

Ground System Architectures Workshop Stronger Together: Improving Interoperability for Users and Operations

Tutorials*—February 22–23 | General Session—February 27–March 2 | Classified Session—March 2 Location—The Aerospace Corporation | El Segundo | California

CALL FOR PARTICIPATION FOR 2023

The 27th annual Ground System Architectures Workshop (GSAW) provides a forum for the world's space-related ground system experts to collaborate with their peer ground system users, developers, and researchers through tutorials*, presentations, working groups, panel discussions, and technical exhibits. GSAW 2023 welcomes attendees and presenters for the Tutorials*, General Session including Working Groups, Plenary Presentations, and Technical Exhibits.

Over the past twenty-six years, GSAW has been a voice and resource for the ground systems community. The collaborative community of users, developers, vendors, and researchers has shared best practices and lessons learned in an evolving global space enterprise. The GSAW 2023 theme, "Stronger Together: Improving Interoperability for Users and Operators," invites you to share your ideas, emerging technologies, and roadmaps for the future with the ground system community. This year's focus is on leveraging interoperability for enterprise capabilities and data beyond individual programs to Consumers and Operators, and improving their User Experiences. Government and Commercial hybrid space architectures enable innovative approaches and partnerships for ground systems services while also presenting challenges for streamlined and consistent operation and user experiences. An outcome of the working model of the past two years is a renewed emphasis on remote and hybrid operating models to support both operations resiliency and workforce needs. We are looking to the ground systems community to share their insights, perspectives, and approaches on interoperable architectures and innovations, and especially in areas that could assist, engage, or improve operations and users.

Areas of interest include but are not limited to experiences, leading-edge practices, lessons learned, and research in a range of ground system topics including:

- Multi-Enterprise interoperability, compatibility, and standards
- Continuous deployment, fielding, and monitoring
- End-to-end, holistic and hybrid Government and Commercial space architectures
- Cyber security and resiliency
- Roadmaps and reference architectures

- Post-pandemic workforce and automation, autonomy)
- Data science, engineering, fusion, analytics, and exploitation
- Service-based operations
- Innovations in exposing legacy system capabilities
- Model-based and digital engineering, digital twins
- Cost, schedule, governance, and data rights

- Agile, DevSecOps, and rapid system development
- Visualization, user experience design, human factors engineering
- Predictive analysis, intelligent/ cognitive systems, machine learning, and autonomy
- Remote and lights-out operations
- Mission assurance and risk management

- Space-ground communications
- Virtualization, containers, hybrid cloud
- Creative business, partnership, and acquisition models
- Situational awareness
- Enablers for interagency cooperation



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We encourage you to submit abstracts by **October 24, 2022** for the following opportunities:

| Opportunity | Location | Duration |
|--|--|--|
| Tutorial* | Virtual | Instruct a 2.5-hour session |
| Plenary Presentation | General Session: Hybrid (In-person + virtual) Classified Session: In person | Present a 15-minute talk describing your work progress, or case studies. Award for Best Presentation |
| Working Group | Hybrid (In-person + virtual) | Lead a 2.5-hour collaborative session |
| Poster | In-Person | Present a 30" x 40" poster on display during lunches and evening event |
| Poster | On-Demand | Submit digital file for On-Demand viewing |
| Technical Exhibit | In-Person | Table to demonstrate products and capabilities during a 2.5-hour evening event |
| Technical Demo | On-Demand | Demonstrate products and capabilities by submitting a pre-recorded video—available to registrants On-Demand |
| Program Format: Hybrid (In-person + virtua | al) Classified Session: Will be held in-person on March 2, 2023, at The Aerospace Corporation El Segundo, California. | We are accepting abstracts for Plenary Presentations, to be delivered in-person.Proposal Instructions and Submission Forms: http://gsaw.aero.org/cfp/forms |
| | | n All attendees must possess a Presentation Guidelines: TS/SCI clearance and be a <u>http://gsaw.aero.org/cfp/</u> U.S. Citizen. guidelines |

* Tutorials are virtual only.

GSAW is sponsored by The Aerospace Corporation in cooperation with

- United States Space Force
- NASA/Jet Propulsion Laboratory, California Institute of Technology
- NASA Goddard Space Flight Center

- European Space Agency
- National Oceanic and Atmospheric Administration
- Software Engineering Institute



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