with ours by:

1. Reviewing the websites provided in section A. Program Description; and,
2. Contacting the administering agency Program Managers or Officers listed on our websites and BAAs.

You must submit your proposal electronically through Grants.gov. DO NOT password protect attachments. You must mark your application with the announcement number.

We created a summary of what is required for a complete proposal in the table below.

- **We require the forms and attachments in bold text with all applications**
- **Some applications require the attachments in italics**
- **We provide more instructions in section D.5. Component Pieces of the Application**

|R&R FORM, OMB 4040-0001| FIELD| ATTACHMENT|
18. **SF 424 (R&R) Application for Federal Assistance, including an authorized signature**

18. **SFLLL Disclosure of Lobbying**

18. **Cover Letter**

<table>
<thead>
<tr>
<th>R&amp;R Other Project Information Form</th>
<th>7. Project Summary/Abstract</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8. Project Narrative</td>
</tr>
<tr>
<td></td>
<td>9. Bibliography &amp; References Cited</td>
</tr>
<tr>
<td></td>
<td>12. Other Attachments</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R&amp;R Senior/Key Person (Expanded) Profile Form</th>
<th>N/A</th>
<th>Biographical Sketch</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>R&amp;R Budget Form</th>
<th>N/A</th>
<th>Budget Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Vendor Quotes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>R&amp;R Personal Data Form</th>
<th>N/A</th>
<th>N/A</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>R&amp;R Project /Performance Site Locations Form</th>
<th>N/A</th>
<th>N/A</th>
</tr>
</thead>
</table>

The SF 424 (R&R) must include the signature of an authorized applicant representative. Your signature is affixed electronically by [Grants.gov](https://grants.gov) upon submission. This signature is considered the signature for the application as a whole.

We give you more instructions in section [D.5. Component Pieces of the Application](#).

c. **Proposal Format**

- **Paper Size**: 8.5 x 11-inch paper
- **Margins**: 1 inch
- **Spacing**: 1.0-line spacing
- **Font**: Times New Roman, 12 point
- **Page Limitation**: 25 pages*
- **Content**: as described below

d. **Proposal Length**

The total length of your project summary/abstract, project narrative, bibliography and references cited, and all curriculum vitae attached to the R&R Senior/Key Person (Expanded) Profile form must be no longer than twenty-five (25) pages. We will not read or evaluate any pages in excess of the twenty-five (25) page limit.
We describe what is included in the page count in the table below.

D.4.d. Page Count Table

<table>
<thead>
<tr>
<th>*INCLUDED IN PAGE COUNT</th>
<th>NOT INCLUDED IN PAGE COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Summary/Abstract</td>
<td>Everything else</td>
</tr>
<tr>
<td>Project Narrative</td>
<td></td>
</tr>
<tr>
<td>Bibliography and References Cited</td>
<td></td>
</tr>
<tr>
<td>Senior/Key Person Curriculum Vitae</td>
<td></td>
</tr>
</tbody>
</table>

We do not include Grants.gov forms in the page count. We do not include budget related information or required representations in the page count. Not having enough information to understand if your costs are reasonable and realistic is the most common reason awards are delayed. We cannot make an award unless we can determine you are eligible, the cost of your proposal is reasonable and realistic, and complies with 2 CFR 200 Subpart E – Cost Principles.

e. Electronic Form and Proposal Attachments

Your application and proposal attachments must be in electronic file formats using Workspace.

DO NOT password protect attachments.


f. Marking of Proposals with Confidential or Proprietary Information

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

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

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

g. Submission to Multiple Administering Agencies

In some cases, proposed equipment and instrumentation, and associated research, may be relevant to more than one of the administering agencies’ research interests. In such cases, you may submit a single DURIP proposal to more than one administering agency; however, only one administering agency will fund it, if selected.

There is no limit on the total number of different proposals you can submit. There is no limit to the number of awards a single applicant organization can receive under this competition.
The electronic SF 424 (R&R) may be saved and modified to indicate the updated agency and CFDA number to that agency. To have the proposal reviewed by more than one administering agency, proposals must be submitted directly to each administering agency, requiring up to three (3) electronic submissions for a single proposal.

**h. Advance Preparation for Electronic Submission through Grants.gov**

Your proposal must be submitted electronically through Grants.gov. Your organization must complete several one-time actions before electronic submission. Registration with Grants.gov may take up to twenty-one (21) days.

1. You should verify that the person authorized to submit proposals for your organization has completed registration well in advance of the submission deadline. Grants.gov electronic proposal submissions cannot be accomplished before your organization is fully registered.
4. Questions relating to the Grants.gov registration process, system requirements, how an application works, or the proposal submittal process can be answered by email at support@grants.gov, telephone at (800) 518-4726 or (606) 545-5035, or at http://www.grants.gov/web/grants/support.html.
5. An active System for Award Management (SAM) registration and an active Dun & Bradstreet Data Universal Numbering System (DUNS) number are required to register through Grants.gov. Sections D.2.a and D.6 provide more information.

**5. COMPONENT PIECES OF THE APPLICATION**

*We have arranged this section to generally follow the table in section D.4.b, The Application as a Whole.*

**a. SF 424 (R&R) Application for Federal Assistance**

You must use the electronic SF 424 (R&R) Application for Federal Assistance form as your application cover page. No pages may precede the SF 424 (R&R). This form is not included in your page count.

You must use 1 February 2022 as the anticipated start date in your proposal and budget; however, the actual effective date is not final until an award is made.

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

We have special instructions for completing several SF 424 (R&R form fields for applications under this announcement. Our instructions are:
<table>
<thead>
<tr>
<th>FIELD</th>
<th>INSTRUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>You may leave “Applicant Identifier” blank</td>
</tr>
<tr>
<td>3.</td>
<td>You may leave “Date Received by State” and “State Application Identifier” blank</td>
</tr>
<tr>
<td>4.a.</td>
<td><strong>ARO Submissions</strong>: Leave “Federal Identifier” blank</td>
</tr>
<tr>
<td></td>
<td><strong>ONR Submissions</strong>: Enter N00014</td>
</tr>
<tr>
<td></td>
<td><strong>AFOSR Submissions</strong>: Leave “Federal Identifier” blank</td>
</tr>
<tr>
<td>FIELD</td>
<td>INSTRUCTION</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
</tbody>
</table>
| 4.b.  | **ARO Submissions:** Enter the ARO Program Manager’s Name  
*The appropriate ARO Program Manager’s name can be found on the ARO BAA “ARO Broad Agency Announcement for Fundamental Research for April 2017 - 31 March 2022” or the most recent ARO announcement as described in section A. Program Description. Each research area in the ARO BAA provides a technical contact for that area.*  

**ONR Submissions:** Enter the three (3) digit Program Officer Code and, if known, the Program Officer’s name, last name first, in brackets, e.g., 331 [Smith, John]  
*Program Officer names and Program Office Codes can be found on the ONR website. First select “Our Research” or use the link https://www.onr.navy.mil/our-research. Then select “ONR Program Managers” https://www.onr.navy.mil/our-research/our-program-managers to get Program Officer names and technical areas. Select “ONR Technology Areas” https://www.onr.navy.mil/our-research/technology-areas to get the Program Office information and Codes.*  

**AFOSR Submissions:** Enter the Program Officer’s name  
*Program Officer names can be found on the AFOSR Website or our general BAA.*  
*From our website, select “Research Areas” or use the following link: http://www.wpafb.af.mil/Welcome/Fact-Sheets/Display/Article/842026.*  
*Our general BAA, “Research Interests of the Air Force Office of Scientific Research,” lists a Program Officer for each research area. You can view our most recent general BAA at https://www.grants.gov/web/grants/view-opportunity.html?oppId=314753.* |
| 8.    | Complete as indicated. If you are submitting your DURIP proposal to more than one administering agency, you must provide the name(s) and phone number(s) of the Point(s) of Contact at those agencies.  
*If you run out of space in field 8, include an attachment to field 12 of the R&R Other Project Information form. Name that attachment “Continuation of SF 424 (R&R) Field 8.” This attachment is included in your page count.* |
<table>
<thead>
<tr>
<th>FIELD</th>
<th>INSTRUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>List the appropriate DoD administering agency name:</td>
</tr>
<tr>
<td></td>
<td>Army Research Office</td>
</tr>
<tr>
<td></td>
<td>Office of Naval Research</td>
</tr>
<tr>
<td></td>
<td>Air Force Office of Scientific Research</td>
</tr>
<tr>
<td></td>
<td><em>This field is usually pre-populated by Grants.gov.</em></td>
</tr>
<tr>
<td>11.</td>
<td>Enter a descriptive title for your project.</td>
</tr>
<tr>
<td></td>
<td><em>Using one phrase or sentence, title the proposal so that it is basic research oriented, not equipment or application oriented. For example, “Ultrashort-Pulse Laser for Research on Advanced Cathodes and Windows for High Power Microwave Sources.”</em></td>
</tr>
<tr>
<td></td>
<td><em>DO NOT use the word DURIP, EQUIPMENT, INSTRUMENTATION, FACILITY, ACQUISITION, or any Program Manager’s name in your title.</em></td>
</tr>
<tr>
<td>16.</td>
<td>Check “No,” and “Program is Not Covered by Executive Order 12372.”</td>
</tr>
<tr>
<td>17.</td>
<td>Select “I Agree” to:</td>
</tr>
<tr>
<td></td>
<td>• Provide the certification regarding lobbying that is required by <strong>31 U.S.C. 1352</strong> as implemented by the DoD in <strong>32 CFR Part 28</strong></td>
</tr>
<tr>
<td></td>
<td>The full text of this certification may be found in Appendix A to Part 28 of 32 CFR at <a href="http://www.ecfr.gov/">http://www.ecfr.gov/</a> or we will provide you a copy if you ask for one.</td>
</tr>
<tr>
<td></td>
<td><em>See section F.3. Administrative and National Policy Requirements for more information and links to the full text of these items.</em></td>
</tr>
<tr>
<td>18.</td>
<td>You may attach the completed <strong>D.3.c. SFLLL Disclosure of Lobbying Activities</strong> if you have lobbying activity that you must disclose under <strong>31 U.S.C. 1352</strong> as implemented by the DoD in <strong>32 CFR Part 28</strong>.</td>
</tr>
</tbody>
</table>

b. **SFLLL Disclosure of Lobbying Activities**

*When required, the SFLLL form is attached to field 18 of the R&R Other Project Information form. This attachment is not included in your page count.*

If you have lobbying activity that you must disclose under **31 U.S.C. 1352** as implemented by the DoD at **32 CFR Part 28**, you must attach the completed SFLLL Disclosure of Lobbying Activities.

You can find instructions for completing this form at: [https://www.gsa.gov/portal/forms/download/116430](https://www.gsa.gov/portal/forms/download/116430).

c. **R&R Other Project Information Form**
This form is not included in your page count.

Complete all information as requested. You must attach the publicly releasable Project Summary/Abstract and Project Narrative to this form.

d. Publicly Releasable Project Summary/Abstract

You must attach the Project Summary/Abstract to field 7 of the R&R Other Project Information form. This attachment is included in your page count.

You must provide a concise abstract of 4,000 characters or less with your proposal. Spaces are included in the character count. Your abstract must be marked as publicly releasable. Your abstract should use terms the public can understand to describe the equipment or instrumentation requested, and research or related education that will be supported by the equipment or instrumentation.

Your abstract header should include the Agency Program Manager or Officer’s name(s) and directorate(s) you listed in SF 424 (R&R) field 4.b. as discussed in section D.5.a. SF 424 (R&R) Application for Federal Assistance.

If you receive an award, we must publish your abstract to a searchable website available to the general public as required by statue. The website address is https://dodgrantawards.dtic.mil/grants/#/home.

e. Project Narrative

You must attach the Project Narrative to field 8 of the R&R Other Project Information form. The narrative must be complete and self-contained to qualify for review. This attachment is included in your page count.

You must clearly describe how the proposed equipment or instrumentation will:

(1) Enhance the quality of research and research-related education currently funded by the DoD. Indicate the DoD organization, the contract or grant number, and the principal investigator (PI), and concisely describe the thrust of the research and the research-related education in sufficient detail to enable review of the proposal by an evaluator who is not familiar with your research program; and/or,

(2) Contribute to research and research-related education currently proposed to the DoD. Indicate the organization and PI of the proposal under consideration, the prospective DoD sponsor, and concisely describe the thrust of the research and research-related education in sufficient detail to enable review of the DURIP proposal by an evaluator who is not familiar with your research proposal; and/or,

(3) Establish new research capabilities or enhance current research capabilities for performing research and research-related education in areas of interest to the DoD. Additionally:

(4) Describe how the proposed equipment or instrumentation will interface with existing facilities or upgrade other equipment or instrumentation available for research and research-related education at your institution; and,

(5) Describe the amounts and sources of ongoing or proposed support for the research and research-related education to be facilitated; and,
(6) Describe any special circumstances regarding the acquisition or installation of the equipment or instrumentation; and,

(7) Indicated the estimated useful life of the equipment.

f. Bibliography and References Cited

You must attach your Bibliography and references Cited to field 9 of the R&R Other Project Information form. This attachment is included in your page count.

g. Facilities and Other Resources

You may attach your Facilities and Other Resources information to field 10 of the R&R Other Project Information form. This attachment is not included in your page count.

h. R&R Senior/Key Person Profile Form

You must attach a short biographical sketch and list of significant publications (vitae) for each Senior/Key Person, whether or not the individuals’ efforts under the project are to be funded by the DoD. You must also attach a list of current and pending support as discussed in the aforementioned vitae including title and objectives, the percentage per year to be devoted to the other projects, the total amount of support the individual is receiving in connection to each of the other research projects or will receive if other proposals are awarded, name and address of the agencies and/or parties supporting the other research projects, and period of performance for the other research projects.

You must list all key persons proposed for the research on the R&R Senior/Key Person Profile (Expanded) form. Key persons are generally the PI, and Co-PIs, and senior staff. We use this information to evaluate the qualifications of you and your research team.

To evaluate compliance with Title IX of the Education Amendments of 1972 (20 U.S.C. A subsection 1681 Et. Seq.), the DoD 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.

To enable this assessment, each applicant must include this form completed as indicated. The Degree Type and Degree Year fields will be used by the DoD as the source for career information. In addition to the required fields on the form applicants must complete these two fields for all individuals that are identified as having the project role of Project Director (PD)/PI or Co-PD/PI on the form. Additional senior/key persons can be adding by selecting the “Next Person” button.

Failure to submit this information may cause the proposal to be returned without further review. Additionally, DoD reserves the right to request further details from the proposer before making a final determination on the funding effort.

This information will be used to support protection of intellectual property, controlled information, key personnel, and information about critical technologies relevant to national security. Additionally, this information will be used to limit undue influence, including foreign talent programs, by countries that desire to exploit the United States’ technology within the DoD research, science and technology, and innovation enterprise.
i. **R&R Personal Data Form**

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

**NOTE:** The Government Accountability Office (GAO), in its report GAO-16-14, *WOMEN IN STEM RESEARCH: Better Data and Information Sharing Could Improve Oversight of Federal Grant Making and Title IX Compliance*, December 3, 2015, recommended that the DoD collect certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in science, technology, engineering, or mathematics disciplines. To enable this assessment, each application must include the following forms completed as indicated: R&R Senior/Key Person Profile (expanded) form, and the R&R Personal Data form.

j. **R&R Budget Form**

*You must include a budget that identifies the equipment or instrumentation to be purchased, cost per item, and the total cost. Cite the proposed sources of the equipment or instrumentation on the budget justification attachment. This form is not included in your page count.*

Your costs should be based on recent quotations from manufacturers or distributors. Itemize equipment on the R&R Budget form to the extent possible, or provide an itemization on the budget justification attachment.

All equipment or instrumentation requested must be considered part of one “system” costing $50,000 to $1,500,000 absent an exception described in section D.9.a. Award Value Limits and Exceptions; and thus all equipment or instrumentation proposed must be exempt from indirect costs.

You must use 1 February 2022 as the anticipated start date in your proposal and budget; however the actual effective date is not final until an award is made.

k. **Budget Justification**

*You must provide a detailed budget justification. The entire budget justification and supporting documentation must be combined into a single file and attached to field K of the R&R Budget form. This attachment is not included in your page count.*

The budget justification must make clear how DURIP funding will affect the successful and complete purchase of the requested equipment. Relevant information includes, but is not limited to, details of any other Federal funds to be used, and any funds to be contributed by non-Federal sources toward the purchase of the equipment or instrumentation.
Your budget justification should include the following supporting documentation sufficient to support all equipment or instrumentation proposed:

1. **Vendor quotes.**

2. A name and telephone number for a contact at each source cited or website address listing the proposed equipment and prices.

l. **R&R Project/Performance Site Locations Form**

   *This form is not included in your page count.*

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

m. **Information Successful Applicants Must Submit After Selection for a Possible Award**

   Our Grants Officer may request additional necessary information from you during negotiations, or as required to inform their consideration for award. You must provide timely responses.

   If you do not fully comply with our information requests by the time we are ready to make an award, we may determine that you are not qualified to receive an award and make an award to someone else.

6. **DUNS UNIQUE IDENTIFIER, CAGE, AND SYSTEM FOR AWARD MANAGEMENT (SAM)**

a. **SAM Registration Required**

   1. **2 CFR 25.110** requires that all applicants, unless exempted, must:

      - Be registered in [SAM.gov](https://www.sam.gov) before submitting an application;
      - Provide a valid DUNS unique identifier; and,

      Continue to maintain an active SAM registration with current information at all times during which any applicant has an active Federal award or an application under consideration by a Federal awarding agency.

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

   3. SAM exemption or exceptions not available under this announcement:

      We will not issue an Agency level exemption to SAM registration under **2 CFR 25.110(d)(1)** for applicants under this announcement. You must comply with SAM registration requirements and include a DUNS and CAGE code on your application.

b. **Questions about SAM Registration and Updates**


c. **Consequences of Non-Compliance with SAM Registration Requirements**
We cannot make an award to you unless you comply with SAM requirements. If you are non-compliant, we may determine you are not qualified to receive an award, and use that determination to make an award to someone else as authorized by 2 CFR 25.205(b).

You cannot receive payments without an active SAM record and CAGE code.

7. SUBMISSION DATES AND TIMES

a. Pre-Proposal Inquiries and Questions Deadline

You must submit all pre-proposal inquiries and questions not later than April 23, 2021. You should submit your questions in writing by electronic mail. You should include the announcement number in the subject line. You may contact the administering agency contacts by telephone, but email is preferred. We discuss this again in section G. Agency Contacts.

Our replies will be provided as soon as practicable. We estimate all our answers will be provided not later than Friday, April 30, 2021.

b. How Submission Time for Pre-Proposal Inquiries and Questions is Determined

We use the date and time stamp on your email to determine when you submitted pre-proposal correspondence.

c. Effect of Missing Pre-Proposal Inquiries and Questions Deadlines

We may not be able to provide responses or answers to late inquiries or questions.

d. Proposal Submission Deadline

We must receive your validated proposal electronically through Grants.gov not later than Friday, May 21, 2021 at 11:59 PM Eastern Daylight Time. This is the final due date.

You are responsible for making sure your application is submitted, received, and validated by Grants.gov before the application deadline. If you submit your application late, your proposal cannot be evaluated or considered for an award.

(1) Timely Receipt Requirements and Proof of Timely Submission

*Online Submission:* All applications must be validated by Grants.gov by Friday, May 21, 2021 at 11:59 PM Eastern Daylight Time. Proof of timely submission is automatically recorded 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.

A second confirmation is provided by email when your application has passed Grants.gov validation and the status is updated from received to validated. **Your application is not complete until you receive the validation confirmation.** Your submission must be validated before the submission deadline.

When the administering agency successfully retrieves the application from Grants.gov, and acknowledges the download of submissions, Grants.gov will
provide an electronic acknowledgement of receipt of the application to the email address of the applicant with the AOR role.

Applications received by Grants.gov after the established due date will be counted as late and will not be considered for funding by the administering agency.

(2) 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. Grants.gov Tracking Number is Application Receipt

Grants.gov generates a confirmation page when you submit your application. A second confirmation is provided by email when your application has passed Grants.gov validation and the status is updated from received to validated. **Your application is not complete until you receive the validation confirmation.**

The validation confirmation page includes a system-generated Grants.gov tracking number; this serves as your receipt. Please keep a copy of all confirmations.

You can verify the submission time and application status with your tracking number through Grants.gov at [https://www.grants.gov/web/grants/applications/track-my-application.html](https://www.grants.gov/web/grants/applications/track-my-application.html).

f. Effect of Missing the Proposal Submission Deadline

Grants.gov will not accept your proposal after the submission deadline.

We will not accept proposals submitted other than electronically through Grants.gov.

8. INTERGOVERNMENTAL REVIEW

N/A – This program is excluded from coverage under Executive Order (E.O.) 12372.

9. FUNDING RESTRICTIONS

a. Award Value Limits and Exceptions

With few exceptions, a DURIP award provides between $50,000 and $1,500,000 in DoD funding for the purchase of major equipment or instrumentation. Section C.3.b, **Amount of Requested DoD Funding** contains this information as well.

(1) Exceptions

You may submit a proposal to purchase major equipment or instrumentation costing more than $1,500,000 under either of the following two (2) conditions:

Your proposal contains a firm commitment from your institution to provide voluntary committed cost sharing or matching so the cost to DoD remains $1,500,000 or less; or,

Your proposal requests the administering agency that receives your proposal to grant an exception to the $1,500,000 maximum amount of DoD funding. At the
administering agency’s discretion, your proposal may be considered if it is warranted by a priority defense research need or needs.

Exceptions to the $1,500,000 limit are expected to be rare. We strongly recommend you communicate with the administering agency before you submit any formal proposal,

(2) We do not limit the number of applications you can submit under this announcement.

b. DURIP Specific Funding Restrictions

This section supplements the information in section C.3.a. Types of Equipment and Instrumentation. You can contact us using the information in section G. Agency Contacts if you want to find out if we can consider an item you are not sure about.

<table>
<thead>
<tr>
<th>ALLOWABLE DURIP COSTS</th>
<th>UNALLOWABLE DURIP COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition of major equipment or instrumentation consistent with the evaluation</td>
<td>Construction of modification of buildings, building support systems such as heating,</td>
</tr>
<tr>
<td>criteria, including: reasonable costs for design, construction, assembly, and/or</td>
<td>ventilation, or air conditioning, plumbing, or electrical, or fixed equipment such as</td>
</tr>
<tr>
<td>installation by external contractors or university technicians or engineers</td>
<td>clean rooms or fume hoods</td>
</tr>
<tr>
<td>Computers for DoD-relevant research programs consistent with the evaluation criteria</td>
<td>Costs for continued operation and maintenance, including extended warranties</td>
</tr>
<tr>
<td></td>
<td>Purely instructional equipment</td>
</tr>
<tr>
<td></td>
<td>General purpose computing facilities</td>
</tr>
<tr>
<td></td>
<td>Direct salaries of faculty, postdoctoral associates, or students</td>
</tr>
<tr>
<td></td>
<td>Costs that are not allowable under 2 CFR 200 Subpart E – Cost Principles</td>
</tr>
</tbody>
</table>

c. Anticipated Announcement and Award Dates

(1) We expect to announce our selection in Fall 2021, followed by acceptance/declination letters or emails to applicants. These notices are not an authorization to commit or expend funds.

(2) We anticipate awards will be in place by February 1, 2022, subject to availability of funds. You must use February 1, 2022 as the anticipated start date in your proposal and budget. The actual effective date is not final until a grant is awarded.

(3) Grants will be awarded by individual administering agencies: Army Research Office, Office of Naval Research, and Air Force Office of Scientific Research.
d. **Pre-Award Costs**

1. Grants include up to ninety (90) calendar days pre-award costs in accordance with 2 CFR 200.308(d)(4) and/or the DoD Research and Development General Terms and Conditions, January 2021 (DoD T&C).

2. The date pre-award costs become allowable is determined by subtracting ninety (90) days from the beginning of the period of performance listed on the awarded grant unless your grant specifies otherwise.

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

4. Our prior written approval is required by 2 CFR 200.308(d)(2) for more than ninety (90) days pre-award costs. Approval of more than ninety (90) days pre-award costs will only be considered before an award is made. Requests for more than one hundred-eighty (180) days pre-award costs will not be considered.

   Your business office must request prior approval of more than ninety (90) days pre-award costs during negotiations. This request must be in writing and include a specific date you want us to consider.

   You are responsible for documenting why pre-award costs are necessary and essential to the effort.

   If we approve your request, the date pre-award costs become allowable will be the specific date specified in the grant document.

e. **Other Submission Requirements**

   You must submit your application through Grants.gov.

**E. APPLICATION REVIEW INFORMATION**

1. **CRITERIA**

   a. **Evaluation Criteria**

   We have three (3) evaluation criteria for this competition. The criteria are of equal importance to each other.

   1. The impact of your proposed equipment or instrumentation on research DoD funds, or plans to fund, and/or the likelihood your proposed equipment or instrumentation will enhance current research capabilities or establish new research capabilities relevant to DoD areas of interest; and,

   2. The importance and priority to DoD missions of research your proposed equipment or instrumentation will support; and,

   3. The potential your proposed equipment or instrumentation offers to enhance your institution’s ability to educate future scientists and engineers through research conducted with the proposed equipment in disciplines important to DoD missions.
You should show strength in as many of the evaluation areas as practicable to demonstrate maximum competitiveness.

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

2. REVIEW AND SELECTION PROCESS

a. Merit-Based, Competitive Procedures

We will impartially evaluate and select proposals submitted under this announcement for possible award on a competitive basis according to Public Law 98-369, the Competition in Contracting Act of 1984, 10 U.S.C. 2361, and 10 U.S.C. 2374 using merit-based, competitive procedures.

We will use a multi-stage evaluation procedure as follows:

(1) The responsible administering agency Program Manager or Officer and other Government technical experts will evaluate proposals;

(2) Administering agency officials will recommend proposal for funding based on the technical evaluators’ evaluations;

(3) In coordination with the Office of the Director for Basic Research in the Office of the Under Secretary of Defense, we will reconcile overlaps and coordinate complimentary efforts to ensure the greatest possible impact with the funds available.

Proposal selection and award decisions are solely the responsibility of Government personnel. We may use support contractors or peers external to the Government to administratively process proposals, act as subject-matter-expert technical consultants, or review proposed costs. We require each support contractor employee or peer to sign a non-disclosure and conflict of interest statement prior to providing or disclosing any proposal information received under this announcement.

If you include the restrictive notice described in D.4.f. Marking of Proposals with Confidential or Proprietary Information, you must include language that lets us provide your proposal information to our support contractors or peers. We may not be able to consider your proposal if you do not include this release.

b. Cost Analysis

If your proposal is selected for possible award, we will analyze the cost of the work for realism and reasonableness. The cost of your proposal is considered, but is not an evaluation factor or criterion.

We must make sure the costs you propose are reasonable and realistic before we can make an award.

F. FEDERAL AWARD ADMINISTRATION INFORMATION

1. SELECTION NOTICES
a. **Electronic Notification**

If your proposal is selected for possible award, you will receive a notice.

b. **Selection for Possible Award Does Not Authorize Work**

A selection notice is not an authorization to start work, and is not an award guarantee.

The administering agency will contact your business office to get answers to any questions about your proposal and negotiate specific award terms.

2. **AWARD NOTICES**

a. **Federal Award Document**

A grant signed by a warranted Grants Officer is the only official notice that an award has been made.

b. **Electronic of Mail Federal Award Distribution**

ARO and AFOSR award documents are sent to your business office by email or mail. This is called award distribution. We always ask your business office to forward the award to the Principal Investigator indicated on the award document. For ONR awards, your business office and Principal Investigator will be notified by email about availability of the award from the **Electronic Document Access (EDA) website**.

3. **ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS**

a. **Reporting on Matters Related to Recipient Integrity and Performance**

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

b. **Agency Review of Risk Pose by Applicants**

1. We must review information available about you and entities included in your proposal through the Office of Management and Budget (OMB) designated repositories of government-wide eligibility qualification and financial integrity information. Our risk review is required by 31 U.S.C. 3321 and 41 U.S.C. 2313, and includes both public and non-public information. You must be qualified as described at 32 CFR 22.415 to receive an award.

2. We must consider the non-public segment of the Federal Awardee Performance and Integrity Information System (FAPIIS) for all awards exceeding the current simplified acquisition threshold of $250,000.

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

We may make an award to a recipient who does not fully meet our standards as described at 2 CFR 200.205(a)(2) if it is determined that the information is not relevant to the current Federal award under consideration or there are specific conditions that can appropriately mitigate the effects of the non-Federal entity’s risk in accordance with 2 CFR 200.207.

(4) We must comply with the guidelines on government-wide suspension and debarment described in 2 CFR 200.213, and must require you to comply with these provisions. These provisions restrict Federal awards, sub-awards and contracts with certain parties that are debarred, suspended or otherwise excluded from or ineligible for participation in Federal programs or activities.

c. Cross-Cutting National Policy Requirements

You must comply with all applicable national policy requirements. Key national policy requirements may be found in the DoD Research and Development General Terms and Conditions, January 2021 (DoD T&C), and Appendix B to 32 CFR Part 22—“Suggested Award Provisions for National Policy requirements that Often Apply,” incorporated here by reference.

The full internet address for the DoD T&C is provided in section F.3.f. below.

d. Equipment Vesting

In keeping with the provisions of 31 U.S.C. 6306 as implemented at 2 CFR 200.313, and the intent of this program to increase university capabilities to conduct DoD-relevant research and research-related education, equipment title will be vested with the university upon purchase without further obligation to the government unless the terms and conditions of your award specify otherwise.

e. Uniform Administrative Requirements, Cost Principles, and Audit Requirements


These terms and conditions are incorporated by reference into this announcement.
f. DoD Research and Development General Terms and Conditions

DoD Research and Development General Terms and Conditions, January 2021 (DoD T&C) found at https://www.onr.navy.mil/Contracts-Grants/submit-proposal/grants-proposal/grants-terms-conditions.aspx may apply to your award. If DoD updates our DoD T&C, the updated version may apply to your award.

These terms and conditions are incorporated by reference into this announcement.

g. Recipients Other Than Individuals

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

h. Minimum Record Retention Requirements

You must keep records related to our awards for at least three (3) years after it is completed and the final Federal Financial Report is submitted. This requirement is described further in 2 CFR 200.333, incorporated here by reference.

The DoD T&C OAR Article II describes additional records retention and access requirements.

Sometimes records must be retained for more than three (3) years.

i. Section 889 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2019

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).
(a) 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).
(b) Telecommunications or video surveillance services provided by such entities or using such equipment.
(c) 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.

(3) See Public Law 115-232, section 889 for additional information.

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

4. REPORTING

a. Monitoring and Reporting Program Performance

You must provide a final performance report to confirm you have accomplished your award objectives by acquiring and using the equipment or instrumentation purchased. You must submit your report on time. Your award document will indicate when the report is due.


SPECIAL NOTE: Pending Federal-wide Research Progress Performance Report (RPPR) Format
We are working on a Federal-wide Research Progress Performance Report (RPPR) for interim, annual, and final research performance reports. You do not have to use the RPPR right now. DoD plans to use the report in the future.

We may issue an award modification that requires you to use the Government-wide RPPR after a final notice is issued in the Federal Register.

b. **Standard Form (SF) 425 Federal Financial Report**


c. **Electronic Payment Requests and Electronic Payment**

(1) You must submit payment requests electronically using the Invoicing, Receipt, Acceptance, and Property Transfer (iRAPT) application. All payments must be made using the electronic funds transfer (EFT) method.

(2) You must register to use iRAPT. You accomplish registration using Wide Area Workflow (WAWF) e-Business Suite at [https://wawf.eb.mil](https://wawf.eb.mil). The website includes registration instructions.

(3) If you have WAWF or iRAPT questions or problems, you can get help by telephone at (866) 618-5988 or (801) 605-7095, but electronic mail at disa.ogden.esd.mbx.cscassig@mail.mil, or by Internet at [https://wawf.eb.mil/xhtml/unauth/web/homepage/vendorCustomerSupport.xhtml](https://wawf.eb.mil/xhtml/unauth/web/homepage/vendorCustomerSupport.xhtml).

d. **Electronic Submission of Technical and SF 425 Reports**

You must plan on submitting reports electronically. Your award document will provide specific instructions.

G. **AGENCY CONTACTS**

You should submit your questions in writing by electronic mail. You should include the announcement number in the subject line. You may contact administering agency contacts by telephone, but email is preferred.

1. **ADMINISTERING AGENCY CONTACTS**

We encourage you to contact the Program Managers listed in our broad agency announcements identified in section **A. Program Description** before submitting proposals to explore research areas of mutual interest to you and us.

If you need help with general questions or problems, please contact one of the administering agency contacts below.

You must contact us not later than **Friday, 23 April, 2021** or we may not be able to reply.

**Army Research Office**
H. OTHER INFORMATION

1. AIR FORCE OMBUDSMAN

(a) An Ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and others for this agreement. When requested, the Ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the Ombudsman does not affect the authority of the Government Program Officer, Grants Officer, or evaluation officials. Further, the Ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of protests or formal grant/cooperative agreement disputes. The Ombudsman may refer the party to another official who can resolve the concern.

(b) Before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the Grants Officer for resolution. Consulting the Ombudsman does not alter or postpone the timelines for any other processes.

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

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

(e) Do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries must be directed to the Grants Officer.

2. GRANTS OFFICER’S AUTHORITY
Grants Officers acting within their warranted capacity are the only individuals legally authorized to make commitments or bind the Government for any matter related to this announcement.

No other individuals are authorized to make commitments or otherwise bind the Government.