



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

U.S. Fourth Fleet (C4F) & DoN-SEC Limited Objective Experiment (LOE) 2024

March 2024

UNCLASSIFIED



UNCLASSIFIED

Agenda



This brief focuses on the upcoming C4F/DoN-SEC LOE 2024.

- Introductions & Overviews
- Event Description
- Commander Fourth Fleet (C4F) Mission and Focus
- “Art of the possible” for C4F and MSC supporting resources
- Planning & Schedule
- Initiative Submission Requirements
- Questions & Discussion

UNCLASSIFIED



DoN-SEC Overview



A DoN SBIR/STTR program initiated to assist the SBIR community use experimentation to enable transition possibilities. The SEC has partnered with C4F to plan and execute this specific event.

Mission

Support the SBIR community by offering **facilitation, mentoring, and training** in all aspects of experimentation.

Charter

- Connect SBIR performers with the DoN experimentation community to deliver innovative solutions for the warfighter
- Use experimentation events to explore and assess capabilities of emerging SBIR technologies
- Enable build-test-build mentality and a process for technology development using experimentation venues— increase TRL

Over 395 Initiatives Engaged Since Inception in 2020, transitions leading to bids, awards, and sales.



U.S. Fourth Fleet Overview



Mission

The USNAVSOUTH/FOURTHFLT Unmanned Campaign provides the Navy a theater to operationalize unmanned systems in a permissive environment, develop TTPs against near-peer competitors, refine manned-unmanned C2 infrastructure, and inform the CNO's hybrid fleet of the 2030's.



Initiatives

- Enhanced Maritime Domain Awareness: Persistent, integrated & distributed
- Combat Logistics: Unmanned logistic delivery
- Kill Chain Integration: Find –Fix –Battle Damage Assessment
- Partner Nation: Expanding activities with key partner Navies

Foster Innovation and Experimentation

USNAVSOUTH will leverage geographic proximity to the US and SOUTHCOM partners to advance navy-wide warfighting concepts and technologies. We will develop unmanned systems to inform the CNO's Hybrid Fleet of the 2030's.

– RADM James Aiken

Commander, USNAVSOUTH/USFOURTHFLT



Experimentation Benefits

Demonstration



Share Info
Already Tried
No Decisional Data

Experimentation



Gain Knowledge
Explore New Areas
Report

Test & Evaluation



Prove Requirements
Pass / Fail
Report



Event Description/Roles



The C4F LOE events are annual at-sea Fleet Experimentation (FLEX) events to assess emerging technologies in solving warfighting gaps. It is unique in testing these new technologies, procedures, and concepts in an operational environment. C4F innovation allows for use of Fleet assets and autonomous environments. Developers can evaluate new systems in the maritime environment, validate assumptions, and receive warfighter feedback.

- New – DoN-SEC agreed to partner with C4F staff to create a SBIR/STTR focused event
- C4F has lead and ownership. SEC supports administrative planning and assistance with Engineering, Operations processes and execution support.
- Navy SBIR/STTR will receive full SEC support for required processes, but government process owners retain authorities (Cyber, SPECTRUM, LiOn Battery, etc.)
- Non-SBIR support from SEC if directly related to SBIR development/data collection (Platforms, targets, etc.)
- Non-SBIR initiatives as approved by C4F staff – still involved with overall planning.





C4F Focus Areas

The 2024 event is an opportunity to evaluate and integrate maturing tactical technologies operating in a maritime/aerial environment.

Focus areas include:

- **Unmanned Systems (UXS) / Counter-Unmanned Systems (C-UXS)**
- Swarm Tactics and Control
- Maritime Domain Awareness (MDA)
- Detection and Avoidance (DAA)
- Persistent Wide Area Search
- Sensors
- Position, Navigation, and Timing (PNT)
- Denied Environments





Asset Overviews

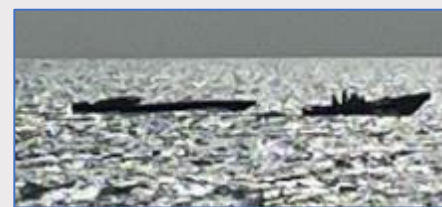


Targeted Capabilities of Supporting Assets:

- Surface platforms capable of supporting installation and operation of technologies as well as launching and recovering UxS (amongst other capabilities)
- Smaller vessels capable of supporting installation and operations of technologies, target acquisition, logistics, Automatic Identification System (AIS), radar integration and more.

The following are proposed for the event:

- Expeditionary Fast Transport (EPF) – 103 meters long expeditionary fast transport ship operated by Military Sealift Command.
- NAWCAD Retriever – 100-ft modified vessel to support littoral Naval Warfare RDT&E projects, marine research, oceanographic surveys, dive team exercises, port operations, towing, ordnance recovery support, towing of side scan sonars and test site surveillance.
- JIATF-South GOTCHA – Former drug runner boat that was seized and used for target tests and utilities.
- JIATF-South ANACONDA – Former drug runner boat. Designed for stealth as a handcrafted fiberglass vessel and sits low to the water. Used for target testing.



PRE-DECISIONAL



Schedule

- ✓ 21 FEB 2024 Concept Development Conference, FS Teams
- **5 APR 2024: Project Proposals Due**
- 17 APR 2024 Initial Planning Conference, FS Teams
- 12 JUN 2024: Mid Planning Conference, FS Teams
- 27 AUG 2024: Final Planning Conference, FS Teams
- FALL 2024: Execution
- 15 NOV 2024 – 13 JAN 2025: Post Execution and Reporting (TBD)



UNCLASSIFIED

DTIC/DoDTechipedia Submission Portal



- **Defense Technical Information Center (DTIC)** - a secure document repository available to authorized DoD personnel, defense contractors, federal government personnel, government contractors, and select academic institutions.
 - DTIC (dtic.mil) requires a CAC, ECA, or PIV token to register.
 - To create an account, click the “Create your DTIC Account” option on the left of the page under the “New to DTIC?” heading.
 - Insert your smart card and enter your work email address (.mil addresses work best).
- **DoDTechipedia**
 - DTIC's secure wiki tool for DoD, Federal Government and their contractors – Share and Analyze Information and collaboration.
- **DoN-SEC DoDTechipedia page** – DTIC account required*
 - RFI and quad template available to be populated and submitted via the **DoN-SEC DTIC page**. The submission drop box can also be found by navigating to the Events hub from the DoN-SEC home page.
 - Submissions should include the provided form and quad in a zip folder labeled with company and technology name.
 - Drag and drop the zip folder into the drop box or click the “Upload” option.
- If you experience issues with DTIC, please contact victoria.m.starke@ausgar.com for alternative submission methods.

Submissions Due April 5, 2024

UNCLASSIFIED



Quad Template



Description: Describe what the technology does

SBIR Company: Name of the SBIR Company

Sponsor: SYSCOM/PEO/PMO or SYSCOM/Warfare Center

Principle Investigator: Name and phone number

TPOC: Name and phone number

Company POC: Name and phone number

TRL:

SBIR Topic Number: List SBIR Topic Number and FIMS if applicable

Contract Considerations: PoP, Follow On, Contract #, Contract End Date, etc.

A diagram or picture of the technology. Can include link to video demo if available.

Focus Areas: Describe how the technology addresses the C4F Focus Areas.

Initiative Objectives:

- What do you want to learn from this event?

Test Requirements:

- Air/Water/Subsurface platform
- Targets/Emissions
- Interoperability/ System Integration
- Data Collection/ Analysis

Concerns/Challenges:

- List any if applicable



Quad Addendum



C4F / DoN-SEC Limited Objective Exercise (LOE) 2024 Request for Initial Information – Quad Addendum

Interested SBIR/STTR Program Managers, Technology Managers, and TPDCs are encouraged to complete the below form and associated quad for consideration in the C4F/DoN-SEC LOE 2024 event. SBIR/STTR performers should coordinate their application through their TPDC. Please submit completed form and quad via DTIC at this [link](#). If you do not have an account, you can create one with a .mil address and a CAC/ECA/PIV token. If you experience issues with DTIC, please contact Victoria.m.stark@ausqar.com for alternative methods.

Points of Contact

Organization Contact Information:

- Principle Investigator Name:
- Principle Investigator Phone:
- Principle Investigator Email:
- Technology Lead Name:
- Technology Lead Phone:
- Technology Lead Email:

[Company Name]

[Insert Company Logo]

Organization Contact Information:

Include a brief description of the company and specialties, mission, etc.

Project Overview

Description:

Paste information from quad and add any amplifying information if desired.

Objectives:

- List detailed objectives – consider what you are hoping to learn from this event.

Test Requirements (Added from Quad and expanded):

- Provide details of the physical, virtual, and/or environmental requirements to meet your objectives.

- Amplifying information from the quad
- Main POCs
- Company Name and logo
- Description of project
- Objectives and what you need to meet them
- Additional comments and/or concerns

DoN-SEC DTIC Home Page:

<https://www.dodtechipedia.mil/dodwiki/x/CY6sPg>

C4F/DoN-SEC Submissions Sub Page:

<https://www.dodtechipedia.mil/dodwiki/x/s5XdPg>



How to Submit

1. Insert Smart Card and log into DTIC
2. Navigate to the DoN-SEC DoDTechipedia page
3. Click “Events” in the Page Directory to the left (or use the toolbar at the bottom of the page)
4. Click on the “C4F/DoN-SEC 2024 LOE” link
5. Zip your populated addendum and quad into one zip folder and label with your company and technology name
6. Once you arrive at this page, drag and drop your zip folder in the dotted box or click “browse for files to manually upload.
7. You will see your file appear at the top after the upload. All files are protected on this Distro D page.

Pages / SEC Home Page / Events Analytics Edit View inline

C4F/DoN-SEC 2024 LOE

Created by Victoria Starke, last modified yesterday at 11:21 AM

Please drag and drop (or manually select) your C4F LOE 2024 Submissions using the file drop box below. The completed proposal form and quad templates can be zipped as **one folder** for upload. Please label with SBIR/STTR company name and technology. Content is restricted to DoD and DoD Contractors only.

File	Modified *
USNWSOUTH October 2023 Hybrid Fleet Campaign Event Report 1-16-2024.pdf	Jan 29, 2024 by Victoria Starke
LOE Submission Quad Template_blank.pptx	Feb 06, 2024 by Victoria Starke
Project Proposal Form_blank.docx	Feb 06, 2024 by Victoria Starke

Drag and drop to upload or browse for files

[Download All](#)



DODTechipedia



- DODTechipedia is a subset of DTIC, hosting innumerable DOD organizations and libraries.
- This DOD-developed wiki promotes facilitating increased communication and collaboration among scientists, engineers, program managers, acquisition professionals and operational warfighters.
- Living knowledge base that reduces duplication of effort, encourages collaboration among program areas and connects capability providers with technology developers.
- DoDTechipedia runs on Confluence, allowing for secure information sharing, real-time updates, and unique customizations for each page (“Space”) created.
- DoN-SEC now has a Space hosted on DODTechipedia that contains updates, reference documents, and submission hubs for experimentation events.
- Links and materials available via DODTechipedia, as well as the DoN-SEC website.

DoN-SEC DTIC Home Page:

<https://www.dodtechipedia.mil/dodwiki/x/CY6sPg>

C4F/DoN-SEC Submissions Sub Page:

<https://www.dodtechipedia.mil/dodwiki/x/s5XdPg>



Points of Contact



- **U.S. Fourth Fleet:**

Dr. Chris Heagney

C4F Lead and Innovation Specialist

Cell: (904) 270-3571

christopher.p.heagney.civ@us.navy.mil

- **Military Sealift Command:**

Michael Zirpolo

Acting Lead Experimentation Engineer

michael.zirpolo.civ@us.navy.mil

John Bruening

MSC Taluga Group Director

Office: (757) 443-3944

John.G.Bruening.civ@us.navy.mil

- **DoN-SEC:**

Scott Bartlett

DoN-SEC PM, Office of Naval Research

scott.w.bartlett4.civ@us.navy.mil

Chris Dillman

COMM: (619) 878-3782

christopher.d.dillman.ctr@us.navy.mil

- **Websites:**

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

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

➤ DoN-SEC LinkedIn: <https://www.linkedin.com/company/don-sec/>