Only here can I create new ways for humans to look at the universe.

Visit the Lockheed Martin booth to learn about our current career opportunities in advanced technology.
WELCOME TO

The 2023 AIAA SciTech Forum Guiding Coalition welcomes you to National Harbor, MD, and online! We have worked hard this past year curating exciting and thought-provoking content around the forum theme, *Ignite the Future: Explore the Frontiers of Aerospace*. We hope these industry leaders, topics, and discussions inspire you! Make it a great week!

GUIDING COALITION

Scott Fouse
AIAA Aerospace R&D Domain Lead, AIAA SciTech Forum Executive Producer

Geoff Butler
General Atomics Aeronautical Systems

Michael Cawood
Lockheed Martin Corporation (ret.)

Taylor Fazzini
Northrop Grumman Aeronautics Systems

Steve Frick
Lockheed Martin Space Advanced Technology Center

Sam Magill
NASA Langley Research Center

Michele Miller
Ball Aerospace

Charles Norton
NASA Jet Propulsion Laboratory

Masami Onoda
JAXA

Pradeep Raj
Virginia Tech

Robert Rose
Reliable Robotics

Chris Rouw
Ball Aerospace

Marilee Wheaton
The Aerospace Corporation

Karen Willcox
University of Texas at Austin

John Wojno
GE Aviation
FORUM TECHNICAL CHAIRS
Mary Roybal, Raytheon Missiles and Defense
(Aerospace Design and Structures Group)
Gary Seidel, Virginia Tech (Deputy Chair, Aerospace Design and Structures Group)
Cliff Brown, NASA Glenn Research Center (Aerospace Sciences Group)
Mrinal Kumar, Ohio State University (Deputy Chair, Aerospace Sciences Group)
Michael Rubin, Red Canyon Software (Intelligent Systems Group)
Cetin Kris, NASA Ames Research Center (Integration and Outreach Division)
Matthew Harvazinski, Air Force Research Laboratory (Propulsion and Energy Group)
Brent Rankin, Air Force Research Laboratory (Deputy Chair, Propulsion and Energy Group)

TECHNICAL DISCIPLINE CHAIRS
ADAPTIVE STRUCTURES
Jeffrey L. Kauffman, University of Central Florida
Ruxandra Botez, École de technologie supérieure (ETS)

AEROAUSTICS
Seongkyu Lee, University of California, Davis
Julian Winkler, Raytheon Technologies

AERODYNAMIC MEASUREMENT TECHNOLOGY
Waruna Kutilalaka, Texas A&M University
Chloe Dedic, University of Virginia

AEROSPACE EDUCATION
Raymond LeBeau, Saint Louis University
Sanjay Jayaram, Saint Louis University

AEROSPACE POWER SYSTEMS
Jeremiah McNatt, NASA Glenn Research Center
Greg Semrau, Moog, Inc.

AIRCRAFT DESIGN
Imon Chakraborty, Auburn University
Taylor Fazzini, Northrop Grumman Aeronautics Systems

APPLIED AERODYNAMICS
Kidambi Sreenivas, University of Tennessee at Chattanooga and Sim Center
Michelle Lynde, NASA Langley Research Center
Wei Liao, Bihrlie Applied Research

ATMOSPHERIC AND SPACE ENVIRONMENTS
Miles Bengtson, National Academies of Sciences, Engineering and Medicine
Justin Likar, Johns Hopkins University Applied Physics Laboratory

ATMOSPHERIC FLIGHT MECHANICS
Ye Lu, Kent State University
Craig Woolsey, Virginia Tech
Soumyo Dutta, NASA Langley Research Center

CASE
Jimmie McEver, Johns Hopkins University Applied Physics Laboratory
Samantha Infeld, Analytical Mechanics Associates, Inc.

CFD2030
Francisco Palacios, The Boeing Company
Dimitri Mavriplis, University of Wyoming
Jeff Slotnick, Boeing Commercial Airplanes

COMPUTER SYSTEMS
James Paunic, Boeing Engineering Operations & Technology

DESIGN ENGINEERING
Olivia Pinon Fischer, Georgia Institute of Technology
Franz-Josef Kahlen, University of Cape Town

DIGITAL AVIONICS
Maarten Uijt de Haag, TU Berlin
Evan T. Dill, NASA Langley Research Center

DIGITAL ENGINEERING
John F. Matlik, Rolls-Royce Corporation
Dave Kepczynski, GE Research
Natalie Straup, Northrop Grumman
Olivia Pinon Fischer, Georgia Institute of Technology

ELECTRIC PROPULSION
Benjamin Jorns, University of Michigan, Ann Arbor
Jason Frieman, NASA Glenn Research Center

ELECTRIFIED AIRCRAFT TECHNOLOGY
Panos Laskaridis, Cranfield University
Jon Gladin, Georgia Institute of Technology
Shengyi Liu, The Boeing Company

ENERGETIC COMPONENTS AND SYSTEMS
Jose Guadarrama, Lockheed Martin
Stephanie Sawhill, Systima Technologies

FLIGHT TESTING
Cody Hydick, Lockheed Martin
Joe Nichols, Raytheon Missiles & Defense

FLUID DYNAMICS
Aaron Towne, University of Michigan, Ann Arbor
Will Tyson, NAVAIR

GAS TURBINE ENGINES
Andrew Nix, West Virginia University
Elhadji Alpha Bah

GREEN ENGINEERING
Tarek Abdel-Salam, East Carolina University
Nathan Hicks, The Boeing Company

GROUND TESTING
Ryan Callahan, Lockheed Martin Aeronautics
Pat Goulding II, National Full-Scale Aerodynamics Complex, AEDC

GUIDANCE, NAVIGATION, AND CONTROL
Michael B. McFarland, Raytheon Missiles & Defense
Luca Massotti, European Space Agency
Michael Niestroy, Lockheed Martin Aeronautics

HIGH-SPEED AIR-BREATHING PROPULSION
Thomas R. Smith, Boeing Engineering Operations & Technology
Friedolin T. Strauss, DLR – German Aerospace Center

HISTORY
Julian Tishkoff, Retired
Kevin Burns, Retired

HUMAN–MACHINE TEAMING
Karen Feigh, Georgia Institute of Technology
Nicholas Napoli, University of Florida

HYBRID ROCKETS
Matthew Hitt, U.S. Army SMDC
Trevor S. Elliott, University of Tennessee at Chattanooga

INFORMATION AND COMMAND AND CONTROL SYSTEMS
Jimmie McEver, Johns Hopkins University Applied Physics Laboratory
Ali Raz, George Mason University
Mike Sotak, Kratos Defense
Inspired by discovery

With an innovative spirit fueling our passion, we are always making progress toward the next horizon.

Learn more at boeing.com
TECHNICAL PROGRAM COMMITTEE

INLETS, NOZZLES, AND PROPULSION SYSTEMS INTEGRATION
Vishal Acharya, Georgia Institute of Technology
Pavlos Zachos, Cranfield University

INTELLIGENT SYSTEMS
Liang Sun, New Mexico State University
David Casbeer, Air Force Research Laboratory

LIQUID PROPULSION
Naveen Vetcha, ERC Incorporated
Matt Quinlan, University of Colorado Colorado Springs

MATERIALS
Jessica Piness, Redwire Space
Marianna Maiaru, University of Massachusetts, Lowell

MESHING, VISUALIZATION, AND COMPUTATIONAL ENVIRONMENTS
Stephen Nichols, Oak Ridge National Laboratory
Nitin Bhagat, University of Dayton

MODELING AND SIMULATION TECHNOLOGIES
Michael Madden, NASA Langley Research Center
Gano Chatterji, NASA Ames Research Center

MULTIDISCIPLINARY DESIGN OPTIMIZATION
Felipe Viana, University of Central Florida
Graeme Kennedy, Georgia Institute of Technology

NON-DETERMINISTIC APPROACHES
Diane Villanueva, The MITRE Corporation
Pankaj Joshi, ZAL Center of Applied Aeronautical Research

NUCLEAR AND FUTURE FLIGHT PROPULSION
Stephanie Thomas, Princeton Satellite Systems

PLASMADYNAMICS AND LASERS
Carmen Guerra-Garcia, Massachusetts Institute of Technology
Suo Yang, University of Minnesota

PRESSURE GAIN COMBUSTION
Don Ferguson, National Energy Technology Laboratory
William Roberts, KAUST

PROPELLANTS AND COMBUSTION
Jeffrey Murphy, The Aerospace Corporation
Jacqueline O’Connor, Pennsylvania State University

SENSOR SYSTEMS AND INFORMATION FUSION
Ric Moseley, Lockheed Martin Aeronautics
Stephen Cain, Air Force Institute of Technology

SMALL SATELLITES
Scott Palo, University of Colorado Boulder
Jonathan Sauder, NASA Jet Propulsion Laboratory

SOCiETY AND AEROSPACE TECHNOLOGY
Amir S. Gohardani, Springs of Dreams Corporation

SOFTWARE
Umum Durak, DLR – German Aerospace Center

SOLID ROCKETS
Wes Ryan, NASA Kennedy Space Center

SPACE EXPLORATION
Surendra P. Sharma, NASA Ames Research Center
Narayanan R. Ramachandran, Jacobs Space Exploration Group

SPACE OPERATIONS AND SUPPORT
Jillian Redfern, Southwest Research Institute
Christopher R. Simpson, Naval Air Warfare Center

SPACECRAFT STRUCTURES
Kawai Kwok, University of Central Florida
Maria Sakovsky, Stanford University

STRUCTURAL DYNAMICS
Alessandro Scotti, Pilatus Aircraft Ltd
Todd Griffith, University of Texas at Dallas

STRUCTURES
Ellen McIsaac, Lockheed Martin Aeronautics
Jeffrey Chambers, Aurora Flight Sciences, A Boeing Company

SUPERSONICS
David Lazzara, The Boeing Company
Darcy Allison, Raytheon Missiles & Defense

SURVIVABILITY
Carrell McAllister, Joint Aircraft Survivability Program Office
Joshua Hess, Air Force Institute of Technology

SYSTEMS ENGINEERING
Samantha Infeld, Analytical Mechanics Associates, Inc.
Alejandro Salado, University of Arizona
Michael W. Sievers, NASA Jet Propulsion Laboratory

TERRESTRIAL ENERGY
Bhupendra Khandelwal, University of Alabama in Tuscaloosa
Tarek Abdel-Salam, East Carolina University

THERMO PHYSICS
Arpit Tiwari, Rivian
Chuck Bersbach, Raytheon Missile Systems Company

TRANSFORMATIONAL FLIGHT
Anthony Linn, Servomotive

UNMANNED SYSTEMS
Zohaib Mian, Astra Space
Omar Kassim Ariff, University of Salford
Sricharan Ayyalasomayajula, BlueHalo

WIND ENERGY
Brent Houchens, Sandia National Laboratories
PJ Stanley, Shell
REDEFINE WHAT IS POSSIBLE
BRING NEW IDEAS TO LIFE
DARE MIGHTY THINGS TOGETHER
SPONSORS & SUPPORTERS

AIAA would like to thank the following organizations for their support of the 2023 AIAA SciTech Forum.

EXECUTIVE SPONSORS

LOCKHEED MARTIN  BOEING

NORTHROP GRUMMAN

Raytheon Technologies

SPONSORS

HEXAGON  Caltech  PACE

SCOPE  Ball  BASTION TECHNOLOGIES

MEDIA SPONSOR

AEROSPACE
<table>
<thead>
<tr>
<th>SAT. 21</th>
<th>SUN. 22</th>
<th>MONDAY 23</th>
<th>TUESDAY 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>0730 hrs</td>
<td></td>
<td>Speaker Briefing</td>
<td>Speaker Briefing</td>
</tr>
<tr>
<td>0800 hrs</td>
<td></td>
<td>Plenary</td>
<td>Plenary</td>
</tr>
<tr>
<td>0830 hrs</td>
<td></td>
<td>Networking Break</td>
<td>Networking Break</td>
</tr>
<tr>
<td>0900 hrs</td>
<td>Pre-Forum Workshops</td>
<td>In-Person Technical Sessions 0930–1110 hrs</td>
<td>In-Person Technical Sessions 0930–1110 hrs</td>
</tr>
<tr>
<td>0930 hrs</td>
<td></td>
<td>Forum 360</td>
<td>Forum 360</td>
</tr>
<tr>
<td>1000 hrs</td>
<td></td>
<td>Forum 360</td>
<td>Fireside Chat on a New Collaboration to Advance Propulsion Technologies</td>
</tr>
<tr>
<td>1030 hrs</td>
<td></td>
<td>Forum 360</td>
<td>Tuesday Networking Lunch 1230–1400 hrs</td>
</tr>
<tr>
<td>1100 hrs</td>
<td></td>
<td>Space 2050</td>
<td>Exposition Hall Open</td>
</tr>
<tr>
<td>1130 hrs</td>
<td></td>
<td>1230 hrs</td>
<td>1530 hrs</td>
</tr>
<tr>
<td>1200 hrs</td>
<td></td>
<td>1300 hrs</td>
<td>1600 hrs</td>
</tr>
<tr>
<td>1230 hrs</td>
<td></td>
<td>1330 hrs</td>
<td>1630 hrs</td>
</tr>
<tr>
<td>1300 hrs</td>
<td></td>
<td>1400 hrs</td>
<td>1700 hrs</td>
</tr>
<tr>
<td>1330 hrs</td>
<td></td>
<td>1430 hrs</td>
<td>1730 hrs</td>
</tr>
<tr>
<td>1400 hrs</td>
<td></td>
<td>1500 hrs</td>
<td>1800 hrs</td>
</tr>
<tr>
<td>1430 hrs</td>
<td></td>
<td>1530 hrs</td>
<td>1830 hrs</td>
</tr>
<tr>
<td>1500 hrs</td>
<td></td>
<td>1600 hrs</td>
<td>1900 hrs</td>
</tr>
<tr>
<td>1530 hrs</td>
<td></td>
<td>1630 hrs</td>
<td>1930 hrs</td>
</tr>
<tr>
<td>1600 hrs</td>
<td></td>
<td>1700 hrs</td>
<td>2000 hrs</td>
</tr>
</tbody>
</table>

SciTech 101

Dryden Lecture in Research

Welcome Happy Hour in the Exposition Hall

National Harbor, MD

Virtual

Hybrid
### FORUM OVERVIEW

<table>
<thead>
<tr>
<th>Time</th>
<th>Wednesday 25</th>
<th>Thursday 26</th>
<th>Friday 27</th>
</tr>
</thead>
<tbody>
<tr>
<td>0730 hrs</td>
<td>Speaker Briefing</td>
<td>Speaker Briefing</td>
<td>Speaker Briefing</td>
</tr>
<tr>
<td>0800 hrs</td>
<td></td>
<td>Plenary</td>
<td></td>
</tr>
<tr>
<td>0830 hrs</td>
<td></td>
<td>Plenary</td>
<td></td>
</tr>
<tr>
<td>0900 hrs</td>
<td>Networking Break in Exposition Hall</td>
<td>Networking Break in Exposition Hall</td>
<td>Networking Break</td>
</tr>
<tr>
<td>0930 hrs</td>
<td>In-Person Technical Sessions</td>
<td>In-Person Technical Sessions</td>
<td>In-Person Technical Sessions</td>
</tr>
<tr>
<td>1000 hrs</td>
<td>0930–1110 hrs</td>
<td>0930–1110 hrs</td>
<td>0930–1110 hrs</td>
</tr>
<tr>
<td>1030 hrs</td>
<td>In-Person Technical Sessions</td>
<td>Forum 360</td>
<td>Forum 360</td>
</tr>
<tr>
<td>1100 hrs</td>
<td>1230–1400 hrs</td>
<td>Exposition Hall Open</td>
<td>Exposition Hall Open</td>
</tr>
<tr>
<td>1130 hrs</td>
<td>Rising Leaders Lunch Panel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200 hrs</td>
<td>Exposition Hall Open</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1230 hrs</td>
<td>Exposition Hall Open</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1300 hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1330 hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1400 hrs</td>
<td>In-Person Technical Sessions</td>
<td>Networking Break 1530–1600 hrs</td>
<td>Networking Break 1530–1600 hrs</td>
</tr>
<tr>
<td>1430 hrs</td>
<td>1400–1540 hrs</td>
<td>Forum 360</td>
<td>Forum 360</td>
</tr>
<tr>
<td>1500 hrs</td>
<td>In-Person Technical Sessions</td>
<td>In-Person Technical Sessions</td>
<td>In-Person Technical Sessions</td>
</tr>
<tr>
<td>1530 hrs</td>
<td>1400–1540 hrs</td>
<td>1400–1540 hrs</td>
<td>1400–1540 hrs</td>
</tr>
<tr>
<td>1600 hrs</td>
<td>Virtual Technical Sessions</td>
<td>Virtual Technical Sessions 1600–1715 hrs</td>
<td>In-Person Technical Sessions 1600–1740 hrs</td>
</tr>
<tr>
<td>1630 hrs</td>
<td>1600–1715 hrs</td>
<td>William H. Pickering Lecture</td>
<td></td>
</tr>
<tr>
<td>1700 hrs</td>
<td></td>
<td></td>
<td>In-Person Technical Sessions</td>
</tr>
<tr>
<td>1730 hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1800 hrs</td>
<td>Durand Lecture for Public Service</td>
<td></td>
<td>Women at SciTech</td>
</tr>
<tr>
<td>1830 hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1900 hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1930 hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000 hrs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Building the future of aviation, today.
That’s Defining Possible.

NORTHROP GRUMMAN
ngc.com
ONLINE PLATFORM TOUR

virtualscitech.aiaa.org

1. Program
View, tag ‘Interested,’ and/or create ‘lists’ for upcoming sessions, or join live sessions straight from the Program page.
• Be sure to adjust your time zone or filter for specific features.
• Multiple sessions within one time slot? Click the “+” at the bottom left of the card and those sessions will expand.
• After a livestreamed session occurs, the on-demand recordings will be available on the same session card.
• NEW - Add individual papers to your schedule or interest list.

2. Chat
Meet and chat with fellow attendees!

3. Attendee List
Looking for an old colleague or friend? Those who have opted in to having their profile shared will be displayed here. You’ll also have the ability to send a direct message if they have that feature turned on. Click on the top right circle to update your profile or permissions on your profile page.

4. Exhibitors & Sponsors
Sharpen your skills and see the latest and greatest products and offerings from cutting-edge companies and organizations. Be sure to check out all our supporting sponsors and partners!

5. Topics/Speakers
Explore all that the AIAA SciTech Forum program has to offer through session topics, formats, and descriptions; participating speakers; areas of interest; and more.

6. Robust Search Feature
Search quickly connects you to the item you are looking for – be it name, video, contributor, exhibitor, sponsor, paper, speaker or session.
DEFYING GRAVITY IS ONLY THE BEGINNING

You routinely accomplish the unimaginable—solving the mysteries of space and flight. But your goal, like ours, is never wonder for wonder’s sake. When you join the world’s largest technical society devoted to aerospace engineering, you’ll become part of a fellowship of peers driven to push the limits of humanity. Take your place among AIAA’s community of 30,000 aerospace engineers and scientists and prepare for unmatched access to professional development, thought leadership, and global collaboration.

Become a Member Today!
AIAA.org/join
PRE-FORUM WORKSHOPS

6th AIAA Propulsion Aerodynamics Workshop (PAW6)
0800-1700 hrs // Chesapeake A-C
This workshop focuses on assessing the accuracy of CFD in obtaining air breathing system performance and flow structure in nozzle and inlet flow fields.

3rd AIAA Aeroelastic Prediction Workshop (AePW-3)
0800-1700 hrs // Chesapeake D-F
The workshop is aimed at understanding the effectiveness of current tools toward predicting aeroelastic phenomena critical for aircraft analysis and design.

SciTech 101
1800-1830 hrs // National Harbor 11
Discover how you can make the most of your week at AIAA SciTech Forum while meeting fellow attendees. This orientation is ideal for first-time attendees, but all are welcome!

PROGRAM
SATURDAY–SUNDAY // 21–22 JANUARY

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 five presentations.

- **In-person**: each 15-minute presentation is followed by 5 minutes of Q&A.
- **Virtual**: each papers’ 10-minute summary video automatically plays in order; after this a Zoom room opens for live Q&A.

**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 shorter presentations, meet the author sessions, and technology demonstrations.

FOR MOST UP-TO-DATE SCHEDULE CHECK ONLINE
PLENARY
Accelerating a More Hopeful Future
0800–0900 hrs // Potomac Ballroom A/B

Without a target you’ll miss every time. XPRIZE competitions have clear, objective, and measurable goals and capture the imaginations of people all over the world, inspiring everyone into action. Hear how millions of dollars in prize purses incentivize radical breakthroughs for the benefit of humanity. Team registration for the XPRIZE Carbon Removal is still open. Learn more about this $100M prize competition at https://pop.xprize.org/prizes/xprize_carbon_capture/overview.

SPEAKER: Anousheh Ansari, CEO, XPRIZE Foundation

FORUM 360
Grand Challenges: The How
1000–1130 hrs // Potomac Ballroom A/B

Grand challenges enable us to tackle major societal and industry issues using collaborative and innovative approaches. Our panel explores “the how”: How do individuals get involved? How should teams approach the challenge? How do we ensure that we’re working across industries, nationalities, and generations to create solutions?

MODERATOR: Yannis Yortsos, Dean, Viterbi School of Engineering, University of Southern California

PANELISTS:
Jenna Carpenter, Founding Dean and Professor of Engineering, Campbell University
Gwen Lighter, CEO, GoFly
Andrew Mang, Chair, Industry and Alumni Relations, Grand Challenges Scholars Program
Col Scott Neumann, USAF (Ret.), Director, Pulitzer Electric Aircraft Race

FORUM 360
Idea Challenge: Applying Aerospace Technologies to Solve Societal Problems
1430–1600 hrs // Potomac Ballroom A/B

This challenge provides young professionals with the opportunity to develop a pitch for an idea or product that fits under the challenge theme. Each team presents ideas for how aerospace technologies and techniques can contribute solutions to large global issues, such as climate change, food sustainability, or access to resources. By introducing these ideas, they showcase how the aerospace industry acts as a pathfinder for humanity. Teams comprising a mix of industry, government, and academic members present their pitches and audience members can ask questions, evaluate the pitches, and choose the winning team.

MODERATOR: Michele Miller, Vice President, Security and Mission Assurance, Ball Aerospace

Meet the Employers
1500–1800 hrs // Cherry Blossom Ballroom

A can’t-miss opportunity where students and young professionals can interact with AIAA Corporate Members and find out what employment opportunities are available, all in a fun and dynamic environment. Participate in round table discussions from 1500–1700 hrs in the Cherry Blossom Ballroom, followed by a cocktail reception from 1700–1800 hrs in the Cherry Blossom Lobby. Space is limited to 400 participants. Remember to bring your resume.

2023 Dryden Lecture in Research
1800–1900 hrs // Potomac Ballroom A/B

“Hypersonic Wall Bounded Viscous Flows: Theory, Ground Test, and Flight”

Rodney D. Bowersox, Associate Dean for Research, Ford I Professor of Aerospace Engineering, and University Regents Professor, Texas A&M University

Proof of purchase is required and included in the registration fee where indicated. Additional tickets may be purchases at registration. All meals in Exposition Hall.

Tuesday Networking Lunch
Welcome Happy Hour
Wednesday Networking Lunch
Thursday Networking Lunch
**PLENARY**  
0800–0900 hrs // Potomac Ballroom A/B  
**SPEAKER:** William D. Roach, Chief Scientist, Air Force Office of Scientific Research

**Fireside Chat on a New Collaboration to Advance Propulsion Technologies**  
1000–1045 hrs // Potomac Ballroom A/B  
DARPA and NASA leaders will discuss a collaboration between the agencies to advance space propulsion technologies for both civilian and defense efforts.  
**SPEAKERS:**  
The Honorable Bill Nelson, Administrator, NASA  
The Honorable Pam Melroy, Deputy Administrator, NASA  
Stefanie Tompkins, Director, DARPA

**FORUM 360**  
**Public Investors in the Future of Aerospace**  
1100–1215 hrs // Potomac Ballroom A/B  
To transition a great idea into a high-impact research program or a sustainable business, you need funding. Our panel of government experts will explain how their funding programs work, how to apply, and the opportunities provided by working with them. After the session, chat with the panelists and other government representatives about funding opportunities.  
**MODERATOR:** Sha-Chelle Manning, Chief of Commercial Strategy, DARPA  
**PANELISTS:**  
Dyan Gibbens, Strategic Advisor and Acting CTO, AFWERX/SpaceWERX  
Byron Knight, Chief Scientist, Advanced Systems and Technology Division, National Reconnaissance Office  
Gynelle Steele, SBIR/STTR Deputy Program Executive, NASA

**Beyond Aerospace Engineering**  
1130-1230 hrs // Azalea 3  
It is often thought that aerospace engineers are the only discipline who make great aerospace feats happen. The reality is the aerospace sector is huge, and aerospace engineers only account for about 20% of the workforce. This workshop investigates how a diverse group of disciplines work together to bring aerospace feats to fruition.  
**MODERATOR:** John A. Cavolowsky, Director, Transformative Aeronautics Concepts Program, Aeronautics Research Mission Directorate, NASA  
**PANELISTS:**  
Therese Jones, Senior Directory of Policy, Satellite Industry Association  
Mira Marquez, Product Designer, Skydio

**FORUM 360**  
**The Secret to Innovative Success: Uncovering Actual Customer Needs**  
1530–1700 hrs // Potomac Ballroom A/B  
The most common mistake innovation teams make is failing to identify an actual customer need. Teams tend to jump from a problem to a solution, and it is almost always wrong. This interactive workshop describes fundamental value-creation practices that significantly improve innovative outcomes, starting with identifying the actual customer need. Participants will learn concepts they can immediately use to improve their innovative performance.  
**SPEAKER:** Curtis R. Carlson, Professor of Practice, Northeastern University; Distinguished Executive in Residence, Worcester Polytechnic Institute; former President and CEO, SRI International  
**FACILITATOR:** Scott Fouse, AIAA Aerospace R&D Domain Lead and AIAA SciTech Forum Executive Producer

**Welcome Happy Hour in the Exposition Hall**  
1730–1900 hrs // Prince George D/E  
Take this opportunity to engage new contacts and refresh old ones.
PLENARY
The Future of Remote Sensing
0800–0900 hrs // Potomac Ballroom A/B
What is the future of remote sensing, and how can we use it to resolve the biggest science and societal questions?
MODERATOR: Lt. Gen. Larry James, USAF (Ret.), Deputy Director, NASA Jet Propulsion Laboratory
SPEAKERS:
Johnathon Caldwell, Vice President and General Manager, Military Space, Lockheed Martin
Sabine Klauke, Chief Technical Officer, Airbus
Jerry M. Wohletz, President and CEO, Draper
FORUM 360
Monitoring Planet Earth
1000–1130 hrs // Potomac Ballroom A/B
Recent acceleration of technologies and processes has enabled the use of remote sensing to map wildfires, track the effects of climate change, and monitor conflicts. Hear successful applications of remote sensing and the challenges involved to monitor planet Earth.
MODERATOR: Al Tadros, Chief Technology Officer, Redwire Space
PANELISTS:
John Choi, Director, Special Purpose UAS Quick Reaction Capability, Special Programs, General Atomics Aeronautical Systems
Marcus Johnson, Project Manager, Advanced Capabilities for Emergency Response Operations Project, NASA Ames Research Center
Cathy Olkin, Principal Scientist, Muon Space
Julie Robinson, Deputy Director, Earth Science, NASA
Rob Stevens, Director, Concept Design Center, The Aerospace Corporation
Barry Tilton, Technology Evangelist, Maxar Technologies
Workforce of the Future—What Does Successful Diversity, Equity, and Inclusion Look Like?
1000–1130 hrs // Cherry Blossom Ballroom
Learn about innovations in fostering and increasing DEI in the aerospace industry, hear from leaders on the DEI journey and how they view success, and inspire attendees with practical tools they can use to foster and increase DEI.
MODERATOR: Anna-Maria Rivas McGowan, Ph.D., Agency Senior Executive for Complex Systems Design, NASA ST
PANELISTS:
Rhom Erskine, Vice President, Global Diversity & Inclusion, Lockheed Martin
Steven Holz, Assistant Project Manager, University Innovation (UI) Project, NASA Langley Research Center
Sonya T. Smith, Professor, Department of Mechanical Engineering, Howard University; MLK Visiting Professor, Department of Aeronautics and Astronautics, MIT
RLA Lunch Panel:
I Got My Dream Job, Now What?
1200–1330 hrs // Cherry Blossom Ballroom
The real world moves at a much slower pace than university. Promotions and leadership roles can be 10-20 year goals. Join us to discuss “where do I go from here?” Limited box lunches available for the first 120 attendees.
Networkung Lunch in Exposition Hall
1230–1400 hrs // Prince George D/E
FORUM 360
Past, Present, and Future Mars Exploration
1430–1600 hrs // Potomac Ballroom A/B
Two decades of continuous presence at and on Mars have revolutionized our understanding of our neighboring rocky planet. Hear how successful planetary remote sensing allows us to project forward to the next decade of exploration in preparation for a future human mission to Mars.
MODERATOR: Bhavya Lal, Associate Administrator for Technology, Policy and Strategy, NASA
PANELISTS:
Hitoshi Kuninaka, Director General, Institute of Space and Astronautical Science (ISAS), JAXA
Clare Luckey, Artemis Mission Integrator/Mars Crew Transit Operations Co-Lead, NASA Johnson Space Center
Michael Meyer, Lead Scientist, Mars Exploration Program, NASA
Joe Parrish, Mars Exploration Program Manager, NASA Jet Propulsion Laboratory
William H. Pickering Lecture: Discoveries with the James Webb Space Telescope
1630–1730 hrs // Potomac Ballroom A/B
Gardner will discuss what scientists have learned in the first six months of science results from the telescope and look ahead to additional results expected in the coming years.
Jonathan Gardner, Deputy Senior Project Scientist, James Webb Space Telescope, NASA Goddard Space Flight Center
2023 Durand Lecture for Public Service
1800–1900 hrs // Potomac Ballroom A/B
“A Half Century of Research in Fluid Dynamics”
Wesley Harris, Charles Stark Draper Professor of Aeronautics and Astronautics, Massachusetts Institute of Technology
PLENARY
Digital Innovation: Accelerating Digital Tech to Transform the Aerospace Industry
0800–0900 hrs // Potomac Ballroom A/B
Digital technologies are transforming the aviation industry, promising greater efficiencies, increased safety and solutions for our most pressing concern: climate change. Join Guillermo Jenaro Rabadan, Project Executive - Head of Digital Design & Manufacturing at Acubed, Airbus’ innovation center in Silicon Valley, as he shares how the acceleration of digital platform development and adoption will revolutionize everything from engineering and manufacturing to airline customer relations and passenger experience.

SPEAKER: Guillermo Jenaro Rabadan, Project Executive, Advanced Digital Design and Manufacturing, Acubed

FORUM 360
Addressing Increasing Complexity in Aerospace Systems
1000–1100 hrs // Potomac Ballroom A/B
As the complexity of aerospace systems and systems of systems continues to increase at a rapid rate, there are profound consequences for system performance, reliability, affordability, manufacturability, supportability, and other characteristics. New technologies, including digital twins, virtual reality, artificial intelligence, and machine learning, can help address and mitigate these issues. Experts in the AIAA Complex Aerospace Systems Exchange will discuss how increasing system complexity and systems engineering is being addressed in their organizations.

MODERATOR: Michael Grieves, Executive Director, Digital Twin Institute

PANELISTS:
Sophia Bright, Vice President, US Navy Product Support, The Boeing Company
Jill M. Marlowe, Digital Transformation Officer, NASA
Ryan Tintner, Vice President of Digital Transformation, Northrop Grumman
Karen Willcox, Director, Oden Institute for Computational Engineering and Sciences, University of Texas at Austin

FORUM 360
Transformative Systems Engineering Success Stories
1100–1200 hrs // Potomac Ballroom A/B
From digital twins to human-machine teaming, new digital techniques and technologies offer the opportunity to revolutionize systems engineering. Hear from industry leaders on the secrets of their success with transformative systems engineering.

FORUM 360
Humans and Autonomy
1430–1600 hrs // Potomac Ballroom A/B
Recent military, civil, and commercial activities indicate that human-machine teaming is poised to become a key area of research and development in aerospace. Hear from industry experts on methodologies and technologies developed to enable safe, trusted, and effective integration of humans and complex machines. They will also address the challenges of human-machine teaming, including legal, moral, and ethical issues, safety concerns, and workforce needs.

MODERATOR: John Tylko, Chief Innovation Officer, Aurora Flight Sciences, A Boeing Company

PANELISTS:
Kailah Cabral, Humans and Autonomy Research Engineer, Aurora Flight Sciences
Mary (Missy) Cummings, Professor of Robotics and AI, George Mason University
Amy Pritchett, Department Head, Aerospace Engineering, Penn State University

Women at SciTech Panel Session and Social Hour: Leadership, Innovation, and Intersectionality
1800–2000 hrs // Potomac Ballroom A/B
Our distinguished panelists will discuss their leadership and innovation journeys, explore how leadership, innovation, and intersectionality combine to shape leaders and the workforce of today and tomorrow. Join us for an evening of networking and inspiring conversation.

MODERATOR: Melissa Sampson, Space Infrastructure, Strategy & Business Development Senior Manager, Lockheed Martin Commercial and Civil Space

PANELIST:
Enanga Daisy Fale, Sr. Systems Engineering Manager, Northrop Grumman Corporation; Director, Aerospace SIG (ASIG), National Society of Black Engineers (NSBE)
CDR Emily “Hawking” Shilling, USN, PMA-281 Naval Mission Planning Systems Military Deputy Program Manager
FIND SUCCESS WITH AIAA ONLINE COURSES

SPRING COURSE OFFERINGS

AIAA online short courses help you stay sharp while improving your knowledge base. We’re committed to assisting in your professional development year-round. AIAA is offering 26 courses this spring featuring an array of disciplines. Enroll in an upcoming course.

Can’t attend the live online lectures? Most courses are available on demand.

**Space Mission Operations**
- Starts 30 January

**AI for Air Traffic Safety Enhancement**
- Starts 7 February

**Complex Systems Competency**
- Starts 15 February

**Technical Writing Essentials for Engineers**
- Starts 21 February

**Electric VTOL Aircraft Design: Theory and Practice**
- Starts 28 February

**Design of Space Launch Vehicles**
- Starts 6 March

**Agile Systems Engineering**
- Starts 13 March

**Design of Modern Aircraft Structures**
- Starts 21 March

**Introduction to Propellant Gauging**
- Starts 26 March

**Optimal Control for Unpiloted Aerial Vehicles**
- Starts 5 April

**Overview of Python for Engineering Programming**
- Starts 11 April

**Hypersonic Flight Vehicle Design and Performance**
- Starts 17 April

**Design of Gas Turbine Engines: From Concept to Details**
- Starts 19 April

- Starts 19 April

**Understanding Aircraft Noise: From Fundamentals to Design Impacts and Simulations**
- Starts 25 April

BROWSE THE FULL COURSE CATALOG
learning.aiaa.org
PLENARY
Making Sci-Fi a Reality
0800–0900 hrs // Potomac Ballroom A/B

“Long before the first Soviet and American spaceflights... American science fiction heroes were rocketing off to new locations.” Learn how our love for science fiction has helped make the impossible a reality. Weitekamp will discuss her most recent book, Space Craze: America’s Enduring Fascination with Real and Imagined Spaceflight. Bring your copy and get it autographed after the session.

SPEAKER: Margaret Weitekamp, Department Chair, Space History, and Curator, Cultural History of Spaceflight, Smithsonian National Air and Space Museum

Teacher Friday: Educator Professional Development Workshop
0900–1400 hrs // Potomac C

Meet and learn from educators and engineers as they discuss the aerospace challenges of the 21st century. Dive into STEM concepts for your classroom or out-of-school-time club/organization. Attendees will discover newly developed standards-based curriculum and integrated projects that can be used in the classroom.

FORUM 360
Creating Revolutionary Capability: Connecting Science Fiction and Science Vision
1000–1130 hrs // Potomac Ballroom A/B

Join leaders from across aerospace and related industries as they consider historical and forward-looking views of how science fiction has influenced technologies, capabilities, and advancements within aerospace and has made revolutionary capabilities a reality.

MODERATOR: Graham Warwick, Executive Editor, Technology, Aviation Week

PANELISTS:
William Gerstenmaier, Vice President, Build and Flight Reliability, SpaceX
Zachary Jackowski, Chief Engineer – Spot, Boston Dynamics
Ben Marchionna, Director of Technology and Innovation, Electra.aero
Bartlett Russell, Deputy Director, Defense Sciences Office, DARPA

FOR MOST UP-TO-DATE SCHEDULE CHECK ONLINE

ASK AND/OR UPVOTE A QUESTION! virtualscitech.aiaa.org/QA
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 2023 AIAA ASSOCIATE FELLOWS

MEET AND GREET
Tuesday 24 // 1630–1730 hrs // Potomac D

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 2023 Associate Fellows. This is a free event.

PREMIER LECTURES

2023 AIAA Durand Lecture for Public Service
Wednesday 25 // 1800–1900 hrs // Potomac Ballroom A/B

This lecture is presented for notable achievements by a scientific or technical leader whose contributions have led directly to the understanding and application of the science and technology of aeronautics and astronautics for the betterment of mankind.

“A Half Century of Research in Fluid Dynamics”

Wesley Harris, Charles Stark Draper Professor of Aeronautics and Astronautics, Massachusetts Institute of Technology

2023 AIAA Dryden Lecture in Research
Monday 23 // 1800–1900 hrs // Potomac Ballroom A/B

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.

“Hypersonic Wall Bounded Viscous Flows: Theory, Ground Test, and Flight”

Rodney D. Bowersox, Associate Dean for Research, Ford I Professor of Aerospace Engineering, and University Regents Professor, Texas A&M University

EDUCATION AWARD

2022 J. Leland Atwood Award
Monday 23 // 0800 hrs // Potomac Ballroom A/B

John Sullivan, Purdue University

For extraordinary contributions to aerospace education and research, including pioneering work on design-build-test student projects, international leadership in the development of pressure- and temperature-sensitive paints for aerodynamic measurements, and statesman-like academic leadership, and for the widespread and profound impact on his students and the broader aerospace industry.

LITERARY AWARDS

2023 AIAA Children’s Literature Award
Thursday 26 // 0800 hrs // Potomac Ballroom A/B

Clayton Anderson, Sleeping Bear Press

Letters from Space

2023 AIAA Gardner-Lasser Aerospace History Literature Award
Thursday 26 // 0800 hrs // Potomac Ballroom A/B

Diane Vaughan, Columbia University

Dead Reckoning: Air Traffic Control, System Effects, and Risk

2023 AIAA History Manuscript Award
Thursday 26 // 0800 hrs // Potomac Ballroom A/B

Cathleen S. Lewis, Smithsonian Institution National Air and Space Museum

Cosmonaut: A Cultural History

2023 AIAA Pendray Aerospace Literature Award
Thursday 26 // 0800 hrs // Potomac Ballroom A/B

“Bala” Balakumar Balachandran, University of Maryland

Applied Nonlinear Dynamics: Analytical, Computational, and Experimental Methods and Vibrations, Third Edition
RECOGNITION

SERVICE AWARD
2023 AIAA Mary W. Jackson Diversity and Inclusion Award
Monday 23 // 0800 hrs // Potomac Ballroom A/B
Eric J. Ruggiero, GE Aerospace
For leadership in bringing the importance of diversity, equity and inclusion to the forefront for the aerospace community through sustained efforts through professional societies.

2023 AIAA Propellants and Combustion Award
Wednesday 25 // 0800 hrs // Potomac Ballroom A/B
Suresh Menon, Georgia Institute of Technology
For his distinguished and pioneering contributions to the field of multi-scale computational modeling and simulation of turbulent and multiphase combustion in power and propulsion systems.

TECHNICAL EXCELLENCE AWARDS
2023 AIAA Aerospace Software Engineering Award
Tuesday 24 // 0800 hrs // Potomac Ballroom A/B
Elizabeth T. Whitaker, Georgia Tech Research Institute/Georgia Institute of Technology
For twenty-five years of expert knowledge contributions researching, teaching and applying Artificial Intelligence (AI) and Machine Learning (ML) techniques primarily to DARPA, IARPA, and DOD aviation application.

2023 AIAA Walter J. and Angeline H. Crichlow Trust Prize
Monday 23 // 1800–1900 hrs // Potomac Ballroom A/B
Inderjit Chopra, University of Maryland
For seminal contributions to rotorcraft fundamental research and education; milestone design projects (human-powered, DaVinci-Aerial-Screw, Mars helicopters), and distinguished service to federal agencies, industry, and professional societies.

2023 AIAA Wyld Propulsion Award
Wednesday 25 // 0800 hrs // Potomac Ballroom A/B
Rodney L. Burton, CU Aerospace, L.L.C.
For distinguished enhancement of science and innovation in the field of electric space propulsion, education of scientist engineers, and entrepreneurial leadership in aerospace engineering.

2023 AIAA Air Breathing Propulsion Award
Wednesday 25 // 0800 hrs // Potomac Ballroom A/B
Feng Liu, University of California, Irvine
For the turbine-burner engine innovation and other high-impact contributions of computational methods for turbomachinery aerodynamics.

2023 AIAA Energy Systems Award
Wednesday 25 // 0800 hrs // Potomac Ballroom A/B
Bengt Aake Sundén, Lund University
For significant contributions to the development of efficient innovative cooling concepts of gas turbines and aircraft engines by pushing advanced numerical and experimental techniques to the forefront.

2023 AIAA Information Systems Award
Tuesday 24 // 0800 hrs // Potomac Ballroom A/B
Jimmie G. McEver, III, Johns Hopkins University Applied Physics Laboratory
For outstanding technical and managerial contributions to complex systems, cyberspace operations, and command and control, to include exemplary outreach efforts within the aerospace community.

2023 AIAA Mechanics and Control of Flight Award
Tuesday 24 // 0800 hrs // Potomac Ballroom A/B
Robert H. Bishop, University of South Florida
For distinguished contributions to spacecraft control systems, especially for pioneering advancements of guidance and navigation systems for the Space Shuttle and ALHAT, and precision landings.

STUDENT PAPER COMPETITIONS
Friday 27 // 0800 hrs // Potomac Ballroom A/B
› Aerodynamic Measurement Technology, Plasmadynamics and Lasers, Propellants and Combustion Student Paper Competition
› Aerospace Power Systems Student Paper Competition
› American Society for Composites Student Paper Award
› Atmospheric Flight Mechanics Best Student Paper Competition
› David P. Weaver Best Student Paper Competition
› Guidance, Navigation, and Control Student Paper Competition
› Harry H. and Lois G. Hilton Student Paper Award in Structures
› Human-Machine Teaming Student Paper Competition
› Intelligent Systems Student Paper Competition
› Jefferson Goblet Student Paper Award
› Lockheed Martin Student Paper Award in Structures
› Meshing, Visualization, and Computational Environments Student Paper Competition
› Sensor Systems and Information Fusion Student Paper Competition
› SwRI Student Paper Award in Non-Deterministic Approaches
› Terrestrial Energy Systems Student Paper Competition
› Thermophysics Student Paper Competition
› Unmanned Systems Student Paper Competition
BEST PROFESSIONAL PAPER AWARDS
These awards will be presented at the sponsoring committee’s meeting.

2021 AIAA Hybrid Rockets Best Paper
Authors: Alessandro Zavoli, Paolo Maria Zolla, Lorenzo Federici, Mario Tindaro Miglierino, and Daniele Bianchi, Sapienza University of Rome

2021 AIAA International Space Planes and Hypersonic Systems & Technologies Best Paper
“ Preliminary Study of Shock / Boundary-Layer Interactions Generated by a Sharp Fin Mounted Above a Flat Plate” (AIAA 2021-4118)
Authors: Dustin L. Otten, Lockheed Martin; and Frank K. Lu, University of Texas at Arlington

2021 AIAA Pressure Gain Combustion Best Paper
“Effects of Inlet Area Ratio on Operability of an Axial Air Inlet Rotating Detonation Combustor” (AIAA 2021-3676)
Authors: Joshua Shepard, Alexander Feleo, and Mirko Gamba, University of Michigan, Ann Arbor

2021 AIAA Propellants and Combustion Best Paper
Authors: Monique S. McClain, Purdue University; Brian T. Bojko, Naval Air Warfare Center Weapons Division; Simon Ray and Steven F. Son, Purdue University

2022 AIAA Electric Propulsion Best Paper
“Experimental Characterization of Wave-Induced Azimuthal Ion Velocities in a Hollow Cathode Plume” (AIAA 2022-1561)
Authors: Parker J. Roberts and Benjamin Jorns, University of Michigan, Ann Arbor; and Vernon Chaplin, Jet Propulsion Laboratory

2022 AIAA Electrified Aircraft Technology Best Paper
“Sizing and Analysis of a Lift-Plus-Cruise VTOL Aircraft with Electrified Propulsion Systems” (AIAA 2022-3513)
Authors: Imon Chakraborty and Aashutosh Aman Mishra, Auburn University

2022 AIAA Gas Turbine Engine Best Paper
“An Experimental Study on the Dynamic Ice Accretion Process over the Surfaces of the Rotating Fan Blades of an Aero-Engine Model” (AIAA 2022-2435)
Authors: Linchuan Tian, Linkai Li, Haiyang Hu, and Hui Hu, Iowa State University

2022 AIAA Guidance, Navigation and Control Best Paper
Authors: James S. McCabe, NASA Johnson Space Center

2022 AIAA Inlets Nozzles and Propulsion System Integration Best Paper
“Summary of the 5th Propulsion Aerodynamics Workshop Nozzle Test Case: Heated Nozzle Exhaust Passing Over a Film-cooled Plate” (AIAA 2022-0086)
Authors: Nicholas J. Georgiadis and Mark P. Wernet, NASA Glenn Research Center; Darrell S. Crowe, Air Force Research Laboratory; Carolyn D. Woebber and Kristen Karman-Shoemaker, Cadence Design Systems; and Chad M. Winkler, The Boeing Company

2022 AIAA Intelligent Systems Best Paper
“Deep Reinforcement Learning for Autonomous Aerobraking Maneuver Planning” (AIAA 2022-2497)
Authors: Giusy Falcone and Zachary R. Putnam, University of Illinois Urbana-Champaign

2022 AIAA Joint Liquid Propulsion and Propellants and Combustion Best Paper Award
“Simultaneous OH, CH2O and flow field imaging of near blowoff dynamics” (AIAA 2022-2348)
Authors: Raghul Manosh Kumar, Subodh Adhikari, Benjamin L. Emerson, and Timothy C. Lieuwen, Georgia Institute of Technology; and Christopher A. Fugger, Special Energies, LLC

2022 AIAA Modeling and Simulation Best Paper
“Just Noticeable Differences for Variations in Quasi-Steady Stall Buffet Model Parameters” (AIAA 2022-0510)
Authors: Arne Imbrechts, Coen C. de Visser, and Daan M. Pool, Technische Universiteit Delft Faculteit Luchtvaart- en Ruimtevaarttechniek

2022 AIAA Multidisciplinary Design Optimization Best Paper
“Multidisciplinary design optimization with mixed categorical variables for aircraft design” (AIAA 2022-0082)
Authors: Paul Saves, Eric Nguyen Van, Nathalie Bartoli, Thierry Lefebvre, Christophe David, and Sébastien Defoort, ONERA, DTIS, Université de Toulouse; and Youssef Diouane and Joseph Morlier, ISAE-Supaero ONERA, DTIS, Université de Toulouse

2022 AIAA Pressure Gain Combustion Best Paper
Authors: Keisuke Goto, Nagoya University; Ken Matsuoka, Koichi Matsuyama, Akira Kawasaki, Hiroaki Watanabe, Noboru Itouyama, Kazuki Ishihara, Valentin Buyakofu, Tomoyuki Noda, and Jiro Kasahara, Nagoya University; Akiko Matsuo, Keo University; Daisuke Nakata and Masaharu Uchiumi, Muroran Institute
RECOGNITION

2022 AIAA Sensor Systems and Information Fusion Best Paper
“Using Drone Swarms as Countermeasure of Radar Detection” (AIAA 2022-0855)
Authors: Claudia Conte, University of Naples Federico II; Sofia Verini Supplizi and Antonio Mele, Italian Air Force Academy; Giorgio de Altereiis, Giancarlo Rufino, and Domenico Accardo, University of Naples Federico II

2022 AIAA Small Satellite Best Paper Award
Authors: Shreeyam Kacker, Alex Meredith, Violet Felt, Joe Kusters, Hannah Tomio, and Kerri Cahoy, Massachusetts Institute of Technology

2022 AIAA Software Best Paper
“Automated Test Case Generation for the Verification of System and High-Level Software Requirements for Fly-by-Wire Platforms” (AIAA 2022-0254)
Authors: Reinhard Reichel, Christian Block, and Serkan Dikmen, University of Stuttgart

2022 AIAA Spacecraft Structures Best Paper
“Compressive Behavior of Isogrid Columns Fabricated with Bend-Forming” (AIAA 2022-2263)
Authors: Harsh Bhundiya, Fabien Royer, and Zack Cordero, Massachusetts Institute of Technology

2022 AIAA Systems Engineering Best Paper
Authors: Hanumanthrao Kannan and Benajmin C. Jantzen, Virginia Polytechnic Institute and State University; and Bryan L. Mesmer, The University of Alabama in Huntsville

2022 Collier Aerospace HyperX Software Structures Best Paper Award
Authors: D. Scott Norwood, Scott Malaznik, Brandon M. Schneberger, Kevin M. Fuller, Jason A. Grant, Matthew T. Gill, and Jesse C. Long, Lockheed Martin Aeronautics Company; and Kevin S. Brown, Air Force Research Laboratory

BEST STUDENT PAPER AWARDS
These awards will be presented at the sponsoring committee’s meeting.

2021 AIAA Hybrid Rockets Best Student Paper
“Swirl injection in hybrid PMMA combustion assessed by thermochemical imaging” (AIAA 2021-3513)
Authors: R. Mitchell Spearrin, Isabelle C. Sanders, Fabio A. Bendana, Nora G. Stacy, Kevin K. Schwarm, Fabio A. Bendana, Nora G. Stacy, and Kevin K. Schwarm, University of California, Los Angeles

2021 AIAA International Space Planes and Hypersonic Systems & Technologies Best Student Paper
“Aerothermal Uncertainty Quantification of Deployable Entry Technologies Using Multi-Fidelity Modeling” (AIAA 2021-4228)
Authors: Mario Santos and Serhat Hosder, Missouri University of Science and Technology; and Thomas K. West, NASA Langley Research Center

2022 AIAA Structural Dynamics Best Paper
“Hypersonic Fluid-Structure Interactions on a Compliant Clamped-Free Clamped-Free Panel Under the Influence of Static Shock Impingement” (AIAA 2022-0241)
Authors: Paulo B. Vasconcelos, Liam P. McQuellin, Krishna M. Talluru, and Andrew J. Neely, University of New South Wales

2022 AIAA Walter Lempert Best Student Paper
“Thomson and Collisional Regimes of In-Phase Coherent Microwave Scattering Off Small Plasma Objects” (AIAA 2022-1748)
Authors: Adam Patel, Apoorv Ranjan, Xingxing Wang, Mikhail Slipchenko, and Alexey Shashurin, Purdue University; and Mikhail N. Shneider, Princeton University

2022 AIAA Walter Lempert Best Student Paper, Honorable Mention
“Analysis of Screech Phenomena in a Mach 1.0 Jet with Linear Array Focused Laser Differential Interferometry” (AIAA 2022-1798)
Authors: Theron J. Price, Mark Gragston, and Phillip A. Kreth, University of Tennessee Space Institute

2022 AIAA Walter Lempert Best Student Paper, Honorable Mention
“Measurements of NH3 in a Shock Tube for Investigating the Chemical Kinetics of Rocket Propellants” (AIAA 2022-1875)
Authors: Sulaiman Alturaifi and Eric L. Petersen, Texas A&M University

LEARN MORE
EXPOSITION HALL

Food Seating Area

Need to identify a place to meet up with friends? Make the HUB that place!

EXPOSITION HOURS

TUESDAY, 24 JANUARY
1200–1600 hrs // Exposition Hall Open
1730–1900 hrs // Welcome Happy Hour

WEDNESDAY, 25 JANUARY
0845–1600 hrs // Exposition Hall Open
1230–1400 hrs // Lunch with the Exhibitors

THURSDAY, 26 JANUARY
0845–1400 hrs // Exposition Hall Open
The HUB is open Tuesday–Thursday during Exposition Hall hours!

This multi-use area built into the heart of AIAA expositions features attendee-favorites like Q&As, innovating programming, charging stations, a lounge area, and more. Check out the complete schedule of activities: aiaa.org/scitech/program/the-hub

AIAA PUBLICATIONS PAVILION IN THE HUB

Stop by the AIAA Publications Pavilion, located in the Exposition Hall, to browse titles on sale and learn about publishing with AIAA.

30% OFF ALL BOOKS

AIAA Publications is offering a special show discount on all titles featured at the AIAA SciTech Forum. Attendees can take advantage of a 30% discount off the list price of all books for sale at the AIAA Publications Pavilion. This show special will only be available during the forum!

Take advantage of these super savings!

LEO

Caltech’s Autonomous Robotics and Control Lab will present LEONARDO, the world’s first bipedal walking robot that can fly, slackline, and skateboard.
The moment for reducing CO$_2$ is now

We support our industry’s commitment to reach net-zero CO$_2$ emissions by 2050. From enhancing energy efficiency and aircraft systems, to embracing alternative aviation fuels and streamlining operations, we are enabling a cleaner, more efficient future.
Current nanofilms for EMI shielding are delicate and fall apart when touched. 4th Phase Technologies, Inc. has developed strong, workable, and pliable Advanced EMI Shielding Materials with electrical conductivity of up to $1 \times 10^6$ S/m. The U.S. Air Force has granted our company Phase I research funding, and we have developed pilot-scale films for you to see and touch at AIAA in January. We request letters of support or your preferred TPOC to apply for Phase II DOD research funding to prepare materials ready for full commercialization and use in Aerospace and Defense markets.

ADDiTEC
4413 SW Cargo Way
Palm City, FL 34990
www.additec.net
ADDiTEC specializes in solving problems and creating opportunities using metal additive manufacturing (AM). The company developed ground-up multi-laser DED technology used by Meltio today, which has the unique capability of utilizing both metal wire and powder material feedstock. ADDiTEC engineers and offers turnkey metal additive manufacturing robot cells (AMRC) tailored to customer requirements as well as offering compact low-cost metal 3D printing systems such as the Meltio M450. The company has highly experienced Research & Development (R&D) capabilities and offers R&D services as well as training and application development support to its customers.

ADS CFD Inc
2603 Camino Ramon, Suite 200
San Ramon, CA 94583
www.adscfd.com
ADS CFD provides software and consulting services to the aerospace industry. Our specialty is fast and accurate high fidelity CFD analysis for gas turbine engines using our commercially available Flow Solver, Code LEO. Now with the introduction of our GPU accelerated code, we’ve ushered in the greatest improvement in CFD computational speed in the past 30 years.

Aerospace Research Central (ARC)
12700 Sunrise Valley Dr., Suite 200
Reston, VA 20191
www.arc.aiaa.org
AIAA has earned an international reputation as the preeminent publisher of cutting-edge aerospace journals and books, and as the leading source of aerospace industry archives, dating back to the early 1900s. Over the past eight decades, AIAA and its predecessor organizations have published over 300 books and almost 200,000 technical articles. AIAA’s current publications include eight technical journals, a magazine, three book series, national and international standards documents, a growing number of eBooks and other electronic products, and a full-service, interactive website. For the most authoritative technical publications, look to AIAA.

Ahmic Aerospace LLC
400 Sugar Camp Circle, Suite 302
Dayton, OH 45409
www.ahmicaerospace.com
Ahmic Aerospace is a research and development company specializing in high-performance aerospace instrumentation and measurement techniques. Ahmic develops novel tools to characterize and understand complex flow phenomena. Our research portfolio targets hypersonic aerothermodynamics, high-speed propulsion systems, and advanced materials testing. At Ahmic, we aspire to transform the way aerospace test data is collected under challenging flow environments.

AIAA Career Center
12700 Sunrise Valley Dr.
Reston, VA 20191
www.aiaa.org/careers/aiaa-aerospace-recruitment-opportunities
AIAA is the largest aerospace professional society in the world, serving nearly 30,000 individual members across the globe. Our recruitment opportunities provide you with access to top talent in the industry who are committed to the aerospace profession. Discover an innovative and diverse workforce that is conducting cutting-edge research that will improve your company’s productivity and products.

AIAA Mid-Atlantic Section
11100 Johns Hopkins Road
Laurel, MD 20723
https://engage.aiaa.org/midatlantic/home
The American Institute of Aeronautics and Astronautics (AIAA) is a professional organization dedicated to shaping the future of aerospace. Through a global network of aeronautical and astronautic professionals, premier conferences and forums, cutting edge publications, and active local participation, AIAA encourages collaboration, innovation, and leadership in the aerospace community. The Mid-Atlantic Section is one local community within AIAA, spanning portions of Maryland, Pennsylvania, and West Virginia. Our goal is to bring together aerospace professionals in the Mid-Atlantic region to push the limit of aerospace expertise. We believe that the key to continued innovation in the aerospace industry is an engaged community of students and professionals.
Altair is a global leader in computational science and artificial intelligence (AI) that provides software and cloud solutions in simulation, high-performance computing (HPC), data analytics, and AI. Our aerospace simulation technologies develop complex, high-fidelity finite-element models for the predictive virtual testing of airframes, engines, and aircraft interiors. We accurately simulate impact damage and correlate against vulnerability events. Altair enables organizations across all industries to compete more effectively and drive smarter decisions in an increasingly connected world – all while creating a greener, more sustainable future. For more information, visit www.altair.com.

If you’ve ever seen a rocket launch, flown on an airplane, driven a car, used a computer, touched a mobile device, crossed a bridge, or put on wearable technology, chances are you’ve used a product where ANSYS software played a critical role in its creation. ANSYS is the global leader in engineering simulation. We help the world’s most innovative companies deliver radically better products to their customers.

Aurora Flight Sciences, a Boeing Company, advances the future of flight by developing and applying innovations across aircraft configurations, autonomous systems, propulsion technologies, and manufacturing processes. With a passionate and agile team, Aurora delivers solutions to its customers’ toughest challenges while meeting high standards of safety and quality. Learn more at www.aurora.aero.

BETA CAE Systems USA, Inc. is an engineering company based in Farmington Hills Michigan. For over 20 years it has been known for its distribution of the ANSA and META Software Suite and continued commitment to offering industry leading software support and services. In addition to this, the company also provides consulting services in high-end Finite Element modeling and analysis, and places specialists for contract positions on client sites.

Blue Origin was founded by Jeff Bezos with the vision of enabling a future where millions of people are living and working in space for the benefit of Earth. In order to preserve Earth, Blue Origin believes that humanity will need to expand, explore, find new energy and material resources, and move industries that stress Earth into space. Blue is working on this today by developing partially and fully reusable launch vehicles that are safe, low cost and serve the needs of all civil, commercial and defense customers.

As a leading global aerospace company, Boeing develops, manufactures and services commercial airplanes, defense products and space systems for customers in more than 150 countries. As a top U.S. exporter, the company leverages the talents of a global supplier base to advance economic opportunity, sustainability and community impact. Boeing’s diverse team is committed to innovating for the future and living the company’s core values of safety, quality and integrity.

Aurora Flight Sciences, A Boeing Company
9950 Wakeman Dr.
Manassas, VA 20110
www.aurora.aero

Aurora Flight Sciences, a Boeing Company, advances the future of flight by developing and applying innovations across aircraft configurations, autonomous systems, propulsion technologies, and manufacturing processes. With a passionate and agile team, Aurora delivers solutions to its customers’ toughest challenges while meeting high standards of safety and quality. Learn more at www.aurora.aero.

Cadence is a pivotal leader in electronic design, building upon more than 30 years of computational software expertise. The company applies its underlying Intelligent System Design strategy to deliver software, hardware and IP that turn design concepts into reality. Cadence customers are the world’s most innovative companies, delivering extraordinary electronic products from chips to boards to systems for the most dynamic market applications, including consumer, hyperscale computing, 5G communications, automotive, mobile, aerospace, industrial and healthcare. Seven years in a row, Fortune magazine has named Cadence one of the 100 Best Companies to Work For. Learn more at www.cadence.com.

Technology engineering leaders choose Caltech CTME for customized professional development and learning programs that build organizational capabilities, skilled teams, and solutions-oriented mindsets. Learners tackle project-based challenges guided by Caltech faculty and our networks of pioneering systems engineering experts.
EXHIBITORS


Client programs are uniquely tailored for company context, products, complexity/difficulty, team dynamics, client case studies and processes, location, format, guest speakers, group facilitation, skill-breadth/depth, and desired learning-outcomes. Programs are available for commercial, government, and individual learners across aerospace, chemical, electronics/high-tech, energy, life sciences, and manufacturing.

Calspan
4455 Genesee Street
Buffalo, NY 14225
www.calspan.com

For over 75 years, Calspan has been an industry-leading research, testing and manufacturing partner to the great innovators of the aerospace and automotive industries. We assist companies in overcoming developmental and technical challenges to ensure their creative concepts become viable commercial products. Our teams ensure a streamlined process from aerospace model design and manufacturing to wind tunnel testing and secure data delivery. We also excel at the design and build of test engine cells, turbomachinery, force measurement balances, and hypersonic model testing. Calspan diligently helps to accelerate pioneering innovations on land or into the sky.

Cambridge University Press
1 Liberty Plaza
New York, NY 10006
www.cambridge.org

Cambridge University Press’ publishing in books and journals combines state-of-the-art content with the highest standards of scholarship, writing and production. Visit our stand to browse new titles, available at 60% discount, and to pick up sample copies of our journals.

Collier Aerospace - HyperX
760 Pilot House Dr.
Newport News, VA 23606
collierair aerospace.com

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

Continuum Dynamics, Inc.
34 Lexington Avenue
Ewing, NJ 08618
https://continuum-dynamics.com

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

- Fixed and rotary-wing aircraft analysis, modeling/simulation, design services and software;
- Fluid dynamics analysis/testing, scale-model development, fluid structure interaction diagnostics, and flow control devices for aerospace and marine applications;
- Aerially released material dispersion modeling;
- Numerical methods development, including CFD, and biomolecular modeling

Convergent Science
6400 Enterprise Lane
Madison, WI 53719
www.convergecfd.com

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

Dantec Dynamics, Inc.
750 Blue Point Rd
Holtsville, NY 11742
dantecdynamics.com

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

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

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

Dantec Dynamics – Turn Measurements into Knowledge
YOUR AEROSPACE CAREER STARTS TODAY!

Discover the new age of aviation as an AIAA Diversity Scholar at 2023 AIAA AVIATION Forum. This forum is the only aviation event that covers the entire integrated spectrum of aviation business, research, development, and technology. It’s the ideal event for students to network and find their next internship or job!

AIAA Diversity Scholars receive the following benefits:
› Complimentary forum registration
› Round-trip airfare
› Hotel stay for the duration of the forum
› Customized forum schedule
› Small-group meetings with aerospace industry leaders
› Complimentary AIAA University Student Membership for one year

APPLY TO BE AN AIAA DIVERSITY SCHOLAR TODAY!

* Must be a full-time student at a U.S. institution to apply.

Deadline
16 March 2023, 2359 hrs ET

Read full eligibility requirements and details at aiaa.org/diversityscholars

Sponsored By

AIAA FOUNDATION

BOEING
DEWESoft LLC 10730 Logan Street
Whitehouse, OH 43571
www.dewesoft.com

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

dSPACE 50131 Pontiac Trail
Wixom, MI 48393-2020
www.dspace.com

dSPACE is helping aircraft and system manufacturers meet the challenges of future air mobility by providing an efficient approach to the development and testing of electronic control systems. The dSPACE development platform can be used for a wide range of use cases, from aircraft electrification, to testing critical flight scenarios in the lab, to automated integration testing, to testing embedded components, to verifying networked aircraft systems and so much more. Go to: www.dspace.com.

Flexcompute 130 Trapelo Road
Belmont, MA 02478
www.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. 4701 E Hunter AVE.
Anaheim, CA 92807
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.

GE Aviation 1 Neumann Lane
Cincinnati, OH 45215
www.geaviation.com

At GE you’ll find yourself in a dynamic environment where ongoing, substantial investment in research and development keeps us looking ahead.

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

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

Join us as we design and engineer multiple military programs that support next generation air dominance.
Inspired by Thomas Edison and led by GE’s early chief consulting engineer, Charles Steinmetz, GE Research was created to maintain market edge and to foster new discoveries and commercial applications. That mission rings true today as we harness unparalleled scientific breadth and depth to drive innovation at the intersection of technical fields, move product to entitlement, solve problems and deliver outcomes to our customers.

General Atomics-Aeronautical Systems, Inc. (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.

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

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! Come and see us at SciTech 23.

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

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Booth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Kulite Semiconductor Products, Inc.</strong></td>
<td>413</td>
</tr>
<tr>
<td>One Willow Tree Road</td>
<td></td>
</tr>
<tr>
<td>Leonia, NJ 07605</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.kulite.com">www.kulite.com</a></td>
<td></td>
</tr>
<tr>
<td>Kulite, a World Leader in Pressure Transducer Technology, manufactures miniature high frequency pressure transducers, TSO &amp; 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.</td>
<td></td>
</tr>
<tr>
<td><strong>LaVision, Inc.</strong></td>
<td>412</td>
</tr>
<tr>
<td>211 W. Michigan Ave., Suite 100</td>
<td></td>
</tr>
<tr>
<td>Ypsilanti, MI 48197</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.lavisioninc.com">www.lavisioninc.com</a></td>
<td></td>
</tr>
<tr>
<td>LaVision integrates measurement systems for experimental fluid dynamics, combustible and multiphase flows, material characterization, and in cylinder measurement. LaVision is the market leader in image based measurement systems playing a pioneering role in the development of techniques such as PIV, LIF, DIC and BOS. LaVision stays at the forefront of measurement science strives for customer satisfaction.</td>
<td></td>
</tr>
<tr>
<td><strong>Lithoz America, LLC</strong></td>
<td>214</td>
</tr>
<tr>
<td>165 Jordan Rd</td>
<td></td>
</tr>
<tr>
<td>Troy, NY 12180</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.lithoz.com">www.lithoz.com</a></td>
<td></td>
</tr>
<tr>
<td>Lithoz is the market and technology leader in additive manufacturing systems for advanced technical ceramics. Lithoz CeraFab 3D printers use lithography-based ceramics manufacturing to deliver the quality, reliability, and repeatability needed for serial production of smooth, precise, finely-detailed ceramic components. Lithoz America, LLC offers machine sales, application support, and custom material development from our Troy, NY location.</td>
<td></td>
</tr>
<tr>
<td><strong>Lockheed Martin Corporation</strong></td>
<td>401</td>
</tr>
<tr>
<td>7501 Calmont Ave</td>
<td></td>
</tr>
<tr>
<td>Fort Worth, TX 76116</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.lockheedmartin.com">www.lockheedmartin.com</a></td>
<td></td>
</tr>
<tr>
<td>Lockheed Martin is a global security and aerospace company principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. Please visit us at Booth 401 where we will be showcasing our products, introducing our employees, and recruiting talented individuals who are ready to research and develop innovative aerospace solutions. We deliver next-generation technology to protect the generations to come.</td>
<td></td>
</tr>
<tr>
<td><strong>Metacomp Technologies</strong></td>
<td>613</td>
</tr>
<tr>
<td>31365 Oak Crest Dr., Suite 250</td>
<td></td>
</tr>
<tr>
<td>Westlake Village, CA 91361</td>
<td></td>
</tr>
<tr>
<td><a href="https://metacomptech.com">https://metacomptech.com</a></td>
<td></td>
</tr>
<tr>
<td>Metacomp Technologies is at the forefront of cutting edge simulation technology with software products for Computational Fluid Dynamics ICFD++, Aero-Acoustics ICAA++, Mesh Generation IMIME and Structural Mechanics ICSM++ 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.</td>
<td></td>
</tr>
<tr>
<td><strong>Mirabilis Design Inc.</strong></td>
<td>216</td>
</tr>
<tr>
<td>2010 El Camino Real, Suite 1061</td>
<td></td>
</tr>
<tr>
<td>Santa Clara, CA 95050</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.mirabilisdesign.com">www.mirabilisdesign.com</a></td>
<td></td>
</tr>
<tr>
<td>Mirabilis Design is a Silicon Valley, software company providing solutions to accelerate innovation in electronics and semiconductors. Our solutions integrate the disjointed flow between high-level SysML documentation and the detailed implementation with MatLab, schematics and RTL. Using VisualSim Architect in the product proposal phase, the specification is quickly validated to meet the requirements. In product specification, the architecture is optimized and integrated into the product lifecycle by using a collaborative platform to continuously verify whether the changes meet the requirements. VisualSim Architect is used by companies in aerospace, defense, space, automotive and semiconductor industries. Engineers study the performance, power and functionality against different configurations, workload and failure conditions.</td>
<td></td>
</tr>
<tr>
<td><strong>MSBAI</strong></td>
<td>209</td>
</tr>
<tr>
<td>2355 Westwood Blvd, Suite 961</td>
<td></td>
</tr>
<tr>
<td>Los Angeles, CA 90064</td>
<td></td>
</tr>
<tr>
<td><a href="http://msb.ai">http://msb.ai</a></td>
<td></td>
</tr>
<tr>
<td>MSBAI enables you to set up simulations in minutes, with a ‘Universal Interface for Simulation’ called GURU. Three verticals we focus on are: 1) Computer-aided engineering, 2) Trajectory and mission planning, 3) Virtual world immersive training. We are under contract to multiple organizations and commercial clients, such as the Air Force and Space Force - hyper-enabling their productivity 1000X to set up models, simulations, and scenarios.</td>
<td></td>
</tr>
</tbody>
</table>
EXHIBITORS

NASA 515
21000 Brookpark Rd.
Cleveland, OH 44135
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.


National Academies of Sciences, Engineering, and Medicine 620
500 Fifth Street NW Fellowships Office, Suite 555
Washington, DC 20001
www.nationalacademies.org

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

National Institute of Aerospace (NIA) 508
100 Exploration Way
Hampton, VA 23666
www.nianet.org

NIA is a non-profit research and graduate education institute created to conduct innovative aerospace and atmospheric research, develop new technologies for the nation and help inspire the next generation of scientists and engineers.

National Reconnaissance Office (NRO) 229
14675 Lee Rd.
Chantilly, VA 20151-1715
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 621
1200 Montreal Road, Building U66
Ottawa, ON K1A 0R6
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.

Northrop Grumman 501
2980 Fairview Park Dr.
Falls Church, VA 22042
www.northropgrumman.com

Northrop Grumman is a leading global security company providing innovative systems, products and solutions in autonomous systems, cyber, C4ISR, space, strike, and logistics and modernization to customers worldwide. Please visit news.northropgrumman.com and follow us on Twitter, @NGCNews, for more information.

Notre Dame Turbomachinery Laboratory 326
Ignition Park, Catalyst II
1165 Franklin Street, Suite 200
South Bend, Indiana 46601

Office of Naval Research 408
875 North Randolph Street
Arlington, VA 22203
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 609
The Campus, 4 Crinan Street
London, England W1B 3HH
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  
Am Bahnhof Westend 13  
Berlin, Berlin 14059  
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.

Raytheon Technologies  
1000 Wilson Blvd  
Arlington, VA 22209  
www.rtx.com

Raytheon Technologies Corporation is an aerospace and defense company that provides advanced systems and services for commercial, military and government customers worldwide. With four industry-leading businesses—Collins Aerospace Systems, Pratt & Whitney, Raytheon Intelligence & Space and Raytheon Missiles & Defense—the company delivers solutions that push the boundaries in avionics, cybersecurity, directed energy, electric propulsion, hypersonics, and quantum physics. The company, formed in 2020 through the combination of Raytheon Company and the United Technologies Corporation aerospace businesses, is headquartered in Arlington, Virginia.

Research in Flight  
1919 North Ashe Ct  
Auburn, AL 36830  
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.

Scaled Composites  
1624 Flight Line, Hangar 78  
Mojave, CA 93501  
www.scaled.com

Scaled Composites is a specialty aerospace and composites development company offering design, build, and test capabilities. Founded by Burt Rutan in 1982 and located in Mojave, CA, Scaled has averaged one first flight of a unique, new airplane per year.

Our employees come from a diverse background of talents, experience, and interests. This unique combination of individuals helps promote an innovative and creative atmosphere. Scaled offers the opportunity to pursue career and personal interests in a manner that can be found nowhere else by following one simple rule: have fun.

Scaled Composites is a wholly owned subsidiary of Northrop Grumman Corporation.

Scope AR  
575 Market Street  
San Francisco, CA 94105  
www.scopear.com

Scope AR is the pioneer of enterprise-class augmented reality solutions, delivering the industry’s only cross-platform AR tools for empowering frontline workers the knowledge they need, when they need it. The company revolutionized the way enterprises work and collaborate by offering a visual “knowledge base” solution that provides effective and efficient knowledge-sharing to conduct complex remote tasks, employee training, product and equipment assembly, maintenance and repair, field and customer support, and more.

SIAM  
3600 Market Street, 6th Floor  
Philadelphia, PA 19104  
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.
EXHIBITORS

SoftInWay Inc.  625
20 Burlington Mall Rd, Suite 450
Burlington, MA 01803
www.softinway.com

SoftInWay is an international engineering R&D company specializing in the development of clean, efficient, reliable turbomachinery & propulsion systems.

SoftInWay supports its customers through its integrated & automated software, AxSTREAM® for all steps of the turbomachinery design, redesign, analysis, & optimization process (including complete 3D design, thermodynamic cycles, rotor dynamics, & secondary flow & cooling system simulation). We also offer a number of engineering services & educational courses.

SoftInWay is ISO 9001:2015 & AS9100:2016 certified & committed to providing our customers with products & services that meet international quality standards. We support more than 500 companies, research labs/universities & government organizations worldwide.

Space: Science & Technology, a Science Partner Journal  212
1200 New York Avenue, NW
Washington, DC 20005
https://spj.sciencemag.org/journals/space

Space: Science & Technology is an online-only, Open Access journal published in affiliation with Beijing Institute of Technology (BIT) and distributed by the American Association for the Advancement of Science (AAAS). Its goal is to publish high-quality, high-influence research articles, review articles, editorials and perspectives on the intersections, frontiers, and hot topics in the space field.

Spirit Aerosystems, Inc.  202
3801 S Oliver
Wichita, KS 67210
www.spirit Aero.com

Spirit AeroSystems is one of the world’s largest manufacturers of aerostuctures 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.

Systecon North America  605
14155 US Highway One, Suite 300
Juno Beach, FL 22209
www.systecon.us

Systecon and their Opus Suite of tools have been optimizing some of the most complex Life Cycle Management projects in over 20 countries worldwide. We are the market leader in predictive analytics, with the DoD embracing our tools to solve complex problems, including US Navy, USMC, OSD, and the F35 Joint Strike Fighter. We work across the entire product life cycle, relying on methods that have been tested and refined for over 40 years and analyses using our proprietary, global market-leading Opus Suite software. For our customers, this means more efficient operations, controlled costs, and most importantly: decisions based on facts. Under continuous development, our customers continue to see advances in the tools year after year. Systecon embraces the latest in technology and continues to advance its position as marketplace leader, having been selected in every head to head comparison of tools for the past 15 years.

Tecplot  204
3535 Factoria Blvd. SE, Suite 550
Bellevue, WA 98006
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.

Tesla  228
13101 Harold Green Road
Austin, TX 78725
www.tesla.com/careers

Join us in the mission to accelerate the world’s transition to sustainable energy. Meet our Thermal Engineering and recruiting team members to learn more about career opportunities at Tesla.

Texas A&M Turbomachinery Lab  525
1485 George Bush Drive W., TAMU 3254
College Station, TX 77843
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**

5191 Oceanus Drive  
Huntington Beach, CA 92649  
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 airframers world-wide and have worked with most major testing facilities around the world. We provide a complete, turn-key solution to your testing needs. Contact us to see how we can help you achieve all of your testing goals.

**University of Maryland UAS Research and Operations Center**

44181 Airport Rd  
California, MD 20619  
https://uroc.umd.edu/

The UMD Uncrewed Aircraft Systems (UAS) Research and Operations Center is dedicated to facilitating the safe and effective use of UAS in research and educational settings for University faculty and students; providing expert technical and operational support to public and private entities employing UAS in new and innovative ways; and to advancing the state of the art in UAS and their seamless integration into the National Airspace System.

**Aerospace Engineering & GLMartin Wind Tunnel @University of Maryland**

3179 Glenn L Martin Hall  
College Park, MD 20742  
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-and is a top-tier nationally ranked program-while advancing research that pushes the boundaries of aeronautical and astronautical engineering.

Our active research programs are supported by leading research centers and labs, including the Space Systems Lab, which houses the largest neutral buoyancy facility housed on a college campus, the Alfred Gessow Rotorcraft Center, home to some of the leading rotorcraft researchers in the country, and the Glenn L. Martin Wind Tunnel, a state-of-the-art low speed wind tunnel that has been actively involved in aerodynamic research and development since 1949.

**Virginia Tech**

460 Old Turner Street,  
133 Randolph Hall  
Blacksburg, VA 24061  
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 #14 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**

11108 86th Ave N  
Maple Grove, MN 55369  
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.

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.
GENERAL INFORMATION

AIAA Registration Hours
Registration is located in the Convention Center Prefunction area on the convention center side of the hotel, ballroom level.

<table>
<thead>
<tr>
<th>Date</th>
<th>Sun, 22 Jan</th>
<th>Mon, 23 Jan</th>
<th>Tues, 24 Jan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>1500–1900 hrs</td>
<td>0700–1800 hrs</td>
<td>0700–1730 hrs</td>
</tr>
<tr>
<td>Wed, 25 Jan</td>
<td>0700–1600 hrs</td>
<td>0700–1600 hrs</td>
<td>0700–1730 hrs</td>
</tr>
</tbody>
</table>

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

Network Name: SciTech23
Password: aiaascitech!

Social Media at #AIAASciTech
Connect with us on social media and tag us in your posts! Visit our Linktree at @AIAAerospace to stay up to date and never miss a beat.

Conference Proceedings
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 17 January 2023. Please follow the instructions below to access the proceedings:

1. To view proceedings visit aiaa.org >ARC>Meeting Papers.
   a. Log in with the link at the top right of the page.
   b. Select the appropriate forum from the list.
   c. **Search for individual papers** with the Quick Search toolbar at the top of the page:
      i. By paper number, click on the “Anywhere” dropdown and select “Find by paper,” select the forum year, and enter the paper number.
      ii. Use the Search textbox to find papers by author, title, or keyword. The Advanced Search link provides additional search information and options.
   2. Direct any questions concerning access to proceedings and/or ARC to arcsupport@aiaa.org.

Be sure to catch all the technical presentations from authors on the event’s platform and after the event in the AIAA Video Library. Access to these videos is included with your conference proceedings. video.aiaa.org

Manuscript Corrections
1. The manuscript in the proceedings is the version of record and may not be edited or replaced. Corrections to manuscripts will be available through the Crossmark feature. To view corrections made to a manuscript click the Crossmark icon, located on every article’s webpage and PDF.
2. Corrections will be available online approximately 15 business days after the last day of the conference.

Certificate of Attendance
All attendees will receive a Certificate of Attendance on the last day of the AIAA forum via email. Claims of hours or applicability toward professional education requirements are the responsibility of the participant.

Keeping You Safe at AIAA SciTech Forum
The health and safety of our attendees is very important to us as we return to in-person events. While masks will not be required, we do highly encourage you to wear one. Health and safety requirements to attend this event are subject to change at any time.

By registering for this event, you agree to adhere to any health and safety requirements in place now or adjusted between now and during the event imposed by a governmental authority, the event facility, or AIAA.

You understand that travel and gathering involves risk of sickness, including sickness from COVID-19, and you voluntarily assume that risk. On behalf of yourself and your family) you waive and release AIAA and its directors, officers, partners, employees, and agents from and against claims, liabilities and expenses arising from injury, sickness or death from contraction or spread of COVID-19 or other communicable disease due to travel to or attendance at an event hosted by AIAA. You also understand, that currently, there is no vaccination or proof of vaccination requirement for attendees.

You agree to not attend this or any AIAA event, and you agree to promptly depart any event at which you are already in attendance, if you feel ill or had recent exposure to a COVID-19 case.

Failure to comply with all safety protocols and requirements as listed or related directions from AIAA or facility representatives on-site may result in the loss of the right to attend or participate in AIAA events, including forfeiting any registration fees paid.

Contact an AIAA staff member with any on-site questions or issues.

Badge Policy
AIAA forum badges are provided to those individuals who have paid for a registration to the event. Badges must be worn at all times to participate in all forum activities. Badges are not provided at the registration desk for committee meetings attendance. In order to obtain an AIAA SciTech Forum badge, one must register for the forum.
AUTHOR & SESSION CHAIR INFORMATION

Speakers’ Briefing 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’ Briefing preparation slides will be provided in each session room. Speakers’ Briefings will be held, \(23-27\) January: \(0730\) hrs

Speaker Ready Room
Speakers who wish to practice their presentations may do so at Potomac A Reg Desk, ballroom level of the convention center side of the hotel. A sign-up sheet will be posted on the door. In consideration of others, please limit practice time to 30-minute increments.

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, \(1\) February.

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.
## COMMITTEE MEETINGS

**Sunday, 22 January**

<table>
<thead>
<tr>
<th>Time</th>
<th>Committee and Ancillary Meetings/Events</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>0900-1200</td>
<td>Council Leadership Training</td>
<td>National Harbor 2</td>
</tr>
<tr>
<td>1330-1700</td>
<td>Council of Directors Workshop on Future Forums Implementation</td>
<td>National Harbor 2</td>
</tr>
<tr>
<td>1400-1530</td>
<td>APATC New Member Orientation</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1500-1600</td>
<td>APATC Education Subcommittee</td>
<td>Chesapeake 1</td>
</tr>
<tr>
<td>1500-1600</td>
<td>APATC Honors and Awards Subcommittee</td>
<td>Chesapeake 2</td>
</tr>
<tr>
<td>1500-1600</td>
<td>APATC Liaisons Subcommittee</td>
<td>Chesapeake 3</td>
</tr>
<tr>
<td>1500-1600</td>
<td>APATC Membership and Nominations Subcommittee</td>
<td>Chesapeake 4</td>
</tr>
<tr>
<td>1500-1600</td>
<td>APATC Planning Subcommittee</td>
<td>Chesapeake 5</td>
</tr>
<tr>
<td>1500-1600</td>
<td>APATC Publicity and Publications Subcommittee</td>
<td>Chesapeake 7</td>
</tr>
<tr>
<td>1530-1600</td>
<td>Diversity Scholars Orientation</td>
<td>Chesapeake 6</td>
</tr>
<tr>
<td>1530-2045</td>
<td>Ground Test Technical Committee (GTTC) Subcommittee Meetings</td>
<td>National Harbor 10</td>
</tr>
<tr>
<td>1600-1700</td>
<td>APATC Technical Activities</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1700-1800</td>
<td>APATC Steering Committee</td>
<td>Ft. Washington Boardroom</td>
</tr>
<tr>
<td>1700-1800</td>
<td>International Student Conference - Orientation</td>
<td>Potomac 1</td>
</tr>
<tr>
<td>1700-1900</td>
<td>Integration Group Meeting</td>
<td>Mezzanine Conference Room 1*</td>
</tr>
<tr>
<td>1730-1900</td>
<td>2023 AIAA Walter J. and Angeline H. Crichlow Trust Prize Reception (Invite only)</td>
<td>Cherry Blossom Ballroom</td>
</tr>
<tr>
<td>1730-2030</td>
<td>Structures Technical Committee Lecture Meeting</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1800-1830</td>
<td>SciTech 101</td>
<td>National Harbor 11</td>
</tr>
<tr>
<td>1800-1900</td>
<td>Propulsion and Energy Group Leadership Team</td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1800-2000</td>
<td>Aircraft Technology, Integration, and Operations Group Meeting</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1800-2100</td>
<td>Applied Aerodynamics Technical Committee Meeting</td>
<td>Potomac D</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Aerospace Design &amp; Structures Group</td>
<td>National Harbor 3</td>
</tr>
<tr>
<td>1900-2130</td>
<td>Committee on Higher Education Meeting</td>
<td>National Harbor 2</td>
</tr>
<tr>
<td>1900-2200</td>
<td>GNC Graduate Student Paper Competition</td>
<td>National Harbor 15</td>
</tr>
</tbody>
</table>

**Monday, 23 January**

<table>
<thead>
<tr>
<th>Time</th>
<th>Committee and Ancillary Meetings/Events</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>0900-0930</td>
<td>International Meet &amp; Greet with AIAA’s International Activities Group</td>
<td>Potomac Foyer</td>
</tr>
<tr>
<td>0900-1200</td>
<td>NIA TAC</td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>0930-1030</td>
<td>Young Professionals Group Meeting</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>0930-1330</td>
<td>International Student Conference - Team</td>
<td>Mezzanine Conference Room 1*</td>
</tr>
<tr>
<td>0930-1330</td>
<td>International Student Conference - Masters</td>
<td>Mezzanine Conference Room 2*</td>
</tr>
<tr>
<td>0930-1330</td>
<td>International Student Conference - Undergrad</td>
<td>Mezzanine Conference Room 3*</td>
</tr>
<tr>
<td>1100-1400</td>
<td>Integration and Outreach Division Meeting</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1200-1330</td>
<td>Aerospace Sciences Group Meeting</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1200-1330</td>
<td>Nuclear and Future Flight Propulsion Tech Committee Meeting</td>
<td>Potomac D</td>
</tr>
<tr>
<td>1200-1330</td>
<td>CFD2030 Integration Committee Meeting</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1500-1630</td>
<td>Journal of Propulsion and Power Editors and Advisory Board Meeting</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1500-1700</td>
<td>Public Policy Committee Annual In-Person Meeting</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1700-1830</td>
<td>AIAA Journal Editors and Advisory Board Meeting</td>
<td>Potomac D</td>
</tr>
</tbody>
</table>
## COMMITTEE MEETINGS

<table>
<thead>
<tr>
<th>TIME</th>
<th>COMMITTEE AND ANCILLARY MEETINGS/EVENTS</th>
<th>ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1730-1930</td>
<td>Systems Engineering Technical Committee Meeting</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1800-1850</td>
<td>FDTC Theoretical Fluid Mechanics</td>
<td>Chesapeake 3</td>
</tr>
<tr>
<td>1800-1850</td>
<td>FDTC High Speed FSI</td>
<td>Chesapeake 9</td>
</tr>
<tr>
<td>1800-1900</td>
<td>Steering Committee Meeting for HyTASP TC</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1800-1900</td>
<td>FDTC Laminar Flow Control DG</td>
<td>Chesapeake 10</td>
</tr>
<tr>
<td>1800-1900</td>
<td>FDTC Large-Eddy Simulation DG</td>
<td>Chesapeake 11</td>
</tr>
<tr>
<td>1800-1900</td>
<td>FDTC Nonequilibrium DG</td>
<td>Chesapeake 12</td>
</tr>
<tr>
<td>1800-1900</td>
<td>FDTC Active Flow Control Database</td>
<td>Ft. Washington Boardroom</td>
</tr>
<tr>
<td>1800-1900</td>
<td>FDTC Uncertainty Quantification in Fluid Dynamics DG</td>
<td>Chesapeake B</td>
</tr>
<tr>
<td>1800-1930</td>
<td>APATC Low Boom / Supersonic Activities DG</td>
<td>Chesapeake C</td>
</tr>
<tr>
<td>1800-1930</td>
<td>FDTC Turbulence Modeling Benchmarking DG</td>
<td>Chesapeake 2</td>
</tr>
<tr>
<td>1800-2000</td>
<td>AIAA ICME Working Group</td>
<td>Chesapeake A</td>
</tr>
<tr>
<td>1800-2000</td>
<td>MVCE Meshing Subcommittee</td>
<td>Chesapeake 5</td>
</tr>
<tr>
<td>1800-2000</td>
<td>Terrestrial Energy Systems Technical Committee Meeting</td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1800-2100</td>
<td>Information Systems Group Meeting</td>
<td>Mezzanine Conference Room 1*</td>
</tr>
<tr>
<td>1800-2200</td>
<td>Supersonic Aircraft Steering Group</td>
<td>National Harbor 15</td>
</tr>
<tr>
<td>1830-2030</td>
<td>University of Maryland Aerospace Alumni Reception</td>
<td>Cherry Blossom Ballroom</td>
</tr>
<tr>
<td>1900-1950</td>
<td>FDTC Massively Separated Flows</td>
<td>Chesapeake 6</td>
</tr>
<tr>
<td>1900-2000</td>
<td>AMT Diversity and Inclusion Subcommittee</td>
<td>Chesapeake 7</td>
</tr>
<tr>
<td>1900-2000</td>
<td>FDTC High-Order CFD Methods DG</td>
<td>Chesapeake 1</td>
</tr>
<tr>
<td>1900-2000</td>
<td>FDTC High Speed Flow Control</td>
<td>Ft. Washington Boardroom</td>
</tr>
<tr>
<td>1900-2000</td>
<td>AMT Publications Subcommittee</td>
<td>Mezzanine Conference Room 6*</td>
</tr>
<tr>
<td>1900-2000</td>
<td>AMT Awards Subcommittee</td>
<td>Mezzanine Conference Room 2*</td>
</tr>
<tr>
<td>1900-2000</td>
<td>AMT Conference Planning Subcommittee</td>
<td>Mezzanine Conference Room 3*</td>
</tr>
<tr>
<td>1900-2030</td>
<td>FDTC Transition DG</td>
<td>Chesapeake 4</td>
</tr>
<tr>
<td>1900-2030</td>
<td>APATC Workshop Collaboration DG</td>
<td>Chesapeake 8</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Propellants and Combustion Technical Committee Meeting</td>
<td>National Harbor 2</td>
</tr>
<tr>
<td>1900-2200</td>
<td>HyTASP Technical Committee Meeting</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1900-2230</td>
<td>Aircraft Design Technical Committee</td>
<td>Potomac C</td>
</tr>
<tr>
<td>2000-2100</td>
<td>FDTC Reduced-Complexity Modeling and Analysis of Fluids Flows</td>
<td>Chesapeake 2</td>
</tr>
<tr>
<td>2100-2200</td>
<td>FDTC The Physics and Control of Leading Edge Vortices on Swept Wings</td>
<td>Chesapeake 2</td>
</tr>
</tbody>
</table>

### Tuesday, 24 January

<table>
<thead>
<tr>
<th>TIME</th>
<th>COMMITTEE AND ANCILLARY MEETINGS/EVENTS</th>
<th>ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800-1130</td>
<td>GTTC Wind Tunnel Model Design Guidebook WG</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>0830-1200</td>
<td>Student Awards Breakfast</td>
<td>Potomac C</td>
</tr>
<tr>
<td>0900-0930</td>
<td>International Meet &amp; Greet with AIAA’s International Activities Group</td>
<td>Potomac Foyer</td>
</tr>
<tr>
<td>0900-1100</td>
<td>GTTC High Speed WT Calibration WG</td>
<td>Potomac D</td>
</tr>
<tr>
<td>0930-1100</td>
<td>AIAA Gas Turbine Engine Technical Committee</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1000-1115</td>
<td>IFAR Early Career Forum</td>
<td>Cherry Blossom Ballroom</td>
</tr>
</tbody>
</table>
## COMMITTEE MEETINGS

<table>
<thead>
<tr>
<th>TIME</th>
<th>COMMITTEE AND ANCILLARY MEETINGS/EVENTS</th>
<th>ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000-1200</td>
<td><strong>Ethics Committee</strong></td>
<td>Ft. Washington Boardroom</td>
</tr>
<tr>
<td>1200-1300</td>
<td><strong>Space Operations &amp; Support Technical Committee</strong></td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1200-1300</td>
<td><strong>NASA Media Roundtable</strong></td>
<td>Chesapeake D</td>
</tr>
<tr>
<td>1200-1400</td>
<td><strong>Carbon Emissions &amp; Sustainability Task Force Meeting</strong></td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1100-1200</td>
<td><strong>Journal Editors-in-Chief Meeting</strong></td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1230-1330</td>
<td><strong>AIAA Journal Subcommittee Meeting</strong></td>
<td>Conference Room 1*</td>
</tr>
<tr>
<td>1230-1330</td>
<td><strong>Publications Ethical Standards Subcommittee</strong></td>
<td>Conference Room 2*</td>
</tr>
<tr>
<td>1300-1700</td>
<td><strong>Regional Engagement Activities Division (READ) Meeting</strong></td>
<td>Ft. Washington Boardroom</td>
</tr>
<tr>
<td>1300-1700</td>
<td><strong>Technical Activities Division Meeting</strong></td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1330-1500</td>
<td><strong>Diversity Scholars/Sponsor Session</strong></td>
<td>Potomac D</td>
</tr>
<tr>
<td>1400-1500</td>
<td><strong>Publications Review Subcommittee</strong></td>
<td>Conference Room 2*</td>
</tr>
<tr>
<td>1400-1500</td>
<td><strong>Advanced Air Mobility Task Force Wrap Presentation</strong></td>
<td>Potomac C</td>
</tr>
<tr>
<td>1400-1600</td>
<td><strong>Content Advisory Committee</strong></td>
<td>Conference Room 1*</td>
</tr>
<tr>
<td>1400-1700</td>
<td><strong>Intelligent Light Customer Meetings</strong></td>
<td>Conference Room 3*</td>
</tr>
<tr>
<td>1530-1700</td>
<td><strong>Journal of Spacecraft and Rockets Editors and Advisory Board Meeting</strong></td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1600-1730</td>
<td><strong>SCALOS Meeting</strong></td>
<td>National Harbor 14</td>
</tr>
<tr>
<td>1600-2000</td>
<td><strong>GTTC Axis Nomenclature FG</strong></td>
<td>Chesapeake 8</td>
</tr>
<tr>
<td>1630-1730</td>
<td><strong>AIAA Associate Fellows, Class of 2023: Meet and Greet</strong></td>
<td>Potomac D</td>
</tr>
<tr>
<td>1630-1730</td>
<td><strong>FDTC Computational Methods for Multi-Phase Flows DG</strong></td>
<td>Chesapeake 10</td>
</tr>
<tr>
<td>1700-1830</td>
<td><strong>APATC NATO Activities DG</strong></td>
<td>Chesapeake 6</td>
</tr>
<tr>
<td>1700-1900</td>
<td><strong>Flight Testing Technical Committee Meeting</strong></td>
<td>Conference Room 1*</td>
</tr>
<tr>
<td>1700-1900</td>
<td><strong>Aerospace Power Systems Technical Committee Meeting</strong></td>
<td>Conference Room 2</td>
</tr>
<tr>
<td>1730-1930</td>
<td><strong>AIAA Atmospheric Flight Mechanics Technical Committee Meeting</strong></td>
<td>National Harbor 11</td>
</tr>
<tr>
<td>1730-1930</td>
<td><strong>Alumni and Friends of MIT Dept. of Aeronautics and Astronautics Reception</strong></td>
<td>Annapolis 1</td>
</tr>
<tr>
<td>1730-2130</td>
<td><strong>Supersonic Aircraft Steering Group</strong></td>
<td>National Harbor 15</td>
</tr>
<tr>
<td>1800-1900</td>
<td><strong>APATC Aero-Propulsive Interactions DG</strong></td>
<td>Chesapeake 12</td>
</tr>
<tr>
<td>1800-1900</td>
<td><strong>Women of Aeronautics &amp; Astronautics Meeting</strong></td>
<td>National Harbor 7</td>
</tr>
<tr>
<td>1800-1930</td>
<td><strong>Inlets, Nozzles, and Propulsion System Integration TC Meeting</strong></td>
<td>Woodrow Wilson B</td>
</tr>
<tr>
<td>1800-1930</td>
<td><strong>Careers in Propellants and Combustion Panel and Networking Session</strong></td>
<td>Woodrow Wilson D</td>
</tr>
<tr>
<td>1800-2000</td>
<td><strong>Sensor Systems and Information Fusion TC Meeting</strong></td>
<td>National Harbor 10</td>
</tr>
<tr>
<td>1800-2000</td>
<td><strong>APATC Rotorcraft in Hover DG</strong></td>
<td>Chesapeake 7</td>
</tr>
<tr>
<td>1800-2000</td>
<td><strong>MVCE Mesh Suitability Working Group Meeting</strong></td>
<td>Ft. Washington Boardroom</td>
</tr>
<tr>
<td>1800-2100</td>
<td><strong>Guidance, Navigation, &amp; Control Technical Committee Meeting</strong></td>
<td>Woodrow Wilson A</td>
</tr>
<tr>
<td>1800-2100</td>
<td><strong>Electric Propulsion Technical Committee</strong></td>
<td>National Harbor 2</td>
</tr>
<tr>
<td>1830-2130</td>
<td><strong>Liquid Propulsion Technical Committee Meeting</strong></td>
<td>Woodrow Wilson C</td>
</tr>
<tr>
<td>1900-2030</td>
<td><strong>Thermophysics Technical Committee Meeting</strong></td>
<td>National Harbor 5</td>
</tr>
<tr>
<td>1900-2030</td>
<td><strong>FDTC Technical Committee Meeting</strong></td>
<td>Chesapeake 9</td>
</tr>
<tr>
<td>1900-2030</td>
<td><strong>FDTC Fluid Applications and Control Subcommittee</strong></td>
<td>Chesapeake 10</td>
</tr>
<tr>
<td>1900-2030</td>
<td><strong>FDTC CFD Subcommittee</strong></td>
<td>Chesapeake 11</td>
</tr>
</tbody>
</table>
## COMMITTEE MEETINGS

<table>
<thead>
<tr>
<th>TIME</th>
<th>COMMITTEE AND ANCILLARY MEETINGS/EVENTS</th>
<th>ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900-2100</td>
<td>Computer Systems Technical Committee</td>
<td>Conference Room 3</td>
</tr>
<tr>
<td>1900-2100</td>
<td>ADCA</td>
<td>Potomac Room 3</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Transformational Flight Integration and Outreach Planning Meeting</td>
<td>National Harbor 8</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Aeroacoustics Technical Committee Meeting</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Plasma Dynamics and Lasers Technical Committee Meeting</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Space Exploration IC Meeting</td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1900-2200</td>
<td>Aerodynamic Measurement Technology Technical Committee Meeting</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1900-2200</td>
<td>Structures Technical Committee Meeting</td>
<td>National Harbor 3</td>
</tr>
<tr>
<td>1900-2200</td>
<td>Materials Technical Committee Annual Meeting</td>
<td>National Harbor 4</td>
</tr>
<tr>
<td>1900-2200</td>
<td>Solid Rockets Technical Committee Meeting</td>
<td>National Harbor 6</td>
</tr>
<tr>
<td>1900-2200</td>
<td>Aerodynamics Technical Working Group Meeting</td>
<td>Potomac 1</td>
</tr>
<tr>
<td>1930-2100</td>
<td>Small Satellite Technical Committee</td>
<td>Conference Room 1*</td>
</tr>
<tr>
<td>1930-2100</td>
<td>High Speed Air Breathing Propulsion Committee Meeting</td>
<td>National Harbor 13</td>
</tr>
<tr>
<td>2000-2200</td>
<td>MVCE GMGW Working Group Meeting</td>
<td>Ft. Washington Boardroom</td>
</tr>
</tbody>
</table>

**Wednesday, 25 January**

<table>
<thead>
<tr>
<th>TIME</th>
<th>COMMITTEE AND ANCILLARY MEETINGS/EVENTS</th>
<th>ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0830-1000</td>
<td>GTTC Additive Manufacturing FG</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>0900-1100</td>
<td>AIAA Publications Committee Meeting</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1000-1130</td>
<td>Workforce of the Future - What Does Successful Diversity, Equity, and Inclusion Look Like?</td>
<td>Cherry Blossom Ballroom</td>
</tr>
<tr>
<td>1030-1200</td>
<td>GTTC Model Deformation WG</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1100-1200</td>
<td>2024 AIAA SciTech Technical Program Planning</td>
<td>Potomac D</td>
</tr>
<tr>
<td>1130-1230</td>
<td>Continuing Education Committee Meeting</td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1200-1300</td>
<td>AMT Nominations Subcommittee</td>
<td>Ft. Washington Boardroom</td>
</tr>
<tr>
<td>1230-1400</td>
<td>GTTC Writing Quality FG</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1300-1600</td>
<td>GTTC Future of Ground Testing WG</td>
<td>Potomac D</td>
</tr>
<tr>
<td>1300-1700</td>
<td>AIAA Council of Directors</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1400-1500</td>
<td>Carbon Emissions &amp; Sustainability Task Force Mid-Point Presentation</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1500-1700</td>
<td>Journal of Guidance, Control, and Dynamics Editors and Advisory Board Meeting</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1530-1730</td>
<td>Multidisciplinary Design Optimization Technical Committee Meeting</td>
<td>Mezzanine Conference Room 1*</td>
</tr>
<tr>
<td>1600-1700</td>
<td>Journal of Aerospace Information Systems Editors and Advisory Board Meeting</td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1600-1730</td>
<td>Lockheed Martin Strategic Participation All Hands Meeting</td>
<td>Potomac 1</td>
</tr>
<tr>
<td>1630-1800</td>
<td>Information and Command and Control Systems Technical Committee Meeting</td>
<td>Chesapeake 8</td>
</tr>
<tr>
<td>1730-2000</td>
<td>Virginia Tech Alumni &amp; Friends</td>
<td>National Harbor 12</td>
</tr>
<tr>
<td>1730-2100</td>
<td>V/STOL Technical Committee Meeting</td>
<td>Ft. Washington Boardroom</td>
</tr>
<tr>
<td>1800-1900</td>
<td>Embry-Riddle Alumni and Friends Reception</td>
<td>Annapolis 1</td>
</tr>
<tr>
<td>1800-1900</td>
<td>APATC CFD Transition Modeling DG</td>
<td>Chesapeake 12</td>
</tr>
<tr>
<td>1800-1900</td>
<td>Supersonics Integration and Outreach Committee</td>
<td>National Harbor 6</td>
</tr>
<tr>
<td>1800-2000</td>
<td>Pressure Gain Combustion Technical Committee Meeting</td>
<td>National Harbor 3</td>
</tr>
<tr>
<td>1800-2000</td>
<td>JHTO/UCAH Hypersonic Community Career and Networking Social</td>
<td>Cherry Blossom Ballroom</td>
</tr>
<tr>
<td>1800-2000</td>
<td>APATC Surrogate Modeling DG</td>
<td>Chesapeake 11</td>
</tr>
</tbody>
</table>
## COMMITTEE MEETINGS

<table>
<thead>
<tr>
<th>TIME</th>
<th>COMMITTEE AND ANCILLARY MEETINGS/EVENTS</th>
<th>ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800-2000</td>
<td>Human-Machine Teaming Technical Committee</td>
<td>Mezzanine Conference Room 1*</td>
</tr>
<tr>
<td>1800-2000</td>
<td>Energetic Components and Systems (ECS) Technical Committee Meeting</td>
<td>Mezzanine Conference Room 2*</td>
</tr>
<tr>
<td>1800-2100</td>
<td>Electrified Aircraft Technology Technical Committee</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1800-2100</td>
<td>History Committee Meeting</td>
<td>National Harbor 5</td>
</tr>
<tr>
<td>1800-2200</td>
<td>Structural Dynamics Technical Committee Meeting</td>
<td>Baltimore 1</td>
</tr>
<tr>
<td>1830-2030</td>
<td>Aerospace Cybersecurity Working Group</td>
<td>Chesapeake 7</td>
</tr>
<tr>
<td>1830-2030</td>
<td>Purdue University Alumni Reception</td>
<td>National Harbor 11</td>
</tr>
<tr>
<td>1900-2100</td>
<td>AIAA Spacecraft Structures Technical Committee Annual Meeting</td>
<td>National Harbor 2</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Fluid Dynamics Technical Committee Plenary Meeting</td>
<td>Potomac D</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Modeling and Simulation Technical Committee Meeting</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1900-2100</td>
<td>University of Michigan Reception</td>
<td>Woodrow Wilson C</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Intelligent Systems</td>
<td>Woodrow Wilson D</td>
</tr>
<tr>
<td>1900-2100</td>
<td>AMT Update Presentations</td>
<td>National Harbor 13</td>
</tr>
<tr>
<td>1900-2100</td>
<td>Digital Engineering Integration Committee</td>
<td>Chesapeake A</td>
</tr>
<tr>
<td>1900-2200</td>
<td>Non-Deterministic Approaches Technical Committee Meeting</td>
<td>Woodrow Wilson A</td>
</tr>
<tr>
<td>1900-2200</td>
<td>Friends of UC Reception</td>
<td>Woodrow Wilson B</td>
</tr>
<tr>
<td>1900-2200</td>
<td>NC State University MAE Alumni Reception</td>
<td>National Harbor 7</td>
</tr>
<tr>
<td>2000-2200</td>
<td>Meshing, Visualization, and Computational Environments Technical Committee Meeting</td>
<td>National Harbor 4</td>
</tr>
</tbody>
</table>

### Thursday, 26 January

<table>
<thead>
<tr>
<th>TIME</th>
<th>COMMITTEE AND ANCILLARY MEETINGS/EVENTS</th>
<th>ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800-1100</td>
<td>Aeronautics Domain Certification Task Force Kickoff Meeting</td>
<td>Potomac D</td>
</tr>
<tr>
<td>0830-1030</td>
<td>GTTC Dynamic Force Measurement in Wind Tunnels FG (new)</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1000-1130</td>
<td>AIAA Student Programs Roundtable</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1030-1230</td>
<td>GTTC Uncertainty Standard WG</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1200-1400</td>
<td>Adaptive Structures Technical Committee</td>
<td>Potomac D</td>
</tr>
<tr>
<td>1230-1430</td>
<td>GTTC Statistically Defensible Test Methods FG</td>
<td>National Harbor 1</td>
</tr>
<tr>
<td>1430-1600</td>
<td>Unmanned Systems Integration and Outreach Committee</td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1700-1900</td>
<td>Survivability Technical Committee Meeting</td>
<td>Presidential Boardroom</td>
</tr>
<tr>
<td>1730-2030</td>
<td>GTTC Closeout Meeting</td>
<td>Potomac C</td>
</tr>
<tr>
<td>1800-1900</td>
<td>APATC Sailplane Aerodynamics DG</td>
<td>Chesapeake 2</td>
</tr>
<tr>
<td>1900-2130</td>
<td>Software Technical Committee Meeting</td>
<td>National Harbor 9</td>
</tr>
<tr>
<td>1800-2000</td>
<td>Women at SciTech Social Hour and Discussion</td>
<td>Potomac AB</td>
</tr>
</tbody>
</table>

### Friday, 27 January

<table>
<thead>
<tr>
<th>TIME</th>
<th>COMMITTEE AND ANCILLARY MEETINGS/EVENTS</th>
<th>ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>0900-1400</td>
<td>Teacher Friday: Educator Professional Development Session at SciTech</td>
<td>Potomac C</td>
</tr>
</tbody>
</table>

*Conference rooms are located on the Mezzanine level of the Convention Center, across from the Relache Spa*
SEE YOU NEXT YEAR IN ORLANDO, FLORIDA

Call for papers opens in March 2023
Abstracts will be due in May 2023

aiaa.org/SciTech