



Department of the Navy (DoN) Small Business Innovation Research (SBIR) Experimentation Cell (DoN-SEC)

Introduction

2025

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About Us

We are a team that connects SBIRs with the DoN experimentation community to deliver innovative solutions for the warfighter.

Since establishment in 2020, our mission is to support the SBIR community by offering facilitation, mentoring, and training in all aspects of experimentation.

We highlight the **benefits of using experimentation** to explore and assess capabilities of emerging SBIR technologies.



Mission



Program Goals:

- **Empower** the SBIR community to more effectively utilize experimentation benefits.
- **Enhance** SBIR Transitioning of technological innovations through effective and relevant experimentation efforts to solve warfighting problems and receive valuable feedback.
- **Increase awareness** of experimentation opportunities for the SBIR community.
- **Simplify** experimentation processes with informative guidebooks.

Experimentation can provide Objective Quality Evidence (OQE) to support transition



Who We Support

- **SBIR Programs**
 - PMO
 - TPOC
 - Small Business
- **Entire Naval Enterprise**
 - R&D Community
 - Acquisition Community
 - Operational/Fleet Community





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Connections



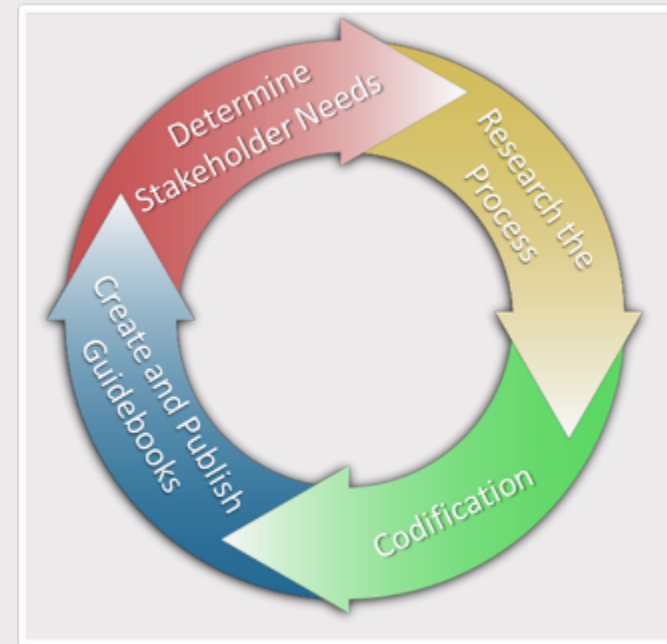
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Methods

Guidebooks:

- SBIR 101 - Basics of Experimentation (tailored for SBIR community)
- SBIR 102 - Ship Riders' Guide
- SBIR 103 - Installation and Engineering Processes
- SBIR 104 - Experiment Analysis & Reporting
- Engineering and Operations Process Guides (EPG/OPG) – Lithium Battery Safety released, others in development



Facilitation: Lower the threshold for entry and input into experimentation communities

Mentoring: Develop relationships to increase knowledge and awareness

Training: Target towards government sponsors and venue owners



Initiative Selection



Two methods of contact:

- **Push:** The SBIR is recommended to us by the Program Manager or brought in by a request from the Technical Point of Contact (TPOC).
- **Pull:** The Performer contacts us directly or event sponsor notifies us of their inclusion in an event.

Business rules:

- **Introduction interview:** Our team meets to determine eligibility and experimentation maturity, and then conducts a fact-finding interview to determine objectives and engineering challenges. If contact was a “Pull,” a meeting will then be established with PM/TPOC to ensure compliance with government objectives and warfighter gap alignment.

All initiative support will be in cooperation with Program Office and TPOC



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Navigating Naval Experimentation

Connections | Processes | Venues

Cost

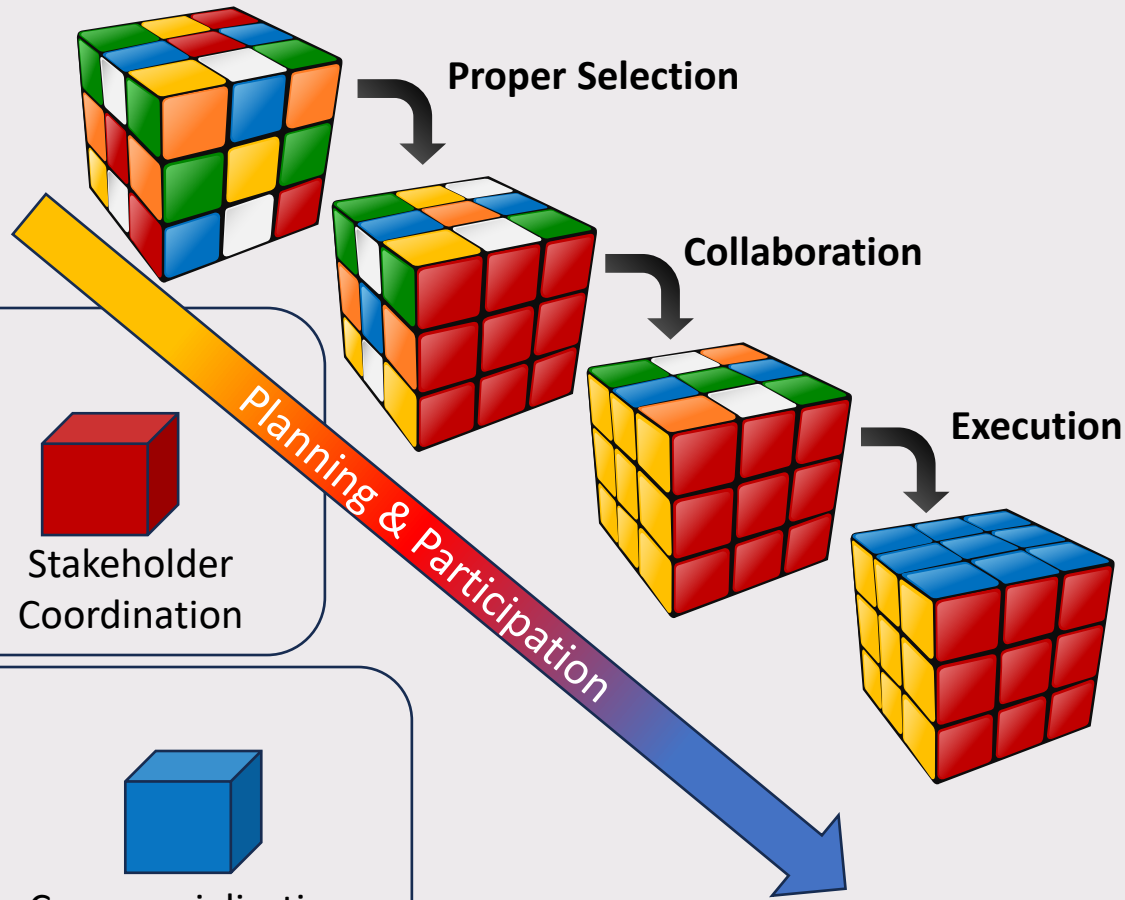
Venue Logistics Manning

Schedules

Event Tech Development Contract Ops/Eng Processes Stakeholder Coordination

Performance

Tech Assessment Data Collection Analysis Commercialization Potential



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Resident Expertise

Experiment Design:

- Problem Statement
- Hypothesis Development
- Objective Development
- DOD Architecture Framework (DODAF) Models
- Liaison to event sponsors

Engineering:

- Ship Install – SHIPMAIN/NMP processes
- Airworthiness Certification
- Accreditation and Assessment (A&A)
- Mission Readiness Assessment (MRA)
- Application Integration (AI)
- Lithium-Ion battery certifications
- RMMCO processes

Operations:

- Air/Water space management
- Spectrum (GPS/EA/Allocation)
- Environmental (PMAP/EIS)
- Unmanned systems/DSD Waivers

Analysis:

- Data Collection and Analysis
- Schedule of Events (SOE)
- Qualitative Analysis/Surveys
- Reporting

Experienced in all phases of experiment planning



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Effects



- SBIR Initiatives become innovative solutions to fit warfighter needs
 - *Maximize impact, communicate, and cross-pollinate data*
- Target premier technical experimentation environments and venues
 - *Right venue, right event*
- “Take the load off” staff and amplify the return investment
 - *More receptive TPOCs and event sponsors*
- Improve and Enhance
 - *Do no harm, do not impede efforts*

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Points of Contact



DoN-SBIR website: <https://www.navysbir.com/>

DoN-SEC website: <https://navysbir.com/sec/>



Follow us on LinkedIn!

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Commonly Used Acronyms

- **AI** Artificial Intelligence
- **ANTX** Advanced Naval Technology Exercise
- **ASN** Assistant Secretary of the Navy
- **BOS** Beyond Line of Sight
- **CDC** Concept Development Conference
- **C4F** Commander Fourth Fleet
- **C4I** Command, Control, Communications, Computers and Intelligence
- **COLREGS** Convention on the International Regulations for Preventing Collisions at Sea
- **FASFAC** Fleet Area Control and Surveillance Facility
- **FLEX** Fleet Experimentation
- **GC** Gold Coast
- **IFC** Interim Flight Clearance
- **IPC** Initial Planning Conference
- **ISR** Intelligence, Surveillance, and Reconnaissance
- **JIFX** Joint Interagency Field Experimentation
- **LTA** Limited Technical Assessment
- **LSE** Large-Scale Exercise
- **LTE** Limited Technical Experiment
- **MACH-TB** Multiservice Advanced Capability Hypersonics Test Bed
- **MPC** Mid-Planning Conference
- **NESAR** Navy Expeditionary & Sustainment
- **NMP** Navy Modernization Program
- **RDT&E** Research, Development, Test and Evaluation
- **RIMPAC** Rim of the Pacific
- **RMF** Risk Management Framework
- **SAS** Sea Air Space
- **SME** Subject Matter Expert
- **TCE** Technical Concept Experiment
- **TOEE** Technology Operational Experimentation
- **TW** Trident Warrior
- **UAS** Unmanned Aerial Systems
- **USV** Unmanned Surface Vessel
- **UUV** Unmanned underwater vehicle
- **W** West (Conference)