Solicitation Number:

RFI-JIFX_FY24_Request_For_Information

Notice Type:

Special Notice

A. INTRODUCTION

The Naval Postgraduate School (NPS) will host quarterly Joint Interagency Field Experimentation (JIFX) events throughout the 2024 fiscal year (FY24). These events provide an opportunity for technology innovators to showcase their emerging capabilities that potentially address pressing military challenges, as well as engage with Department of Defense (DoD) stakeholders to gain insights that may inform their future development and investment decisions. Companies, educational institutions, laboratories, and other organizations are invited to submit Technology Proposals that may lead to an invitation to participate in FY24 JIFX events.

The Office of the Under Secretary of Defense for Research and Engineering (OUSD R&E) Innovation & Modernization office (I&M) is the primary sponsor for the JIFX event series. Stakeholders attending each JIFX event includes representatives from the United States' Combatant Commands (AFRICOM, CENTCOM, CYBERCOM, EUCOM, INDO-PACOM, NORTHCOM, SOUTHCOM, SPACECOM, SOCOM and TRANSCOM), military services (Navy, Marine Corps, Army, Air Force, Space Force), other U.S. Government (USG) organizations, and allied military/government representatives.

For a full list of event dates and how to submit a technology proposal, please visit the [JIFX website](#).

B. OBJECTIVES

(1) Background: The NPS JIFX team leads a technology engagement series of quarterly field events for cultivating a community of interest which enable DoD, US government, and Allied stakeholders to identify, influence, and accelerate early-stage solution development that address national and collective security challenges.

The overall purpose of JIFX is to: a) accelerate innovation and explore technologies that have the potential to address National Defense Strategy objectives; b) showcase capabilities that fit in DOD's seams and gaps; c) rapidly advance a wide range of technologies from small businesses, non-traditional companies, academia, and

the defense industry; and d) provide a collaborative learning environment featuring easy access for the DoD, industry, academia, partner nations and other USG organizations.

During FY24, the JIFX team will host four quarterly events, with each one focusing on emerging technology and capability needs for the Department, in coordination with Science & Technology (S&T) and operational representatives from the Combatant Commands, military services, and interagency partners. Invited technology developers will come from across the vibrant innovation ecosystem, including USG research and development (R&D) organizations, academia, private industry, and non-governmental organizations (NGOs). JIFX events provide an opportunity for technology developers to interact with operational personnel to determine how their technology and ideas may support or enhance DoD/USG capabilities. The environment facilitates a collaborative learning environment between government, academia, industry, and NGOs to promote the identification and development of emerging and maturing technologies. These events enable rapid iteration on nascent technologies with the direct input of end users.

Submissions that relate to any of the RFI areas of interest will be considered for acceptance. In addition, cross-cutting technologies pertaining to precision-strike and less than lethal weapons, information operations, novel energy solutions, along with intelligence, surveillance, and reconnaissance (ISR) capabilities may be considered for acceptance during any of the scheduled JIFX events. For more information about themes and focus areas for individual events please visit the JIFX website.

(2) Event Dates and Locations: Dates and locations may change due to operational and scheduling requirements. For the most up-to-date information please visit the JIFX website.

24-1	23 - 27 October 2023
	Location: Camp Roberts, CA and Naval Postgraduate School, CA
	Focus Area: Operations at the Edge
	Submission Deadline: Wednesday, August 23, 2023
24-2	5 - 9 February 2024
	Location: Camp Roberts, CA and Naval Postgraduate School, CA
	Focus Area: Multi-Domain UXS & Countermeasures
	Submission Deadline: Thursday, December 7, 2023

24-3   6 - 10 May 2024
Location: Camp Roberts, CA and Naval Postgraduate School, CA
Focus Area: C5ISR & Countermeasures
Submission Deadline: Thursday, March 7, 2024

24-4   5 – 9 August 2024
Location: Camp Roberts, CA and Naval Postgraduate School, CA
Focus Area: Non-Standard Communication & Navigation
Submission Deadline: Thursday, June 6, 2024

Dates, Locations, Focus Areas, and Submissions Deadlines are all subject to change. Additional Events may be added as required.

C. SUBMISSION INSTRUCTIONS AND AREAS OF INTEREST

(1) Proposal Process: The submission process is managed through the NPS JIFX Proposal webpage. Proposals will be reviewed, and selected respondents will be invited to participate in a JIFX event. NPS will provide a venue, supporting infrastructure, and operational and technical personnel at no cost to invited respondent(s). The JIFX venue will only supply basic venue infrastructure including power, restricted airspace, frequency allocation, network access, and working/collaboration spaces. Outside of those basic items, invited respondents should practice self-sufficiency and bring all other resources necessary to successfully operate their technologies. Respondents are responsible for all costs including, but not limited to, travel, equipment, regulatory compliance, insurance, and licensing to participate. Multiple proposals, each addressing a different technology, may be submitted by each respondent. Submissions will be reviewed by government representatives, service subject matter experts (SMEs), JIFX personnel, support contractors, as well as NPS faculty, staff, or students (as appropriate). You may submit multiple proposals; however, each proposal must address only one technology.

(2) Security Requirements: Participants should not submit classified information. It is preferred that no proprietary information be included in the proposal. If provided, clearly label any proprietary or other sensitive information in proposals.

(3) Other Special Requirements: DO NOT SUBMIT PROPOSALS FOR FUNDING. DO NOT SUBMIT PROPOSALS FOR PRESENTATIONS OR DEMONSTRATIONS. No contracts will be awarded based on this announcement or any

subsequent supplemental RFI announcements. Proposal submission deadliness may be found on the NPS JIFX [Proposal](#) webpage.

(5) TECHNOLOGY AREAS OF INTEREST:

Technology areas of interest are not listed in priority order. Interest areas include, but are not limited to:

A) Unmanned Aerial Systems

    1) Unmanned Tethered Aerial System (UTAS)

    2) Nano and Micro Vertical Takeoff and Land (VTOL)

    3) Short Range / Short Endurance (SR/SE) VTOL and Fixed Wing

    4) Medium Range / Medium Endurance (MR/ME) Fixed Wing

    5) Long Range / Long Endurance (LR/LE) Fixed Wing

B) Unmanned Systems (UxS) Design, Deployment, Operation, Networking, and Control

    1) Unmanned Maritime Systems

    2) Sensors

    3) Power and Communications sub-systems

    4) Multi- and Cross-Domain UxS

    5) Technologies Supporting Swarming UxS

    6) Mobile Ad-Hoc Networking for UxS Control

    7) Situational Awareness and Control systems

    8) Autonomy and Semi-Autonomy

    9) Human Machine Teaming

C) Countering Unmanned Systems

    1) Detection, Tracking, and Surveillance Systems

    2) Defeat Systems

    3) Remote UxS Characterization

D) Communication and Networking

    1) 5G Enabled Technologies

    2) Non-Radio Frequency Communications

    3) Scalable and Mobile Communication Networks

    4) Location, Tracking, and Communication Technologies

    5) Distributed Spectrum Management

6) Air to Ground Communication

7) Information Exchange and Communication

8) Untethered, Underwater Communication Systems

E) Cyber, Cyber Security, and Electronic Warfare

1) Signature Reductions and Electromagnetic Battle Management

2) Communication, Network, and Data Security

3) Operations in GPS Denied Environments

4) Cyber Effects

F) Intelligence, Surveillance, and Reconnaissance (ISR)

1) Undersea ISR

2) Remote Sensing

3) Integrated Undersea Surveillance System (IUSS).

4) Persistent ISR

5) Digital Characterization/Classification of Vessels

6) Maritime C4ISR

G) Situational Awareness

1) Social Media for Situational Awareness

2) Maritime Domain Awareness

3) Command and Control Optimization, Modeling and Simulation

4) Maritime Common Operating Picture

5) Maritime Risk, Threat, Analysis and Resilience

H) Defense Support to Civil Authorities (DSCA)

1) Non-combatant Evacuation Operations (NEO)

2) Data Collection during Disaster Response Operations

3) Mapping in Disaster Environments

4) Technologies Augmenting Current Distributed Health and Preparedness Training

5) Mass Communications Across a Wide Range of Outlets

I) Health and Safety

1) Improved Life-Support and Tracking during Patient Evacuation

2) Rapid Body and Health Detection and Monitoring

3) Detection, Measurement, Sterilization, and Clean-Up of Explosive, Nuclear, Radiological, Chemical, and/or Biological Agents in all Environments

4) Warfighter Performance Enhancements and Wearable Technologies

5) Water Generation and Purification Systems

J) Expeditionary Operations

1) Mine and Improvised Explosive Device (IED) Operations Systems

2) Counter-Mine and Counter-IED Operations and Systems

K) Infrastructure and Power

1) Energy efficiencies and Improved Safety

2) Next-Generation Energy Power and Storage

L) Mobility and Transportation

1) Cargo Screening

2) In-transit Visibility (ITV)

3) Mobility Management Solutions

4) Next generation Maritime Vessels

M) Precision strike, Non-Lethal Weapons, Information Operations

1) Targeting Technologies for Faster, More Precise Engagements

2) Light Aerial Combat Vehicles

3) Land domain Non-Lethal/Scalable Effects Engagement

4) Multi-Domain Non-Lethal/Scalable Effects Engagement

5) Maritime domain Non-Lethal/Scalable Effects Engagement

6) Air & Space domain Non-Lethal/Scalable Effects Engagement

7) Visual Augmentation Systems