Navy 24.4 Open Topics AMA - June 26, 2024 | Online Unanswered Questions

Department of the Navy (DoN) Program Management Office | Brian Shipley

Question		Answer
1.	Can you explain why Navy has chosen to continue to solicit their Phase I SBIR as "Open Topic" but require proposals to fit within three specific topic areas? Do you think this could eliminate the Navy from getting unique technology proposals that the Navy isn't even aware that they need?	DoN follows DoD SBIR/STTR Programs Innovation Open Topics Guidance when authoring Open Topics and leverages these topics to solicit proposals to adapt commercial products to fill a capability gap, improve performance, or modernize existing capability in various mission critical areas. Topics that support mission needs ensures alignment to technical requirements and resources, improving probability of transition.
2.	How are these Navy "open topics" when they seem to limited to certain topic areas?	See response to question #1
3.	If the topic is not ITAR topic, how inclusion of this clause after the contract award would effect the project? Many of the SBIR Phase I projects involve University partner and students there want to publish the project results. Inclusion of this clause would affect the project. Please explain this clause. ""Any controlled unclassified information pertaining to this contract shall not be released for public dissemination including publications, conference presentations, or posting to any social media sites, unless it has been approved for public release by appropriate Naval Systems Command (SYSCOM). "	 The clause cited pertains the Fundamental Research Disclosure and applies to firms proposing to the DoN SBIR/STTR Programs, and: 1) Whose proposed work under SBIR/STTR Phase I or Phase II will include fundamental research, and 2) Are seeking a waiver to eliminate the requirement for prior approval of public disclosure of information (in accordance with DFARS 252.204-7000). For complete requirements, reference the Fundamental Research Disclosure located under Supporting Documents (Volume 5) at https://navysbir.com/links_forms.htm
4.	Need emergency UEI + CAGE support.	The UEI is assigned by the System for Award Management (SAM) on <u>https://sam.gov/</u> The CAGE Code is not required of proposal submission to the Defense SBIR/STTR Innovation Portal (DSIP), however, the CAGE Code is required prior to a contract award.
5.	What Technology Readiness Level (TRL) and Manufacturing Readiness Level (MRL) do you expect for projects in the Phase I proposal?	There is no TRL/MRL requirement. These Open Topics intend to solicit proposals to adapt existing commercial products to fill capability gaps, improve performance, or modernize existing capability. Regardless of the TRL/MRL, the objective of the Phase I is to address the questions the research and development effort will try to answer to determine the feasibility of the proposed approach.

		A Phase I proposal template specific to DoN to meet Phase I requirements is available at: <u>https://navysbir.com/links_forms.htm</u>
6.	What is the expected deliverable for an OPTION period of performance?	The Navy SBIR 24.4 instruction indicates contract deliverables for Open Topic Phase I Option, if exercised, will be an Option period kick-off brief, progress reports, and a final report.
7.	If you have won a Phase 1 and 2 with the Air Force and now have an IDIQ, how do we work with the Navy on the IDIQ and relevant technology?	The DoN 24.4 Open Topics are accepting Phase I proposals only. Please view navysbir.com for information on Navy Catapult which leverages prior SBIR investment to accelerate technology development to meet Naval priorities with a 2nd Phase II award <u>https://www.navysbir.com/programs/catapult.htm</u>
8.	If you have a Phase 1 or 2 SBIR (Selected, Funded) with the Air Force can you transfer that to the Navy or do you need to win a Navy SBIR?	The DoN 24.4 Open Topics are accepting Phase I proposals only. Please view navysbir.com for information on Navy Catapult which leverages prior SBIR investment to accelerate technology development to meet Naval priorities with a 2nd Phase II award. <u>https://www.navysbir.com/programs/catapult.htm</u>
9.	What is the expected work / deliverables for the OPTION period of performance, if selected?	The Navy SBIR 24.4 instruction indicates contract deliverables for Open Topic Phase I Option, if exercised, will be an Option period kick-off brief, progress reports, and a final report. The Phase I Option tasks further 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.

NAVAIR | <u>N244-P01</u> Open Topic for Advanced Robotic Automation for Fleet Readiness Center Industrial Processes

Question		Answer
1.	Can a proposal be made outside of robotics, such as fire safety options?	Proposals responding to the 24.4 BAA must be responsive to the topic. If you believe you have solutions that are not responsive to this topic but would be of interest to NAVAIR I encourage you to contact the NAVAIR Office of Small Business Programs to inquire about possible customers.
2.	I am attending remotely and would appreciate a PoC (email) for this group so that we can present a short summary of our tech for them to point us to the right person to talk to.	Please follow up with <u>navair-sbir@us.navy.mil</u>
3.	Can I get contact information for Frederick Lancaster or where can I find it? Thank you.	Please follow up with <u>navair-sbir@us.navy.mil</u> and correspondence will be provided to Fred Lancaster and his team.

4.	How can we effectively re-evaluate and adjust automation processes to ensure they enhance rather than hinder our operations, specifically in the context of MCDA aircraft types and the increasing NMC rates?	Looking at other Maintenance Repair and Overhaul (MRO) facilities is a good way to understand how NAVAIR refurbishes aircraft and thus the processes and equipment, as most Commercial MRO facilities mirror NAVAIR.
5.	What % of parts are you looking at that would be flight critical vs. non-flight critical. Huge certification issues with new technology repairing or making new parts. Thank you.	The goal of the Automation/Robotics portion of the SBIR is to not affect the part that would cause requalification but to automate for instance a manual operation. It's also not an Additive Manufacturing effort.
6.	Are the teams (1,2,3) sub topic subjects?	N244-P01 is a single topic to which a firm may submit one proposal. Items 1, 2, and 3 are technology areas of interest and proposals should focus on or incorporate one or more of the technology areas of interest listed. Please indicate the technology area of interest within the Abstract section of the Cover Sheet, Volume 1.
7.	For this topic, are you interested ML/AI only solutions that guides humans to perform maintenance	Yes we are, but that topic also opens to ideas that improve overall maintenance efficiency and effectiveness.
8.	Given that MRO is a complex activity and while automation tools are great, have we explored other solutions to improve mission-capable (MC) rates in addition to these tools? Additionally, will there be requirements like these in future SBIR solicitations?	These are the technology areas that are of interest to the sponsoring activity. It cannot be said for certain what requirements will be reflected in future solicitations.
9.	Will NAVAIR consider vehicle platform builds for this SBIR? Our solution is a vehicle level platform - autonomous eVTOL for rescue and cargo delivery.	If it is for the maintenance of an autonomous vehicle, it would be considered, but this SBIR focuses on aircraft Maintenance Repair and Overhaul.
10.	For Technology Area of Interest 3 (Emerging Technologies for Autonomous Aviation Maintenance), will you consider an analytic solution that does not include a robotic component?	Yes, items 1, 2, and 3 are technology areas of interest and proposals should focus on or incorporate one or more of the technology areas of interest listed: automation/robotics, human-robot collaboration/cobots, and intelligent analytical solutions.
11.	Under yourN244- POI,2,3 would you accept a simulation of a complete operation, customized to NAVAIR maintenance and repair for training purposes.	Yes, and that would fit under the third area of the three technology areas of interest.
12.	We have a SBIR D2P2 with USAF that is selected but not funded, and it is directly related to your Open Topic, how do we move this forward with the Navy?	Please submit a Phase I proposal to the Open Topic. It is the policy of the DoN SBIR/ STTR programs to only accept and evaluate proposals received in accordance with the SBIR/ STTR Policy Directive (PD). A "Selectable, Not Funded"

	proposal from another Agency is not a proposal in response to a DoN solicitation nor is it an award that can be leveraged as a sequential or subsequent Phase II.
 Are the 3 areas with team subtopics for the main topic? For example team 1- Advance Robotic systems, Team 2 - Human Robot collaborationetc. 	N244-P01 is a single topic to which a firm may submit one proposal. Items 1, 2, and 3 are technology areas of interest and proposals should focus on or incorporate one or more of the technology areas of interest listed. Please indicate the technology area of interest within the Abstract section of the Cover Sheet, Volume 1.
14. Can you elaborate on the types (domains) of "Work Instructions" you are looking for: 2. AI/ML Generated Work Instructions	There are standard work instructions for a process that don't change and then there are the work instructions that need to be generate due to a special repair, unforeseen, or an inspection.
15. How do we get more information about the compute/data infrastructure NAVAIR has available to support ML/AI solutions? My concern is that an ML/AI solution based on data obtained by a complex combination of sensors and data fusion from different operational elements would become its own project, and going ahead with feasibility in Phase I without any information on this places it as an afterthought.	Submit a proposal and if selected and successful, that information will be accessible as an awardee. The Fleet Readiness Centers use a variety of hardware and software that may differ from site to site. This could be an inspection system that scans and then automatically assess the condition, rather than human visual interaction and the documenting the results on paper. It doesn't necessarily have to be gathering data for instance from Machine Health Monitoring sensors.

NAVSEA | <u>N244-P02</u> Open Topic for Sustainment and Obsolescence

Question		Answer
1.	I'm working on ship production/repair, but it seems that the yards/RMCs don't have much presence on SBIR. Is there an open-ended path, like with the National Science Foundation, where I have freedom to propose something not listed as a topic?	The National Shipbuilding Research Program (NSRP) provides a collaborative framework to manage, focus, and share research and development and leverage best practices in shipbuilding and ship repair.
2.	What is the certain application we need to not be able to reach in order to get a function that you are looking to get rid of. ie., is there a central point that you are reliant on and how could we best address that concern?	 We are looking for a variety of applications for potential projects which include, but are not limited to: 1) Material Quality, Readiness, and Availability 2) AI/ML Generated Work Instructions 3) Additive Manufacturing Tools and Processes Advancements (afloat and ashore applications) 4) Cold Spray Technology Advancements

	 Shipyard and Maintenance Operational Logistics Improvements Rapid Manufacturing to address urgent part obsolescence needs Digital Twins for system lifecycle sustainability and design evolution
 What are the first systems that will need to be integrated and what are critical things that you must demonstrate capabilities in to require a pilot/proposal 	All solutions will be considered. Phase I outlines the concept and feasibility that the technology can be developed into a useful technology for NAVSEA.

NAVWAR | <u>N244-P03</u> Open Topic for Advanced Data Integrity and Control Methods

Question		Answer
1.	For the Topic N244-P03, there are separate PoP and cost ceilings stated. Is the Phase 1 Option PoP and Cost ceiling added to the Phase 1 Base or is it independent of the Base values? Is the total PoP for Phase I 10 months? Is the total cost ceiling for Phase I \$175K? Could you please clarify this?	They are independent of the base values. The Base amount is \$75k, the Option amount is \$100k.
2.	Is the bottom line that you need to access any data source, make them interoperable/interchangeable, in any format, inclusive of ZT principles?	Negative: We are looking for a more fundamental way to achieve data centric security. Our current tools and methods are complicated application layer capability that relies on tagging, configurations, policy engines and in many cases they are platform specific. Removing the data from the platform removes the controls. We are searching for other methods to achieve control of data lower in the technology delivery stack.
3.	For N244-P03 topic, what are the key performance metrics the Navy will use to evaluate the effectiveness of the proposed solution? Are there specific benchmarks or thresholds for data integrity, access control, and distribution resilience?	As this is looking for concepts as much as specific technologies, we will evaluate performance in a Phase II and/or III using World Class Alignment Metrics.
4.	For N244-P03: NAVWAR Open Topic for Advanced Data Integrity and Control Methods: What kinds of solutions will be considered in terms of looking for software vulnerabilities that protect data used within that software?	I believe this is out of scope for this SBIR topic. We are not necessarily looking for an application. This could be a file format, an encryption scheme, protocols Certainly protection of the underlying technology will need to be assessed; however, that would be beyond assessment of new ideas for data control.
5.	Can you elaborate more on your point about blockchain not yielding a complete solution?	We have not seen an application of blockchain implemented in a construct that would replace data management and control of all general data. There are also

		recovery objectives for certain information that make the application of blockchain only solutions complicated.
6.	What are the current data/architecture structures that integrity and control will be applied to?	Anywhere we generate, store, share, and protect data is applicable. The tools and methods we have today are things like file formats, meta data (tags), policy decision engines, encryption schemes
7.	Will DoN consider a completely autonomous solution that covers only the resiliency portion or must the proposed solution address both integrity and access control?	Yes, DoN will consider partial complete solutions or approaches to elements of the challenge. We recognize this is a complex problem and solutions may need to be composed.
8.	You said you are blockchain solutions, what is an example deployment use case and which areas of the DoD infrastructure do you think this solution would add the most value to from Day 1?	We are exploring blockchain solutions in multiple projects to include identity, obfuscation, and integrity. Improving the quality and scale that we can control data, while sharing with our mission partners is the value target.
9.	Are you open to blockchain solutions and if so what is an example deployment use case and which areas of the DoD infrastructure do you think this solution would add the most value to from Day 1?	No, we recognize blockchain may be a foundational part of a complete solution, or may be holistic for certain use cases. For example: blockchain based solutions may work very well for controlling large volumes of telemetry and other temporally relevant data.