



2024 USNDA CONFERENCE DRAFT AGENDA

Igniting the U.S. Industrial Base for the Autonomous Era

Intro and Keynote

- 0800-0900:** Coffee/snacks/Networking
0900-0915: Introduction to USNDA, Opening Remarks
0915-0945: Keynote Speaker (TBD)
0945-1000: Break/Networking

State of the UAS/CUAS World

- 1000-1030:** Global Update and Reports from End Users: Ukraine/Russia, Israel, Iran, China
1030-1100: Requirements Developers: Army Futures, Marine Corps CD&I, AFWERX
1100-1130: S&T and Prototyping: AFRL, ARL, ONR, MCWL
1130-1200: Program Offices: OUSD A&S, Army PM SUAS, Navy PMA-263
- 1200-1330:** Networking Lunch

Company Demos

- 1230-1330:** Company Demos

Working Sessions

- 1330-1600:** Breakout Working Groups
1600-1630: Afternoon Snacks/Networking

Conference Outputs / Wrap-up

- 1630-1645:** Review Conference Outputs, Follow-on Action Items, and Responsible Parties
1645-1700: Final Remarks

Conference Outputs

- A concept and outline of a unified development architecture to speed up innovation and delivery of UAS / CUAS systems from concept phase through to operational use.
- A mapping of the drone / CUAS industrial base ecosystem; and initial draft of a targeted plan for strengthening / improving the industrial base ecosystem through tailored government/academia/industry partnerships.
- M&S and LVC applications to help drone and CUAS developers speed up testing, help academic institutions accelerate training thinkers and innovators, and help government agencies speed up training and integration.
- Initial design of the 2025 Drone Wars and Drone Games.



Working Sessions

Group 1: Designing the 2025 National Drone Games and Drone Wars

Participants in this working group will frame out the design of the 2025 National Drone Wars and 2025 National Drone Games. The National Drone Games are intended to foster competitive experiments with new and novel ways to accomplish capability objectives (think measures of performance); while the National Drone Wars will be a live force on force event to investigate tactics techniques and procedures (TTP) with emerging technologies in sUAS and C-sUAS. The working group will incorporate input from government leaders on objectives and measurable outcomes, from drone companies/ developers on state of the art capabilities, and from prototyping agencies and academia on latest technology breakthroughs.

Group 2: Designing a Unified Architecture for Experimentation

To accelerate mass production of drones that can integrate with government and third-party payloads, the U.S drone base - from hobbyists to academic institutions to large manufacturers - needs access to a common architecture to accelerate innovation. Participants in this working group will create an abstraction layer to abstract the complexity of different hardware and capabilities in order to help industry players, startups, and academic institutions speed up trial and error, innovation and delivery to the field. The goal is a hardware agnostic, common software development architecture for civil sector drone developers, that also allows for government agencies to develop more sensitive integrations.

Group 3: Improving Technical Collaboration for Drone Control and Maneuver in Contested Electromagnetic Spectrums

The U.S. industrial and innovation based for drones and C-UAS is not sufficiently tied to programs and emerging capabilities for command, control, communications, computers, cyber (C5) capabilities, to include extension and applications of those capabilities in the air littorals. Participants in this working group will review government, academic, and industry efforts for C5 capabilities, to include counter-C5ISR applications, and draft a framework to help align those efforts with corresponding innovation lines of effort for Drones and CUAS systems. The objective of this working group is to improve access and collaboration between drone/CUAS developers and C5 capabilities developers and requirements sponsors, in order to create more resilient and effective drone and CUAS solutions for federal, state, and local applications.



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Group 4: Designing Modeling and Simulation (M&S) and Live Virtual Constructive (LVC) applications to enable Drone & CUAS manufacturers, innovators, and operator training

Modeling and simulation using modern software and AI tools can support more rapid early-phase experimentation and testing before prototyping and delivery of drones and CUAS systems. It can also aid government agencies in developing better data to inform requirements for drones and CUAS. This working group will pair M&S developers with UAS and CUAS leaders to generate recommendations for applying existing M&S tools, or designing new models and tools to help accelerate drone development, training, and effective use of drones and CUAS by operators.

Group 5: Strengthening the Drone and CUAS Industrial Base

Participants in this working group will design a road map of targeted areas to help accelerate development of a more robust supply and resource chain for drone and CUAS systems. The group will examine the industrial base for drones and CUAS production, including not only hardware and software developers for drones/CUAS and payloads, but the command and control, data, and machine learning technologies and human resource expertise that surround them. The group will explore system-wide ideas from collaboration and resilience of the production chain from raw materials to hardware (motors, frames, cameras, wires, chips) and software (data storage, data processing, etc) with the goal of aligning government, industry and academic players to make it easier for all partners to build resilience and harden supply network, while easing and simplifying tech and business partnerships and acquisition paths. An output of this group may include recommendations to improve or evolve the DIU Blue UAS program.

Group 6 (in Main Plenary): Regional and State of Florida Drone and CUAS Hub

This working group will gather academic, political, law enforcement and business leaders from the state of Florida to share ideas about how the USNDA's technology, modeling, and simulation hub in the Central Florida region can support and integrate with partners across the region. USNDA will establish a Collaborative Capstone Research Laboratory (CCRL) on the campus of Full Sail University by 2027, but opportunities for collaboration can begin now. Participants will gather information about efforts across the region, and identify opportunities and timelines for collaboration.