25.4 Release 11 BAA
Virtual Topic Workshops

August 25 - 28, 2025

Rules of Engagement

Department of the NAVY SBIR/STTR PROGRAMS

- Post all questions via the Q&A Component
- Session will be recorded and posted on navysbir.com

Program Authorities

Department of the NAVY SBIR/STTR PROGRAMS

- 15 U.S. Code §638. Research and development

  https://uscode.house.gov/view.xhtml?req=(title:15%20section:638%20edition:prelim)

- SBIR/STTR Policy Directive – provides guidance from SBA to the participating Federal agencies for the general operation of the SBIR and STTR programs.

  https://www.sbir.gov/sites/default/files/2024-07/SBA%20SBIR_STTR_POLICY_DIRECTIVE_May2023.pdf

Program Goals

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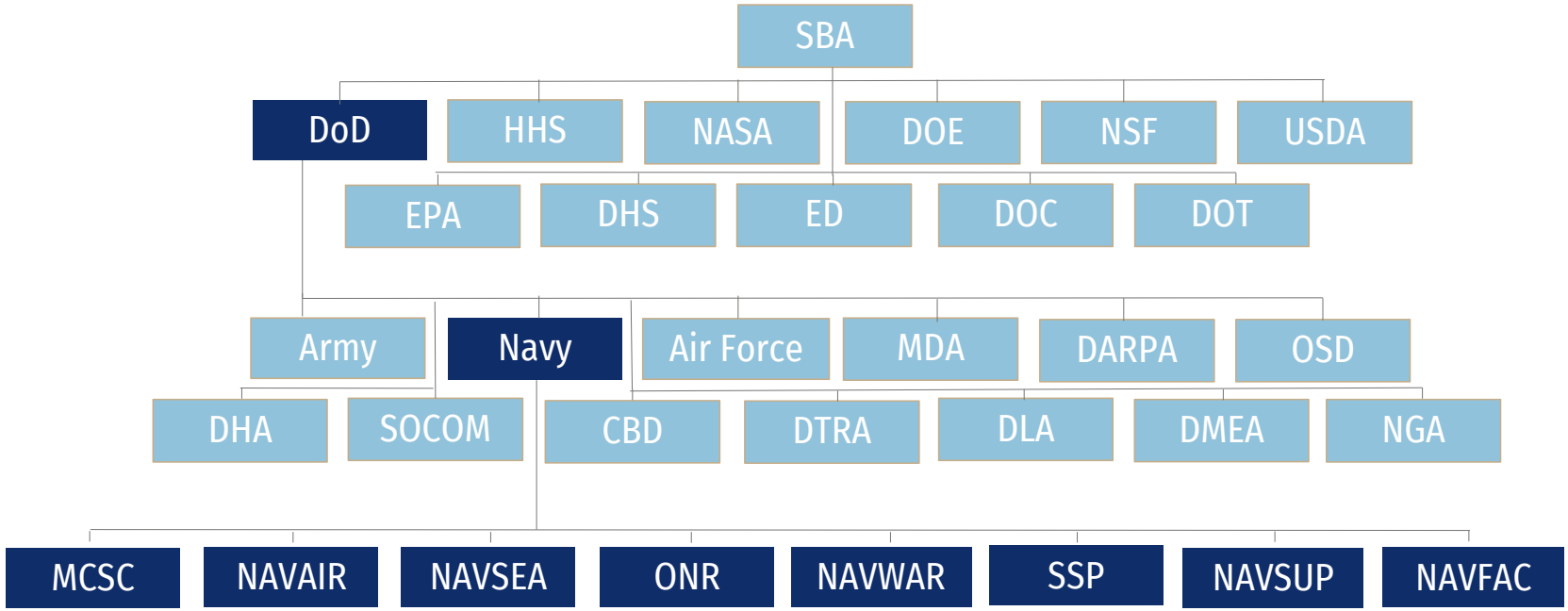
- Stimulate technological innovation
- Use small business to meet Federal R/R&D needs
- Foster and encourage participation in innovation and entrepreneurship
- Increase private sector commercialization of innovations derived from Federal R&D funding
- Foster technology transfer through cooperative R&D between small businesses and research institutions

Federal SBIR/STTR Programs

Department of the NAVY SBIR/STTR PROGRAMS



Naval SBIR/STTR Systems Commands (SYSCOM) Contacts
https://navysbir.com/poc.htm

Eligibility

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- Must qualify as a small business concern as defined by 13 CFR 121.702:
  - Organized for profit, with a place of business located in the United States
  - More than 50% owned and controlled by one or more individuals who are citizens or permanent resident aliens of the United States, or by other small business concerns that are each more than 50% owned and controlled by one or more individuals who are citizens or permanent residents of the United States; and
  - No more than 500 employees, including affiliates
- Must meet the commercialization and transition rate benchmark requirements as determined by the SBA
- Small business concern can be majority-owned by multiple venture capital operating companies, hedge funds, or private equity firms

Differences between SBIR and STTR

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	SBIR	STTR
Partnering Requirement	Permits partnering	Requires a non-profit research institution partner
Principal Investigator	Primary employment (>50%) must be with the small business	PI may be employed by either the research institution partner or small business
Work Requirement	May subcontract up to: 33% (Phase I) 50% (Phase II)	Minimum: 40% Small Business 30% Research Institution Partner
Program Size	3.2%	0.45%
Majority VC Ownership	Allowed by some agencies	Not allowed
Participating Agencies	11 Agencies (extramural R&D budget >$100M)	5 Agencies (extramural R&D budget > $1B)

The small business is ALWAYS the applicant and awardee.

Our Organization

Execution Aligned to Mission Requirements

How We Work

Department of the NAVY SBIR/STTR PROGRAMS

PHASE I

FEASIBILITY

FOCUSED TOPICS

- Acquisition aligned
- Program Office sponsored
- $240K, 12-month PoP

OPEN TOPICS

- Broad technical priorities
- Leverages proven solutions
- $240K, 12-month PoP

PHASE II

DEVELOPMENT

CONTINUED DEVELOPMENT

- Build and test prototypes
- $2M, 18-30-month PoP

DIRECT TO PHASE II

- Higher TRL solutions
- $2M, 18-30-month PoP

CATAPULT

PRIORITY INVESTMENT

- Leverages prior Naval and cross-Agency investment
- Meets Naval priority with high transition potential
- Ongoing customer nominations
- Cost and schedule to meet transition target
- Non-SBIR investment as a force-multiplier

PHASE III

COMMERCIALIZATION

DEFENSE & PRIVATE MARKETS

- Derives from, extends, or completes prior SBIR/STTR investment
- Non-SBIR/STTR funding
- Over $1B annually across hundreds of projects

DoD SBIR 25.4 Release 11 - BAA Schedule

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Pre-Release	Open	Close
August 6	August 27	September 24

SYSCOM	Topic
Open Topics	
MCSC	N254-P01: MCSC Open Topic for Non-Lethal Counter Personnel and Vehicle Stopping Technologies
NAVSEA	N254-P02: NAVSEA Open Topic for Modular Mine Warfare Components
NAVWAR	N254-P03: NAVWAR Open Topic for Post-Quantum Encryption for Commodity Hardware
Conventional Topics	
NAVFAC	N254-122: Artificial Hardwood Replacement for Dry Docking Blocks
NAVFAC	N254-123: Expeditionary Energy-Efficient Greywater Treatment for Reuse
NAVSEA	N254-124 TITLE: Non-Intrusive Sensing for Ship Space and Equipment Monitoring

Posting of Topics

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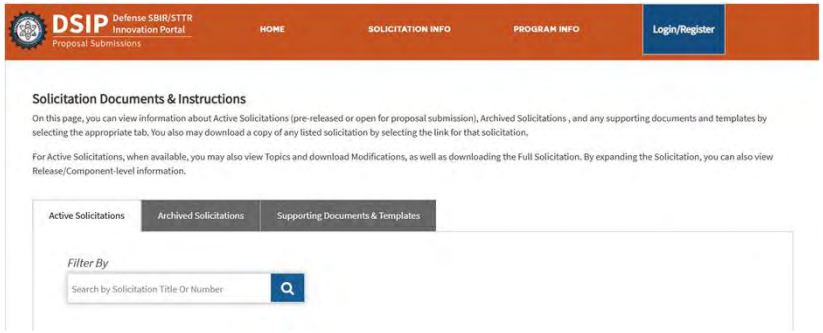
DoD

https://www.dodsbirsttr.mil/submissions/login



- Active solicitations & Topic Q&A
- Archived solicitations
- Training materials available on DSIP

DON

https://navysbir.com/

- DON instructions
- DON topic list and descriptions
- Copy of DSIP Topic Q&A

Everything you need to know is in the BAA!

DON SBIR 25.4 Release 11 Topic Workshop August 25, 2025

Naval Facilities Engineering Systems Command (NAVFAC)

Topic# N254-122, Artificial Hardwood Replacement for Dry Docking Blocks

TPOC Nathan Finch

NAVFAC Mission

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The Naval Shore Facilities, Base Operating Support, and Expeditionary Engineering Systems Command that delivers life-cycle technical and acquisition solutions aligned to Fleet and Marine Corps priorities.

NAVFAC COMPONENT COMMANDS: Has 13 component commands, 9 of which are Facilities Engineering Commands that report to two NAVFAC Commands, NAVFAC Atlantic in Norfolk, Va., and NAVFAC Pacific in Pearl Harbor, Hawaii

SPECIALTY CENTERS: Has two centers that perform specialized missions.

- The Naval Facilities Engineering and Expeditionary Warfare Center, in Port Hueneme, CA
  - supports combatant capabilities and sustainable facilities through specialized engineering, technology development, and lifecycle logistics services.
- The Navy Crane Center, based at Norfolk Naval Shipyard, Portsmouth, Va
  - leads the Navy shore-based weight handling program by establishing policy and providing engineering, acquisition, technical support, training and evaluation services to all Navy shore activities worldwide.

Objective

Develop a hardwood replacement compound for the blocks being used in dry docking ships.

This loading is perpendicular to the wood grain and in compression only. Wood is used for its compliance under these forces. The replacement compound product does not need to look like wood or have a grain.

Description

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Stakeholder Pearl Harbor Naval Shipyard and Intermediate Maintenance Facility needs a replacement for the hardwood caps on the docking blocks to continue the mission of repairing submarines and ships at their facility.

U.S. Navy docking blocks have changed very little in the past 100 years. These concrete blocks have a footprint of 42” x 48”, and a total height of 48”. The top and bottom of the concrete block are capped with 3ea 48” x 6” x 14” white oak timbers. See UFC 4-213-10, Figure 8-2 for the standard drawing [Ref 1]. These timbers are increasingly difficult to procure with long lead times. Additionally, these timbers are vulnerable to both termite and fungal attacks.

Larger dimension blocks, such as 12” x 12” x 48” are also in great need with a desire to use woodworking tools to cut the blocks into shape to conform to the shape of a ship’s hull.

This loading is perpendicular to the wood grain and in compression only. Wood is used for its compliance under these forces. The desired product does not need to look like wood or have a grain.

Capability Requirements/Performance Goals

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A replacement compound for the hardwood caps would:

- Have the same or greater compressive strength when compared to white oak
- Have similar stress-strain characteristics to white oak
- Be nailable with similar or greater pullout strength to white oak
- Be able to withstand at least 330 LT for up to five years while remaining dimensionally stable
- Be immune to fungal and insect attack
- Be submersible without degradation
- Have the same or greater friction with concrete and steel without damaging the surface
- Be shapeable with woodworking tools
- Be nontoxic with nontoxic byproducts from cutting and forming
- Be price competitive to white oak
- Be produced in lead times under 30 days for up to 20k board-feet

Docking Block

UFC 4-213-10

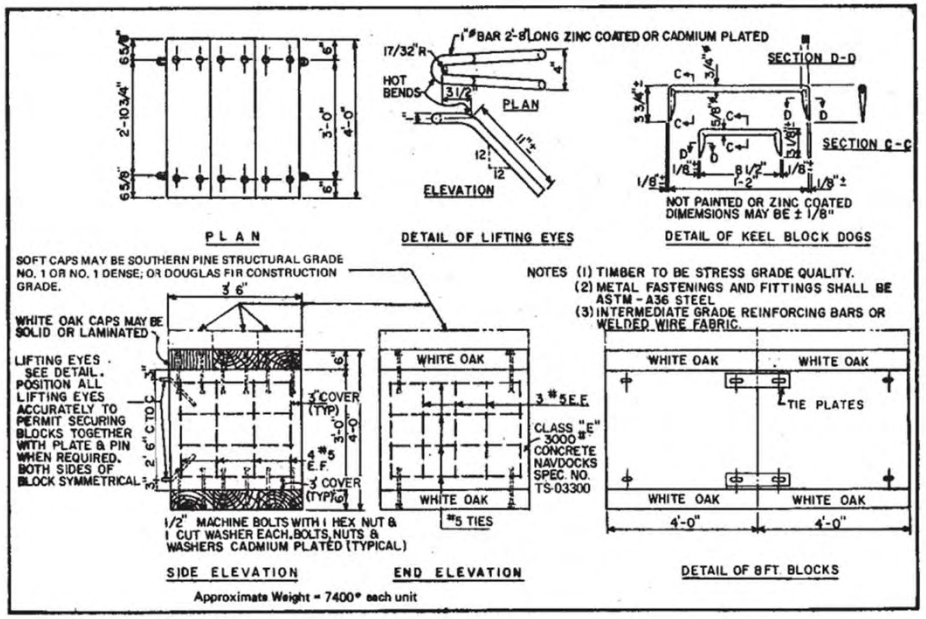

Figure 8-1 Ship Blocks

UFC 4-213-10
15 August 2002
Change 1, 1 September 2012

Questions?

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Common Questions:

Submersible 40 feet under water for up to a week at a time.

Predrilling for fasteners is not acceptable

Non-toxic refers to end users, water run-off, and cut off material/dust not being HAZMAT. No additional PPE compared to current products.

DON SBIR 25.4 Release 11 Topic Workshop August 25, 2025

Naval Facilities Engineering Systems Command (NAVFAC)

Topic # N253-123, Expeditionary Energy-Efficient Greywater Treatment for Reuse

TPOC James Pilkington

NAVFAC Mission

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  - leads the Navy shore-based weight handling program by establishing policy and providing engineering, acquisition, technical support, training and evaluation services to all Navy shore activities worldwide.

Objective

Develop a rugged expeditionary system to treat greywater to the Sanitary Control and Surveillance of Field Water Supplies – Technical Bulletin (TB MED 577) recycled greywater standards in an operational environment to be used for Class II, Class III, and Class IV applications.

The solution should demonstrate an effective treatment, simple functionality and maintainability, and autonomous operation, incorporating automated control systems that adjust treatment processes based on real-time input and output water quality analysis, thereby minimizing the need for manual operator intervention.

Description

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The Department of Defense's Expeditionary community has a need for an effective and user-friendly way to treat greywater in an operational environment. The system must be able to start processing greywater once unpacked and also be quickly disassembled and drained for transportation.

The system shall be able to treat field-generated shower and laundry water to TB MED 577 recycled greywater reuse standards or better

State-of-the-art greywater treatment technologies present several challenges for expeditionary applications. Novel treatment methods, while promising, often involve lengthy startup periods (exceeding six hours) and require specialized technical expertise for operation and maintenance.

The ideal system should be easily operated and maintained by personnel without formal training on the specific equipment.

The innovation shall not lie in the concept of greywater recycling but in developing a system that surpasses the limitations of current energy-intensive, complex, and ineffective methods.

Capability Requirements/Performance Goals

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The ideal system should be easily operated and maintained by personnel without formal training on the specific equipment.

In expeditionary environments, minimizing energy consumption and logistical burden is paramount due to the necessity of transporting fuel to the battlefield. Therefore, offerors should carefully consider the trade-offs between treatment performance, energy efficiency, and system complexity when selecting an appropriate technology.

Solutions should demonstrate efficient use of resources while consistently meeting the water quality standards defined in TB MED 577 without the excessive power demands or over-purification often associated with RO.

The proposed system's novelty shall come from combining increased energy efficiency crucial for expeditionary settings; a ruggedized and compact design for easy transport and deployment; smart features like advanced sensors and automation; and enhanced contaminant removal for safe and reliable water reuse.

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QUESTIONS?

Stay in Touch

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