"Other experimentation events say that they encourage collaboration and failure, but JIFX truly means it. Every experimenter is eager to collaborate with others to demonstrate capabilities that have never been seen before. Similarly, the true bleeding edge can be seen live in the making at JIFX because of a lack of fear of failure. Only when failure is encouraged do experimenters truly push the bounds of what is possible in hopes of all kinds of discovery, both good and bad."

-JIFX 24-3 Participant
JIFX 24-4

Dates: 5 – 9 August 2024
Location: NPS Field Laboratory at Camp Roberts (near Paso Robles, CA)

Visit the event webpage for more details, https://nps.edu/web/fx/upcoming-jifx

- Event slides are posted on this page
- Recordings available by request (Ashley.book@nps.edu)
## Agenda

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<td>• Collaboration Opportunities</td>
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<td>8/1/24</td>
<td><strong>Finalized Schedule of Events:</strong></td>
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<td>• Logistics &amp; Reminders</td>
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</table>
What is JIFX?
Dr. Mike Richardson, JIFX Director
Ashley Book, Event Operations
Jonathan Coon, Data Management
Aurelio Monarrez, Air Operations
Joseph Lukefahr, Tech & Network Management
Dirk Hale, Camp Roberts Facilities
JIFX is an experiment in the methods to enable rapid technological development.

JIFX provides researchers a turn-key solution for safe, secure, legal, and collaborative experimentation.

**Joint Interagency Field Experimentation**

**Mission Statement:**
The JIFX team leads experimentation in alternative methods to enable rapid technological development by cultivating a community of interest and hosting broadly scoped quarterly collaborative field events which enable DoD, US government, and allied stakeholders to identify, influence, and accelerate early-stage technology development that address national and collective security challenges.
What JIFX isn’t:

- Tradeshow
- Conference
- Sales Event
- Demonstration
- Lectures
- Presentation
- Acquisition Event

JIFX is not a marketing event or trade show, so send your engineers!
Experimentation vs. Demonstration

**Experiment:**
- “I need to learn something new about...”
- Several variables, looking for the relationships between them
  - “Does a change to A impact B?”
- Hypothesis: “I think I know what will happen...”
- Intent: Gain knowledge

**Demonstration:**
- “Let me show you what I can do”
- “I’ve done this before”
- No variables
- Confident of outcome even before starting
- Intent: Share knowledge

*Source: Department of the Navy Small Business Innovation Research (SBIR), Guidebook to Experiment Analysis & Reporting*
FUNDAMENTAL TENETS

AUSTERE BY DESIGN

COLLABORATION IS EXPECTED

BOUNDED, NOT CONTROLLED

DEVELOP NOW

FAILURE = LEARNING

INCLUSIVE
Event Logistics
General Location

- McMillan Airfield at Camp Roberts
- Closest Town: Paso Robles, Atascadero, San Luis Obispo
  - Hotels, Vacation Rentals, etc.
- Closest Airports: San Luis Obispo (45m), Monterey (1h30m), Bakersfield (2h), San Jose (2h15m), SF (2h40m)
Event Location

NPS Field Laboratory at McMillan Airfield
Federal government office

- California 93446
- P.O. Box 40, Lake Nacimiento, California
- Send to your phone
- Claim this business
- Add a link

Google Maps view of the location.
Camp Roberts Facilities: McMillan Airfield
Camp Roberts Facilities: Combined Arms Collective Training Facility (CACTF)

26-acre full-scale urban operations training facility including a mock church, police station with underground jail, three-story hotel, businesses, residential buildings, underground tunnels, and a rubble pile.
McMillan Airfield

Occupied Pads
(not available)

Gravel Pads
(available)

JIFX Main Site

Parking
Event Schedule

Monday:
0900: Venue and registration open.
1000: Event kick-off brief.
**Frequency verifications** and **experimentation** follow throughout the day.
1630: Afternoon debrief.

Tuesday & Wednesday
0730: Venue and registration open.
0800: Morning brief.
0830: Flyers meeting.
**Experimentation** continues throughout the day.
1630: Afternoon debrief.

Thursday:
0730: Venue and registration open.
0800: Morning brief.
0830: Flyers meeting.
**Experimentation** continues throughout the day.
1200: Afternoon debrief.
**Experimentation** continues.

Friday
0730: Venue and registration open.
0800: Morning brief.
0830: Flyers meeting.
**Experimentation** continues throughout the day.

Lunch Briefs:
Tuesday Information Session (NAVSEA SBIR/STTR Program)
Wednesday Government-Only Planning Meeting

*All Briefs will be in-person & broadcast for virtual participation.*
Registration & Gate Access

• Registration is required for all participants
  • [www.nps.edu/web/fx/register](http://www.nps.edu/web/fx/register)
  • Be sure to scroll all the way through the safety brief!

• Non-US Citizens Registration deadline: 08 July 2024
## Badges

<table>
<thead>
<tr>
<th>Staff</th>
<th>Stakeholder</th>
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<tbody>
<tr>
<td><img src="image1" alt="Staff Badge" /></td>
<td><img src="image2" alt="Stakeholder Badge" /></td>
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<tr>
<th>Government</th>
<th>Private Industry / Academia</th>
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<td><img src="image4" alt="Private Industry / Academia Badge" /></td>
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Event Info

- Weather
  - Fires are a major concern

- Emergencies
  - Emergency Services are 30-45 minutes away
  - Emergency Phone Numbers will be on the back of all participant name badge

- Wildlife

- Food options limited: bring what you need

- Hazmat: pack out what you bring in!
Weather
Event Info

Photography:

• Okay to photograph/video your own equipment
• Ask for permission before capturing imagery of any other experiments/people
• No photos of personnel in uniform
• No photos of sensitive sites
• NPS Public Affairs Office
Shipping

Parcel Service (Individual packages, less than 150 lbs)
NPS Field Laboratory - McMillan Airfield
Attn: (*Your Company / Your Name*)
Bldg 914, Shipping & Receiving
Camp Roberts, CA 93451-5000
Ph 805-227-1314

Directly to the Airfield: Freight
NPS Field Laboratory - McMillan Airfield
Attn: (*Your Company / Your Name*)
McMillan Airfield, East Perimeter Rd
Camp Roberts, CA 93451-5000
Ph 805-227-1314

Addresses are posted on the website!
www.nps.edu/fx
Experiment Introductions

- Introduction of Experiment
- 1-2 minutes each

1. What is your technology/experiment
2. How can you support other experiments?
3. How can other experiments support you?
Collaborations

<table>
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<tr>
<th>Request</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td><strong>BlueSpaceAI</strong>: what we would be interested in is (minimum) overhead video of our vehicle operating autonomously or (preferred) video with each frame spatially and temporally indexed to GPS.</td>
<td>Jeremy Templeton</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:jtempleton@bluesapce.ai">jtempleton@bluesapce.ai</a></td>
</tr>
</tbody>
</table>
JIFX Networks

Communications

Local IP networking (Ethernet, WiFi)
- McMillan Airfield
  - CACTF

Limited Internet connectivity

Information Technology
(Camp Roberts)

Printing @ McMillan Airfield
Tactical Assault Kit (TAK)
Cursor-on-Target
debugging/routing
Before You Connect...

• JIFX network is intended for:
  • Event administration
  • Rapid collaboration & integration

• Acceptable use:
  • Respect others’ operations, privacy, security
  • No malicious activity

• Consult your organization’s IT & security policies before connecting

• Coordinate with network manager before connecting systems (Joseph Lukefahr)
Air Operations

No flight operations are permitted unless the RED RANGE FLAG is flying. The airspace is considered “HOT” when the flag is raised.

- An “Airboss” will manage all UAVS and always maintain safety in the airspace.
  - Prior to radiating – you need airboss approval!
  - Prior to take-off – you need airboss approval!
  - Prior to landing – you need airboss approval!

- All UAVs and Frequency Emitting devices must be verified by the airboss

- JIFX Radios for communications

- Remain clear of runway at all times, unless permission from airboss
Airspace Safety

Found on “Upcoming Events” Page

- **Airspace Control Plan** (ACP)
- **Pre-Mishap Plan** (PMP)
Airspace Control Plan (ACP)

This **Airspace Control Plan (ACP)** outlines airspace procedures for NPS activities aboard Camp Roberts CA ARNG base and within Restricted Area R-2504A/B. The ACP is directive for all NPS JIFX event participants.

**Airspace Boundaries and Buffers must be displayed on your Ground Control Station (GCS)**

![Map Diagram showing Camp Roberts Restricted Operating Zones, No Fly Zones, and Holding Points within the R-2504 Area.](image)
Pre-Mishap Plan

The PMP established procedures that will assist personnel immediately following a mishap.

“In case of a mishap, or any unintended impact with the ground or another vehicle, the flying unit will immediately notify the Air Boss via Radio or phone.”
Vulcan

• Vulcan is an innovation scouting platform that serves a diverse ecosystem and provides networked capabilities for the discovery and assessment of capabilities of interest to U.S. National Security.

• Non-Government users engage Vulcan with their innovations to address U.S. Government needs.

• Visit www.Vulcan-sof.com to request an account and create your Scout Card.
Questions?

Slides available on Website – “Upcoming JIFX”
Recording available by request (Ashley.book@nps.edu)