





Joint Interagency Field Experimentation

NPS Joint Interagency Field Experimentation 24-2 Update

The Naval Postgraduate School (NPS), in support of the Innovation & Modernization (I&M) Office in the Office of the Undersecretary of Defense for Research and Engineering (OUSD R&E), executed JIFX 24-2 at the NPS Field Laboratory on McMillan Airfield, Camp Roberts, CA from 5-8 February 2024. This innovation discovery event focused on 13 small business and non-traditional performers exploring 19 unique technologies in a collaborative learning environment related to the field of Multi-Domain UXS & Countermeasures.

Despite several powerful rainstorms, 155 people participated in the event. Participants represented 6 COCOMs (CENTCOM, NORTHCOM, STRATCOM, TRANSCOM, INDOPACOM, and SOCOM), Naval Special Warfare, Naval Surface Warfare Center (NSWC) Crane, NSWC Port Hueneme, NSWC Carderock, Department of the Army, Army Futures Command, US Army DEVCOM, AFSOC, AFRL, the DIU, and the Australian Strategic Policy Institute. The Naval Postgraduate School was well represented with 7 Masters and Doctoral students, 3 faculty members, 2 attorneys, the director for research innovation, and 5 scientists on sabbatical from the Republic of Korea.

Highlighting the event was participation by Mr Jon Lazar, the I&M Director and JIFX sponsor. Mr Lazar took the time to speak with all the technologists and stakeholders about the importance of their participation in JIFX, and I&M's other sponsored events – JPEM and Thunderstorm - to accelerate the fielding of capabilities to our and allied warfighters. That message resonated strongly with the audience. We were also joined by NavalX deputy directors Scott Bewley and LT Gray Chynoweth, who expanded our knowledge of the Navy's innovation accelerator ecosystem and how technology developers benefit from working with their office, too.

The next JIFX event at Camp Roberts is scheduled for 13-17 May 2024. We are seeking technologies relevant to defense applications especially those directly related to the topic of C5ISR & Countermeasures.

Total Participants

DoD Stakeholders

33% Technologists

Unique Technologies

UAS Sorties





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| Quad ID | Experiment Title | Organization | Vulcan Scout Card ID |
|---------|---|--|---|
| A-03 | Mustang sUAS | <u>GreenSight</u> | <u>16006</u> |
| A-07 | CASSEE Compact Aerial Inspection System | <u>GreenSight</u> | <u>16239</u> |
| A-09 | GPS-Denied UAV Navigation | Rhoman Aerospace | <u>11550</u> |
| B-05 | WeatherHive Swarming Meteorological Measurement System | <u>GreenSight</u> | <u>14423</u> |
| B-12 | Development & Assessment of Off-Road Autonomous-Driving Capabilities | BlueSpace.ai | 14088 |
| B-13 | Intelligent Humanoid Robot | <u>AIVOT</u> | <u>15551</u> |
| D-02 | Variable Text Encryption Using Physical Tokens | Expanse Laboratories | <u>16235</u> |
| E-01 | THOR | <u>Aronetics</u> | 11448 |
| E-02 | C5ISR Technologies for the Tactical Edge | IoT/AI | 9229, 9588, 12148, 13020, 13021, 14794, 14802 |
| F-01 | Target Detection using Neuromorphic Vision | <u>Grayscale AI</u> | <u>16168</u> |
| F-02 | Multi-Domain Expeditionary AI & Behavior Analysis at-the-edge for Tactical Surveillance Application | Gantz-Mountain Intelligence Automation Systems, Inc. | <u>4624</u> |
| F-04 | Frontline Perception System | <u>TurbineOne</u> | <u>10168</u> |
| G-03 | Holographic Situational Awareness | Avalon Holographics | 9019 |

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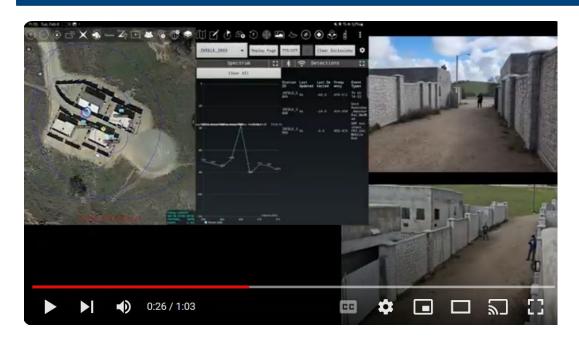
GreenSightAg's WeatherHive team deployed aircraft from their newly redesigned hive dispenser flying day and night to sense temperatures and wind speed at various altitudes.



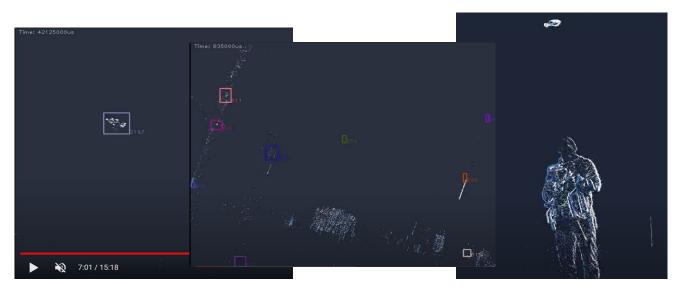
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IoT/AI integrates its entire suite of smart sensors to identify targets of interest within the CACTF and track them beyond ten kilometers.



Grayscale Al's experiment proved the effectiveness of neuro-morphic imaging to capture objects in motion based on their light reflection. Clearly catching UAS along with precipitation in these images.













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AIVOT's Intelligent Humanoid Robot moves simulated spare parts after receiving verbal instructions.



Gantz Mountain Intelligence Automation Systems validates the integration of new AI algorithms and a backup power system during the event.



Mr Jon Lazar, I&M Director, receives the coveted JIFX coin for inspiring technologists to help solve DoD operational challenges.

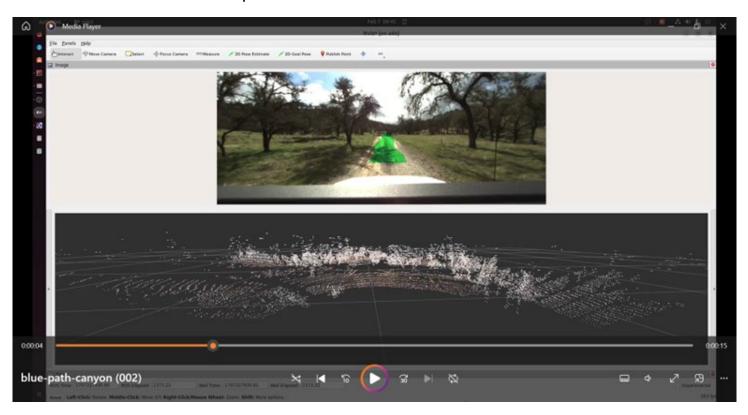








Bluespace AI sensors captured valuable data and imagery during their travels on the rain-soaked roads and trails of Camp Roberts.



Upcoming Events

| Event | Dates | Focus Area | Location |
|-----------|-------------------|---|--------------------------------------|
| JIFX 24-3 | 13 – 17 May 2024 | C5ISR & Countermeasures | NPS Field Laboratory at Camp Roberts |
| JIFX 24-4 | 5 – 9 August 2024 | Non-Standard Communication & Navigation | NPS Field Laboratory at Camp Roberts |





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