DEPARTMENT OF THE NAVY (DON)
2026 DoW Small Business Technology Transfer (STTR) BAA
Release 5
Proposal Submission Instructions

IMPORTANT

- **The following instructions apply to STTR topics only:**
  - **DON26TZ05-NV022 through DON26TZ05-NV024**
- Submitting small business concerns (SBCs) are encouraged to thoroughly review the DoW SBIR/STTR Program Broad Agency Announcement (BAA) and register for the DSIP Listserv to remain apprised of important programmatic changes.
  - The DoW Program BAA is located at: https://www.defensesbirsttr.mil/SBIR-STTR/Opportunities/#announcements. Select the tab for the appropriate BAA cycle.
  - Register for the DSIP Listserv at: https://www.dodsbirsttr.mil/submissions/login.
- The information provided in the DON Proposal Submission Instructions takes precedence over the DoW Instructions posted for this BAA.
- **DON Phase I Technical Volume (Volume 2) page limit is not to exceed 10 pages.**
- Phase I Technical Volume (Volume 2) and Supporting Documents (Volume 5) templates, specific to DON topics, are available at https://www.navysbir.com/links_forms.htm.
- The DON may consider the following FAR and Non-FAR contract strategies when issuing Phase I awards: Firm Fixed Price (FFP), Basic Ordering Agreement (BOA), or Prototype Other Transaction (OT). The DON may consider the following FAR and Non-FAR contracting strategies when issuing Phase II awards: Cost Plus Fixed Fee (CPFF), FFP, BOA, or Prototype OT.
- This BAA is issued under regulations set forth in Federal Acquisition Regulation (FAR) 35.016 and awards will be made under "other competitive procedures". The policies and procedures of FAR Subpart 15.3 shall not apply to this BAA, except as specifically referenced in it. All procedures are at the sole discretion of the Government as set forth in this BAA. Submission of a proposal in response to this BAA constitutes the express acknowledgement to that effect by the proposing SBC.

INTRODUCTION

The DON SBIR/STTR Programs are mission-oriented programs that integrate the needs and requirements of the DON's Fleet through research and development (R&D) topics that have dual-use potential, but primarily address the needs of the DON. More information on the programs can be found on the DON SBIR/STTR website at www.navysbir.com. Additional information on DON's mission can be found on the DON website at www.navy.mil.

For questions regarding this BAA, use the information in Table 1 to determine who to contact for what types of questions.

TABLE 1: POINTS OF CONTACT FOR QUESTIONS REGARDING THIS BAA

Type of Question	When	Contact Information
Program and administrative	Always	Navy SBIR/STTR Program Management Office usn.pentagon.cnr-arlington-va.mbx.navy-sbir-sttr@us.navy.mil or appropriate Program Manager listed in Table 2 (below)
Topic-specific technical questions	BAA Pre-release	Technical Point of Contact (TPOC) listed in each topic on the DoW SBIR/STTR Innovation Portal (DSIP). Refer to the Proposal Submission section of the DoW SBIR/STTR Program BAA for details.
	BAA Open	DoW SBIR/STTR Topic Q&A platform (https://www.dodsbirsttr.mil/submissions) Refer to the Proposal Submission section of the DoW SBIR/STTR Program BAA for details.
Electronic submission to the DoW SBIR/STTR Innovation Portal (DSIP)	Always	DSIP Support via email at dodsbirsupport@reisystems.com
Navy-specific BAA instructions and forms	Always	DON SBIR/STTR Program Management Office usn.pentagon.cnr-arlington-va.mbx.navy-sbir-sttr@us.navy.mil

TABLE 2: DON SYSTEMS COMMANDS (SYSCOM) STTR PROGRAM MANAGERS

Topic Numbers	Point of Contact	SYSCOM	Email
DON26TZ05-NV022 to DON26TZ05-NV024	Ms. Kristi DePriest	Naval Air Systems Command (NAVAIR)	navair-sbir@us.navy.mil

PHASE I SUBMISSION INSTRUCTIONS

The following section details requirements for submitting a compliant Phase I Proposal to the DoW SBIR/STTR Programs.

(NOTE: Proposing SBCs are advised that support contract personnel will be used to carry out administrative functions and may have access to proposals, contract award documents, contract deliverables, and reports. All support contract personnel are bound by appropriate non-disclosure agreements.)

DoW SBIR/STTR Innovation Portal (DSIP). Proposing SBCs are required to submit proposals via the DoW SBIR/STTR Innovation Portal (DSIP); and follow proposal submission instructions in the DoW SBIR/STTR Program BAA on the DSIP at https://www.dodsbirsttr.mil/submissions. Proposals submitted by any other means will be disregarded. Proposing SBCs submitting through DSIP for the first time will be asked to register. It is recommended that SBCs register as soon as possible upon identification of a proposal opportunity to avoid delays in the proposal submission process. Proposals that are not

successfully certified electronically in DSIP by the Corporate Official prior to BAA Close will NOT be considered submitted and will not be evaluated by DON. Proposals that are encrypted, password protected, or otherwise locked in any portion of the submission will be REJECTED unless specifically directed within the text of the topic to which you are submitting. Please refer to the DoW SBIR/STTR Program BAA for further information.

Proposal Volumes. The following seven volumes are required.

- **Proposal Cover Sheet (Volume 1).** As specified in DoW SBIR/STTR Program BAA.

- **Technical Proposal (Volume 2)**
  - Technical Proposal (Volume 2) must meet the following requirements or the proposal will be REJECTED:
    - Not to exceed 10 pages, regardless of page content
    - Single column format, single-spaced typed lines
    - Standard 8 ½" x 11" paper
    - Page margins one inch on all sides. A header and footer may be included in the one-inch margin.
    - No font size smaller than 10-point
    - Include, within the 10-page limit of Volume 2, an Option that furthers the effort in preparation for Phase II and will bridge the funding gap between the end of Phase I and the start of Phase II. Tasks for both the Phase I Base and the Phase I Option must be clearly identified. Phase I Options are exercised upon selection for Phase II.
    - Work proposed for the Phase I Base must be exactly six (6) months.
    - Work proposed for the Phase I Option must be exactly six (6) months.

  - Additional information:
    - A Phase I proposal template specific to DON to meet Phase I requirements is available at https://navysbir.com/links_forms.htm.
    - A font size smaller than 10-point is allowable for headers, footers, imbedded tables, figures, images, or graphics that include text. However, proposing SBCs are cautioned that if the text is too small to be legible it will not be evaluated.

- **Cost Volume (Volume 3).**
  - Cost Volume (Volume 3) must meet the following requirements or the proposal will be REJECTED:
    - The Phase I Base amount must not exceed $200,000.
    - Phase I Option amount must not exceed $115,000.
    - Costs for the Base and Option must be separated and clearly identified in Volume 3.
    - For Phase I a minimum of 40% of the work is performed by the proposing SBC, and a minimum of 30% of the work is performed by the single research institution. The percentage of work requirement must be met in the Base costs as well as in the Option costs. The percentage of work is measured by both direct and indirect costs. To calculate the minimum percentage of effort for the proposing SBC the sum of all direct and indirect costs attributable to the proposing SBC represent the numerator and the total cost of the proposal (i.e., Total Cost before Profit Rate is applied) is the denominator. The single research institution percentage is calculated by taking the sum of all costs attributable to the single research institution (identified as Total Subcontractor Costs (TSC) 1 in DSIP Cost Volume) as the numerator and the total cost of the proposal (i.e., Total Cost before Profit Rate is applied) as the denominator.

- Proposing SBC Costs (included in numerator for calculation of the SBC):
  - Total Direct Labor (TDL)
  - Total Direct Material Costs (TDM)
  - Total Direct Supplies Costs (TDS)
  - Total Direct Equipment Costs (TDE)
  - Total Direct Travel Costs (TDT)
  - Total Other Direct Costs (TODC)
  - General & Administrative Cost (G&A)

  NOTE: G&A, if proposed, will only be attributed to the proposing SBC.
- Research Institution (numerator for Research Institution calculation):
  - Total Subcontractor Costs (TSC) 1
- Total Cost (i.e., Total Cost before Profit Rate is applied, denominator for either calculation)

— **Cost Sharing: Cost sharing is not accepted on DON Phase I proposals. A value above or below $0.00 entered in the Cost Sharing field will not be considered in the Phase I contract award.**

- Additional information:
  - Provide sufficient detail for subcontractor, material, and travel costs. Subcontractor costs must be detailed to the same level as the prime contractor. Material costs must include a listing of items and cost per item. Travel costs must include the purpose of the trip, number of trips, location, length of trip, and number of personnel.
  - Inclusion of cost estimates for travel to the sponsoring SYSCOM's facility for one day of meetings is recommended for all proposals.
  - The "Additional Cost Information" of Supporting Documents (Volume 5) may be used to provide supporting cost details for Volume 3. When a proposal is selected for award, be prepared to submit further documentation to the SYSCOM Contracting Officer to substantiate costs (e.g., an explanation of cost estimates for equipment, materials, and consultants or subcontractors).

- **Company Commercialization Report (Volume 4)**. DoW collects and uses Volume 4 and DSIP requires Volume 4 for proposal submission. Please refer to the Proposal Preparation Instructions and Requirements section of the DoW SBIR/STTR Program BAA for details to ensure compliance with DSIP Volume 4 requirements.

- **Supporting Documents (Volume 5).** Volume 5 is for the submission of administrative material that DON may or will require to process a proposal, if selected, for contract award.

  All proposing SBCs must review and submit the following items, as applicable:

  - **Allocation of Rights.** Required for all SBCs proposing to STTR. In accordance with the SBIR and STTR Policy Directive section 8(b) and DFARS 252.227-7040, the proposing SBC must submit this agreement as an upload as a separate PDF file in Volume 5, Supporting Documents. The STTR Allocation of Rights template must be used and is available on https://navysbir.com/links_forms.htm. Please refer to the Proposal Preparation Instructions and Requirements section of the DoW STTR Program BAA for information on this requirement.

- Proposing SBCs may include the following administrative materials in Supporting Documents (Volume 5); a template is available at https://navysbir.com/links_forms.htm to provide guidance on optional material the proposing SBC may want to include in Volume 5:
    - Additional Cost Information to support the Cost Volume (Volume 3)
    - SBIR/STTR Funding Agreement Certification
    - Data Rights Assertion
    - Disclosure of Information (DFARS 252.204-7000)
    - Prior, Current, or Pending Support of Similar Proposals or Awards
    - Foreign Citizens
- Details of Request for Discretionary Technical and Business Assistance (TABA), if proposed, is to be included under the Additional Cost Information section if using the DON Supporting Documents template.
- Do not include documents or information to substantiate the Technical Volume (Volume 2) (e.g., resumes, test data, technical reports, or publications). Such documents or information will not be considered.
- A font size smaller than 10-point is allowable for documents in Volume 5; however, proposing SBCs are cautioned that the text may be unreadable.

- **Fraud, Waste and Abuse Training Certification (Volume 6)**. DoW requires Volume 6 for submission. Please refer to the Proposal Preparation Instructions and Requirements section of the DoW SBIR/STTR Program BAA for details.

- **Disclosures of Foreign Affiliations or Relationships to Foreign Countries (Volume 7)**. In accordance with 15 U.S.C. §638(vv) and the SBA SBIR/STTR Policy Directive, the DoW will review all proposals submitted in response to this BAA to assess security risks presented by SBCs seeking a Federally funded award. SBCs must complete the Disclosures of Foreign Affiliations or Relationships to Foreign Countries webform in Volume 7 of the DSIP proposal submission. Please refer to the Proposal Preparation Instructions and Requirements section of the DoW SBIR/STTR Program BAA for details.

PHASE I EVALUATION AND SELECTION

The following section details how the DON SBIR/STTR Programs will evaluate Phase I proposals.

Proposals meeting DSIP submission requirements will be forwarded to the DON SBIR/STTR Programs. Prior to evaluation, all proposals will undergo a compliance review to verify compliance with DoW and DON SBIR/STTR proposal eligibility requirements. Proposals not meeting submission requirements will be REJECTED and not evaluated.

- **Proposal Cover Sheet (Volume 1).** The Proposal Cover Sheet (Volume 1) will undergo a compliance review to verify the proposing SBC has met eligibility requirements and followed the instructions for the Proposal Cover Sheet as specified in the DoW SBIR/STTR Program BAA.

- **Technical Volume (Volume 2).** The DON will evaluate and select Phase I proposals using the evaluation criteria specified in the Method of Selection and Evaluation Criteria section of the DoW SBIR/STTR Program BAA, with technical merit being most important, followed by qualifications of key personnel and commercialization potential of equal importance. The information considered for this decision will come from Volume 2. This is not a FAR Part 15 evaluation and proposals will not be compared to one another. Cost is not an evaluation criterion and will not be considered during the evaluation process; the DON will only do a compliance review of Volume 3. Due to limited funding, the DON reserves the right to limit the number of awards under any topic.

The Technical Volume (Volume 2) will undergo a compliance review (prior to evaluation) to verify the proposing SBC has met the following requirements or the proposal will be REJECTED:

- Not to exceed 10 pages, regardless of page content
- Single column format, single-spaced typed lines
- Standard 8 ½" x 11" paper
- Page margins one inch on all sides. A header and footer may be included in the one-inch margin.
- No font size smaller than 10-point, except as permitted in the instructions above.
- Include, within the 10-page limit of Volume 2, an Option that furthers the effort in preparation for Phase II and will bridge the funding gap between the end of Phase I and the start of Phase II. Tasks for both the Phase I Base and the Phase I Option must be clearly identified.
- Work proposed for the Phase I Base must be exactly six (6) months.
- Work proposed for the Phase I Option must be exactly six (6) months.

- **Cost Volume (Volume 3).** The Cost Volume (Volume 3) will not be considered in the selection process and will only undergo a compliance review to verify the proposing SBC has met the following requirements or the proposal will be REJECTED:
  - Must not exceed values for the Base ($200,000) and Option ($115,000).
  - Must meet minimum percentage of work; 40% of the work is performed by the proposing SBC, and a minimum of 30% of the work is performed by the single research institution. The percentage of work requirement must be met in the Base costs as well as in the Option costs.
  - **Cost Sharing: Cost sharing is not accepted on DON Phase I proposals. A value above or below $0.00 is entered in the Cost Sharing field will not be considered in the Phase I contract award.**

- **Company Commercialization Report (Volume 4).** The CCR (Volume 4) will not be evaluated by the DON nor will it be considered in the award decision. However, all proposing SBCs must refer to the DoW SBIR/STTR Program BAA to ensure compliance with DSIP Volume 4 requirements.

- **Supporting Documents (Volume 5).** Supporting Documents (Volume 5) will not be considered in the selection process and will only undergo a compliance review to ensure the proposing SBC has included items in accordance with the PHASE I SUBMISSION INSTRUCTIONS section above.

- **Fraud, Waste, and Abuse Training Certificate (Volume 6).** Not evaluated.

- **Disclosures of Foreign Affiliations or Relationships to Foreign Countries (Volume 7)**. Disclosures of Foreign Affiliations or Relationships to Foreign Countries (Volume 7) will be assessed as part of the Foreign Risk Evaluation (FRE) Program to Assess Security Risks. Refer to the DoW SBIR/STTR Program BAA to ensure compliance with Volume 7 requirements.

ADDITIONAL SUBMISSION CONSIDERATIONS

This section details additional items for proposing SBCs to consider during proposal preparation and submission process.

Foreign Risk Evaluation (FRE) Program to Assess Security Risks. 15 U.S.C. §638(vv) requires the Department of War, in coordination with the Small Business Administration, to establish and implement a due diligence program, known as Foreign Risk Evaluation (FRE) Program, to assess and, when possible, mitigate security risks presented by SBCs seeking a Federally funded award. Please review the

Certifications and Registrations section of the DoW SBIR/STTR Program BAA for details on how DoW will assess security risks presented by SBCs. The FRE Program to Assess Security Risks will be implemented for all Phases.

Discretionary Technical and Business Assistance (TABA). The Small Business Innovation and Economic Security Act Section 7 mandates agencies offer TABA. The purpose of TABA is to assist awardees in making better technical decisions on SBIR/STTR projects; solving technical problems that arise during SBIR/STTR projects; minimizing technical risks associated with SBIR/STTR projects; commercializing the SBIR/STTR product or process, including intellectual property protections and cybersecurity assistance; and screening for potential foreign involvement in technology development or commercialization activities. TABA services can be provided through vendor(s) selected by the SBC or the SBC may propose use of TABA funding to hire new staff, augment staff, or direct staff to conduct or participate in training activities consistent with the purpose of TABA as detailed above. The Phase I TABA amount, if proposed, cannot include any profit/fee by the proposing SBC and must be inclusive of all applicable indirect costs. TABA cannot be used in the calculation of general and administrative expenses (G&A) for the SBIR proposing SBC. An SBC receiving TABA will be required to submit a report detailing the results and benefits of the service received. This TABA report will be due at the time of submission of the final report.

Request for TABA funding will be reviewed by the DON SBIR/STTR Program Management Office.

If proposing a TABA Provider, the following MUST be included in the request or be subject to denial.

- Provider(s)
- Provider(s) point of contact, email address, and phone number
- An explanation of the provider's unique qualifications to provide the TABA service
- Tasks that will be performed by the provider (to include the purpose and objective of the assistance)
- Total provider(s) cost, number of hours, and labor rates (average/blended rate is acceptable)

If proposing TABA funding to hire new staff, augment staff, or direct staff to conduct or participate in training activities consistent with the purpose of TABA, the following MUST be included or be subject to denial.

- Name(s), position(s), business need to be filled, and/or training to be provided
- Number of employees to be hired, augmented, or directed to participate in training activities
- Qualifications of employees hired or augmented, or detailed need for training
- Tasks that will be performed (to include the purpose and objective of the assistance)
- Total staff/training cost, number of hours, and labor rates (average/blended rate is acceptable)

TABA requests must be included in the proposal as follows:

- Phase I:
    - — Online DoW Cost Volume (Volume 3) – the value of the TABA request.
    - — Supporting Documents (Volume 5) – a detailed request for TABA (as specified above) specifically identified as "TABA" in the section titled Additional Cost Information when using the DON Supporting Documents template.
- Phase II:
    - — DON Phase II Cost Volume (provided by the DON SYSCOM) - the value of the TABA request.
    - — Supporting Documents (Volume 5) – a detailed request for TABA (as specified above) specifically identified as "TABA" in the section titled Additional Cost Information when using the DON Supporting Documents template.

Proposed values for TABA must NOT exceed:

- Phase I: A total of $6,500, in addition to the Phase I award amount.
- Phase II: A total of $25,000 per award, not to exceed $50,000 per Phase II project, included in the Phase II award amount.

Disclosure of Information (DFARS 252.204-7000). In order to eliminate the requirements for prior approval of public disclosure of information (in accordance with DFARS 252.204-7000) under this award, the proposing SBC shall identify and describe all fundamental research to be performed under its proposal, including subcontracted work, with sufficient specificity to demonstrate that the work qualifies as fundamental research. Fundamental research means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reasons (defined by National Security Decision Directive 189). An SBC whose proposed work will include fundamental research and requests to eliminate the requirement for prior approval of public disclosure of information must complete the DON Fundamental Research Disclosure and upload as a separate PDF file to the Supporting Documents (Volume 5) in DSIP as part of their proposal submission. The DON Fundamental Research Disclosure is available on https://navysbir.com/links_forms.htm and includes instructions on how to complete and upload the completed Disclosure. Simply identifying fundamental research in the Disclosure does **NOT** constitute acceptance of the exclusion. All exclusions will be reviewed and, if approved by the Government Contracting Officer, noted in the contract.

Partnering Research Institutions. The Naval Academy, the Naval Postgraduate School, and other military academies are Government organizations but qualify as partnering research institutions. However, DON laboratories DO NOT qualify as research partners. DON laboratories may be proposed only IN ADDITION TO the partnering research institution.

System for Award Management (SAM). It is strongly encouraged that proposing SBCs register in SAM, https://sam.gov, by the Close date of this BAA, or verify their registrations are still active and will not expire within 60 days of BAA Close. Additionally, proposing SBCs should confirm that they are registered to receive contracts (not just grants) and the address in SAM matches the address on the proposal. An SBC selected for an award MUST have an active SAM registration at the time of award or they will be considered ineligible.

Cybersecurity Maturity Model Certification (CMMC) Program. DoW has established the CMMC Program to verify that awardees have implemented required security measures necessary to safeguard Federal Contract Information (FCI) and Controlled Unclassified Information (CUI). CMMC Level requirements are identified within each topic and must be met prior to award. Proposing SBCs should anticipate that a Projected CMMC Level for Phase II award may be higher than the Projected CMMC Level advertised in the Phase I topic. Proposing SBCs should carefully review and consider the CMMC requirements as compliance may impact proposed costs and technical approach. Please review the DoW SBIR/STTR Program BAA for additional information on the CMMC Program.

Notice of NIST SP 800-171 Assessment Database Requirement. The purpose of the National Institute of Standards and Technology (NIST) Special Publication (SP) 800-171 is to protect Controlled Unclassified Information (CUI) in Nonfederal Systems and Organizations. As prescribed by DFARS 252.240-7997, in order to be considered for award, an SBC is required to implement NIST SP 800-171 and shall have a current assessment uploaded to the Supplier Performance Risk System (SPRS) which provides storage and retrieval capabilities for this assessment. The platform Procurement Integrated Enterprise Environment (PIEE) will be used for secure login and verification to access SPRS. For brief instructions on NIST SP 800-171 assessment, SPRS, and PIEE, please visit

https://www.sprs.csd.disa.mil/nistsp.htm. For in-depth tutorials on these items please visit https://www.sprs.csd.disa.mil/webtrain.htm.

Human Subjects, Animal Testing, and Recombinant DNA. Due to the short timeframe associated with Phase I of the SBIR/STTR process, the DON does **not** recommend the submission of Phase I proposals that require the use of Human Subjects, Animal Testing, or Recombinant DNA. For example, the ability to obtain Institutional Review Board (IRB) approval for proposals that involve human subjects can take 6-12 months, and that lengthy process can be at odds with the Phase I goal for time-to-award. Before the DON makes any award that involves an IRB or similar approval requirement, the proposing SBCs must demonstrate compliance with relevant regulatory approval requirements that pertain to proposals involving human, animal, or recombinant DNA protocols. It will not impact the DON's evaluation, but requiring IRB approval may delay the start time of the Phase I award and if approvals are not obtained within two months of notification of selection, the decision to award may be terminated. If the use of human, animal, and recombinant DNA is included under a Phase I or Phase II proposal, please carefully review the requirements at: https://www.nre.navy.mil/work-with-us/how-to-apply/compliance-and-protections/research-protections. This webpage provides guidance and lists approvals that may be required before contract/work can begin.

Government Furnished Equipment (GFE). Due to the typical lengthy time for approval to obtain GFE, it is recommended that GFE is not proposed as part of the Phase I proposal. If GFE is proposed, and it is determined during the proposal evaluation process to be unavailable, proposed GFE may be considered a weakness in the technical merit of the proposal.

International Traffic in Arms Regulation (ITAR). For topics indicating ITAR restrictions or the potential for classified work, limitations are generally placed on disclosure of information involving topics of a classified nature or those involving export control restrictions, which may curtail or preclude the involvement of universities and certain non-profit institutions beyond the basic research level. Small businesses must structure their proposals to clearly identify the work that will be performed that is of a basic research nature and how it can be segregated from work that falls under the classification and export control restrictions. As a result, information must also be provided on how efforts can be performed in later phases if the university/research institution is the source of critical knowledge, effort, or infrastructure (facilities and equipment).

SELECTION, AWARD, AND POST-AWARD INFORMATION

Notifications. Email notifications for proposal receipt (approximately one week after the Phase I BAA Close) and selection are sent based on the information received on the proposal Cover Sheet (Volume 1). Consequently, the e-mail address on the proposal Cover Sheet must be correct.

Debriefs. Requests for a debrief must be made within 15 calendar days of select/non-select notification via email as specified in the select/non-select notification. Please note debriefs are typically provided in writing via email to the Corporate Official identified in the proposal of the proposing SBC within 60 days of receipt of the request. Requests for oral debriefs may not be accommodated. If contact information for the Corporate Official has changed since proposal submission, a notice of the change on company letterhead signed by the Corporate Official must accompany the debrief request.

Protests. Interested parties have the right to protest in accordance with the procedures in FAR Subpart 33.1.

Pre-award agency protests related to the terms of the BAA must be served to: osd.ncr.ousd-r-e.mbx.SBIR-STTR-Protest@mail.mil. A copy of a pre-award Government Accountability Office (GAO) protest must also be filed with the aforementioned email address within one day of filing with the GAO.

Protests related to a selection or award decision should be filed with the appropriate Contracting Officer for an Agency Level Protest or with the GAO. Contracting Officer contact information for specific DON Topics may be obtained from the DON SYSCOM Program Managers listed in Table 2 above. For protests filed with the GAO, a copy of the protest must be submitted to the appropriate DON SYSCOM Program Manager and the appropriate Contracting Officer within one day of filing with the GAO.

Awards. Due to limited funding, the DON reserves the right to limit the number of awards under any topic. Any notification received from the DON that indicates the proposal has been selected does not ultimately guarantee an award will be made. This notification indicates that the proposal has been selected in accordance with the evaluation criteria and has been sent to the Contracting Officer to conduct compliance review of Volume 3, to confirm eligibility of the proposing SBC, and to take other relevant steps necessary prior to making an award.

Contract Types. A Firm Fixed Price (FFP), Basic Ordering Agreement (BOA), or Prototype Other Transaction (OT) may be used for Phase I awards.

Funding Limitations. In accordance with the SBIR and STTR Policy Directive section 4(b)(5), there is a limit of one sequential Phase II award per SBC per topic. Additionally, to adjust for inflation DON has raised Phase I and Phase II award amounts. The maximum Phase I proposal/award amount including all options (less TABA) is $315,000. The Phase I Base amount must not exceed $200,000 and the Phase I Option amount must not exceed $115,000. The maximum Phase II proposal/award amount including all options (including TABA) is $2,000,000 (unless non-SBIR/STTR funding is being added). Individual SYSCOMs may award amounts, including Base and all Options, of less than $2,000,000 based on available funding. The structure of the Phase II proposal/award, including maximum amounts as well as breakdown between Base and Option amounts will be provided to all Phase I awardees either in their Phase I award or a minimum of 30 days prior to the due date for submission of their Initial Phase II proposal.

Contract Deliverables. Contract deliverables for Phase I are typically a kick-off brief, progress reports, and a final report. Required contract deliverables (as stated in the contract) must be uploaded to https://www.navysbirprogram.com/navydeliverables/.

Payments. The DON makes three payments from the start of the Phase I Base period, and from the start of the Phase I Option period, if exercised. Payment amounts represent a set percentage of the Base or Option value as follows:

Days from Start of Base Award or Option	Payment Amount
15 Days	50% of Total Base or Option
90 Days	35% of Total Base or Option
180 Days	15% of Total Base or Option

Transfer Between SBIR and STTR Programs. Section 4(b)(1)(i) of the SBIR and STTR Policy Directive provides that, at the agency's discretion, projects awarded a Phase I under a BAA for SBIR may transition in Phase II to STTR and vice versa.

PHASE II GUIDELINES

Evaluation and Selection. All Phase I awardees may submit an **Initial** Phase II proposal for evaluation and selection. The evaluation criteria for Phase II is the same as Phase I (as stated in the BAA). The Phase I Final Report and Initial Phase II Proposal will be used to evaluate the SBC's potential to progress to a workable prototype in Phase II and transition the technology to Phase III. Details on the due date, content, and submission requirements of the Initial Phase II Proposal will be provided by the awarding SYSCOM either in the Phase I contract or by subsequent notification.

Awards. The DON will consider the following for Phase II award: Cost Plus Fixed Fee (CPFF), Firm Fixed Price (FFP), Basic Ordering Agreement (BOA), or Prototype Other Transaction (OT). Phase II awards can be structured in a way that allows for increased funding levels based on the project's transition potential. To accelerate the transition of SBIR/STTR-funded technologies to Phase III, especially those that lead to Programs of Record and fielded systems, the Commercialization Readiness Program was authorized and created as part of section 5122 of the National Defense Authorization Act of Fiscal Year 2012. The statute set-aside is 1% of the available SBIR/STTR funding to be used for administrative support to accelerate transition of SBIR/STTR-developed technologies and provide non-financial resources for the SBCs (e.g., the Navy SBIR Transition Program, STP).

Navy SBIR Transition Program (STP). Phase II awardees have the opportunity to participate in the virtual Navy STP Kickoff during the first or second year of the Phase II contract. While there are no travel costs associated with this virtual event, Phase II awardees should budget time of up to a full day to participate. STP information can be obtained at: https://navystp.com. Phase II awardees will be contacted separately regarding this program.

PHASE III GUIDELINES

A Phase III SBIR/STTR award is any work that derives from, extends, or completes effort(s) performed under prior SBIR/STTR funding agreements, but is funded by sources other than the SBIR/STTR programs. This covers any contract, grant, or agreement issued as a follow-on Phase III award or any contract, grant, or agreement award issued as a result of a competitive process where the awardee was an SBIR/STTR firm that developed the technology as a result of a Phase I or Phase II award. The DON will give Phase III status to any award that falls within the above-mentioned description. Consequently, DON will assign SBIR/STTR Data Rights to any noncommercial technical data and noncommercial computer software delivered in Phase III that were developed under SBIR/STTR Phase I/II effort(s). Government prime contractors and their subcontractors must follow the same guidelines as above and ensure that companies operating on behalf of the DON protect the rights of the SBIR/STTR firm.

Department of the Navy
STTR DOW 2026 BAA
Topic Index
Release 5

DON26TZ05-NV022 TITLE: Compact Efficient High Energy Pulsed Laser

OUSW (R&E) CRITICAL TECHNOLOGY AREA(S): Scaled Directed Energy (SCADE)

COMPONENT TECHNOLOGY PRIORITY AREA(S): Directed Energy (DE)

PROJECTED CMMC LEVEL REQUIREMENT: Level 2 (Self)

The technology within this topic is restricted under the International Traffic in Arms Regulation (ITAR), 22 CFR Parts 120-130, which controls the export and import of defense-related material and services, including export of sensitive technical data, or the Export Administration Regulation (EAR), 15 CFR Parts 730-774, which controls dual use items. Offerors must disclose any proposed use of foreign nationals (FNs), their country(ies) of origin, the type of visa or work permit possessed, and the statement of work (SOW) tasks intended for accomplishment by the FN(s) in accordance with the Announcement. Offerors are advised foreign nationals proposed to perform on this topic may be restricted due to the technical data under US Export Control Laws.

OBJECTIVE: Develop a robust, compact, high-pulse-energy laser for airborne material ablation and penetration, focusing on repetition rate tunability and pulse energy as the highest-priority parameters.

DESCRIPTION: The primary goal of this STTR topic is to develop novel, effective methods for material ablation and penetration during airborne missions. This effort seeks innovations in long-pulse lasers intended for airborne platforms. The final deliverable will be a laser system provided to the Navy to explore the feasibility and military utility of this technology.
A successful project will document, design, and test a robust, turn-key, long-pulse laser system that meets the following performance specifications:
• Pulse Energy: 10 J or greater
• Repetition Rate: Tunable up to 40 kHz
• Pulse Generation: Capable of producing single, on-demand pulses
• Pulse Duration: Greater than 5 nanoseconds
• Thermal Management: Must adequately manage heat while operating at high repetition rates and maximum power for a duration of at least 10 seconds. (Note: This duty cycle is significantly longer than commercially available systems.)
The resulting system must be engineered for practical field use with the following characteristics:
• Compact - an optimal volume of approximately 80 inches long, 24 inches wide, and 24 inches high - with a clear path to packaging.
• Maintainable and operable by non-laser specialists, i.e., basic operations (e.g., system startup and shutdown, changing the repetition rate) should not require a laser engineer to perform manual realignment of optical components.
• Minimal required maintenance. (Note: If flashlamp pumping is used, the lamps must be exchangeable without the expertise of a laser engineer.)
Proposals should adhere to the following guidelines:
• The highest priorities for this effort are repetition rate tunability and pulse energy.
• Pulse duration and center frequency are flexible parameters but must be sufficient to demonstrate laser-material interactions.
• If the requirements for all parameters are deemed infeasible, proposals should specify what can be achieved. Evaluations will be scored accordingly.
• The use of commercial off-the-shelf (COTS) components is permitted; however, the project will require novel laser engineering to achieve the desired performance.
• Coherent beam combining is an acceptable approach to reach the specified pulse energies.

PHASE I: Establish a comprehensive and feasible concept for a plan for the laser system. Create a detailed system design, specify all necessary components, and conduct a thorough cost analysis. Validate the design's feasibility with supporting modeling and engineering calculations ensuring that the model must generate clear performance goals (e.g., pulse duration, spectral profile, pulse energy, timing diagram) that the system will aim to meet in Phase II. Provide a proof-of-concept or breadboard demonstration for any novel or high-risk concepts that are critical to the success of Phase II.
Develop a detailed Statement of Work (SOW) that includes a timeline for system development and identifies the personnel required for its successful completion. Prepare and submit required periodic progress updates to ensure the project remains on track to meet its objectives.
Prepare prototype plans to be developed under Phase II.

PHASE II: Build and validate the prototype laser system based on the design established in Phase I, which will involve continuous iteration to meet the project's demanding performance goals. Execute the design proposed in Phase I to fabricate and benchmark the system's capabilities. Continuously iterate and improve upon the design to better meet the primary goals of a tunable repetition rate and multi-Joule pulse energy.
Key Milestones
• Successful demonstration of the laser system meeting the project's core objectives.
• Measurement of penetration rates on selected material samples.
• A comprehensive assessment of the far-field beam quality.
Deliver a compact prototype or a prototype that has a clear and viable path to becoming compact, is operable by non-experts, and does not require manual movement of optical components during routine operation.

PHASE III DUAL USE APPLICATIONS: Develop and acquire a compact, ruggedized, and commercially available laser system that meets the performance thresholds defined in this topic.
The technology is expected to enter Phase III at a Technology Readiness Level (TRL) of 3/4. The Navy may seek follow-on funding for demonstrations to support further development and transition the system to TRL 6.

The technology resulting from this effort is anticipated to have broad military application. In addition, there are scientific uses, specifically in high energy physics. Machining, plasma science, and solar energy or power beaming are a few industries that may benefit from this technology.

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KEYWORDS: Pulsed laser; High average power; High repetition rate; Directed energy; Airborne laser; Coherent beam combining

DON26TZ05-NV023 TITLE: Detection and Classification of Low Probability of Intercept radar waveforms using Field-Programmable Gate Array with Cognitive Techniques

OUSW (R&E) CRITICAL TECHNOLOGY AREA(S): Quantum and Battlefield Information Dominance (Q-BID)

COMPONENT TECHNOLOGY PRIORITY AREA(S): Microelectronics

PROJECTED CMMC LEVEL REQUIREMENT: Level 2 (Self)

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OBJECTIVE: Utilize a Digital Radio Frequency Memory (DRFM) Radio Frequency System-on-Chip (RFSoC) device's Field-Programmable Gate Array (FPGA) to develop an advanced electronic warfare cognitive capability that detects advanced Low Probability Intercept (LPI) waveforms across a wideband frequency range.

DESCRIPTION: DRFMs are typically used to characterize and jam adversarial radar signals. Detecting and classifying LPI waveforms with low latency from adversarial sources is critical to DRFM effectiveness, enabling optimization of jamming countermeasures based on the identified radar type. Detecting and classifying LPI radar signals is non-trivial and requires significant computing power. Because LPI signals are typically low power, high duty cycle, and wideband, they require long integration times and high receiver sensitivity. While these Radio Frequency (RF) considerations are fundamental challenges in LPI detection, this effort will focus on signal processing techniques for LPI detection and implementation on a FPGA, with emphasis on detection methods.
Traditional signal processing methods include, but are not limited to, adaptive matched filtering with Fast Fourier Transform (FFT) frequency detection, various filter banks, autocorrelation, Wigner-Ville distribution, and cyclostationary processing. Leveraging FPGA technology may provide performance gains through more advanced cognitive techniques such as time-frequency analysis, convolutional neural networks (CNNs), and deep learning methods including long short-term memory (LSTM) networks. In fact, the FPGA is the ideal tool for this, since its hardware emulation of algorithms allows for real-time or near real-time performance.

DRFM RFSoCs targeted for Test and Evaluation (T&E) threat-representative flight systems can be retrofitted with this capability, as FPGAs can adapt hardware description language (HDL) from other implementations. Implementing this system on a DRFM platform presents challenges due to HDL requirements and the relatively recent adoption of direct-RF architectures to access wide frequency ranges.

The Airborne Threat Simulation Organization (ATSO) at the Naval Air Warfare Center, Weapons Division (NAWCWD), Point Mugu, California, is responsible for simulating real adversarial threats for Navy training. ATSO has access to extensive LPI waveform data that can support training, testing, and validation of deep learning algorithms, convolutional neural networks, or other knowledge-based techniques. Leveraging this a priori knowledge, the research institute point of contact, will identify,

optimize, and develop cognitive algorithms suited to ATSO applications. If multiple algorithms are identified, they may be implemented in parallel.
Because real-time hyperparameter adjustment on the FPGA is not practical, neural network or cognitive techniques must be designed and trained on a high-compute PC or Linux platform, if required. Other algorithms not dependent on deep learning or cognitive techniques can be developed in hardware description language (HDL) and behaviorally simulated using software such as ModelSim. Benchmarking development metrics should be straightforward, as ATSO can provide ground truth data.
An evaluation kit of the Advanced Micro Devices (AMD) (formerly Xilinx) RFSoC is proposed to prototype this capability. The final deliverable will be a report assessing the feasibility and effectiveness of implementing advanced cognitive techniques on RFSoCs.

PHASE I: Compile a large database to train and validate a conceptual model. (Note: this database can be developed using numerical computation software such as MATLAB.) Identify algorithms.
Demonstrate algorithm feasibility prior to deployment on an RFSoC platform.
Provide prototype plans to be developed under Phase II.

PHASE II: Develop additional HDL to implement the required signal processing functions. Create testbenches to measure model performance as it transitions from simulated environments (MATLAB and ModelSim) to the hardware design environment in Xilinx Vivado.
Conduct sufficient HDL validation and then deploy the design to the Xilinx RFSoC. Transmit LPI waveforms provided by the ATSO to the RFSoC using Keysight or other RF instrumentation in a laboratory benchtop environment for initial testing. The RFSoC and associated algorithms it was programmed with shall be delivered as the project's prototype.
Conduct testing to further validate system performance using facilities maintained by NAWCWD, Point Mugu. Transmit LPI waveforms over the air in an anechoic chamber to evaluate detector performance under controlled conditions.
Note: If additional funding becomes available, the DRFM detector and classifier may be integrated onto targets such as the GQM-163A to enhance live, virtual, constructive training realism. This effort would require systems engineering support to integrate the LPI detector into a flight-capable module within the space constraints of the target platform.

PHASE III DUAL USE APPLICATIONS: Finalize the hardware and firmware design for integration into a target platform such as the GQM-163A or other operational systems. Ruggedize the Phase II prototype for the intended operational environment.
Conduct comprehensive Operational Test and Evaluation (OT&E) in live, virtual, and constructive (LVC) training scenarios to validate system performance against a broad range of threats. Develop a transition plan and manufacturing process to support wider fleet deployment. Provide lifecycle support documentation for system maintenance and future algorithm updates.
This technology has significant dual-use potential in any application requiring the detection of weak or complex signals in a crowded electromagnetic spectrum. Commercial applications include:
• Telecommunications: Cognitive radio systems could use this technology to dynamically sense and adapt to spectrum usage, improving network efficiency. Techniques from this technology could also be applied to the cell phone industry, to improve links to cell towers even when in a low signal environment.
• Automotive: Advanced driver-assistance systems (ADAS) and autonomous vehicles could leverage these techniques to enable the detection and classification of radar signals from other vehicles and infrastructure, enhancing safety and reliability.
• Spectrum Monitoring: Government regulatory bodies and private companies can use this for identifying unlicensed or interfering signal sources.
• Scientific Research: Applications in radio astronomy and atmospheric sensing, where detecting faint signals in significant noise is a primary challenge.

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KEYWORDS: Low Probability Intercept; LPI; Electronic Warfare; Field-Programmable Gate Array; FPGA; RFSoC; Machine Learning; Signal Processing; Digital Radio Frequency Memory; DRFM; Radio Frequency System-on-Chip

DON26TZ05-NV024 TITLE: Lightweight, Modular Fuel Cell Systems for Unmanned Aircraft Systems

OUSW (R&E) CRITICAL TECHNOLOGY AREA(S): Contested Logistics Technologies (LOG)

COMPONENT TECHNOLOGY PRIORITY AREA(S): Renewable Energy Generation and Storage

PROJECTED CMMC LEVEL REQUIREMENT: Level 2 (Self)

OBJECTIVE: Develop a rugged, reliable, efficient fuel cell system with a high power-to-weight ratio and incorporated intelligent control algorithms and feature modularity.

DESCRIPTION: The Navy and Marine Corps are actively seeking to enhance the range, endurance, and payload capacity of their unmanned aircraft systems (UAS). In recent years, hydrogen fuel cells have emerged as a promising technology for propulsion and power systems that can improve UAS operational capabilities [Refs 1-4].
While various fuel cell types exist, proton exchange membrane (PEM) fuel cells are most prominently used for UAS applications [Refs 5-6]. However, further improvements to performance and reliability are necessary before widespread adoption into the services. This STTR topic seeks to explore any fuel cell solution that can meet the key performance, reliability, and design metrics required for integration into military UAS.
The Navy is seeking a modular fuel cell system where the stack and balance-of-plant can be adjusted to meet a range of electrical power outputs from an initial 1kW to 20kW, with the potential to exceed 100kW.
Proposals should address the following key system parameters:
• Full system power-to-weight ratio of 500 W/kg, including the thermal management system.
• Overall efficiency of 50% or greater (versus the fuel's lower heating value) when operating at half of the maximum power output.
• Rugged and reliable, capable of achieving over 200 full on/off cycles and a lifetime of 1,000+ hours with minimal maintenance.
• Startup and shutdown time of less than 10 minutes.
• Capable of operation up to 15,000 feet altitude.
• Safe and hardened for military UAS applications.
• Capable of starting and operating at both full power and idle in MIL-STD-810H basic hot and basic cold environments.
• Adherence to shock and vibration requirements [Ref 7].
• An advanced monitoring and control system to autonomously optimize control parameters, maximize system performance, and provide health monitoring and diagnostics.
Additional Considerations:
• While gaseous hydrogen is the expected fuel, solutions using other fuels will be considered, especially if they offer logistical benefits.
• Preference will be given to systems with minimal thermal and audible signatures.
• Additional consideration will be given to solutions that can withstand the high g-force requirements of tube-launched systems.

PHASE I: Develop a concept for a comprehensive design for a fuel cell system that meets the key performance parameters previously outlined. Substantiate the design concept with sufficient data, such as CAD drawings, i-V polarization curves, and/or results from modeling and simulation, to demonstrate the system's capabilities.
Demonstrate modularity by addressing two distinct power configurations: a 1 kW system with a total weight of 5 lbs, and a 10 kW system with a total weight of 40 lbs.

Clearly define the control schemes and algorithms for monitoring and autonomously controlling the fuel cell for both system configurations.
Ensure that the design demonstrates compatibility with UAS integration. (Note: To aid in this effort, the Government will provide essential UAS requirement specifications, including integration interfaces, dimensions, electrical connectors, voltage requirements, and communication protocols (e.g., CAN bus, serial).)
Provide prototype plans to be developed under Phase II.

PHASE II: Develop, fabricate, and demonstrate a fuel cell system prototype based on the design established in Phase I.
Conduct bench testing of the completed system using a UAS power profile provided by the Government to demonstrate operational performance and to demonstrate the system's initial environmental, reliability, and lifetime capabilities.
Implement and test the advanced control system to demonstrate that it optimizes the fuel cell's performance while providing diagnostics and prognostics on system health.
Collaborate with a UAS manufacturer selected by the Government to integrate and demonstrate the fuel cell system.

PHASE III DUAL USE APPLICATIONS: Transition the fuel cell system to a fully integrated and manufacturable product by developing a robust manufacturing process; demonstrating Low-Rate Initial Production (LRIP) capability to deliver the fuel cell systems at scale; continuing collaboration with a UAS manufacturer to deliver a fully integrated product that provides improved operational capability; and demonstrating the performance of the integrated UAS in various operational exercises and scenarios.
The fuel cell technology developed in this topic offers significant benefits for the private sector. Commercial UAS vendors exploring fuel cell systems to improve platform endurance could adopt this technology as a drop-in replacement. Furthermore, existing applications that currently use fuel cells, such as forklifts and stationary or mobile backup power systems, could leverage the reliability and lifetime improvements demonstrated in this effort.

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KEYWORDS: Fuel cell; Electrical power; Energy storage; Hydrogen; Electrochemical; Unmanned Aircraft System; UAS