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6–10 JANUARY 2025
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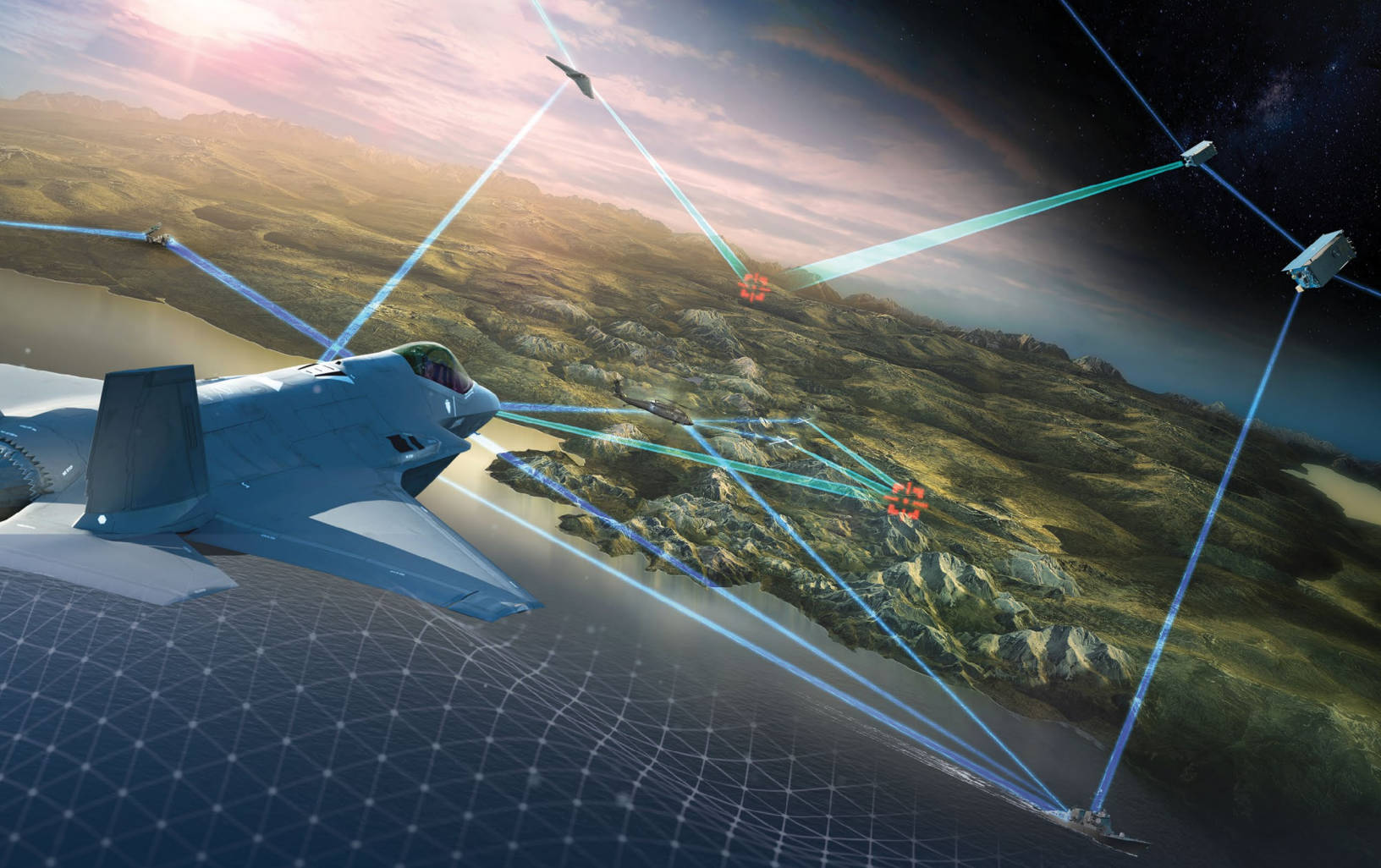

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The 2025 AIAA SciTech Forum Guiding Coalition and Technical Program Committee welcome you to Orlando! We have worked hard this past year curating exciting and thought-provoking content around the forum theme, Energize the Future. We hope these industry leaders, topics, and technical sessions inspire you. Make it a great week!

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PROGRAM

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SUNDAY, 5 JANUARY

7:30 p.m.	*Orlando Ballroom L*	AIAA-01	**SciTech 101**

MONDAY, 6 JANUARY

7:30 a.m.	*Session Rooms*	SP-01	**Technical Papers Session Prep**
8 a.m.	*Windermere Ballroom*	PLN-01	**Plenary Session**
8:30 a.m.	*Plaza Ballroom G*	AIAA-02	**Educator Workshop**
9 a.m.	*Regency Rotunda*	NW-01	**Networking Break**
10 a.m.	*Regency Ballroom Q*	F360-01	**Forum 360: Aviation R&D Requirements**
10 a.m.	*Plaza Ballroom H*	AIAA-03	**Rising Leaders in Aerospace: The Art of Making a Great Impression - Pitching for Young Professionals (Organized by SEDS)**
1 p.m.	*Regency Ballroom Q*	F360-02	**Forum 360: Mission Requirements Driving Space R&D Needs**
2 p.m.	*Regency Ballroom O/P*	AIAA-04	**Meet the Employers**
3 p.m.	*Regency Rotunda*	NW-02	**Networking Break**
3:30 p.m.	*Windermere Ballroom*	AIAA-05	**2025 AIAA Durand Lecture for Public Service**
3:30 p.m.	*Regency Ballroom Q*	AIAA-06	**Ushering in the Third Aerospace Revolution: Status from the U.S. Advanced Air Mobility (AAM) Interagency Working Group**
4:30 p.m.	*Regency Ballroom O/P*	AIAA-07	**Meet the Universities**
5:30 p.m.	*Windermere Ballroom*	AIAA-08	**Awards Recognition Ceremony**
6 p.m.	*Plaza Ballroom G*	DGE Workshop-1	**Aligning our Digital Taxonomy for Aerospace Workshop**

TUESDAY, 7 JANUARY

7:30 a.m.	*Session Rooms*	SP-02	**Technical Papers Session Prep**
8 a.m.	*Windermere Ballroom*	PLN-02	**Plenary Session**
9 a.m.	*Regency Rotunda*	NW-03	**Networking Break**
9:30 a.m.	*Windermere*	AIAA-22	**Advancing Microgravity Science, Technology, and Exploration: NASA's Strategy to Define the Next Era of Continuous Human Presence in Low Earth Orbit**
10 a.m.	*Regency Ballroom Q*	F360-03	**Forum 360: Establishing a Digital Culture — Enabling New Ways of Working**
11:30 a.m.	*Regency Ballroom Q*	AIAA-09	**The AI Future is Now: What AI Users Are Telling Us About AI... Will Change Everything**
1 p.m.	*Regency Ballroom Q*	F360-04	**Forum 360: The Future of Aerospace Design**
1 p.m.	*Regency Ballroom O/P*	AIAA-10	**Moving Toward Routine: Join COSMIC in Changing Space to Meet National ISAM Demands**
2 p.m.	*Plaza Ballroom G*	AIAA-12	**Rising Leaders in Aerospace: Panel & Social Hour — Transforming the Future of Aerospace: Innovations and Challenges**
2 p.m.	*Columbia 34*	AIAA-11	**AIAA Autonomy Position Discussion**
2 p.m.	*the HUB in Expo Hall*	HUB-01	**Interview — *Aerospace America* and AFWERX**

PROGRAM

3 p.m.	*Regency Ballroom*	NW-04	**Networking Break**
3 p.m.	*the HUB in Expo Hall*	HUB-02	**Benefits of Bonding – Click Bond**
3:30 p.m.	*Regency Ballroom Q*	F360-05	**Forum 360: Advancing Digital Engineering with Pattern-Based MBSE**
3:30 p.m.	*Manatee Spring II*	AIAA-13	**Bridging 1940 to 2040: Strategies for Our Diverse Aerospace Future**
3:30 p.m.	*the HUB in Expo Hall*	HUB-03	**Model-Based Certification: Transforming Aerospace Assurance Streamlining Safety, Compliance, and Innovation**
4 p.m.	*Windermere Ballroom*	AIAA-14	**2025 AIAA Dryden Lecture in Research**
5:30 p.m.	*Regency Ballroom*	HH-01	**Reception in the Expo Hall**

WEDNESDAY, 8 JANUARY

7:30 a.m.	*Session Rooms*	SP-03	**Technical Papers Session Prep**
8 a.m.	*Windermere Ballroom*	PLN-03	**Plenary Session: Fulfilling the Promise of the World's First Exascale Supercomputer: Aerospace on Frontier**
9 a.m.	*Regency Ballroom*	NW-05	**Networking Break**
9 a.m.	*the HUB in Expo Hall*	HUB-04	**Performance Enhancement of Subsonic Turbofans**
9:30 a.m.	*the HUB in Expo Hall*	HUB-05	**Stellar Students Share Their STEM Experiences & Workforce Dreams – Higher Orbits**
10 a.m.	*Regency Ballroom Q*	F360-06	**Forum 360: How Propulsion Technology Will Drive Net Zero**
10:30 a.m.	*the HUB in Expo Hall*	HUB-06	**JuliaHub HUB Presentation**
11 a.m.	*the HUB in Expo Hall*	HUB-07	**Using Artificial Intelligence for Improved Materials Characterization - ZEISS Industrial Quality Solutions**
11:30 a.m.	*Regency Ballroom*	LUNCH-01	**Expo Hall Lunch**
11:30 a.m.	*the HUB in Expo Hall*	HUB-08	**Presentation of RDSwin Student Design Software Followed by Aircraft Design, 7th edition Book Signing in Publications Booth**
12 p.m.	*the HUB in Expo Hall*	HUB-09	**CADRE: Multi-Agent Autonomy for a Team of Rovers on the Moon – JPL**
12:30 p.m.	*the HUB in Expo Hall*	HUB-10	**Bold Exploration – Johns Hopkins University Applied Physics Laboratory**
1 p.m.	*Regency Ballroom Q*	F360-07	**Forum 360: Materials and Manufacturing: The Need for Speed**
1 p.m.	*the HUB in Expo Hall*	HUB-11	**Artificial Intelligence in Space Exploration and the Search for Life Beyond Earth - JPL**
2 p.m.	*Plaza Ballroom G*	AIAA-15	**Rising Leaders in Aerospace: Speed Mentoring**
2:30 p.m.	*the HUB in Expo Hall*	HUB-12	**NASA's ATM-x: Hollister Airspace Ecosystem Overview**
3 p.m.	*Regency Ballroom*	NW-06	**Networking Break**
3 p.m.	*the HUB in Expo Hall*	HUB-13	**Cadence Design Systems HUB Presentation**
3:30 p.m.	*Windermere Ballroom*	F360-08	**Idea Challenge Workshop: Defining Opportunities on the Bleeding Edge**
6 p.m.	*Plaza Ballroom G*	DGE Workshop-2	**Digital Materiel Management Workshop**

PROGRAM

THURSDAY, 9 JANUARY

7:30 a.m.	*Session Rooms*	SP-04	**Technical Papers Session Prep**
8 a.m.	*Windermere Ballroom*	PLN-04	**Plenary Panel: AI and Autonomy**
9 a.m.	*Regency Ballroom*	NW-07	**Networking Break**
9:15 a.m.	*the HUB in Expo Hall*	HUB-14	**Doing More with Less: From Human-Powered Flight Across the English Channel to Solar-Powered Flight on Mars - AeroVironment**
9:30 a.m.	*Plaza Ballroom H*	AIAA-17	**Sustainable Aviation Workshop: Recap of Outcomes and NASA AACES Vision for 2050**
9:30 a.m.	*Plaza Ballroom G*	AIAA-16	**High-Speed Flight Task Force Wrap-Up Presentation**
9:45 a.m.	*the HUB in Expo Hall*	HUB-15	**Space4All Presentation**
10 a.m.	*Regency Ballroom Q*	F360-09	**Forum 360: Resilience of Software-Enabled Systems**
11:15 a.m.	*the HUB in Expo Hall*	HUB-17	**How NASA Aeronautics Finds "Wicked Problems"**
11:30 a.m.	*Regency Rotunda*	LUNCH-02	**Networking Lunch**
11:45 a.m.	*the HUB in Expo Hall*	HUB-18	**Investing in Aerospace & Defense Innovation - RTX Ventures**
12:15 p.m.	*the HUB in Expo Hall*	HUB-19	**AIAA Materials Startup Panel**
1 p.m.	*Regency Ballroom Q*	F360-10	**Forum 360: Certification of AI-Enabled Systems**
2 p.m.	*Regency Ballroom O/P*	AIAA-18	**Rising Leaders in Aerospace Goal Setting Workshop: Unlocking Success - Setting OKRs to Align with Long-Term Vision**
3 p.m.	*Regency Rotunda*	NW-08	**Networking Break**
3:30 p.m.	*Regency Ballroom Q*	F360-11	**Capture the Satellite Game Challenge: An Autonomy Design Competition for Non-Cooperative Space Operations in Kerbal Space Program**
3:30 p.m.	*Barrel Spring I*	AIAA-19	**Breaking Barriers: Advancing Diversity, Equity, and Inclusion in the Aerospace Industry**
6 p.m.	*Windermere Ballroom*	AIAA-20	**Women at SciTech Panel and Social Hour Sponsored by GE Aerospace**
6 p.m.	*Regency Ballroom O/P*	DGE Workshop-3	**Empowering Regional Digital Engineering, Modeling and Simulation Efforts Workshop**
7:30 p.m.	*Discovery 48*	AIAA-21	**Aerospace-Themed Board Game Night**

FRIDAY, 10 JANUARY

7:30 a.m.	*Session Rooms*	SP-05	**Technical Papers Session Prep**
8: a.m.	*Windermere Ballroom*	PLN-05	**Plenary Panel: The Future of Innovation**
9 a.m.	*Regency Rotunda*	NW-09	**Networking Break**
10 a.m.	*Regency Ballroom Q*	F360-12	**Forum 360: The Essential Building Blocks Needed for a Thriving Commercial Space Sector**
3 p.m.	*Regency Rotunda*	NW-10	**Networking Break**

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

DATE	START	ROOM	ABBREVIATION	TITLE
			ADAPTIVE STRUCTURES	
6-Jan	**9:30 a.m.**	*Plaza Ballroom F*	AS-01	Adaptive Unmanned Aerial System
6-Jan	**9:30 a.m.**	*Plaza Ballroom K*	AS-02	Meta-Materials and Multi-Stable Structures
6-Jan	**1 p.m.**	*Plaza Ballroom K*	AS-03	Novel Adaptive Structures I
6-Jan	**3:30 p.m.**	*Rock Spring I & II*	AS-04	INCAS I
7-Jan	**9:30 a.m.**	*Bayhill 18*	AS-05/SCS-04	Adaptive Spacecraft Structures and Systems
7-Jan	**3:30 p.m.**	*Bayhill 31*	AS-06	Novel Adaptive Structures II
8-Jan	**9:30 a.m.**	*Orlando Ballroom N*	AS-07 ★	Adaptive Structures Lecture: "Morphing Aircraft in the U.S. Air Force"
8-Jan	**1 p.m.**	*Blue Spring I*	AS-08	Bio-inspired Adaptive Structures
8-Jan	**3:30 p.m.**	*Blue Spring I*	AS-09	Adaptive Leading and Trailing Edges
9-Jan	**9:30 a.m.**	*Blue Spring I*	AS-10	Active Composites and Structural Health Monitoring / Non-Destructive Evaluation
9-Jan	**3:30 p.m.**	*Celebration 16*	AS-11	Frank Abdi Honorary Session
10-Jan	**3:30 p.m.**	*Blue Spring II*	AS-12	INCAS II
			AEROACOUSTICS	
7-Jan	**1 p.m.**	*Bayhill 18*	AA-01/EAT-11/TF-03	Advanced Air Mobility Noise
7-Jan	**3:30 p.m.**	*Bayhill 18*	AA-02	Propeller, Rotorcraft, and V/STOL Noise I
8-Jan	**9:30 a.m.**	*Bayhill 18*	AA-03	Propeller, Rotorcraft, and V/STOL Noise II
8-Jan	**3:30 p.m.**	*Bayhill 18*	AA-05	Jet Aeroacoustics
9-Jan	**9:30 a.m.**	*Bayhill 18*	AA-06	Computational Aeroacoustics / Jet Aeroacoustics
9-Jan	**1 p.m.**	*Bayhill 18*	AA-07	Community Noise, Sonic Boom and Metrics / Airframe, High-Lift Noise
9-Jan	**3:30 p.m.**	*Bayhill 18*	AA-08	Acoustic / Fluid Dynamics Interactions / Turbulence and Vortex Induced Noise Sources / General Acoustics
			AERODYNAMIC MEASUREMENT TECHNOLOGY	
6-Jan	**9:30 a.m.**	*Orlando Ballroom L*	AMT-01	Gas-Phase Thermometry
6-Jan	**9:30 a.m.**	*Orlando Ballroom M*	AMT-02/PC-02/FD-04	Highlighting Women in Aerospace
6-Jan	**1 p.m.**	*Florida Ballroom C*	AMT-03/HSABP-04	Instrumentation and Diagnostic Techniques for High-Speed Air-Breathing Propulsion I
6-Jan	**1 p.m.**	*Orlando Ballroom M*	AMT-04/SD-04/GT-04	Invited: NASA Ames Unsteady PSP Development for Testing and Evaluation
6-Jan	**1 p.m.**	*Orlando Ballroom L*	AMT-05	Velocimetry II

Common Terms

Plenary
Keynote speaker(s) that kicks off the day at AIAA SciTech Forum. This is the only event at that time so everyone is encouraged to attend.

Forum 360
High-level panel session that tackles the most pressing issues impacting the future of aerospace.

Technical Sessions
A series of paper or oral-only technical presentations. Each session contains a maximum of six presentations.

Technical Panels
In-depth panel session focusing on a technical topic.

Technical Lectures
In-depth session with one or two invited subject matter experts focusing on a technical topic.

Technical Workshops
Longer sessions focusing on a technical topic, often in a collaborative environment.

Rising Leaders in Aerospace (RLA)
These events, organized by the Young Professionals Group, are geared toward Young Professional participants.

The HUB
Stage/presentation area in the middle of the Expo Hall. Contains product demonstrations, special panels, sponsor presentations, and fun activities.

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

6-Jan	**3:30 p.m.**	*Florida Ballroom C*	AMT-06/HSABP-06	Instrumentation and Diagnostic Techniques for High-Speed Air-Breathing Propulsion II
6-Jan	**3:30 p.m.**	*Orlando Ballroom M*	AMT-07	Invited: AMT Rising Stars
6-Jan	**3:30 p.m.**	*Orlando Ballroom L*	AMT-08	Velocimetry III
7-Jan	**9:30 a.m.**	*Orlando Ballroom M*	AMT-10	PSP/TSP Workshop
7-Jan	**9:30 a.m.**	*Florida Ballroom B*	PGC-08/AMT-11	RDE Measurement and Diagnostics I
7-Jan	**1 p.m.**	*Orlando Ballroom L*	AMT-12	Applied Spectroscopic Measurements I
7-Jan	**1 p.m.**	*Orlando Ballroom M*	AMT-13	PSP and TSP Measurements I
7-Jan	**1 p.m.**	*Florida Ballroom B*	PGC-10/AMT-14	RDE Measurement and Diagnostics II
7-Jan	**3:30 p.m.**	*Orlando Ballroom L*	AMT-15	1D, Planar, and Volumetric Measurements
7-Jan	**3:30 p.m.**	*Orlando Ballroom M*	AMT-17	PSP and TSP Measurements II
7-Jan	**3:30 p.m.**	*Celebration 6*	PC-16/PGC-12/AMT-16	Measurements and Advanced Diagnostics for Reacting Systems
8-Jan	**9:30 a.m.**	*Orlando Ballroom L*	AMT-18	Applied Spectroscopic Measurements II
8-Jan	**9:30 a.m.**	*Orlando Ballroom M*	AMT-20 ★	Innovations in Aerodynamic Measurement Technologies
8-Jan	**9:30 a.m.**	*Celebration 3*	PC-18/AMT-19	Combustion Diagnostics I
8-Jan	**1 p.m.**	*Orlando Ballroom M*	AMT-21	AMT in Industry
8-Jan	**1 p.m.**	*Orlando Ballroom L*	AMT-23/GT-14	Measurements in Challenging Environments I
8-Jan	**1 p.m.**	*Celebration 3*	PC-21/AMT-22	Combustion Diagnostics II
8-Jan	**3:30 p.m.**	*Orlando Ballroom M*	AMT-24	Invited: Developments and Advances in Background Oriented Schlieren
8-Jan	**3:30 p.m.**	*Orlando Ballroom L*	AMT-25	Novel Instrumentation, Probes, and Sensors I
9-Jan	**9:30 a.m.**	*Orlando Ballroom L*	AMT-26	Other Topics in AMT I
9-Jan	**9:30 a.m.**	*Orlando Ballroom M*	AMT-27	Velocimetry I
9-Jan	**1 p.m.**	*Orlando Ballroom L*	AMT-28	High-Speed Flow Measurements II
9-Jan	**1 p.m.**	*Orlando Ballroom M*	AMT-29	Invited: Developments and Advances in FLDI
9-Jan	**3:30 p.m.**	*Orlando Ballroom L*	AMT-30	Data Analysis Techniques and Data-Driven Validation
9-Jan	**3:30 p.m.**	*Orlando Ballroom M*	AMT-31	High-Speed Flow Measurements I
9-Jan	**3:30 p.m.**	*Manatee Spring II*	EAT-33/AFM-29/ AMT-38	Flight Testing and Flying Demonstrators for the Future of Flight: German Aerospace Center (DLR) perspective
10-Jan	**9:30 a.m.**	*Orlando Ballroom M*	AMT-32	Combustion, Detonation, and Propulsion Measurements I
10-Jan	**9:30 a.m.**	*Orlando Ballroom L*	AMT-34	Novel Instrumentation, Probes, and Sensors II
10-Jan	**9:30 a.m.**	*Coral Spring I*	GT-19/AMT-33	Measurements in Challenging Environments II
10-Jan	**1 p.m.**	*Orlando Ballroom L*	AMT-35	Combustion, Detonation, and Propulsion Measurements II
10-Jan	**1 p.m.**	*Coral Spring I*	GT-20/AMT-36	Measurements in Challenging Environments III
			AEROSPACE EDUCATION	
6-Jan	**1 p.m.**	*Blue Spring II*	EDU-01	Insights for New Department Chairs
7-Jan	**3:30 p.m.**	*Bayhill 26*	EDU-02	Advancing Aerospace Education I
8-Jan	**9:30 a.m.**	*Blue Spring I*	EDU-03	Insights for New Faculty Joining Aerospace Engineering Departments
9-Jan	**1 p.m.**	*Barrel Spring I*	EDU-04	Aerospace Engineering Education in the 21st Century: Revisions to ABET Criteria for Aerospace Engineering
10-Jan	**9:30 a.m.**	*Celebration 15*	EDU-05	Advancing Aerospace Education II
10-Jan	**1 p.m.**	*Celebration 15*	EDU-06	Advancing Aerospace Education III
10-Jan	**3:30 p.m.**	*Celebration 15*	EDU-07	Advancing Aerospace Education IV
			AEROSPACE POWER SYSTEMS	
7-Jan	**1 p.m.**	*Celebration 6*	APS-01	Bridging Horizons: Exploring Synergies Between Terrestrial and Space Fission Surface Power Reactors
9-Jan	**1 p.m.**	*Celebration 13*	APS-02	Energy Generation and Storage: System Level Approaches
10-Jan	**9:30 a.m.**	*Celebration 13*	APS-03	Space Power Generation and Management Component Technologies
10-Jan	**1 p.m.**	*Celebration 8*	APS-04	Powering Missions in Deep Space and in Extreme Environments
10-Jan	**3:30 p.m.**	*Celebration 8*	APS-05	Energy Storage and Power Architectures for Aeronautics Systems

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

AIRCRAFT DESIGN				
6-Jan	**9:30 a.m.**	*Bayhill 30*	APA-01/ACD-01/ MDO-01	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques I
6-Jan	**9:30 a.m.**	*Manatee Spring I*	ACD-02	Conceptual Design and Optimization I
6-Jan	**10:30 a.m.**	*Manatee Spring II*	INPSI-03/APA-19/ ACD-06/EAT-06 ★	NASA Sustainable Flight National Partnership Overview and Sustainable Flight Demonstrator/X66 Focus
6-Jan	**1 p.m.**	*Manatee Spring I*	ACD-04	Conceptual Design and Optimization II
6-Jan	**1 p.m.**	*Bayhill 30*	APA-08/ACD-03/ MDO-03	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques II
6-Jan	**3:30 p.m.**	*Manatee Spring I*	ACD-07	Novel Aircraft Configurations
6-Jan	**3:30 p.m.**	*Bayhill 30*	APA-16/ACD-05/ MDO-06	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques III
7-Jan	**9:30 a.m.**	*Manatee Spring I*	ACD-08	Aerodynamic Optimization and Analysis I
7-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-28/ACD-26/ TES-06/GRE-04 ★	Clean Aviation Program Keynote: Latest Highlights and Achievements
7-Jan	**1 p.m.**	*Manatee Spring I*	ACD-10	Aerodynamic Optimization and Analysis II
7-Jan	**3:30 p.m.**	*Manatee Spring I*	ACD-13	Supersonic and Hypersonic Applications
7-Jan	**3:30 p.m.**	*Plaza Ballroom J*	INPSI-07/EAT-18/ TF-07/ACD-15 ★	IMOTHEP – Investigation and Maturation of Technologies for Hybrid Electric Propulsion (Featured Keynote)
8-Jan	**9:30 a.m.**	*Manatee Spring I*	ACD-14	Design of Hydrogen-Powered Aircraft
8-Jan	**1 p.m.**	*Manatee Spring I*	ACD-16	Design of Hybrid-Electric Aircraft
8-Jan	**3:30 p.m.**	*Manatee Spring I*	ACD-17	Wing Design and Optimization
9-Jan	**9:30 a.m.**	*Manatee Spring I*	ACD-18	Design of Subscale Aircraft I
9-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-12/ACD-11/ APA-35	Clean Aviation Special Session: Innovative Aircraft Concepts and Novel Configurations
9-Jan	**11 a.m.**	*Manatee Spring II*	EAT-15/APA-42/ ACD-12	Clean Aviation Special Session: Advanced Wing Design and Breakthrough Technologies
9-Jan	**1 p.m.**	*Bayhill 29*	DE-06/ACD-20	Aircraft Design Methods, Tools, and Processes
9-Jan	**1 p.m.**	*Manatee Spring I*	ACD-21	Design of Subscale Aircraft II
9-Jan	**3:30 p.m.**	*Manatee Spring I*	ACD-22	Aviation Operations & Environmental Impacts
10-Jan	**9:30 a.m.**	*Manatee Spring I*	ACD-24	Flight Mechanics and Control in Design
10-Jan	**1 p.m.**	*Bayhill 17*	TF-12/UAS-14/ACD-25	Advanced Air Mobility Operations, Design, and Analysis
APPLIED AERODYNAMICS				
6-Jan	**9:30 a.m.**	*Bayhill 30*	APA-01/ACD-01/ MDO-01	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques I
6-Jan	**9:30 a.m.**	*Bayhill 31*	APA-02/GT-01	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing I
6-Jan	**9:30 a.m.**	*Bayhill 33*	APA-03	Airfoil/Wing/Configuration Aerodynamics I
6-Jan	**9:30 a.m.**	*Bayhill 32*	APA-04/FD-03	Flow Control: Methods and Applications I
6-Jan	**9:30 a.m.**	*Bayhill 28*	APA-05	Special Session: Applied Surrogate Modeling I (Invited)
6-Jan	**9:30 a.m.**	*Bayhill 29*	APA-06	Special Session: Drag Reducing Surfaces (Invited)
6-Jan	**9:30 a.m.**	*Bayhill 22*	APA-07	Special Session: High-Lift-Prediction-Workshop (HLPW-5): Summaries (Invited)
6-Jan	**10:30 a.m.**	*Manatee Spring II*	INPSI-03/APA-19/ ACD-06/EAT-06 ★	NASA Sustainable Flight National Partnership Overview and Sustainable Flight Demonstrator/X66 Focus
6-Jan	**1 p.m.**	*Bayhill 30*	APA-08/ACD-03/ MDO-03	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques II
6-Jan	**1 p.m.**	*Bayhill 31*	APA-09/GT-03	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing II
6-Jan	**1 p.m.**	*Bayhill 33*	APA-10	Airfoil/Wing/Configuration Aerodynamics II
6-Jan	**1 p.m.**	*Bayhill 32*	APA-11/FD-07	Flow Control: Methods and Applications II
6-Jan	**1 p.m.**	*Bayhill 29*	APA-12/FD-08	Hypersonics I
6-Jan	**1 p.m.**	*Rock Spring I & II*	APA-13/FD-10	Special Session: Active Flow Control, in Honor of Avi Seifert
6-Jan	**1 p.m.**	*Bayhill 28*	APA-14	Special Session: Applied Surrogate Modeling II (Invited)
6-Jan	**1 p.m.**	*Bayhill 22*	APA-15	Special Session: High-Lift-Prediction-Workshop (HLPW-5): RANS Simulations (Invited)

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

6-Jan	**3:30 p.m.**	*Bayhill 30*	APA-16/ACD-05/ MDO-06	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques III
6-Jan	**3:30 p.m.**	*Bayhill 32*	APA-20/FD-12	Flow Control: Methods and Applications III
6-Jan	**3:30 p.m.**	*Bayhill 29*	APA-21/FD-13	Hypersonics II
6-Jan	**3:30 p.m.**	*Bayhill 28*	APA-22	Special Session: Applied Surrogate Modeling III (Invited)
6-Jan	**3:30 p.m.**	*Bayhill 22*	APA-23	Special Session: High-Lift-Prediction-Workshop (HLPW-5): RANS and Adaptive Simulations (Invited)
7-Jan	**9:30 a.m.**	*Bayhill 30*	APA-24	Aero-Propulsive Interactions and Aerodynamics of Integrated Propeller Systems I
7-Jan	**9:30 a.m.**	*Bayhill 31*	APA-25	Applied Aeroelasticity and Aerodynamic-Structural Dynamics Interaction I
7-Jan	**9:30 a.m.**	*Bayhill 32*	APA-26/FD-17	Flow Control: Methods and Applications IV
7-Jan	**9:30 a.m.**	*Bayhill 33*	APA-27	Reduced Order Aerodynamic Modeling and System Identification I
7-Jan	**9:30 a.m.**	*Rock Spring I & II*	APA-28/GT-09/ CFD2030-04	Shared Opportunities in Uncertainty Quantification in Support of CFD Validation
7-Jan	**9:30 a.m.**	*Bayhill 28*	APA-29/AFM-05	Special Session: 2nd AIAA Stability and Control Prediction Workshop I (Invited)
7-Jan	**9:30 a.m.**	*Bayhill 22*	APA-30	Special Session: High-Lift-Prediction-Workshop (HLPW-5): Gridding, RANS, and Hybrid RANS/LES (Invited)
7-Jan	**9:30 a.m.**	*Bayhill 29*	APA-31	Special Session: HPC Multi-Physics CREATE I (Invited)
7-Jan	**1 p.m.**	*Bayhill 30*	APA-32	Aero-Propulsive Interactions and Aerodynamics of Integrated Propeller Systems II
7-Jan	**1 p.m.**	*Bayhill 31*	APA-33	Applied Aeroelasticity and Aerodynamic-Structural Dynamics Interaction II
7-Jan	**1 p.m.**	*Bayhill 32*	APA-34	Applied Computational Fluid Dynamics I
7-Jan	**1 p.m.**	*Bayhill 33*	APA-36	Reduced Order Aerodynamic Modeling and System Identification II
7-Jan	**1 p.m.**	*Bayhill 22*	APA-38	Special Session: High-Lift-Prediction-Workshop (HLPW-5): Scale-Resolving Simulations I (Invited)
7-Jan	**1:00 PM**	*Bayhill 29*	APA-39	Special Session: HPC Multi-Physics CREATE II (Invited)
7-Jan	**3:30 p.m.**	*Bayhill 32*	APA-41	Applied Computational Fluid Dynamics II
7-Jan	**3:30 p.m.**	*Bayhill 30*	APA-43	Low Speed, Low Reynolds Number & Bio-Inspired Aerodynamics
7-Jan	**3:30 p.m.**	*Bayhill 28*	APA-44/AFM-11	Special Session: 2nd AIAA Stability and Control Prediction Workshop II (Invited)
7-Jan	**3:30 p.m.**	*Bayhill 22*	APA-45	Special Session: High-Lift-Prediction-Workshop (HLPW-5): Scale-Resolving Simulations II (Invited)
7-Jan	**3:30 p.m.**	*Bayhill 29*	APA-46	Special Session: HPC Multi-Physics CREATE III (Invited)
7-Jan	**3:30 p.m.**	*Bayhill 33*	APA-47	Unsteady Aerodynamics
7-Jan	**3:30 p.m.**	*Coral Spring I*	GT-11/APA-40	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing IV
8-Jan	**9:30 a.m.**	*Bayhill 29*	APA-50	Missile/Projectile/Munition Aerodynamics, Carriage and Store Separation
8-Jan	**9:30 a.m.**	*Bayhill 28*	APA-51	Propeller/Rotorcraft/Wind Turbine Aerodynamics I
8-Jan	**9:30 a.m.**	*Bayhill 30*	APA-52	Special Session: NATO AVT-350: Novel Control Effectors: Advanced Concepts I (Invited)
8-Jan	**9:30 a.m.**	*Bayhill 22*	APA-53	Special Session: Updates to the NASA SUSAN Electrofan Trade Study I (Invited)
8-Jan	**9:30 a.m.**	*Bayhill 31*	FD-24/APA-48	Flow Control: Methods and Applications V
8-Jan	**9:30 a.m.**	*Bayhill 32*	FD-26/APA-49	Hypersonic Flows I
8-Jan	**1 p.m.**	*Bayhill 28*	APA-57	Propeller/Rotorcraft/Wind Turbine Aerodynamics II
8-Jan	**1 p.m.**	*Bayhill 30*	APA-58	Special Session: NATO AVT-350: Novel Control Effectors: Advanced Concepts II (Invited)
8-Jan	**1 p.m.**	*Bayhill 22*	APA-59	Special Session: Updates to the NASA SUSAN Electrofan Trade Study II (Invited)
8-Jan	**1 p.m.**	*Bayhill 31*	FD-30/APA-54	Flow Control: Methods and Applications VI
8-Jan	**1 p.m.**	*Bayhill 32*	FD-32/APA-55	Hypersonic Flows II
8-Jan	**1 p.m.**	*Bayhill 25*	MVCE-09/APA-60/ CFD2030-07	Visualization and Knowledge Extraction of Large-Scale Data Sets
8-Jan	**3:30 p.m.**	*Bayhill 28*	APA-63	Propeller/Rotorcraft/Wind Turbine Aerodynamics III

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

8-Jan	**3:30 p.m.**	*Bayhill 30*	APA-64	Special Session: NATO AVT-350: Novel Control Effectors: Advanced Concepts III (Invited)
8-Jan	**3:30 p.m.**	*Bayhill 22*	APA-65	Special Session: Updates to the NASA SUSAN Electrofan Trade Study III (Invited)
8-Jan	**3:30 p.m.**	*Bayhill 29*	APA-66	Turbulence and Transition Modeling for Aerodynamic Applications
8-Jan	**3:30 p.m.**	*Bayhill 31*	FD-36/APA-61	Flow Control: Methods and Applications VII
8-Jan	**3:30 p.m.**	*Bayhill 32*	FD-38/APA-62	Hypersonic Flows III
9-Jan	**9:30 a.m.**	*Bayhill 30*	APA-70	Special Session: NATO AVT-298 Reynolds Number Effects on Swept Wing Aerodynamics: Testing and Computations I
9-Jan	**9:30 a.m.**	*Bayhill 22*	APA-71	Special Session: Rotor-in-Hover Simulations I (Invited)
9-Jan	**9:30 a.m.**	*Bayhill 29*	APA-86/SD-22	DPW-8/AePW-4 Mini Workshop
9-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-12/ACD-11/APA-35	Clean Aviation Special Session: Innovative Aircraft Concepts and Novel Configurations
9-Jan	**9:30 a.m.**	*Bayhill 31*	FD-41/APA-68	Flow Control: Methods and Applications VIII
9-Jan	**9:30 a.m.**	*Bayhill 32*	FD-42/APA-69	Hypersonic Flows IV
9-Jan	**9:30 a.m.**	*Bayhill 26*	MVCE-10/APA-67/CFD2030-08	CFD on Large-Scale Meshes for Applied Aerodynamics
9-Jan	**11 a.m.**	*Manatee Spring II*	EAT-15/APA-42/ACD-12	Clean Aviation Special Session: Advanced Wing Design and Breakthrough Technologies
9-Jan	**1 p.m.**	*Bayhill 30*	APA-75	Special Session: NATO AVT-298 Reynolds Number Effects on Swept Wing Aerodynamics: Testing and Computations II
9-Jan	**1 p.m.**	*Bayhill 22*	APA-76	Special Session: Rotor-in-Hover Simulations II (Invited)
9-Jan	**1 p.m.**	*Bayhill 31*	FD-47/APA-73	Flow Control: Methods and Applications IX
9-Jan	**1 p.m.**	*Bayhill 32*	FD-48/APA-74	Hypersonic Flows V
9-Jan	**3:30 p.m.**	*Bayhill 22*	APA-78	Special Session: Applied Aerodynamics: State of the Art (Invited)
9-Jan	**3:30 p.m.**	*Bayhill 29*	APA-79	Transonic Aerodynamics
9-Jan	**3:30 p.m.**	*Bayhill 31*	FD-51/APA-77	Flow Control: Methods and Applications X
10-Jan	**9:30 a.m.**	*Bayhill 29*	APA-82/SPSN-04	Supersonic Aerodynamics I
10-Jan	**9:30 a.m.**	*Celebration 12*	INPSI-10/APA-81	Aerodynamics of Inlets and Nozzles I
10-Jan	**1 p.m.**	*Bayhill 29*	APA-84/SPSN-05	Supersonic Aerodynamics II
10-Jan	**1 p.m.**	*Celebration 5*	HIS-07/APA-83	History of Institutions and Design Methodologies
			ATMOSPHERIC FLIGHT MECHANICS	
6-Jan	**9:30 a.m.**	*Bayhill 23*	AFM-01	System Identification and Flight Test I
6-Jan	**1 p.m.**	*Bayhill 23*	AFM-02	Hypersonic and Spacecraft Flight Mechanics
6-Jan	**3:30 p.m.**	*Bayhill 23*	AFM-03	System Identification and Flight Test II
7-Jan	**9:30 a.m.**	*Bayhill 23*	AFM-04	Aircraft Dynamics, Performance, Stability, and Control I
7-Jan	**9:30 a.m.**	*Bayhill 28*	APA-29/AFM-05	Special Session: 2nd AIAA Stability and Control Prediction Workshop I (Invited)
7-Jan	**1 p.m.**	*Bayhill 23*	AFM-08	System Identification and Flight Test III
7-Jan	**1 p.m.**	*Rock Spring I & II*	GNC-12/AFM-06	Entry, Descent and Landing Technology: Overviews
7-Jan	**3:30 p.m.**	*Bayhill 23*	AFM-09	Aircraft Dynamics, Performance, Stability, and Control II
7-Jan	**3:30 p.m.**	*Bayhill 28*	APA-44/AFM-11	Special Session: 2nd AIAA Stability and Control Prediction Workshop II (Invited)
7-Jan	**3:30 p.m.**	*Rock Spring I & II*	GNC-15/AFM-10	Entry, Descent and Landing Technology: Navigation Sensors
8-Jan	**9:30 a.m.**	*Bayhill 23*	AFM-13	System Identification and Flight Test IV
8-Jan	**9:30 a.m.**	*Rock Spring I & II*	GNC-18/AFM-12	Entry, Descent and Landing Technology: Guidance I (Entry & Aerocapture)
8-Jan	**1 p.m.**	*Bayhill 23*	AFM-14	Aeroservoelasticity
8-Jan	**1 p.m.**	*Rock Spring I & II*	GNC-21/AFM-15	Entry, Descent and Landing Technology: Aerocapture for Ice Giants I
8-Jan	**3:30 p.m.**	*Bayhill 23*	AFM-17	System Identification and Flight Test V
8-Jan	**3:30 p.m.**	*Rock Spring I & II*	GNC-23/AFM-16	Entry, Descent and Landing Technology: Aerocapture for Ice Giants II
9-Jan	**9:30 a.m.**	*Bayhill 23*	AFM-19	Handling Qualities and Flying Qualities
9-Jan	**9:30 a.m.**	*Rock Spring I & II*	GNC-25/AFM-18	Entry, Descent and Landing Technology: Guidance II

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

9-Jan	**1 p.m.**	*Bayhill 23*	AFM-20	Aerodynamic Prediction Methods
9-Jan	**1 p.m.**	*Rock Spring I & II*	GNC-30/AFM-21	Entry, Descent and Landing Technology: Map Generation and Relative Localization
9-Jan	**3:30 p.m.**	*Bayhill 23*	AFM-22	Automatic Maneuver Injection and System Identification for General Aviation Aircraft
9-Jan	**3:30 p.m.**	*Manatee Spring II*	EAT-33/AFM-29/ AMT-38	Flight Testing and Flying Demonstrators for the Future of Flight: German Aerospace Center (DLR) perspective
9-Jan	**3:30 p.m.**	*Rock Spring I & II*	GNC-35/AFM-23	Entry, Descent and Landing Technology: EDL Missions I
10-Jan	**9:30 a.m.**	*Bayhill 23*	AFM-25	Role of Parameter/System Identification in Air Vehicle Development, Flight Test and Certification
10-Jan	**9:30 a.m.**	*Rock Spring I & II*	GNC-37/AFM-24	Entry, Descent and Landing Technology: EDL Missions II
10-Jan	**1 p.m.**	*Bayhill 23*	AFM-27	Launch Vehicle, Missile, and Projectile Flight Mechanics
10-Jan	**1 p.m.**	*Rock Spring I & II*	GNC-43/AFM-26	Entry, Descent and Landing Technology: Guidance III
10-Jan	**3:30 p.m.**	*Rock Spring I & II*	GNC-47/AFM-28	Entry, Descent and Landing Technology: Guidance IV
ATMOSPHERIC AND SPACE ENVIRONMENTS				
7-Jan	**9:30 a.m.**	*Peacock Spring*	EXPL-07/ASE-01	Lunar Environments and Effects on Lunar Exploration
9-Jan	**3:30 p.m.**	*Bayhill 26*	MVCE-12/ASE-02	Other Topics in MVCE and ASE
10-Jan	**1 p.m.**	*Coral Spring II*	ASE-03	Atmospheric and Space Environments
CFD VISION 2030				
6-Jan	**9:30 a.m.**	*Barrel Spring I*	CFD2030-01	NASA's Revolutionary Computational Aerosciences
6-Jan	**3:30 p.m.**	*Barrel Spring I*	CFD2030-02	CFD2030 Challenges in Hypersonic Simulations
7-Jan	**9:30 a.m.**	*Rock Spring I & II*	APA-28/GT-09/ CFD2030-04	Shared Opportunities in Uncertainty Quantification in Support of CFD Validation
7-Jan	**9:30 a.m.**	*Celebration 15*	CFD2030-03	Development of AI/ML for CFD Applications
8-Jan	**9:30 a.m.**	*Celebration 15*	CFD2030-05	Turbulence, Turbulence Modeling, Uncertainty Quantification and V&V
8-Jan	**1 p.m.**	*Celebration 15*	CFD2030-06	Large Scale Simulations and AI/ML Applications
8-Jan	**1 p.m.**	*Bayhill 25*	MVCE-09/APA-60/ CFD2030-07	Visualization and Knowledge Extraction of Large-Scale Data Sets
9-Jan	**9:30 a.m.**	*Bayhill 26*	MVCE-10/APA-67/ CFD2030-08	CFD on Large-Scale Meshes for Applied Aerodynamics
COMMUNICATION SYSTEMS				
10-Jan	**3:30 p.m.**	*Blue Spring I*	CS-01	Communication Systems
COMPLEX AEROSPACE SYSTEMS EXCHANGE				
7-Jan	**9:30 a.m.**	*Plaza Ballroom E*	CASE-01	Beyond Technical Expertise: Essential Skills for Leading in Complex Systems
COMPUTER SYSTEMS				
10-Jan	**3:30 p.m.**	*Bayhill 23*	CPS-01	Computer Systems
CYBERSECURITY				
6-Jan	**3:30 p.m.**	*Plaza Ballroom I*	IS-05/HMT-01/CSS-01/GTE-06/EAT-05	Artificial Intelligence in Aerospace & Defense
10-Jan	**3:30 p.m.**	*Bayhill 22*	CSS-03 ★	Cybersecurity
DESIGN ENGINEERING				
7-Jan	**9:30 a.m.**	*Plaza Ballroom F*	DE-02	ML/AI Applications to Design Engineering I
7-Jan	**1 p.m.**	*Plaza Ballroom F*	DE-03	ML/AI Applications to Design Engineering II
8-Jan	**9:30 a.m.**	*Florida Ballroom C*	GTE-01/HYP-01/STR-01/DE-01/EAT-36 ★	Advanced Manufacturing Innovations in Aerospace and Defense
8-Jan	**1 p.m.**	*Barrel Spring II*	DE-04	Innovative and Creative Aerospace Designs
8-Jan	**3:30 p.m.**	*Barrel Spring II*	DE-05	Early Design Approaches for Increased -ilities
9-Jan	**1 p.m.**	*Bayhill 29*	DE-06/ACD-20	Aircraft Design Methods, Tools, and Processes
10-Jan	**9:30 a.m.**	*Celebration 6*	DE-07	Designing with Intelligence: Exploring the Promise and Challenges of Human-Machine Teaming for Design

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

DIGITAL AVIONICS				
7-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-09/GNC-13/DA-01/ HMT-02/TF-04/EAT-13	Future of Autonomous Flight
10-Jan	**9:30 a.m.**	*Blue Spring I*	DA-02	Digital Avionics I
10-Jan	**1 p.m.**	*Blue Spring I*	DA-03	Digital Avionics II
DIGITAL ENGINEERING				
6-Jan	**9:30 a.m.**	*Plaza Ballroom E*	DGE-01	Digital Thread/Twin Integration Problem Space
6-Jan	**1 p.m.**	*Plaza Ballroom E*	DGE-02	AIAA Digital Engineering Integration Committee Digital Ecosystem Position Paper
6-Jan	**1 p.m.**	*Barrel Spring I*	DGE-03	Digital Engineering: Digital Twins for New Ways of Working
6-Jan	**2 p.m.**	*Plaza Ballroom E*	DGE-04 ★	Saab Aeronautics: Digital Engineering History and Future
6-Jan	**3:30 p.m.**	*Plaza Ballroom E*	DGE-05	Materials to Missions
7-Jan	**9:30 a.m.**	*Barrel Spring I*	DGE-06	Digital Engineering: Digital Twins for Maintenance and Logistics Operations
7-Jan	**3:30 p.m.**	*Barrel Spring I*	DGE-07	Digital Engineering: Digital Thread
7-Jan	**3:30 p.m.**	*Plaza Ballroom E*	DGE-08	US DoD (OSD) Digital Engineering, Modeling and Simulation - Strategy and Realization Panel
8-Jan	**9:30 a.m.**	*Barrel Spring I*	DGE-09	Digital Engineering: Computational & Knowledge Based Engineering
8-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-25/DGE-14	Clean Aviation Special Session: Future Aircraft Design, Novel Certification and Digital Technology Integration
8-Jan	**1 p.m.**	*Plaza Ballroom E*	DGE-10 ★	Digital Materiel Management - Realizing Value from Digital ... Together!
8-Jan	**2 p.m.**	*Plaza Ballroom E*	DGE-11	Confidence in Models and Artifacts Across Four Technical Societies: The Rosetta Stone Project
8-Jan	**3:30 p.m.**	*Barrel Spring I*	DGE-12	Digital Engineering: Digital Ecosystem
8-Jan	**3:30 p.m.**	*Plaza Ballroom J*	EAT-23/DGE-13/GTE-28	Digital Engineering for Next-Generation Aircraft Design and Development
9-Jan	**9:30 a.m.**	*Plaza Ballroom E*	DGE-16	Digital Procurement - Exemplars and Prototypes
9-Jan	**1 p.m.**	*Plaza Ballroom E*	DGE-17	Confidence in Models and Artifacts - VVUQ
9-Jan	**3:30 p.m.**	*Plaza Ballroom E*	DGE-18	Digital System Model Position Paper Panel Discussion
10-Jan	**9:30 a.m.**	*Celebration 16*	DGE-19	A Study of Guidelines for Enabling Interoperable and Responsible Use of AI
DYNAMICS SPECIALISTS				
7-Jan	**9:30 a.m.**	*Plaza Ballroom K*	DS-01	Gust Load Alleviation I
7-Jan	**1 p.m.**	*Barrel Spring I*	DS-02	Dynamics Challenges in eVTOL Aircraft
7-Jan	**1 p.m.**	*Plaza Ballroom K*	DS-03	Gust Load Alleviation II
8-Jan	**1 p.m.**	*Orlando Ballroom N*	DS-04 ★	Dynamics Specialists Conference Keynote Lecture
8-Jan	**3:30 p.m.**	*Celebration 15*	DS-05	Progress in Digital Design and Certification
9-Jan	**9:30 a.m.**	*Celebration 15*	DS-06	Active Flutter Suppression
9-Jan	**3:30 p.m.**	*Orlando Ballroom N*	DS-07	Towards Certifiable Active Flutter Suppression Systems
ELECTRIC PROPULSION				
6-Jan	**9:30 a.m.**	*Celebration 1*	EP-01	Hall Thruster I
6-Jan	**1 p.m.**	*Celebration 1*	EP-02	Electric Propulsion Modeling
6-Jan	**3:30 p.m.**	*Celebration 1*	EP-03	Air-Breathing Electric Propulsion
7-Jan	**9:30 a.m.**	*Celebration 1*	EP-04	Cathodes I
7-Jan	**9:30 a.m.**	*Celebration 6*	EP-05	NASA's Psyche Mission: Electric Journey to a Metal World
7-Jan	**10:30 a.m.**	*Celebration 6*	EP-06	Air-Breathing Electric Propulsion Panel
7-Jan	**1 p.m.**	*Celebration 1*	EP-07	Hall Thrusters II
7-Jan	**3:30 p.m.**	*Celebration 1*	EP-08	Facility Effects and Spacecraft Interactions
8-Jan	**9:30 a.m.**	*Celebration 1*	EP-09	Cathodes II
8-Jan	**9:30 a.m.**	*Celebration 6*	EP-10	Novel Numerical Methods for Electric Propulsion Modeling
8-Jan	**3:30 p.m.**	*Celebration 1*	EP-12	Electric Propulsion Diagnostics
8-Jan	**3:30 p.m.**	*Celebration 6*	EP-13	Mentoring Underrepresented Students and Young Professionals
9-Jan	**9:30 a.m.**	*Celebration 1*	EP-14/LP-14	Dual Mode Propulsion
9-Jan	**1 p.m.**	*Celebration 1*	EP-15	Electromagnetic and Ion Thrusters
10-Jan	**9:30 a.m.**	*Celebration 1*	EP-17	Electrospray and Small Satellite Electric Propulsion

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

ELECTRIFIED AIRCRAFT TECHNOLOGY				
6-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-01	Electrified Aircraft Rolling Recap I
6-Jan	**10:30 a.m.**	*Manatee Spring II*	INPSI-03/APA-19/ ACD-06/EAT-06 ★	NASA Sustainable Flight National Partnership Overview and Sustainable Flight Demonstrator/X66 Focus
6-Jan	**1 p.m.**	*Windermere Ballroom*	EAT-03/TF-16	Spotlight Session on Electrified Aircraft Technology: Industry Flight Demo Programs
6-Jan	**1 p.m.**	*Coral Spring II*	EAT-04	Superconducting & Cryogenic Components and Systems
6-Jan	**2 p.m.**	*Windermere Ballroom*	EAT-29/TF-10	Featured Talk: Flying the ALIA eVTOL/eCTOL — with Kyle Clark of BETA Technologies
6-Jan	**3:30 p.m.**	*Coral Spring II*	EAT-07	Electric Energy Storage and Conversion
6-Jan	**3:30 p.m.**	*Manatee Spring II*	EAT-19/TES-04/GRE-01	Spotlight Session on Hydrogen and Fuel Cell Technologies
6-Jan	**3:30 p.m.**	*Plaza Ballroom I*	IS-05/HMT-01/CSS-01/GTE-06/EAT-05	Artificial Intelligence in Aerospace & Defense
7-Jan	**9:30 a.m.**	*Coral Spring II*	EAT-10	Power Conversion and Electric Drives
7-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-28/ACD-26/TES-06/GRE-04 ★	Clean Aviation Program Keynote: Latest Highlights and Achievements
7-Jan	**1 p.m.**	*Bayhill 18*	AA-01/EAT-11/TF-03	Advanced Air Mobility Noise
7-Jan	**1 p.m.**	*Coral Spring II*	EAT-14	Propulsion, Power & Thermal System Architecture and Integration
7-Jan	**1 p.m.**	*Celebration 5*	EAT-26/GTE-19	Clean Aviation Special Session: Propulsion Technology for Ultra Efficient Short-Medium Range Aircraft
7-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-09/GNC-13/DA-01/ HMT-02/TF-04/EAT-13	Future of Autonomous Flight
7-Jan	**2 p.m.**	*Plaza Ballroom J*	EAT-27/TF-08 ★	Airbus ASCEND and Cryoprop Demonstrators (Featured Keynote)
7-Jan	**3:30 p.m.**	*Plaza Ballroom J*	INPSI-07/EAT-18/TF-07/ACD-15 ★	IMOTHEP – Investigation and Maturation of Technologies for Hybrid Electric Propulsion (Featured Keynote)
7-Jan	**3:30 p.m.**	*Plaza Ballroom K*	TF-06/EAT-16/IS-14	U.S. Air Force AFWERX Agility Prime: The Future of Air Mobility
8-Jan	**9:30 a.m.**	*Coral Spring II*	EAT-17	Electrified Aircraft Design
8-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-25/DGE-14	Clean Aviation Special Session: Future Aircraft Design, Novel Certification and Digital Technology Integration
8-Jan	**9:30 a.m.**	*Florida Ballroom C*	GTE-01/HYP-01/STR-01/DE-01/EAT-36 ★	Advanced Manufacturing Innovations in Aerospace and Defense
8-Jan	**1 p.m.**	*Florida Ballroom C*	EAT-08/TF-01/TES-05	Future of Aviation
8-Jan	**1 p.m.**	*Coral Spring II*	EAT-22	Thermal Management
8-Jan	**3:30 p.m.**	*Plaza Ballroom J*	EAT-23/DGE-13/GTE-28	Digital Engineering for Next-Generation Aircraft Design and Development
9-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-02/HYP-02/GTE-03/HSABP-01/PGC-02	Innovations in Military Aerospace Propulsion
9-Jan	**9:30 a.m.**	*Silver Spring I*	EAT-09/INPSI-05	Horizon Europe: Electric & Hydrogen Aviation via CINEA
9-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-12/ACD-11/APA-35	Clean Aviation Special Session: Innovative Aircraft Concepts and Novel Configurations
9-Jan	**11 a.m.**	*Manatee Spring II*	EAT-15/APA-42/ ACD-12	Clean Aviation Special Session: Advanced Wing Design and Breakthrough Technologies
9-Jan	**1 p.m.**	*Manatee Spring II*	EAT-31	Clean Aviation Special Session: Electrified Aircraft Technologies and Integration
9-Jan	**3:30 p.m.**	*Plaza Ballroom D*	EAT-21/GTE-15/HSABP-14/INPSI-08/PC-24	Disruptive Propulsion System Technologies for Next Generation Aircraft
9-Jan	**3:30 p.m.**	*Coral Spring II*	EAT-30	System Dynamics, Modelling and Control
9-Jan	**3:30 p.m.**	*Manatee Spring II*	EAT-33/AFM-29/ AMT-38	Flight Testing and Flying Demonstrators for the Future of Flight: German Aerospace Center (DLR) perspective
10-Jan	**9:30 a.m.**	*Coral Spring II*	EAT-32	Model Based Systems Engineering & Next Generation Aircraft Design
10-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-34/TES-07/GRE-05/PC-44	Clean Aviation Special Session: Disruptive Technologies for Hydrogen-Powered Aircraft
10-Jan	**1 p.m.**	*Manatee Spring II*	EAT-35	Electrified Aircraft Rolling Recap II

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

ENERGETIC COMPONENTS AND SYSTEMS				
9-Jan	**9:30 a.m.**	*Celebration 6*	ECS-01	Energetic Components and Systems
9-Jan	**1 p.m.**	*Celebration 6*	ECS-02	Review of Updates in New Rev B of the AIAA S-113 Criteria for Explosive Systems and Devices on Space and Launch Vehicles
FLIGHT TESTING				
9-Jan	**1 p.m.**	*Bayhill 33*	GNC-32/FT-01	Flight Testing Guidance, Navigation, and Control Solutions
9-Jan	**3:30 p.m.**	*Bayhill 33*	FT-02	Flight Test Data Analysis Techniques
10-Jan	**9:30 a.m.**	*Bayhill 33*	FT-03	Flight Test Techniques
10-Jan	**9:30 a.m.**	*Celebration 5*	HIS-06/FT-04	Historical Perspectives on Aerospace Policy
10-Jan	**1 p.m.**	*Bayhill 33*	FT-05	From AI to Hypoxia: R&D at the United States Air Force Test Pilot School
FLUID DYNAMICS				
6-Jan	**9:30 a.m.**	*Bayhill 25*	FD-01	AIAA-JSASS Joint Session: Martian Aerodynamics
6-Jan	**9:30 a.m.**	*Bayhill 27*	FD-02	CFD Methods and Applications I: Meshing and Grid Techniques in Computational Fluid Dynamics
6-Jan	**9:30 a.m.**	*Bayhill 21*	FD-05	Instability and Transition I
6-Jan	**9:30 a.m.**	*Orlando Ballroom M*	AMT-02/PC-02/FD-04	Highlighting Women in Aerospace
6-Jan	**9:30 a.m.**	*Bayhill 32*	APA-04/FD-03	Flow Control: Methods and Applications I
6-Jan	**1 p.m.**	*Bayhill 32*	APA-11/FD-07	Flow Control: Methods and Applications II
6-Jan	**1 p.m.**	*Bayhill 29*	APA-12/FD-08	Hypersonics I
6-Jan	**1 p.m.**	*Rock Spring I & II*	APA-13/FD-10	Special Session: Active Flow Control, in Honor of Avi Seifert
6-Jan	**1 p.m.**	*Bayhill 27*	FD-06	CFD Methods and Applications II: Application of Innovative Schemes and Methods in CFD
6-Jan	**1 p.m.**	*Bayhill 21*	FD-09	Instability and Transition II
6-Jan	**3:30 p.m.**	*Bayhill 32*	APA-20/FD-12	Flow Control: Methods and Applications III
6-Jan	**3:30 p.m.**	*Bayhill 29*	APA-21/FD-13	Hypersonics II
6-Jan	**3:30 p.m.**	*Bayhill 21*	FD-14	Instability and Transition III
7-Jan	**9:30 a.m.**	*Bayhill 32*	APA-26/FD-17	Flow Control: Methods and Applications IV
7-Jan	**9:30 a.m.**	*Bayhill 25*	FD-15	AIAA-JSASS Joint Session: Smart Measurement
7-Jan	**9:30 a.m.**	*Bayhill 27*	FD-16	CFD Methods and Applications IV: Other Topics in CFD
7-Jan	**9:30 a.m.**	*Bayhill 21*	FD-18	Instability and Transition IV
7-Jan	**1 p.m.**	*Bayhill 27*	FD-19	CFD Methods and Applications V: Advanced Techniques in Shock-Capturing and High-Order Flow Simulations
7-Jan	**1 p.m.**	*Bayhill 21*	FD-20	Instability and Transition V
7-Jan	**3:30 p.m.**	*Bayhill 27*	FD-21	CFD Methods and Applications VI: Advancements in Mesh Adaptation Techniques for Computational Fluid Dynamics
7-Jan	**3:30 p.m.**	*Bayhill 21*	FD-22	Instability and Transition VI
8-Jan	**9:30 a.m.**	*Bayhill 27*	FD-23	CFD Methods and Applications VII: Applications of the Galerkin Method in Fluid Dynamics
8-Jan	**9:30 a.m.**	*Bayhill 31*	FD-24/APA-48	Flow Control: Methods and Applications V
8-Jan	**9:30 a.m.**	*Bayhill 33*	FD-25/SD-14	Fluid Structure Interaction I
8-Jan	**9:30 a.m.**	*Bayhill 32*	FD-26/APA-49	Hypersonic Flows I
8-Jan	**9:30 a.m.**	*Bayhill 21*	FD-27	Instability and Transition VII
8-Jan	**9:30 a.m.**	*Bayhill 26*	MVCE-07/FD-28	Mesh Adaptation and Error Estimation for LES
8-Jan	**1 p.m.**	*Bayhill 27*	FD-29	CFD Methods and Applications VIII: Advanced Numerical Methods in Fluid Dynamics
8-Jan	**1 p.m.**	*Bayhill 31*	FD-30/APA-54	Flow Control: Methods and Applications VI
8-Jan	**1 p.m.**	*Bayhill 33*	FD-31/SD-15	Fluid Structure Interaction II
8-Jan	**1 p.m.**	*Bayhill 32*	FD-32/APA-55	Hypersonic Flows II
8-Jan	**1 p.m.**	*Bayhill 21*	FD-33	Multiphase Flows I: Droplet Dynamics
8-Jan	**1 p.m.**	*Bayhill 26*	MVCE-08/NDA-03/FD-34	Surrogate Modeling and Mesh Adaptation for Shock-Dominated Flows
8-Jan	**3:30 p.m.**	*Bayhill 27*	FD-35	CFD Methods and Applications IX: Applied CFD
8-Jan	**3:30 p.m.**	*Bayhill 31*	FD-36/APA-61	Flow Control: Methods and Applications VII

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

8-Jan	**3:30 p.m.**	*Bayhill 33*	FD-37/SD-16	Fluid Structure Interaction III
8-Jan	**3:30 p.m.**	*Bayhill 32*	FD-38/APA-62	Hypersonic Flows III
8-Jan	**3:30 p.m.**	*Bayhill 21*	FD-39	Multiphase Flows II
9-Jan	**9:30 a.m.**	*Bayhill 27*	FD-40	CFD Methods and Applications X: Machine Learning and High-Performance Computing in Advanced Fluid Dynamics
9-Jan	**9:30 a.m.**	*Bayhill 31*	FD-41/APA-68	Flow Control: Methods and Applications VIII
9-Jan	**9:30 a.m.**	*Bayhill 32*	FD-42/APA-69	Hypersonic Flows IV
9-Jan	**9:30 a.m.**	*Bayhill 21*	FD-43	Multiphase Flows III: Modeling
9-Jan	**9:30 a.m.**	*Bayhill 33*	FD-44	Other Topics in Fluid Dynamics
9-Jan	**9:30 a.m.**	*Bayhill 28*	FD-45	Shock Wave Boundary Layer Interaction: LES
9-Jan	**9:30 a.m.**	*Celebration 16*	FD-74	Transition Open Forum
9-Jan	**1 p.m.**	*Bayhill 27*	FD-46	Deep Learning for CFD
9-Jan	**1 p.m.**	*Bayhill 31*	FD-47/APA-73	Flow Control: Methods and Applications IX
9-Jan	**1 p.m.**	*Bayhill 32*	FD-48/APA-74	Hypersonic Flows V
9-Jan	**1 p.m.**	*Bayhill 21*	FD-49	Multiphase Flows IV: Experiments
9-Jan	**1 p.m.**	*Bayhill 28*	FD-50	Shock Wave Boundary Layer Interaction: Computational
9-Jan	**3:30 p.m.**	*Bayhill 31*	FD-51/APA-77	Flow Control: Methods and Applications X
9-Jan	**3:30 p.m.**	*Bayhill 27*	FD-52	Modal Analysis and Deep Learning for Fluid Flows
9-Jan	**3:30 p.m.**	*Bayhill 21*	FD-53	Multiphase Flows V: Applications
9-Jan	**3:30 p.m.**	*Bayhill 30*	FD-54	RANS/LES/Hybrid Turbulence Modeling and Applications: Turbulence Modeling
9-Jan	**3:30 p.m.**	*Bayhill 28*	FD-55	Shock Wave Boundary Layer Interaction: Experimental
9-Jan	**3:30 p.m.**	*Bayhill 32*	FD-56	Turbulent Flows: Analysis Techniques
10-Jan	**9:30 a.m.**	*Bayhill 26*	FD-57	Bio-Inspired and Low-Reynolds Number Flows I
10-Jan	**9:30 a.m.**	*Bayhill 27*	FD-58	Plume-Surface Interaction I
10-Jan	**9:30 a.m.**	*Bayhill 30*	FD-59	RANS/LES/Hybrid Turbulence Modeling and Applications: Simulations and Validations
10-Jan	**9:30 a.m.**	*Bayhill 28*	FD-60	Shock Wave Boundary Layer Interaction: Experimental
10-Jan	**9:30 a.m.**	*Bayhill 32*	FD-61	Turbulent Flows: Scalar Transport
10-Jan	**1 p.m.**	*Bayhill 27*	FD-62	Plume-Surface Interaction II
10-Jan	**1 p.m.**	*Bayhill 30*	FD-63	RANS/LES/Hybrid Turbulence Modeling and Applications: High-Speed Flows
10-Jan	**1 p.m.**	*Bayhill 26*	FD-64	Turbulent Flows: Jets, Nozzles, and Wakes
10-Jan	**1 p.m.**	*Bayhill 32*	FD-65	Vortex Dynamics I
10-Jan	**1 p.m.**	*Bayhill 28*	FD-66	Wall-Bounded and Free Shear Flows I
10-Jan	**3:30 p.m.**	*Bayhill 26*	FD-67	Bio-Inspired and Low-Reynolds Number Flows II
10-Jan	**3:30 p.m.**	*Bayhill 30*	FD-69	RANS/LES/Hybrid Turbulence Modeling and Applications IV: High-Speed Flows
10-Jan	**3:30 p.m.**	*Bayhill 29*	FD-70	Turbulent Flows: Effect of Wall Conditions
10-Jan	**3:30 p.m.**	*Bayhill 32*	FD-71	Vortex Dynamics II
10-Jan	**3:30 p.m.**	*Bayhill 28*	FD-72	Wall-Bounded and Free Shear Flows II
10-Jan	**3:30 p.m.**	*Bayhill 31*	FD-73	Wing-Gust Interactions
			GAS TURBINE ENGINES	
6-Jan	**9:30 a.m.**	*Celebration 2*	GTE-02	Advanced Gas Turbine Engines and Cycles I
6-Jan	**9:30 a.m.**	*Rock Spring I & II*	GTE-10 ★	Tutorial: Gas Turbine Engines for Supersonic Flight I
6-Jan	**1 p.m.**	*Celebration 2*	GTE-04	Advanced Gas Turbine Engines and Cycles II
6-Jan	**3:30 p.m.**	*Celebration 2*	GTE-05	Alternative Fuels and Fuel Injectors I
6-Jan	**3:30 p.m.**	*Plaza Ballroom F*	GTE-12 ★	Tutorial: Gas Turbine Engines for Supersonic Flight II
6-Jan	**3:30 p.m.**	*Plaza Ballroom I*	IS-05/HMT-01/CSS-01/GTE-06/EAT-05	Artificial Intelligence in Aerospace & Defense
7-Jan	**9:30 a.m.**	*Celebration 2*	GTE-07	Alternative Fuels and Fuel Injectors II
7-Jan	**9:30 a.m.**	*Celebration 5*	GTE-08 ★	High Efficiency Propulsion Systems for Supersonic and Hypersonic Aviation

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

7-Jan	**1 p.m.**	*Celebration 5*	EAT-26/GTE-19	Clean Aviation Special Session: Propulsion Technology for Ultra Efficient Short-Medium Range Aircraft
7-Jan	**1 p.m.**	*Celebration 2*	GTE-09	Alternative Fuels and Fuel Injectors III
7-Jan	**3:30 p.m.**	*Celebration 2*	GTE-11	Combustion Systems
8-Jan	**9:30 a.m.**	*Florida Ballroom C*	GTE-01/HYP-01/STR-01/DE-01/EAT-36 ★	Advanced Manufacturing Innovations in Aerospace and Defense
8-Jan	**9:30 a.m.**	*Celebration 2*	GTE-13	Combustors I
8-Jan	**1 p.m.**	*Celebration 2*	GTE-14	Combustors II
8-Jan	**1 p.m.**	*Celebration 5*	GTE-16	Sustainable Aviation: Technologies Propelling the Future of Aviation
8-Jan	**3:30 p.m.**	*Plaza Ballroom J*	EAT-23/DGE-13/GTE-28	Digital Engineering for Next-Generation Aircraft Design and Development
8-Jan	**3:30 p.m.**	*Celebration 2*	GTE-17	Gas Turbine Engine Design and Analysis
9-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-02/HYP-02/GTE-03/HSABP-01/PGC-02	Innovations in Military Aerospace Propulsion
9-Jan	**9:30 a.m.**	*Celebration 5*	GTE-18	AIAA Workshop for Advancing Turbomachinery Design in AxSTREAM for High-Speed Flows
9-Jan	**9:30 a.m.**	*Celebration 2*	GTE-20	Gas Turbine Engine Performance
9-Jan	**1 p.m.**	*Celebration 2*	GTE-21	High-Fidelity Simulations
9-Jan	**1 p.m.**	*Celebration 5*	GTE-22 ★	Tutorial: Rotordynamics and Fluid Film Bearings for High-Performance Turbomachinery
9-Jan	**1 p.m.**	*Florida Ballroom C*	LP-20/GTE-23 ★	Introduction to NPSS
9-Jan	**3:30 p.m.**	*Plaza Ballroom D*	EAT-21/GTE-15/HSABP-14/INPSI-08/PC-24	Disruptive Propulsion System Technologies for Next Generation Aircraft
9-Jan	**3:30 p.m.**	*Celebration 2*	GTE-24	Thermal Management and Heat Transfer I
10-Jan	**9:30 a.m.**	*Celebration 2*	GTE-25	Thermal Management and Heat Transfer II
10-Jan	**1 p.m.**	*Celebration 2*	GTE-26	Turbomachinery I
10-Jan	**3:30 p.m.**	*Celebration 2*	GTE-27	Turbomachinery II
			GREEN ENGINEERING	
6-Jan	**3:30 p.m.**	*Manatee Spring II*	EAT-19/TES-04/GRE-01	Spotlight Session on Hydrogen and Fuel Cell Technologies
7-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-28/ACD-26/TES-06/GRE-04 ★	Clean Aviation Program Keynote: Latest Highlights and Achievements
10-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-34/TES-07/GRE-05/PC-44	Clean Aviation Special Session: Disruptive Technologies for Hydrogen-Powered Aircraft
10-Jan	**3:30 p.m.**	*Celebration 14*	GRE-03	Green Engineering
			GROUND TESTING	
6-Jan	**9:30 a.m.**	*Bayhill 31*	APA-02/GT-01	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing I
6-Jan	**1 p.m.**	*Orlando Ballroom M*	AMT-04/SD-04/GT-04	Invited: NASA Ames Unsteady PSP Development for Testing and Evaluation
6-Jan	**1 p.m.**	*Bayhill 31*	APA-09/GT-03	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing II
6-Jan	**1 p.m.**	*Coral Spring I*	GT-05	Testing and Characterization of New and Existing Wind Tunnels
6-Jan	**3:30 p.m.**	*Coral Spring I*	GT-07	Development and Refinement of Advanced Measurement Technologies in Ground Test
7-Jan	**9:30 a.m.**	*Rock Spring I & II*	APA-28/GT-09/CFD2030-04	Shared Opportunities in Uncertainty Quantification in Support of CFD Validation
7-Jan	**9:30 a.m.**	*Coral Spring I*	GT-08	Advancements in Ground Test Analysis and Methodologies
7-Jan	**1 p.m.**	*Coral Spring I*	GT-10	Aerodynamic Forces Measurement in Ground Testing Facilities
7-Jan	**3:30 p.m.**	*Coral Spring I*	GT-11/APA-40	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing IV
8-Jan	**9:30 a.m.**	*Coral Spring I*	GT-12	Novel and Emerging Applications in Ground Testing
8-Jan	**1 p.m.**	*Orlando Ballroom L*	AMT-23/GT-14	Measurements in Challenging Environments I
8-Jan	**1 p.m.**	*Coral Spring I*	GT-13	High Reynolds Number Session (Special Session)
8-Jan	**3:30 p.m.**	*Coral Spring I*	GT-15	ULTIMATE Research Project (Special Session)
9-Jan	**1 p.m.**	*Coral Spring I*	GT-17	RDT&E Ground Test Workforce Challenges: Individual and Organizational Responsibilities for Workforce Development
10-Jan	**9:30 a.m.**	*Coral Spring I*	GT-19/AMT-33	Measurements in Challenging Environments II
10-Jan	**1 p.m.**	*Coral Spring I*	GT-20/AMT-36	Measurements in Challenging Environments III

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

GUIDANCE, NAVIGATION, AND CONTROL				
6-Jan	**9:30 a.m.**	*Bayhill 24*	GNC-01	Aircraft Guidance, Navigation, and Control Technology
6-Jan	**9:30 a.m.**	*Bayhill 18*	GNC-03	Spacecraft and Launch Guidance, Navigation, and Control I
6-Jan	**9:30 a.m.**	*Plaza Ballroom J*	IS-02/GNC-02	Guidance, Navigation, and Control Architectures for Autonomous Systems I
6-Jan	**1 p.m.**	*Bayhill 18*	GNC-05	Spacecraft and Launch Guidance, Navigation, and Control II
6-Jan	**1 p.m.**	*Bayhill 24*	GNC-06	Urban/Small/Rotary Wing Aircraft Guidance and Control
6-Jan	**1 p.m.**	*Plaza Ballroom J*	IS-04/GNC-04	Guidance, Navigation, and Control Architectures for Autonomous Systems II
6-Jan	**3:30 p.m.**	*Bayhill 24*	GNC-07	Aircraft Trajectory Optimization and Generation
6-Jan	**3:30 p.m.**	*Bayhill 26*	GNC-08	GNC Graduate Student Paper Competition
6-Jan	**3:30 p.m.**	*Bayhill 18*	GNC-10	Spacecraft and Launch Guidance, Navigation, and Control III
6-Jan	**3:30 p.m.**	*Plaza Ballroom J*	IS-06/GNC-09	Guidance, Navigation, and Control Architectures for Autonomous Systems III
7-Jan	**9:30 a.m.**	*Orlando Ballroom N*	GNC-11 ★	GNC Technical Plenary Lecture and Social: From Constrained Control to Resilient Safe Autonomy for Aerospace Systems
7-Jan	**1 p.m.**	*Rock Spring I & II*	GNC-12/AFM-06	Entry, Descent and Landing Technology: Overviews
7-Jan	**1 p.m.**	*Bayhill 24*	GNC-14	Towards Safe Autonomous Flight I
7-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-09/GNC-13/DA-01/ HMT-02/TF-04/EAT-13	Future of Autonomous Flight
7-Jan	**3:30 p.m.**	*Rock Spring I & II*	GNC-15/AFM-10	Entry, Descent and Landing Technology: Navigation Sensors
7-Jan	**3:30 p.m.**	*Bayhill 24*	GNC-17	Towards Safe Autonomous Flight II
8-Jan	**9:30 a.m.**	*Rock Spring I & II*	GNC-18/AFM-12	Entry, Descent and Landing Technology: Guidance I (Entry & Aerocapture)
8-Jan	**9:30 a.m.**	*Bayhill 24*	GNC-19	Towards Safe Autonomous Flight III
8-Jan	**1 p.m.**	*Bayhill 24*	GNC-20	Autonomy and Artificial Intelligence for Aerospace Vehicle GNC I
8-Jan	**1 p.m.**	*Rock Spring I & II*	GNC-21/AFM-15	Entry, Descent and Landing Technology: Aerocapture for Ice Giants I
8-Jan	**3:30 p.m.**	*Bayhill 24*	GNC-22	Autonomy and Artificial Intelligence for Aerospace Vehicle GNC II
8-Jan	**3:30 p.m.**	*Rock Spring I & II*	GNC-23/AFM-16	Entry, Descent and Landing Technology: Aerocapture for Ice Giants II
8-Jan	**3:30 p.m.**	*Bayhill 25*	GNC-24	Missile and Trans-Atmospheric Vehicle Guidance, Navigation, and Control I
9-Jan	**9:30 a.m.**	*Rock Spring I & II*	GNC-25/AFM-18	Entry, Descent and Landing Technology: Guidance II
9-Jan	**9:30 a.m.**	*Bayhill 24*	GNC-26/IS-24	Guidance, Navigation, and Control in Intelligent Systems
9-Jan	**9:30 a.m.**	*Bayhill 25*	GNC-27	Missile and Trans-Atmospheric Vehicle Guidance, Navigation, and Control II
9-Jan	**9:30 a.m.**	*Bayhill 17*	MST-10/GNC-28	Modeling and Simulation for Autonomous Guidance, Navigation and Control I
9-Jan	**1 p.m.**	*Bayhill 24*	GNC-29	Distributed, Cooperative, and Multi-Vehicle Guidance, Navigation, and Control
9-Jan	**1 p.m.**	*Rock Spring I & II*	GNC-30/AFM-21	Entry, Descent and Landing Technology: Map Generation and Relative Localization
9-Jan	**1 p.m.**	*Bayhill 25*	GNC-31	Flight Control I
9-Jan	**1 p.m.**	*Bayhill 33*	GNC-32/FT-01	Flight Testing Guidance, Navigation, and Control Solutions
9-Jan	**1 p.m.**	*Bayhill 17*	MST-11/GNC-33	Modeling and Simulation for Autonomous Guidance, Navigation and Control II
9-Jan	**3:30 p.m.**	*Bayhill 24*	GNC-34	Cooperative Control/Path Planning
9-Jan	**3:30 p.m.**	*Rock Spring I & II*	GNC-35/AFM-23	Entry, Descent and Landing Technology: EDL Missions I
9-Jan	**3:30 p.m.**	*Bayhill 25*	GNC-36	Flight Control II
10-Jan	**9:30 a.m.**	*Rock Spring I & II*	GNC-37/AFM-24	Entry, Descent and Landing Technology: EDL Missions II
10-Jan	**9:30 a.m.**	*Bayhill 24*	GNC-38	Guidance, Navigation, and Control
10-Jan	**9:30 a.m.**	*Bayhill 25*	GNC-40	Navigation, Estimation, Sensing and Control I
10-Jan	**9:30 a.m.**	*Bayhill 31*	GNC-41	Optimal Control in Aerospace Applications
10-Jan	**9:30 a.m.**	*Bayhill 21*	IS-32/GNC-39	Guidance, Navigation, and Control Architectures for Autonomous Systems VI
10-Jan	**1 p.m.**	*Bayhill 31*	GNC-42	Control Theory for Aerospace Applications
10-Jan	**1 p.m.**	*Rock Spring I & II*	GNC-43/AFM-26	Entry, Descent and Landing Technology: Guidance III
10-Jan	**1 p.m.**	*Bayhill 24*	GNC-44	Motion Planning, Sensing, and Operations for Aerospace Robotic Systems

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

10-Jan	**1 p.m.**	*Bayhill 25*	GNC-45	Navigation, Estimation, Sensing and Control II
10-Jan	**3:30 p.m.**	*Bayhill 25*	GNC-46/PDL-18/TP-16	Aero-Optics
10-Jan	**3:30 p.m.**	*Rock Spring I & II*	GNC-47/AFM-28	Entry, Descent and Landing Technology: Guidance IV
10-Jan	**3:30 p.m.**	*Bayhill 21*	IS-35/GNC-48	Guidance, Navigation, and Control Architectures for Autonomous Systems V
10-Jan	**3:30 p.m.**	*Celebration 13*	SATS-05/GNC-49	Small Satellite GNC and Propulsion
			HIGH-SPEED AIR-BREATHING PROPULSION	
6-Jan	**9:30 a.m.**	*Celebration 8*	HSABP-02/INPSI-01	High-Speed Inlets, Isolators and Nozzles I
6-Jan	**1 p.m.**	*Florida Ballroom C*	AMT-03/HSABP-04	Instrumentation and Diagnostic Techniques for High-Speed Air-Breathing Propulsion I
6-Jan	**1 p.m.**	*Celebration 8*	HSABP-03/INPSI-02	High-Speed Inlets, Isolators and Nozzles II
6-Jan	**3:30 p.m.**	*Florida Ballroom C*	AMT-06/HSABP-06	Instrumentation and Diagnostic Techniques for High-Speed Air-Breathing Propulsion II
6-Jan	**3:30 p.m.**	*Celebration 8*	HSABP-05/INPSI-04	High-Speed Inlets, Isolators and Nozzles III
7-Jan	**9:30 a.m.**	*Celebration 8*	HSABP-07/INPSI-06	Integrated Propulsion for High-Speed Systems
7-Jan	**1 p.m.**	*Celebration 8*	HSABP-08	Numerical Analysis of Scramjet Engines
8-Jan	**9:30 a.m.**	*Celebration 8*	HSABP-10	Going Big - Challenges in Scaling Up Innovation and Manufacturing of Small and Medium HSABP Businesses
8-Jan	**10:30 a.m.**	*Celebration 8*	HSABP-11	Turning the Nose Into the Wind - Thermal Careers in HSABP
8-Jan	**1 p.m.**	*Celebration 8*	HSABP-12	Scramjet and Alternative High-Speed Engine Design, Thermodynamics and Optimization I
8-Jan	**3:30 p.m.**	*Celebration 8*	HSABP-13	Scramjet and Alternative High-Speed Engine Design, Thermodynamics and Optimization II
9-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-02/HYP-02/GTE-03/HSABP-01/PGC-02	Innovations in Military Aerospace Propulsion
9-Jan	**1 p.m.**	*Celebration 8*	HSABP-15	Ground or Flight Tests on High-Speed Propulsion Systems
9-Jan	**3:30 p.m.**	*Plaza Ballroom D*	EAT-21/GTE-15/HSABP-14/INPSI-08/PC-24	Disruptive Propulsion System Technologies for Next Generation Aircraft
9-Jan	**3:30 p.m.**	*Celebration 8*	HSABP-16	High Fidelity Combustion Modeling for High-Speed Propulsion
			HISTORY	
6-Jan	**1 p.m.**	*Orlando Ballroom N*	HIS-01 ★	Educating America's First Women Astronauts: A History of Access to STEM Education
7-Jan	**9:30 a.m.**	*Celebration 11*	HIS-02	Beyond Traditional Narratives in Aerospace History
7-Jan	**3:30 p.m.**	*Celebration 16*	HIS-03	Aerospace Oral History Workshop
8-Jan	**10:30 a.m.**	*Silver Spring I*	HIS-05	Developing Principles for Space Archeology
10-Jan	**9:30 a.m.**	*Celebration 5*	HIS-06/FT-04	Historical Perspectives on Aerospace Policy
10-Jan	**1 p.m.**	*Celebration 5*	HIS-07/APA-83	History of Institutions and Design Methodologies
10-Jan	**3:30 p.m.**	*Celebration 9*	HIS-08	AIAA Historic Aerospace Sites
10-Jan	**3:30 p.m.**	*Celebration 5*	HIS-09/MST-14/TF-14/UAS-17	Multi-Modal Transportation
			HUMAN MACHINE TEAMING	
6-Jan	**3:30 p.m.**	*Plaza Ballroom I*	IS-05/HMT-01/CSS-01/GTE-06/EAT-05	Artificial Intelligence in Aerospace & Defense
7-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-09/GNC-13/DA-01/HMT-02/TF-04/EAT-13	Future of Autonomous Flight
8-Jan	**3:30 p.m.**	*Rainbow Spring II*	HMT-03	Generative AI Applications in Human Machine Teaming
9-Jan	**9:30 a.m.**	*Blue Spring II*	HMT-04	Human-Machine Teaming: Explainable AI for Decision-Making and Knowledge
9-Jan	**1 p.m.**	*Blue Spring II*	HMT-05	Human-Machine Teaming: Human Performance and Cyber-Physical Systems
9-Jan	**3:30 p.m.**	*Blue Spring II*	HMT-06	Human-Machine Teaming: Models, Functional Allocation and Performance Analysis

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

HYBRID ROCKETS				
8-Jan	**1 p.m.**	*Celebration 13*	HR-01	Novel and Green Approaches to Hybrid Rockets: Simulations and Applications
9-Jan	**9:30 a.m.**	*Celebration 13*	HR-02	Fuel Characterization, Visualization, and Controls for Hybrid Propulsion Systems
9-Jan	**1 p.m.**	*Celebration 16*	HR-03	Development and Evaluation of Advanced Manufacturing Techniques and Contemporary Materials
10-Jan	**1 p.m.**	*Celebration 6*	HR-04	Combustion Stability, Combustion Dynamics, Mixing, Motor Performance, and Related Issues
10-Jan	**3:30 p.m.**	*Celebration 6*	HR-05	Design and Development of Novel Hybrid Rocket Motor Concepts
HYPERSONICS				
6-Jan	**9:30 a.m.**	*Celebration 9*	HYP-03 ★	Hypersonics Activities Country Reports I
6-Jan	**1 p.m.**	*Celebration 11*	HYP-04	Hypersonic Fundamentals
6-Jan	**1 p.m.**	*Celebration 9*	HYP-05 ★	Hypersonics Activities Country Reports II
6-Jan	**3:30 p.m.**	*Celebration 9*	HYP-06	Hypersonic Missions and Vehicles
6-Jan	**3:30 p.m.**	*Celebration 11*	HYP-07	Thermal Management in Hypersonics
7-Jan	**9:30 a.m.**	*Celebration 9*	HYP-08	Operationalizing Very Low Earth Orbit: Benefits and Challenges
7-Jan	**1 p.m.**	*Celebration 11*	HYP-09	Computational Methods in Hypersonics I
7-Jan	**1 p.m.**	*Celebration 9*	HYP-10	Hypersonic Propulsion Components
7-Jan	**3:30 p.m.**	*Celebration 11*	HYP-11	Computational Methods in Hypersonics II
7-Jan	**3:30 p.m.**	*Celebration 9*	HYP-12	Hypersonic Propulsion Systems
8-Jan	**9:30 a.m.**	*Florida Ballroom C*	GTE-01/HYP-01/STR-01/DE-01/EAT-36 ★	Advanced Manufacturing Innovations in Aerospace and Defense
8-Jan	**9:30 a.m.**	*Celebration 11*	HYP-13	Computational Methods in Hypersonics III
8-Jan	**9:30 a.m.**	*Celebration 9*	HYP-14	Hypersonics Test and Evaluation I
8-Jan	**1 p.m.**	*Celebration 11*	HYP-15	Computational Methods in Hypersonics IV
8-Jan	**3:30 p.m.**	*Celebration 9*	HYP-17	Delivering a Hypersonic Future Through JHTO and UCAH Efforts
9-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-02/HYP-02/GTE-03/HSABP-01/PGC-02	Innovations in Military Aerospace Propulsion
9-Jan	**9:30 a.m.**	*Celebration 9*	HYP-20	Hypersonics Test and Evaluation II
9-Jan	**1 p.m.**	*Celebration 9*	HYP-18	Strategies for Developing Commercial High-Speed Vehicles
9-Jan	**3:30 p.m.**	*Celebration 11*	HYP-21	Computational Methods in Hypersonics V
9-Jan	**3:30 p.m.**	*Celebration 9*	HYP-22	Guidance and Control Systems in Hypersonics
10-Jan	**9:30 a.m.**	*Celebration 9*	HYP-23	Other Topics in Hypersonics I
10-Jan	**1 p.m.**	*Celebration 9*	HYP-24	Other Topics in Hypersonics II
INFORMATION AND COMMAND AND CONTROL SYSTEMS				
8-Jan	**1 p.m.**	*Plaza Ballroom K*	ICC-01	The Future of Distributed Command and Control: At the Intersection of AI and System-of-Systems
8-Jan	**3:30 p.m.**	*Plaza Ballroom K*	ICC-02	Accelerating the Data Advantage
9-Jan	**9:30 a.m.**	*Plaza Ballroom K*	ICC-03	Multidisciplinary Command and Control for Rocket Cargo Delivery
9-Jan	**3:30 p.m.**	*Plaza Ballroom K*	ICC-04	AI/ML, and Decision-Making in Information, Command and Control Systems
INTERNATIONAL STUDENT CONFERENCE				
6-Jan	**9:30 a.m.**	*Columbia 34*	ISC-01	International Student Conference - Undergraduate Category
6-Jan	**9:30 a.m.**	*Columbia 35*	ISC-02	International Student Conference - Masters Category
6-Jan	**9:30 a.m.**	*Columbia 36*	ISC-03	International Student Conference - Team Category
INLETS, NOZZLES, AND PROPULSION SYSTEMS INTEGRATION				
6-Jan	**9:30 a.m.**	*Celebration 8*	HSABP-02/INPSI-01	High-Speed Inlets, Isolators and Nozzles I
6-Jan	**10:30 a.m.**	*Manatee Spring II*	INPSI-03/APA-19/ACD-06/EAT-06 ★	NASA Sustainable Flight National Partnership Overview and Sustainable Flight Demonstrator/X66 Focus
6-Jan	**1 p.m.**	*Celebration 8*	HSABP-03/INPSI-02	High-Speed Inlets, Isolators and Nozzles II
6-Jan	**3:30 p.m.**	*Celebration 8*	HSABP-05/INPSI-04	High-Speed Inlets, Isolators and Nozzles III
7-Jan	**9:30 a.m.**	*Celebration 8*	HSABP-07/INPSI-06	Integrated Propulsion for High-Speed Systems

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

7-Jan	**3:30 p.m.**	*Plaza Ballroom J*	INPSI-07/EAT-18/TF-07/ACD-15 ★	IMOTHEP – Investigation and Maturation of Technologies for Hybrid Electric Propulsion (Featured Keynote)
9-Jan	**9:30 a.m.**	*Silver Spring I*	EAT-09/INPSI-05	Horizon Europe: Electric & Hydrogen Aviation via CINEA
9-Jan	**1 p.m.**	*Celebration 12*	INPSI-09	Inlets, Nozzles, and Propulsion Systems Integration
9-Jan	**3:30 p.m.**	*Plaza Ballroom D*	EAT-21/GTE-15/HSABP-14/INPSI-08/PC-24	Disruptive Propulsion System Technologies for Next Generation Aircraft
10-Jan	**9:30 a.m.**	*Celebration 12*	INPSI-10/APA-81	Aerodynamics of Inlets and Nozzles I
INTELLIGENT SYSTEMS				
6-Jan	**9:30 a.m.**	*Celebration 16*	IS-01	Distributed Sensing for Autonomous Air Mobility I
6-Jan	**9:30 a.m.**	*Plaza Ballroom J*	IS-02/GNC-02	Guidance, Navigation, and Control Architectures for Autonomous Systems I
6-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-03	Distributed Sensing for Autonomous Air Mobility II
6-Jan	**1 p.m.**	*Plaza Ballroom J*	IS-04/GNC-04	Guidance, Navigation, and Control Architectures for Autonomous Systems II
6-Jan	**3:30 p.m.**	*Plaza Ballroom I*	IS-05/HMT-01/CSS-01/GTE-06/EAT-05	Artificial Intelligence in Aerospace & Defense
6-Jan	**3:30 p.m.**	*Plaza Ballroom J*	IS-06/GNC-09	Guidance, Navigation, and Control Architectures for Autonomous Systems III
7-Jan	**9:30 a.m.**	*Manatee Spring II*	IS-07	Explainable AI for Decision-Making and Knowledge Management Under Uncertainty
7-Jan	**9:30 a.m.**	*Plaza Ballroom I*	IS-08	Space Trusted Autonomy I
7-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-09/GNC-13/DA-01/HMT-02/TF-04/EAT-13	Future of Autonomous Flight
7-Jan	**1 p.m.**	*Plaza Ballroom J*	IS-10 ★	Large Language Models as Autonomous Agents for Spacecraft Control
7-Jan	**3:30 p.m.**	*Orlando Ballroom N*	IS-12 ★	Intelligent Systems Technical Committee Awardee Lecture
7-Jan	**3:30 p.m.**	*Plaza Ballroom I*	IS-13	Space Trusted Autonomy II
7-Jan	**3:30 p.m.**	*Plaza Ballroom K*	TF-06/EAT-16/IS-14	U.S. Air Force AFWERX Agility Prime: The Future of Air Mobility
8-Jan	**9:30 a.m.**	*Plaza Ballroom F*	IS-15	Intelligent Computer Vision and Applications I
8-Jan	**9:30 a.m.**	*Plaza Ballroom J*	IS-16	Multi-Agent Control and Coordination I
8-Jan	**9:30 a.m.**	*Plaza Ballroom I*	IS-17	Sensor Fusion and Systems Health Management
8-Jan	**1 p.m.**	*Plaza Ballroom F*	IS-18	Intelligent Computer Vision and Applications II
8-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-19	Learning, Reasoning, and Data Driven Systems I
8-Jan	**1 p.m.**	*Plaza Ballroom J*	IS-20	Multi-Agent Control and Coordination II
8-Jan	**3:30 p.m.**	*Plaza Ballroom I*	IS-21	Learning, Reasoning, and Data Driven Systems II
8-Jan	**3:30 p.m.**	*Manatee Spring II*	IS-22	Multi-Agent Control and Coordination III
9-Jan	**9:30 a.m.**	*Bayhill 24*	GNC-26/IS-24	Guidance, Navigation, and Control in Intelligent Systems
9-Jan	**9:30 a.m.**	*Plaza Ballroom F*	IS-23	Autonomy I
9-Jan	**9:30 a.m.**	*Plaza Ballroom I*	IS-25	Intelligent Space Autonomy
9-Jan	**9:30 a.m.**	*Plaza Ballroom D*	IS-26	Intelligent Trajectory and Path Planning I
9-Jan	**1 p.m.**	*Plaza Ballroom F*	IS-27	Autonomy II
9-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-28	Safe Autonomy
9-Jan	**1 p.m.**	*Plaza Ballroom J*	IS-29	Traffic Management and Urban Air Mobility
9-Jan	**3:30 p.m.**	*Plaza Ballroom I*	IS-30	Human - Automation Interaction
9-Jan	**3:30 p.m.**	*Plaza Ballroom J*	IS-31	Intelligent Trajectory and Path Planning II
9-Jan	**3:30 p.m.**	*Blue Spring I*	IS-37	NASA SMD's Autonomous Navigation Demonstration Relevance Assessment Team (ANDRAT): A Mission to Reduce Risks for Future Science Missions
10-Jan	**9:30 a.m.**	*Bayhill 21*	IS-32/GNC-39	Guidance, Navigation, and Control Architectures for Autonomous Systems VI
10-Jan	**1 p.m.**	*Bayhill 21*	IS-33	Autonomy for Artemis: What Do We Need and When Do We Need It?
10-Jan	**3:30 p.m.**	*Manatee Spring I*	IS-34	Air Combat and Flight Control
10-Jan	**3:30 p.m.**	*Bayhill 21*	IS-35/GNC-48	Guidance, Navigation, and Control Architectures for Autonomous Systems V
10-Jan	**3:30 p.m.**	*Bayhill 24*	IS-36	Intelligent Approaches for Physical Systems

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

LIQUID PROPULSION				
6-Jan	**9:30 a.m.**	*Celebration 7*	LP-03	Liquid Propulsion Modeling and Simulation I
6-Jan	**9:30 a.m.**	*Celebration 6*	LP-17 ★	Introduction to Additive Manufacturing for Propulsion and Energy Systems I
6-Jan	**9:30 a.m.**	*Florida Ballroom C*	PGC-03/LP-02	Liquid Fueled Rotating Detonation Engines
6-Jan	**1 p.m.**	*Celebration 7*	LP-05	Liquid Propulsion Modeling and Simulation II
6-Jan	**1 p.m.**	*Celebration 6*	LP-19 ★	Introduction to Additive Manufacturing for Propulsion and Energy Systems II
6-Jan	**3:30 p.m.**	*Celebration 7*	LP-06	Liquid Propulsion Modeling and Simulation III
7-Jan	**9:30 a.m.**	*Celebration 7*	LP-07	Liquid Propulsion Design, Analysis, Testing, and Operation I
7-Jan	**1 p.m.**	*Celebration 7*	LP-08	Liquid Propulsion Design, Analysis, Testing, and Operation II
7-Jan	**3:30 p.m.**	*Celebration 7*	LP-09	Liquid Propellant Management, Storage, and Feed Systems I
8-Jan	**9:30 a.m.**	*Celebration 7*	LP-10	Cryogenic Propellant Applications
8-Jan	**1 p.m.**	*Celebration 6*	LP-01	In-Space Propellant Transfer
8-Jan	**1 p.m.**	*Celebration 7*	LP-11	Combustor Design, Analysis and Testing
8-Jan	**3:30 p.m.**	*Celebration 7*	LP-13	Liquid Propellant Management, Storage, and Feed Systems II
9-Jan	**9:30 a.m.**	*Celebration 1*	EP-14/LP-14	Dual Mode Propulsion
9-Jan	**9:30 a.m.**	*Celebration 7*	LP-15	Liquid Propulsion: In-Space, Green and Non-Toxic Propellants
9-Jan	**1 p.m.**	*Celebration 7*	LP-16	Liquid Propulsion Design, Analysis, Testing, and Operation IV
9-Jan	**1 p.m.**	*Florida Ballroom C*	LP-20/GTE-23 ★	Introduction to NPSS
9-Jan	**3:30 p.m.**	*Celebration 7*	LP-18	Liquid Propulsion Design, Analysis, Testing, and Operation III
9-Jan	**3:30 p.m.**	*Florida Ballroom C*	LP-23 ★	NASA Chemical Equilibrium with Applications (CEA) Tutorial
10-Jan	**9:30 a.m.**	*Celebration 7*	LP-21	Test Facilities and Advanced Diagnostic Techniques for Liquid Propulsion Systems
10-Jan	**1 p.m.**	*Celebration 7*	LP-22	Other Topics in Liquid Propulsion I
MATERIALS				
6-Jan	**9:30 a.m.**	*Blue Spring I*	MAT-01	High Performance Materials for Extreme Environments
6-Jan	**9:30 a.m.**	*Blue Spring II*	MAT-02	Nanostructured Materials II
6-Jan	**3:30 p.m.**	*Orlando Ballroom N*	MAT-04	Materials Postdoc & R&D Early-Career Mentorship: Academia, Government, and Industry Insights
6-Jan	**3:30 p.m.**	*Blue Spring II*	MAT-05	Testing and Characterization of Materials
6-Jan	**3:30 p.m.**	*Celebration 16*	STR-07/MAT-03	AI/ML in Structures and Materials II
7-Jan	**9:30 a.m.**	*Blue Spring II*	MAT-07	Nanostructured Materials I
7-Jan	**9:30 a.m.**	*Celebration 14*	STR-09/MAT-06	AI/ML in Structures and Materials I
7-Jan	**3:30 p.m.**	*Blue Spring II*	MAT-08	Multiscale Modeling
8-Jan	**9:30 a.m.**	*Blue Spring II*	MAT-09	Fatigue and Fracture
8-Jan	**9:30 a.m.**	*Celebration 14*	STR-14/MAT-10	Structures and Materials in Extreme Environments
8-Jan	**1 p.m.**	*Blue Spring II*	MAT-11	Materials for Additive Manufacturing
8-Jan	**1 p.m.**	*Florida Ballroom A*	MAT-12	NASA 2040 Vision Study - Implementation Activities I
8-Jan	**3:30 p.m.**	*Blue Spring II*	MAT-14	Multifunctional Materials for Aerospace I
8-Jan	**3:30 p.m.**	*Florida Ballroom A*	MAT-15	NASA 2040 Vision Study - Implementation Activities II
8-Jan	**3:30 p.m.**	*Celebration 11*	MDO-16/STR-18/MAT-13	Integrated Computational Material Engineering (ICME)
9-Jan	**9:30 a.m.**	*Florida Ballroom A*	MAT-16	NASA 2040 Vision Study - Implementation Activities III
9-Jan	**1 p.m.**	*Orlando Ballroom N*	STR-25/SD-17/MAT-17 ★	Structures, Structural Dynamics, and Materials Lecture
9-Jan	**3:30 p.m.**	*Florida Ballroom A*	MAT-18	NASA 2040 Vision Study - Implementation Activities IV
10-Jan	**9:30 a.m.**	*Barrel Spring I*	MAT-20	Process Modeling of Aerospace Materials
10-Jan	**9:30 a.m.**	*Blue Spring II*	STR-29/MAT-19	AI/ML in Structures and Materials III
10-Jan	**1 p.m.**	*Barrel Spring I*	MAT-22	Microstructure Characterization and Modeling
10-Jan	**1 p.m.**	*Blue Spring II*	STR-31/MAT-21	AI/ML in Structures and Materials IV

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

MESHING, VISUALIZATION, AND COMPUTATIONAL ENVIRONMENTS				
6-Jan	**9:30 a.m.**	*Bayhill 26*	MVCE-01	Adaptive Meshing, Error Estimation, and Grid Quality Metrics
6-Jan	**1 p.m.**	*Bayhill 26*	MVCE-02/MDO-05	Geometry Modeling for MDO
7-Jan	**9:30 a.m.**	*Bayhill 26*	MVCE-03	High-Order Mesh Adaptation and HPC
8-Jan	**9:30 a.m.**	*Bayhill 25*	MVCE-06	Automated Workflows and Frameworks for Engineering Design and Analysis
8-Jan	**9:30 a.m.**	*Bayhill 26*	MVCE-07/FD-28	Mesh Adaptation and Error Estimation for LES
8-Jan	**1 p.m.**	*Bayhill 26*	MVCE-08/NDA-03/FD-34	Surrogate Modeling and Mesh Adaptation for Shock-Dominated Flows
8-Jan	**1 p.m.**	*Bayhill 25*	MVCE-09/APA-60/ CFD2030-07	Visualization and Knowledge Extraction of Large-Scale Data Sets
9-Jan	**9:30 a.m.**	*Bayhill 26*	MVCE-10/APA-67/ CFD2030-08	CFD on Large-Scale Meshes for Applied Aerodynamics
9-Jan	**3:30 p.m.**	*Bayhill 26*	MVCE-12/ASE-02	Other Topics in MVCE and ASE
MICROGRAVITY SPACE PROCESSING				
9-Jan	**3:30 p.m.**	*Silver Spring I*	MSP-01 ★	Progress in Microgravity Space Processing
9-Jan	**4:30 p.m.**	*Silver Spring I*	MSP-02	Microgravity Space Processing, Advances, Challenges, Major/New Players, and Perspectives
MODELING AND SIMULATION TECHNOLOGIES				
6-Jan	**9:30 a.m.**	*Bayhill 17*	MST-01	Modeling and Simulation of UAS/UAM/AAM Vehicle Dynamics, Systems, and Environments I
6-Jan	**1 p.m.**	*Bayhill 17*	MST-02	Modeling and Simulation of Air Vehicle Dynamics, Systems, and Environments I
6-Jan	**3:30 p.m.**	*Bayhill 17*	MST-03	Modeling and Simulation of Air Traffic Management (ATM)
7-Jan	**1 p.m.**	*Bayhill 17*	MST-05	Human Factors, Perception, and Cueing
7-Jan	**3:30 p.m.**	*Bayhill 17*	MST-06	Modeling and Simulation of Air Vehicle Dynamics, Systems, and Environments II
8-Jan	**9:30 a.m.**	*Bayhill 17*	MST-07	Modeling and Simulation of Space Vehicle Dynamics, Systems, and Environments
8-Jan	**1 p.m.**	*Bayhill 17*	MST-08	Simulation-Based Software Development and Verification
8-Jan	**3:30 p.m.**	*Bayhill 17*	MST-09	Modeling of Fluid Flow
9-Jan	**9:30 a.m.**	*Bayhill 17*	MST-10/GNC-28	Modeling and Simulation for Autonomous Guidance, Navigation and Control I
9-Jan	**1 p.m.**	*Bayhill 17*	MST-11/GNC-33	Modeling and Simulation for Autonomous Guidance, Navigation and Control II
9-Jan	**3:30 p.m.**	*Bayhill 17*	MST-12	Modelling and Simulation with Data-Driven Methods
10-Jan	**9:30 a.m.**	*Bayhill 17*	MST-13	Other Modelling and Simulation Topics
10-Jan	**3:30 p.m.**	*Celebration 5*	HIS-09/MST-14/TF-14/UAS-17	Multi-Modal Transportation
MULTIDISCIPLINARY DESIGN OPTIMIZATION				
6-Jan	**9:30 a.m.**	*Bayhill 30*	APA-01/ACD-01/ MDO-01	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques I
6-Jan	**9:30 a.m.**	*Celebration 5*	MDO-02	Aerodynamic Design Optimization I
6-Jan	**1 p.m.**	*Bayhill 30*	APA-08/ACD-03/ MDO-03	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques II
6-Jan	**1 p.m.**	*Plaza Ballroom D*	MDO-04	Application of MDO for Vehicle Design II
6-Jan	**1 p.m.**	*Bayhill 26*	MVCE-02/MDO-05	Geometry Modeling for MDO
6-Jan	**3:30 p.m.**	*Bayhill 30*	APA-16/ACD-05/ MDO-06	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques III
6-Jan	**3:30 PM**	*Plaza Ballroom D*	MDO-07	Emerging Methods, Algorithms, and Software Development in MDO
7-Jan	**9:30 a.m.**	*Celebration 16*	MDO-08	Application of MDO for Vehicle Design I
7-Jan	**9:30 a.m.**	*Plaza Ballroom D*	MDO-09	Metamodeling, Reduced Order Models, and Approximation Methods I
7-Jan	**1 p.m.**	*Plaza Ballroom D*	MDO-10	Metamodeling, Reduced Order Models, and Approximation Methods II
7-Jan	**1 p.m.**	*Celebration 16*	MDO-11	Shape/Topology Optimization and Generative AI
7-Jan	**3:30 p.m.**	*Florida Ballroom A*	MDO-12	Bridging the Gap Between MDO Practitioners, Developers, and Researchers
8-Jan	**9:30 a.m.**	*Celebration 16*	MDO-14	Software/Hardware Co-Design and Optimization with Digital Twin

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

8-Jan	**1 p.m.**	*Celebration 16*	MDO-15	Aerodynamic Design Optimization II
8-Jan	**3:30 p.m.**	*Celebration 11*	MDO-16/STR-18/MAT-13	Integrated Computational Material Engineering (ICME)
8-Jan	**3:30 p.m.**	*Celebration 16*	MDO-17	MDO/Sensitivity Analysis with Aeroelasticity/Fluid-Structure Interaction
9-Jan	**9:30 a.m.**	*Celebration 8*	NDA-04/MDO-18	Design Under Uncertainty I
9-Jan	**9:30 a.m.**	*Rainbow Spring II*	NDA-05/MDO-19	Probabilistic Machine Learning for Uncertainty Quantification in Complex Systems
9-Jan	**3:30 p.m.**	*Celebration 5*	NDA-07/MDO-20	Design Under Uncertainty II
10-Jan	**3:30 p.m.**	*Rainbow Spring I*	MDO-22	Machine Learning and Optimization
10-Jan	**3:30 p.m.**	*Orlando Ballroom N*	MDO-23	Special Session: MDO Benchmarks for Aircraft Design
10-Jan	**3:30 p.m.**	*Rainbow Spring II*	NDA-09/MDO-21	Design Under Uncertainty III
NON-DETERMINISTIC APPROACHES				
6-Jan	**9:30 a.m.**	*Orlando Ballroom N*	NDA-01 ★	Non-Deterministic Approaches Lecture
6-Jan	**3:30 p.m.**	*Celebration 6*	NDA-02/SD-08	Uncertainty Quantification for Acoustics and Structural Dynamics
8-Jan	**1 p.m.**	*Bayhill 26*	MVCE-08/NDA-03/FD-34	Surrogate Modeling and Mesh Adaptation for Shock-Dominated Flows
9-Jan	**9:30 a.m.**	*Celebration 8*	NDA-04/MDO-18	Design Under Uncertainty I
9-Jan	**9:30 a.m.**	*Rainbow Spring II*	NDA-05/MDO-19	Probabilistic Machine Learning for Uncertainty Quantification in Complex Systems
9-Jan	**1 p.m.**	*Rainbow Spring II*	NDA-06	Model Order Reduction and Surrogate Modeling I
9-Jan	**3:30 p.m.**	*Celebration 5*	NDA-07/MDO-20	Design Under Uncertainty II
9-Jan	**3:30 p.m.**	*Rainbow Spring II*	NDA-08	Model Order Reduction and Surrogate Modeling II
10-Jan	**3:30 p.m.**	*Rainbow Spring II*	NDA-09/MDO-21	Design Under Uncertainty III
NUCLEAR AND FUTURE FLIGHT PROPULSION				
6-Jan	**9:30 a.m.**	*Celebration 13*	NFF-01	Nuclear Thermal Propulsion: Mission Analysis
6-Jan	**1 p.m.**	*Celebration 13*	NFF-02	Nuclear Thermal Propulsion: Concepts, Materials, and Testing
6-Jan	**3:30 p.m.**	*Celebration 13*	NFF-03	Nuclear Fusion and Future Flight
7-Jan	**9:30 a.m.**	*Celebration 13*	NFF-04	Nuclear Power for Space Operations
7-Jan	**3:30 p.m.**	*Celebration 13*	NFF-06	Fusion Propulsion - Concepts, Problems, and Potential
8-Jan	**9:30 a.m.**	*Celebration 13*	NFF-07	In-Atmosphere Options for Nuclear Propulsion
PLASMADYNAMICS AND LASERS				
6-Jan	**9:30 a.m.**	*Bayhill 19*	PDL-01	Plasma-Assisted Ignition and Combustion I: Ignition
6-Jan	**1 p.m.**	*Bayhill 19*	PDL-02	Plasma-Assisted Ignition and Combustion II: Plasma Discharges
6-Jan	**3:30 p.m.**	*Bayhill 19*	PDL-03	Plasma-Assisted Ignition and Combustion III: Short Discharges and Reactive Flows
7-Jan	**9:30 a.m.**	*Bayhill 19*	PDL-04	Plasma and Laser Diagnostics I: Thomson Scattering and Others
7-Jan	**1 p.m.**	*Bayhill 19*	PDL-05	Plasma and Laser Diagnostics II: Nanosecond Pulsed Discharges and Reactive Flows
7-Jan	**3:30 p.m.**	*Bayhill 19*	PDL-06	Plasma and Laser Diagnostics III: Experimental Applications
8-Jan	**9:30 a.m.**	*Bayhill 19*	PDL-07	Plasma and Laser Physics I: Short-Pulse Discharges
8-Jan	**1 p.m.**	*Bayhill 19*	PDL-08	Plasma and Laser Physics II: Non-Equilibrium and Kinetic Effects
8-Jan	**3:30 p.m.**	*Bayhill 19*	PDL-09	Milestones: How to Name a New Laser Diagnostics (Richard Miles 80th)
9-Jan	**9:30 a.m.**	*Bayhill 19*	PDL-10/PC-30	Progress and Challenges in Plasma Assisted Combustion: Plasma Fundamentals
9-Jan	**1 p.m.**	*Bayhill 19*	PDL-11/PC-33	Progress and Challenges in Plasma Assisted Combustion: Combustion Fundamentals
9-Jan	**3:30 p.m.**	*Bayhill 19*	PDL-12/PC-37	Progress and Challenges in Plasma Assisted Combustion: Implementation
10-Jan	**9:30 a.m.**	*Bayhill 18*	PDL-13	Computational Methods for Plasmas and Lasers
10-Jan	**9:30 a.m.**	*Bayhill 19*	PDL-14	Hypersonics, Laser Physics and Plasmas: Experiments and Simulations
10-Jan	**1 p.m.**	*Bayhill 19*	PDL-16	Hypersonics and Entry Flow Plasmas: Simulation
10-Jan	**1 p.m.**	*Bayhill 18*	PDL-17	Plasma and Laser-Based Propulsion
10-Jan	**3:30 p.m.**	*Bayhill 25*	GNC-46/PDL-18/TP-16	Aero-Optics
10-Jan	**3:30 p.m.**	*Bayhill 19*	PDL-19	Plasma-Assisted Aerodynamics and MHD

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

PRESSURE GAIN COMBUSTION				
6-Jan	**9:30 a.m.**	*Florida Ballroom B*	PGC-01/PC-01	Detonation Fundamentals
6-Jan	**9:30 a.m.**	*Florida Ballroom C*	PGC-03/LP-02	Liquid Fueled Rotating Detonation Engines
6-Jan	**1 p.m.**	*Celebration 5*	PC-07/PGC-05	Recent Progress and Outstanding Challenges in Two-Phase Detonations
6-Jan	**1 p.m.**	*Florida Ballroom B*	PGC-04	Fundamental Investigation of PGC Concepts I
6-Jan	**3:30 p.m.**	*Celebration 5*	PC-09/PGC-06	Computational Advances in Two-Phase Detonations
6-Jan	**3:30 p.m.**	*Florida Ballroom B*	PGC-07	Fundamental Investigation of PGC Concepts II
7-Jan	**9:30 a.m.**	*Florida Ballroom B*	PGC-08/AMT-11	RDE Measurement and Diagnostics I
7-Jan	**1 p.m.**	*Florida Ballroom C*	PGC-09	PGC Operability and Performance I
7-Jan	**1 p.m.**	*Florida Ballroom B*	PGC-10/AMT-14	RDE Measurement and Diagnostics II
7-Jan	**3:30 p.m.**	*Celebration 6*	PC-16/PGC-12/AMT-16	Measurements and Advanced Diagnostics for Reacting Systems
7-Jan	**3:30 p.m.**	*Florida Ballroom B*	PGC-11	Computational Modeling, Simulation, and Validation I
7-Jan	**3:30 p.m.**	*Florida Ballroom C*	PGC-13	PGC Operability and Performance II
8-Jan	**9:30 a.m.**	*Florida Ballroom B*	PGC-14	Computational Modeling, Simulation, and Validation II
8-Jan	**1 p.m.**	*Florida Ballroom B*	PGC-15	Computational Modeling, Simulation, and Validation III
8-Jan	**3:30 p.m.**	*Florida Ballroom B*	PGC-16/PC-27	Detonation Combustion Systems
8-Jan	**3:30 p.m.**	*Florida Ballroom C*	PGC-17	PGC Operability and Performance III
9-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-02/HYP-02/GTE-03/HSABP-01/PGC-02	Innovations in Military Aerospace Propulsion
9-Jan	**9:30 a.m.**	*Florida Ballroom C*	PGC-18	PGC Operability and Performance IV
9-Jan	**9:30 a.m.**	*Florida Ballroom B*	PGC-19	PGC Thermal Management I
9-Jan	**1 p.m.**	*Florida Ballroom B*	PGC-20	PGC Thermal Management II
9-Jan	**3:30 p.m.**	*Florida Ballroom B*	PGC-21	PGC Thermal Management III
PROPELLANTS AND COMBUSTION				
6-Jan	**9:30 a.m.**	*Orlando Ballroom M*	AMT-02/PC-02/FD-04	Highlighting Women in Aerospace
6-Jan	**9:30 a.m.**	*Celebration 3*	PC-03	Modeling and Simulations I
6-Jan	**9:30 a.m.**	*Celebration 4*	PC-04	Sustainable Aviation Fuels
6-Jan	**9:30 a.m.**	*Florida Ballroom B*	PGC-01/PC-01	Detonation Fundamentals
6-Jan	**1 p.m.**	*Celebration 4*	PC-05	Combustion Chemistry
6-Jan	**1 p.m.**	*Celebration 3*	PC-06	Modeling and Simulations II
6-Jan	**1 p.m.**	*Celebration 5*	PC-07/PGC-05	Recent Progress and Outstanding Challenges in Two-Phase Detonations
6-Jan	**3:30 p.m.**	*Celebration 3*	PC-08	Combustion Theory and Modelling
6-Jan	**3:30 p.m.**	*Celebration 5*	PC-09/PGC-06	Computational Advances in Two-Phase Detonations
6-Jan	**3:30 p.m.**	*Celebration 4*	PC-10	Pollutant Formation
7-Jan	**9:30 a.m.**	*Celebration 3*	PC-11	Machine Learning for Combustion
7-Jan	**9:30 a.m.**	*Celebration 4*	PC-12	Rocket and Air-Breathing Propulsion
7-Jan	**1 p.m.**	*Celebration 4*	PC-14	Shock-Spray Interaction I
7-Jan	**3:30 p.m.**	*Celebration 3*	PC-15	High Performance Computing
7-Jan	**3:30 p.m.**	*Celebration 6*	PC-16/PGC-12/AMT-16	Measurements and Advanced Diagnostics for Reacting Systems
7-Jan	**3:30 p.m.**	*Celebration 4*	PC-17	Shock-Spray Interaction II
8-Jan	**9:30 a.m.**	*Celebration 3*	PC-18/AMT-19	Combustion Diagnostics I
8-Jan	**9:30 a.m.**	*Celebration 4*	PC-19	Detonation and Supersonic Combustion I
8-Jan	**9:30 a.m.**	*Celebration 5*	PC-20	The Physics of Fuel Jets in Cross Flow: Experimental and Computational Progress
8-Jan	**1 p.m.**	*Celebration 3*	PC-21/AMT-22	Combustion Diagnostics II
8-Jan	**1 p.m.**	*Celebration 4*	PC-23	Detonation and Supersonic Combustion II
8-Jan	**3:30 p.m.**	*Celebration 4*	PC-25	Advanced Combustion Design
8-Jan	**3:30 p.m.**	*Celebration 3*	PC-26	Combustion Diagnostics III
8-Jan	**3:30 p.m.**	*Celebration 5*	PC-28	Sustainable Aviation Fuels Panel: Emissions and Their Climate Impact
8-Jan	**3:30 p.m.**	*Florida Ballroom B*	PGC-16/PC-27	Detonation Combustion Systems

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

9-Jan	**9:30 a.m.**	*Celebration 3*	PC-29	Detonations, Explosions, and Supersonic Combustion
9-Jan	**9:30 a.m.**	*Celebration 4*	PC-31	Spray in High Speed Flow
9-Jan	**9:30 a.m.**	*Bayhill 19*	PDL-10/PC-30	Progress and Challenges in Plasma Assisted Combustion: Plasma Fundamentals
9-Jan	**1 p.m.**	*Celebration 4*	PC-32	Droplet and Spray Combustion
9-Jan	**1 p.m.**	*Celebration 3*	PC-34	Shock Tubes
9-Jan	**1 p.m.**	*Bayhill 19*	PDL-11/PC-33	Progress and Challenges in Plasma Assisted Combustion: Combustion Fundamentals
9-Jan	**3:30 p.m.**	*Plaza Ballroom D*	EAT-21/GTE-15/HSABP-14/INPSI-08/PC-24	Disruptive Propulsion System Technologies for Next Generation Aircraft
9-Jan	**3:30 p.m.**	*Celebration 4*	PC-35	Fuels and Energetic Materials I
9-Jan	**3:30 p.m.**	*Celebration 3*	PC-36	Hydrogen and Ammonia Combustion
9-Jan	**3:30 p.m.**	*Bayhill 19*	PDL-12/PC-37	Progress and Challenges in Plasma Assisted Combustion: Implementation
10-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-34/TES-07/GRE-05/PC-44	Clean Aviation Special Session: Disruptive Technologies for Hydrogen-Powered Aircraft
10-Jan	**9:30 a.m.**	*Celebration 4*	PC-38	Fuels and Energetic Materials II
10-Jan	**9:30 a.m.**	*Celebration 3*	PC-39	Turbulent Combustion
10-Jan	**1 p.m.**	*Celebration 3*	PC-40	Flame Dynamics
SENSOR SYSTEMS AND INFORMATION FUSION				
6-Jan	**9:30 a.m.**	*Barrel Spring II*	SEN-01	UAV Sensors and Sensing Systems
6-Jan	**1 p.m.**	*Barrel Spring II*	SEN-02	Sensor and Algorithm Analysis
6-Jan	**3:30 p.m.**	*Barrel Spring II*	SEN-03	Algorithms for Sensor Systems and Info Fusion
7-Jan	**1 p.m.**	*Barrel Spring II*	SEN-05	Sensors, Instrumentation and Applications I
7-Jan	**3:30 p.m.**	*Barrel Spring II*	SEN-06	Sensors, Instrumentation and Applications II
8-Jan	**9:30 a.m.**	*Barrel Spring II*	SEN-07	Sensor Systems for Space Applications and Situational Awareness
SOCIETY AND AEROSPACE TECHNOLOGY				
6-Jan	**3:30 p.m.**	*Rainbow Spring II*	SAT-01	Society and Aerospace Technology
8-Jan	**9:30 a.m.**	*Plaza Ballroom E*	SATS-01	Small Satellite Mission Studies and Upcoming Missions
8-Jan	**3:30 p.m.**	*Celebration 13*	SATS-02	Small Satellite Novel Technologies
9-Jan	**3:30 p.m.**	*Celebration 13*	SATS-03	Small Satellite Novel Technologies, Tools and Multi-Satellite Constellations
10-Jan	**1 p.m.**	*Celebration 13*	SATS-04/SCS-12	Small Satellite Deployable Structures
10-Jan	**3:30 p.m.**	*Celebration 13*	SATS-05/GNC-49	Small Satellite GNC and Propulsion
SPACE AUTOMATION AND ROBOTICS				
6-Jan	**9:30 a.m.**	*Rainbow Spring II*	SAR-01	In-Space and On-Orbit Servicing Robotics
6-Jan	**1 p.m.**	*Rainbow Spring II*	SAR-02	In-Space and On-Orbit Assembly and Novel Technologies for Space Robotics
7-Jan	**1 p.m.**	*Rainbow Spring II*	SAR-04	ML and AI for Space Robotics and Automation
7-Jan	**3:30 p.m.**	*Rainbow Spring II*	SAR-05	Ground-Based V&V, Human-Automated Systems Interaction, and Teleoperations
SPACE EXPLORATION				
6-Jan	**9:30 a.m.**	*Peacock Spring*	EXPL-01	Enabling Technologies I
6-Jan	**9:30 a.m.**	*Silver Spring I*	EXPL-02	NASA's Roadmap to Mars
6-Jan	**1 p.m.**	*Peacock Spring*	EXPL-03	Enabling Technologies II
6-Jan	**1 p.m.**	*Silver Spring I*	EXPL-04	From Antarctica to Mars - A Look Back and Forward with Key Lessons Noted with Regard to Human Performance at the Dawn of Commercial Space, Extended Orbital, Lunar Operations, then On to Mars
6-Jan	**3:30 p.m.**	*Peacock Spring*	EXPL-05	Mars: Missions, Transport and Logistics
6-Jan	**3:30 p.m.**	*Silver Spring I*	EXPL-06	Mars Architecture - Strategy, Implementation, and Technology
7-Jan	**9:30 a.m.**	*Peacock Spring*	EXPL-07/ASE-01	Lunar Environments and Effects on Lunar Exploration
7-Jan	**9:30 a.m.**	*Silver Spring I*	EXPL-08	STMD Technology Development - Building Towards Mars
7-Jan	**1 p.m.**	*Silver Spring I*	EXPL-09	The Astronaut Digital Twin and a Systems Approach to Human Performance Advances in Crewed Spaceflight: Accelerating Countermeasure Development for Lunar, Mars, and Commercial Missions
7-Jan	**1 p.m.**	*Peacock Spring*	EXPL-10	Radiation Effects and Remote Sensing

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

7-Jan	**3:30 p.m.**	*Silver Spring I*	EXPL-11	Mars Architecture Cryogenic Technologies - Progress on CFM
7-Jan	**3:30 p.m.**	*Peacock Spring*	EXPL-12	Space Logistics: Joint Session with Space Logistics TC I
8-Jan	**9:30 a.m.**	*Plaza Ballroom K*	EXPL-13 ★	Space Exploration Portfolio
8-Jan	**1 p.m.**	*Silver Spring I*	EXPL-14	Human Systems Integration Complexities and Space Medicine Topics for the Moon and On to Mars
8-Jan	**1 p.m.**	*Peacock Spring*	EXPL-15	Space Logistics: Joint Session with Space Logistics TC II
8-Jan	**3:30 p.m.**	*Peacock Spring*	EXPL-16	Lunar Exploration- Novel Concepts
9-Jan	**1 p.m.**	*Plaza Ballroom K*	EXPL-17	Advancing In-Space Servicing, Assembly, and Manufacturing (ISAM): Bridging Research, Technology, Education and Policy
9-Jan	**9:30 a.m.**	*Peacock Spring*	EXPL-18	Lunar Exploration- Novel Logistics Concepts
9-Jan	**1 p.m.**	*Silver Spring I*	EXPL-20/SL-03	Lunar Construction using Regolith-Filled Bags
9-Jan	**1 p.m.**	*Peacock Spring*	EXPL-21	Lunar Exploration- Rovers, Soil mitigations and Other Logistics Support
9-Jan	**3:30 p.m.**	*Peacock Spring*	EXPL-22	Lunar Exploration-Trade Studies, Numerical and Other Studies
10-Jan	**9:30 a.m.**	*Peacock Spring*	EXPL-23	Impact of Space Activities on Climate and Atmosphere
10-Jan	**9:30 a.m.**	*Celebration 11*	EXPL-24	Planetary Mission Architectures and AIAA Undergraduate Space Design Competition Winner Presentations
10-Jan	**9:30 a.m.**	*Silver Spring I*	EXPL-25	To the Moon and Beyond: Empowering the Next Generation of Space Explorers
10-Jan	**1 p.m.**	*Peacock Spring*	EXPL-26	Mission Architectures
10-Jan	**3:30 p.m.**	*Celebration 11*	EXPL-28	Novel Flight Systems
10-Jan	**3:30 p.m.**	*Peacock Spring*	EXPL-29	Novel Planetary Mission Concepts
			SPACE LOGISTICS	
8-Jan	**9:30 a.m.**	*Rainbow Spring II*	SL-01 ★	Beyond Earth: The Role of Space Logistics in Sustaining Space Operations
9-Jan	**1 p.m.**	*Silver Spring I*	EXPL-20/SL-03	Lunar Construction using Regolith-Filled Bags
			SPACE OPERATIONS AND SUPPORT	
6-Jan	**1 p.m.**	*Bayhill 25*	OPS-01	Launch and On-Orbit Servicing
6-Jan	**3:30 p.m.**	*Bayhill 25*	OPS-02	Operations Innovations
7-Jan	**1 p.m.**	*Bayhill 25*	OPS-03	Collision Avoidance and Debris Mitigation I
7-Jan	**3:30 p.m.**	*Bayhill 25*	OPS-04	Collision Avoidance and Debris Mitigation II
8-Jan	**3:30 p.m.**	*Bayhill 26*	OPS-05	Autonomy & Artificial Intelligence
			SPACE TETHERS	
10-Jan	**3:30 p.m.**	*Coral Spring I*	STE-01	Space Tethers
			SPACECRAFT STRUCTURES	
6-Jan	**9:30 a.m.**	*Florida Ballroom A*	SCS-01	Design Methods, Tools and Processes in Support of Spacecraft Structures
6-Jan	**1 p.m.**	*Florida Ballroom A*	SCS-02/STR-06	In-Space Servicing, Assembly and Manufacturing (ISAM) I
6-Jan	**3:30 p.m.**	*Florida Ballroom A*	SCS-03	Spacecraft Antennas, Reflectors, and Other Optical Apertures I
7-Jan	**9:30 a.m.**	*Bayhill 18*	AS-05/SCS-04	Adaptive Spacecraft Structures and Systems
7-Jan	**9:30 a.m.**	*Florida Ballroom A*	SCS-05/STR-10	In-Space Servicing, Assembly and Manufacturing (ISAM) II
7-Jan	**9:30 a.m.**	*Florida Ballroom C*	SCS-06	Spacecraft Booms and Trusses
7-Jan	**1 p.m.**	*Florida Ballroom A*	SCS-07	Lightweight and Inflatable Space Structures
7-Jan	**3:30 p.m.**	*Plaza Ballroom D*	SCS-08	Spacecraft Structures Test, Analysis, and Correlation
8-Jan	**9:30 a.m.**	*Florida Ballroom A*	SCS-09	Spacecraft Antennas, Reflectors, and Other Optical Apertures II
8-Jan	**3:30 p.m.**	*Orlando Ballroom N*	SCS-10/STR-17	In-Space Servicing, Assembly and Manufacturing (ISAM) III
9-Jan	**9:30 a.m.**	*Orlando Ballroom N*	SCS-11/STR-21	In-Space Servicing, Assembly and Manufacturing (ISAM) IV
10-Jan	**1 p.m.**	*Celebration 13*	SATS-04/SCS-12	Small Satellite Deployable Structures
			STRUCTURAL DYNAMICS	
6-Jan	**1 p.m.**	*Orlando Ballroom M*	AMT-04/SD-04/GT-04	Invited: NASA Ames Unsteady PSP Development for Testing and Evaluation
6-Jan	**1 p.m.**	*Celebration 15*	SD-01	Aeroelastic Problems of Hypersonic Vehicles and Aero-, Servo-, and Thermo-elastic Phenomena
6-Jan	**1 p.m.**	*Celebration 16*	SD-02	Computer Methods and Machine Learning
6-Jan	**1 p.m.**	*Blue Spring I*	SD-03	Dynamic Loads, Response, Vibration, and Stability of Aerospace Vehicles
6-Jan	**1 p.m.**	*Plaza Ballroom F*	SD-05	Whirl Flutter Testing and Prediction

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

6-Jan	**3:30 p.m.**	*Celebration 6*	NDA-02/SD-08	Uncertainty Quantification for Acoustics and Structural Dynamics
6-Jan	**3:30 p.m.**	*Celebration 15*	SD-06	Crashworthiness of Unconventional Aircraft
6-Jan	**3:30 p.m.**	*Blue Spring I*	SD-07	Dynamic Loads, Response, Vibration, and Stability of Aerospace Vehicles and Vertical Lift Vehicles
7-Jan	**9:30 a.m.**	*Blue Spring I*	SD-09	Flutter and Limit Cycle Oscillations I
7-Jan	**1 p.m.**	*Celebration 15*	SD-10	Fluid Structure Interaction and Small UAV Aeroelastic Problems
7-Jan	**1 p.m.**	*Blue Spring I*	SD-11	Flutter and Limit Cycle Oscillations II
7-Jan	**3:30 p.m.**	*Blue Spring I*	SD-12	Flutter and Limit Cycle Oscillations III
7-Jan	**3:30 p.m.**	*Celebration 15*	SD-13	Testing Methodologies and Techniques of Structural Dynamics
8-Jan	**9:30 a.m.**	*Bayhill 33*	FD-25/SD-14	Fluid Structure Interaction I
8-Jan	**1 p.m.**	*Bayhill 33*	FD-31/SD-15	Fluid Structure Interaction II
8-Jan	**3:30 p.m.**	*Bayhill 33*	FD-37/SD-16	Fluid Structure Interaction III
9-Jan	**9:30 a.m.**	*Bayhill 29*	APA-86/SD-22	DPW-8/AePW-4 Mini Workshop
9-Jan	**1 p.m.**	*Orlando Ballroom N*	STR-25/SD-17/MAT-17 ★	Structures, Structural Dynamics, and Materials Lecture
10-Jan	**9:30 a.m.**	*Rainbow Spring II*	SD-18	International Collaborations Advancing Materials and Combustion
10-Jan	**9:30 a.m.**	*Orlando Ballroom N*	SD-19	Vibration & Vibroacoustic Control, Energy Harvesting & Damping
10-Jan	**1 p.m.**	*Rainbow Spring I*	SD-20	Mechanical Shocks, Fracture and Fatigue, and Flexible Multibody Dynamics
10-Jan	**1 p.m.**	*Rainbow Spring II*	SD-21	Structural Dynamics and Structural Health Monitoring
			SOLID ROCKETS	
9-Jan	**3:30 p.m.**	*Celebration 12*	SR-02	Solid Rocket Modeling and Analysis Methods
10-Jan	**1 p.m.**	*Celebration 12*	SR-03	Solid Rocket Propellant Chemistry
			SOFTWARE	
9-Jan	**9:30 a.m.**	*Barrel Spring II*	SOF-01 ★	Evolution of core Flight System (cFS)
9-Jan	**1 p.m.**	*Barrel Spring II*	SOF-02	AI/ML and Autonomy Software Engineering Practices
9-Jan	**3:30 p.m.**	*Barrel Spring II*	SOF-03	AI/ML and Autonomy Software Tools, Modelling and Simulation, and Scenarios
10-Jan	**9:30 a.m.**	*Barrel Spring II*	SOF-04	Resilient and Fault Tolerant Software, Runtime Monitoring and Assurance for AI/System and Operational Safety
10-Jan	**1 p.m.**	*Barrel Spring II*	SOF-05	AI/ML and Autonomy Software Verification, Validation and Certification
			STRUCTURES	
6-Jan	**9:30 a.m.**	*Plaza Ballroom D*	STR-03	Additive Structures
6-Jan	**9:30 a.m.**	*Celebration 15*	STR-04	Fatigue, Fracture, and Impact Damage of Structures I
6-Jan	**1 p.m.**	*Florida Ballroom A*	SCS-02/STR-06	In-Space Servicing, Assembly and Manufacturing (ISAM) I
6-Jan	**1 p.m.**	*Celebration 14*	STR-05	Air and Space Structural Design, Analysis, Test
6-Jan	**3:30 p.m.**	*Celebration 16*	STR-07/MAT-03	AI/ML in Structures and Materials II
6-Jan	**3:30 p.m.**	*Celebration 14*	STR-08	Composite Structural Analysis, Design, Testing, and Manufacturing I
7-Jan	**9:30 a.m.**	*Florida Ballroom A*	SCS-05/STR-10	In-Space Servicing, Assembly and Manufacturing (ISAM) II
7-Jan	**9:30 a.m.**	*Celebration 14*	STR-09/MAT-06	AI/ML in Structures and Materials I
7-Jan	**1 p.m.**	*Celebration 14*	STR-11	Composite Structural Analysis, Design, Testing, and Manufacturing II
7-Jan	**3:30 p.m.**	*Celebration 14*	STR-12	Structural Health Monitoring and Non-Destructive Evaluation I
8-Jan	**9:30 a.m.**	*Florida Ballroom C*	GTE-01/HYP-01/STR-01/DE-01/EAT-36 ★	Advanced Manufacturing Innovations in Aerospace and Defense
8-Jan	**9:30 a.m.**	*Celebration 14*	STR-14/MAT-10	Structures and Materials in Extreme Environments
8-Jan	**1 p.m.**	*Plaza Ballroom D*	STR-15	Enhancing Verification and Validation for Structural Certification in the Aerospace Industry through Uncertainty Quantification and Propagation
8-Jan	**1 p.m.**	*Celebration 14*	STR-16	Fatigue, Fracture, and Impact Damage of Structures II
8-Jan	**3:30 p.m.**	*Celebration 11*	MDO-16/STR-18/MAT-13	Integrated Computational Material Engineering (ICME)
8-Jan	**3:30 p.m.**	*Orlando Ballroom N*	SCS-10/STR-17	In-Space Servicing, Assembly and Manufacturing (ISAM) III
8-Jan	**3:30 p.m.**	*Plaza Ballroom D*	STR-19	Optimally-Tailored Microstructures and Architected Metamaterials for Advanced Aircraft Structures
8-Jan	**3:30 p.m.**	*Celebration 14*	STR-20	Structural Health Monitoring and Non-Destructive Evaluation II
9-Jan	**9:30 a.m.**	*Orlando Ballroom N*	SCS-11/STR-21	In-Space Servicing, Assembly and Manufacturing (ISAM) IV

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

9-Jan	**9:30 a.m.**	*Celebration 14*	STR-23	Topics in Air and Space Structures I
9-Jan	**1 p.m.**	*Orlando Ballroom N*	STR-25/SD-17/MAT-17 ★	Structures, Structural Dynamics, and Materials Lecture
9-Jan	**3:30 p.m.**	*Celebration 14*	STR-26	Buckling and Stability of Air and Space Structures
9-Jan	**3:30 p.m.**	*Celebration 15*	STR-28	Topics in Air and Space Structures II
10-Jan	**9:30 a.m.**	*Blue Spring II*	STR-29/MAT-19	AI/ML in Structures and Materials III
10-Jan	**9:30 a.m.**	*Celebration 14*	STR-30	Composite Structural Analysis, Design, Testing, and Manufacturing III
10-Jan	**1 p.m.**	*Blue Spring II*	STR-31/MAT-21	AI/ML in Structures and Materials IV
10-Jan	**1 p.m.**	*Celebration 14*	STR-32	Fatigue, Fracture, and Impact Damage of Structures III
			SUPERSONICS	
6-Jan	**9:30 a.m.**	*Plaza Ballroom I*	SPSN-01	NASA's Quesst Mission Special Session
8-Jan	**3:30 p.m.**	*Silver Spring I*	SPSN-02	Landing/Takeoff (LTO) Noise Prediction Special Session
9-Jan	**1 p.m.**	*Celebration 15*	SPSN-06	Supersonic Modeling and Design I
10-Jan	**9:30 a.m.**	*Bayhill 29*	APA-82/SPSN-04	Supersonic Aerodynamics I
10-Jan	**1 p.m.**	*Bayhill 29*	APA-84/SPSN-05	Supersonic Aerodynamics II
10-Jan	**3:30 p.m.**	*Silver Spring I*	SPSN-07	Supersonic Modeling and Design II
			SURVIVABILITY	
8-Jan	**9:30 a.m.**	*Peacock Spring*	SUR-01	Aircraft Survivability
8-Jan	**1 p.m.**	*Barrel Spring I*	SUR-02	Spacecraft and Materials Survivability
			SYSTEMS ENGINEERING	
7-Jan	**1 p.m.**	*Plaza Ballroom E*	SE-01	Systems Engineering Applications, Including New Space Applications
7-Jan	**3:30 p.m.**	*Plaza Ballroom F*	SE-02	Systems Engineering Processes and Methods I
8-Jan	**9:30 a.m.**	*Plaza Ballroom D*	SE-03	Atmospheric Flight Systems Engineering Theory and Applications I
8-Jan	**3:30 p.m.**	*Plaza Ballroom F*	SE-04	Atmospheric Flight Systems Engineering Theory and Applications II
8-Jan	**3:30 p.m.**	*Plaza Ballroom E*	SE-06	Systems Engineering Processes and Methods II
9-Jan	**1 p.m.**	*Celebration 14*	SE-08	Evolutions in Technical Debt: Unlocking Systems Complexity
9-Jan	**1 p.m.**	*Plaza Ballroom D*	SE-09	MBSE and System Composer Workshop
9-Jan	**3:30 p.m.**	*Plaza Ballroom F*	SE-10	Artificial Intelligence for Systems Engineering (AI4SE) Panel
9-Jan	**4:30 p.m.**	*Plaza Ballroom F*	SE-11	Model Based Technical Reviews
10-Jan	**1 p.m.**	*Orlando Ballroom N*	SE-12	Perspectives on Effective Model-Based Systems Engineering (MBSE)
			TERRESTRIAL ENERGY	
6-Jan	**9:30 a.m.**	*Celebration 12*	TES-01	Alternative Fuels and Propulsion Systems
6-Jan	**1 p.m.**	*Celebration 12*	TES-02	Hydrogen, Ammonia and Thermofluid Models in Terrestrial Energy
6-Jan	**3:30 p.m.**	*Manatee Spring II*	EAT-19/TES-04/GRE-01	Spotlight Session on Hydrogen and Fuel Cell Technologies
7-Jan	**9:30 a.m.**	*Plaza Ballroom J*	EAT-28/ACD-26/ TES-06/GRE-04 ★	Clean Aviation Program Keynote: Latest Highlights and Achievements
7-Jan	**1 p.m.**	*Celebration 12*	TES-03	Advances in Renewable Energy and Green Infrastructure
8-Jan	**1 p.m.**	*Florida Ballroom C*	EAT-08/TF-01/TES-05	Future of Aviation
10-Jan	**9:30 a.m.**	*Manatee Spring II*	EAT-34/TES-07/GRE-05/PC-44	Clean Aviation Special Session: Disruptive Technologies for Hydrogen-Powered Aircraft
			THERMOPHYSICS	
6-Jan	**9:30 a.m.**	*Bayhill 20*	TP-01	Aerothermodynamics I
6-Jan	**1 p.m.**	*Bayhill 20*	TP-02	Aerothermodynamics II
6-Jan	**3:30 p.m.**	*Bayhill 20*	TP-03	Aerothermodynamics III
7-Jan	**9:30 a.m.**	*Bayhill 20*	TP-04	Aerothermodynamics IV
7-Jan	**9:30 a.m.**	*Bayhill 24*	TP-05	Heat Pipe, Two-Phase, and Nano/Micro Devices and Processes
7-Jan	**1 p.m.**	*Bayhill 20*	TP-06	Thermal Protection Systems and Thermal Management I
7-Jan	**3:30 p.m.**	*Bayhill 20*	TP-07	Thermal Protection Systems and Thermal Management II
8-Jan	**9:30 a.m.**	*Bayhill 20*	TP-08	Ablation I
8-Jan	**1 p.m.**	*Bayhill 20*	TP-09	Ablation II
9-Jan	**9:30 a.m.**	*Bayhill 20*	TP-11	Non-Equilibrium Flows and Radiation I

TECHNICAL SESSIONS

★ Engage with your community at these must-attend lectures

9-Jan	**1 p.m.**	*Bayhill 20*	TP-12	Non-Equilibrium Flows and Radiation II
9-Jan	**3:30 p.m.**	*Bayhill 20*	TP-13	Non-Equilibrium Flows and Radiation III
10-Jan	**9:30 a.m.**	*Bayhill 20*	TP-14	Non-Equilibrium Flows and Radiation IV
10-Jan	**1 p.m.**	*Bayhill 20*	TP-15	Theoretical, Experimental, and Computational Heat Transfer I
10-Jan	**3:30 p.m.**	*Bayhill 25*	GNC-46/PDL-18/TP-16	Aero-Optics
10-Jan	**3:30 p.m.**	*Bayhill 20*	TP-17	Theoretical, Experimental, and Computational Heat Transfer II
TRANSFORMATIONAL FLIGHT				
6-Jan	**1 p.m.**	*Windermere Ballroom*	EAT-03/TF-16	Spotlight Session on Electrified Aircraft Technology: Industry Flight Demo Programs
6-Jan	**2 p.m.**	*Windermere Ballroom*	EAT-29/TF-10	Featured Talk: Flying the ALIA eVTOL/eCTOL — with Kyle Clark of BETA Technologies
7-Jan	**1 p.m.**	*Bayhill 18*	AA-01/EAT-11/TF-03	Advanced Air Mobility Noise
7-Jan	**1 p.m.**	*Plaza Ballroom I*	IS-09/GNC-13/DA-01/ HMT-02/TF-04/EAT-13	Future of Autonomous Flight
7-Jan	**1 p.m.**	*Blue Spring II*	TF-05	What Does it Mean to Fly Without a Pilot Onboard, from a Cybersecurity Point of View?
7-Jan	**2 p.m.**	*Plaza Ballroom J*	EAT-27/TF-08 ★	Airbus ASCEND and Cryoprop Demonstrators (Featured Keynote)
7-Jan	**3:30 p.m.**	*Plaza Ballroom J*	INPSI-07/EAT-18/ TF-07/ACD-15 ★	IMOTHEP – Investigation and Maturation of Technologies for Hybrid Electric Propulsion (Featured Keynote)
7-Jan	**3:30 p.m.**	*Plaza Ballroom K*	TF-06/EAT-16/IS-14	U.S. Air Force AFWERX Agility Prime: The Future of Air Mobility
8-Jan	**1 p.m.**	*Florida Ballroom C*	EAT-08/TF-01/TES-05	Future of Aviation
10-Jan	**9:30 a.m.**	*Rainbow Spring I*	UAS-13/TF-11	ATM for Advanced Aircraft Concepts
10-Jan	**1 p.m.**	*Bayhill 17*	TF-12/UAS-14/ACD-25	Advanced Air Mobility Operations, Design, and Analysis
10-Jan	**3:30 p.m.**	*Bayhill 17*	TF-15	Towards Net-Zero Emissions
UNCREWED AND AUTONOMOUS SYSTEMS				
6-Jan	**9:30 a.m.**	*Rainbow Spring I*	UAS-01	Systems Design and Optimization I
6-Jan	**1 p.m.**	*Rainbow Spring I*	UAS-02	Systems Design and Optimization II
6-Jan	**3:30 p.m.**	*Rainbow Spring I*	UAS-03	Systems Design and Optimization III
7-Jan	**9:30 a.m.**	*Rainbow Spring I*	UAS-04	UAS Optimising Human Machine Relationships
7-Jan	**1 p.m.**	*Celebration 13*	UAS-05	Innovative Solutions for Enhanced Security Measures
7-Jan	**3:30 p.m.**	*Rainbow Spring I*	UAS-06	UAS Student Papers
8-Jan	**9:30 a.m.**	*Rainbow Spring I*	UAS-07	Autonomous Mission Management Concepts and Technologies I
8-Jan	**1 p.m.**	*Rainbow Spring I*	UAS-08	Autonomous Mission Management Concepts and Technologies II
8-Jan	**3:30 p.m.**	*Rainbow Spring I*	UAS-09	Autonomy for AAM Systems I
9-Jan	**9:30 a.m.**	*Rainbow Spring I*	UAS-10	Autonomy for AAM Systems II
9-Jan	**1 p.m.**	*Rainbow Spring I*	UAS-11	Autonomous Systems Capabilities and Integration for Earth and Deep Space I
9-Jan	**3:30 p.m.**	*Rainbow Spring I*	UAS-12	Autonomous Systems Capabilities and Integration for Earth and Deep Space II
10-Jan	**9:30 a.m.**	*Rainbow Spring I*	UAS-13/TF-11	ATM for Advanced Aircraft Concepts
10-Jan	**1 p.m.**	*Bayhill 17*	TF-12/UAS-14/ACD-25	Advanced Air Mobility Operations, Design, and Analysis
10-Jan	**3:30 p.m.**	*Celebration 5*	HIS-09/MST-14/TF-14/UAS-17	Multi-Modal Transportation
WIND ENERGY				
6-Jan	**3:30 p.m.**	*Celebration 12*	WE-01	Machine Learning and Control of Wind Energy Systems
7-Jan	**9:30 a.m.**	*Celebration 12*	WE-02	Wind Energy System Aerodynamics
7-Jan	**1 p.m.**	*Orlando Ballroom N*	WE-03 ★	Wind Energy Lecture: Wind Turbine Aerodynamics: Challenges in Design and Tests
7-Jan	**3:30 p.m.**	*Celebration 12*	WE-04	Wind Turbine Loads and Dynamics
8-Jan	**9:30 a.m.**	*Celebration 12*	WE-05	Toyota Mothership: Tools and Technologies of the High Altitude Aerial Platform
8-Jan	**1 p.m.**	*Celebration 12*	WE-06	Toyota Mothership: Vision and Progress of the High Altitude Aerial Platform
8-Jan	**3:30 p.m.**	*Celebration 12*	WE-07	International Undergraduate Student Wind Energy Design Research

TWO SIGNATURE EVENTS.
ONE EXPO HALL BRIMMING WITH INNOVATION.

The global aviation and space communities are coming to Las Vegas for AIAA AVIATION Forum and ASCEND. These two events, co-located at Caesars Forum, embody groundbreaking innovation and offer unmatched technical prowess.

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AIAA

COMMITTEE MEETINGS AND EVENTS

TIME	LOCATION	COMMITTEE AND ANCILLARY MEETINGS/EVENTS
SUNDAY, 5 JANUARY		
1:30-5:30 p.m.	*Plaza G*	AIAA Town Hall with Volunteer Leaders and Community Breakout Sessions
2:30-5 p.m.	*Plaza D, E, F*	Breakout Rooms: AIAA Town Hall
3-4 p.m.	*Discovery 45*	APATC Honors & Awards Subcommittee
3-4 p.m.	*Columbia 37*	APATC Education Subcommittee
3-4 p.m.	*Challenger 41 & 42*	APATC Liaison Subcommittee
3-4 p.m.	*Discovery 44*	APATC Membership Subcommittee
3-4 p.m.	*Challenger 38*	APATC Planning Subcommittee
3-4 p.m.	*Challenger 39*	APATC Publicity and Publication Subcommittee
4-5 p.m.	*Boardroom*	APATC Technical Activities
4-6 p.m.	*Celebration 6*	Transformative Systems Engineering Task Force Workshop
4-8:30 p.m.	*Regency Q*	Ground Testing Technical Committee (GTTC) Meetings
5-6 p.m.	*Discovery 45*	APATC Steering Committee
5:30-7:30 p.m.	*Barrel Spring 1*	Structures Technical Committee Sunday Lecture
6-7 p.m.	*Orlando L*	Idea Challenge Kickoff Meeting
6-9 p.m.	*Plaza G*	Applied Aerodynamics Technical Committee Meeting
6:30-7:30 p.m.	*Regency O & P*	Diversity Scholars Orientation
6:30-8:30 p.m.	*Discovery 44*	Information Systems Group Meeting
7-9 p.m.	*Barrel Spring 2*	Aerospace Design & Structures Group Meeting
7-9 p.m.	*Plaza H*	Committee on Higher Education Annual Meeting
7:30-8 p.m.	*Orlando L*	SciTech 101
8-9 p.m.	*Regency O & P*	International Student Conference Orientation
MONDAY, 6 JANUARY		
9-11:00 a.m.	*Discovery 45*	Space and Missiles Group Open Meeting
9:30-11:30 a.m.	*Discovery 43*	GTTC High Speed Wind Tunnel Calibration Working Group
10-11:30 a.m.	*Plaza H*	Rising Leaders in Aerospace: Pitching for Young Professionals (Organized by SEDS)
10 a.m.-12 p.m.	*Boardroom*	AIAA Foundation Board Meeting
11 a.m.-12 p.m.	*Columbia 37*	Journal of Propulsion & Power EAB Meeting
11 a.m.-12:30 p.m.	*Challenger 41 & 42*	GTTC Model Deformation Working Group
11 a.m.-3 p.m.	*Discovery 44*	Integration and Outreach Division (IOD)
12-1 p.m.	*Challenger 40*	FDTC Computational Methods for Multi-Phase Flows
12-2 p.m.	*Discovery 43*	CFD Vision 2030 Integration Committee Meeting
12-2 p.m.	*Discovery 46*	Idea Challenge Planning Workshop
1-2 p.m.	*Discovery 47*	Corporate Members and University Roundtable
1-2 p.m.	*Challenger 38*	Education Series EAB Meeting
2-4 p.m.	*Discovery 45*	GTTC Additive Manufacturing Focus Group
2-5 p.m.	*Challenger 41 & 42*	Reusable Launch Vehicles Industry Trends and University Student Engagement
3-4 p.m.	*Challenger 38*	Progress Series EAB Meeting
3:30-5 p.m.	*Discovery 43*	FDTC High-Fidelity CFD Verification DG
4-5 p.m.	*Columbia 37*	Journal of Aircraft Editorial Meeting
4:30-5:30 p.m.	*Challenger 39*	HyTASP Steering Committee Meeting
5-6 p.m.	*Columbia 34*	FDTC Large Eddy Simulation DG
5:30-7 p.m.	*Windermere Ballroom*	AIAA Awards Recognition Ceremony
6-7 p.m.	*Celebration 1*	FDTC Active Flow Control Database DG
6-7 p.m.	*Boardroom*	APATC Aerodynamic/Propulsive Interactions DG
6-7 p.m.	*Bayhill 32*	FDTC Reduced-Complexity Modeling and Analysis of Fluid Flows DG
6-7 p.m.	*Bayhill 28*	FDTC Turbulence Model Benchmarking DG

COMMITTEE MEETINGS AND EVENTS

6-7 p.m.	*Discovery 45*	MVCE Meshing Subcommittee
6-7 p.m.	*Coral Spring 1*	AMT Nominations Subcommittee Meeting
6-7 p.m.	*Coral Spring 2*	AMT Diversity and Inclusion Subcommittee Meeting
6-8 p.m.	*Celebration 11*	Certification by Analysis Community of Interest (COI)
6-9 p.m.	*Plaza G*	Aligning our Digital Taxonomy for Aerospace
6:30-8:30 p.m.	*Manatee Spring 2*	Propellants and Combustion Technical Committee Meeting
7-8 p.m.	*Peacock Spring*	AMT Awards Subcommittee Meeting
7-8 p.m.	*Manatee Spring 1*	AMT Conference Planning Subcommittee Meeting
7-8 p.m.	*Celebration 3*	FDTC High-speed flow Control
7-8 p.m.	*Bayhill 33*	FDTC Massively Separated Flows DG
7-8 p.m.	*Rock Spring 1&2*	AMT Publications Subcommittee Meeting
7-8 p.m.	*Discovery 44*	MVCE Computational Environments Subcommittee
7-8:30 p.m.	*Bayhill 29*	FDTC Uncertainty Quantification in Fluid Dynamics DG
7-9 p.m.	*Columbia 37*	Computer Systems Technical Committee Meeting
7-9 p.m.	*Plaza H*	Liquid Propulsion Technical Committee Meeting
7-9 p.m.	*Bayhill 30*	FDTC Transition DG
7-9 p.m.	*Celebration 5*	Friends of UC
7-9 p.m.	*Columbia 35*	NC State University Mechanical and Aerospace Engineering Alumni Reception
7-9 p.m.	*Barrel Spring 1*	Terrestrial Energy Systems Committee Meeting
7-10 p.m.	*Regency O &P*	Aircraft Design Technical Committee
7-10 p.m.	*Celebration 8*	HyTASP Technical Committee Meeting
7-10 p.m.	*Orchid Room*	University of Michigan Department of Aerospace Engineering AIAA Reception
7-10 p.m.	*Barrel Spring 2*	Systems Engineering Technical Committee Meeting
7:15-9:15 p.m.	*Bayhill 27*	Modeling and Simulation Technical Committee Meeting
8-9 p.m.	*Bayhill 31*	FDTC Swept Wing Leading Edge Vortex Flow Physics DG
8-10 p.m.	*Celebration 2*	FDTC High Speed FSI DG
8-10 p.m.	*Bayhill 17*	ISTC Student Paper Competition Presentations
TUESDAY, 7 JANUARY		
9-10 a.m.	*Challenger 38*	Books Subcommittee
9-11 a.m.	*Regency O & P*	International Student Conference Awards Breakfast
10-11 a.m.	*Challenger 40*	PEG Meeting
10 a.m.-12 p.m.	*Columbia 36*	International Activities Group
10 a.m.-12 p.m.	*Columbia 35*	Ethics Committee Meeting
11 a.m.-12 p.m.	*Columbia 37*	Journal of Spacecraft and Rockets EAB Meeting
11 a.m.-12 p.m.	*Plaza H*	SciTech 2026 Technical Program Committee Meeting
11:30 a.m.-1 p.m.	*Columbia 34*	CFD Workshop Collaboration (leveraging experience)
12-1 p.m.	*Challenger 39*	IAG Strategy & Implementation Committee Meeting
1-2:30 p.m.	*Columbia 37*	AIAA Journal EAB Meeting
1-3 p.m.	*Columbia 36*	GTTC Model Attitude Measurement Working Group
1-4 p.m.	*Challenger 40*	Seminar on Non-intrusive Laser-based Diagnostic Techniques for Hypersonic Flows
1-5 p.m.	*Plaza H*	Technical Activities Division Meeting
1-5 p.m.	*Discovery 44*	AIAA Regional Engagement Activities Division (READ) Meeting
2-3 p.m.	*Challenger 38*	Publications Ethical Standards Committee
2-5 p.m.	*Discovery 43*	RTRC Recruiting Info Session for Students/Young Professionals
3-4 p.m.	*Discovery 45*	Thermophysics Nominations Subcommittee
3-5 p.m.	*Columbia 37*	Journal of Guidance Control and Dynamics EAB Meeting
3:30-5 p.m.	*Discovery 46*	National Awards Best Practices Workshop
3:30-5:30 p.m.	*Discovery 47*	Public Policy Committee Meeting

COMMITTEE MEETINGS AND EVENTS

4-5:30 p.m.	*Challenger 39*	SURTC Annual Meeting
5-6 p.m.	*Challenger 38*	Journal of Thermophysics and Heat Transfer EAB Meeting
5-6 p.m.	*Columbia 35*	Flight Testing Technical Committee Meeting
5-6 p.m.	*Columbia 36*	NASA ULI Review Meeting
5-7 p.m.	*Discovery 45*	AIAA Computational Fluid Dynamics (CFD) Committee on Standards (CoS)
5-7 p.m.	*Orchid Room*	GT Alumni Reception
5:30-6:30 p.m.	*Challenger 41 & 42*	Diversity WG Meet and Greet
5:30-6:30 p.m.	*Discovery 48*	Section Officers Meetup
5:30-7 p.m.	*Descend 21 in the Hyatt*	Department of Aerospace Engineering at the University of Illinois
6-7 p.m.	*Boardroom*	APATC Laminar Flow Control DG
6-7:30 p.m.	*Columbia 37*	Design Engineering Technical Committee (DETC) Meeting
6-8 p.m.	*Rock Spring 1 & 2*	APATC Applied Surrogate Modeling DG
6-8 p.m.	*Celebration 4*	Gas Turbine Engines (GTE) Technical Committee Meeting
6-8 p.m.	*Celebration 1*	Multidisciplinary Design Optimization TC Meeting
6-8 p.m.	*Bayhill 33*	Space Automation and Robotics Technical Committee (SARTC) Meeting
6-8 p.m.	*Discovery 47*	Solid Rocket Technical Committee
6-9 p.m.	*Celebration 2*	Nondeterministic Approaches Technical Committee Meeting
6-9 p.m.	*Celebration 6*	Intelligent Systems Technical Committee
6:30-7 p.m.	*Orlando L*	Non-Equilibrium Flow Discussion Group
6:30-8 p.m.	*Manatee Spring 1*	PGCTC Student Mixer and Networking Event
6:30-8 p.m.	*Rainbow Spring 1*	MVCE Technical Committee
6:30-8:30 p.m.	*Barrel Spring 1*	APATC Integrated (Digital and Physical) Collaborative Experimentation (ICE) FG
6:30-8:30 p.m.	*Hampton Social, Montauk Hall 9101 International Dr. Orlando, FL 32819*	Purdue University Friends & Family Reception
6:30-8:30 p.m.	*Celebration 7*	Sensor Systems and Information Fusion Annual Meeting
6:30-9:30 p.m.	*Bayhill 30*	Electric Propulsion Technical Committee Meeting
7-8 p.m.	*Bayhill 32*	APATC Stability & Control Prediction DG
7-8 p.m.	*Bayhill 31*	APATC CFD Transition Modeling DG
7-9 p.m.	*Plaza E*	High Speed Air Breathing Propulsion Technical Committee Meeting
7-9 p.m.	*Regency Q*	Aerospace Department Chairs Association
7-9 p.m.	*Plaza D*	Materials Technical Committee Meeting
7-9 p.m.	*Coral Spring 2*	FDTC FAC Subcommittee
7-9 p.m.	*Coral Spring 1*	FDTC FFP Subcommittee
7-9 p.m.	*Plaza J*	AFM TC Winter Meeting
7-9 p.m.	*Barrel Spring 2*	SDTC (Structural Dynamics)
7-9 p.m.	*Peacock Spring*	FDTC CFD Subcommittee
7-9 p.m.	*Bayhill 17*	Electrictrified Aircraft Technologies Technical Committee Meeting
7-9 p.m.	*Plaza K*	Thermophysics Technical Committee
7-9:30 p.m.	*Celebration 9*	Aeroacoustics Technical Committee
7-10 p.m.	*Plaza G*	Digital Engineering Integration Committee (DEIC) Meeting
7-10 p.m.	*Plaza H*	Spacecraft Structures (SCS) TC Meeting
7-10 p.m.	*Celebration 3*	Adaptive Structures Technical Committee Meeting
7-10 p.m.	*Celebration 8*	Plasmadynamics and Lasers Technical Committee Meeting
7:30-10:30 p.m.	*Regency O & P*	Structures Technical Committee Annual Meeting
7:30-10:30 p.m.	*Silver Spring 1*	Face-to-Face Meeting: Space Exploration Integration Committee
7:30-10:30 p.m.	*Manatee Spring 2*	Aerodynamic Measurement Technology Technical Committee Meeting

COMMITTEE MEETINGS AND EVENTS

WEDNESDAY, 8 JANUARY		
8-9 a.m.	*Challenger 38*	GTTC RDT&E Risk Management Process Sufficiency
9-10:30 a.m.	*Challenger 39*	GTTC Writing Quality Focus Group
9-11 a.m.	*Plaza H*	AIAA Publications Committee
9-11 a.m.	*Columbia 35*	GTTC IR Thermography Focus Group
9:30-11:30 a.m.	*Columbia 37*	GTTC Statistical Methods and UQ Focus Group
10-11 a.m.	*Columbia 34*	Faculty Advisor Engagement Panel
11 a.m.-12:30 p.m.	*Columbia 36*	Space Logistics TC Meeting
12-2 p.m.	*Discovery 44*	SciTech USAF & USSF Meeting
12:30-1:30 p.m.	*Columbia 37*	Journals Subcommittee
1-2:30 p.m.	*Challenger 40*	GTTC/APATC Focus Group: Integrated (Physical and Digital) Collaborative Experimentation
1-5 p.m.	*Plaza H*	Council of Directors Meeting
1:30-3 p.m.	*Columbia 37*	Journals Editor-in-Chief Meeting
2-4 p.m.	*Columbia 36*	GTTC Dynamic Force Measurement in Wind Tunnels Focus Group
2-4 p.m.	*Plaza G*	Rising Leaders in Aerospace: Speed Mentoring
2:30-3:30 p.m.	*Columbia 35*	GTTC Intro to Ground Testing - Planning Session
3-4 p.m.	*Challenger 38*	Journal of Aerospace Information Systems
3-5 p.m.	*Challenger 39*	V/STOL TC Meeting
5-7 p.m.	*Orchid Room*	VA Tech SciTech Happy Hour
5:30-7 p.m.	*Challenger 39*	Human-Machine Teaming TC Meeting
6-7 p.m.	*Columbia 37*	APATC Sailplane Aerodynamics DG
6-7 p.m.	*Regency O & P Foyer*	AIAA Associate Fellows, Class of 2025 Reception
6-7:30 p.m.	*Discovery 44*	Propulsion Aerodynamic Workshop
6-8 p.m.	*Plaza D*	Women of Aeronautics and Astronautics Committee Meeting
6-8 p.m.	*Columbia 36*	Aerospace Power Systems Technical Committee Meeting
6-8 p.m.	*Columbia 35*	Uncrewed and Autonomous Systems IOC
6-8 p.m.	*Discovery 46*	COSMIC Academic Caucus Meetup
6-8 p.m.	*Rainbow Spring 1*	Supersonics Integration and Outreach Committee Meeting
6-8 p.m.	*Blue Spring 2*	APATC Rotorcraft Simulation DG
6-9 p.m.	*Plaza G*	Digital Materiel Management Workshop
6:30-8:30 p.m.	*Florida B*	JHTO/ UCAH Hypersonic Community Career and Networking Social
6:30-8:30 p.m.	*Florida A*	Joint Advanced Propulsion Institute (JANUS) Poster Session
6:30-9 p.m.	*Celebration 1*	TF IOC Meeting
7-9 p.m.	*Regency Q*	FDTC Plenary Meeting
7-9 p.m.	*Plaza H*	Pressure Gain Combustion TC meeting
7-9 p.m.	*Orlando M*	AMT Update Presentations and Student Event
7-9 p.m.	*Celebration 3*	Embry-Riddle Alumni and Friends Reception
7-9:30 p.m.	*Plaza E*	Guidance Navigation and Control TC
7-10:30 p.m.	*Regency O & P*	AIAA Associate Fellows, Class of 2025 Induction Ceremony and Dinner

COMMITTEE MEETINGS AND EVENTS

THURSDAY, 9 JANUARY		
8-9 a.m.	*Columbia 35*	GTTC Focus Group: Identify and Address RDT&E Workforce Challenges
9:30-10:30 a.m.	*Discovery 46*	Young Professionals Group Meeting
12-2 p.m.	*Columbia 35*	AIAA Microgravity and Space Processes (MSP) TC Committee Meeting
1-3 p.m.	*Challenger 40*	GTTC Data Systems Focus Group
1:30-4 p.m.	*Columbia 37*	AAM Multi-Modal Working Group Meeting
4-6 p.m.	*Discovery 45*	History Committee
5:30-8:30 p.m.	*Regency Q*	GTTC Closeout Meeting
6-7 p.m.	*Columbia 36*	Energetic Components and Systems Technical Committee Meeting
6-7 p.m.	*Columbia 35*	Small Satellite Technical Committee
6-7:30 p.m.	*Challenger 39*	Information Command and Control Systems TC Meeting
6-8 p.m.	*Challenger 38*	Hybrid Rockets TC
6-8 p.m.	*Discovery 44*	Aerospace Cybersecurity Working Group
6-9 p.m.	*Regency O & P*	Empowering Regional Digital Engineering, Modeling and Simulation Efforts
6:30-8:30 p.m.	*Columbia 37*	Software TC Meeting

RECOGNITION

AIAA is committed to ensuring that aerospace professionals are recognized and celebrated for their achievements, innovations, and discoveries that make the world safer, more connected, more accessible, and more prosperous. From the major missions that reimagine how our nation utilizes air and space to the inventive new applications that enhance everyday living, aerospace professionals leverage their knowledge for the benefit of society. AIAA continues to celebrate that pioneering spirit showcasing the very best in the aerospace industry.

AIAA AWARDS RECOGNITION CEREMONY

MONDAY, 6 JANUARY

5:30–7 p.m. | Windermere Ballroom.

Please join us to celebrate and recognize the distinguished awardees and best papers authors in this special event.

This is a free event; registration is not required.

CLASS OF 2025 AIAA ASSOCIATE FELLOWS INDUCTION CEREMONY

(Ticketed Event)

WEDNESDAY, 8 JANUARY

Reception: 6–6:50 p.m. | Foyer Outside Regency O & P Ballroom

Dinner: 7:15 p.m. | Regency O & P Ballroom

Each year, the Institute recognizes exemplary professionals for their accomplishments in engineering or scientific work, outstanding merit and contributions to the art, science, or technology of aeronautics or astronautics. Join us to congratulate the Class of 2025 Associate Fellows at this annual celebration event.

Admission to the reception, dinner, and induction ceremony is available on a first-come, first-served basis and can be purchased for $140 via the AIAA SciTech Forum registration webpage, or onsite (based on availability). Proof of purchase for the event is required. Dress is business attire or semi-formal.

AIAA would like to thank the following organizations for their generous support to the AIAA Associate Fellows Induction Ceremony.

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PREMIER LECTURES

Admission to this lecture does not require AIAA SciTech Forum registration.

2025 AIAA Durand Lecture for Public Service

MONDAY, 6 JANUARY

3:30–4:30 p.m. | Windermere Ballroom

The Durand Lectureship for Public Service is presented for notable achievements by a scientific or technical leader whose contributions have led directly to the understanding and application of the science and technology of aeronautics and astronautics for the betterment of humanity.

Kevin G. Bowcutt, Principal Senior Technical Fellow & Chief Scientist of Hypersonics, The Boeing Company

Lecture:
"The Evolution of Hypersonic Flight Over Seven Decades and the Technical Breakthroughs that Got Us Here"

2025 AIAA Dryden Lecture in Research

TUESDAY, 7 JANUARY

4–5 p.m. | Windermere Ballroom

The AIAA Dryden Lectureship in Research emphasizes the great importance of basic and applied research to the advancement in aeronautics and astronautics and is a salute to research scientists and engineers.

Tim C. Lieuwen, Regents' Professor, David S. Lewis Jr. Chair, and Executive Director of the Strategic Energy Institute, Georgia Institute of Technology

Lecture:
"Future Research Directions in Aero Propulsion and Clean Energy Systems"

EDUCATION AWARD

2024 Abe M. Zarem Graduate Award for Distinguished Achievement in Astronautics

This award was established by AIAA Honorary Fellow Abe Zarem, founder and managing director of Frontier Associates, to annually recognize graduate students in aeronautics and astronautics who have demonstrated outstanding scholarship in their field.

Mohammed Abir Mahdi, Oklahoma State University

Shafi Al Salman Romeo, Oklahoma State University

"Convolutional Neural Network and Homogenization based Hybrid Approach for Lattice Structures"

Advisor: **Zhao Wei**, Oklahoma State University

RECOGNITION

LITERARY AWARDS

2025 AIAA Gardner-Lasser Aerospace History Literature Award

This award is presented for the best original contribution to the field of aeronautical or astronautical nonfiction literature published in the last five years dealing with the science, technology, and/or impact of aeronautics or astronautics on society.

Michael W. Hankins, Smithsonian's National Air and Space Museum

Book: *Flying Camelot: The F-15, the F-16, and the Weaponization of Fighter Pilot Nostalgia*

2025 AIAA Pendray Aerospace Literature Award

The award is presented for an outstanding contribution or contributions to aeronautical and astronautical literature in the relatively recent past.

Joseph M. Powers, University of Notre Dame

Book: *Mechanics of Fluids*

SERVICE AWARDS

2025 AIAA Mary W. Jackson Diversity and Inclusion Award

This award recognizes an individual or group within AIAA who has devoted time and effort and made significant contributions to the advancement of diversity and inclusion within the Institute. It also seeks to raise awareness on the value of a diverse membership and inclusive environment, and of important and challenging issues pertaining to diversity and inclusion in the aerospace workforce at large.

Karen A. Thole, University of Michigan

For sustained significant contributions to raise awareness of the value of diversity and inclusion in the aerospace workforce at large, an AIAA core value.

2025 AIAA Sustained Service Award

This award is presented to recognize sustained and significant service to AIAA and who has shown continuing dedication to the interests of the Institute by making significant and sustained contributions

Steven X. Bauer, NASA Langley Research Center

For sustained leadership, service, and contributions to the AIAA Hampton Roads Section, Region I, and AIAA National.

Gene R. Dionne, USAF (Ret.), Lockheed Martin Space (retired)

For his passionate, unmatched support of AIAA and the Rocky Mountain Section through volunteering across all committees.

Trevor S. Elliott, University of Tennessee at Chattanooga

For prolific, dedicated, and outstanding service to AIAA forums, technical committees, student teams, outreach groups, rocketry organizations, and aerospace communities leading to numerous student-led recognitions.

David C. Fleming, University of Michigan

For sustained service to the Cape Canaveral Section and Florida Institute of Technology Student Branch through continued participation, council leadership and unwavering dedication to AIAA's mission.

Aaron L. Harcrow Jr., No Box Innovations, LLC

For over 40 years of outstanding and sustained service to the Atlanta Section and Region II, contributing to the success of the Section.

Christopher J. Pestak, HX5, LLC

For dedicated service to AIAA and the field of aerospace for over 40 years and holding significant leadership positions within AIAA.

Robert W. Pitz, Vanderbilt University

For over three decades of distinguished and continuous service to AIAA, especially in national leadership roles involving publications, honors, ethics, and technical committee activities.

TECHNICAL EXCELLENCE AWARDS

2024 AIAA-ASEE J. Leland Atwood Award

This award is bestowed upon an outstanding aerospace engineering educator in recognition of the educator's contributions to the profession. This award is co-sponsored by the ASEE Aerospace Division and AIAA.

Stephen D. Heister, Purdue University

For his transformative impact on the aerospace industry in revitalizing Maurice J. Zucrow Laboratory, and mentoring leaders currently developing advanced rocket and airbreathing propulsion systems.

2025 AIAA-ASC James H. Starnes, Jr. Award

This award is presented to recognize continued significant contribution to and demonstrated promotion of the field of structural mechanics over an extended period of time emphasizing practical solutions, to acknowledge high professionalism, and to acknowledge the strong mentoring of and influence on colleagues.

Paul M. Weaver, University of Limerick, Ireland, and University of Bristol, United Kingdom

For his outstanding contribution in the field of composite structures and his supportive and inspirational mentoring of young academics and professionals.

2025 AIAA Aerospace Power Systems Award

This award, established in 1981, is presented for a significant contribution in the broad field of aerospace power systems, specifically as related to the application of engineering sciences and systems engineering to the generation, storage, management, and distribution of electrical energy to aerospace power systems.

Margot Wasz, The Aerospace Corporation (retired)

For exceptional technical contributions to advanced spacecraft battery power systems, outstanding service to the mission success of high-value United States Space Force launch vehicle systems, and leadership of AIAA space power activities.

RECOGNITION

2025 AIAA Air Breathing Propulsion Award
This award is presented to an individual for sustained, meritorious accomplishment in the arts, sciences, and technology of air breathing propulsion systems.

Zoltán S. Spakovszky, Massachusetts Institute of Technology

For outstanding and sustained contributions to air-breathing propulsion through rigorous discoveries and advancements in compressor aerodynamic and aerostructural stability and in aeroengine acoustics.

2025 AIAA Ashley Award for Aeroelasticity
This award recognizes outstanding contributions to the understanding and application of aeroelastic phenomena. It commemorates the accomplishments of Prof. Holt Ashley, who dedicated his professional life to the advancement of aerospace sciences and engineering and had a profound impact on the fields of aeroelasticity, unsteady aerodynamics, aeroservoelasticity, and multidisciplinary optimization.

Mordechay Karpel, Technion – Israel Institute of Technology

For outstanding contributions to structural dynamics, aeroelasticity, and aeroservoelasticity, including engineering leadership, research innovations, influential publications, development of industrial software, and mentoring of aerospace professionals.

2025 AIAA de Florez Award for Flight Simulation
This award is presented for an outstanding individual achievement in the application of flight simulation to aerospace training, research, and development.

Heinrich H. Bülthoff, Max Planck Institute for Biological Cybernetics

For groundbreaking research into how the brain processes multisensory perceptual information and the application of this knowledge for developing revolutionary new motion simulation technologies.

2025 AIAA Energy Systems Award
This award is presented for a significant contribution in the broad field of energy systems, specifically as related to the application of engineering sciences and systems engineering to the production, storage, distribution, and conservation of energy.

Ying Zheng, Western University

For remarkable contributions in advancing applied catalysis for clean and renewable energy innovations through exceptional dedication to research, education, and application.

2025 AIAA Hypersonic Systems and Technologies Award
This award is presented to recognize outstanding sustained contributions and achievements in enabling technologies and/or the integration of technologies for system applications in the advancement of hypersonic flight.

Gary Polansky, Sandia National Laboratories (retired)

In recognition of decades of technical leadership in pioneering U.S. hypersonic boost-glide vehicle development and testing in service of the national defense.

2025 AIAA Information Systems Award
This award is presented to recognize outstanding technical and/or management contributions in space and aeronautics for computer, sensing, and fusion aspects of information technology and science.

Radhakrishna Sampigethaya, Embry-Riddle Aeronautical University

For pioneering work and research in aviation cybersecurity in the areas of developing aircraft and air traffic control systems countermeasures, educating the current and next-generation workforce, and enhancing aerospace safety and security.

2025 AIAA Mechanics and Control of Flight Award
This award is presented for an outstanding recent technical or scientific contribution by an individual in the mechanics, guidance, or control of flight in space or the atmosphere.

Ilya Kolmanovsky, University of Michigan

For significant contributions to advances in theory and methods enabling development of reference governors and model predictive control algorithms enforcing safety constraints in aerospace systems.

2025 AIAA Propellants and Combustion Award
This award is presented for outstanding technical contributions to aeronautical or astronautical combustion engineering.

Robert P. Lucht, Purdue University

For numerous contributions to combustion, propulsion, and power generation through innovative development of advanced laser diagnostics and applying them to practical energy systems.

2025 AIAA Wyld Propulsion Award
This award is presented for outstanding achievement in the development or application of rocket propulsion systems.

Alon Gany, Technion – Israel Institute of Technology

For pioneering contributions in propulsion research on metalized propellants, energetic materials, hybrid rockets, ramjets, and scramjets, with sustained excellence in educating generations of propulsion experts.

RECOGNITION

STUDENT PAPER COMPETITIONS

Winners will be announced on Friday, 10 January, during the plenary session. | Windermere Ballroom

- Aerospace Design and Structures Group
- American Society for Composites Student Paper Award
- Jefferson Goblet Student Paper Award
- Lockheed Martin Student Paper Award in Structures
- Harry H. and Lois G. Hilton Student Paper Award in Structures
- SwRI Student Paper Award in Non-Deterministic Approaches
- Atmospheric Flight Mechanics
- Prof. Kirti "Karman" Ghia Memorial Award, Fluid Dynamics
- Green Engineering
- Guidance, Navigation, and Control
- High-Speed Air-Breathing Propulsion
- Human Machine Teaming
- Intelligent Systems
- Meshing, Visualization, and Computational Environments
- Small Satellites
- Terrestrial Energy Systems
- Unmanned Systems

BEST PROFESSIONAL PAPERS

2023 AIAA Solid Rockets Best Paper

"Dual-Zone Temperature and Multi-Species Measurements in Solid-Propellant Flames via Broadband Mid-Infrared Laser Absorption Spectroscopy" (AIAA 2023-4029)

Authors: **Vishnu Radhakrishna**, **Kyle E. Uhlenhake**, **Steven F. Son**, and **Christopher S. Goldenstein**, Purdue University

2024 AIAA Aerodynamic Measurement Technology Best Paper

"Internal Heat Transfer Measurement of Ablating Body in Mach 7 Flow via Luminescent Sensor" (AIAA 2024-2660)

Authors: **Joseph Gonzales**, The University of Notre Dame; **Kojiro Suzuki**, The University of Tokyo; and **Hirotaka Sakaue**, The University of Notre Dame

2024 AIAA Aerospace Design and Structures Best Paper

"Interactions between a Mach 3 Turbulent Boundary Layer and a Fully-Clamped Compliant Panel" (AIAA 2024-0933)

Authors: **Scott J. Peltier**, **Autumn N. Garner**, and **Christopher J. Clifford**, Air Force Research Laboratory; **Garrett C. Jones** and **Jacob W. Floyd**, Axient LLC; **Caleb A. Williams**, **Daniel A. Reasor, Jr.**, and **Thomas A. Mason**, Air Force Research Laboratory

2024 AIAA Aerospace Power Systems Best Paper

"Test Performance Results of a Magnetohydrodynamic Generator System Using an Ionized Plasma Flow to Simulate the Interplanetary Solar Wind" (AIAA 2024-0472)

Authors: **Chris N. Torre** and **William V. Torre**, Torre Space Power Systems

2024 AIAA Atmospheric Flight Mechanics Best Paper

"Linear Parameter-Varying (LPV) System based Hybrid Loads Observer using an Uncertain Aircraft Model" (AIAA 2024-2486)

Authors: **Oliver Luderer** and **Frank Thielecke**, Hamburg University of Technology

2024 AIAA Electric Propulsion Best Paper

"Carbon Transport in Electric Propulsion Testing – I: Multiscale Computations for Carbon Sputtering by Low Energy Ion Bombardment" (AIAA 2024-1135)

Authors: **H. Tran**, **S. Clark**, **R. Thompson**, **DA. Levin**, **J. Rovey**, **H.B. Chew**, University of Illinois at Urbana Champaign

2024 AIAA Electrified Aircraft Technology Best Paper

"Adaptive Control and Scaling Approach for the Emulation of Dynamic Sub-scale Torque Loads" (AIAA 2024-2356)

Authors: **Santino J. Bianco** and **Donald L. Simon**, NASA Glenn Research Center; and **Elyse D. Hill**, Oak Ridge Associated Universities

2024 AIAA Electrified Aircraft Technology Symposium Best Paper

"Parametric Modeling and Mission Performance Analysis of a True Parallel Hybrid Turboprop Aircraft for Freighter Operations" (AIAA 2024-3581)

Authors: **Dahlia D. V. Pham**, **Noah S. Listgarten**, **Gregory G. Zilliac**, and **Susie Go**, NASA Ames Research Center; **Jeffrey V. Bowles**, Ames Associate; and **Ralph H. Jansen**, NASA Glenn Research Center

2024 AIAA Electrified Aircraft Technology Symposium Best Paper

"System-Level Energy Pack Requirements for Sustainable Commercial Aviation" (AIAA 2024-3828)

Authors: **Maxfield Arnson** and **Gökçin Çınar**, University of Michigan; **Elias Waddington**, **Phillip J. Ansell**, and **Matthew A. Clarke**, University of Illinois at Urbana-Champaign; **Reynard de Vries**, Delft University of Technology; **Francesco Salucci** and **Nirmit Prabhakar**, Argonne National Laboratory; **Jonathan Gladin**, Georgia Institute of Technology; **Mingxuan Shi**, The Boeing Company; **Edward Lovelace**, Ampaire; and **Peter de Bock**, Advanced Research Projects Agency - Energy (ARPA-E)

RECOGNITION

2024 AIAA Gas Turbine Engines Best Paper
"Changes in the Composition of Aircraft Lubricants Undergoing Thermal Breakdown" (AIAA 2024-2575)

Authors: **Raquel Juarez** and **Eric L. Petersen**, Texas A&M University

2024 AIAA Guidance, Navigation, and Control Best Paper
"Keypoint-based Stereophotoclinometry for Characterizing and Navigating Small Bodies: A Factor Graph Approach" (AIAA 2024-0513)

Authors: **Travis Driver**, Georgia Institute of Technology; **Andrew Vaughan**, **Yang Cheng**, and **Adnan Ansar**, Jet Propulsion Laboratory, California Institute of Technology; **John Christian** and **Panagiotis Tsiotras**, Georgia Institute of Technology

2024 AIAA Guidance, Navigation, and Control Best Paper
"Optimal Guidance for an Ideal Missile" (AIAA 2024-1989)

Author: **Curtis P. Mracek**, USAF, Raytheon, Ret.

2024 AIAA Joint High Speed Air Breathing Propulsion and Inlets, Nozzles and Propulsion System Integration Best Paper
"Depressurisation Restart Method for a Hypersonic Inlet with Closed-Plenum Mass Flow Metering" (AIAA 2024-4116)

Authors: **Lachlan J. Noller**, **Fabian Zander**, and **David R. Buttsworth**, University of Southern Queensland

2024 AIAA History Best Paper
"On the History and Semantics of Burble in Aerodynamic Theory" (AIAA 2024-2216)

Authors: **Benjamin C. Moulton**, Utah State University; **Cory D. Goates**, Research in Flight; and **Troy A. Abraham**, Utah State University

2024 AIAA Intelligent Systems Best Paper
"State Omniscience for Cooperative Local Catalog Maintenance of Close Proximity Satellite Systems" (AIAA 2024-0992)

Authors: **Christopher W. Hays** and **Troy Henderson**, Embry-Riddle Aeronautical University; **Kristina Miller**, University of Illinois Urbana-Champaign; and **Sean Phillips** and **Alexander Soderlund**, Air Force Research Laboratory

25th AIAA International Space Planes and Hypersonic Systems and Technologies Best Paper
"Influence of Active Cooling on Engine Performance by Mitigating Aero-thermo-elastic Deformation of a Hypersonic Inlet" (AIAA 2023-3037)

Authors: **Jennifer A. Horing**, **Kurt K. Maute**, and **Iain D. Boyd**, University of Colorado Boulder

2024 AIAA Liquid Propulsion Best Paper
"Investigations of Multi-Zonal Modeling Strategy for Rocket Combustion Dynamics" (AIAA 2024-0148)

Authors: **Cheng Huang**, University of Kansas; **Ashvin Hosangadi**, Combustion Research and Flow Technology, Inc. (CRAFT Tech); and **Charles Merkle**, Purdue University

2024 AIAA Modeling and Simulation Technologies Best Paper Award
"Airborne Recovery of the X-61A Gremlin Unmanned Aircraft" (AIAA 2024-0570)

Authors: **Ryan Carter** and **Tim Keeter**, Dynetics, Inc.

2024 AIAA Multidisciplinary Design Optimization Best Paper
"DeepGeo: Deep Geometric Mapping for Automated and Effective Parameterization in Aerodynamic Shape Optimization" (AIAA 2024-3839)

Authors: **Zhen Wei**, EPFL; **Aobo Yang**, The Hong Kong University of Science and Technology (HKUST); **Jichao Li**, Institute of High Performance Computing, A*STAR; **Michaël Bauerheim**, ISAE-SUPAERO; **Rhea P. Liem**, The Hong Kong University of Science and Technology (HKUST); and **Pascal Fua**, EPFL

2024 AIAA Pressure Gain Combustion Best Paper
"Rotating Detonation Combustor Performance Modeling Informed by Experimental Stagnation Pressure Measurements" (AIAA 2024-2792)

Authors: **Kevin J. Dille**, **Carson D. Slabaugh**, and **Stephen D. Heister**, Purdue University

2024 AIAA Propellants and Combustion Best Paper
"Selectivity-conversion limit in plasma-driven direct methane-to-methanol conversion" (AIAA 2024-0402)

Authors: **Charan R. Nallapareddy** and **Thomas C. Underwood**, The University of Texas at Austin

2024 AIAA Sensor Systems and Information Fusion Best Paper
"Simulating the In-Flight Release of a Test Mass for a Simplified Gravitational Reference Sensor" (AIAA 2024-2451)

Authors: **Anthony Y. Davila Alvarez**, **Zane Forrester**, **Peter Wass**, and **John W. Conklin**, University of Florida

2024 AIAA Shahyar Pirzadeh Memorial Best Paper
"LAVA Voronoi Mesher for Wall-Modeled Large-Eddy Simulations" (AIAA 2024-4306)

Authors: **Victor C.B. Sousa**, **Abram K. Rodgers**, **Keshav Sriram**, **Emre Sozer**, **Michael F. Barad**, **Gerrit-Daniel Stich**, **François Cadieux**, and **Jared C. Duensing**, NASA Ames Research Center

RECOGNITION

2024 AIAA Small Satellite Best Paper
"Investigation of Structural Architectures for the PowerCube Origami-Inspired Solar Array" (AIAA 2024-1433)

Authors: **Laura K. Schmitz**, **Antonio Pedivellano**, **Joachim Schmidt**, **Ambre Rabanel,** and **Thomas Sinn**, DCUBED (Deployables Cubed GmbH)

2024 AIAA Software Best Paper
"Certification of Reinforcement Learning Applications for Air Transport Operations Based on Criticality and Autonomy" (AIAA 2024-1463)

Authors: **Marta Ribeiro**, **Iordanis Tseremoglou**, and **Bruno F. Santos**, Delft University of Technology

2024 AIAA Solid Rockets Best Paper
"A Numerical Method for Burnback Analysis of UV-cured Solid Rocket Propellant Grains" (AIAA 2024-0635)

Authors: **Giovanni Polizzi**, **Andrea Ferrero**, **Filippo Masseni**, and **Dario Pastrone**, Politecnico di Torino

2024 AIAA Spacecraft Structures Best Paper
"A Truss-Supported Doubly-Curved Deployable Reflector Based on the Miura-Ori Pattern" (AIAA 2024-2256)

Authors: **Tianshu Wang** and **Matthew Santer**, Imperial College London

2024 AIAA Structural Dynamics Best Paper
"High Speed Whirl Flutter Tests of Swept Tip Tiltrotor Blades." (AIAA 2024-1851)

Authors: **Xavier Delgado** and **Anubhav Datta**, University of Maryland

2024 Collier Aerospace HyperX/AIAA Structures Best Paper
"Design, Manufacturing, and Experiments of Additive Manufactured Stiffened Thin-walled Plates" (AIAA 2024-2077)

Authors: **Adam Leicht**, **Mohammed Abir Mahdi**, **Kathleen McNamara**, **Hadi Noori**, and **Wei Zhao**, Oklahoma State University

BEST STUDENT PAPERS

2023 AIAA Solid Rockets Best Student Paper Award
"Solid Rocket Motor Internal Ballistics Using a Vortex Particle Method" (AIAA 2023-4032)

Authors: **Griffin A. DiMaggio** and **Roy J. Hartfield, Jr.**, Auburn University; and **Vivek Ahuja**, Altai

2024 AIAA Aerospace Power Systems Best Student Paper
"Power System Testing and Verification for a Space Camera System With 18650 Batteries" (AIAA 2024-0021)

Authors: **Vikas Patel**, **Daniel Lopez**, **Gustavo Gavilanez**, **Nicola-Isabella Ruiz**, **Daniel Posada**, and **Troy Henderson**, Embry-Riddle Aeronautical University

2024 AIAA Electrified Aircraft Technology Symposium Best Student Paper
"Modeling and Simulation of High Temperature Proton Exchange Membrane Fuel Cells in Parallel Hybrid Electric Turboprop Aircraft with Multi Whale Optimization Algorithms" (AIAA 2024-3829)

Authors: **Yi-Chih Wang** and **Gökçin Çınar**, University of Michigan

2024 AIAA Solid Rockets Best Student Paper
"Electromagnetically Controlled Porosity Growth in a Composite Solid Propellant via Microwave Thermostatic Binder Susceptors" (AIAA 2024-0435)

Authors: **Justin A. Lajoie** and **Brock Jones**, Iowa State University; **Adam R. Lawrence** and **Stuart J. Barkley**, Naval Surface Warfare Center Crane Division; and **Travis R. Sippel**, University of Missouri

2024 AIAA Walter Lempert Best Student Paper
"Coaxial Rocket Injector Mixing and Combustion Via Mid-Infrared Laser Absorption Tomography" (AIAA 2024-2420)

Authors: **Alex R. Keller** and **R. Mitchell Spearrin**, University of California, Los Angeles (UCLA); **Fabio A. Bendana**, **Dean K. Kaialau**, **Armando A. Perezselsky**, and **Andrew C. Cortopassi**, The Aerospace Corporation

2024 AIAA Walter Lempert Best Student Paper - Honorable Mention
"Simultaneous fs/ps CARS and OH PLIF measurements of an ethylene-air flame in a dual-mode scramjet" (AIAA 2024-2131)

Authors: **Andrew J. Metro**, **Alan J. Kim**, **Owen T. Petito**, **Robert D. Rockwell**, and Chloe E. Dedic, University of Virginia; and Andrew D. Cutler, The George Washington University

2024 AIAA Walter Lempert Best Student Paper - Honorable Mention
"Chirped Terahertz Time-Domain Spectroscopy for Reactive Plasma Flows" (AIAA 2024-1823)

Authors: **Charan R. Nallapareddy** and **Thomas C. Underwood**, The University of Texas at Austin

GENERAL INFORMATION

AIAA Registration Hours

Registration is in the Regency Rotunda at the Hyatt Regency Orlando.

SUN, 5 JAN	3–7 p.m.
MON, 6 JAN	7 a.m.–5:30 p.m.
TUES, 7 JAN	7 a.m.–5:30 p.m
WED, 8 JAN	7 a.m.–5:30 p.m
THUR, 9 JAN	7 a.m.–5:30 p.m
FRI, 10 JAN	7 a.m.–3 p.m

Student Lounge Hours

An exclusive, students-only place to unwind, connect, and relax. Location in the Regency Rotunda near registration. Student Lounge open to students beginning Monday, 6 January, 9:30 a.m. through Friday, 10 January at 12 p.m.

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AIAA provides limited Wi-Fi service for attendees to use while onsite. To keep this service available and optimized for all attendees, please do not download files larger than 2MB, create multiple sessions across multiple devices, or download multiple files in one session. If you receive an error message that an AIAA server is blocking your current IP address, please inform the AIAA registration desk. **Staying at the Hyatt Regency? Please use the Wi-Fi information provided to you upon check-in.**

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Technical Papers Session Prep in Session Rooms

Authors who are presenting papers will meet with session chairs and co-chairs in their session rooms for a short 30-minute briefing on the day of their sessions to exchange bios and review final details prior to the session. Please attend on the day of your session(s). Laptops preloaded with the Speakers' preparation slides will be provided in each session room. Speakers' Prep will be held, **6-10 January, 7:30 a.m.**

Speaker Ready Room

Speakers who wish to practice their presentations may do so in the **Planning Office B**, convention level behind the registration desk. A sign-up sheet will be posted on the door.

Session Chair Reports

All session chairs are asked to complete a session chair report to evaluate their session for future planning purposes, including session topics and room allocations. Please submit your session chair report **electronically Wednesday, 15 January.**

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Each session room will be preset with the following: Laptop computer, LCD projector, screen, microphone and sound system (if necessitated by room size), and a laser pointer. You may use your own laptop if you wish. Any additional audiovisual equipment requested onsite will be at cost to the presenter. Please note that AIAA does not provide security in the session rooms and recommends that items of value not be left unattended.

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If a written paper is not submitted by the final manuscript deadline, authors will not be permitted to present the paper at the forum. It is also the responsibility of those authors whose papers or presentations are accepted to ensure that one of the authors attends the forum to present the paper. If a paper is not presented at the forum, it will be withdrawn from the forum proceedings. These policies are intended to eliminate no-shows, to improve the quality of the forum for all participants, and to ensure that the published proceedings accurately represent the presentations made at a forum.

Journal Publication

Authors of appropriate papers are encouraged to submit them for possible publication in one of the Institute's archival journals: *AIAA Journal; Journal of Aerospace Information Systems; Journal of Air Transportation; Journal of Aircraft; Journal of Guidance, Control, and Dynamics; Journal of Propulsion and Power; Journal of Spacecraft and Rockets; or Journal of Thermophysics and Heat Transfer.* You may now submit your paper online at **http://mc.manuscriptcentral.com/aiaa**.

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Alphabetical Order

Booth	Company
529	ADS CFD Inc
515	Advanced Test Equipment Rentals
216	ALTAIR
508	Anduril Industries
133	Ansys
132	AEDC
512	Air Commando Outreach Squadron
506	Barrios
421	BETA CAE Systems USA, Inc.
306	Cadence
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532	Cambridge University Press
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313	Dept of Aero Eng, Iowa State U
407	Dewesoft LLC
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117	Embry-Riddle Aeronautical U
501	Enduralock
314	Engineering Unleashed
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541	EURO-COMPOSITES Corporation
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408	Flexcompute
525	Florida Institute of Technology
318	Force Measurement Systems Inc.
232	GE Aerospace
230	GE Aerospace Research
427	GA-ASI
K6	GridPro
401	Gulfstream
410	Hadland Imaging
211	Hexagon
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107	IC2
208	INSSTEK
135	Jet Propulsion Laboratory
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514	JuliaHub
234	Kulite Semiconductor Products, Inc.
534	LaVision, Inc.
128	Lithoz America, LLC
201	Lockheed Martin Corporation
101	Los Alamos National Laboratory
316	Luminary Cloud, Inc.
526	M4 Engineering, Inc.
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437	MathWorks
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312	North Wind
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120	Precision Filters
126	Rolls-Royce
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315	TOPTICA Photonics
320	Tri Models Incorporated
131	University of Central Florida
518	University of Illinois UC
110	U of Florida M&A Eng & Astraeus Space Institute
528	U of Kansas - Jayhawk Global
409	U of Maryland, AE Dept
523	UT Austin AE and EM Dept
521	Utah State University
533	Vectoflow Inc.
112	Virginia Tech
520	VirtusAero, LLC
433	Volcano Platforms Inc
503	WAVETRUSS
536	Western Michigan University
121	ZEISS Industrial Quality Solutions
118	Zero Hour Parts
505	Zulu Pods

Booth Order

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107	IC2
108	Delft University of Technology
109	Cornell University MAE
110	U of Florida Mechanical & Aerospace Engineering Department & Astraeus Space Institute
111	Calspan Corporation
112	Virginia Tech
117	Embry-Riddle Aeronautical University
118	Zero Hour Parts
120	Precision Filters
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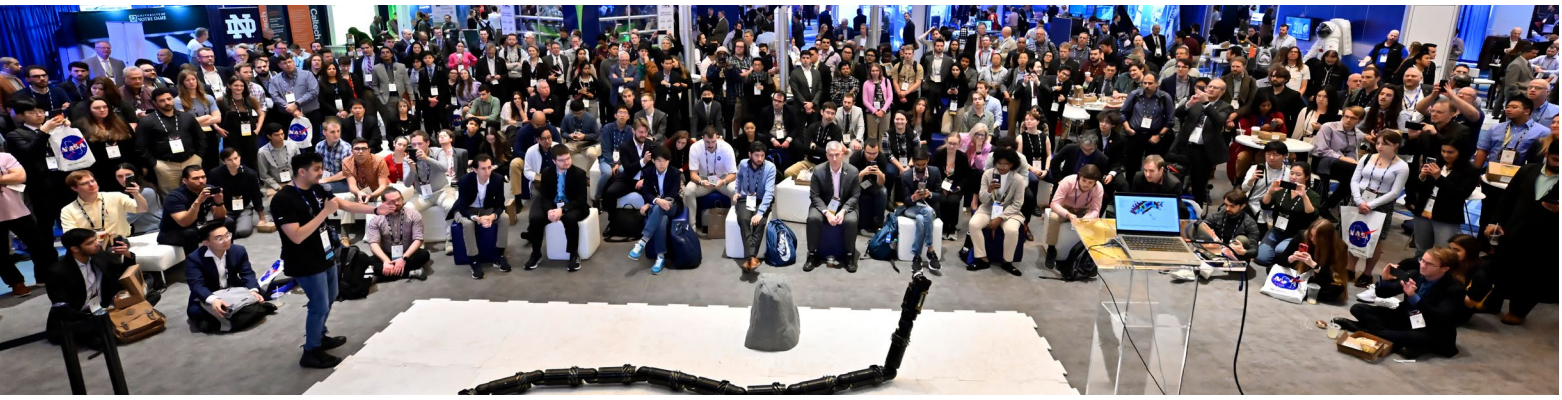

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Click Bond 207

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Click Bond brings nearly 40 years of aerospace expertise, pioneering assembly solutions that combine mechanical fastening with adhesive bonding to optimize structural integrity.

In 1987, our founder, a young pilot and inventor named Charlie Hutter, developed an adhesive-bonded solution, the Click Patch, to repair a leaking fuel tank rivet on his own airplane. That groundbreaking solution predetermined the course Click Bond would take for decades to come. Since then, customers around the globe, on some of the world's most critical programs and missions, have trusted Click Bond's adhesive-bonded fasteners for the many benefits they offer in terms of performance, safety, and cost.

Click Bond has remained at the forefront of technical design and manufacturing, not by doing what's obvious and easy, but by doing what's novel and challenging.

Our customers and the missions they support require that we're never satisfied with the status quo.

We constantly co-create solutions that push the bounds of what's possible.

POINTS OF INTEREST AT AIAA-SCITECH
Demonstrations – Adhesive bonded product demonstrations with our experts

Career Opportunities – Connection with our People Operations team to learn about career opportunities

Monday, Jan. 06 (2-4 p.m.) Meet the Employer & Click Bond Careers

Click Bond's CEO, Karl Hutter: Tuesday, Jan. 07 (1-12:15 p.m.) F360-04: Forum 360: The Future of Aerospace Design

Click Bond's Senior Business Development Strategist, Bill Perez: Tuesday, Jan. 07 (3-3:30 p.m.) The Hub: How engineers are eliminating holes in their structures.

Applications for: commercial and defense aerospace, autonomous, business aviation, and more (Cables & Wiring, Equipment Attachment, Lighting & Sensors, Repairs, Systems Attachment, Tubing & Hoses, Junction boxes, Enclosures, and Light Switches)"

Collier Aerospace - Hyper X 425

collieraerospace.com

What began at NASA 30 years ago has continuously developed into today's HyperX suite of structural software solutions. HyperX performs design, stress analysis, & detail sizing optimization for aircraft and space launch vehicles fabricated with composite or traditional metallic materials. On average, the software reduces the weight of structures by 15-20%, an exceptional achievement for aerostructures. HyperX explores very rapidly a very open design space providing insightful design study trends. On the analysis and certification side, HyperX replaces the need for spreadsheets and "hand calculations" with automatically generated stress reports for FAA certification. HyperX customers are able to produce results faster and more accurately, giving them an edge over competitors.

Colorado School of Mines 311

www.mines.edu

Mines offers stackable graduate engineering degrees in a fully online format - consider focus areas in advanced FEA for structural analysis/design, additive manufacturing, or mechanical engineering fundamentals. Let us help you earn the graduate degree that will empower what's next in your aerospace career!

Continuum Dynamics, Inc. 220

https://continuum-dynamics.com

Continuum Dynamics, Inc. provides leading-edge research, analysis tools, and practical solutions to our clients' immediate engineering challenges, and is on the forefront of technology in areas related to aerospace, defense, wind and nuclear power, pharmaceuticals, and crop-protection chemical application. Examples of CDI technologies include: advanced helicopter rotor blades that provide improved performance to operators (including the President of the United States); truck drag reduction systems to improve fuel efficiency; and technologies to ensure safe nuclear power plant operation. Capabilities include:

-Accurate, fast, easy-to-use design and analysis software for fixed and rotary-wing aircraft;

-Real-time and non-real-time physics-based flight dynamics simulation tools for conventional aircraft, helicopters, tiltrotors, and unconventional advanced air mobility platforms;

-Fixed and rotary-wing aircraft analysis, modeling/simulation, design services;

-Fluid dynamics analysis/testing, scale-model development, fluid structure interaction diagnostics, and flow control devices for aerospace and marine applications;

-Aerially released material dispersion modeling;

-Numerical methods development, including CFD, and biomolecular modeling

Convergent Science 100

https://convergecfd.com/

Convergent Science is an innovative, rapidly expanding computational fluid dynamics (CFD) company. Our flagship product, CONVERGE, is a revolutionary CFD software with truly autonomous meshing capabilities that eliminate the grid generation bottleneck from the simulation process. Convergent Science is headquartered in Madison, Wisconsin, and has offices in the United States, Europe, and India and distributors worldwide.

Cornell University Sibley School of Mechanical and Aerospace Engineering 109

www.mae.cornell.edu/mae

At the Sibley School of Mechanical and Aerospace Engineering our engineers understand that the problems of the world will not be solved by doing things the way they have always been done. We know that real innovation comes from the marriage of deep technical knowledge with creative imagination and our program nurtures both the mind and the imagination. Our Master of Engineering Distance Learning programs are designed for professional students and offer an array of flexible options. Students can optimize their workload to suit them, allowing you to continue your path in education while maintaining your contribution to your organization. Streamline your focus in spacecraft propulsion, energy

EXHIBITORS

systems, or mechanical design. Broaden your skillset with courses in engineering management or systems architecture.

CUBRC 308

www.cubrc.org

CUBRC executes hypersonic ground testing, hypersonic flight testing support, cutting-edge computational modeling and analysis, and unique capability development. CUBRC develops, operates, and maintains a family of supersonic and hypersonic ground test facilities, diagnostics and instrumentation, and computational tools and models that has been designated by the US Government as critical test infrastructure.

Dantec Dynamics, Inc. 236

www.dantecdynamics.com

Dantec Dynamics develops and manufactures measurement systems that determine physical properties in fluids (velocity, temperature, concentration, species) and in solid structures (strain, vibration, laminate defects). We deliver turnkey as well as customized solutions with user-friendly software. Furthermore, our clients benefit from superior technical application support worldwide.

Our distinct competence and experience in integrating measurement methods and technologies into the right solution for you, is unique.

Partnering with Dantec Dynamics helps you gain crucial knowledge from any test or measurement campaign.

Dantec Dynamics – Turn Measurements into Knowledge

Dassault Systèmes 517

www.3ds.com

Dassault Systèmes, the 3DEXPERIENCE Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating virtual twin experiences of the real world with our 3DEXPERIENCE platform and applications, our customers can redefine the creation, production and life-cycle-management processes of their offer and thus have a meaningful impact to make the world more sustainable. The beauty of the Experience Economy is that it is a human-centered economy for the benefit of all – consumers, patients and citizens. Dassault Systèmes brings value to more than 300,000 customers of all sizes, in all industries, in more than 150 countries. For more information, visit https://www.3ds.com/

As systems become more complex to design, build and deliver, OEMs and suppliers need to accelerate innovation, drive efficiencies and move to the factory of the future to allow for greater agility on production rate. This requires a new way to conceptualize, design, manufacture, test, certify and sustain new air and space vehicles.

Delft University of Technology 108

www.tudelft.nl

Top education and research are at the heart of the oldest and largest technical university in the Netherlands. Our 8 f aculties offer 16 bachelor's and more than 30 master's programmes. Our more than 25,000 students and 6,000 employees share a fascination for science, design and technology. Our common mission: impact for a better society.

Department of Aerospace Engineering, Iowa State University 313

www.aere.iastate.edu

Iowa State has a long history of educational and research excellence in aerospace engineering. This includes training students for engineering careers in aviation starting as early as 1928, housing one of five NASA centers of excellence in Computational Fluid Dynamics in the 1970's, building the world's first Tornado and Downburst simulator, and housing the only university icing research wind tunnel in the United States.

Dewesoft LLC 407

www.dewesoft.com

DEWESoft, offers a full suite of hardware for in-vehicle & lab data acquisition applications. Scalable from 4 to 1,000's of channels our instruments are available as small USB & EtherCat devices, stand-alone battery-powered systems, rack-mounted configurations, & ruggedized field-ready solutions. Powered by the latest DEWESoft X software, we acquire & control many multi-domain test sets that include analog in/out, digital in/out, video, CAN, FlexRay, XCP, GPS, & more.

dSPACE 206

www.dspace.com

dSPACE helps aerospace engineers make the vision for future flight missions a reality with our very wide and comprehensive portfolio for simulation and validation solutions. Our end-to-end development and test environment is ideal for applications such as electric aircraft, electric and hybrid propulsion, urban air mobility, unmanned aircraft systems and autonomous flight vehicles. We offer long-standing expertise and proven solutions, including best-in-class hardware-in-the-loop technology with FPGAs for real-time testing. Whether you are working on function development, testing embedded components, verifying networked aircraft systems or testing electromechanical systems, we're ready to help you master the challenges of the future. With approximately 2,000 employees worldwide, dSPACE is headquartered in Paderborn, Germany, has three project centers in Germany, and serves customers through regional dSPACE companies in the USA, the UK, France, Japan, China, Croatia, and South Korea.

Embry-Riddle Aeronautical University 117

www.erau.edu

Embry-Riddle Aeronautical University is the world's largest, most comprehensive institution specializing in aviation, aviation business, aerospace, engineering and STEM-related degree programs. A fully accredited university, Embry-Riddle also serves as a major research center, which seeks solutions to real-world problems and global challenges in partnership with the aerospace industry, other universities and government agencies. A nonprofit, independent institution, Embry-Riddle offers more than 100 associate's, bachelor's, master's and Ph.D. degree programs through its colleges of Arts & Sciences, Aviation, Business, Engineering and Security & Intelligence. The university educates 31,000+ students at its residential campuses in Daytona Beach, Florida, and Prescott, Arizona, and through online programs offered by its Worldwide Campus, which has about 110 locations globally. In 2024, U.S. News & World Report ranked Embry-Riddle's online undergraduate degree programs as the highest among the

EXHIBITORS

nation's private institutions. From 2016 to 2023, the university has ranked either No. 1 or No. 2 in this category when compared with all institutions — private or public. Embry-Riddle's Aerospace Engineering program ranks No. 5 in the nation, and the university has been ranked Best for Veterans. Our residential campuses also hold multiple Top 10 regional rankings.

Enduralock 501

www.enduralock.com

Enduralock, the SBA 2022 winner for National Security and Defense, has: 1) Satellite docking system incorporating a mechanical latch, electrical connections, and fuel transfer in one connector 2) Eliminating safety wire with mechanically locking, high vibration resistant (10x aerospace requirement) fasteners, that are reversible & reusable with a standard hex socket. They remain locked with loss of preload. Through an AF Phase II SBIR, they were scaled to 3mm to eliminate safety wire in missiles & spacecraft. An end effector was developed for robotic installation. 3) Nut plates that engage off-axis bolts & then self-align. Through an AF Phase II SBIR, the first mechanically locking nut plate was developed for use in extreme vibration environments. 4) A mechanically locking, vibration resistant fuel line/hydraulic connector is being developed for the B-2 (AF Phase II SBIR). Enduralock currently has 2 other AF Phase II SBIRs for qualifying its products on the B-1, B-2, KC-135 and AGE.

Engineering Unleashed 314

https://engineeringunleashed.com/

Engineering Unleashed is a community of more than 6,000 engineering faculty, staff, and administrators. We are committed to the mission of instilling an entrepreneurial mindset within undergraduate engineering students. An entrepreneurial mindset equips students to create personal, economic, and societal value.

This is the engineer we need: One with an entrepreneurial mindset that is coupled with engineering thought and action, expressed through collaboration and communication, and founded on character.

Ennova Technologies Inc. 527

www.ennova-cfd.com

Ennova Technologies delivers today's most scalable simulation platform combining the power of cloud based computing, advanced geometry repair tools, and mixed mode meshing to create an extremely efficient pre and post processing simulation environment.

ESTECO 212

www.esteco.com

ESTECO is a pioneer in numerical optimization solutions, specializing in the research and development of engineering software for all stages of the simulation-driven design process. ESTECO's top-class products, modeFRONTIER and VOLTA, are used worldwide, helping companies increase efficiency in design simulation and accelerate product innovation.

EURO-COMPOSITES Corporation 541

www.euro-composites.com

The EC Group is a global player in the field of high-quality and sophisticated composite materials. We serve our customers from all over the world from three production locations.

Our consistent growth has made us a leading company in the composite world. In order to meet changing market needs, EC improves continuously: new products, new technologies, deeper integration with our customers and new organizational methods such as methods-time measurement. We are one of the leading manufacturers of complex composite products worldwide.

FAMU-FSU College of Engineering 524

https://eng.famu.fsu.edu/

The FAMU-FSU College of Engineering, established by the Florida Legislature in 1982, is the joint engineering school for Florida A&M and Florida State universities, the only shared college of engineering in the nation. We are located less than three miles from each campus. Our students enroll (and graduate) as Seminoles or Rattlers and start their college experience on the home campus. Once prerequisites are complete, they learn together at our engineering building.

Flexcompute 408

http://flexcompute.com

Flexcompute is a solver technology company focused on dramatically reducing the time and costs of high-fidelity simulations. Run the fastest and most accurate CFD you've experienced from anywhere, without licenses or hardware, using the groundbreaking Flow360 solver. With emerging hardware as our template, we rewrote from scratch, a full stack proprietary code that unlocked solving speeds orders of magnitude faster than anything else on the market. Run steady simulations in minutes and unsteady simulations in hours. This enables teams to run high-fidelity CFD at all stages of design. All with the goal of shortening your design cycles, reducing simulation costs, and improving product outcomes.

Florida Institute of Technology 525

www.fit.edu

At Florida Tech, we say "yes" to big ideas. We pursue outrageous dreams and embark on the endeavors most pivotal to the future. Founded to educate the pioneers of the U.S. space program, Florida Tech is deeply, historically rooted in this culture of relentless determination. Today, we carry on this legacy through the rigorous hands-on degree programs we offer in engineering, science, computing, aeronautics, business, psychology and more.

Force Measurement Systems Inc. 318

www.forcems.com

FORCE MEASUREMENT SYSTEMS (FMS) is a comprehensive resource for the design and fabrication of high precision force measurement systems, load cells, and flexures. FMS expertise is in jet engine and rocket thrust stands. FMS personnel are experienced in single and multi-component thrust stands ranging from 1 lb to 3 million lbs.

EXHIBITORS

GE Aerospace 232

www.geaerospace.com

GE Aerospace will build upon our established 100+ years of expertise, extensive partnerships, and commitment to customers. Together we will mobilize a new era of growth in aerospace and defense — one that balances the current needs of our industry with those of future generations, surpassing what is expected and delivering what is essential. Where others stop, we accelerate.

GE Aviation is a world-leading provider of jet and turboprop engines, components and integrated systems for commercial, military, business and general aviation aircraft and has a global service network to support these offerings.

Building on an unsurpassed legacy of success, GE Edison Works continues to execute on bold technical initiatives to ensure even more demonstrable support to the warfighter and those in need of humanitarian relief.

Join us as we design and engineer multiple military programs that support next generation air dominance."

GE Aerospace Research 230

www.ge.com/research

Inspired by Thomas Edison and led by GE's early chief consulting engineer, Charles Steinmetz, GE Aerospace Research was created to maintain market edge and to foster new discoveries and commercial applications. That mission rings true today as we harness unparalleled scientific breadth and depth to drive innovation at the intersection of technical fields, move product to entitlement, solve problems and deliver outcomes to our customers.

General Atomics Aeronautical Systems, Inc. 427

www.ga-asi.com

General Atomics-Aeronautical Systems, Inc. (GA-ASI), an affiliate of General Atomics, is a leading designer and manufacturer of proven, reliable remotely piloted aircraft (RPA) systems, radars, and electro-optic and related mission systems, including the Predator® RPA series and the Lynx® Multi-mode Radar. GA-ASI is actively developing the next generation of RPA systems leveraging state-of-the-art technologies including multi-functional structures using additive manufacturing, airborne manned-unmanned teaming (MUM-T) capabilities, revolutionary controller capabilities that reduce manpower requirements, and low cost, modular RPA solutions. Additionally, GA-ASI produces ground control stations and sensor control/image analysis software, offers pilot training and support services, and develops meta-material antennas. www.ga-asi.com

GridPro K6

www.gridpro.com

We develop GridPro, a Hexa (structured MB) grid generation tool, with automation as its goal. Contrary to Traditional Meshing Algorithms, GridPro's Algorithm takes much of the effort from the user to provide an automatic and robust meshing process without compromising on quality.

Gulfstream 401

www.gulfstream.com

Inspired by the belief that aviation could fuel business growth, Gulfstream Aerospace Corp. invented the first purpose-built business aircraft, the Gulfstream I, which first flew in 1958. Today, more than 2,900 aircraft are in service around the world. Together with parent company General Dynamics, Gulfstream consistently invests in the future, dedicating resources to researching and developing innovative new aircraft, technologies and services. With a fleet that includes the super-midsize Gulfstream G280, the high-performing Gulfstream G650 and Gulfstream G650ER, and a next-generation family of aircraft including the all-new Gulfstream G400, the award-winning Gulfstream G500 and Gulfstream G600, the flagship Gulfstream G700 and the ultralong-range Gulfstream G800, Gulfstream offers an aircraft for every mission. All are backed by Gulfstream's Customer Support network and its worldwide team. Visit our website at gulfstream.com.

Hadland Imaging 410

www.hadlandimaging.com

Hadland Imaging believes in providing the absolute best in ultra high-speed visible, infrared & Flash X-ray imaging solutions to industry leaders & professionals to get the job done right.

Hexagon 211

www.hexagon.com

Hexagon is a global leader in sensor, software and autonomous solutions. Hexagon's Manufacturing Intelligence division uses data from design and engineering, production and metrology to make manufacturing smarter. Our CAE solutions, developed through the acquisition of the MSC Software portfolio, help engineers accelerate product innovation. For more information, visit hexagon.com

HITEC Sensors 513

https://hitec.humaneticsgroup.com/

HITEC is part of the Humanetics Sensors group that combines the capabilities of Fibercore's specialized fiber optics, HITEC's custom sensors and OpTek's fiber processing, micromanufacturing and precision engineering. Our combined capabilities offer customers a unique ability to develop custom fiber sensors for critical environments, at micron precision.

IC2 (Interdisciplinary Consulting Corp) 107

www.thinkic2.com

Delivering Scientific-Grade Sensors. Advancing Aerospace Test. With a deep knowledge of aerospace test and over two decades researching best-in-class sensor development techniques, IC2 delivers scientific-grade precision sensors that push the envelope of aerospace measurement accuracy and performance.

EXHIBITORS

INSSTEK 208

http://insstek.com/

INSSTEK,. Inc. is a leading company in the field of Additive Manufacturing (AM), with the goal of commercializing DMT (Direct Metal Tooling) additive technology. InssTek provides total solutions for AM based on core technologies such as DMT 3D metal printing, laser material processing, and system development. From product design to production, all the technologies required for customers to use InssTek's metal printers have been developed in-house to provide an easier and more enjoyable environment for the users.

Jet Propulsion Laboratory 135

www.jpl.nasa.gov

JPL is a NASA Federally Funded Research and Development Center (FFRDC) managed by the California Institute of Technology.

JKI K3

www.jki.net

Partner with a company that allows you to focus on developing the unique technology for your application. Around the world, our software tests rocket engines and automates advanced vacuum chambers for companies leading the space revolution. Our tools allow you to seamlessly integrate with Python, LabVIEW, and .NET.

JuliaHub 514

https://juliahub.com/

JuliaSim is the next-generation, cloud-based platform for model-based design. Using modern scientific machine learning (SciML) techniques and equation-based digital twin modeling and simulation, JuliaSim accelerates simulation times, significantly reducing workflow runtime from months to hours. The platform integrates block diagrams, acausal modeling, state transition diagrams, and a differentiable programming language within a unified environment, streamlining complex modeling and simulation tasks.

Kulite Semiconductor Products, Inc. 234

https://kulite.com/

Kulite, a World Leader in Pressure Transducer Technology, manufactures miniature high frequency pressure transducers, TSO & PMA flight qualified pressure transducers, wind tunnel engine pressure probes and turbine blade implants, used in development and manufacture of helicopters, business jets, commuters, commercial and military aircraft. They are designed to operate with electromechanical indicators, ECU, FADEC and EICAS systems and other aircraft circuits.

LaVision, Inc. 534

www.lavision.de/en/

LaVision provides integrated measurement systems for experimental fluid dynamics, combusting and multiphase flows, material characterization, and in cylinder measurement. LaVision is the market leader in image based measurement systems playing a pioneering role in the development of techniques such as PIV, LIF, DIC and BOS. LaVision stays at the forefront of measurement science strives for customer satisfaction.

Lithoz America, LLC 128

www.lithoz.com

Lithoz is the market and technology leader in additive manufacturing systems for advanced technical ceramics. Lithoz CeraFab 3D printers use lithography-based ceramics manufacturing to deliver the quality, reliability, and repeatability needed for serial production of smooth, precise, finely-detailed ceramic components. Lithoz America, LLC offers machine sales, application support, and custom material development from our Troy, NY location.

Lockheed Martin Corporation 201

www.lockheedmartin.com

Headquartered in Bethesda, Maryland, Lockheed Martin Corporation is a global security and aerospace company that employs approximately 116,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services.

Los Alamos National Laboratory 101

www.lanl.jobs

Los Alamos National Laboratory is one of the world's most innovative multidisciplinary research institutions. We're engaged in strategic science on behalf of national security to ensure the safety and reliability of the U.S. nuclear stockpile. Our workforce specializes in a wide range of progressive science, technology, and engineering across many exciting fields, including space exploration, geophysics, renewable energy, supercomputing, medicine, and nanotechnology. Join us and be part of something extraordinary.

Luminary Cloud, Inc. 316

www.luminarycloud.com

Luminary Cloud is the world's first modern computer-aided engineering SaaS platform that provides engineers insights in minutes,allowing for quick simulation, analysis, and iteration that were once impossible. We call this realtime engineering.

M4 Engineering, Inc. 526

www.m4-engineering.com

M4 Engineering helps solve the challenges that arise in developing new types of manned and unmanned space and flight vehicles. From conceptual design, weight prediction and pre-PDR work through analysis, multi-disciplinary design analysis and optimization (MDAO), test, fabrication and certification we help fill the gaps needed for a successful program

MatchID US Inc. 412

www.matchid.eu

As a measurement tool, Digital Image Correlation (DIC) is becoming an accepted technique in both industry and academia, as it allows full field, contact-less, 3D-measurement of deformations at the surface of any type of material and under arbitrary loading, combining ease-of-use with high flexibility.

As MatchID's tagline is "Metrology beyond colors", we seek to offer the DIC system of the future, by adopting a module-based structure, where the focus lies primarily on the metrological aspects.

EXHIBITORS

MathWorks 437

www.mathworks.com

The MATLAB and Simulink product families are fundamental applied math and computational tools at the world's educational institutions. Adopted by more than 6,500 universities and colleges, MathWorks products accelerate the pace of learning, teaching, and research in engineering and science. MathWorks products also help prepare students for careers in industry worldwide, where the tools are widely used for data analysis, mathematical modeling, and algorithm development in collaborative research and new product development. Application areas include data analytics, mechatronics, communication systems, image processing, computational finance, and computational biology.

Metacomp Technologies 414

www.metacomptech.com

Metacomp Technologies is at the forefront of cutting edge simulation technology with software products for Computational Fluid Dynamics (CFD++), Aero-Acoustics (CAA++), Geometry Preparation (SIM++) and Mesh Generation (MIME) and Structural Mechanics (CSM++) including MetaFSI for fluid-structure interactions. Founded in 1994 by pioneers in CFD, validated by industry, government institutions, and universities worldwide, and with an unparalleled reputation for high-level support, Metacomp will be an Integral part of your success.

NASA 301

www.nasa.gov

The National Aeronautics and Space Administration is America's civil space program and the global leader in space exploration. The agency has a diverse workforce of just under 18,000 civil servants, and works with many more U.S. contractors, academia, and international and commercial partners to explore, discover, and expand knowledge for the benefit of humanity. This year's NASA booth at AIAA SciTech will feature Aeronautics, the Space Environmental Testing Management Office, the Game Changing Development Program, and the Rocket Propulsion Testing office.

See: https://www.nasa.gov/topics/aeronautics/index.html, https://www.nasa.gov/offices/setmo, gameon.nasa.gov, https://www.nasa.gov/directorates/heo/rpt/index.html)

National Academies of Science, Engineering, and Medicine 419

www.nationalacademies.org

The National Academies of Sciences, Engineering, and Medicine are private, nonprofit institutions that provide expert advice on some of the most pressing challenges facing the nation and the world. Our work helps shape sound policies, inform public opinion, and advance the pursuit of science, engineering, and medicine.

National Reconnaissance Office (NRO) 600

https://www.nro.gov/

The National Reconnaissance Office is committed to protecting the security of the United States, its citizens and its allies through unparalleled capabilities in space-based intelligence, surveillance and reconnaissance. For more than 60 years, the NRO has leveraged innovation and strategic partnerships to develop, acquire, launch and operate America's spy satellites. A diversified architecture of spacecraft provides information critical to policymakers, the Department of Defense, two dozen federal agencies, the Intelligence Community, the military, and commercial partners. This is both our legacy and our mission for the future - ensuring the United States maintains and expands its advantage amid increasing challenges from our adversaries.

National Research Council Canada 411

http://nrc-cnrc.gc.ca

The National Research Council (NRC) is the Government of Canada's largest research organization supporting innovation, knowledge and technology development. The NRC's Aerospace Research Centre has world-class research facilities and multidisciplinary expertise, providing cost-effective platforms to test, validate and demonstrate your technologies. Clients have access to our 5 foot trisonic tunnel, 6 × 9 foot tunnel, 30 foot low-speed tunnel, altitude icing tunnel or 10 × 20 foot icing tunnel.

NDTL Propulsion and Power 415

https://ndtl.nd.edu/

NDTL is a University of Notre Dame and South Bend, Indiana-based research and development organization focused on large-scale, high-energy, high-complexity testing and leading-edge computational and analysis capabilities to develop advanced technologies for conventional and high Mach airbreathing propulsion, energy generation, advanced thermal management, and energy storage solutions.

Nominal 509

www.nominal.io

Nominal powers mission-critical engineering work with modern analysis tools, real-time observability, and advanced data infrastructure — all in one collaborative workspace.

North Wind 312

www.north-wind.com

North Wind is the nation's leading independent supplier of hypersonic and mission critical Research, Development, Test & Evaluation (RDT&E) systems and services.

Northrop Grumman 125

www.northropgrumman.com

Northrop Grumman is a leading global aerospace and defense technology company. Our pioneering solutions equip our customers with the capabilities they need to connect and protect the world, and push the boundaries of human exploration across the universe. Driven by a shared purpose to solve our customers' toughest problems, our employees define possible every day.

EXHIBITORS

Office of Naval Research 215

www.onr.navy.mil

The Department of the Navy's Office of Naval Research provides the science and technology necessary to maintain the Navy and Marine Corps' technological advantage. ONR is a leader in science and technology with engagement in 50 states, 55 countries, 634 institutions of higher learning and nonprofit institutions, and more than 960 industry partners. ONR, through its commands, including ONR Global and NRL employs more than 3,800 people, comprising uniformed, civilian and contract personnel.

Overleaf 435

www.overleaf.com

Overleaf is a free, collaborative, cloud-based LaTeX editor which makes the process of writing, editing and publishing scientific documents quicker and easier. This intuitive online platform has seen rapid adoption across science and research, and Overleaf's award-winning collaboration technology is now in use by over 10 million researchers, students and technical writers in institutions, labs and industry worldwide. All you need is a web browser - try it and use it for free at www.overleaf.com.

PACE K4

https://pace.txtgroup.com

PACE develops innovative commercial off-the-shelf software products for preliminary aircraft and systems architecture design, which help mitigate technological risks, support investment decisions and reduce time to market.

Our software's open architecture supports the investigation of new and emerging technologies such as electric or hybrid-electric propulsion systems, which are key drivers of achieving sustainability and zero emissions in the aerospace industry.

PCB Piezotronics, Inc. 516

www.pcb.com

PCB Piezotronics Inc. is a designer and manufacturer of microphones, vibration, pressure, force, torque, load, and strain sensors, as well as the pioneer of ICP® technology. This instrumentation is used for flight testing, wind tunnels, modal analysis, satellite testing and acoustics for cabin noise. PCB® stands behind their products with the valuable services, including a 24-hour SensorLines, a global distribution network, and the industry's only commitment to Total Customer Satisfaction.

Precision Filters 120

www.pfinc.com

PRECISION FILTERS, INC. is a global provider of instrumentation for test measurements. You can rely on a single source for signal conditioning and switching—a complete range of instrumentation— products optimized to work together to provide high performance at reasonable cost. PFI designs and manufactures precision solutions that include a family of analog signal conditioning, filtering and switching systems. The 28000 Signal Conditioning System provides a complete range of transducer conditioning with up to 256 channels per chassis. Precision's solid-state switch provides up to 256x256 cross-point switching and replaces tedious manual patch panels. The PF-1U provides 8 or 16 channels of high performance filter/amplifiers in a compact package with Ethernet control.

Rolls-Royce 126

www.rolls-royce.com

Rolls-Royce pioneers cutting-edge technologies that deliver clean, safe and competitive solutions to meet our planet's vital power needs. We are one of the largest providers of defense and civil aero-engine products and services globally with 16,000 engines in the service of 160 customers in 103 countries. We power aircraft in every major sector, including commercial and business aviation, defense transport, combat, patrol, trainers, helicopters and UAVs. Rolls-Royce is heavily invested in SAF compatibility, hybrid and all-electric propulsion, future energy storage and distribution, STOVL technology, microgrids, SMRs, and so on.

RTX 319

www.rtx.com

RTX is the world's largest aerospace and defense company. With more than 180,000 global employees, we push the limits of technology and science to redefine how we connect and protect our world. Through industry-leading businesses – Collins Aerospace, Pratt & Whitney, and Raytheon – we are advancing aviation, engineering integrated defense systems for operational success, and developing next-generation technology solutions and manufacturing to help global customers address their most critical challenges. The company, with 2022 sales of $67 billion, is headquartered in Arlington, Virginia.

SIAM 138

www.siam.org

Society for Industrial and Applied Mathematics (SIAM), headquartered in Philadelphia, Pennsylvania, is an international society of over 14,000 individual members, including applied and computational mathematicians and computer scientists, as well as other scientists and engineers. Members from 85 countries are researchers, educators, students, and practitioners in industry, government, laboratories, and academia. The Society, which also includes nearly 500 academic and corporate institutional members, serves and advances the disciplines of applied mathematics and computational science by publishing a variety of books and prestigious peer-reviewed research journals, by conducting conferences, and by hosting activity groups in various areas of mathematics. SIAM provides many opportunities for students including regional sections and student chapters.

Siemens Industry Software, Inc. 535

www.sw.siemens.com/en-US

Siemens Digital Industries Software and Siemens Xcelerator are transforming the everyday by giving companies like yours the agility, flexibility and adaptability to turn ideas into innovation with greater efficiency and speed.

Specialised Imaging, Inc. K1

www.specialised-imaging.com

Specialised Imaging is a manufacturer of ultra high-speed imaging solutions for scientific research and military applications. These solutions include the award-winning Trajectory Tracker2 projectile tracking system, SIM intensified framing cameras, ballistic range cameras, image intensifiers, illumination, and triggering systems. Specialised Imaging also offers streak cameras and long record high-resolution video camera systems.

EXHIBITORS

Tecplot, inc. 309

www.tecplot.com

Tecplot is the leading post-processing software developer in CFD data visualization. We believe visual analysis is the key to unlocking information hidden in complex data, leading to world-changing discoveries and innovation. Not only do we empower engineers and scientists to visualize, analyze and understand information in simulation and test data results, but through our high-resolution images and animations, we help them clearly communicate their results to stakeholders.

Tecplot software differs from other visualization tools in that it is easy to learn and use, offers broader capabilities, and produces better-quality images and output.

Tecplot 360 – A suite of visualization and analysis tools that can handle large data sets, automate workflows, and visualize parametric results.

FieldView – High-end postprocessing, with realistic images that help you understand your data.

Tecplot RS – Specifically designed to streamline oil & gas reservoir simulation visualization and analysis."

Tekna 130

www.tekna.com

Tekna is the world leader in induction plasma technology. Its 30 years of experience have led it to the mastery of a highly automated industrial process that uses the power of inductive plasma for the high yield production of advanced high-quality powders.

Telops 210

www.telops.com

Located in Quebec City, Canada, Telops designs and manufactures high-performance hyperspectral imaging systems and infrared cameras for defence, industrial, and academic research applications. Telops also offers R&D services for optical systems technology development in order to respond to the specific needs of its customers.

Texas A&M Turbomachinery Laboratory 219

https://turbolab.tamu.edu/

The Turbomachinery Laboratory is a center of the Texas A&M Engineering Experiment Station (TEES) and a member of the Texas A&M University System. The Turbo Lab conducts both Basic and Applied Research with 15 active research professors, and 100 graduate student researchers within three thematic areas: Rotordynamics and Mechanical Systems; Thermal Fluids and Combustion; and Computational Modelling and Design.

Industry and Government sponsored research and testing is conducted at the TL facility in College Station, Texas. Research consortia with 35-40 members sponsor student-led projects and is a powerful avenue for industry/government/educational institutions to train and hire top talent with Masters and Ph.D degrees from the Turbo Lab.

TOPTICA Photonics 315

www.toptica.com

TOPTICA has been developing and manufacturing high-end laser systems for scientific and industrial applications for 25 years. Our portfolio includes diode lasers, ultrafast fiber lasers, terahertz systems and frequency combs.

Tri Models Incorporated 320

www.trimodels.com

Tri Models is the Premier supplier of wind tunnel models & ground test hardware for the global aerospace community. From "standard" wind tunnel models, to icing/deicing certification models to hot-firing hypersonic test rigs, we have done it all. We support most major air-framers world-wide and have worked with most major testing facilities around the world. We provide a complete, turn-key solution to your testing needs. Contact us to see how we can help you achieve all of your testing goals.

University of Central Florida 131

www.ucf.edu

The University of Central Florida (UCF) is a metropolitan research university built to make a better future for our students and society. We solve tomorrow's greatest challenges through a commitment to academic, inclusive and operational excellence. Leveraging innovative learning, discovery and partnerships, we foster social mobility while developing the skilled talent needed to advance industry for our region, state and beyond. Discover what it's all about to be a Knight.

University of Florida Mechanical & Aerospace Engineering Department & Astraeus Space Institute 110

www.mae.ufl.edu

The Department of Mechanical and Aerospace Engineering (MAE) at the University of Florida is the largest academic program on campus, by student enrollment. Our Mechanical Engineering program celebrated its 100 year anniversary in 2009 and is one of the founding departments of the Herbert Wertheim College of Engineering. Now more than a decade beyond the successful merger of the mechanical and aerospace programs, MAE remains a vibrant and intellectually diverse program at both the undergraduate and graduate levels.

University of Illinois Urbana - Champaign 518

https://aerospace.illinois.edu/

The Aerospace Engineering Department at the University of Illinois Urbana-Champaign is one of the nation's most prestigious programs, known for its pioneering contributions to both education and research in aerospace science and technology. Offering undergraduate and graduate programs, including B.S., M.S., M.Eng., and Ph.D. degree, the Aerospace Engineering Department is a dynamic and innovative academic community that is deeply committed to advancing the field of aerospace engineering and to providing a high-quality education that prepares students to become leaders in the aerospace industry and contribute to the technological advancements that will shape the future of aerospace.

University of Maryland - Department of Aerospace Engineering 409

www.aero.umd.edu

For 75 years, the Department of Aerospace Engineering at the University of Maryland has fostered excellence in undergraduate and graduate education while advancing research that pushes the boundaries of aeronautical and astronautical engineering.

EXHIBITORS

University of Texas at Austin - Aerospace Engineering and Engineering Mechanics Department 523

www.ae.utexas.edu

The University of Texas at Austin
Aerospace Engineering and Engineering Mechanics
Cockrell School of Engineering

The Department of Aerospace Engineering and Engineering Mechanics at The University of Texas at Austin is an interdisciplinary department with teaching and research activities in astronautics, earth-space engineering and science, aviation, energy, robotics, theoretical and experimental mechanics, and computational engineering. We offer programs in aerospace engineering, computational engineering and engineering mechanics.

Utah State University 521

https://engineering.usu.edu/mae/

College of Engineering
UtahStateUniversity

Online Master of Science in Aerospace Engineering, Department of Mechanical and Aerospace Engineering, Utah State University.

Our master's in aerospace engineering is tailored for engineers aspiring to be a leader in the aerospace industry. With courses covering optimization, compressible fluid fow, aerodynamics, propulsion, and more, it offers a comprehensive curriculum aligning with the latest industry demands. Dive into spacecraft navigation, optimal guidance, and hypersonics, gaining spcialized knowledge crucial for success.

Vectoflow Inc. 533

www.vectoflow.com

vectoflow measurements in fluids

As pioneers in fluid dynamic measurement technology, Vectoflow GmbH stands at the forefront of innovation in our field. A dynamic team of seasoned experts with extensive experience in fluid dynamics research and industry spearheads our commitment to excellence. Through the integration of cutting-edge processes, we consistently push the boundaries of measurement technology, achieving unprecedented levels of quality. Fuelled by our entrepreneurial drive, we are dedicated to the ongoing enhancement and diversification of our product portfolio, ensuring that we remain at the cutting edge of technological advancement.

Virginia Tech 112

www.aoe.vt.edu

COLLEGE OF ENGINEERING
KEVIN T. CROFTON DEPARTMENT OF AEROSPACE AND OCEAN ENGINEERING
VIRGINIA TECH

The Kevin T. Crofton Department of Aerospace and Ocean Engineering is the fast growing graduate program in the College of Engineering. We are listed as #12 in US News and Reports. We offer PhD in aerospace engineering with six discipline areas, MS in aerospace or ocean engineering, M.Eng in aerospace engineering, certificate program in naval engineering, distance learning options for working professionals, and 64 graduate level courses offered each academic year.

VirtusAero, LLC 520

www.virtusaero.com

VirtusAero LLC

VirtusAero delivers powerful software for high-fidelity CFD analysis, specifically focused on supersonic and hypersonic flow regimes. US3D is our state-of-the-art research and analysis tool developed collaboratively at the University of Minnesota, NASA Ames, and VirtusAero, providing unstructured-grid, finite-volume CFD.

At VirtusAero we believe that powerful software should be easy to use. This simple idea drives us to improve every aspect of software that we develop and support. We work hard to incorporate our knowledge and expertise into the tools we build so that researchers and engineers can more quickly and easily find the answers they need.

Volcano Platforms Inc 433

www.volcanoplatforms.com

VP VOLCANO Platforms

Volcano Platforms Inc., is an early-stage technology startup that focuses on providing solutions for physics-based SaaS modeling and simulations to accelerate digital transformation of physical prototyping to predictive, fast, and cost-effective computing. We provide the missing piece in digital-twin for industrial research & development. Our secret sauce is breakthrough-fast algorithms combining rapid pre- and post-processing with high-fidelity modeling. Volcano ScaLES exploits graphics co-processors to complete in hours what now takes weeks. Initial products will be targeting Aerospace & Defense, Automotive, Emerging Urban Air Mobility, and Space Vehicles market segments.

WAVETRUSS 503

https://wavetruss.com

Wavetruss develops Bi-stable, high strain, extreme aspect ratio flexures capable of reversible deployment along a trajectory. Convectional methods of construction result in structures that are not engineered to be flexible and also structurally ridged. Methods of construction that form assemblies from structural members that are not pre-stressed through flexural elastic deformation and are not flexural members. Most structures are composed of elements designed to experience axial compression or tension along there lengths. These conventional structures are more likely to experience uncontrolled elastic instability when external forces result in their material deformation. A structure built from pre-stressed sinusoidal members may be well adapted to exploit the elastic instability of its slender members by allowing their controlled buckling and possibly the abrupt change in the shape (a conformational change) of the assembly they compose.

Western Michigan University 536

www.wmich.edu

WESTERN MICHIGAN UNIVERSITY

Western Michigan University's College of Engineering and Applied Sciences is located at the heart of the University's Parkview Campus. The 343,000-square-foot facility was completed in the fall of 2003. The $100 million high-tech academic facility is the University's largest.

ZEISS Industrial Quality Solutions 121

www.zeiss.com/metrology/us/home.html?vaURL=www.zeiss.com/metrology

ZEISS

ZEISS Industrial Quality Solutions is a leading manufacturer of multidimensional metrology solutions. These include coordinate measuring machines, optical and multisensor systems and metrology software for the automotive, aircraft, mechanical engineering, plastics and medical technology industries. Innovative technologies such as 3D X-ray metrology for quality inspection round off the product portfolio.

EXHIBITORS

Zero Hour Parts 118

www.zerohourparts.com

Zero Hour Parts has built a storied reputation for providing the fastest turnarounds for all of your machining needs. For consistently high-quality, rapid results, Zero Hour is always ready to deliver.

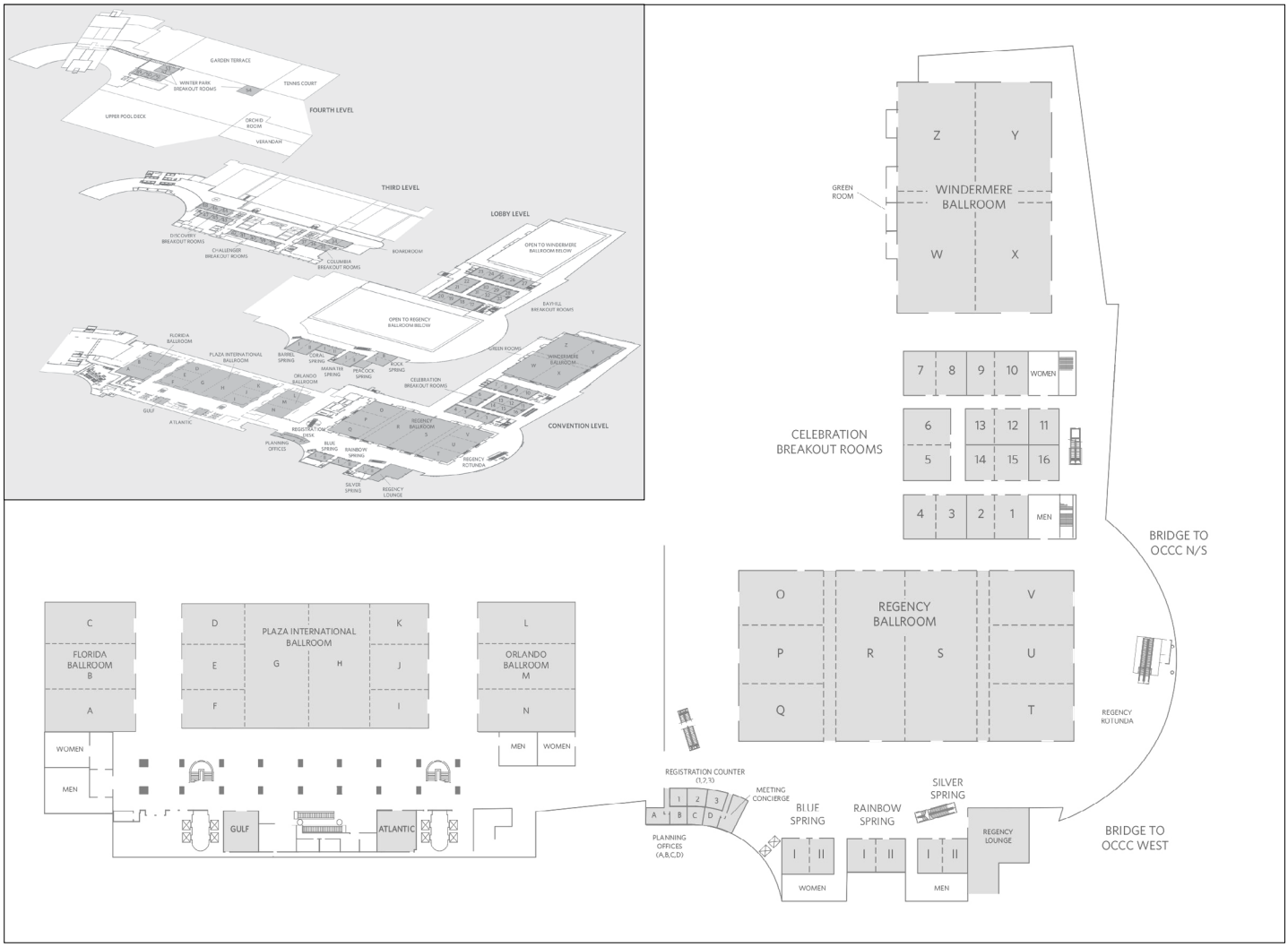
Zulu Pods 505

www.zulupods.com

Zulu Pods is committed to providing high quality, innovative lubrication delivery solutions to the Aerospace and Defense market that radically simplify short-duration engine architecture to reduce weight, cost, and complexity while improving performance.

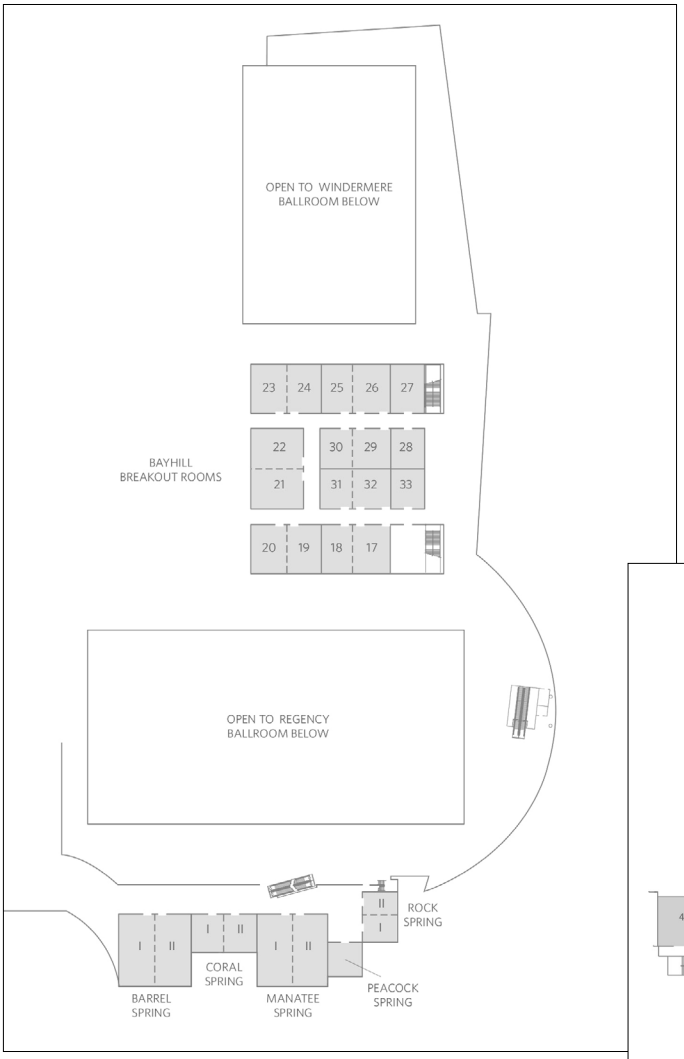
VENUE MAP

CONVENTION LEVEL



VENUE MAP

LOBBY LEVEL



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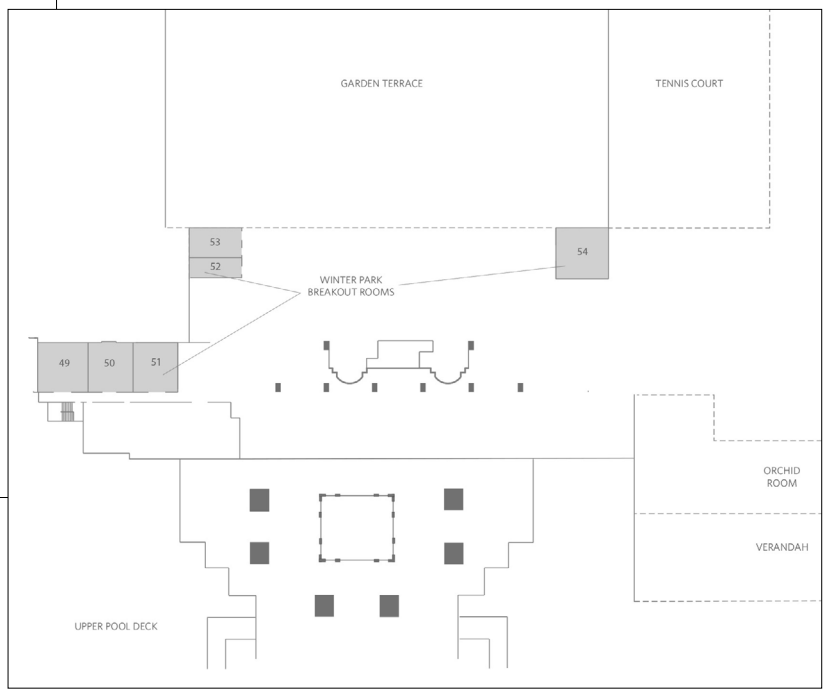
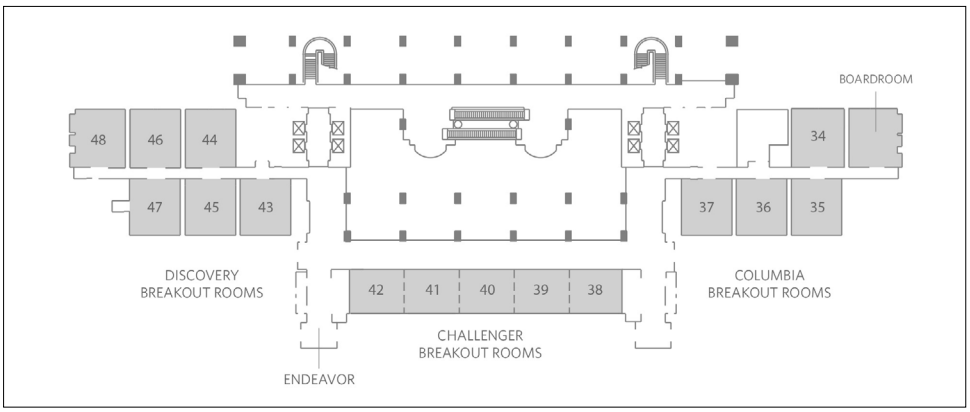
FOURTH LEVEL



THIRD LEVEL



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