

SCI TECH  **FORUM**

8-12 JANUARY 2024
ORLANDO, FL

OUTSIDE-IN: **EXPAND THE** **BOUNDARIES**



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NETWORK NAME: **SciTech24**
PASSWORD: **aiaascitech!**

WELCOME TO **SCI TECH**

The 2024 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, Outside-In: Expand the Boundaries. We hope these industry leaders, topics, and technical sessions inspire you! Make it a great week!

The American Institute of Aeronautics and Astronautics (AIAA) is the world's largest aerospace technical society. With nearly 30,000 individual members from 91 countries, and nearly 100 corporate members, AIAA brings together industry, academia, and government to advance engineering and science in aviation, space, and defense. For more information, visit aiaa.org, or follow AIAA on Twitter, Facebook, LinkedIn, and Instagram.



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12700 Sunrise Valley Drive, Suite 200, Reston, VA 20191-5807
703.264.7500 or 800.639.AIAA (2422) | Fax: 703.264.7657
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AIAA EVENTS APP



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PROGRAM

START ROOM ABBREVIATION SESSION

Sunday, 7 January

1930 hrs Plaza Ballroom E AIAA-08 SciTech 101

Monday, 8 January

0730 hrs Session Rooms SP-01 Technical Papers Session Prep

0800 hrs Windermere Ballroom PLN-01 **PLENARY:** Breakthrough Capabilities

0900 hrs Regency Rotunda NW-01 Networking Break

0930 hrs Celebration 9 ACD-01/APA-01 Aerodynamic Analysis for Aircraft Configuration Design

0930 hrs Orlando Ballroom L AIAA-09 Sustainable Aviation: Views from Across the Industry

0930 hrs Regency Ballroom Q SS-01 Compelling Content Corner: Power and Propulsion Special Session

1000 hrs Regency Ballroom O/P AIAA-10 The Art of Making a Great Impression: Pitching for Young Professionals

1000 hrs Windermere Ballroom F360-01 **FORUM 360:** Pushing the Boundaries of Computing

1300 hrs Regency Ballroom Q SS-02 Compelling Content Corner: AI and the Future of Systems Engineering

1300 hrs Orlando Ballroom N AIAA-11 AIAA Corporate Member Workforce Research Presentation

1330 hrs Windermere Ballroom F360-02 **FORUM 360:** Applying Breakthrough Capabilities to Aerospace

1400 hrs Regency Ballroom O/P AIAA-12 Meet the Employers

1500 hrs Regency Rotunda NW-02 Networking Break

1530 hrs Plaza Ballroom G AIAA-13 Certification Task Force Wrap Presentation

1530 hrs Windermere Ballroom SS-03 Why Learning the Language of Business Can Increase the Likelihood of Funding Request Approval

1530 hrs Regency Ballroom Q SS-04 Compelling Content Corner: JSR@60 - Highlights of the First Six Decades of Astronautics

1615 hrs Regency Ballroom O/P AIAA-14 Meet the Universities

1730 hrs Windermere Ballroom AIAA-15 2024 Dryden Lecture in Research

Tuesday, 9 January

0730 hrs Session Rooms SP-02 Technical Papers Session Prep

0800 hrs Windermere Ballroom PLN-02 **PLENARY:** Fireside Chat: Future of Flight

0900 hrs Regency Rotunda NW-03 Networking Break

0930 hrs Regency Ballroom Q SS-05 Compelling Content Corner: Teaching System Engineering in Undergraduate Mechanical and Aerospace Engineering Education: Concepts, Frameworks, and Examples

1000 hrs Windermere Ballroom F360-03 **FORUM 360:** A Systems View of Sustainability

1300 hrs Regency Ballroom Q SS-06 Compelling Content Corner: Successful Diversity, Equity, Inclusion, and Accessibility - How Do We Get There?

1315 hrs the HUB HUB-01 Psyche: Journey to a Metal World, Mission Overview (Presented by NASA Jet Propulsion Laboratory)

1330 hrs Windermere Ballroom F360-04 **FORUM 360:** Disruptive Technologies Shaping the Future of Flight

1400 hrs Plaza Ballroom G AIAA-16 Rising Leaders in Aerospace: Speed Mentoring Sponsored by Lockheed Martin

1430 hrs the HUB HUB-02 Open Source CFD in the Aerospace Community (Presented by Ennova Technologies CFD)

PROGRAM

1500 hrs	<i>the HUB</i>	HUB-03	Shaping the Future of Aviation: Cutting-Edge Solutions for Innovative Aircraft Preliminary Design (Presented by PACE Aerospace & IT)
1500 hrs	<i>Regency Ballroom</i>	NW-04	Networking Break
1530 hrs	<i>the HUB</i>	HUB-04	AIAA Certification Task Force Wrap and Next Steps
1530 hrs	<i>Regency Ballroom Q</i>	SS-07	Compelling Content Corner: Engineering and Research in Central Florida
1730 hrs	<i>Regency Ballroom</i>	HH-01	Welcome Happy Hour in the Exposition Hall

Wednesday, 10 January

0730 hrs	<i>Session Rooms</i>	SP-03	Technical Papers Session Prep
0800 hrs	<i>Windermere Ballroom</i>	PLN-03	PLENARY: Emerging Capabilities and Challenges in Test
0900 hrs	<i>Regency Ballroom</i>	NW-05	Networking Break
0915 hrs	<i>the HUB</i>	HUB-05	Advancing Space Technologies Through Suborbital and Orbital Flight (Presented by NASA Ames Research Center)
0930 hrs	<i>Regency Ballroom Q</i>	SS-08	Compelling Content Corner: First Look at Psyche Spacecraft's Launch and Initial Checkout Progress and Results
1000 hrs	<i>Plaza Ballroom H</i>	AIAA-17	AIAA Faculty Advisor Roundtable Session
1000 hrs	<i>Windermere Ballroom</i>	F360-05	FORUM 360: How Will AI Minimize Safety Risk?
1000 hrs	<i>the HUB</i>	HUB-06	AIAA AAM Multi-Vehicle Activities Initiative
1030 hrs	<i>the HUB</i>	HUB-07	Aerospace Policy Connection (APC): Aerospace R&D Issues
1045 hrs	<i>Regency Ballroom Q</i>	SS-09	Compelling Content Corner: Exploring Mars Together: Draft Plan for a Sustainable Future for Science at Mars
1100 hrs	<i>the HUB</i>	HUB-08	AIAA Materials Startups Panel
1130 hrs	<i>Regency Ballroom</i>	LUNCH-01	Luncheon in Exposition Hall
1200 hrs	<i>the HUB</i>	HUB-09	EELS: Advanced Autonomy and Robotics Technology at JPL (Presented by NASA Jet Propulsion Laboratory)
1230 hrs	<i>Windermere Ballroom</i>	AIAA-18	Rising Leaders in Aerospace Lunch Panel: "Stories from the Sky" Sponsored by Lockheed Martin
1230 hrs	<i>the HUB</i>	HUB-10	GE Aerospace Goes Hypersonic (Presented by GE Aerospace)
1300 hrs	<i>Florida Ballroom A</i>	AIAA-19	AIAA Cislunar Ecosystem Task Force: Our First Year and Path Ahead
1300 hrs	<i>Florida Ballroom B</i>	AIAA-20	Autonomy/AI/ML Task Force Challenge Update
1300 hrs	<i>the HUB</i>	HUB-11	Dynamic Road-Mapping: Mastering Innovation in the Complexity of Today's Agile World with SharpCloud (Presented by SharpCloud)
1400 hrs	<i>the HUB</i>	HUB-12	What Does an Aerospace Engineer Do at a Department of Energy Lab? (Presented by Los Alamos National Laboratories)
1430 hrs	<i>the HUB</i>	HUB-13	Sustainable Aviation Workshop Overview
1500 hrs	<i>Regency Ballroom</i>	NW-06	Networking Break
1500 hrs	<i>the HUB</i>	HUB-14	Optimizing Data Flow with Machine Learning for Operational Efficiency (Presented by Northrop Grumman)
1530 hrs	<i>Discovery 47</i>	AIAA-21	AAM Multi-Vehicle Activities
1530 hrs	<i>Windermere Ballroom</i>	F360-06	FORUM 360: Using Digital Tools to Revolutionize Test
1530 hrs	<i>Regency Ballroom Q</i>	SS-10	Compelling Content Corner: How to Effectively Mentor Women and Gender Minority Students and Early Career Engineers
1645 hrs	<i>Regency Ballroom Q</i>	SS-11	Compelling Content Corner: Evolving the Systems Engineering Discipline with Visualization Technology

PROGRAM

Thursday, 11 January

0730 hrs	<i>Session Rooms</i>	SP-04	Technical Papers Session Prep
0800 hrs	<i>Windermere Ballroom</i>	PLN-04	PLENARY: Future of Space Operations
0900 hrs	<i>Regency Ballroom</i>	NW-07	Networking Break
0900 hrs	<i>Plaza Ballroom G</i>	AIAA-25	K-12 Educator Workshop
0915 hrs	<i>the HUB</i>	HUB-15	Signals-of-Opportunity Architecture and Technology for Earth Science Observations (Presented by NASA Jet Propulsion Laboratory)
0930 hrs	<i>Orlando Ballroom N</i>	AIAA-22	Transformative Systems Task Force Report Out
1000 hrs	<i>Windermere Ballroom</i>	F360-07	FORUM 360: Visions Ahead: Upcoming Missions and Beyond
1030 hrs	<i>the HUB</i>	HUB-16	Honking for a Passing Lane — Enabling a High-Speed Future
1100 hrs	<i>Columbia 36</i>	AIAA-23	AIAA Student Funding Opportunities
1100 hrs	<i>the HUB</i>	HUB-17	Blending and Integrating Research Communities Around Advanced Air Mobility's Role in Multimodal Transportation and Total Mobility
1130 hrs	<i>Regency Rotunda</i>	LUNCH-02	Networking Lunch
1130 hrs	<i>the HUB</i>	HUB-18	The Next Generation Spacesuit (Presented by Collins Aerospace)
1200 hrs	<i>the HUB</i>	HUB-19	SWOT Mission: Navigating Technical Challenges to Unveil Oceanic and Freshwater Wonders (Presented by NASA Jet Propulsion Laboratory)
1230 hrs	<i>the HUB</i>	HUB-20	Higher Orbits Feature
1300 hrs	<i>Windermere Ballroom</i>	F360-08	FORUM 360: Idea Challenge: The Artemis Generation Speaks
1300 hrs	<i>Regency Ballroom Q</i>	SS-12	Compelling Content Corner: Unlocking Scale and Agility in Manufacturing of Aerostructures Through Roboforming
1315 hrs	<i>the HUB</i>	HUB-21	Paper Airplane Contest
1345 hrs	<i>Regency Ballroom Q</i>	SS-13	Compelling Content Corner: Artificial or Cooperative Intellect? The Future of Small Satellite Operations
1430 hrs	<i>Windermere Ballroom</i>	SS-15	KSP Differential Game Challenge: An Autonomy Design Competition for Non-Cooperative Space Operations in Kerbal Space Program
1500 hrs	<i>Regency Rotunda</i>	NW-08	Networking Break
1800 hrs	<i>Windermere Ballroom</i>	AIAA-24	Women at SciTech Panel and Social Hour: "Making Space for Women"

Friday, 12 January

0730 hrs	<i>Session Rooms</i>	SP-05	Technical Papers Session Prep
0800 hrs	<i>Windermere Ballroom</i>	PLN-05	PLENARY: Fireside Chat: Imagining the Aerospace Engineer of Tomorrow
0900 hrs	<i>Regency Rotunda</i>	NW-09	Networking Break
1000 hrs	<i>Orlando Ballroom N</i>	F360-09	FORUM 360: What Does Tomorrow Look Like?
1500 hrs	<i>Regency Rotunda</i>	NW-10	Networking Break

DATE	START	ROOM	ABBREVIATION	TITLE
ADAPTIVE STRUCTURES				
8-Jan	0930 hrs	Florida Ballroom A	AS-01	Multifunctional Structures/Materials & Structural Health Monitoring and Prognosis
8-Jan	0930 hrs	Barrel Spring II	AS-04/STR-09/SD-05/SCS-04/MAT-33	Design and Analysis of Structures and Materials in Extreme Environments
8-Jan	0930 hrs	Plaza Ballroom I	AS-09/ACD-06/STR-14	Buckling and Stability of Aircraft and Spacecraft Structures I
8-Jan	0930 hrs	Barrel Spring I	AS-13/ACD-10/STR-18/MAT-32	Artificial Intelligence and Machine Learning for Materials and Structures I
8-Jan	1300 hrs	Florida Ballroom A	AS-03	Smart Sensors/Actuators/Controls and Materials Design and Applications
8-Jan	1300 hrs	Barrel Spring I	AS-16/STR-25/DE-08/MAT-34	Artificial Intelligence and Machine Learning for Materials and Structures II
8-Jan	1530 hrs	Florida Ballroom A	AS-21/MAT-03/STR-04	Inter-Agency Panel: Emerging Technologies in Aerospace Materials and Structures
9-Jan	0930 hrs	Orlando Ballroom N	AS-05	★ Adaptive Structures Lecture
9-Jan	1300 hrs	Plaza Ballroom D	AS-08	Morphing and/or Biomimetic Adaptive Structures
9-Jan	1300 hrs	Florida Ballroom B	SCS-06/AS-06	Adaptive Spacecraft Structures
9-Jan	1530 hrs	Plaza Ballroom D	AS-10	Morphing and/or Biomimetic Adaptive Structures/Materials & Bio-Inspired Innovations
10-Jan	0930 hrs	Plaza Ballroom D	AS-12/DA-03	Design, Modeling, Simulation, and Optimization of Adaptive Structures/Materials
10-Jan	1530 hrs	Plaza Ballroom D	AS-14	Special Session: Mr. Martin Brenner Memorial Session
11-Jan	1300 hrs	Celebration 15	AS-17	Special Session: Canadian Smart Materials and Adaptive Structures Research
11-Jan	1530 hrs	Celebration 15	AS-18	Active and Passive Adaptive Concepts/Systems for Aircraft and Spacecraft
11-Jan	1530 hrs	Plaza Ballroom D	AS-20	Special Session: INCAS (National Institute of Aerospace Research Elie Carafoli) Research
AEROACOUSTICS				
11-Jan	0930 hrs	Rainbow Spring I	AA-01	Acoustic/Fluid Dynamics Interactions
11-Jan	1300 hrs	Bayhill 20	AA-02	Computational Aeroacoustics /Jet Aeroacoustics / Acoustic/Fluid Dynamics Interactions
11-Jan	1300 hrs	Rainbow Spring I	AA-03	General Acoustics, Advanced Testing, Community Noise, Sonic Boom and Metrics

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 Exposition Hall. Contains product demonstrations, special panels, sponsor presentations, and fun activities.

TECHNICAL SESSIONS



Engage with your community at these must-attend lectures

11-Jan	1530 hrs	Rainbow Spring I	AA-04/TF-05	Advanced Air Mobility Noise
11-Jan	1530 hrs	Bayhill 20	AA-05	Jet Aeroacoustics I
12-Jan	0930 hrs	Bayhill 20	AA-06	Jet Aeroacoustics II
12-Jan	0930 hrs	Rainbow Spring I	AA-07	Propeller, Open Rotor, and Rotorcraft Noise I
12-Jan	1300 hrs	Bayhill 20	AA-08	Jet Aeroacoustics III
12-Jan	1300 hrs	Celebration 11	AA-09	Propeller, Open Rotor, and Rotorcraft Noise II
12-Jan	1530 hrs	Rainbow Spring I	AA-11	Duct Acoustics
12-Jan	1530 hrs	Bayhill 20	AA-12	Jet Aeroacoustics IV / Computational Aeroacoustics
12-Jan	1530 hrs	Celebration 11	AA-13	Propeller, Open Rotor, and Rotorcraft Noise III
AERODYNAMIC MEASUREMENT TECHNOLOGY				
8-Jan	1530 hrs	Celebration 9	AMT-01/PC-10	Highlighting Women in Aerospace 2024
9-Jan	0930 hrs	Celebration 9	AMT-03	Surface Temperature and Heat Transfer Measurements
9-Jan	0930 hrs	Rock Spring I & II	PDL-04/AMT-02/ EP-05	Plasma and Laser Diagnostics I: Thomson Scattering and Others
9-Jan	1300 hrs	Celebration 9	AMT-05	Development and Applications of Pressure Sensitive Paints
9-Jan	1300 hrs	Rock Spring I & II	PDL-05/AMT-04	Aero-Optics and Atmospheric Optical Turbulence
9-Jan	1530 hrs	Coral Spring II	AMT-06	Development of TSP/PSP Technology
9-Jan	1530 hrs	Celebration 9	AMT-07	Invited Session: Measurements, Diagnostics, and Progress of Rotating Detonation Engines
9-Jan	1530 hrs	Celebration 7	AMT-08	Laser Absorption and Scattering Techniques
10-Jan	0930 hrs	Celebration 8	AMT-09	Invited Session: Measurements in Hypersonic Flows I
10-Jan	0930 hrs	Celebration 9	AMT-10	PSP/TSP Workshop
10-Jan	1300 hrs	Celebration 9	AMT-11	High-Speed Particle Diagnostics
10-Jan	1300 hrs	Celebration 8	AMT-12	Invited Session: Measurements in Hypersonic Flows II
10-Jan	1530 hrs	Orlando Ballroom N	AMT-14	★ Aerodynamic Measurement Technology Award Lecture
10-Jan	1530 hrs	Bayhill 26	PDL-11/AMT-15	Plasma and Laser Diagnostics II: Nanosecond Pulsed Discharges and Reactive Flows
11-Jan	0930 hrs	Celebration 9	AMT-16	Development and Implementation of CARS and Other Coherent Methods
11-Jan	0930 hrs	Manatee Spring I	AMT-17	Diagnostics for Energetic Materials
11-Jan	0930 hrs	Celebration 8	AMT-18	Turbulence and Unsteady Flow Techniques
11-Jan	1300 hrs	Celebration 9	AMT-19/FD-60	High-Speed Measurements for Hypersonic Turbulent Boundary Layers
11-Jan	1300 hrs	Celebration 8	AMT-20/HASBP-11	Instrumentation & Diagnostic Techniques for High-Speed Air-Breathing Propulsion
11-Jan	1530 hrs	Celebration 8	AMT-22	Innovations in Aerodynamic Measurement Technologies
11-Jan	1530 hrs	Celebration 7	AMT-23	Molecular Tagging Velocimetry
11-Jan	1530 hrs	Celebration 6	PC-29/AMT-21	Combustion Diagnostics I
12-Jan	0930 hrs	Celebration 7	AMT-24	3D Imaging and Reconstruction
12-Jan	0930 hrs	Celebration 9	AMT-25	Experimental Methods for Hypersonics I
12-Jan	0930 hrs	Celebration 8	AMT-26	Instrumentation and Measurement Techniques for Challenging Environments & Test Facilities
12-Jan	1300 hrs	Celebration 9	AMT-27	Experimental Methods for Hypersonics II
12-Jan	1300 hrs	Celebration 7	AMT-28	Particle and Flow Imaging Velocimetry
12-Jan	1300 hrs	Celebration 8	AMT-30	Rising Stars in AMT
12-Jan	1300 hrs	Columbia 35	PDL-16/AMT-29	Plasma and Laser Diagnostics III: Experimental Applications
12-Jan	1530 hrs	Celebration 5	AMT-31/PC-36	Combustion Diagnostics II
12-Jan	1530 hrs	Celebration 9	AMT-32/GT-19	Optical and Laser Diagnostics for Facility Characterization
12-Jan	1530 hrs	Celebration 7	AMT-33	Wind Tunnel Measurement Techniques
AEROSPACE EDUCATION				
8-Jan	0930 hrs	Bayhill 33	EDU-01	Advancing Aerospace Education I
9-Jan	0930 hrs	Bayhill 33	EDU-03	Navigating the Future: Revisions to ABET Criteria for Aerospace Engineering Curricula in the 21st Century

TECHNICAL SESSIONS



Engage with your community at these must-attend lectures

9-Jan	1300 hrs	Bayhill 33	EDU-04	Advancing Aerospace Education II
10-Jan	0930 hrs	Bayhill 33	EDU-05	Advancing Aerospace Education III
10-Jan	1300 hrs	Bayhill 33	EDU-06	Revolutionizing Engineering Pedagogy: Exploring the Role of ChatGPT
11-Jan	0930 hrs	Bayhill 33	EDU-07	Advancing Aerospace Education IV
11-Jan	1300 hrs	Bayhill 33	EDU-08	Insights for New Faculty Joining Aerospace Engineering Departments
AEROSPACE POWER SYSTEMS				
8-Jan	0930 hrs	Celebration 3	APS-01	Aerospace Power System Components
8-Jan	1530 hrs	Celebration 3	APS-02	Power Generation and Storage
AIRCRAFT DESIGN				
8-Jan	0930 hrs	Celebration 9	ACD-01/APA-01	Aerodynamic Analysis for Aircraft Configuration Design
8-Jan	0930 hrs	Plaza Ballroom I	AS-09/ACD-06/ STR-14	Buckling and Stability of Aircraft and Spacecraft Structures I
8-Jan	0930 hrs	Barrel Spring I	AS-13/ACD-10/STR- 18/MAT-32	Artificial Intelligence and Machine Learning for Materials and Structures I
8-Jan	1300 hrs	Celebration 9	ACD-03/APA-06	Aerodynamic Analysis Methods for Aircraft Design
8-Jan	1400 hrs	Regency Ballroom Q	GTE-02/HIS-01/ EAT-12/ACD-28/TF- 08/INPSI-08/PC-37	★ Clean Aviation Program Highlights and Achievements
8-Jan	1530 hrs	Orlando Ballroom M	EAT-02/ACD-04/ GTE-04	Clean Aviation Special Session: Electrified Aircraft and Systems
9-Jan	0930 hrs	Plaza Ballroom D	ACD-30/EAT-15/ TF-09/STR-31/ GNC-52/DA-01/ GTE-27/INPSI-10	Clean Aviation Special Session: Emerging Technologies and Innovations
9-Jan	1300 hrs	Plaza Ballroom F	ACD-32/DE-12/ STR-21/MAT-30	Clean Aviation Special Session: Next Generation Multifunctional Fuselage Demonstrator I
9-Jan	1530 hrs	Bayhill 23	ACD-07	Framework Optimization for Aircraft Design
9-Jan	1530 hrs	Plaza Ballroom F	ACD-33/DE-10/ MAT-31/STR-22	Clean Aviation Special Session: Next Generation Multifunctional Fuselage Demonstrator II
10-Jan	0930 hrs	Plaza Ballroom F	ACD-08/EAT-14/GTE- 12/INPSI-09/PC-38	Clean Aviation Special Session: Advanced Engine and Aircraft Configurations
10-Jan	1300 hrs	Plaza Ballroom J	ACD-09/EAT-05	Large Battery-Electric Aircraft: Did We Underestimate Their Potential?
10-Jan	1300 hrs	Plaza Ballroom D	ACD-27/TF-10/GTE- 24/STR-33	Clean Aviation Special Session: Fast Rotorcraft
10-Jan	1530 hrs	Bayhill 20	ACD-11	Innovations in Aircraft Propulsion Design
10-Jan	1530 hrs	Bayhill 21	ACD-13/UAS-08	Unmanned Systems Design
11-Jan	0930 hrs	Bayhill 19	ACD-15	Emerging Aircraft Configurations
11-Jan	0930 hrs	Celebration 6	ACD-31/APA-86/ STR-32	★ Airbus Wing of Tomorrow Programme
11-Jan	0930 hrs	Plaza Ballroom F	GTE-17/EAT-08/PC- 25/ACD-14/INPSI-11	Clean Aviation Special Session: Future Propulsion Systems & Integration
11-Jan	1300 hrs	Plaza Ballroom F	ACD-05/APA-88/TF- 02/EAT-13/GTE-25	Clean Aviation Special Session: Innovative Aircraft Concepts and Novel Configurations
11-Jan	1300 hrs	Bayhill 19	ACD-16	Aircraft Design for Supersonic and Beyond
11-Jan	1300 hrs	Bayhill 28	APA-57/ACD-19	Applied Computational Fluid Dynamics I
11-Jan	1530 hrs	Bayhill 19	ACD-17/TF-06	Design for Aircraft Electrification I
11-Jan	1530 hrs	Bayhill 18	ACD-18	Flight Mechanics in Aircraft Design
11-Jan	1530 hrs	Plaza Ballroom F	AFM-28/GTE-26/ ACD-29/STR-12	Clean Aviation Special Session: Integrated Airframe Design Technology and Advanced Structures/Systems
12-Jan	0930 hrs	Bayhill 19	ACD-20/TF-07	Design for Aircraft Electrification II
12-Jan	0930 hrs	Bayhill 27	APA-67/ACD-19	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques I
12-Jan	0930 hrs	Barrel Spring I	GTE-22/ACD-21/ EAT-18/DE-09	Clean Aviation Special Session: Future Aircraft Architecture, Technology Integration & Novel Certification
12-Jan	1300 hrs	Bayhill 18	ACD-23	Component Optimization for Aircraft Design

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

12-Jan	1300 hrs	<i>Celebration 3</i>	ACD-24	Design, Build, Test, Learn
12-Jan	1300 hrs	<i>Bayhill 27</i>	APA-73/ACD-22	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques II
12-Jan	1530 hrs	<i>Bayhill 18</i>	ACD-26	Commercial Aircraft Design
12-Jan	1530 hrs	<i>Bayhill 27</i>	APA-80/ACD-25	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques III
APPLIED AERODYNAMICS				
8-Jan	0930 hrs	<i>Celebration 9</i>	ACD-01/APA-01	Aerodynamic Analysis for Aircraft Configuration Design
8-Jan	0930 hrs	<i>Bayhill 26</i>	APA-03	Propeller/Rotorcraft/Wind Turbine Aerodynamics I
8-Jan	0930 hrs	<i>Bayhill 27</i>	APA-04	Special Session: Applied Surrogate Modeling I
8-Jan	0930 hrs	<i>Bayhill 28</i>	APA-05	Special Session: Artemis I Aerosciences Flight Data Analysis I
8-Jan	0930 hrs	<i>Bayhill 30</i>	FD-01/APA-02	Flow Control: Methods and Applications I
8-Jan	1300 hrs	<i>Celebration 9</i>	ACD-03/APA-06	Aerodynamic Analysis Methods for Aircraft Design
8-Jan	1300 hrs	<i>Bayhill 26</i>	APA-08	Propeller/Rotorcraft/Wind Turbine Aerodynamics II
8-Jan	1300 hrs	<i>Bayhill 32</i>	APA-09	Reduced Order Aerodynamic Modeling & System Identification I
8-Jan	1300 hrs	<i>Bayhill 27</i>	APA-10	Special Session: Applied Surrogate Modeling II
8-Jan	1300 hrs	<i>Bayhill 28</i>	APA-11	Special Session: Artemis I Aerosciences Flight Data Analysis II
8-Jan	1530 hrs	<i>Bayhill 32</i>	APA-13	Reduced Order Aerodynamic Modeling & System Identification II
8-Jan	1530 hrs	<i>Bayhill 27</i>	APA-14	Special Session: Applied Surrogate Modeling III
8-Jan	1530 hrs	<i>Bayhill 28</i>	APA-15	Special Session: Artemis I Aerosciences Flight Data Analysis III
8-Jan	1530 hrs	<i>Bayhill 26</i>	APA-16/GT-01	Special Session – Integrated (Digital and Physical) Collaborative Experimentation: Mutual Accountability and Validation Dialog
8-Jan	1530 hrs	<i>Bayhill 30</i>	FD-13/APA-12	Flow Control: Methods and Applications II
9-Jan	0930 hrs	<i>Bayhill 26</i>	APA-18/FD-19	Hypersonic Aerodynamics I
9-Jan	0930 hrs	<i>Bayhill 32</i>	APA-19/GT-03	Integration of Computational and Empirical Experimentation Techniques
9-Jan	0930 hrs	<i>Bayhill 27</i>	APA-20	Special Session: Aerodynamic Design Applications Using the NASA CDISC Design Method
9-Jan	0930 hrs	<i>Bayhill 28</i>	APA-21	Special Session: Sailplane Aerodynamics and Design
9-Jan	0930 hrs	<i>Bayhill 30</i>	FD-17/APA-17	Flow Control: Methods and Applications III
9-Jan	1300 hrs	<i>Bayhill 26</i>	APA-23/FD-24	Hypersonic Aerodynamics II
9-Jan	1300 hrs	<i>Bayhill 28</i>	APA-24	Special Session: Drag Reducing Surfaces I
9-Jan	1300 hrs	<i>Bayhill 25</i>	APA-25	Special Session: Rotorcraft in Hover I
9-Jan	1300 hrs	<i>Bayhill 27</i>	APA-26	Special Session: Supersonic Configurations at Low Speeds (SCALOS)
9-Jan	1300 hrs	<i>Bayhill 32</i>	APA-27	Unsteady Aerodynamics I
9-Jan	1300 hrs	<i>Bayhill 30</i>	FD-22/APA-22	Flow Control: Methods and Applications IV
9-Jan	1530 hrs	<i>Bayhill 26</i>	APA-29/FD-29	Hypersonic Aerodynamics III
9-Jan	1530 hrs	<i>Bayhill 27</i>	APA-30	Missile/Projectile/Munition Aerodynamics, Carriage & Store Separation
9-Jan	1530 hrs	<i>Bayhill 28</i>	APA-31	Special Session: Drag Reducing Surfaces II
9-Jan	1530 hrs	<i>Bayhill 25</i>	APA-32	Special Session: Rotorcraft in Hover II
9-Jan	1530 hrs	<i>Bayhill 32</i>	APA-33	Unsteady Aerodynamics II
10-Jan	0930 hrs	<i>Bayhill 32</i>	APA-34/MVCE-07	CAPS Special Session
10-Jan	0930 hrs	<i>Bayhill 25</i>	APA-35/FD-33	Flow Control: Methods and Applications V
10-Jan	0930 hrs	<i>Bayhill 26</i>	APA-36/FD-35	Hypersonic Aerodynamics IV
10-Jan	0930 hrs	<i>Bayhill 28</i>	APA-39	Special Session: Updates to the NASA SUSAN Electrofan Trade Study I
10-Jan	0930 hrs	<i>Celebration 3</i>	INPSI-04/APA-38	Inlet Design and Performance
10-Jan	0930 hrs	<i>Rock Spring I & II</i>	PDL-07/APA-37	Hypersonics and Entry Flow Plasmas I: Experiments
10-Jan	1300 hrs	<i>Bayhill 32</i>	APA-40	Aero-Propulsive Interactions and Aerodynamics of Integrated Propellers I
10-Jan	1300 hrs	<i>Bayhill 25</i>	APA-41/FD-40	Flow Control: Methods and Applications VI
10-Jan	1300 hrs	<i>Bayhill 26</i>	APA-42/FD-42	Hypersonic Aerodynamics V
10-Jan	1300 hrs	<i>Bayhill 28</i>	APA-46	Special Session: Updates to the NASA SUSAN Electrofan Trade Study II
10-Jan	1300 hrs	<i>Celebration 3</i>	INPSI-05/APA-44	Nozzle Design and Performance

TECHNICAL SESSIONS




Engage with your community at these must-attend lectures

10-Jan	1300 hrs	<i>Rock Spring I & II</i>	PDL-08/APA-43	Hypersonics and Entry Flow Plasmas II: Simulation
10-Jan	1300 hrs	<i>Celebration 7</i>	PDL-09/APA-45	Plasma-Assisted Aerodynamics and MHD
10-Jan	1530 hrs	<i>Bayhill 32</i>	APA-47	Aero-Propulsive Interactions and Aerodynamics of Integrated Propellers II
10-Jan	1530 hrs	<i>Bayhill 25</i>	APA-48/FD-46	Flow Control: Methods and Applications VII
10-Jan	1530 hrs	<i>Bayhill 27</i>	APA-50	Special Session: Applied Aerodynamics: State of the Art (Presentations & Panel Discussion)
10-Jan	1530 hrs	<i>Bayhill 33</i>	APA-87	AIAA Workshops: Past, Present, and Future
10-Jan	1530 hrs	<i>Bayhill 30</i>	FD-49/APA-49	Hypersonic Aerodynamics VI
10-Jan	1530 hrs	<i>Celebration 3</i>	INPSI-06/APA-52	Test Rig Design and Measurements in High-Speed Flows
11-Jan	0930 hrs	<i>Celebration 6</i>	ACD-31/APA-86/ STR-32	★ Airbus Wing of Tomorrow Programme
11-Jan	0930 hrs	<i>Bayhill 25</i>	APA-53/FD-52	Flow Control: Methods and Applications VIII
11-Jan	0930 hrs	<i>Bayhill 26</i>	APA-55	Special Session: HPC CREATE I
11-Jan	0930 hrs	<i>Bayhill 32</i>	APA-56/SPSN-03	Transonic Aerodynamics I
11-Jan	0930 hrs	<i>Bayhill 30</i>	FD-54/APA-54	Hypersonic Aerodynamics VII
11-Jan	1300 hrs	<i>Plaza Ballroom F</i>	ACD-05/APA-88/TF- 02/EAT-13/GTE-25	Clean Aviation Special Session: Innovative Aircraft Concepts and Novel Configurations
11-Jan	1300 hrs	<i>Bayhill 28</i>	APA-57/ACD-19	Applied Computational Fluid Dynamics I
11-Jan	1300 hrs	<i>Bayhill 25</i>	APA-58/FD-58	Flow Control: Methods and Applications IX
11-Jan	1300 hrs	<i>Bayhill 26</i>	APA-60	Special Session: HPC CREATE II
11-Jan	1300 hrs	<i>Bayhill 32</i>	APA-61	Transonic Aerodynamics II
11-Jan	1300 hrs	<i>Bayhill 30</i>	FD-61/APA-59	Hypersonic Aerodynamics VIII
11-Jan	1530 hrs	<i>Bayhill 33</i>	APA-62	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing I
11-Jan	1530 hrs	<i>Bayhill 25</i>	APA-63	Airfoil/Wing/Configuration Aerodynamics
11-Jan	1530 hrs	<i>Bayhill 28</i>	APA-64	Applied Computational Fluid Dynamics II
11-Jan	1530 hrs	<i>Bayhill 32</i>	APA-66/SPSN-05	Supersonic Aerodynamics
12-Jan	0930 hrs	<i>Bayhill 27</i>	APA-67/ACD-19	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques I
12-Jan	0930 hrs	<i>Manatee Spring II</i>	APA-68	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing II
12-Jan	0930 hrs	<i>Bayhill 28</i>	APA-70	Applied Computational Fluid Dynamics III
12-Jan	0930 hrs	<i>Bayhill 32</i>	APA-72	Turbulence and Transition Modeling I
12-Jan	1300 hrs	<i>Bayhill 27</i>	APA-73/ACD-22	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques II
12-Jan	1300 hrs	<i>Manatee Spring II</i>	APA-74	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing III
12-Jan	1300 hrs	<i>Bayhill 33</i>	APA-75	Aero-Structural Interactions I
12-Jan	1300 hrs	<i>Bayhill 28</i>	APA-76	Applied Computational Fluid Dynamics IV
12-Jan	1300 hrs	<i>Bayhill 32</i>	APA-78	Turbulence and Transition Modeling II
12-Jan	1300 hrs	<i>Bayhill 19</i>	APA-79	Unmanned, Bio-Inspired, Solar Powered Aerial Vehicle Design
12-Jan	1300 hrs	<i>Bayhill 30</i>	FD-77/APA-77	Hypersonic Aerodynamics IX
12-Jan	1530 hrs	<i>Bayhill 27</i>	APA-80/ACD-25	Aerodynamic Design: Analysis, Methodologies, and Optimization Techniques III
12-Jan	1530 hrs	<i>Manatee Spring II</i>	APA-81	Aerodynamic Testing: Ground, Wind-Tunnel, and Flight Testing IV
12-Jan	1530 hrs	<i>Bayhill 33</i>	APA-82	Aero-Structural Interactions II
12-Jan	1530 hrs	<i>Bayhill 28</i>	APA-83	Applied Computational Fluid Dynamics V
12-Jan	1530 hrs	<i>Bayhill 32</i>	APA-85	Other Topics in Applied Aerodynamics
12-Jan	1530 hrs	<i>Bayhill 30</i>	FD-82/APA-84	Hypersonic Aerodynamics X
ATMOSPHERIC AND SPACE ENVIRONMENTS				
11-Jan	0930 hrs	<i>Rock Spring I & II</i>	PDL-12/ASE-01/EP-13	Atmospheric & Space Plasmas for Aerodynamics & Propulsion
12-Jan	0930 hrs	<i>Columbia 36</i>	ASE-02	Space Environments and Effects I: Measurements
12-Jan	1300 hrs	<i>Columbia 36</i>	ASE-03	Space Environments and Effects II: Testing and Modeling

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

ATMOSPHERIC FLIGHT MECHANICS				
8-Jan	0930 hrs	Bayhill 20	GNC-01/AFM-01	Entry, Descent and Landing GN&C Technology I - Overviews
8-Jan	1300 hrs	Bayhill 20	GNC-05/AFM-02	Entry, Descent and Landing GN&C Technology II - Terrain Mapping and Map-Relative Navigation
8-Jan	1530 hrs	Bayhill 20	GNC-08/AFM-03	Entry, Descent and Landing GN&C Technology III - PL&HA Sensors & Testing
9-Jan	0930 hrs	Bayhill 20	GNC-13/AFM-04/ SFM-11	Entry, Descent and Landing GN&C Technology IV - Aerocapture for Ice Giants I
9-Jan	1300 hrs	Bayhill 20	GNC-18/AFM-05	Entry, Descent and Landing GN&C Technology V - Aerocapture for Ice Giants II
9-Jan	1530 hrs	Bayhill 20	GNC-25/AFM-06	Entry, Descent and Landing GN&C Technology VI - Entry Guidance & Entry Systems
10-Jan	0930 hrs	Bayhill 24	AFM-07	Aircraft System Identification I
10-Jan	0930 hrs	Bayhill 23	AFM-09	Low-Earth Orbit Flight Test of an Inflatable Decelerator I: Systems Engineering (Invited)
10-Jan	1300 hrs	Bayhill 24	AFM-10	Aircraft System Identification II
10-Jan	1300 hrs	Bayhill 23	AFM-12	Low-Earth Orbit Flight Test of an Inflatable Decelerator II: Flight Sciences (Invited)
10-Jan	1300 hrs	Bayhill 20	GNC-30/AFM-08	Entry, Descent and Landing GN&C Technology VII - PL&HA Navigation and Powered-Descent Guidance
10-Jan	1530 hrs	Bayhill 23	AFM-13	Low-Earth Orbit Flight Test of an Inflatable Decelerator III: Measurements (Invited)
10-Jan	1530 hrs	Bayhill 24	AFM-14	The CoAx 600 UAV (Invited)
10-Jan	1530 hrs	Bayhill 19	GNC-33/AFM-11	Entry, Descent and Landing GN&C Technology VIII - Powered-Descent Guidance
11-Jan	0930 hrs	Bayhill 27	AFM-15	Entry, Descent, and Landing Flight Dynamics and Control
11-Jan	0930 hrs	Bayhill 28	AFM-16	Projectile Aerodynamics
11-Jan	1300 hrs	Bayhill 22	AFM-17	Dragonfly Entry and Flight Dynamics (Invited)
11-Jan	1300 hrs	Bayhill 27	AFM-18	Launch Vehicle and Projectile Flight Mechanics and Control
11-Jan	1530 hrs	Bayhill 22	AFM-19	A New UAS Handling Qualities Specification
11-Jan	1530 hrs	Plaza Ballroom F	AFM-28/GTE-26/ ACD-29/STR-12	Clean Aviation Special Session: Integrated Airframe Design Technology and Advanced Structures/Systems
12-Jan	0930 hrs	Columbia 35	AFM-21	Handling Qualities
12-Jan	0930 hrs	Bayhill 24	AFM-22	VTOL and Advanced Air Mobility
12-Jan	0930 hrs	Bayhill 25	AFM-23	Wind and Wake Estimation
12-Jan	1300 hrs	Bayhill 24	AFM-24	Aircraft Dynamics I
12-Jan	1300 hrs	Bayhill 25	AFM-25	Wind Sensing with Small UAS I (Invited)
12-Jan	1530 hrs	Bayhill 24	AFM-26	Aircraft Dynamics II
12-Jan	1530 hrs	Bayhill 25	AFM-27	Wind Sensing with Small UAS II (Invited)
COMPLEX AEROSPACE SYSTEMS EXCHANGE				
11-Jan	1300 hrs	Florida Ballroom A	CASE-01	 A Design Approach to Complexity Issues in Aerospace
12-Jan	0930 hrs	Celebration 16	CASE-02	AI/ML for Complexity
12-Jan	1300 hrs	Celebration 16	CASE-03/DGE-12	Approaches for Complex Systems and Enterprises
CFD VISION 2030				
9-Jan	0930 hrs	Celebration 7	CFD2030-01	CFD 2030: Hypersonic Modeling & Simulation Grand Challenge
9-Jan	1300 hrs	Celebration 7	CFD2030-02	Advanced Temporal and Spatial Discretization
10-Jan	0930 hrs	Celebration 7	CFD2030-03	Improved Flow Physics Models for the Full Flight Envelope
11-Jan	0930 hrs	Celebration 7	CFD2030-04/ MVCE-08	Large-Scale Meshes for Complex Aircraft Configurations
12-Jan	0930 hrs	Bayhill 18	CFD2030-05	AIAA Certification by Analysis Community of Interest: The Path to using Uncertainty Quantification for Predictive Flight Characteristics
COMMUNICATION SYSTEMS				
10-Jan	1530 hrs	Celebration 2	CS-01	Communication Systems

TECHNICAL SESSIONS



Engage with your community at these must-attend lectures

COMPUTER SYSTEMS				
8-Jan	0930 hrs	Celebration 2	CPS-01	Computer Systems
CYBERSECURITY				
8-Jan	0930 hrs	Orlando Ballroom M	CSS-01	Mitigating Cyber Threats for Space Systems using SPARTA & Defense in Depth
8-Jan	1300 hrs	Celebration 6	CSS-02	Cyber Attack, Defense and Resilience
8-Jan	1530 hrs	Plaza Ballroom K	CSS-03	Operating in a Cyber Contested Space Environment
DESIGN ENGINEERING				
8-Jan	0930 hrs	Plaza Ballroom J	DE-01/ACD-02	Design Methods, Tools and Processes in Support of Aircraft Design (joint ACD/DE)
8-Jan	1300 hrs	Barrel Spring I	AS-16/STR-25/DE-08/MAT-34	Artificial Intelligence and Machine Learning for Materials and Structures II
8-Jan	1300 hrs	Plaza Ballroom I	DE-02/STR-06	Buckling and Stability of Aircraft and Spacecraft Structures II
8-Jan	1530 hrs	Plaza Ballroom J	DE-03	Design Approaches, Tools and Processes for Aerospace Systems
9-Jan	0930 hrs	Plaza Ballroom J	DE-04/DGE-04	ML/AI Applications to Design I
9-Jan	1300 hrs	Plaza Ballroom F	ACD-32/DE-12/STR-21/MAT-30	Clean Aviation Special Session: Next Generation Multifunctional Fuselage Demonstrator I
9-Jan	1300 hrs	Plaza Ballroom J	DE-05/DGE-05	ML/AI Applications to Design II
9-Jan	1530 hrs	Plaza Ballroom F	ACD-33/DE-10/MAT-31/STR-22	Clean Aviation Special Session: Next Generation Multifunctional Fuselage Demonstrator II
9-Jan	1530 hrs	Plaza Ballroom J	DE-06	Designing with Intelligence: Exploring the Promise and Challenges of AI in Aerospace
12-Jan	0930 hrs	Barrel Spring I	GTE-22/ACD-21/EAT-18/DE-09	Clean Aviation Special Session: Future Aircraft Architecture, Technology Integration & Novel Certification
DIGITAL AVIONICS				
9-Jan	0930 hrs	Plaza Ballroom D	ACD-30/EAT-15/TF-09/STR-31/GNC-52/DA-01/GTE-27/INPSI-10	Clean Aviation Special Session: Emerging Technologies and Innovations
10-Jan	0930 hrs	Plaza Ballroom D	AS-12/DA-03	Design, Modeling, Simulation, and Optimization of Adaptive Structures/Materials
11-Jan	0930 hrs	Celebration 3	DA-02	Digital Avionics I
11-Jan	1530 hrs	Celebration 3	DA-04	Digital Avionics II
12-Jan	0930 hrs	Bayhill 17	DA-06/GNC-51/MST-11/UAS-11/IS-33	Clean Aviation Special Session: Next Generation Aircraft Cockpits, Systems and Avionics
DIGITAL ENGINEERING				
8-Jan	0930 hrs	Plaza Ballroom D	DGE-01	Digital Thread/Twin Integration Panel
8-Jan	1300 hrs	Bayhill 19	DGE-02	Digital Engineering: Digital Twin
8-Jan	1530 hrs	Bayhill 19	DGE-03	Digital Engineering: Digital Thread & Ecosystem
9-Jan	1300 hrs	Manatee Spring I	DGE-13	★ NASA Digital Transformation
9-Jan	1400 hrs	Manatee Spring I	DGE-14	★ Digital Materiel Management in the Department of the Air Force
9-Jan	1530 hrs	Bayhill 19	DGE-06	Digital Engineering: Knowledge-Based Engineering
10-Jan	0930 hrs	Florida Ballroom B	DGE-07/DE-07	Certification by Analysis – Establishing Trust In Models
10-Jan	1300 hrs	Bayhill 19	DGE-08	Digital Engineering: Model-Based Engineering & Virtual Certification
11-Jan	0930 hrs	Plaza Ballroom D	DGE-09	Digital Workforce Development Panel
11-Jan	1300 hrs	Plaza Ballroom D	DGE-10	RAND Digital Engineering Study Panel
11-Jan	1530 hrs	Orlando Ballroom N	DGE-11	Realizing Value from Digital Twins Panel
12-Jan	1300 hrs	Celebration 16	CASE-03/DGE-12	Approaches for Complex Systems and Enterprises
ELECTRIC PROPULSION				
8-Jan	1530 hrs	Orlando Ballroom L	EP-03	Cathodes
9-Jan	0930 hrs	Orlando Ballroom L	EP-04	Electric Propulsion Diagnostics I
9-Jan	0930 hrs	Rock Spring I & II	PDL-04/AMT-02/EP-05	Plasma and Laser Diagnostics I: Thomson Scattering and Others
9-Jan	1300 hrs	Orlando Ballroom L	EP-06	Electric Propulsion Diagnostics II

TECHNICAL SESSIONS



Engage with your community at these must-attend lectures

9-Jan	1530 hrs	Plaza Ballroom I	EP-07	Advanced Electrical Propulsion Concepts and Materials
9-Jan	1530 hrs	Orlando Ballroom L	EP-08	Thruster Plume and Erosion
10-Jan	0930 hrs	Orlando Ballroom L	EP-09	Electrospray Thruster Design and Performance
10-Jan	1300 hrs	Orlando Ballroom L	EP-10	Electrospray Thruster Modeling and Characterization
10-Jan	1300 hrs	Plaza Ballroom I	EP-11	Ion Engines and PPTs
10-Jan	1530 hrs	Orlando Ballroom L	EP-12	Air-Breathing Electric Propulsion
11-Jan	0930 hrs	Orlando Ballroom L	EP-14	Hall Thrusters I
11-Jan	0930 hrs	Rock Spring I & II	PDL-12/ASE-01/EP-13	Atmospheric & Space Plasmas for Aerodynamics & Propulsion
11-Jan	1300 hrs	Orlando Ballroom L	EP-15	Hall Thrusters II
11-Jan	1530 hrs	Orlando Ballroom L	EP-16	Electric Propulsion Test Facilities
12-Jan	1300 hrs	Orlando Ballroom L	EP-18	Advanced Concepts in Electric Propulsion
12-Jan	1300 hrs	Orlando Ballroom M	EP-19	Electric Propulsion Modeling
ELECTRIFIED AIRCRAFT TECHNOLOGY				
8-Jan	0930 hrs	Plaza Ballroom F	EAT-16	Electrified Aircraft Rolling Recap I
8-Jan	1300 hrs	Celebration 16	EAT-01	Electrified Aircraft Design
8-Jan	1400 hrs	Regency Ballroom Q	GTE-02/HIS-01/ EAT-12/ACD-28/TF-08/ INPSI-08/PC-37	★ Clean Aviation Program Highlights and Achievements
8-Jan	1530 hrs	Orlando Ballroom M	EAT-02/ACD-04/ GTE-04	Clean Aviation Special Session: Electrified Aircraft and Systems
9-Jan	0930 hrs	Plaza Ballroom D	ACD-30/EAT-15/ TF-09/STR-31/ GNC-52/DA-01/ GTE-27/INPSI-10	Clean Aviation Special Session: Emerging Technologies and Innovations
9-Jan	1530 hrs	Florida Ballroom A	GTE-15/IS-32/ HSABP-07/NFF-08/ PC-22/EAT-07/TF-11	Disruptive Innovations in Aerospace & Defense
10-Jan	0930 hrs	Plaza Ballroom F	ACD-08/EAT-14/ GTE-12/INPSI-09/ PC-38	Clean Aviation Special Session: Advanced Engine and Aircraft Configurations
10-Jan	1300 hrs	Plaza Ballroom J	ACD-09/EAT-05	Large Battery-Electric Aircraft: Did We Underestimate Their Potential?
10-Jan	1300 hrs	Celebration 16	EAT-04	Electric Aircraft Components
10-Jan	1300 hrs	Barrel Spring I	EAT-06	Propulsion, Architectures, and Systems Integration
10-Jan	1530 hrs	Plaza Ballroom F	EAT-03	NASA Spotlight Session on Electrified Aircraft Technology
11-Jan	0930 hrs	Plaza Ballroom F	GTE-17/EAT-08/PC-25/ ACD-14/INPSI-11	Clean Aviation Special Session: Future Propulsion Systems & Integration
11-Jan	1300 hrs	Plaza Ballroom F	ACD-05/APA-88/TF-02/ EAT-13/GTE-25	Clean Aviation Special Session: Innovative Aircraft Concepts and Novel Configurations
11-Jan	1300 hrs	Blue Spring II	EAT-09	Testing, Validation, Safety and Certification
11-Jan	1530 hrs	Manatee Spring II	EAT-10	System Dynamics, Modelling, & Control
11-Jan	1530 hrs	Blue Spring II	EAT-11	Thermal Management
12-Jan	0930 hrs	Barrel Spring I	GTE-22/ACD-21/ EAT-18/DE-09	Clean Aviation Special Session: Future Aircraft Architecture, Technology Integration & Novel Certification
12-Jan	1300 hrs	Orlando Ballroom N	EAT-17	Electrified Aircraft Rolling Recap II
ENERGETIC COMPONENTS AND SYSTEMS				
11-Jan	1300 hrs	Celebration 3	ECS-01	Energetic Components and Systems
FLIGHT TESTING				
8-Jan	0930 hrs	Rock Spring I & II	FT-01	Flight Testing I
8-Jan	1300 hrs	Rock Spring I & II	FT-02	Flight Testing II
FLUID DYNAMICS				
8-Jan	0930 hrs	Bayhill 30	FD-01/APA-02	Flow Control: Methods and Applications I
8-Jan	0930 hrs	Bayhill 31	FD-02	Leading-edge Vortices on Swept Wings: History, Progress, and Opportunities
8-Jan	0930 hrs	Bayhill 23	FD-03	RANS / LES / Hybrid Methods: Applications

TECHNICAL SESSIONS



Engage with your community at these must-attend lectures

8-Jan	0930 hrs	<i>Coral Spring II</i>	FD-04	RANS / LES / Hybrid Methods: High-Speed Flows
8-Jan	0930 hrs	<i>Bayhill 25</i>	FD-05	Vortex Dynamics I
8-Jan	0930 hrs	<i>Bayhill 29</i>	FD-06	Wing-Gust Interactions
8-Jan	1300 hrs	<i>Bayhill 31</i>	FD-08	Modal Analysis of Fluid Flows I
8-Jan	1300 hrs	<i>Bayhill 29</i>	FD-09	NATO AVT-346: Instability and Transition in Hypersonic Flows
8-Jan	1300 hrs	<i>Coral Spring II</i>	FD-10	RANS / LES / Hybrid Methods: Modeling
8-Jan	1300 hrs	<i>Bayhill 23</i>	FD-11	RANS / LES / Hybrid Methods: WMLES Applications
8-Jan	1300 hrs	<i>Bayhill 25</i>	FD-12	Vortex Dynamics II
8-Jan	1530 hrs	<i>Bayhill 30</i>	FD-13/APA-12	Flow Control: Methods and Applications II
8-Jan	1530 hrs	<i>Bayhill 31</i>	FD-14	Modal Analysis of Fluid Flows II
8-Jan	1530 hrs	<i>Bayhill 29</i>	FD-15	NATO AVT-346: Instability and Transition in Hypersonic Separated Flows
9-Jan	0930 hrs	<i>Bayhill 26</i>	APA-18/FD-19	Hypersonic Aerodynamics I
9-Jan	0930 hrs	<i>Bayhill 30</i>	FD-17/APA-17	Flow Control: Methods and Applications III
9-Jan	0930 hrs	<i>Bayhill 25</i>	FD-18	High-Speed Flow Control
9-Jan	0930 hrs	<i>Bayhill 29</i>	FD-20	Instability and Transition I
9-Jan	0930 hrs	<i>Bayhill 31</i>	FD-21	Uncertainty Quantification in Fluids Challenge Problem I
9-Jan	1300 hrs	<i>Bayhill 26</i>	APA-23/FD-24	Hypersonic Aerodynamics II
9-Jan	1300 hrs	<i>Bayhill 30</i>	FD-22/APA-22	Flow Control: Methods and Applications IV
9-Jan	1300 hrs	<i>Coral Spring I</i>	FD-23/SD-10	Fluid Structure Interactions I
9-Jan	1300 hrs	<i>Bayhill 29</i>	FD-25	Instability and Transition II
9-Jan	1300 hrs	<i>Bayhill 31</i>	FD-26	Uncertainty Quantification in Fluids Challenge Problem II
9-Jan	1530 hrs	<i>Bayhill 26</i>	APA-29/FD-29	Hypersonic Aerodynamics III
9-Jan	1530 hrs	<i>Coral Spring I</i>	FD-28/SD-12	Fluid Structure Interactions II
9-Jan	1530 hrs	<i>Bayhill 29</i>	FD-30	Instability and Transition III
9-Jan	1530 hrs	<i>Bayhill 31</i>	FD-31/MVCE-06	Moving Meshes and Mesh Adaptation
10-Jan	0930 hrs	<i>Bayhill 25</i>	APA-35/FD-33	Flow Control: Methods and Applications V
10-Jan	0930 hrs	<i>Bayhill 26</i>	APA-36/FD-35	Hypersonic Aerodynamics IV
10-Jan	0930 hrs	<i>Bayhill 31</i>	FD-32	Bio-Inspired and Low-Reynolds Number Flows I
10-Jan	0930 hrs	<i>Coral Spring I</i>	FD-34/SD-16	Fluid Structure Interactions III
10-Jan	0930 hrs	<i>Bayhill 29</i>	FD-36	Instability and Transition IV
10-Jan	0930 hrs	<i>Bayhill 30</i>	FD-38	Wall-Bounded and Free Shear Flows I
10-Jan	1300 hrs	<i>Bayhill 25</i>	APA-41/FD-40	Flow Control: Methods and Applications VI
10-Jan	1300 hrs	<i>Bayhill 26</i>	APA-42/FD-42	Hypersonic Aerodynamics V
10-Jan	1300 hrs	<i>Bayhill 31</i>	FD-39	Bio-Inspired and Low-Reynolds Number Flows II
10-Jan	1300 hrs	<i>Coral Spring I</i>	FD-41/SD-17	Fluid Structure Interactions IV
10-Jan	1300 hrs	<i>Bayhill 29</i>	FD-43	Instability and Transition V
10-Jan	1300 hrs	<i>Coral Spring II</i>	FD-44	RANS / LES / Hybrid Methods: Data-Driven Approaches
10-Jan	1300 hrs	<i>Bayhill 30</i>	FD-45	Wall-Bounded and Free Shear Flows II
10-Jan	1530 hrs	<i>Bayhill 25</i>	APA-48/FD-46	Flow Control: Methods and Applications VII
10-Jan	1530 hrs	<i>Coral Spring I</i>	FD-48	High Order Methods I
10-Jan	1530 hrs	<i>Bayhill 30</i>	FD-49/APA-49	Hypersonic Aerodynamics VI
10-Jan	1530 hrs	<i>Bayhill 31</i>	FD-51	Multiphase Flows
11-Jan	0930 hrs	<i>Bayhill 25</i>	APA-53/FD-52	Flow Control: Methods and Applications VIII
11-Jan	0930 hrs	<i>Coral Spring I</i>	FD-53	High Order Methods II
11-Jan	0930 hrs	<i>Bayhill 30</i>	FD-54/APA-54	Hypersonic Aerodynamics VII
11-Jan	0930 hrs	<i>Bayhill 29</i>	FD-55	Instability and Transition VI
11-Jan	0930 hrs	<i>Bayhill 31</i>	FD-56	Multiphase Flows: Applications
11-Jan	0930 hrs	<i>Coral Spring II</i>	FD-57	Neural Network Modeling for Fluid Flows
11-Jan	1300 hrs	<i>Celebration 9</i>	AMT-19/FD-60	High-Speed Measurements for Hypersonic Turbulent Boundary Layers
11-Jan	1300 hrs	<i>Bayhill 25</i>	APA-58/FD-58	Flow Control: Methods and Applications IX

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

11-Jan	1300 hrs	<i>Coral Spring I</i>	FD-59	High Order Methods III
11-Jan	1300 hrs	<i>Bayhill 30</i>	FD-61/APA-59	Hypersonic Aerodynamics VIII
11-Jan	1300 hrs	<i>Bayhill 29</i>	FD-62	Instability and Transition VII
11-Jan	1300 hrs	<i>Bayhill 31</i>	FD-63	Multiphase Flows: Cavitation and Bubble Dynamics
11-Jan	1300 hrs	<i>Coral Spring II</i>	FD-64	Turbulent Flows
11-Jan	1530 hrs	<i>Coral Spring I</i>	FD-66	High-Fidelity Applications I
11-Jan	1530 hrs	<i>Bayhill 31</i>	FD-68	Multiphase Flows: Droplets Dynamics
11-Jan	1530 hrs	<i>Bayhill 29</i>	FD-69	Shock Wave / Boundary Layer Interaction I
11-Jan	1530 hrs	<i>Coral Spring II</i>	FD-70	Turbulent Flows: Applications
11-Jan	1530 hrs	<i>Plaza Ballroom E</i>	SD-27/FD-65	Fluid Structure Interaction (Joint SD/FD)
12-Jan	0930 hrs	<i>Coral Spring I</i>	FD-71	High-Fidelity Applications II
12-Jan	0930 hrs	<i>Bayhill 29</i>	FD-73	Shock Wave / Boundary Layer Interaction II
12-Jan	0930 hrs	<i>Coral Spring II</i>	FD-74	Turbulent Flows: Compressible, Reacting, and Non-Equilibrium Flow
12-Jan	0930 hrs	<i>Bayhill 31</i>	FD-75	Turbulent Flows: Stratified and Atmospheric Flows
12-Jan	1300 hrs	<i>Coral Spring I</i>	FD-76	Compressible and High Speed Flow Applications I
12-Jan	1300 hrs	<i>Bayhill 30</i>	FD-77/APA-77	Hypersonic Aerodynamics IX
12-Jan	1300 hrs	<i>Bayhill 31</i>	FD-78	Hypersonic Turbulent Flows
12-Jan	1300 hrs	<i>Bayhill 29</i>	FD-79	Shock Wave / Boundary Layer Interaction III
12-Jan	1300 hrs	<i>Coral Spring II</i>	FD-80	Turbulence, Model Closures, and Surrogates I
12-Jan	1530 hrs	<i>Bayhill 30</i>	FD-82/APA-84	Hypersonic Aerodynamics X
12-Jan	1530 hrs	<i>Bayhill 29</i>	FD-83	Other Topics in Fluid Dynamics
12-Jan	1530 hrs	<i>Bayhill 31</i>	FD-84	Other Topics: Rarefied Flows, Jets, and Modeling Approaches
12-Jan	1530 hrs	<i>Coral Spring II</i>	FD-85	Turbulence, Model Closures, and Surrogates II
GAS TURBINE ENGINES				
8-Jan	0930 hrs	<i>Celebration 1</i>	GTE-01	GTE Combustors I
8-Jan	1300 hrs	<i>Celebration 1</i>	GTE-03	GTE Combustors II
8-Jan	1400 hrs	<i>Regency Ballroom Q</i>	GTE-02/HIS-01/ EAT-12/ACD-28/TF-08/ INPSI-08/PC-37	 Clean Aviation Program Highlights and Achievements
8-Jan	1530 hrs	<i>Bayhill 26</i>	APA-16/GT-01	Special Session - Integrated (Digital and Physical) Collaborative Experimentation: Mutual Accountability and Validation Dialog
8-Jan	1530 hrs	<i>Orlando Ballroom M</i>	EAT-02/ACD-04/ GTE-04	Clean Aviation Special Session: Electrified Aircraft and Systems
8-Jan	1530 hrs	<i>Celebration 1</i>	GTE-05	GTE Controls and Operations
9-Jan	0930 hrs	<i>Plaza Ballroom D</i>	ACD-30/EAT-15/ TF-09/STR-31/ GNC-52/DA-01/ GTE-27/INPSI-10	Clean Aviation Special Session: Emerging Technologies and Innovations
9-Jan	0930 hrs	<i>Celebration 2</i>	GTE-06	GTE Zero Emission I
9-Jan	1300 hrs	<i>Celebration 2</i>	GTE-07	GTE Zero Emission II
9-Jan	1300 hrs	<i>Celebration 1</i>	GTE-09	Workshop: GTE Transient Simulation and Controls Basics
9-Jan	1300 hrs	<i>Orlando Ballroom M</i>	PC-16/GTE-08	Sustainable Aviation Fuels Panel: Moving towards 100% SAF
9-Jan	1530 hrs	<i>Celebration 1</i>	GTE-10	GTE Design and Cycles
9-Jan	1530 hrs	<i>Celebration 2</i>	GTE-11	Zero Emission Aviation - A Status Report on Global Efforts
9-Jan	1530 hrs	<i>Florida Ballroom A</i>	GTE-15/IS-32/ HSABP-07/NFF-08/ PC-22/EAT-07/TF-11	Disruptive Innovations in Aerospace & Defense
10-Jan	0930 hrs	<i>Plaza Ballroom F</i>	ACD-08/EAT-14/ GTE-12/INPSI-09/ PC-38	Clean Aviation Special Session: Advanced Engine and Aircraft Configurations
10-Jan	0930 hrs	<i>Celebration 1</i>	GTE-13	GTE Performance
10-Jan	1300 hrs	<i>Celebration 1</i>	GTE-14	GTE Systems and Manufacturing
10-Jan	1300 hrs	<i>Plaza Ballroom D</i>	ACD-27/TF-10/GTE-24/ STR-33	Clean Aviation Special Session: Fast Rotorcraft

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

10-Jan	1530 hrs	Celebration 1	GTE-16	Turbomachinery
11-Jan	0930 hrs	Plaza Ballroom F	GTE-17/EAT-08/PC-25/ACD-14/INPSI-11	Clean Aviation Special Session: Future Propulsion Systems & Integration
11-Jan	0930 hrs	Bayhill 20	GTE-18	GTE Fuel Systems
11-Jan	0930 hrs	Celebration 1	GTE-19	★ Tutorial: Gas Turbine Engines for Supersonic Flight
11-Jan	1300 hrs	Plaza Ballroom F	ACD-05/APA-88/TF-02/EAT-13/GTE-25	Clean Aviation Special Session: Innovative Aircraft Concepts and Novel Configurations
11-Jan	1530 hrs	Plaza Ballroom F	AFM-28/GTE-26/ACD-29/STR-12	Clean Aviation Special Session: Integrated Airframe Design Technology and Advanced Structures/Systems
12-Jan	0930 hrs	Celebration 1	GTE-21	GTE Heat Transfer and Thermal Management I
12-Jan	0930 hrs	Barrel Spring I	GTE-22/ACD-21/EAT-18/DE-09	Clean Aviation Special Session: Future Aircraft Architecture, Technology Integration & Novel Certification
12-Jan	1300 hrs	Celebration 1	GTE-23	GTE Heat Transfer and Thermal Management II
12-Jan	1530 hrs	Celebration 9	AMT-32/GT-19	Optical and Laser Diagnostics for Facility Characterization
GREEN ENGINEERING				
8-Jan	0930 hrs	Blue Spring I	GRE-01	Green Engineering I
9-Jan	0930 hrs	Blue Spring I	GRE-02	Green Engineering II
10-Jan	0930 hrs	Blue Spring II	GRE-03	Green Engineering III
GROUND TESTING				
9-Jan	0930 hrs	Bayhill 32	APA-19/GT-03	Integration of Computational and Empirical Experimentation Techniques
9-Jan	0930 hrs	Manatee Spring II	GT-02	Advancements in Ground Test Analysis and Methodologies
9-Jan	0930 hrs	Bayhill 22	GT-04	Showcase of National Full-Scale Aerodynamics Complex Flow Characterization of the 40- by 80-foot Wind Tunnel
9-Jan	1300 hrs	Bayhill 22	GT-05	★ Introduction to Ground Test Facility Capabilities (Special Session)
9-Jan	1530 hrs	Bayhill 22	GT-06	Showcase on Model Angle Measurement Techniques (Special Session)
10-Jan	0930 hrs	Bayhill 22	GT-07	National Partnership for Aeronautical Ground Testing (NPAT) Wind Tunnel Community Forum
10-Jan	1300 hrs	Bayhill 22	GT-08	International Summary on High Reynolds Number Testing (Special Session)
11-Jan	0930 hrs	Bayhill 21	GT-10	Ground Test Workforce Challenges: Retention
11-Jan	1300 hrs	Bayhill 21	GT-11	Characterization of New and Existing Wind Tunnel Facility Performance and Capabilities
11-Jan	1530 hrs	Bayhill 21	GT-12	Highlights and Advancements in Additive Manufacturing for Ground Test Applications (Special Session)
12-Jan	0930 hrs	Bayhill 22	GT-13	Expanding Test Capabilities in Existing Ground Test Facilities
12-Jan	0930 hrs	Bayhill 21	GT-14	International Showcase of Model Deformation Measurement Systems I (Special Session)
12-Jan	1300 hrs	Bayhill 22	GT-15	Development and Commissioning of New Test Facilities and Operational Modes
12-Jan	1300 hrs	Bayhill 21	GT-16	International Showcase of Model Deformation Measurement Systems II (Special Session)
12-Jan	1530 hrs	Bayhill 22	GT-17	Development and Refinement of Advanced Measurement Technologies in Ground Test
12-Jan	1530 hrs	Bayhill 21	GT-18	Novel Applications in Model Development, Test Techniques, and Capabilities in Ground Test
GUIDANCE, NAVIGATION, AND CONTROL				
8-Jan	0930 hrs	Bayhill 20	GNC-01/AFM-01	Entry, Descent and Landing GN&C Technology I - Overviews
8-Jan	0930 hrs	Bayhill 24	GNC-02/IS-02	GN&C Architectures for Autonomous Systems I
8-Jan	0930 hrs	Bayhill 21	GNC-03	Spacecraft and Launch Guidance Navigation and Control I
8-Jan	0930 hrs	Bayhill 19	GNC-04	Using Machine Learning in Safety-Critical Systems: Regulator and Technologist Perspectives
8-Jan	1300 hrs	Bayhill 20	GNC-05/AFM-02	Entry, Descent and Landing GN&C Technology II - Terrain Mapping and Map-Relative Navigation
8-Jan	1300 hrs	Bayhill 24	GNC-06/IS-06	GN&C Architectures for Autonomous Systems II
8-Jan	1300 hrs	Bayhill 21	GNC-07	Spacecraft and Launch Guidance Navigation and Control II

TECHNICAL SESSIONS



Engage with your community at these must-attend lectures

8-Jan	1530 hrs	Bayhill 20	GNC-08/AFM-03	Entry, Descent and Landing GN&C Technology III - PL&HA Sensors & Testing
8-Jan	1530 hrs	Bayhill 21	GNC-11	Spacecraft and Launch Guidance Navigation and Control III
8-Jan	1530 hrs	Bayhill 24	GNC-15	Navigation, Estimation, Sensing and Tracking I
8-Jan	1530 hrs	Bayhill 23	GNC-28	Control Techniques for AAM Autonomy
8-Jan	1530 hrs	Coral Spring II	MST-03/GNC-10	Modeling and Simulation for Autonomous Guidance, Navigation and Control I
9-Jan	0930 hrs	Plaza Ballroom D	ACD-30/EAT-15/ TF-09/STR-31/ GNC-52/DA-01/ GTE-27/INPSI-10	Clean Aviation Special Session: Emerging Technologies and Innovations
9-Jan	0930 hrs	Bayhill 19	GNC-12	Autonomy and Artificial Intelligence for Aerospace Vehicle GNC I
9-Jan	0930 hrs	Bayhill 20	GNC-13/AFM-04/ SFM-11	Entry, Descent and Landing GN&C Technology IV - Aerocapture for Ice Giants I
9-Jan	0930 hrs	Bayhill 24	GNC-16	Towards Contingency Management for Autonomous Flight
9-Jan	0930 hrs	Bayhill 21	GNC-29	Control Theory for Aerospace Applications I
9-Jan	0930 hrs	Coral Spring II	MST-05/GNC-14	Modeling and Simulation for Autonomous Guidance, Navigation and Control II
9-Jan	1300 hrs	Bayhill 19	GNC-17	Autonomy and Artificial Intelligence for Aerospace Vehicle GNC II
9-Jan	1300 hrs	Bayhill 20	GNC-18/AFM-05	Entry, Descent and Landing GN&C Technology V - Aerocapture for Ice Giants II
9-Jan	1300 hrs	Bayhill 23	GNC-19/IS-14	Intelligent Systems in Guidance Navigation and Control
9-Jan	1300 hrs	Bayhill 21	GNC-21	Navigation, Estimation, Sensing and Tracking II
9-Jan	1300 hrs	Coral Spring II	MST-07/GNC-20	Modeling and Simulation for Autonomous Guidance, Navigation and Control III
9-Jan	1300 hrs	Celebration 15	NDA-08/GNC-23	Uncertainty Quantification and Analysis of Complex Aerospace Systems (joint NDA/GNC)
9-Jan	1300 hrs	Bayhill 18	SFM-15/GNC-22	Space Situational Awareness I
9-Jan	1530 hrs	Bayhill 24	GNC-24	Enabling Technologies for AAM Autonomy
9-Jan	1530 hrs	Bayhill 20	GNC-25/AFM-06	Entry, Descent and Landing GN&C Technology VI - Entry Guidance & Entry Systems
9-Jan	1530 hrs	Bayhill 21	GNC-26	Navigation, Estimation, sensing and Tracking III
9-Jan	1530 hrs	Celebration 11	SATS-03/GNC-27	Small Satellite Guidance, Navigation and Control
10-Jan	0930 hrs	Orlando Ballroom N	GNC-31	★GNC Technical Lecture and Social
10-Jan	1300 hrs	Bayhill 20	GNC-30/AFM-08	Entry, Descent and Landing GN&C Technology VII - PL&HA Navigation and Powered-Descent Guidance
10-Jan	1300 hrs	Bayhill 21	GNC-32	Control Theory for Aerospace Applications II
10-Jan	1300 hrs	Bayhill 27	GNC-34	Path and Trajectory Topics
10-Jan	1300 hrs	Silver Spring I	SFM-25/GNC-35	Space Situational Awareness II
10-Jan	1530 hrs	Bayhill 19	GNC-33/AFM-11	Entry, Descent and Landing GN&C Technology VIII - Powered-Descent Guidance
10-Jan	1530 hrs	Manatee Spring II	GNC-36	Graduate Student Paper Competition
11-Jan	0930 hrs	Bayhill 23	GNC-38	Missile and Trans-Atmospheric Vehicle GN&C I
11-Jan	0930 hrs	Bayhill 24	GNC-39	Motion Planning, Sensing, and Operations
11-Jan	0930 hrs	Celebration 4	LP-14/GNC-37	Low-g Slosh Considerations Perspectives from Various Subsystem Viewpoints
11-Jan	0930 hrs	Silver Spring I	SFM-30/GNC-40	Space Situational Awareness III
11-Jan	1300 hrs	Bayhill 24	GNC-41	High Altitude/Endurance/Flutter
11-Jan	1300 hrs	Bayhill 23	GNC-42	Missile and Trans-Atmospheric Vehicle GN&C II
11-Jan	1530 hrs	Bayhill 23	GNC-43	Missile and Trans-Atmospheric Vehicle GN&C III
11-Jan	1530 hrs	Bayhill 24	GNC-44	Urban/Small/Rotary Wing Aircraft Control
12-Jan	0930 hrs	Bayhill 17	DA-06/GNC-51/ MST-11/UAS-11/IS-33	Clean Aviation Special Session: Next Generation Aircraft Cockpits, Systems and Avionics

TECHNICAL SESSIONS



Engage with your community at these must-attend lectures

12-Jan	0930 hrs	Bayhill 23	GNC-45	Nonlinear Dynamic Inversion Control
12-Jan	1300 hrs	Bayhill 17	GNC-46	Distributed Guidance, Navigation and Control I
12-Jan	1300 hrs	Bayhill 23	GNC-47	Refueling/Formation Control/LPV
12-Jan	1530 hrs	Bayhill 23	GNC-49	Aircraft Control Topics
12-Jan	1530 hrs	Bayhill 17	GNC-50	Distributed Guidance, Navigation and Control II
HIGH-SPEED AIR-BREATHING PROPULSION				
8-Jan	0930 hrs	Plaza Ballroom K	HSABP-01	Inlets, Isolators and Nozzles
9-Jan	0930 hrs	Plaza Ballroom K	HSABP-03	High Fidelity Combustion Modelling for High Speed Air-Breathing Propulsion I
9-Jan	1300 hrs	Plaza Ballroom K	HSABP-04	High Fidelity Combustion Modelling for High Speed Air-Breathing Propulsion II
9-Jan	1530 hrs	Florida Ballroom A	GTE-15/IS-32/ HSABP-07/NFF-08/ PC-22/EAT-07/TF-11	Disruptive Innovations in Aerospace & Defense
9-Jan	1530 hrs	Plaza Ballroom K	HSABP-05	Numerical Analysis of Scramjet Engines
10-Jan	1300 hrs	Plaza Ballroom K	HSABP-06	Ground and Flight Testing for High Speed Air-Breathing Propulsion
10-Jan	1530 hrs	Plaza Ballroom K	HSABP-08	Scramjet and Alternative High Speed Engine Design, Thermodynamics and Optimization
11-Jan	0930 hrs	Plaza Ballroom K	HSABP-09	Fast People Doing Fast Things - New Topics and Careers in High Speed Air-Breathing Propulsion
11-Jan	1300 hrs	Celebration 8	AMT-20/HASBP-11	Instrumentation & Diagnostic Techniques for High-Speed Air-Breathing Propulsion
11-Jan	1300 hrs	Plaza Ballroom K	HSABP-12	New Generation Materials for Extreme Environments
HISTORY				
8-Jan	1400 hrs	Regency Ballroom Q	GTE-02/HIS-01/ EAT-12/ACD-28/TF-08/ INPSI-08/PC-37	★ Clean Aviation Program Highlights and Achievements
11-Jan	0930 hrs	Blue Spring I	HIS-02	AIAA and Early Aviation History
11-Jan	1300 hrs	Blue Spring I	HIS-03	Aviation and Flight History
12-Jan	0930 hrs	Celebration 11	HIS-04	Space History
HUMAN MACHINE TEAMING				
8-Jan	0930 hrs	Peacock Spring	HMT-01	Managing Uncertainties in Cyber-Physical Human-Machine Decision-Making I (Joint AIAA-SIAM Session)
8-Jan	1300 hrs	Peacock Spring	HMT-02	Managing Uncertainties in Cyber-Physical Human-Machine Decision-Making II (Joint AIAA-SIAM Session)
8-Jan	1530 hrs	Peacock Spring	HMT-03	Human-Machine Teaming in Multi-Agent Systems
10-Jan	0930 hrs	Peacock Spring	HMT-04	Human-Machine Teaming: Models, Anomalies, and Evaluation
10-Jan	1300 hrs	Peacock Spring	HMT-05	Human-Machine Teaming: Decision Support Tools and Interfaces
HYBRID ROCKETS				
9-Jan	1300 hrs	Celebration 8	HR-01	Combustion
9-Jan	1530 hrs	Celebration 8	HR-02	Fuel Regression
10-Jan	1300 hrs	Celebration 15	HR-03	Hybrid Rocket Design
INFORMATION AND COMMAND AND CONTROL SYSTEMS				
9-Jan	0930 hrs	Peacock Spring	ICC-01	Information and C2 Systems I
9-Jan	1300 hrs	Peacock Spring	ICC-02	Information and C2 Systems II
9-Jan	1530 hrs	Peacock Spring	ICC-03	Information and C2 Systems III
INLETS, NOZZLES, AND PROPULSION SYSTEMS INTEGRATION				
8-Jan	1400 hrs	Regency Ballroom Q	GTE-02/HIS-01/ EAT-12/ACD-28/TF-08/ INPSI-08/PC-37	★ Clean Aviation Program Highlights and Achievements
9-Jan	0930 hrs	Plaza Ballroom D	ACD-30/EAT-15/ TF-09/STR-31/ GNC-52/DA-01/ GTE-27/INPSI-10	Clean Aviation Special Session: Emerging Technologies and Innovations
9-Jan	0930 hrs	Celebration 3	INPSI-01	6th Propulsion Aerodynamics Workshop Special Session - Nozzle

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

9-Jan	1300 hrs	<i>Celebration 3</i>	INPSI-02	6th Propulsion Aerodynamics Workshop Special Session - Inlet
9-Jan	1530 hrs	<i>Celebration 3</i>	INPSI-03	Embedded Inlets and Fan Distortion Effects
10-Jan	0930 hrs	<i>Plaza Ballroom F</i>	ACD-08/EAT-14/GTE-12/INPSI-09/PC-38	Clean Aviation Special Session: Advanced Engine and Aircraft Configurations
10-Jan	0930 hrs	<i>Celebration 3</i>	INPSI-04/APA-38	Inlet Design and Performance
10-Jan	1300 hrs	<i>Celebration 3</i>	INPSI-05/APA-44	Nozzle Design and Performance
10-Jan	1530 hrs	<i>Celebration 3</i>	INPSI-06/APA-52	Test Rig Design and Measurements in High-Speed Flows
11-Jan	0930 hrs	<i>Plaza Ballroom F</i>	GTE-17/EAT-08/PC-25/ACD-14/INPSI-11	Clean Aviation Special Session: Future Propulsion Systems & Integration
INTELLIGENT SYSTEMS				
8-Jan	0930 hrs	<i>Bayhill 24</i>	GNC-02/IS-02	GN&C Architectures for Autonomous Systems I
8-Jan	0930 hrs	<i>Rainbow Spring II</i>	IS-01	Advances in Intelligent Fault-Tolerant Systems & Applications I
8-Jan	0930 hrs	<i>Rainbow Spring I</i>	IS-03	Multi-agent Control and Coordination
8-Jan	1300 hrs	<i>Bayhill 24</i>	GNC-06/IS-06	GN&C Architectures for Autonomous Systems II
8-Jan	1300 hrs	<i>Rainbow Spring I</i>	IS-04	Advancement in AAM for Safe Integration in NAS
8-Jan	1300 hrs	<i>Rainbow Spring II</i>	IS-05	Advances in Intelligent Fault-Tolerant Systems & Applications II
8-Jan	1530 hrs	<i>Rainbow Spring II</i>	IS-08	Guidance Navigation and Control Architectures for Autonomous Systems I
8-Jan	1530 hrs	<i>Rainbow Spring I</i>	IS-09	Intelligent Systems for Air Traffic Management
9-Jan	0930 hrs	<i>Rainbow Spring II</i>	IS-10	Guidance Navigation and Control Architectures for Autonomous Systems II
9-Jan	0930 hrs	<i>Rainbow Spring I</i>	IS-11	Systems Health Management
9-Jan	1300 hrs	<i>Bayhill 23</i>	GNC-19/IS-14	Intelligent Systems in Guidance Navigation and Control
9-Jan	1300 hrs	<i>Bayhill 24</i>	IS-12	Autonomy
9-Jan	1300 hrs	<i>Rainbow Spring I</i>	IS-15	Trusted Space Autonomy I
9-Jan	1530 hrs	<i>Florida Ballroom A</i>	GTE-15/IS-32/ HSABP-07/NFF-08/ PC-22/EAT-07/TF-11	Disruptive Innovations in Aerospace & Defense
9-Jan	1530 hrs	<i>Rainbow Spring II</i>	IS-16	Guidance Navigation and Control Architectures for Autonomous Systems III
9-Jan	1530 hrs	<i>Rainbow Spring I</i>	IS-17	Trusted Space Autonomy II
10-Jan	0930 hrs	<i>Rainbow Spring I</i>	IS-18	Distributing Sensing as Enabling Technology for Autonomous Air Mobility I
10-Jan	0930 hrs	<i>Rainbow Spring II</i>	IS-19	Guidance Navigation and Control Architectures for Autonomous Systems IV
10-Jan	1300 hrs	<i>Plaza Ballroom F</i>	IS-20	 Distinguished Lecture: Intelligent Systems Award
10-Jan	1530 hrs	<i>Rainbow Spring I</i>	IS-21	Distributing Sensing as Enabling Technology for Autonomous Air Mobility II
10-Jan	1530 hrs	<i>Rainbow Spring II</i>	IS-22	Guidance Navigation and Control Architectures for Autonomous Systems V
11-Jan	0930 hrs	<i>Rainbow Spring II</i>	IS-23	Distributing Sensing as Enabling Technology for Autonomous Air Mobility III
11-Jan	1300 hrs	<i>Rainbow Spring II</i>	IS-24	Adaptive & Intelligent Control I
11-Jan	1530 hrs	<i>Rainbow Spring II</i>	IS-25	Adaptive & Intelligent Control II
11-Jan	1530 hrs	<i>Celebration 9</i>	IS-26	Fault Tolerant Control
12-Jan	0930 hrs	<i>Bayhill 17</i>	DA-06/GNC-51/ MST-11/UAS-11/IS-33	Clean Aviation Special Session: Next Generation Aircraft Cockpits, Systems and Avionics
12-Jan	0930 hrs	<i>Rainbow Spring II</i>	IS-28	Human - Automation Interaction
12-Jan	1300 hrs	<i>Celebration 2</i>	IS-29	Trajectory and Path Planning I
12-Jan	1300 hrs	<i>Rainbow Spring II</i>	IS-30	Vision Aided Autonomy
12-Jan	1530 hrs	<i>Celebration 2</i>	IS-31	Trajectory and Path Planning II

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

LIQUID PROPULSION				
8-Jan	0930 hrs	Celebration 4	LP-01	Combustor Design, Analysis and Testing I
8-Jan	0930 hrs	Celebration 11	LP-02	Liquid Propulsion Cryogenics I: Boiling
8-Jan	1300 hrs	Celebration 4	LP-03	Combustor Design, Analysis and Testing II
8-Jan	1300 hrs	Celebration 11	LP-04	Liquid Propulsion Cryogenics II: Chilling Considerations
8-Jan	1530 hrs	Celebration 4	LP-05	Combustor Design, Analysis and Testing III
8-Jan	1530 hrs	Celebration 11	LP-06	Liquid Propulsion Cryogenics III: Pressurization
9-Jan	0930 hrs	Celebration 4	LP-07	★ Introduction to Additive Manufacturing for Propulsion and Energy Applications
9-Jan	1300 hrs	Celebration 4	LP-08	Liquid Propulsion Advanced Manufacturing: Additive I
9-Jan	1530 hrs	Celebration 4	LP-09	Liquid Propulsion Advanced Manufacturing: Additive II and Other Hardware
10-Jan	0930 hrs	Celebration 4	LP-10	Injector Design, Analysis and Testing I
10-Jan	0930 hrs	Celebration 11	LP-11	Launch Vehicle Liquid Propulsion Systems
10-Jan	1300 hrs	Celebration 4	LP-12	Green and Non-Toxic Propellants I and Injector Design, Analysis and Testing II
10-Jan	1530 hrs	Celebration 4	LP-13	Green and Non-Toxic Propellants II
11-Jan	0930 hrs	Celebration 4	LP-14/GNC-37	Low-g Slosh Considerations Perspectives from Various Subsystem Viewpoints
11-Jan	1300 hrs	Celebration 11	LP-15	Injector Design, Analysis and Testing III
11-Jan	1300 hrs	Celebration 4	LP-16/EXPL-20	Propellant Management, Gauging and Slosh
12-Jan	0930 hrs	Celebration 4	LP-19	In-Space Liquid Propulsion Systems I
12-Jan	1300 hrs	Celebration 4	LP-20	In-Space Liquid Propulsion Systems II
MATERIALS				
8-Jan	0930 hrs	Barrel Spring II	AS-04/STR-09/SD-05/SCS-04/MAT-33	Design and Analysis of Structures and Materials in Extreme Environments
8-Jan	0930 hrs	Barrel Spring I	AS-13/ACD-10/STR-18/MAT-32	Artificial Intelligence and Machine Learning for Materials and Structures I
8-Jan	1300 hrs	Barrel Spring I	AS-16/STR-25/DE-08/MAT-34	Artificial Intelligence and Machine Learning for Materials and Structures II
8-Jan	1300 hrs	Plaza Ballroom D	MAT-01/STR-01	Structural Optimization Application for Aircraft and Spacecraft I
8-Jan	1300 hrs	Barrel Spring II	MAT-04	High Performance Materials for Extreme Environments
8-Jan	1300 hrs	Plaza Ballroom J	MAT-24/STR-23	Structural Analysis, Design, Testing and Manufacturing (Joint DE/STR)
8-Jan	1530 hrs	Plaza Ballroom I	MAT-02/STR-03	Composite Structural Analysis, Design, Testing, and Manufacturing I
8-Jan	1530 hrs	Florida Ballroom A	AS-21/MAT-03/STR-04	Inter-Agency Panel: Emerging Technologies in Aerospace Materials and Structures
8-Jan	1530 hrs	Barrel Spring I	MAT-05	Fatigue and Fracture
8-Jan	1530 hrs	Plaza Ballroom D	MAT-07/STR-11	Structural Optimization Application for Aircraft and Spacecraft II
8-Jan	1530 hrs	Florida Ballroom B	SCS-03/MAT-06	High Strain Composite Materials and Structures
9-Jan	0930 hrs	Florida Ballroom A	MAT-09/ICME-01	★ ICME, Past, Present & Future
9-Jan	0930 hrs	Barrel Spring II	MAT-10	Nanostructured Materials I
9-Jan	1030 hrs	Florida Ballroom A	MAT-26	Materials Postdoc & R&D Early-Career Mentorship: Academia, Government, and Industry Insights
9-Jan	1300 hrs	Plaza Ballroom F	ACD-32/DE-12/STR-21/MAT-30	Clean Aviation Special Session: Next Generation Multifunctional Fuselage Demonstrator I
9-Jan	1300 hrs	Barrel Spring I	MAT-11	Multiscale Modeling
9-Jan	1300 hrs	Barrel Spring II	MAT-12	Nanostructured Materials II
9-Jan	1530 hrs	Plaza Ballroom F	ACD-33/DE-10/MAT-31/STR-22	Clean Aviation Special Session: Next Generation Multifunctional Fuselage Demonstrator II
9-Jan	1530 hrs	Barrel Spring I	MAT-13	Multifunctional Materials for Aerospace
9-Jan	1530 hrs	Barrel Spring II	MAT-14	Testing and Characterization of Materials I
10-Jan	0930 hrs	Barrel Spring II	MAT-16	Testing and Characterization of Materials II
10-Jan	1530 hrs	Barrel Spring I	MAT-18	Materials for Additive Manufacturing

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

10-Jan	1530 hrs	Barrel Spring II	MAT-19	NASA 2040 Vision I - Batteries (Invited Presentation Session)
10-Jan	1530 hrs	Celebration 15	SUR-01/MAT-23	Survivability and Aerospace Materials
11-Jan	0930 hrs	Barrel Spring II	MAT-21	NASA 2040 Vision II - Composites (Invited Presentation Session)
11-Jan	0930 hrs	Celebration 16	SD-23/MAT-22	Special Session: International Collaborations Advancing Materials and Combustion
11-Jan	0930 hrs	Celebration 15	SUR-02/MAT-23	Survivability and Aerospace Materials
11-Jan	1300 hrs	Barrel Spring II	MAT-25	NASA 2040 Vision III - Surrogate Modeling (Invited Presentation Session)
11-Jan	1300 hrs	Barrel Spring I	STR-27/MAT-35	3D Woven Composites for Materials and Structures
11-Jan	1530 hrs	Barrel Spring II	MAT-27/ICME-02	NASA 2040 Vision IV - ICME (Invited Presentation Session)
12-Jan	0930 hrs	Barrel Spring II	MAT-28	Dynamic Failure of Aerospace Materials and Structures
12-Jan	0930 hrs	Orlando Ballroom M	STR-17/SD-18/MAT-17	Structural Joints and Repairs
MESHING, VISUALIZATION, AND COMPUTATIONAL ENVIRONMENTS				
8-Jan	0930 hrs	Bayhill 22	MVCE-01	Geometry Modeling, Visualization and Computational Environments
8-Jan	1300 hrs	Bayhill 22	MVCE-02	Mesh Generation Methods for Structured, Unstructured and Overset Meshes
8-Jan	1530 hrs	Bayhill 22	MVCE-03	Visualization Challenges for Higher-Order Solutions and Grids
9-Jan	0930 hrs	Bayhill 23	MVCE-04/NDA-05	Adaptive Meshing, Error Estimation, and Uncertainty Quantification
9-Jan	1300 hrs	Celebration 16	MVCE-05/NDA-07	Modern Meshing Techniques
9-Jan	1530 hrs	Bayhill 31	FD-31/MVCE-06	Moving Meshes and Mesh Adaptation
10-Jan	0930 hrs	Bayhill 32	APA-34/MVCE-07	CAPS Special Session
11-Jan	0930 hrs	Celebration 7	CFD2030-04/ MVCE-08	Large-Scale Meshes for Complex Aircraft Configurations
MODELING AND SIMULATION TECHNOLOGIES				
8-Jan	0930 hrs	Coral Spring I	MST-01	Simulation-Based Software Development and Verification
8-Jan	1300 hrs	Coral Spring I	MST-02	Modeling and Simulation of Air and Space Vehicle Dynamics, Systems, and Environments I
8-Jan	1530 hrs	Coral Spring II	MST-03/GNC-10	Modeling and Simulation for Autonomous Guidance, Navigation and Control I
8-Jan	1530 hrs	Coral Spring I	MST-04	Modeling and Simulation of Air and Space Vehicle Dynamics, Systems, and Environments II
9-Jan	0930 hrs	Coral Spring II	MST-05/GNC-14	Modeling and Simulation for Autonomous Guidance, Navigation and Control II
9-Jan	0930 hrs	Coral Spring I	MST-06	Modeling and Simulation of Air and Space Vehicle Dynamics, Systems, and Environments III
9-Jan	1300 hrs	Coral Spring II	MST-07/GNC-20	Modeling and Simulation for Autonomous Guidance, Navigation and Control III
10-Jan	1300 hrs	Barrel Spring II	MST-08	Modeling and Simulation for Certification and Qualification
10-Jan	1530 hrs	Bayhill 22	MST-09	Human-in-the-Loop Simulation
11-Jan	0930 hrs	Bayhill 22	MST-10	Modeling and Simulation of Uninhabited Aerial Systems
12-Jan	0930 hrs	Bayhill 17	DA-06/GNC-51/ MST-11/UAS-11/IS-33	Clean Aviation Special Session: Next Generation Aircraft Cockpits, Systems and Avionics
MULTIDISCIPLINARY DESIGN OPTIMIZATION				
8-Jan	0930 hrs	Florida Ballroom C	MDO-01	Aerodynamic Design Optimization
8-Jan	0930 hrs	Celebration 15	NDA-01/MDO-02	Design Under Uncertainty
8-Jan	1300 hrs	Florida Ballroom C	MDO-03	Application of MDO for Vehicle Design I
8-Jan	1530 hrs	Plaza Ballroom F	MDO-05	Shape and Topology Optimization
9-Jan	0930 hrs	Florida Ballroom C	MDO-06	Application of MDO for Vehicle Design II
9-Jan	0930 hrs	Plaza Ballroom F	MDO-07	Physics-Informed Machine Learning
9-Jan	1300 hrs	Florida Ballroom C	MDO-08	Metamodeling, Reduced Order Models, and Approximation Methods I
9-Jan	1530 hrs	Florida Ballroom C	MDO-09	Machine Learning and Optimization
10-Jan	0930 hrs	Florida Ballroom C	MDO-10	Metamodeling, Reduced Order Models, and Approximation Methods II
10-Jan	1530 hrs	Florida Ballroom C	MDO-11	Emerging Methods, Algorithms, and Software Development in MDO I
11-Jan	0930 hrs	Florida Ballroom C	MDO-12	Emerging Methods, Algorithms, and Software Development in MDO II

TECHNICAL SESSIONS




Engage with your community at these must-attend lectures

11-Jan	1300 hrs	Florida Ballroom C	MDO-13	Emerging Methods, Algorithms, and Software Development in MDO III
11-Jan	1530 hrs	Florida Ballroom A	MDO-14	Bridging the Gap Between MDO Applications in Academia and Industry
11-Jan	1530 hrs	Florida Ballroom C	MDO-15	MDO for Aeroelasticity and Fluid-Structure Interaction I
12-Jan	0930 hrs	Celebration 3	MDO-16	MDO for Aeroelasticity and Fluid-Structure Interaction II
12-Jan	1300 hrs	Barrel Spring II	MDO-17	Special Session: High-Fidelity Aeroelastic Design Optimization Applications and Benchmarks
12-Jan	1530 hrs	Barrel Spring II	MDO-18	Special Sessions on Structural Optimization Applications and High-Fidelity Benchmarks
NON-DETERMINISTIC APPROACHES				
8-Jan	0930 hrs	Celebration 15	NDA-01/MDO-02	Design Under Uncertainty
8-Jan	0930 hrs	Orlando Ballroom N	NDA-02	★Non-Deterministic Approaches Lecture
8-Jan	1300 hrs	Celebration 15	NDA-03	Model Order Reduction & Surrogate Modeling
8-Jan	1530 hrs	Celebration 15	NDA-04	Probabilistic Machine Learning for Uncertainty Quantification in Complex Systems (Joint NDA/MDO)
9-Jan	0930 hrs	Bayhill 23	MVCE-04/NDA-05	Adaptive Meshing, Error Estimation, and Uncertainty Quantification
9-Jan	0930 hrs	Celebration 15	NDA-06	Reliability and Risk Analysis Methods and Applications
9-Jan	1300 hrs	Celebration 16	MVCE-05/NDA-07	Modern Meshing Techniques
9-Jan	1300 hrs	Celebration 15	NDA-08/GNC-23	Uncertainty Quantification and Analysis of Complex Aerospace Systems (joint NDA/GNC)
9-Jan	1530 hrs	Celebration 15	NDA-09	Uncertainty Quantification and Model Validation for ICME (joint MAT/NDA)
NUCLEAR AND FUTURE FLIGHT PROPULSION				
9-Jan	1530 hrs	Orlando Ballroom M	NFF-01	Nuclear Thermal Propulsion I
9-Jan	1530 hrs	Florida Ballroom A	GTE-15/IS-32/ HSABP-07/NFF-08/ PC-22/EAT-07/TF-11	Disruptive Innovations in Aerospace & Defense
10-Jan	0930 hrs	Orlando Ballroom M	NFF-02	Nuclear Thermal Propulsion II
10-Jan	1300 hrs	Orlando Ballroom M	NFF-03	Nuclear Fusion Propulsion
10-Jan	1530 hrs	Orlando Ballroom M	NFF-04	Future Flight Propulsion
11-Jan	0930 hrs	Orlando Ballroom M	NFF-05	Laying the Foundations for a Paradigm Shift from Conventional to Advanced Propulsion Technologies: Part I (Current and Future Research and Development)
11-Jan	1300 hrs	Orlando Ballroom M	NFF-06	Laying the Foundations for a Paradigm Shift from Conventional to Advanced Propulsion Technologies: Part II (Funding Mechanisms and Streams)
11-Jan	1530 hrs	Orlando Ballroom M	PC-31/NFF-07	Laying the Foundations for a Paradigm Shift from Conventional to Advanced Propulsion Technologies: Part III (Nuclear Thermal Propulsion)
PLASMA DYNAMICS AND LASERS				
8-Jan	0930 hrs	Celebration 7	PDL-01/PC-02	Plasma-Assisted Ignition and Combustion I: Ignition
8-Jan	1300 hrs	Celebration 7	PDL-02/PC-06	Plasma-Assisted Ignition and Combustion II: Chemical Reforming & Conversion
8-Jan	1530 hrs	Celebration 7	PDL-03/PC-11	Plasma-Assisted Ignition and Combustion III: Static and Dynamic Stability
9-Jan	0930 hrs	Rock Spring I & II	PDL-04/AMT-02/ EP-05	Plasma and Laser Diagnostics I: Thomson Scattering and Others
9-Jan	1300 hrs	Rock Spring I & II	PDL-05/AMT-04	Aero-Optics and Atmospheric Optical Turbulence
9-Jan	1530 hrs	Rock Spring I & II	PDL-06	Plasma Kinetics Discussion Group
10-Jan	0930 hrs	Rock Spring I & II	PDL-07/APA-37	Hypersonics and Entry Flow Plasmas I: Experiments
10-Jan	1300 hrs	Rock Spring I & II	PDL-08/APA-43	Hypersonics and Entry Flow Plasmas II: Simulation
10-Jan	1300 hrs	Celebration 7	PDL-09/APA-45	Plasma-Assisted Aerodynamics and MHD
10-Jan	1530 hrs	Celebration 7	PDL-10	Computational Methods for Plasmas and Lasers
10-Jan	1530 hrs	Bayhill 26	PDL-11/AMT-15	Plasma and Laser Diagnostics II: Nanosecond Pulsed Discharges and Reactive Flows
11-Jan	0930 hrs	Rock Spring I & II	PDL-12/ASE-01/EP-13	Atmospheric & Space Plasmas for Aerodynamics & Propulsion
11-Jan	1300 hrs	Celebration 7	PDL-13	Plasma and Laser Physics II: Chemical Conversion

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

11-Jan	1530 hrs	<i>Rock Spring I & II</i>	PDL-14	Plasma Aerodynamics Discussion Group
12-Jan	0930 hrs	<i>Bayhill 33</i>	PDL-15	Plasma and Laser Physics I: Filamentary Discharges
12-Jan	1300 hrs	<i>Columbia 35</i>	PDL-16/AMT-29	Plasma and Laser Diagnostics III: Experimental Applications
12-Jan	1530 hrs	<i>Columbia 35</i>	PDL-17	Short-Pulsed Lasers Discussion Group
PRESSURE GAIN COMBUSTION				
8-Jan	0930 hrs	<i>Celebration 5</i>	PC-03/PGC-01	Opportunities and S/T Challenges in Detonation-Based Propulsion Technology for Space: Launch, Boost/Upper-Stage and In-Space
8-Jan	1300 hrs	<i>Celebration 5</i>	PC-07/PGC-02	Special session: Liquid-Fueled RDEs - ONR MURI
8-Jan	1530 hrs	<i>Celebration 6</i>	PC-09/PGC-03	Detonation Fundamentals I
8-Jan	1530 hrs	<i>Celebration 5</i>	PGC-04	Rotating Detonation Engine Measurement and Diagnostics
9-Jan	0930 hrs	<i>Celebration 5</i>	PGC-05	Fundamental Investigation of PGC Concepts I
9-Jan	0930 hrs	<i>Celebration 6</i>	PGC-06	PGC Applications, Integration and Thermal Management
9-Jan	1300 hrs	<i>Celebration 5</i>	PGC-07	Fundamental Investigation of PGC Concepts II
9-Jan	1300 hrs	<i>Celebration 6</i>	PGC-08	PGC Component and Subsystem Design and Evaluation
9-Jan	1530 hrs	<i>Celebration 5</i>	PGC-09	RDE Operability, Optimization and Performance I
10-Jan	0930 hrs	<i>Celebration 6</i>	PGC-10	RDE Computational Modeling, Simulation and Validation
10-Jan	1300 hrs	<i>Celebration 5</i>	PGC-12	Computational Modeling, Simulation and Validation I
10-Jan	1530 hrs	<i>Celebration 5</i>	PGC-13	RDE Operability, Optimization and Performance II
11-Jan	0930 hrs	<i>Celebration 5</i>	PGC-14	Computational Modeling, Simulation and Validation II
11-Jan	1300 hrs	<i>Celebration 5</i>	PGC-15	RDE Operability, Optimization and Performance III
11-Jan	1530 hrs	<i>Celebration 5</i>	PGC-16	Computational Modeling, Simulation and Validation III
12-Jan	0930 hrs	<i>Celebration 6</i>	PC-33/PGC-17	Detonation Engine Combustion
12-Jan	0930 hrs	<i>Celebration 5</i>	PGC-18	RDE Operability, Optimization and Performance IV
12-Jan	1300 hrs	<i>Celebration 6</i>	PC-35/PGC-19	Detonation Fundamentals II
12-Jan	1300 hrs	<i>Celebration 5</i>	PGC-20	RDE Operability, Optimization and Performance V
PROPELLANTS AND COMBUSTION				
8-Jan	0930 hrs	<i>Celebration 14</i>	PC-01	Combustion Chemistry
8-Jan	0930 hrs	<i>Celebration 5</i>	PC-03/PGC-01	Opportunities and S/T Challenges in Detonation-Based Propulsion Technology for Space: Launch, Boost/Upper-Stage and In-Space
8-Jan	0930 hrs	<i>Celebration 7</i>	PDL-01/PC-02	Plasma-assisted Ignition and Combustion I: Ignition
8-Jan	1300 hrs	<i>Celebration 2</i>	PC-04	Hydrogen Combustion
8-Jan	1300 hrs	<i>Celebration 14</i>	PC-05	Ignition and Extinction
8-Jan	1300 hrs	<i>Celebration 5</i>	PC-07/PGC-02	Special session: Liquid-Fueled RDEs - ONR MURI
8-Jan	1300 hrs	<i>Celebration 7</i>	PDL-02/PC-06	Plasma-Assisted Ignition and Combustion II: Chemical Reforming & Conversion
8-Jan	1400 hrs	<i>Regency Ballroom Q</i>	GTE-02/HIS-01/ EAT-12/ACD-28/TF-08/ INPSI-08/PC-37	 Clean Aviation Program Highlights and Achievements
8-Jan	1530 hrs	<i>Celebration 9</i>	AMT-01/PC-10	Highlighting Women in Aerospace 2024
8-Jan	1530 hrs	<i>Celebration 14</i>	PC-08	Advanced Combustor Design
8-Jan	1530 hrs	<i>Celebration 6</i>	PC-09/PGC-03	Detonation Fundamentals I
8-Jan	1530 hrs	<i>Celebration 2</i>	PC-12	Swirl Flames
8-Jan	1530 hrs	<i>Celebration 7</i>	PDL-03/PC-11	Plasma-Assisted Ignition and Combustion III: Static and Dynamic Stability
9-Jan	0930 hrs	<i>Celebration 14</i>	PC-13	Combustion Instability
9-Jan	0930 hrs	<i>Orlando Ballroom M</i>	PC-14	Machine Learning in Combustion
9-Jan	1300 hrs	<i>Celebration 14</i>	PC-15	Data-Driven Modeling of Combustion Dynamics
9-Jan	1300 hrs	<i>Orlando Ballroom M</i>	PC-16/GTE-08	Sustainable Aviation Fuels Panel: Moving towards 100% SAF
9-Jan	1530 hrs	<i>Florida Ballroom A</i>	GTE-15/IS-32/ HSABP-07/NFF-08/ PC-22/EAT-07/TF-11	Disruptive Innovations in Aerospace & Defense
9-Jan	1530 hrs	<i>Celebration 6</i>	PC-17	Sustainable Aviation Fuel Combustion

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

9-Jan	1530 hrs	Celebration 14	PC-18	Turbulent Flames
10-Jan	0930 hrs	Plaza Ballroom F	ACD-08/EAT-14/ GTE-12/INPSI-09/ PC-38	Clean Aviation Special Session: Advanced Engine and Aircraft Configurations
10-Jan	0930 hrs	Celebration 14	PC-19	Ramjet/Scramjet Combustion
10-Jan	1300 hrs	Celebration 6	PC-20	Multiphase Modeling
10-Jan	1300 hrs	Celebration 14	PC-21	Propellant Combustion I
10-Jan	1530 hrs	Celebration 14	PC-23	Propellant Combustion II
11-Jan	0930 hrs	Plaza Ballroom F	GTE-17/EAT-08/PC- 25/ACD-14/INPSI-11	Clean Aviation Special Session: Future Propulsion Systems & Integration
11-Jan	0930 hrs	Celebration 11	PC-24	Ammonia Combustion
11-Jan	0930 hrs	Celebration 14	PC-26	Combustion Fundamentals
11-Jan	1300 hrs	Celebration 6	PC-28	Shock/Droplet Interaction
11-Jan	1530 hrs	Celebration 6	PC-29/AMT-21	Combustion Diagnostics I
11-Jan	1530 hrs	Celebration 14	PC-30	Combustion Modeling and Simulation I
11-Jan	1530 hrs	Orlando Ballroom M	PC-31/NFF-07	Laying the Foundations for a Paradigm Shift from Conventional to Advanced Propulsion Technologies: Part III (Nuclear Thermal Propulsion)
12-Jan	0930 hrs	Celebration 14	PC-32	Combustion Modeling and Simulation II
12-Jan	0930 hrs	Celebration 6	PC-33/PGC-17	Detonation Engine Combustion
12-Jan	1300 hrs	Celebration 14	PC-34	Atomization and Sprays
12-Jan	1300 hrs	Celebration 6	PC-35/PGC-19	Detonation Fundamentals II
12-Jan	1530 hrs	Celebration 5	AMT-31/PC-36	Combustion Diagnostics II
SENSOR SYSTEMS AND INFORMATION FUSION				
10-Jan	1530 hrs	Peacock Spring	SEN-01	Unmanned Aerial Vehicle Sensors and Sensing Systems
11-Jan	0930 hrs	Peacock Spring	SEN-02	Sensors for Detection, Identification and Classification
11-Jan	1300 hrs	Peacock Spring	SEN-03	Sensor Systems and Algorithms for Space Applications and Situational Awareness
11-Jan	1530 hrs	Peacock Spring	SEN-04	Sensor Instrumentation and Applications
12-Jan	0930 hrs	Columbia 34	SEN-05	Sensor Systems for Flight Control
12-Jan	1300 hrs	Columbia 34	SEN-06	Algorithms for Sensor Systems and Information Fusion
12-Jan	1530 hrs	Columbia 34	SEN-07	Sensor System Analysis
SMALL SATELLITES				
9-Jan	0930 hrs	Celebration 11	SATS-01	Small Satellite Missions and Mission Concepts
9-Jan	1300 hrs	Celebration 11	SATS-02	CubeSats before College: Expanding the STEM Pathway
9-Jan	1530 hrs	Celebration 11	SATS-03/GNC-27	Small Satellite Guidance, Navigation and Control
10-Jan	0930 hrs	Plaza Ballroom K	SATS-04/SCS-08	Small Satellite Deployable Structures
10-Jan	1300 hrs	Celebration 11	SATS-05	Small Satellite Autonomy and Software
10-Jan	1530 hrs	Celebration 11	SATS-06	Small Satellite Propulsion
SOCIETY AND AEROSPACE TECHNOLOGY				
8-Jan	1300 hrs	Blue Spring I	SAT-01	Society and Aerospace Technology
SOFTWARE				
10-Jan	0930 hrs	Bayhill 19	SOF-01	Certification, Verification and Artificial Intelligence
SOLID ROCKETS				
8-Jan	0930 hrs	Celebration 13	SR-01	Solid Rocket Modeling and Simulations
8-Jan	1300 hrs	Celebration 13	SR-02	Solid Rocket Propellant Combustion and Characterization
8-Jan	1530 hrs	Celebration 13	SR-03	Solid Rocket Combustion Stability and Ballistic Analysis Methods
SPACE EXPLORATION				
8-Jan	0930 hrs	Celebration 12	EXPL-01	 Commercial Space - A Partnership to Success
8-Jan	1300 hrs	Celebration 12	EXPL-02	The Space Exploration Portfolio - Strategy and Implementation
8-Jan	1530 hrs	Celebration 12	EXPL-03	Lessons Learned in History for Future Space Operations from Exploring the Earth, Skies and Space

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

9-Jan	0930 hrs	<i>Celebration 12</i>	EXPL-04	Artemis I Review I
9-Jan	0930 hrs	<i>Celebration 13</i>	EXPL-05	★NASA Cryogenic Fluid Management Portfolio Project - 2023 Accomplishments and Highlights
9-Jan	1300 hrs	<i>Celebration 12</i>	EXPL-06	Artemis I Review II
9-Jan	1300 hrs	<i>Celebration 13</i>	EXPL-07	Challenges and Opportunities for New Orbital Opportunities, Laboratories Coming On-Line in the Near Future for Research, Test, and Development-- Where We Are, and Where We are Going
9-Jan	1530 hrs	<i>Celebration 12</i>	EXPL-08	Artemis I Launch - Vehicle Lift-off/ Exhaust Plume Environment/Debris
9-Jan	1530 hrs	<i>Celebration 13</i>	EXPL-09	Mission Architectures - Various Planetary Missions
10-Jan	0930 hrs	<i>Celebration 13</i>	EXPL-10	★Innovations and Challenges in Space Medicine and Human Systems Integration for Exploration Class Missions and Commercial Space Endeavours
10-Jan	0930 hrs	<i>Celebration 12</i>	EXPL-11	★Space Nuclear Power (Joint Session with Thermal TC)
10-Jan	1300 hrs	<i>Celebration 13</i>	EXPL-12	Humans in Space Logistics, Medical issues, Bio-Research
10-Jan	1300 hrs	<i>Celebration 12</i>	EXPL-13	Space Policy - Ensuring Humanity's Future in the Stars
10-Jan	1530 hrs	<i>Celebration 13</i>	EXPL-14	Artificial Intelligence and Robotics for Space Exploration I
11-Jan	0930 hrs	<i>Celebration 13</i>	EXPL-16	Artificial Intelligence and Robotics for Space Exploration II
11-Jan	0930 hrs	<i>Celebration 12</i>	EXPL-17	Enabling Technologies
11-Jan	1300 hrs	<i>Celebration 12</i>	EXPL-18	Impact of Space Activities on Climate and Atmosphere
11-Jan	1300 hrs	<i>Celebration 13</i>	EXPL-19	Other Topics in Space Exploration
11-Jan	1300 hrs	<i>Celebration 4</i>	LP-16/EXPL-20	Propellant Management, Gauging and Slosh
11-Jan	1530 hrs	<i>Celebration 12</i>	EXPL-21	Impact of Space Activities on Climate and Atmosphere Discussion
11-Jan	1530 hrs	<i>Celebration 13</i>	EXPL-22	Lunar Exploration I
12-Jan	0930 hrs	<i>Celebration 12</i>	EXPL-23	Lunar/Mars Exploration - ISRU Operations
12-Jan	0930 hrs	<i>Celebration 13</i>	EXPL-24	Lunar Exploration II
12-Jan	1300 hrs	<i>Celebration 13</i>	EXPL-25	Mission Architectures - Mars
12-Jan	1300 hrs	<i>Celebration 12</i>	EXPL-26	Space Logistics (Joint Session with Space Logistics TC)
SPACE OPERATIONS AND SUPPORT				
10-Jan	1300 hrs	<i>Blue Spring I</i>	OPS-01	Spacecraft Operations and Support I
10-Jan	1530 hrs	<i>Blue Spring I</i>	OPS-02	Spacecraft Operations and Support II
11-Jan	1530 hrs	<i>Blue Spring I</i>	OPS-03	Spacecraft Operations and Support III
SPACE TETHERS				
8-Jan	1530 hrs	<i>Bayhill 33</i>	STE-01	Space Tethers I
9-Jan	1530 hrs	<i>Bayhill 33</i>	STE-02	Space Tethers II - Student Paper Competition
SPACECRAFT STRUCTURES				
8-Jan	0930 hrs	<i>Barrel Spring II</i>	AS-04/STR-09/SD-05/SCS-04/MAT-33	Design and Analysis of Structures and Materials in Extreme Environments
8-Jan	0930 hrs	<i>Florida Ballroom B</i>	SCS-01	Spacecraft Antennas, Reflectors, and Other Optical Apertures I
8-Jan	1300 hrs	<i>Florida Ballroom B</i>	SCS-02	Spacecraft Booms and Trusses
8-Jan	1530 hrs	<i>Florida Ballroom B</i>	SCS-03/MAT-06	High Strain Composite Materials and Structures
9-Jan	0930 hrs	<i>Florida Ballroom B</i>	SCS-05	In-space Assembly and Manufacturing of Structures
9-Jan	1300 hrs	<i>Florida Ballroom B</i>	SCS-06/AS-06	Adaptive Spacecraft Structures
9-Jan	1530 hrs	<i>Florida Ballroom B</i>	SCS-07	Design Methods, Tools and Processes for Spacecraft Structures
10-Jan	0930 hrs	<i>Plaza Ballroom K</i>	SATS-04/SCS-08	Small Satellite Deployable Structures
10-Jan	1530 hrs	<i>Florida Ballroom B</i>	SCS-09	Spacecraft Structures Test, Analysis, and Correlation
11-Jan	0930 hrs	<i>Florida Ballroom B</i>	SCS-10	Spacecraft Antennas, Reflectors, and Other Optical Apertures II
11-Jan	1300 hrs	<i>Florida Ballroom B</i>	SCS-11	Origami-inspired Spacecraft Structures
11-Jan	1530 hrs	<i>Florida Ballroom B</i>	SCS-12	Lightweight and Inflatable Spacecraft Structures



SPACEFLIGHT MECHANICS				
8-Jan	0930 hrs	<i>Silver Spring I</i>	SFM-01	Attitude Dynamics, Determination, and Control I
8-Jan	0930 hrs	<i>Bayhill 17</i>	SFM-02	Cislunar Astrodynamics, Missions, and Operations I
8-Jan	0930 hrs	<i>Bayhill 18</i>	SFM-03	Trajectory Maneuver Design and Optimization I
8-Jan	1300 hrs	<i>Bayhill 18</i>	SFM-04	Asteroid and Small Body Missions I
8-Jan	1300 hrs	<i>Silver Spring I</i>	SFM-05	Orbit Determination and Estimation I
8-Jan	1300 hrs	<i>Bayhill 17</i>	SFM-06	Satellite Rendezvous and Proximity Operations I
8-Jan	1530 hrs	<i>Bayhill 18</i>	SFM-07	Cislunar Astrodynamics, Missions, and Operations II
8-Jan	1530 hrs	<i>Silver Spring I</i>	SFM-08	Satellite Constellations, Formations, and Relative Motion I
8-Jan	1530 hrs	<i>Bayhill 17</i>	SFM-09	Trajectory Maneuver Design and Optimization II
9-Jan	0930 hrs	<i>Bayhill 18</i>	SFM-10	Cislunar Astrodynamics, Missions, and Operations III
9-Jan	0930 hrs	<i>Bayhill 20</i>	GNC-13/AFM-04/ SFM-11	Entry, Descent and Landing GN&C Technology IV - Aerocapture for Ice Giants I
9-Jan	0930 hrs	<i>Bayhill 17</i>	SFM-13	Trajectory Maneuver Design and Optimization III
9-Jan	1300 hrs	<i>Bayhill 17</i>	SFM-14	Interplanetary Mission Design
9-Jan	1300 hrs	<i>Bayhill 18</i>	SFM-15/GNC-22	Space Situational Awareness I
9-Jan	1300 hrs	<i>Silver Spring I</i>	SFM-16	Special Session: Space Maneuver and Logistics I
9-Jan	1530 hrs	<i>Bayhill 18</i>	SFM-17	Cislunar Astrodynamics, Missions, and Operations IV
9-Jan	1530 hrs	<i>Silver Spring I</i>	SFM-18	Special Session: Space Maneuver and Logistics II
9-Jan	1530 hrs	<i>Bayhill 17</i>	SFM-19	Trajectory Maneuver Design and Optimization IV
10-Jan	0930 hrs	<i>Silver Spring I</i>	SFM-20	Attitude Dynamics, Determination, and Control II
10-Jan	0930 hrs	<i>Bayhill 18</i>	SFM-21	Cislunar Astrodynamics, Missions, and Operations V
10-Jan	0930 hrs	<i>Bayhill 17</i>	SFM-22	Trajectory Maneuver Design and Optimization V
10-Jan	1300 hrs	<i>Bayhill 17</i>	SFM-23	Earth Orbital and Planetary Mission Studies
10-Jan	1300 hrs	<i>Bayhill 18</i>	SFM-24	Machine Learning and Artificial Intelligence for Space Flight I
10-Jan	1300 hrs	<i>Silver Spring I</i>	SFM-25/GNC-35	Space Situational Awareness II
10-Jan	1530 hrs	<i>Silver Spring I</i>	SFM-26	Orbit Determination and Estimation II
10-Jan	1530 hrs	<i>Bayhill 18</i>	SFM-27	Satellite Rendezvous and Proximity Operations II
10-Jan	1530 hrs	<i>Bayhill 17</i>	SFM-28	Trajectory Maneuver Design and Optimization VI
11-Jan	0930 hrs	<i>Bayhill 18</i>	SFM-29	Machine Learning and Artificial Intelligence for Space Flight II
11-Jan	0930 hrs	<i>Silver Spring I</i>	SFM-30/GNC-40	Space Situational Awareness III
11-Jan	0930 hrs	<i>Bayhill 17</i>	SFM-31	Trajectory Maneuver Design and Optimization VII
11-Jan	1300 hrs	<i>Bayhill 18</i>	SFM-32	Asteroid and Small Body Missions II
11-Jan	1300 hrs	<i>Silver Spring I</i>	SFM-33	Attitude Dynamics, Determination, and Control III
11-Jan	1300 hrs	<i>Bayhill 17</i>	SFM-34	Satellite Constellations, Formations, and Relative Motion II
11-Jan	1530 hrs	<i>Bayhill 17</i>	SFM-35	Satellite Rendezvous and Proximity Operations III
STRUCTURAL DYNAMICS				
8-Jan	0930 hrs	<i>Plaza Ballroom E</i>	SD-01	Flutter and Limit Cycle Oscillations (LCO)
8-Jan	0930 hrs	<i>Celebration 16</i>	SD-02	Machine Learning in Structural Dynamics and Aeroelasticity
8-Jan	0930 hrs	<i>Barrel Spring II</i>	AS-04/STR-09/SD-05/SCS-04/MAT-33	Design and Analysis of Structures and Materials in Extreme Environments
8-Jan	1300 hrs	<i>Plaza Ballroom E</i>	SD-03	3rd Aeroelastic Prediction Workshop (AEPW3) I
8-Jan	1530 hrs	<i>Plaza Ballroom E</i>	SD-04	Dynamic Loads, Response, Vibration and Stability of Aerospace Vehicles I
8-Jan	1530 hrs	<i>Celebration 16</i>	SD-06	Structural Dynamics Analysis
9-Jan	0930 hrs	<i>Plaza Ballroom E</i>	SD-07	3rd Aeroelastic Prediction Workshop (AEPW3) II
9-Jan	0930 hrs	<i>Celebration 16</i>	SD-08	Special Session: Structural Dynamics and Crashworthiness of Unconventional Aircraft
9-Jan	1300 hrs	<i>Coral Spring I</i>	FD-23/SD-10	Fluid Structure Interactions I
9-Jan	1300 hrs	<i>Plaza Ballroom E</i>	SD-09	Fluid Structure Interaction (FSI) of Hypersonic Aircraft and Missiles
9-Jan	1530 hrs	<i>Coral Spring I</i>	FD-28/SD-12	Fluid Structure Interactions II
9-Jan	1530 hrs	<i>Celebration 16</i>	SD-13	Wind Tunnel Flutter and Aeroelastic Response Experiments

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

10-Jan	0930 hrs	<i>Coral Spring I</i>	FD-34/SD-16	Fluid Structure Interactions III
10-Jan	0930 hrs	<i>Celebration 16</i>	SD-14	Computer Methods, HPC Algorithms, & Reduced Order Modeling
10-Jan	0930 hrs	<i>Plaza Ballroom E</i>	SD-15	Dynamic Loads, Response, Vibration and Stability of Aerospace Vehicles II
10-Jan	1300 hrs	<i>Coral Spring I</i>	FD-41/SD-17	Fluid Structure Interactions IV
10-Jan	1530 hrs	<i>Celebration 16</i>	SD-20	Launch Vehicle and Spacecraft Loads and Environments Definition
10-Jan	1530 hrs	<i>Plaza Ballroom E</i>	SD-21	Special Session: Advances in Whirl Flutter Testing and Prediction
11-Jan	0930 hrs	<i>Plaza Ballroom E</i>	SD-22	Aeroelastic Problems for Electric-Aircraft and Unmanned Aerial Vehicles
11-Jan	0930 hrs	<i>Celebration 16</i>	SD-23/MAT-22	Special Session: International Collaborations Advancing Materials and Combustion
11-Jan	1300 hrs	<i>Plaza Ballroom E</i>	SD-24	Nonlinear Dynamics, Flexible Multibody Dynamics, Contact/Constraint Modeling
11-Jan	1300 hrs	<i>Celebration 16</i>	SD-25	Special Session: Operator-Theoretic Methods for Reduced-Order Modeling in SD and Aeroelasticity
11-Jan	1530 hrs	<i>Celebration 16</i>	SD-26	Experimental Structural Dynamics and Aeroelastic Phenomena
11-Jan	1530 hrs	<i>Plaza Ballroom E</i>	SD-27/FD-65	Fluid Structure Interaction (Joint SD/FD)
12-Jan	1030	<i>Celebration 15</i>	SD-29	Special Session: Application / Structural Dynamic Aspects of Shocks
12-Jan	0930 hrs	<i>Celebration 15</i>	SD-28	Special Sessions: Fatigue Loads and Spectrum Generation
STRUCTURES				
8-Jan	0930 hrs	<i>Barrel Spring II</i>	AS-04/STR-09/SD-05/SCS-04/MAT-33	Design and Analysis of Structures and Materials in Extreme Environments
8-Jan	0930 hrs	<i>Plaza Ballroom I</i>	AS-09/ACD-06/STR-14	Buckling and Stability of Aircraft and Spacecraft Structures I
8-Jan	0930 hrs	<i>Barrel Spring I</i>	AS-13/ACD-10/STR-18/MAT-32	Artificial Intelligence and Machine Learning for Materials and Structures I
8-Jan	1300 hrs	<i>Barrel Spring I</i>	AS-16/STR-25/DE-08/MAT-34	Artificial Intelligence and Machine Learning for Materials and Structures II
8-Jan	1300 hrs	<i>Plaza Ballroom D</i>	MAT-01/STR-01	Structural Optimization Application for Aircraft and Spacecraft I
8-Jan	1300 hrs	<i>Plaza Ballroom J</i>	MAT-24/STR-23	Structural Analysis, Design, Testing and Manufacturing (Joint DE/STR)
8-Jan	1530 hrs	<i>Plaza Ballroom I</i>	MAT-02/STR-03	Composite Structural Analysis, Design, Testing, and Manufacturing I
8-Jan	1530 hrs	<i>Florida Ballroom A</i>	AS-21/MAT-03/STR-04	Inter-Agency Panel: Emerging Technologies in Aerospace Materials and Structures
8-Jan	1530 hrs	<i>Plaza Ballroom D</i>	MAT-07/STR-11	Structural Optimization Application for Aircraft and Spacecraft II
8-Jan	1530 hrs	<i>Barrel Spring II</i>	STR-02	Structures and Materials in Extreme Environments
9-Jan	0930 hrs	<i>Plaza Ballroom D</i>	ACD-30/EAT-15/TF-09/STR-31/GNC-52/DA-01/GTE-27/INPSI-10	Clean Aviation Special Session: Emerging Technologies and Innovations
9-Jan	0930 hrs	<i>Plaza Ballroom I</i>	STR-05	Composite Structural Analysis, Design, Testing, and Manufacturing II
9-Jan	1300 hrs	<i>Plaza Ballroom F</i>	ACD-32/DE-12/STR-21/MAT-30	Clean Aviation Special Session: Next Generation Multifunctional Fuselage Demonstrator I
9-Jan	1300 hrs	<i>Plaza Ballroom I</i>	STR-08	Composite Structural Analysis, Design, Testing, and Manufacturing III
9-Jan	1530 hrs	<i>Plaza Ballroom F</i>	ACD-33/DE-10/MAT-31/STR-22	Clean Aviation Special Session: Next Generation Multifunctional Fuselage Demonstrator II
10-Jan	0930 hrs	<i>Plaza Ballroom I</i>	STR-13	Composite Structural Analysis, Design, Testing, and Manufacturing IV
10-Jan	0930 hrs	<i>Plaza Ballroom J</i>	STR-15	Fatigue, Fracture, and Impact Damage of Structures I
10-Jan	1300 hrs	<i>Plaza Ballroom D</i>	ACD-27/TF-10/GTE-24/STR-33	Clean Aviation Special Session: Fast Rotorcraft
10-Jan	1300 hrs	<i>Orlando Ballroom N</i>	STR-19	★ Structures, Structural Dynamics, and Materials Lecture
10-Jan	1530 hrs	<i>Plaza Ballroom J</i>	STR-16	Fatigue, Fracture, and Impact Damage of Structures II
10-Jan	1530 hrs	<i>Plaza Ballroom I</i>	STR-24	Composite Structural Analysis, Design, Testing, and Manufacturing V
11-Jan	0930 hrs	<i>Celebration 6</i>	ACD-31/APA-86/STR-32	★ Airbus Wing of Tomorrow Programme
11-Jan	0930 hrs	<i>Plaza Ballroom I</i>	STR-20	Additive Structures I
11-Jan	0930 hrs	<i>Plaza Ballroom J</i>	STR-30	Stitched Composite Structures

TECHNICAL SESSIONS



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11-Jan	1300 hrs	Barrel Spring I	STR-27/MAT-35	3D Woven Composites for Materials and Structures
11-Jan	1300 hrs	Plaza Ballroom I	STR-29	Additive Structures II
11-Jan	1530 hrs	Plaza Ballroom F	AFM-28/GTE-26/ ACD-29/STR-12	Clean Aviation Special Session: Integrated Airframe Design Technology and Advanced Structures/Systems
11-Jan	1530 hrs	Plaza Ballroom J	STR-07	Special Session in Honor of Anthony Palazotto and in Memory of Harry Hilton
11-Jan	1530 hrs	Plaza Ballroom I	STR-28	Other Topics in Structures
12-Jan	0930 hrs	Celebration 2	STR-10	Structural Health Monitoring & Non-Destructive Evaluation
12-Jan	0930 hrs	Orlando Ballroom M	STR-17/SD-18/MAT-17	Structural Joints and Repairs
STUDENT PAPER COMPETITION				
8-Jan	0930 hrs	Columbia 34	ISC-01	International Student Conference - Undergraduate Category
8-Jan	0930 hrs	Columbia 35	ISC-02	International Student Conference - Masters Category
8-Jan	0930 hrs	Columbia 36	ISC-03	International Student Conference - Team Category
SUPERSONICS				
10-Jan	1300 hrs	Rainbow Spring I	SPSN-01	Supersonic Operations
10-Jan	1530 hrs	Celebration 8	SPSN-02	Supersonic Design, Analysis and Technology
11-Jan	0930 hrs	Bayhill 32	APA-56/SPSN-03	Transonic Aerodynamics I
11-Jan	1530 hrs	Bayhill 32	APA-66/SPSN-05	Supersonic Aerodynamics
11-Jan	1530 hrs	Bayhill 26	SPSN-04	2nd Environmental Impact of Supersonic Transport Workshop I
12-Jan	0930 hrs	Bayhill 26	SPSN-06	2nd Environmental Impact of Supersonic Transport Workshop II
12-Jan	1300 hrs	Bayhill 26	SPSN-07	2nd Environmental Impact of Supersonic Transport Workshop III
12-Jan	1530 hrs	Bayhill 26	SPSN-08	2nd Environmental Impact of Supersonic Transport Workshop Panel
SURVIVABILITY				
10-Jan	1530 hrs	Celebration 15	SUR-01/MAT-23	Survivability and Aerospace Materials
SYSTEMS ENGINEERING				
9-Jan	1300 hrs	Florida Ballroom A	SE-01	Decision Making and MBSE
10-Jan	0930 hrs	Florida Ballroom A	SE-03	Theory of SE and Ontologies in SE
10-Jan	1530 hrs	Florida Ballroom A	SE-04	Verification and Validation
11-Jan	0930 hrs	Florida Ballroom A	SE-05	Applications of SE
11-Jan	1530 hrs	Plaza Ballroom K	SE-06	Tutorial on applying Assume-Guarantee Contracts with Pacti for specifying and analyzing system-level functionality
TERRESTRIAL ENERGY				
8-Jan	0930 hrs	Celebration 8	TES-01	Combustors, Micro-Combustors, Turbines, Advanced Cycles & Designs
8-Jan	1300 hrs	Celebration 8	TES-02	Emerging Fuels and the Power Systems
8-Jan	1530 hrs	Celebration 8	TES-03	Advanced in Renewable Energy
9-Jan	0930 hrs	Celebration 8	TES-04	Hybrid Power/Propulsion Systems and other Topics in Terrestrial Energy
THERMOPHYSICS				
8-Jan	0930 hrs	Manatee Spring I	TP-01	Aerothermodynamics, Thermal Protection Systems and Ablation I
8-Jan	0930 hrs	Manatee Spring II	TP-02	Experimental and Computational Non-Equilibrium Flows and Radiation I
8-Jan	1300 hrs	Manatee Spring I	TP-03	Aerothermodynamics, Thermal Protection Systems and Ablation II
8-Jan	1300 hrs	Manatee Spring II	TP-04	Experimental and Computational Non-Equilibrium Flows and Radiation II
8-Jan	1530 hrs	Manatee Spring I	TP-05	Aerothermodynamics, Thermal Protection Systems and Ablation III
8-Jan	1530 hrs	Manatee Spring II	TP-06	Experimental and Computational Non-Equilibrium Flows and Radiation III
8-Jan	1530 hrs	Rock Spring I & II	TP-07	Heat Pipes, Loop Heat Pipes, and Two-Phase Devices and Processes
9-Jan	0930 hrs	Manatee Spring I	TP-08	Aerothermodynamics, Thermal Protection Systems and Ablation IV
9-Jan	0930 hrs	Celebration 1	TP-09	Gas Processing Systems, Transport Phenomena and Thermophysical Properties
9-Jan	1300 hrs	Orlando Ballroom N	TP-10	★Thermophysics Award Lecture
9-Jan	1530 hrs	Manatee Spring I	TP-11	Aerothermodynamics, Thermal Protection Systems and Ablation V

TECHNICAL SESSIONS

 Engage with your community at these must-attend lectures

9-Jan	1530 hrs	Manatee Spring II	TP-12	Thermophysics Special Session - Variable Emissivity in Materials
10-Jan	0930 hrs	Manatee Spring II	TP-13	Aerothermodynamics, Thermal Protection Systems and Ablation VI
10-Jan	0930 hrs	Manatee Spring I	TP-14	Experimental and Computational Non-Equilibrium Flows and Radiation V
10-Jan	1300 hrs	Manatee Spring II	TP-15	Aerothermodynamics, Thermal Protection Systems and Ablation VII
10-Jan	1300 hrs	Manatee Spring I	TP-19	Microscale and Microgravity and Other Topics
10-Jan	1530 hrs	Rock Spring I & II	TP-18	Thermal Management & Control in Aircraft and Spacecraft: Devices & Applications including AI and ML
10-Jan	1530 hrs	Manatee Spring I	TP-21	Theoretical, Experimental, and Computational Heat Transfer I
11-Jan	0930 hrs	Manatee Spring II	TP-16	Experimental and Computational Non-Equilibrium Flows and Radiation IV
11-Jan	1300 hrs	Manatee Spring I	TP-22	Theoretical, Experimental, and Computational Heat Transfer II


TRANSFORMATIONAL FLIGHT

8-Jan	1400 hrs	Regency Ballroom Q	GTE-02/HIS-01/ EAT-12/ACD-28/TF-08/ INPSI-08/PC-37	 Clean Aviation Program Highlights and Achievements
9-Jan	0930 hrs	Plaza Ballroom D	ACD-30/EAT-15/ TF-09/STR-31/ GNC-52/DA-01/ GTE-27/INPSI-10	Clean Aviation Special Session: Emerging Technologies and Innovations
9-Jan	1300 hrs	Blue Spring I	TF-01	Air Traffic Management for Advanced/Transformational Aircraft Concepts
9-Jan	1530 hrs	Florida Ballroom A	GTE-15/IS-32/ HSABP-07/NFF-08/ PC-22/EAT-07/TF-11	Disruptive Innovations in Aerospace & Defense
9-Jan	1530 hrs	Blue Spring I	TF-03	Urban, Regional, and On-Demand Air Mobility, Emergent Market Studies; Autonomous Vehicle Operations and Simplified Vehicle Operations
10-Jan	0930 hrs	Blue Spring I	TF-04	V/ESTOL Aircraft Design, Aircraft Analysis and Aircraft Ground and/or Flight Test
10-Jan	1300 hrs	Plaza Ballroom D	ACD-27/TF-10/GTE-24/ STR-33	Clean Aviation Special Session: Fast Rotorcraft
11-Jan	1300 hrs	Plaza Ballroom F	ACD-05/APA-88/TF-02/ EAT-13/GTE-25	Clean Aviation Special Session: Innovative Aircraft Concepts and Novel Configurations
11-Jan	1530 hrs	Rainbow Spring I	AA-04/TF-05	Advanced Air Mobility Noise
11-Jan	1530 hrs	Bayhill 19	ACD-17/TF-06	Design for Aircraft Electrification I
12-Jan	0930 hrs	Bayhill 19	ACD-20/TF-07	Design for Aircraft Electrification II

UNCREWED AND AUTONOMOUS SYSTEMS

8-Jan	0930 hrs	Blue Spring II	UAS-01	Autonomous Mission Management Concepts and Technologies
8-Jan	1300 hrs	Blue Spring II	UAS-02	Mission Management Concepts and Man-Machine/System Optimization
8-Jan	1530 hrs	Blue Spring II	UAS-03	Autonomous Task and System Integration
9-Jan	0930 hrs	Blue Spring II	UAS-04	Autonomy for AAMS I
9-Jan	1300 hrs	Blue Spring II	UAS-05	Autonomy for AAMS II
9-Jan	1530 hrs	Blue Spring II	UAS-06	Deep Space Applications, Machine Learning and Certification Concepts
10-Jan	1300 hrs	Blue Spring II	UAS-07	System Design and Optimization I
10-Jan	1530 hrs	Bayhill 21	ACD-13/UAS-08	Unmanned Systems Design
11-Jan	0930 hrs	Blue Spring II	UAS-09	System Design and Optimization II
12-Jan	0930 hrs	Bayhill 17	DA-06/GNC-51/ MST-11/UAS-11/IS-33	Clean Aviation Special Session: Next Generation Aircraft Cockpits, Systems and Avionics

WIND ENERGY

9-Jan	1530 hrs	Orlando Ballroom N	WE-01	 Wind Energy Lecture
10-Jan	0930 hrs	Celebration 2	WE-02	Blade Aerodynamics and Aeroacoustics
10-Jan	1300 hrs	Celebration 2	WE-03	Wind Farm Aerodynamics and Flow Control
11-Jan	0930 hrs	Celebration 2	WE-04	Novel Concepts: Toyota Mothership, High Altitude Aerial Platform Project
11-Jan	1300 hrs	Celebration 2	WE-05	Optimization, Control and Stability of Wind Energy Systems

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COMMITTEE MEETINGS AND EVENTS

TIME	ROOM	COMMITTEE AND ANCILLARY MEETINGS/EVENTS
SUNDAY, 7 JANUARY		
0900-1600 hrs	Plaza G	Council Integrated Training and Workshop
0900-1130 hrs	Plaza D, E,F	Council Breakout Rooms
1500-1600 hrs	Celebration 8	APATC Education Subcommittee
1500-1600 hrs	Celebration 9	APATC Membership Subcommittee
1500-1600 hrs	Celebration 7	APATC Honors & Awards Subcommittee
1500-1600 hrs	Celebration 6	APATC Publicity & Publications Subcommittee
1500-1600 hrs	Celebration 4	APATC Planning Subcommittee
1500-1600 hrs	Boardroom	Geometry Modeling Working Group
1530-1630 hrs	Celebration 3	APATC Liaisons Subcommittee
1600-1700 hrs	Celebration 2	APATC Technical Activities
1600-2040 hrs	Regency Q	GTTC Subcommittee Meetings
1630-1800 hrs	Orlando L	TAD All Hands Reception
1700-1800 hrs	Celebration 8	APATC Steering Committee
1730-1845 hrs	Plaza F	MDO TC Meet and Greet Reception
1730-1930 hrs	Celebration 2	Structures Technical Committee Lecture Meeting
1800-2000 hrs	Celebration 5	Guidance, Navigation, and Control TC Meeting
1800-2100 hrs	Barrel Spring 1	Applied Aerodynamics Technical Committee Meeting
1830-1930 hrs	Boardroom	PEG Leadership Meeting
1900-2100 hrs	Plaza H	Aerospace Design & Structures Group Meeting
1900-2100 hrs	Plaza F	Committee on Higher Education (CHE) Meeting
MONDAY, 8 JANUARY		
0900-1200 hrs	Winter Park 54	GTTC Axis Nomenclature and Axis Systems FG
1000-1100 hrs	Discovery 47	Journal of Propulsion and Power Editorial Board Meeting
1100-1400 hrs	Boardroom	Integration and Outreach Division Meeting
1130-1300 hrs	Discovery 47	CFD2030 Committee Meeting
1200-1300 hrs	Winter Park 54	FDTC Computational Methods for Multi-Phase Flows
1200-1330 hrs	Regency O & P	Joint Meeting - AIAA Astrodynamics TC and AAS Space Flight Mechanics Committee
1300-1400 hrs	Winter Park 49	GTTC Model Deformation WG
1300-1430 hrs	Winter Park 54	GTTC Writing Quality FG
1300-1500 hrs	Columbia 37	High Speed Flight Task Force
1400-1500 hrs	Discovery 44	Progress Book Series EAB
1400-1530 hrs	Discovery 43	Autonomy/AI/ML Task Force Meeting
1400-1600 hrs	Winter Park 49	GTTC Additive Manufacturing FG
1500-1600 hrs	Challenger 39	Education Series EAB
1500-1700 hrs	Discovery 46	International Activities Group General Meeting

COMMITTEE MEETINGS AND EVENTS

TIME	ROOM	COMMITTEE AND ANCILLARY MEETINGS/EVENTS
1530-1700 hrs	Winter Park 54	FDTC High-Fidelity CFD Verification DG
1600-1700 hrs	Boardroom	Society and Aerospace Technology Outreach Committee Meeting
1630-1730 hrs	Discovery 44	Journal of Aircraft Editorial Board Meeting
1800-1900 hrs	Challenger 41	AMT Publications Subcommittee
1800-2000 hrs	Celebration 1	Propellants and Combustion Technical Committee Meeting
1800-1900 hrs	Rainbow Spring 1	FDTC Reduced-Complexity Modeling and Analysis of Fluid Flows DG
1800-1900 hrs	Rainbow Spring 2	FDTC Active Flow Control Database D
1800-1900 hrs	Bayhill 31	FDTC Turbulence Model Benchmarking DG
1800-1900 hrs	Celebration 7	Steering Committee Meeting for HyTASP TC
1800-1930 hrs	Challenger 42	DETC SCITECH Meeting
1800-2000 hrs	Bayhill 33	Electrified Aircraft Design & Integration Discussion Group
1800-2000 hrs	Columbia 37	Terrestrial Energy Systems Committee Meeting
1800-2030 hrs	Coral Spring 1	Intelligent Systems Student Paper Competition
1830-2000 hrs	Columbia 36	Information Systems Group Meeting
1830-2030 hrs	Regency O & P	Sensor Systems and Information Fusion
1830-2130 hrs	Bayhill 21	Advanced software for Process Analysis and Progressive Damage and Failure Analysis of Composite Structures
1830-2200 hrs	Celebration 9	NC State University Mechanical and Aerospace Engineering Alumni Reception
1900-2000 hrs	Boardroom	Aerodynamic Measurement Technology: Awards Subcommittee
1900-2000 hrs	Challenger 40	AMT Conference Planning Subcommittee Meeting
1900-2200 hrs	Celebration 6	HyTASP Technical Committee Meeting
1900-2000 hrs	Coral Spring 2	APATC Stability & Control Discussion Group
1900-2000 hrs	Bayhill 29	FDTC High-speed flow Control
1900-2000 hrs	Bayhill 30	FDTC Uncertainty Quantification in Fluid Dynamics DG
1900-2100 hrs	Manatee Spring 2	FDTC Transition DG
1900-2100 hrs	Celebration 3	CREATE User Group Meeting
1900-2000 hrs	Peacock Spring	FDTC Massively Separated Flows DG
1900-2100 hrs	Bayhill 22	Aeroelastic Prediction Workshop 4 Kickoff Meeting
1900-2100 hrs	Bayhill 23	Drag Prediction Workshop 8 Kickoff Meeting
1900-2100 hrs	Celebration 11	Meshing, Visualization, and Computational Environments Technical Committee Meeting
1900-2200 hrs	Plaza G	Aircraft Design Technical Committee Meeting
2000-2100 hrs	Boardroom	Aerodynamic Measurement Technology: Nominations Subcommittee
2000-2200 hrs	Rainbow Spring 1	FDTC Swept Wing Leading Edge Vortex Flow Physics DG

COMMITTEE MEETINGS AND EVENTS

TIME	ROOM	COMMITTEE AND ANCILLARY MEETINGS/EVENTS
TUESDAY, 9 JANUARY		
0900-1000 hrs	Regency O & P	Young Professionals Group Meeting
0900-1000 hrs	Challenger 39	Books Subcommittee
0900-1200 hrs	Columbia 34	AIAA Honors and Awards Committee
0930-1100 hrs	Discovery 47	AIAA Gas Turbine Engine Technical Committee
1000-1200 hrs	Boardroom	Ethics Committee Meeting
1100-1200 hrs	Regency O & P	2025 SciTech Technical Program Committee Meeting
1100-1200 hrs	Columbia 37	Aerospace Sciences Group Meeting
1200-1330 hrs	Discovery 47	AAS Space Flight Mechanics Committee Meeting
1200-1330 hrs	Discovery 48	Astrodynamics Technical Committee Meeting
1300-1400 hrs	Columbia 34	International Strategy and Implementation Committee Meeting
1300-1450 hrs	Columbia 36	AIAA Journal Editorial Board Meeting
1300-1700 hrs	Challenger 38	Regional Engagement Activities Division (READ) Meeting
1300-1800 hrs	Regency O & P	Technical Activities Division Meeting
1330-1530 hrs	Winter Park 54	GTTC Model Attitude Measurement WG
1400-1500 hrs	Winter Park 50	Journal of Spacecraft and Rockets Editorial Board Meeting
1400-1500 hrs	Challenger 39	Publications Ethical Standards Committee
1400-1600 hrs	Challenger 40	Survivability Technical Committee Annual Meeting
1400-1600 hrs	Plaza H	AIAA Honors and Awards – A Special Session on Award and Member Upgrade Nominations
1530-1700 hrs	Winter Park 50	Journal of Guidance, Control, and Dynamics Editorial Board Meeting
1530-1800 hrs	Columbia 35	Public Policy Committee Meeting
1600-1800 hrs	Columbia 36	Commercial Aviation Sustainability Working Group Meeting
1645-1800 hrs	Regency Q	Lockheed Martin Strategic Participation All-Hands Meeting
1700-1800 hrs	Challenger 39	AIAA Small Satellites Technical Committee
1700-1830 hrs	Discovery 43	Human-Machine Teaming Technical Committee Meeting
1700-1900 hrs	Columbia 37	AIAA Aero-Propulsion Workshop Planning
1700-1900 hrs	Discovery 44	Computational Fluid Dynamics Committee on Standards (CFD CoS)
1730-1830 hrs	Regency R-V	Section Officers Meetup
1730-1930 hrs	Boardroom	Aerospace Power Systems Technical Committee Meeting
1800-1900 hrs	Bayhill 30	APATC Sailplane Aerodynamics DG
1800-1930 hrs	Celebration 5	Careers in Propellants and Combustion: Panel and Networking Session
1800-2000 hrs	Challenger 40	Space Tethers Technical Committee Meeting
1800-2100 hrs	Challenger 42	SRTC Meeting
1800-2100 hrs	Plaza G	Digital Engineering Integration Committee (DEIC) Face-to-Face
1830-2000 hrs	Coral Spring 2	APATC Applied Surrogate Modeling DG
1830-2000 hrs	Bayhill 33	APATC CFD Transition Modeling DG

COMMITTEE MEETINGS AND EVENTS

TIME	ROOM	COMMITTEE AND ANCILLARY MEETINGS/EVENTS
1830-2030 hrs	<i>The Hampton Social, Montauk Hall *located out of hotel</i>	Purdue University Reception
1830-2100 hrs	<i>Discovery 46</i>	Transformational Flight Integration and Outreach Committee Meeting
1830-2100 hrs	<i>Bayhill 23</i>	Electric Propulsion Technical Committee
1830-2130 hrs	<i>Regency Q</i>	Non-Deterministic Approaches Technical Committee
1830-2130 hrs	<i>Bayhill 21</i>	Advanced software for Process Analysis and Progressive Damage and Failure Analysis of Composite Structures
1900-2000 hrs	<i>Peacock</i>	APATC Collaborative Experiments and Computations DG
1900-2000 hrs	<i>Celebration 14</i>	Data-driven modeling of Complex Fluids: Working Group Discussion
1900-2100 hrs	<i>Celebration 2</i>	Atmospheric Flight Mechanics TC
1900-2100 hrs	<i>Celebration 6</i>	Aerospace Department Chairs Meeting (ADCA)
1900-2200 hrs	<i>Rainbow Spring 1</i>	Michigan Aerospace AIAA Reception
1900-2100 hrs	<i>Regency O & P</i>	Thermophysics Technical Committee Meeting
1900-2100 hrs	<i>Barrel Spring 1</i>	HSABP Technical Committee Meeting
1900-2100 hrs	<i>Bayhill 31</i>	FDTC CFD Subcommittee
1900-2100 hrs	<i>Celebration 11</i>	FDTC FAC Subcommittee
1900-2100 hrs	<i>Celebration 16</i>	FDTC FFP Subcommittee
1900-2150 hrs	<i>Bayhill 17</i>	Materials TC Meeting
1900-2200 hrs	<i>Bayhill 24</i>	Adaptive Structures Technical Committee Meeting
1900-2200 hrs	<i>Bayhill 27</i>	Systems Engineering Technical Committee Meeting
1930-2130 hrs	<i>Manatee Spring 1</i>	Liquid Propulsion Technical Committee Meeting
1930-2200 hrs	<i>Challenger 41</i>	Space Exploration Integration and Outreach Committee: Face-to-Face Meeting
1930-2230 hrs	<i>Plaza H</i>	Aerodynamic Measurement Technology Technical Committee Meeting
1930-2230 hrs	<i>Bayhill 22</i>	Structures Technical Committee Meeting
2000-2100 hrs	<i>Boardroom</i>	MVCE GMGW Working Group Meeting
WEDNESDAY, 10 JANUARY		
0800-0930 hrs	<i>Winter Park 49</i>	GTTC RDT&E Risk Management Process Sufficiency
0830-1600 hrs	<i>Columbia 34</i>	Digital Avionics TC Meeting
0900-1100 hrs	<i>Regency O & P</i>	AIAA Publications Committee
0900-1700 hrs	<i>Winter Park 51</i>	IL Meeting Room
0930-1130 hrs	<i>Winter Park 54</i>	GTTC Measurement Uncertainty WG
1000-1130 hrs	<i>Columbia 36</i>	Transformative Systems Engineering Task Force Meeting
1230-1330 hrs	<i>Boardroom</i>	Journals Subcommittee
1300-1430 hrs	<i>Winter Park 49</i>	GTTC/APATC Focus Group: Integrated (Physical and Digital) Collaborative Experimentation
1300-1700 hrs	<i>Regency O & P</i>	Council of Directors Meeting
1315-1515 hrs	<i>Discovery 44</i>	AAM Multi-Modal Integration Meeting
1400-1500 hrs	<i>Challenger 38</i>	Journals' Editors-in-Chief Meeting
1400-1600 hrs	<i>Winter Park 54</i>	GTTC Dynamic Force Measurement in Wind Tunnels FG

COMMITTEE MEETINGS AND EVENTS

TIME	ROOM	COMMITTEE AND ANCILLARY MEETINGS/EVENTS
1500-1600 hrs	Boardroom	Journal of Aerospace Information Systems Editorial Board Meeting
1600-1730 hrs	Columbia 37	Cislunar Ecosystem Task Force Meeting
1730-1830 hrs	Discovery 43	Foreign Nationals Working Group
1700-1900 hrs	Boardroom	V/STOL Technical Committee Meeting
1700-2000 hrs	Challenger 41-42	University of Kentucky Aerospace Reception
1730-2000 hrs	Orchid/Verandah	Virginia Tech Alumni & Friends
1800-1900 hrs	Coral Spring 2	EATTC - Digital Engineering Discussion Group
1800-1900 hrs	Challenger 38	Flight Test Technical Committee Meeting
1800-1900 hrs	Bayhill 33	APATC NATO/STO Discussion Group
1800-1900 hrs	Bayhill 31	APATC Laminar Flow Control DG
1800-1900 hrs	Columbia 34	Supersonics Integration and Outreach Committee Meeting
1800-1900 hrs	Coral Spring 1	APATC Aero-Propulsive Interactions DG
1800-2000 hrs	Bayhill 23	Electrified Aircraft Technologies Technical Committee Meeting
1700-1900 hrs	Challenger 39	History Committee
1800-2000 hrs	Columbia 37	Energetic Components and Systems TC Meeting
1800-2000 hrs	Plaza I	Transition Open Forum
1800-2000 hrs	Discovery 46	Information Command and Control TC Meeting
1800-2000 hrs	Discovery 48	MDO TC Meeting
1800-2100 hrs	Celebration 1	Intelligent Systems Technical Committee Meeting
1800-2100 hrs	Bayhill 19	Women of Aeronautics and Astronautics Committee Meeting
1800-2200 hrs	Regency Q	SDTC committee meeting
1800-2200 hrs	Plaza H	Class of 2024 Associate Fellows Reception, Dinner & Induction Ceremony
1830-2000 hrs	Blue Spring 2	APATC Rotorcraft DG
1830-2030 hrs	Plaza G	JHTO/UCAH Hypersonics Community Career & Networking Social
1830-2130 hrs	Bayhill 21	Advanced software for Process Analysis and Progressive Damage and Failure Analysis of Composite Structures
1900-2100 hrs	Discovery 44	Software Systems TC Meeting
1900-2100 hrs	Celebration 4	Embry-Riddle Alumni and Friends Reception
1900-2100 hrs	Celebration 2	FDTC Plenary Meeting
1900-2100 hrs	Celebration 5	AMT Student Outreach Event and Updated Presentations
1900-2100 hrs	Celebration 16	Plasmadynamics and Lasers Technical Committee
1900-2100 hrs	Bayhill 30	Pressure Gain Combustion TC Meeting
1900-2100 hrs	Discovery 43	Modeling and Simulation Technical Committee Meeting
1900-2200 hrs	Discovery 47	Aeroacoustics Technical Committee Meeting
1900-2100 hrs	Regency O & P	Spacecraft Structures Technical Committee Meeting
1900-2200 hrs	Celebration 3	Friends of UC
1900-2200 hrs	Celebration 9	University of Alabama in Huntsville Students, Alumni & Friends

COMMITTEE MEETINGS AND EVENTS

TIME	ROOM	COMMITTEE AND ANCILLARY MEETINGS/EVENTS
THURSDAY, 11 JANUARY		
0900-1100 hrs	Winter Park 54	GTTC High Speed WT Calibration WG
1300-1400 hrs	Winter Park 49	GTTC Focus Group: Identify and Address RDT&E Workforce Challenges
1300-1500 hrs	Winter Park 54	GTTC Data System Discussion Group
1500-1700 hrs	Boardroom	Uncrewed and Autonomous Systems Integration Committee (UASIC) Membership Meeting
1600-1700 hrs	Regency O & P	Advanced Materials/Advanced Materials Task Force Kick-Off Meeting
1730-2030 hrs	Regency Q	GTTC Closeout Meeting
1800-2000 hrs	Challenger 38	Computer Systems TC Meeting
1900-2100 hrs	Regency O & P	Atmospheric and Space Environments Technical Committee Meeting
FRIDAY, 12 JANUARY		
0900-1000 hrs	Winter Park 54	Space Traffic Coordination Task Force Meeting





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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.

CLASS OF 2024 AIAA ASSOCIATE FELLOWS

(Ticketed Event)

Wednesday 10 // 1800-1845 hrs // Foyer outside of ballrooms Plaza G & F

Dinner: 1900 hrs // Plaza Ballroom H

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 2024 AIAA 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 \$135 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.



PREMIER LECTURE

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

2024 AIAA Dryden Lecture in Research

Monday 8 // 1730-1830 hrs // Windermere Ballroom

The lecture 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.

Peyman Givi, Distinguished Professor and James T. MacLeod Chair in Engineering, University of Pittsburgh

Lecture: **“The Promise of Quantum Computing for Aerospace Science and Engineering”**

LITERARY AWARDS

2024 AIAA Gardner-Lasser Aerospace History Literature Award

Thursday 11 // 0800 hrs // Windermere Ballroom

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.

Margaret A. Weitekamp, Smithsonian’s National Air and Space Museum

Space Craze: America’s Enduring Fascination with Real and Imagined Space Flight

2024 AIAA History Manuscript Award

Thursday 11 // 0800 hrs // Windermere Ballroom

This award is presented for the best historical manuscript dealing with the science, technology, and/or impact of aeronautics and astronautics on society.

Aaron M. Bateman, George Washington University

A Space Renaissance: The Strategic Defense Initiative and the Arms Race

2024 AIAA Pendray Aerospace Literature Award

Thursday 11 // 0800 hrs // Windermere Ballroom

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

Ann P. Dowling, University of Cambridge

Combustion Noise

2024 AIAA Summerfield Book Award

Thursday 11 // 0800 hrs // Windermere Ballroom

This award is presented to the author of the best book recently published (within the last five years) by AIAA.

Jeffrey W. Hamstra, Lockheed Martin Corporation

The F-35 Lightning II: From Concept to Cockpit

SERVICE AWARD

2024 AIAA Mary W. Jackson Diversity and Inclusion Award

Monday 8 // 0800 hrs // Windermere Ballroom

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.

Amanda Simpson, Chief Executive Officer, Third Segment LLC

For being a trailblazer in the aerospace community, a champion of diversity and inclusion in industry and government, and an inspiration to future generations.

RECOGNITION

TECHNICAL EXCELLENCE AWARDS

2024 AIAA Air Breathing Propulsion Award

Wednesday 10 // 0800 hrs // Windermere Ballroom

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

Aspi R. Wadia, GE Aviation (retired)

For sustained excellence, global impact, and revolutionary research and development in gas turbine aerodynamics.

2024 AIAA Aerodynamic Measurement Technology Award

Tuesday 9 // 0800 hrs // Windermere Ballroom

This award is presented for continued contributions and achievements toward the advancement of advanced aerodynamics flowfield and surface measurement techniques for research in flight and ground test applications.

Paul M. Danehy, NASA Langley Research Center

For the development and application of optical and laser-based measurement techniques supporting NASA's aeronautics and space exploration missions.

2024 AIAA de Florez Award for Flight Simulation

Tuesday 9 // 0800 hrs // Windermere Ballroom

This award is presented for an outstanding individual achievement in the application of flight simulation to aerospace training, research, and development.

Marinus Maria van Paassen, Delft University

For key contributions to the fields of human-in-the-loop vehicle simulation, real-time and distributed simulation software, and aerospace human factors.

2024 AIAA Energy Systems Award

Wednesday 10 // 0800 hrs // Windermere Ballroom

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.

Chih-Jen Sung, University of Connecticut

For outstanding contributions to flame dynamics and low-temperature chemistry for developing fuel-flexible, ultra-low emission, efficient combustion energy systems using conventional and alternative fuels.

2024 AIAA Intelligent Systems Award

Monday 8 // 0800 hrs // Windermere Ballroom

This award is presented to recognize important fundamental contributions to intelligent systems technologies and applications that advance the capabilities of aerospace systems.

Randal W. Beard, Brigham Young University

For his innovative contributions to the guidance and control of autonomous aircraft and to the mentoring and training of the next generation of aerospace leaders.

2024 AIAA Mechanics and Control of Flight Award

Tuesday 9 // 0800 hrs // Windermere Ballroom

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.

David Mitchell, Mitchell Aerospace Research

For industry-defining research and globally recognized leadership in flying qualities, handling qualities, and PIO evaluation in both fixed wing and rotary wing vehicles.

2024 AIAA Propellants and Combustion Award

Wednesday 10 // 0800 hrs // Windermere Ballroom

This award is presented for outstanding technical contributions to aeronautical or astronautical combustion engineering.

Jeffrey Cohen, RTX Technology Research Center

For outstanding contributions to sprays, combustion control, and gas turbine combustion.

2024 AIAA Structures, Structural Dynamics, & Materials Award

Tuesday 9 // 0800 hrs // Windermere Ballroom

This award is presented to an individual who has been responsible for an outstanding sustained technical or scientific contribution in aerospace structures, structural dynamics, or materials.

Carlos E. S. Cesnik, University of Michigan

For seminal contributions to research and education in structural modeling, dynamics, and health monitoring emphasizing multiphysics effects in very flexible aircraft, rotorcraft, and hypersonic vehicles.

2024 AIAA Survivability Award

Tuesday 9 // 0800 hrs // Windermere Ballroom

This award is presented to an individual or a team to recognize outstanding achievement or contribution in design, analysis, implementation and/or education of survivability in an aerospace system.

Gary C. Wollenweber, GE Aerospace

For exceptional contributions during a longstanding career in aircraft engine thermal design that has led to improved aircraft survivability through IR signature reduction.

2024 AIAA Wyld Propulsion Award

Wednesday 10 // 0800 hrs // Windermere Ballroom

This award is presented for outstanding achievement in the development or application of rocket propulsion systems.

Joseph Majdalani, Auburn University

For groundbreaking theoretical modeling and research on cyclonic rocket engines, revolutionizing the understanding of these and many other liquid, solid, and hybrid rocket engines.

RECOGNITION

STUDENT PAPER COMPETITIONS

Friday 12 // 0800 hrs // 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
- › Green Engineering Best Student Paper Award
- › Guidance Navigation and Control Best Graduate Student Paper
- › Human Machine Teaming SciTech Paper
- › Intelligent Systems Student Paper Competition
- › Meshing, Visualization, and Computational Environments Best Student Paper
- › Sensor Systems & Information Fusion Student Paper Grand Challenge
- › Space Tethers Student Paper Competition
- › Terrestrial Energy Systems Best Student Paper Award
- › Unmanned Systems

STUDENT ACHIEVEMENT AWARDS

Friday 12 // 0800 hrs // Windermere Ballroom

2023 Abe M. Zarem Graduate Award for Distinguished Achievement in Astronautics

Quentin Roberts, University of Washington
Advisor: Dr. Carl Knowlen, University of Washington

2023 Abe M. Zarem Graduate Award for Distinguished Achievement in Aeronautics

Stephen Monroe, Clarkson University
Advisor: Dr. Chunlei Liang, Clarkson University

BEST PROFESSIONAL PAPER AWARDS

These awards will be presented at the sponsoring committee's meeting.

2023 AIAA Adaptive Structures Best Paper

“Homogenization Model for Multistable Honeycomb Metastructures Exhibiting Beam-like Behavior” (AIAA 2023-1394)

Authors: David Matthew Boston and Andres F. Arrieta, Purdue University

2023 AIAA Aerospace Design and Structures Best Paper

“Using Broyden’s Method to Improve the Computational Performance of a Harmonic Balance Aeroelastic Solution Technique” (AIAA 2023-2221)

Authors: Jeffrey P. Thomas and Earl H. Dowell, Duke University

2023 AIAA Electric Propulsion Best Paper

“Operation and Performance of a Magnetically Shielded Hall Thruster at Ultrahigh Current Densities on Xenon and Krypton” (AIAA 2023-0842)

Authors: Leanne L. Su, Tate M. Gill, Parker J. Roberts, William J. Hurley, Thomas A. Marks, Christopher L. Sercel, Madison G. Allen, Collin B. Whittaker, Matthew P. Byrne, Zachariah B. Brown, Eric Vigés, Benjamin A. Jorns, University of Michigan

2023 AIAA Electrified Aircraft Technology Best Paper

“Coupled Hybrid & Electric Aircraft Design and Strategic Airline Planning” (AIAA 2023-3869)

Authors: Maurice F. M. Hoogreef, Noa Zuijderwijk, Elise Scheer, Pieter-Jan Proesmans, Bruno Santos, Delft University of Technology

2023 AIAA Gas Turbine Engines Best Paper

“High-Lift High-Work LPT Blades and Separation: A Machine-Learning-Based Approach to Separation Identification” (AIAA 2023-0113)

Authors: Jared N. Kerestes, Christopher Marks, and John P. Clark, U.S. Air Force Research Laboratory; Mitch Wolff, Wright State University; Ron-Ho Ni, Aerodynamic Solutions, Inc.; and Nathan Fletcher, Innovative Scientific Solutions, Inc.

2023 AIAA Guidance, Navigation, and Control Best Paper

“Customized Real-Time First-Order Methods for Onboard Dual Quaternion-based 6-DoF Powered-Descent Guidance” (AIAA 2023-2003)

Authors: Abhinav G. Kamath, Purnanand Elango, Taewan Kim, Skye Mceowen, Mehran Mesbahi, and Behçet Açıkmeşe, University of Washington; Yue Yu, The University of Texas at Austin; and John M. Carson III, NASA Johnson Space Center

2023 AIAA High Speed Air Breathing Propulsion Best Paper

“Manifold-based Modeling for Supersonic Turbulent Combustion” (AIAA 2023-2529)

Authors: Esteban Cisneros-Garibay and Michael E. Mueller, Princeton University

2023 AIAA History Committee Best Paper

“Edgar Lineberry, Pioneer of Orbital Rendezvous” (AIAA 2023-0312)

Authors: John L. Goodman, Odyssey Space Research, LLC

2023 AIAA Inlets, Nozzles, and Propulsion System Integration Best Paper

“Modal Analysis of Serpentine Diffuser Distortion” (AIAA 2023-3308)

Authors: Spencer L. Stahl and Datta V. Gaitonde, The Ohio State University; and Russell Powers and John T. Spyropoulos, Naval Air Warfare Center

2023 AIAA Liquid Propulsion Best Paper

“Flame-Acoustic Interaction in a Sub- and Supercritical, Single-Injector, LOX/CNG/LNG Rocket Combustor with Optical Access” (AIAA 2023-1838)

Authors: Jan Martin, Wolfgang Armbruster, Michael Börner, Justin Steven Hardi, German Aerospace Center (DLR); and Michael Oswald, German Aerospace Center (DLR) and RWTH Aachen University

2023 AIAA Modeling and Simulation Best Paper

“Development of a Shipboard Skid-equipped Rotary-wing Aircraft Manoeuvring and Securing Simulation Package” (AIAA 2023-0341)

Authors: Alexander R. Schock and Robert Langlois, Carleton University

RECOGNITION

2023 AIAA Multidisciplinary Design Optimization Best Paper

“Advancements in Coupled Aeropropulsive Design Optimization for High-Bypass Turbofan Engines” (AIAA 2023-3591)

Authors: Andrew H. R. Lamkin, Anil Yildirim and Joaquim R. R. A. Martins, University of Michigan; and Nathan A. Wukie, Air Force Research Laboratory

2023 AIAA Pressure Gain Combustion Best Paper

“Low-Order Model for Detonation Velocity Suppression in Rotating Detonation Combustors” (AIAA 2023-1291)

Authors: Provence Barnouin, Eric Bach, Christian Oliver Paschereit, Myles D. Bohon, Technische Universität Berlin; and Ephraim J. Gutmark, University of Cincinnati

2023 AIAA Propellants and Combustion Best Paper

“Frictional Ignition of Metals in High Pressure Oxygen: A Critical Reassessment of NASA Test Data” (AIAA 2023-1489)

Authors: Andres Garcia Jimenez and Zachary Cordero, Massachusetts Institute of Technology

2023 AIAA Sensor Systems and Information Fusion Best Paper

“Drone Navigation Based on Integrated MEMS Inertial and Polarimetric Camera Measurements” (AIAA 2023-2705)

Authors: Verdiana Bottino, G. de Alteriis, C. Conte, R. Schiano Lo Moriello, G. Rufino, D. Accardo, University of Naples Federico II

2023 AIAA Shahyar Pirzadeh Memorial Award for Outstanding Paper in Meshing, Visualization and Computational Environments

“Free-Form Deformation of Parametric CAD Geometry via B-Spline Transformations” (AIAA 2023-3601)

Authors: Marlana C. Gomez, Marshall C. Galbraith, and Robert Haimes, Massachusetts Institute of Technology

2023 AIAA Small Satellite Best Paper

“On-Orbit Demonstration and Validation of Glint Image Capture” (AIAA 2023-1109)

Authors: Bhavi Jagatia, Ravi Teja Nallapu, and Philip Linden, Planet Labs PBC

2023 AIAA Software Best Paper

“Space ROS: An Open-Source Framework for Space Robotics and Flight Software” (AIAA 2023-2709)

Authors: Austin B. Probe, Emergent Space Technologies, Inc.; S. Will Chambers and Amalaye Oyake, Blue Origin; Matthew Deans, Guillaume Brat, Nick Cramer, Brian Kempa, NASA Ames Research Center; Brian Roberts, NASA Goddard Space Flight Center; Kimberly Hambuchen, NASA Glenn Research Center

2023 AIAA Solid Rockets Best Paper

“Qualification of HCl in Solid Propellant Combustion Products” (AIAA 2023-1515)

Authors: F. Maggi, S. Carlotti, L. Nichelini, A. Masini, M. Adorno, A. Galavotti, A. Verga, Politecnico di Milano; S. Dossi, ReActive Powder Technology s.r.l.; A. Neri, ESA-ESRI

2023 AIAA Spacecraft Structures Best Paper

“Kilometer-Scale Parabolic Reflector for a Radio Telescope in a Lunar Crater” (AIAA 2023-0754)

Authors: Manan Arya and JT Herrscher, Stanford University; Dario Pisanti, Scuola Superiore Meridionale; Alessandro Verniani, Mélanie Delapierre, Gaurangi Gupta, Ashish Goel, Joseph Lazio, Paul Goldsmith, and Saptarshi Bandyopadhyay, Jet Propulsion Laboratory, California Institute of Technology

2023 AIAA Structural Dynamics Technical Committee Best Paper

“Three-Dimensional Blade and Hub Stresses of Coaxial Rotors in High-Speed Forward Flight” (AIAA 2023-1892)

Authors: Mrinalgouda Patil, and Anubhav Datta, University of Maryland

2023 Collier Aerospace HyperX/AIAA Structures Best Paper Award

“A Mechanics-Informed Neural Network Framework for Data-Driven Nonlinear Viscoelasticity” (AIAA 2023-0949)

Authors: Faisal As'ad and Charbel Farhat, Stanford University

BEST STUDENT PAPER AWARDS

These awards will be presented at the sponsoring committee's meeting.

2023 AIAA Intelligent Systems Best Student Paper

“Twin-Delayed Deep Deterministic Policy Gradient for altitude control of a flying-wing aircraft with an uncertain aerodynamic model” (AIAA 2023-2678)

Authors: Willem Völker, Yifei Li, and Erik-Jan van Kampen, Delft University of Technology

2023 AIAA Structural Dynamics Technical Committee Best Student Paper

“Experimental Effect of Sideslip Angle on the Dynamic Behaviour of Flared Folding Wingtips” (AIAA 2023-0376)

Authors: Fintan Healy, Djamel Rezgui, Jonathan E. Cooper, University of Bristol

2023 AIAA Walter Lempert Best Student Paper Award

“Joint Temperature and Velocity Statistics in High-speed Flows Using Simultaneous CARS Thermometry and FLEET Velocimetry” (AIAA 2023-0221)

Authors: Jonathan Crosmer, Erik L. Braun, David. G. Ritchie, Nathaniel S. Kiefer, James Braun, Guillermo Paniagua, Mikhail N. Slipchenko, and Terrence R. Meyer, Purdue University

2023 AIAA Walter Lempert Best Student Paper Award - Honorable Mention

“HTPB Combustion Temperature Measurements” (AIAA 2023-0162)

Authors: Clayton M. Geipel, Christopher J. Pfützner, and Brian T. Fisher, U.S. Naval Research Laboratory

2023 AIAA Walter Lempert Best Student Paper Award - Honorable Mention

“Preliminary Krypton Measurements by Two-Photon Absorption Laser Induced Fluorescence (TALIF) in Cold Flow and a Hollow Cathode Plasma” (AIAA 2023-1863)

Authors: Jacob Gottfried, Seth Antozzi, Ciprian Dumitrache, and Azer P. Yalin, Colorado State University

GENERAL INFORMATION

AIAA Registration Hours

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

SUN, 7 JAN 1500-1900 hrs	MON, 8 JAN 0700-1730 hrs	TUES, 9 JAN 0700-1730 hrs
WED, 10 JAN 0700-1730 hrs	THUR, 11 JAN 0700-1730 hrs	FRI, 12 JAN 0700-1500 hrs

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MON, 8 JAN 0930-1730 hrs	TUES, 9 JAN 0700-1730 hrs	WED, 10 JAN 0700-1730 hrs
THUR, 11 JAN 0700-1730 hrs	FRI, 12 JAN 0700-1200 hrs	

Wi-Fi Internet Access On Site

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Proceedings for the forum will be available online. The cost is included in the registration fee where indicated. Online proceedings will be available for viewing and downloading around 4 January 2024. Please follow the instructions below to access the proceedings:



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- Corrections **will be available online** approximately 15 business days after the last day of the conference.



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AIAA members can post and browse resumes, browse job listings, and access other online employment resources by visiting the AIAA Career Center at careercenter.aiaa.org.

AUTHOR & SESSION CHAIR INFORMATION

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, **8-12 January: 0730 hrs**

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, 17 January**.

Audiovisual

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.

“No Paper, No Podium” and “No Podium, No Paper” Policies

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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TUESDAY, 9 JANUARY

1300-1600 hrs
Exposition Hall Open

1730-1900 hrs
Welcome Happy Hour

WEDNESDAY, 10 JANUARY

0845-1600 hrs
Exposition Hall Open

1130-1300 hrs
Lunch with the Exhibitors

THURSDAY, 11 JANUARY

0845-1400 hrs
Exposition Hall Open

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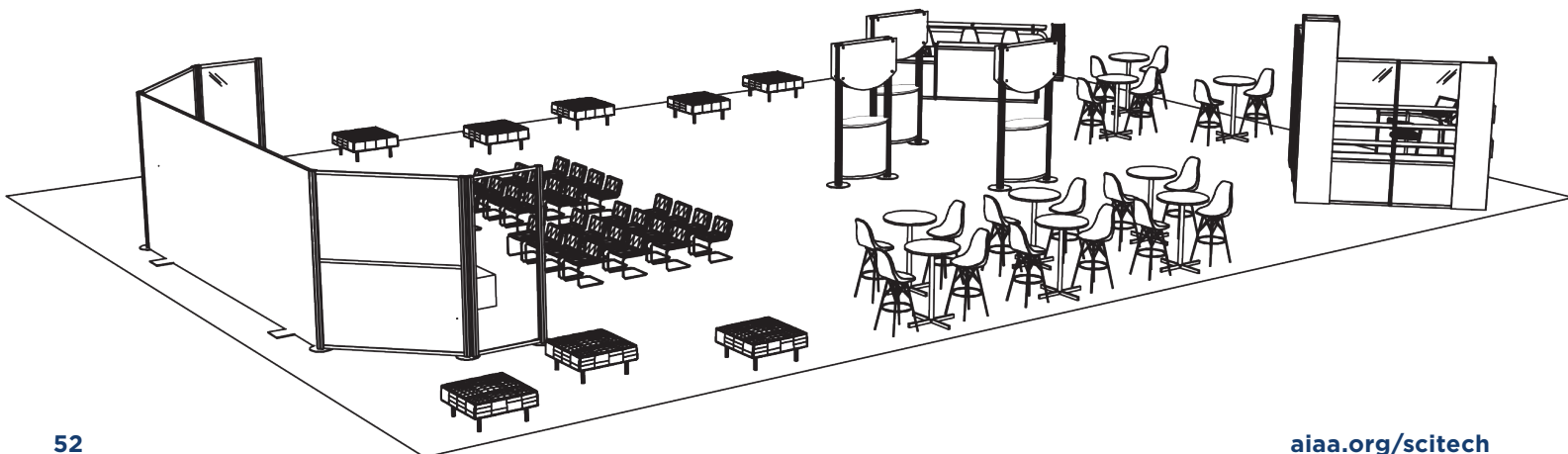
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AIAA Central Florida and Cape Canaveral Sections 135

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The AIAA Central Florida Section is here to serve our members and the aerospace community of the central Florida area.



The Central Florida Section offers events such as networking, workshops, speakers, forums, outreach and social events, and tours to help bring our community together and create a brighter future for central Florida aerospace industry.

ALTAIR

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Boeing Company

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Carnegie Mellon University Software Engineering Institute

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Dantec Dynamics, Inc. 436

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Enduralock

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

EXHIBITORS

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.

ESTECO

214

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.



FAMU-FSU College of Engineering

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<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

337

<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.



Force Measurement Systems Inc.

231

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.



Galaxy Technology Hires LLC

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www.galaxytekhires.com

Galaxy Technology Hires is an engineering and technology recruitment firm, headquartered in Houston, Texas, with a small team of highly specialized, niche recruiters and sourcers. We provide custom solutions to our clients with everything from name generation and sourcing, to



research and organizational mapping, to full cycle recruiting. We offer retained search, contingent search, executive search, and recruitment process outsourcing (RPO) services, as well as contract and contract to hire.

GE Aerospace

514

www.geaerospace.com

GE Aerospace is a world-leading provider of jet engines, components and systems for commercial and military aircraft with a global service network to support these offerings. GE Aerospace and its joint ventures have an installed base of more than 40,000 commercial and 26,000 military aircraft engines, and the business is playing a vital role in shaping the future of flight.



GE Aerospace

GE Aerospace Research

415

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.



GE Research

General Atomics Aeronautical Systems, Inc.

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<https://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



Gulfstream

405

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

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EXHIBITORS

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

114

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

213

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



HPCMP CREATE

511

<http://hpcmpcreate.org>

The HPCMP CREATE TM program is designed to improve the DoD acquisition process by developing and deploying five sets of advanced computational engineering design tools for acquisition programs: (1) Military aircraft design (CREATE-AV), (2) Military ship design (CREATE-SH), (3) RF antenna design and integration with platforms (CREATE-RF), (4) Meshing and geometry tool (CREATE-MG), and (5) Ground vehicle design (CREATE-GV). CREATE also includes an educational software suite called Genesis, for undergraduate and graduate student application of computational fluid dynamics learned in the classroom.

HPCMP CREATE TM products are intended for US Government, DOD, and partnering industries use only. All products are ITAR controlled.



IC2 (Interdisciplinary Consulting Corp)

225

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.

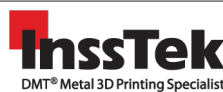


InssTek

411

<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.

Intelligent Light

326

www.ilight.com

Intelligent Light's solutions deliver our dynamic vision of analysis and engineering transformation by addressing the most advanced challenges presented for engineering. In order to implement 21st century HPC workflows, users require innovation and expertise spanning multiple domains. To help our customers get the most value from HPC and simulation, we have built a team of visualization and workflow engineers, user interface specialists, and signal processing/data science experts with access and experience on some of the world's most powerful HPC systems. We are ready to meet your Digital Transformation challenges for simulation and deliver a Realizable Digital Thread for HPC via our intelliThread™ family of solutions!

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Jet Propulsion Laboratory

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www.jpl.nasa.gov

JPL is a research and development lab federally funded by NASA and managed by Caltech.



JKI

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Kulite Semiconductor Products, Inc.

330

<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.



Lithoz America, LLC

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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



EXHIBITORS

components. Lithoz America, LLC offers machine sales, application support, and custom material development from our Troy, NY location.

Lockheed Martin Corporation 205

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 334

www.lanl.jobs



As a federally funded research and development center, Los Alamos National Laboratory aligns our strategic plan with priorities set by the Department of Energy's National Nuclear Security Administration (DOE NNSA) and key national strategy guidance documents. We execute work across all of DOE's missions: national security, science, energy, and environmental management. Scientific and engineering capabilities developed through LANL's stockpile research are part of what makes DOE and NNSA a science, technology, and engineering powerhouse for the nation.

Luminary Cloud, Inc. K4

www.luminarycloud.com



Luminary Cloud is an early-stage tech startup focused on innovations in high-performance computing for enterprise industrial R&D.

MathWorks 109

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 517

www.metacompotech.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 527

www.nasa.gov

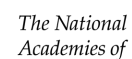


The National Aeronautics and Space Administration is America's civil space program and the global leader in space exploration. The agency has a diverse workforce of just under 18,000 civil servants, and works with many more U.S. contractors, academia, and international and commercial partners to explore, 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: www.nasa.gov/topics/aeronautics/index.html, www.nasa.gov/offices/setmo, gameon.nasa.gov, www.nasa.gov/directorates/heo/rpt/index.html

National Academies of Sciences, Engineering, and Medicine 512

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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

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 513

<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 x 9 foot tunnel, 30 foot low-speed tunnel, altitude icing tunnel or 10 x 20 foot icing tunnel.

EXHIBITORS

NDTL Propulsion and Power

521

<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.

Northrop Grumman

119

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 95,000 employees define possible every day.

Office of Naval Research

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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

437

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 Aerospace & IT

533

<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.

Precision Filters

130

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.

Quartus Engineering

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www.quartus.com



At Quartus, engineering is our passion. Supporting other engineers in a timely, cost-effective manner is our goal. We specialize in the design, analysis, and prototyping of complex systems and structures that require high precision and high reliability. We offer a broad range of engineering services and systems development capabilities — with key expertise in analysis & testing, custom metrology solutions, robotics & mechanisms, and precision optical systems

Research in Flight

122

www.researchinflight.com



Research in Flight is focused on developing innovative solutions for air vehicle aerodynamics. The nucleus of this development is a surface vorticity solver known as FlightStream®. FlightStream® provides solutions for aerodynamic related performance parameters of interest to air vehicle, marine, and energy system designers. FlightStream® simultaneously offers sufficient validated fidelity to accurately drive design processes and sufficient computational efficiency to be useful in conceptual and preliminary design trade studies. FlightStream® offers an intuitive user experience, interactivity with contemporary engineering tools, and air vehicle centric analysis options. FlightStream® has been placed at premier research institutions, universities, and companies around the world.

Rolls-Royce

234

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.

EXHIBITORS

RTX

219

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.

Sandia National Laboratories

541

www.sandia.gov



For more than 70 years, Sandia has delivered essential science and technology to resolve the nation's most challenging security issues.

SharpCloud

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Embrace your organization's complexity and use SharpCloud to help uncover the hidden insights and gaps between strategy and execution. Transform your planning from doing projects right, to focusing on the right projects, accelerating business competitiveness, agility and performance.

SIAM

140

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.

SpaceWorks Enterprises, Inc.

112

www.spaceworks.aero



SpaceWorks Enterprises, Inc. (SpaceWorks), based in Atlanta, Georgia, is an aerospace engineering company specializing in concept design, systems analysis, rapid prototyping, product development, and economic assessment for a broad and diverse customer base. For over 20 years, SpaceWorks has been dedicated to advancing the state-of-the-art in the aerospace industry, from the early design phase through flight demonstrations and system operation.

SpaceX

212

www.spacex.com



SpaceX designs, manufactures and launches the world's most advanced rockets and spacecraft. The company was founded in 2002 by Elon Musk to revolutionize space transportation, with the ultimate goal of making life multiplanetary.

SpaceX has gained worldwide attention for a series of historic milestones. It is the only private company ever to return a spacecraft from low-Earth orbit, which it first accomplished in December 2010. The company made history again in May 2012 when its Dragon spacecraft attached to the International Space Station, exchanged cargo payloads, and returned safely to Earth – a technically challenging feat previously accomplished only by governments. Since then Dragon has delivered cargo to and from the space station multiple times, providing regular cargo resupply missions for NASA.

For more information, visit www.spacex.com.

Specialised Imaging, Inc.

K1

www.specialised-imaging.com



Specialised Imaging is an internationally renowned company that designs and manufactures ultra-high-speed imaging cameras for industrial, scientific and defence research applications.

The company was formed in 2003, its founder members having previously worked together in the high-speed imaging field and bringing over 80 years' combined experience to the venture.

Since its inception in 2004, Specialised Imaging have successfully launched many new and innovative ultra-highspeed imaging systems. The company is at the forefront of world-wide innovation in the high-speed imaging field, having been awarded the BEEA's Small Company of the year in 2009 and the Queen's Award for Enterprise in 2011 & 2016.

This commitment to development has enabled the company to establish a reputation as an exciting and creative player in the high-speed camera market.

Spirit AeroSystems, Inc.

312

www.spiritaero.com



Spirit AeroSystems is one of the world's largest manufacturers of aerostructures for commercial airplanes, defense platforms, and business/regional jets. With expertise in aluminum and advanced composite manufacturing solutions, the company's core products include fuselages, integrated wings and wing components, pylons, and nacelles. Also, Spirit supports aftermarket work for commercial and business/regional jets. Headquartered in Wichita, Kansas, Spirit has facilities in the U.S., U.K., France, Malaysia and Morocco.

EXHIBITORS

Tecplot, inc.

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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.



Telops

208

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

142

<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.

Tri Models Incorporated

313

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.



aiaa.org/scitech

University of Central Florida

237

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.

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University of Maryland - Department of Aerospace Engineering

206

aero.umd.edu



For more than 70 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.

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

535

www.ae.utexas.edu



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.

Virginia Tech

111

www.aoe.vt.edu



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

232

www.virtusaero.com

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.



EXHIBITORS

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

235

www.volcanoplatforms.com



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.

Zero Hour Parts

236

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

537

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.



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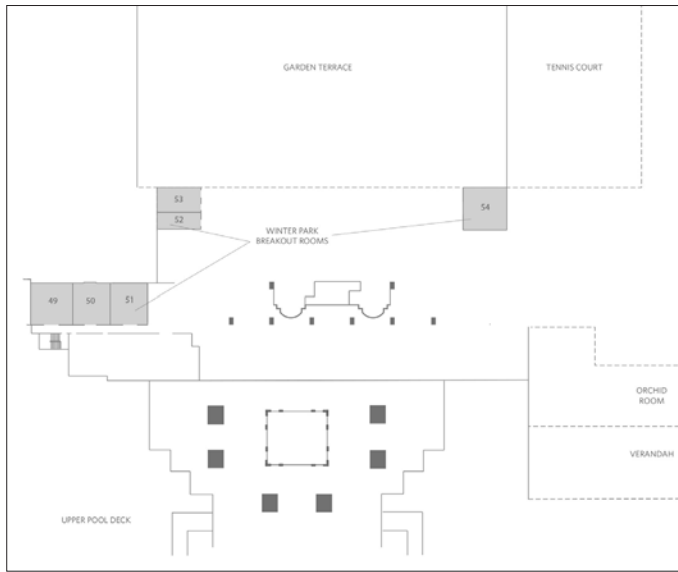
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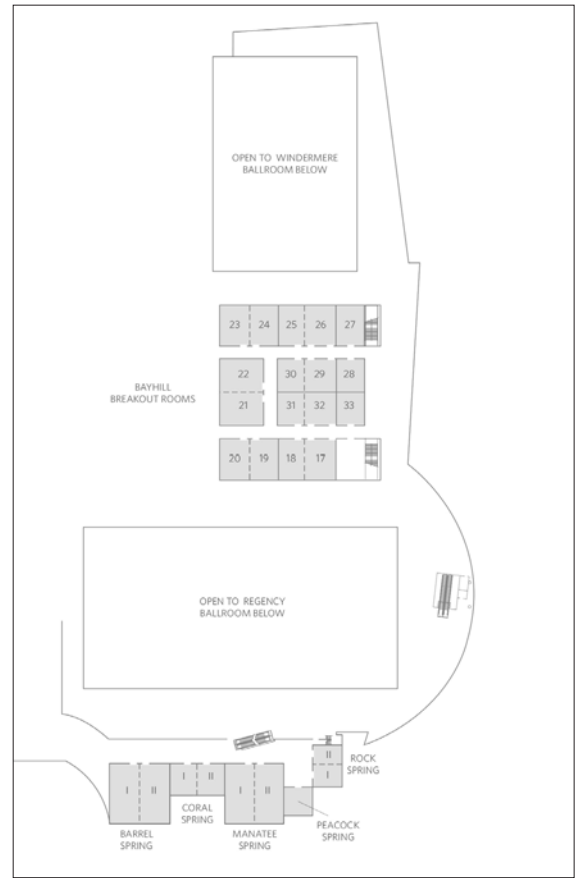
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VENUE MAP

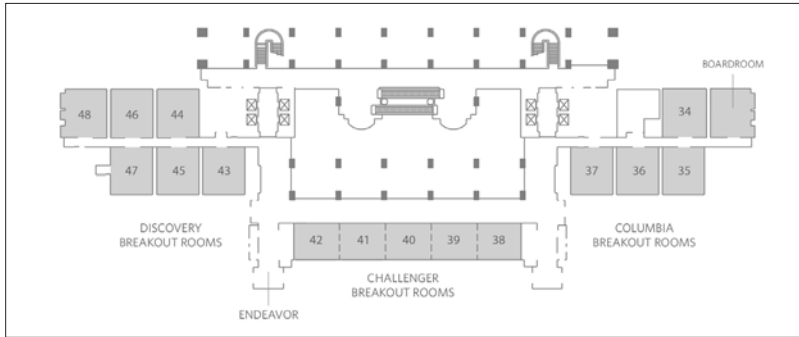
FOURTH LEVEL



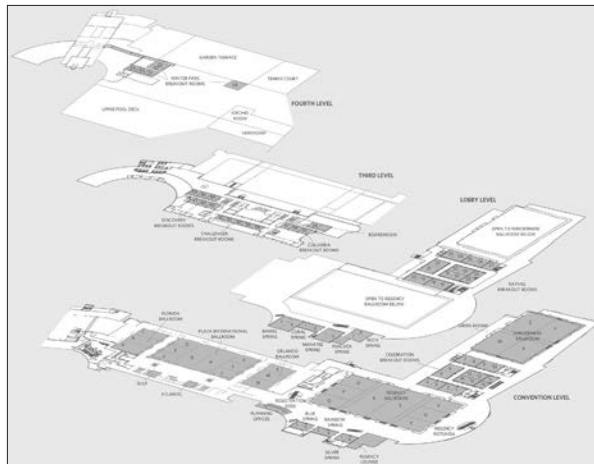
LOBBY LEVEL



THIRD LEVEL



CONVENTION LEVEL





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