Ground System Architectures Workshop

Deploying Ground Innovation

March 8–11, 2027
The Aerospace Corporation | Chantilly, VA
Westfields Marriott Washington Dulles | Chantilly, VA

CALL FOR PARTICIPATION

Since its inception, GSAW has grown into the ground systems community's largest and most influential annual technical event. For our 31st year, we are excited to bring GSAW 2027 to the East Coast for the first time, bringing us closer to many of our operational partners and a significant segment of the intelligence community. This shift enables deeper collaboration, broader participation, and new opportunities to engage directly with mission stakeholders across the space enterprise.

Our 2027 theme, "Deploying Ground Innovation," reflects the rapid technological evolution reshaping what is possible for today's and tomorrow's ground systems. As the demand for resilient, intelligent, mission-ready capabilities accelerates, GSAW will spotlight how innovation is being operationalized across proliferated and conventional architectures, automation, digital engineering, AI/ML, cybersecurity, data management, and other essential domains. Other topics pertaining to ground system architectures are also welcomed including submissions that illuminate how these and other advancements, especially in the era of agentic AI, are transforming the present and future of space mission operations.

Join us in person for GSAW 2027, for a full program of tutorials, working groups, plenary presentations, posters, exhibits, evening sessions, and classified content. To underscore the importance and momentum of this year's discussions, the Classified Session will now open the week on Monday, rather than be later on Thursday. Additionally, a select number of tutorials will be shared virtually to engage the broader community.

GSAW 2027 addresses critical questions facing our community:

- **How do we accelerate innovation adoption while maintaining mission assurance?**
  Balancing agility with reliability, security, and compliance in operational environments.
- **What lessons learned can guide successful deployment of emerging technologies?**
  Real-world case studies of AI/ML, cloud, autonomy, and digital engineering implementations.
- **How can commercial innovation be integrated into government ground architectures?**
  Bridging commercial capabilities with government requirements, security standards, and operational constraints.
- **What strategies enable long-term resilience in evolving threat landscapes?**
  Building adaptable, secure, and sustainable ground systems for the future.

Ground system topics related to the following are of particular interest:

Architecture and Integration
- Mission-first architecture approaches
- Hybrid and multi-cloud technology
- Proliferated ground architectures
- Ground Segment as a Service (GSaaS)
- Software-defined infrastructure
- Edge computing
- Location-agnostic ground processing

Emerging Technologies
- Trusted autonomy
- Quantum technologies

Development and Engineering
- Agile methodologies
- DevSecOps
- Digital engineering

Operations and Orchestration
- Mission orchestration
- Remote ground operations
- Cooperative constellation management
- Autoscaling to meet mission demands
- Communications
- Human-machine teaming

Data and Intelligence
- Intelligent capabilities, AI/ML, agentic AI
- Data analytics and fusion
- Data management
- Anomaly detection

Security and Resilience
- Cybersecurity
- Ground mission assurance
- Software supply chain security

Governance and Process
- FinOps
- Commercial innovation
- Space sustainability

We encourage you to submit abstracts by September 22, 2026 for the following opportunities:

Tutorial	Instruct a half- or full-day session. In-person and virtual options will be available
Plenary Presentation	Present a 15-minute talk describing your work progress or case studies. Dr. Barry Boehm Award for Best Presentation
Working Group	Lead a four-hour collaborative session
Poster	Present a 30″ × 40″ poster on display during a 2.5-hour evening event (Tuesday evening)
Technical Exhibit	Reserve a table to demonstrate your products and capabilities during a 2.5-hour evening event (Tuesday evening)
Evening Session	Lead a 2.5-hour evening session (Wednesday evening)
Classified Session Plenary Presentation	Present a 15-minute talk describing your work progress or case studies during the classified session

New Location:

Westfields Marriott
14750 Conference Center Drive
Chantilly, VA 20151

Program Format:

Pre-Workshop Tutorials

- **Virtual**
  Wednesday and Thursday, March 3–4, 2027

In-Person Sessions

- **Classified Session**
  Monday, March 8, 2027 (morning)
  - The Aerospace Corporation
    14745 Lee Road
    Chantilly, VA 20151
  - All attendees must possess a TS/SCI clearance and be a U.S. citizen
- **Tutorials**
  Monday, March 8, 2027 (afternoon)
- **General Sessions (unclassified)**
  Tuesday–Thursday, March 9–11, 2027
  - Westfields Marriott
    14750 Conference Center Drive
    Chantilly, VA 20151

Proposal Instructions and Submission Forms:

http://gsaw.aero.org/cfp/forms

Presentation Guidelines:

http://gsaw.aero.org/cfp/guidelines

Submission Deadlines

- Abstracts/proposals due: **September 22, 2026**
- Notification of acceptance starting: **October 26, 2026**
- Accepted presentations, posters, working session slides, and tutorial slides due: **January 26, 2027**

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
- Boehm Center for Systems and Software Engineering

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