AVIATION FORUM

27 JUNE–1 JULY 2022
CHICAGO, IL & ONLINE

CHALLENGING TIMES

UNIQUE OPPORTUNITIES

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

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WELCOME TO AVIATION FORUM

The 2022 AIAA AVIATION Forum Executive Steering Committee welcomes you to Chicago and online! We have worked hard this past year curating exciting and thought-provoking content around the forum theme, **Challenging Times, Unique Opportunities**. We hope these industry leaders, topics, and discussions inspire you! Make it a great week!

EXECUTIVE STEERING COMMITTEE

Ed Waggoner
Aeronautics Research Mission Directorate, NASA (Forum General Chair)

"Siva"kumar Balasubramanian
Spirit AeroSystems

Ming Chang
AIAA Aeronautics Domain Lead

Ed Gerding
Boeing Global Services

Jim Hileman
FAA

Dimitri Mavris
Georgia Institute of Technology

Linda O'Brien
Lockheed Martin Aeronautics

Craig Wanke
MITRE Corporation

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Patrick Yee, The Aerospace Corporation (Deputy Forum Technical Chair, Aerospace Sciences Group)

David Levy, Sierra Nevada Corporation (Forum Technical Chair, Aircraft Technology, Integration, and Operations Group)

Daniel DeLaurentis, Purdue University (Deputy Forum Technical Chair, Aircraft Technology, Integration, and Operations Group)

Vincent Schultz, NASA Langley Research Center (Forum Technical Chair, Integration and Outreach Division)

TECHNICAL DISCIPLINE CHAIRS

AEROSPACE TRAFFIC MANAGEMENT

Joseph Post, University of South Florida

Edward Stanton, Aerospace Traffic Management Integration and Outreach Committee

AIR TRANSPORTATION SYSTEMS

David P Thipphavong, NASA Ames Research Center

Peng Wei, George Washington University

Min Xue, NASA Ames Research Center

AIRCRAFT DESIGN

Timothy Takahashi, Arizona State University

Peter Schmollgruber, ONERA

APPLIED AERODYNAMICS

Mehdi Ghoryeshi, U.S. Air Force Academy

Sally A. Viken, NASA

Ovais Khan, Texas A&M University Kingsville

ATMOSPHERIC AND SPACE ENVIRONMENTS

Hui Hu, Iowa State University

Steven Barrett, Massachusetts Institute of Technology

CFD2030

Dimitri Mavriplis, University of Wyoming

COMPUTATIONAL FLUID DYNAMICS

Manan Vyas, NASA Glenn Research Center

Reetesh Ranjan, University of Tennessee at Chattanooga

COMPUTER SYSTEMS

Miroslav Velev, Aries Design Automation, LLC

Christopher Coley, U.S. Air Force Academy

DESIGN ENGINEERING

Olivia Pinon Fischer, Georgia Institute of Technology

Franz-Josef Kahlen, Kahlen GPS

DIGITAL ENGINEERING

Olivia Pinon Fischer, Georgia Institute of Technology

Dave Kepczynski, General Electric

Natalie Straup, Northrop Grumman

Mathew French, Northrop Grumman

FLIGHT TESTING

James Childress, The Boeing Company

Or Dantsker, University of Illinois at Urbana-Champaign

Derek Spear, U.S. Air Force

FLOW VISUALIZATION SHOWCASE

Ivan Bermejo-Moreno, University of Southern California

CJ Doolittle, FlexCompute Inc.

FLUID DYNAMICS

Andrew Magstadt, Sierra Nevada Corporation

CJ Doolittle, FlexCompute Inc.

GENERAL AVIATION

Nicholas Borer, NASA Langley Research Center

GROUND TESTING

Brandon Chynoweth, Purdue University

Matthew Kuester, Virginia Tech

HIGH-SPEED AIR BREATHING PROPULSION

Zekai Hong, National Research Council Canada

Justin Kirik, Northrop Grumman

HYBRID ROCKETS

Trevor Elliott, University of Tennessee at Chattanooga

Matthew Hitt, U.S. Army Space and Missile Defense Command

INLETS, NOZZLES, AND PROPULSION SYSTEMS INTEGRATION

Ragini Acharya, University of Tennessee Space Institute

Ann Khidekel, Collins Aerospace, RTX

ITAR

Scott Sherer, Air Force Research Laboratory

Rick Graves, Air Force Research Laboratory

MESHING, VISUALIZATION, AND COMPUTATIONAL ENVIRONMENTS

David McDaniel, DoD HPCMP CREATE™

MODELING AND SIMULATION TECHNOLOGIES

Nishanth Goli, Engenius Micro

Thomas Powelson, Lockheed Martin

MULTIDISCIPLINARY DESIGN OPTIMIZATION

Geojoe Kuruvila, The Boeing Company

Turaj Ashuri, Kennesaw State University

PLASMADYNAMICS AND LASERS

Eric Matlis, University of Notre Dame

PRESSURE GAIN COMBUSTION

Mirko Gamba, University of Michigan

SOLID ROCKETS

Reid Young, Northrop Grumman

Wes Ryan, NASA

SUPERSONICS

David Lazzara, The Boeing Company

Darcy Allison, Raytheon

TERRESTRIAL ENERGY SYSTEMS

Tarek Abdel-Salam, East Carolina University

Pablo Bueno, Southwest Research Institute

THERMOPHYSICS AND HEAT TRANSFER

Daniil Andrienko, University of Colorado Boulder

Kyle Hanquist, University of Arizona

Sandra Boetcher, Embry-Riddle Aeronautical University

TRANSFORMATIONAL FLIGHT SYSTEMS

Siddhartha Krishnamurthy, NASA Langley Research Center

Cedric Justin, Georgia Institute of Technology

VERTICAL/SHORT TAKE-OFF AND LANDING (V/STOL) AIRCRAFT SYSTEMS

Jacob Cook, NASA

Geoffrey Jeram, U.S. Army

Sienna Whiteside, NASA

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FORUM OVERVIEW

	SAT. 25	SUN. 26	MONDAY 27	TUESDAY 28
0730 hrs			Speaker Briefing	Speaker Briefing
0800 hrs	Continuing Education Workshops	Continuing Education Workshops	Plenary	Plenary
0830 hrs				
0900 hrs			Networking Break	Networking Break
0930 hrs			In-Person Technical Sessions 0930–1110 hrs; Forum 360	In-Person Technical Sessions 0930–1110 hrs; Forum 360
1000 hrs				
1030 hrs				
1100 hrs				
1130 hrs			Taste of Chicago Lunch	Taco Tuesday Lunch
1200 hrs				
1230 hrs				
1300 hrs		2nd Annual Leadership Symposium		Exposition Hall Open
1330 hrs				
1400 hrs			In-Person Technical Sessions 1400–1540 hrs	In-Person Technical Sessions 1400–1540 hrs; Forum 360
1430 hrs			Forum 360; Rising Leaders in Aerospace: Speed Mentoring	
1500 hrs				
1530 hrs				
1600 hrs		Meet the Employers	Virtual Technical Sessions 1600–1715 hrs; Networking Break; Women of Aeronautics and Astronautics panel	Virtual Technical Sessions 1600–1715 hrs; Networking Break
1630 hrs				TARAM Panel
1700 hrs				
1730 hrs				Welcome Happy Hour in the Exposition Hall
1800 hrs			Trivia Night	
1830 hrs		Student Welcome Mixer		
1900 hrs				
1930 hrs		Ignite the Meet(ing)		
2000 hrs				

Chicago

Virtual

Hybrid

FORUM OVERVIEW

	WEDNESDAY 29			THURSDAY 30			FRIDAY 1	
0730 hrs	Speaker Briefing			Speaker Briefing			Speaker Briefing	
0800 hrs	Plenary			Plenary			Plenary	
0830 hrs								
0900 hrs	Networking Break in Exposition Hall			Networking Break in Exposition Hall			Networking Break	
0930 hrs	In-Person Technical Sessions 0930–1110 hrs	Forum 360	Exposition Hall Open 0845–1630 hrs	In-Person Technical Sessions 0930–1110 hrs	Forum 360	Exposition Hall Open 0845–1400 hrs	In-Person Technical Sessions 0930–1110 hrs	Forum 360
1000 hrs								
1030 hrs								
1100 hrs								
1130 hrs				Exposition Hall Box Lunch			Networking Lunch on Your Own	
1200 hrs	Rising Leaders Lunch Panel							
1230 hrs								
1300 hrs								
1330 hrs								
1400 hrs	In-Person Technical Sessions 1400–1540 hrs			In-Person Technical Sessions 1400–1540 hrs	Forum 360		In-Person Technical Sessions 1400–1540 hrs	
1430 hrs		Forum 360						
1500 hrs								
1530 hrs								
1600 hrs	Virtual Technical Sessions 1600–1715 hrs		Networking Break	Virtual Technical Sessions 1600–1715 hrs		Networking Break	Virtual Technical Sessions 1600–1715 hrs	
1630 hrs								
1700 hrs								
1730 hrs								
1800 hrs								
1830 hrs								
1900 hrs								
1930 hrs								
2000 hrs								

Want to watch virtual events while on site?
Head to rooms 5A - 5I on the 5th floor to watch virtual sessions, network, and relax with fellow attendees.

ONLINE PLATFORM TOUR

virtualaviation.aiaa.org

PLAN
Explore all the AIAA AVIATION program has to offer through topic listing and descriptions, contributors, and speaker lists. View and favorite upcoming sessions, download the reminder to your personal calendar or join live sessions straight from the Schedule 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 session occurs, the on-demand recordings will be available on the same session card.

EXPLORE
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!

CONNECT
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.

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COVID-19 HEALTH & SAFETY PROTOCOLS

aiaa.org/AVIATIONHealthSafety

The health and safety of all participants is AIAA's top priority as we come back together in person. For everyone's protection, in conjunction with the facility, we have put the following protocols in place.

AIAA has partnered with InHouse Physicians (IHP) to provide a comprehensive COVID health security solution for on-site participants. IHP will be managing the proof of vaccination or COVID test uploads, the daily health screenings, as well as help administer our check-in verification points and provide on-site medical support and clinicians. Please be on the lookout for correspondence from IHP via text and email.

Required

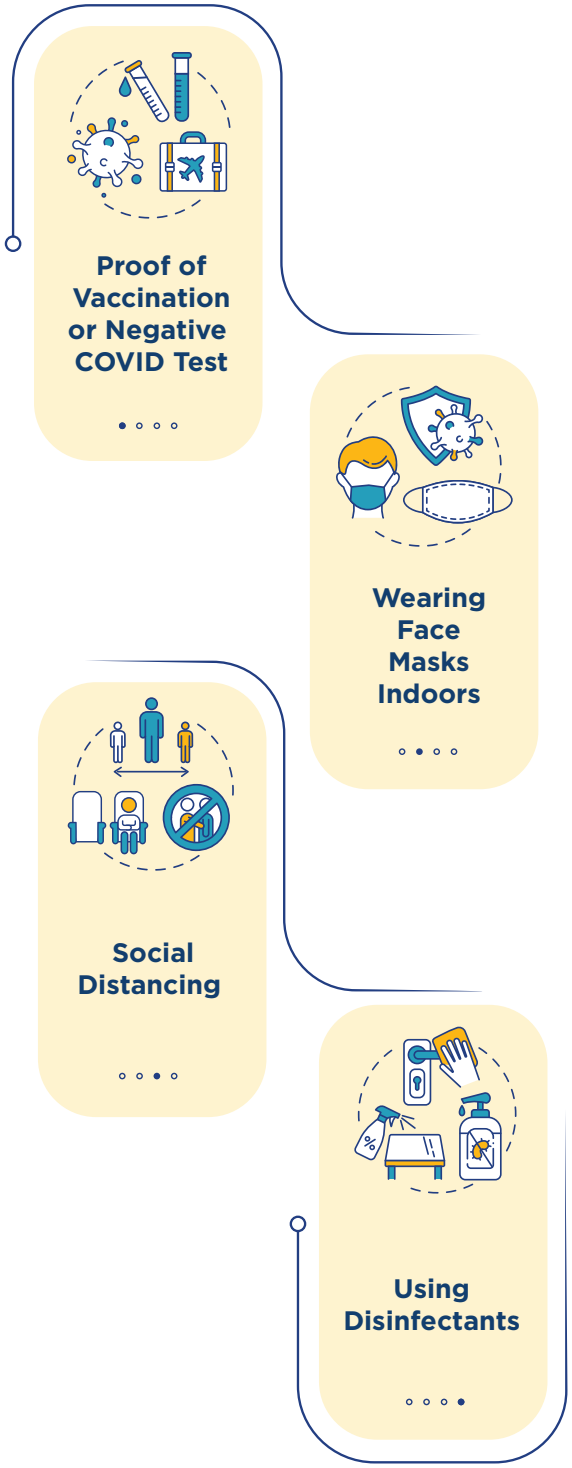
- Proof of full vaccination or negative COVID test taken and uploaded 24 hours prior to your arrival
- Completion of Daily Health Screening — look for the email or text each morning or scan QR code below
- Get vetted for forum participation each day at one of the check-in stations
- Face masks are required indoors when not eating or drinking

General Health and Safety Precautions

- Social distancing will be observed as much as possible within the facility
- Please be respectful of each individual's personal space and comfort level — there are green, yellow, red, and orange ribbons to indicate your level of comfort should you choose to wear them
- Speakers at the podium may be unmasked while speaking*
- Food and beverage will be provided using attendants or in individual packaging where possible
- Masks are available at the registration table and hand sanitizer stations are placed around the facility

Contact an AIAA staff member or email carmelab@aiaa.org with any questions or issues.

*May be subject to change based on recent state guidelines.



DAILY HEALTH SCREENING

VACCINE CARD OR COVID-19 TEST RESULT UPLOAD

PROGRAM SATURDAY // 25 JUNE

FOR MOST UP-TO-DATE SCHEDULE CHECK ONLINE

7th AIAA Drag Prediction Workshop ("DPW-VII: Expanding the Envelope")

0800–1700 hrs // *Williford A & B*

Predict the effect of shock-induced separation on the variation of lift and pitching moment with increasing angle of-attack at transonic conditions.

PROGRAM SUNDAY // 26 JUNE

2nd AIAA Workshop for Multifidelity Modeling in Support of Design and Uncertainty Quantification

0800–1700 hrs // *Williford C*

Multifidelity modeling encompasses a broad range of methods that use approximate models together with high-fidelity models to accelerate a computational task that requires repeated model evaluations.

2nd AIAA Leadership Symposium

1300–1700 hrs // *Waldorf*

Join AIAA leadership at the 2nd annual Leadership Symposium as we focus on how disruptive change results in growth and impact. AIAA President Laura McGill, AIAA Executive Director Dan Dumbacher, and other members of the Board of Trustees and the Council of Directors will provide insight on the Institute's vision and strategic trajectory as we move forward. As a leader in the organization, we invite you to collaborate across divisions and committees by sharing best practices and institutional knowledge to help both new and experienced leaders have productive and engaging experiences.

Meet the Employers

1600–1800 hrs // *Grand Ballroom*

This fun and dynamic event offers students and young professional attendees the chance to meet AIAA corporate members and learn about possible employment opportunities. There is no cost to participate and forum registration is not required.

Student Welcome Mixer

1830–1930 hrs // *Willford A-C*

Join us at the Student Welcome Mixer to mingle with your peers and hear from AIAA leadership about the opportunities available to you as an AIAA student member. Games, entertainment, and light fare will be provided! A cash bar will be available to students age 21 and over with a valid ID. *(Proof of student registration required.)*

Ignite the (Meet)ing

1930–2000 hrs // *Waldorf*

Come learn about the networking opportunities available at the AIAA AVIATION Forum and how you can make the most of your first AIAA forum.

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

- **Student Welcome Mixer**
- **Taste of Chicago Lunch**
- **Taco Tuesday Lunch**
- **Welcome Happy Hour in the Exposition Hall**
- **Thursday Lunch in the Exposition Hall**

PLENARY
State of the Industry

0800–0900 hrs // *International Ballroom*

Hear from Kevin Michaels, a globally recognized expert on the aviation and aerospace manufacturing industries, as he examines the current state and future of the industry.

SPEAKER: Kevin Michaels, Managing Director, AeroDynamic Advisory

FORUM 360
Current State of the Industry

0930–1100 hrs // *International Ballroom*

This panel of experts will consider how the aviation industry is reacting to current challenges, including downturn in demand and extended life of platforms. They'll also reflect on opportunities provided, including shifting government and industry roles, and engineering support to product operations.

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

PANELISTS:
Roderick McLean, Vice President and General Manager, Air Mobility and Maritime Missions, Lockheed Martin Aeronautics Company

Mike Sinnett, Vice President and General Manager, Product Development, Boeing Commercial Airplanes

Jim Tighe, Chief Technical Officer, Wisk

Taste of Chicago Lunch

1130–1330 hrs // *Continental A-C*

Proof of purchase is required and included in the registration fee where indicated.

FORUM 360
Meeting the Current Workforce Challenges

1430–1600 hrs // *International Ballroom*

The aviation industry faces a shortage of available talent for all positions. This shortage is complicated by the demand from all industries for individuals with specific skillsets needed now and in the future. Join us as we discuss how the community can work together to ensure that students and workers have the education and training they need to maintain the high standards of engineering excellence demanded by the industry.

MODERATOR: Dimitri Mavris, Langley Distinguished Regents Professor, Georgia Tech

PANELISTS:
Tim Booher, Vice President, Combat Systems, Lockheed Martin

Ahsan Choudhuri, Professor, Aerospace and Mechanical Engineering, and Associate Vice President, Aerospace Center, University of Texas at El Paso

Brian Connolly, Vice President and Senior Chief Engineer, Cyber Systems, The Boeing Company

Mike Kincaid, Associate Administrator, Office of STEM Engagement, NASA

Amanda VandePol, U.S. Aerospace, Defense, Federal and Marine Portfolio Development Executive, Siemens Digital Industries Software

Speed Mentoring

1500–1700 hrs // *Continental A-C*

Leaders in the aerospace industry will take time to meet with Rising Leaders participants and share their experiences. The event is a great way to get new insights and make connections.

FORUM 360
Women of Aeronautics and Astronautics (WoAA) Panel: Propelling the Aerospace Industry with Allyship

1630–1730 hrs // *International Ballroom*

This event will see aerospace industry leaders sharing their experiences of implementing and promoting allyship during their careers. Panelists who identify with minority groups will speak about encountering allyship and how it can play a crucial role in enabling them to thrive at work and otherwise.

MODERATOR: Shireen Datta, Aerospace Systems Engineer, Aurora Flight Sciences

PANELISTS:
Nayan Bohidar, Research Engineer and Manager, Propulsion Engineering Team, Aurora Flight Sciences

Kate Gunderson, Mechanical/Aerospace Engineer, National Test Pilot School

Jessica Jones, Staff Aeroelastician, Aurora Flight Sciences

Linda O'Brien, Vice President and Chief Engineer, Lockheed Martin Aeronautics

Trivia Night

1800–1930 hrs // *Continental A-C*

Join fellow students and young professionals to test your knowledge of aerospace trivia, have the chance to win cool prizes, and meet new people. Light snacks will be provided. *Hosted by the AIAA University of Illinois Chicago Student Branch.*

NETWORKING BREAKS

0900–0930 hrs // *International and Continental Foyers*

1600–1630 hrs // *International and Continental Foyers*

PLENARY
Supply Chain

0800–0900 hrs // *International Ballroom*

SPEAKER: Ron Epstein, Managing Director, Aerospace & Defense, Bank of America Merrill Lynch

FORUM 360
Supply Chain – The Greater Picture

0930–1100 hrs // *International Ballroom*

We're in the midst of a supply chain crisis, with disruptions being felt in our daily lives as well as across the industry. Our panel of experts will consider the issues and problems we're facing and explore potential solutions, including how to ensure the future resilience of the supply chain.

MODERATOR: Tom Edwards, Chief Technology Officer, Crown Consulting Inc.

PANELISTS:
Abe Eshkenazi, CEO, Association for Supply Chain Management

Jeff Gajda, Chief Procurement Officer, Vice President, Sourcing and Procurement, Honeywell

Samantha Marnick, Executive Vice President and Chief Operating Officer; President, Commercial, Spirit AeroSystems

Maciek Nowak, Interim Dean, Professor, Quinlan School of Business, Loyola University Chicago

Technical Lecture: History of High-Speed Air-Breathing Propulsion

0930–1030 hrs // *Lake Ontario*

Taco Tuesday Lunch

1130–1330 hrs // *Continental A-C*

Proof of purchase is required and included in the registration fee where indicated.

2022 Fluid Dynamics Award Lecture

1400–1500 hrs // *Williford C*

NETWORKING BREAKS

0900–0930 hrs // *International and Continental Foyers*

1600–1630 hrs // *Salon A*

FORUM 360
Aviation Supply Chain: Challenges, Opportunities, and Path Forward

1430–1600 hrs // *International Ballroom*

This panel will focus on the aviation industry supply chain, discussing its importance, challenges that have been encountered, and the path forward to resilience to support the entire aviation ecosystem.

MODERATOR: Parimal "PK" Kopardekar, Director, NASA Aeronautics Research Institute

PANELISTS:
Mohamed Denden, Vice President of Procurement, Airbus Americas

Ronald Epstein, Managing Director, Aerospace & Defense, Bank of America Merrill Lynch

Joseph Hernandez, Vice President of Technology, FEAM

Robie I. Samanta Roy, Chief Operating Officer, Electra.aero

FORUM 360
Evaluation of the Transport Airplane Risk Assessment Methodology

1630–1800 hrs // *International Ballroom*

The FAA developed a report regarding the methodology and effectiveness of the Transport Airplane Risk Assessment Methodology (TARAM) process with the National Academies of Sciences, Engineering, and Medicine (National Academies). TARAM is used to identify potential risks in currently operating airplanes, which will alert FAA officials if action is needed to prevent potential accidents. The National Academies appointed an ad hoc committee of 12 members to undertake a study to evaluate the FAA's TARAM process. This discussion will cover:

- Role and objectives of TARAM within the FAA's overall safety oversight system
- Assessment of the TARAM analysis process
- Effectiveness of TARAM for the purposes of improving aviation safety
- Recommendations to improve the methodology and effectiveness of TARAM as an element of aviation safety

MODERATOR: George Ligler, Proprietor, GTL Associates; Professor, Multidisciplinary Engineering, Texas A&M University; Chair, National Academies Committee on Transport Airplane Risk Assessment Methodology

PANELISTS:
John-Paul Clarke, Professor and Ernest Cockrell Jr. Memorial Chair in Engineering, University of Texas at Austin

Karen Feigh, Professor and Associate Chair for Research, Georgia Institute of Technology

Jeff Guzzetti, President, Guzzetti Aviation Risk Discovery, LLC

Jan Schilling, Chief Engineer for Advanced Products, GE Aviation (retired)

Welcome Happy Hour

1730–1900 hrs // *Exposition Hall*

PLENARY

0800–0900 hrs // *International Ballroom*

SPEAKER: Mel Johnson, Director, Compliance and Airworthiness Division, Aircraft Certification Services, Federal Aviation Administration

FORUM 360
How Do We Engineer for Safety?

0930–1100 hrs // *International Ballroom*

Safety is paramount in the aviation industry. As we add new entrants and vehicles, how do we improve on this standard? Hear from experts as they discuss incorporating autonomous systems, digital engineering, and new methods of testing, among other advances, to engineer for safety.

MODERATOR: Shweta Mulcare, Outcome Lead, Aviation Safety Information Analysis and Sharing (ASIAS) and Advanced Analytics Evolution, The MITRE Corporation

PANELISTS:
Ludovic Aron, Representative to the United States, European Union Aviation Safety Agency (EASA)

Capt. Bob Fox, First Vice President and National Safety Coordinator, Air Line Pilots Association, Intl'l (ALPA)

Dan Freeman, Vice President, Safety Management System, The Boeing Company

Dan Heller, Vice President, Corporate Engineering, Lockheed Martin

Jacqueline S. Janning-Lask, Director of Engineering and Technical Management and Chief Engineer, Air Force Life Cycle Management Center

Kevin Matthies, Senior Vice President and General Manager, Boeing Programs, Spirit AeroSystems

Lunch Panel: Interactive Discussion with Young Professionals on Career Transitions and New Opportunities

1200–1330 hrs // *Continental A*

Join young leaders in the aerospace industry to discuss topics of importance to young professionals in the workplace. Boxed lunches are provided on a first-come, first-served basis.

NETWORKING BREAKS

0900–0930 hrs // *Salon A*
1600–1630 hrs // *Salon A*

Technical Lecture: High-Speed Air-Breathing Propulsion Flight Test and Captive Flight Test

1400–1500 hrs // *Lake Ontario*

Industry leaders will describe their latest work in hypersonic flight test and answer your questions about plans for new fleets of high-speed transports and testbed.

NASA Aeronautics Aviation Sustainability Strategy

1430–1630 hrs // *International Ballroom*

One of the most daunting challenges facing the global aviation industry revolves around sustainability. NASA Aeronautics technology leadership will discuss several critical initiatives in its aviation sustainability strategy. These initiatives directly address accelerating the implementation of technologies that focus on key sustainability barriers including hybrid-electric propulsion, advanced composite manufacturing, advanced configurations, and propulsion systems. Join NASA leadership as they discuss these crucially important sustainable aviation topics.

MODERATOR: Rich Wahls, Deputy Director (Acting) and Strategic Technical Advisor, Advanced Air Vehicles Program, Aeronautics Research Mission Directorate, NASA

SPEAKER: Robert Pearce, Associate Administrator, Aeronautics Research Mission Directorate, NASA

PANELISTS:
John Cavolowsky, Director, Transformative Aeronautics Concepts Program, Aeronautics Research Mission Directorate, NASA

Barbara Esker, Director (Acting) and Deputy Director, Advanced Air Vehicles Program, Aeronautics Research Mission Directorate, NASA

Lee Noble, Director, Integrated Aviation Systems Program, Aeronautics Research Mission Directorate, NASA

Akbar Sultan, Director, Airspace Operations & Safety Program, Aeronautics Research Mission Directorate, NASA

Special Session: Supersonic Aircraft

1430–1540 hrs // *4F*

Chanute Flight Test Award Lecture

1730–1830 hrs // *Williford A*

My Journey: Honest Ed's to the....."Blackbird" at Mach 3.2!

Rogers Smith

PLENARY

0800–0900 hrs // *International Ballroom*

SPEAKER: Laurence Wildgoose, Assistant Administrator for Policy, International Affairs, and Environment, Federal Aviation Administration

FORUM 360
Government Perspectives on the U.S. Civil Government Aviation Climate Action Plan

0930–1100 hrs // *International Ballroom*

On 9 November 2021, the U.S. government published the United States Aviation Climate Action Plan, which describes a whole-of-government approach to put the sector on a path toward achieving net-zero emissions by 2050. The plan builds on individual and sector-wide commitments announced by the U.S. aviation industry, and highlights specific actions and policy measures to foster innovation and drive change across the entire U.S. aviation sector.

MODERATOR: R. John Hansman, T. Wilson Professor of Aeronautics & Astronautics, Massachusetts Institute of Technology; Director, MIT International Center for Air Transportation

PANELISTS:
Jay Fitzgerald, Chief Scientist, Bioenergy Technologies Office, U.S. Department of Energy

Roberto I. Guerrero, Deputy Assistant Secretary of the Air Force for Operational Energy, Office of the Assistant Secretary of the Air Force for Energy, Installations and Environment

James Hileman, Chief Scientific and Technical Advisor, Environment and Energy, Federal Aviation Administration

Richard Wahls, Deputy Director (Acting) and Strategic Technical Advisor, Advanced Air Vehicles Program, Aeronautics Research Mission Directorate, NASA

PEGASAS Annual Meeting

0930–1600 hrs // *Buckingham*

PEGASAS researchers, FAA program managers and technical monitors, industry affiliates, and advisory board members meet annually to showcase the progress of PEGASAS research. The general aviation-focused meeting is packed with technical tracks covering PEGASAS projects that support FAA research requirements and topic-relevant invited talks. For more information, visit our website www.pegasas.aero or contact info@pegasas.aero.

Lunch with Exhibitors

1130–1330 hrs // *Exposition Hall - Salon A*

Proof of purchase is required and included in the registration fee where indicated.

FORUM 360
Industry Perspectives on the U.S. Civil Government Aviation Climate Action Plan

1430–1600 hrs // *International Ballroom*

This is the second of two sessions on the November 2021 Aviation U.S. government Aviation Climate Action Plan. Hear perspectives from across the aviation industry on the plan, recent advances in technology and policy, and the industry's commitment to action.

MODERATOR: Nancy Young, Chief Sustainability Officer, Alder Fuels

PANELISTS:
Lauren Riley, Managing Director, Global Environmental Affairs and Sustainability, United Airlines

Brian Ripsin, Americas Sustainability Manager, Shell Aviation

Michael Winter, Senior Fellow, Advanced Technology, Pratt & Whitney

Brian Yutko, Chief Engineer, Sustainability and Future Mobility, Boeing

Stay fit with your fellow attendees!

See the sights of Chicago on foot with AIAA staff on Tuesday, 28 June, and Thursday, 30 June, at 0600 hrs. Meet in the lobby at the Hilton Chicago for a run/walk. All levels are welcome for a 1-3 mile route.

NETWORKING BREAKS

0900–0930 hrs // *Salon A*

1600–1630 hrs // *International and Continental Foyers*

PROGRAM FRIDAY // 1 JULY

PLENARY
Future State of the Industry

0800–0900 hrs // *International Ballroom*

SPEAKER: Diana Birkett Rakow, Senior Vice President, Public Affairs and Sustainability, Alaska Airlines

FORUM 360
Future Airspace Operations

0930–1100 hrs // *International Ballroom*

The density and diversity of airspace operations is likely to change significantly with developments related to drones, eVTOLs, sTOLs, advanced air mobility, supersonics, and commercial space transportation. NASA, the FAA, and industry are keen on ensuring that future airspace operations will continue to scale to accommodate the diversity and density in the same manner. The panel will discuss the lessons learned from current air traffic operations and unmanned aircraft system traffic management and identify various capabilities that need to be developed to prepare for the future in a safe manner.

MODERATOR: Lisa Ellman, Executive Director, Commercial Drone Alliance and Partner, Hogan Lovells

PANELISTS:
Ella Atkins, Professor of Aerospace Engineering; Director, Autonomous Aerospace Systems (A2SYS) Lab; Associate Director of the Robotics Institute, University of Michigan

Steve Bradford, Chief Scientist, NextGen, FAA

Todd Briscoe, Director of Commercial Advanced Product Development, Core Engineering and Materials and Process Engineering, Spirit AeroSystems

Bob Ellithorpe, Vice President, Program Management, Archer

Akbar Sultan, Director, Airspace Operations and Safety Program, Aeronautics Research Mission Directorate, NASA

Frank Matus, Director, ATC and Digital Aviation Solutions - Americas, Thales

PEGASAS Annual Meeting

0930–1100 hrs // *Buckingham*

PEGASAS researchers, Federal Aviation Administration program managers and technical monitors, industry affiliates, and advisory board members meet annually to showcase the progress of PEGASAS research. The general aviation-focused meeting is packed with technical tracks covering PEGASAS projects that support FAA research requirements and topic-relevant invited talks. For more information, visit our website www.pegasas.aero or contact info@pegasas.aero.

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NETWORKING BREAKS

0900–0930 hrs // *International Foyer*

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13 July 2022, 1200-1330 hrs ET

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- Challenges that prevent this from being certified and adopted

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If you want to attend any of these special sessions, you will need to complete an additional registration and verification process. In addition to a forum registration that includes access to sessions, a separate registration process is required to attend these restricted sessions. To register, please bring the required documentation with you to the on-site ITAR registration desk: most important is proof of U.S. citizenship. (Please note that a CAC card IS NOT official proof of U.S. citizenship.) See the specific requirements below to determine individual requirements.

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(One of the following is required for all those registering for ITAR sessions)
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Non-U.S. Government Attendees
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Copy of approved and active **DD2345** contractor certificate** ^

**Please note that if your paycheck comes from someone other than the U.S. government, for example, a university, you will need to follow the process of the non-U.S. Government Attendees.*

*** If you are not familiar with the DD2345, please check with your Corporate Security Officer.*

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ITAR Registration Hours:

Sunday, 26 June	**1600–1900 hrs**	Registration
Monday, 27 June	**0800–1600 hrs**	Room 4M
Tuesday, 28 June	**0800–1600 hrs**	Room 4M
Wednesday, 29 June	**0800–1500 hrs**	Room 4M

MONDAY, 27 JUNE

0930–1110 hrs // *4M*
ITAR-01: General Topics

1400–1540 hrs // *4M*
ITAR-02: Kinetic Weapon Integration

TUESDAY, 28 JUNE

0930–1110 hrs // *4M*
ITAR-03: USAF Transformational S&T I

1400–1540 hrs // *4M*
ITAR-04: USAF Transformational S&T II

WEDNESDAY, 29 JUNE

0930–1110 hrs // *4M*
ITAR-05: Directed Energy I

1400–1540 hrs // *4M*
ITAR-06: Directed Energy II

ITAR badges must be worn during the sessions.
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Cell phones, computers, tablets, cameras, personal fitness devices, or other electronic devices with cameras, recording, or two-way transmission capabilities will not be permitted into the ITAR session room(s). There will be a check-in desk in front of the room where you can leave these devices. Large briefcases and bags will also need to be left at the desk.

Please be advised that all policies and procedures MUST be followed or admittance to the restricted sessions will not be permitted. Anyone wishing to enter the restricted session room MUST abide by the policies, procedures, and submission of verified documents mandated by the DoD. No Exceptions!

RECOGNITION

SERVICE AWARDS

The following 2022 AIAA Sustained Service Awards will be presented at the AIAA Leadership Summit on 26 June 2022.

João Luiz F. Azevedo, Instituto de Aeronáutica e Espaço, Brazil

For more than 10 years of service as Deputy Director–Region VII and as a member of the AIAA Education Series Editorial Advisory Board.

Carlos E. S. Cesnik, University of Michigan

For nearly three decades of sustained and meritorious service to AIAA in a variety of leadership roles within its technical activities.

John R. Chawner, Cadence Design Systems, Inc.

For over 40 years of continuous involvement and advocacy to drive CFD engagement and advancements in AIAA through workshops and technical and integration committees.

Farzad Mashayek, University of Illinois Chicago

For outstanding, sustained contributions to the Institute at the section and regional levels and to national technical committees with role-model activities in terrestrial energy generation and storage.

TECHNICAL AWARDS

Join us each morning as the following awards will be presented at the plenary sessions.

2021 Elmer A. Sperry Award

Michimasa Fujino, HondaJet

In recognition of his singular achievement of research and development of new technologies for business aviation including the Over-the-Wing Engine Mount and Natural Laminar Flow airfoil, and the introduction to the market of commercial aircraft based on these technologies through the formation of HondaJet.

2022 AIAA Aerodynamics Award

Marilyn J. Smith, Georgia Institute of Technology

For contributions to the computational and theoretical aerodynamic analysis of static and dynamic systems with separated flows, particularly for vertical takeoff and landing rotorcraft vehicles.

2022 AIAA Aircraft Design Award

Steve Ericson, Overair

For a lifetime of innovative aircraft designs and exceptional skills in configuration design, as well as mentoring young engineers in aircraft design.

2022 AIAA Chanute Flight Test Award

Rogers E. Smith, Consultant/SDI

For career-long achievements and contributions to the safe practices and teaching of flight testing, particularly in-flight controls and flying qualities, and significant collaboration with a diverse set of aerospace stakeholders.

2022 AIAA Fluid Dynamics Award

Mujeeb R. Malik, NASA Langley Research Center

For numerous and significant contributions to the understanding and control of laminar turbulent boundary-layer transition, and for exceptional leadership, particularly in the area of certification-by-analysis.

2022 AIAA Ground Testing Award

James C. Ross, NASA Ames Research Center

In recognition of decades of exemplary service and leadership in ground testing, advancing critical technologies including heavy vehicles, military aircraft, and NASA's Multipurpose Crew Vehicle Program.

2022 AIAA Hap Arnold Award for Excellence in Aeronautical Program Management

Paul W. Niewald, The Boeing Company

For championing the use of innovative tools such as digital engineering to transform aircraft development, saving time and cost while enhancing performance and safety.

2022 AIAA James A. Van Allen Space Environments Award

Henry B. Garrett, Jet Propulsion Laboratory, California Institute of Technology

For a lifetime of contributions to the understanding of the interactions of spacecraft with the Earth's magnetosphere and those of other planets.

2022 AIAA Losey Atmospheric Sciences Award

Fred H. Proctor, NASA (retired)

For leading fundamental research to characterize atmospheric-related aviation hazards and to develop advanced sensor algorithms for identifying and mitigating these hazards.

2022 AIAA Thermophysics Award

Karen A. Thole, Pennsylvania State University, START Lab

For pioneering research at the intersection of additive manufacturing and heat transfer in gas turbine engines that enables innovative combustor and turbine cooling designs.

2022 AIAA Plasmadynamics and Lasers Award

Sergey O. Macheret, Purdue University

For pioneering work on novel plasma generation and control methods and on aerospace applications of plasmas.

RECOGNITION

BEST PROFESSIONAL PAPER

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

2021 AIAA Ground Testing Best Paper Award
"Evaluation of CFD Predictions of CobraMRV Control Surface Effectiveness at the NASA Langley Unitary Plan Wind Tunnel" (AIAA-2021-2965) by **Marie F. Denison**, **Joseph A. Garcia**, **Ben E. Nikaido**, **Scott M. Murman**, and **James C. Ross**, NASA Ames Research Center; **Robert E. Childs**, **Paul M. Stremel**, and **Veronika M. Hawk**, Science and Technology Corporation; **Bil Kleb**, **Stephen J. Alter**, and **Thomas K. West**, NASA Langley Research Center; and **Philip Robinson**, NASA Johnson Space Center

2021 AIAA Modeling and Simulation Best Paper Award
"A Gaussian Process Enhancement to Linear Parameter Varying Models" (AIAA-2021-3006) by **Stefan Schuet**, **Carlos Malpica** and **Jeremy Aires**, NASA Ames Research Center

2022 AIAA Aircraft Design Best Paper Award
"Aerodynamic Performance Benefits of Over-the-Wing Distributed Propulsion for Hybrid-Electric Transport Aircraft" (AIAA-2022-0128) by **Reynard de Vries** and **Roelof Vos**, Delft University of Technology

2022 AIAA Applied Aerodynamics Best Paper Award
"Development of a Subsonic-Supersonic, Unstructured Panel Method" (AIAA-2022-0403) by **Cory D. Goates** and **Douglas F. Hunsaker**, Utah State University

2022 AIAA Fluid Dynamics Best Paper Award
"Formation of a Nacelle Inlet Ground Vortex in Crosswind" (AIAA-2022-1698) by **Derek A. Nichols**, **Bojan Vukasinovic**, and **Ari Glezer**, Georgia Institute of Technology; and **Bradley Rafferty**, The Boeing Company

2022 AIAA Plasmadynamics and Lasers Best Paper Award
"Experimental Study of Electron Transpiration Cooling with a 2-kW Laser Heating System" (AIAA-2022-0983) by **Junhwi Bak**, **Anuj Rekhy**, **Christopher Limbach**, **Richard Miles**, and **James Creel**, Texas A&M University

2022 AIAA Solid Rockets Best Paper Award
"Solid Rocket Motor Internal Ballistics with a Surface-Vorticity Solver" (AIAA-2022-1898) by **Griffin A. DiMaggio**, **Joseph Majdalani**, and **Roy J. Hartfield, Jr.**, Auburn University; and **Vivek Ahuja**, Research in Flight

2022 AIAA Thermophysics Best Professional Paper Award
"Direct Molecular Simulation of Rovibrational Relaxation and Chemical Reactions in Air Mixtures" (AIAA-2022-1010) by **Erik Torres**, University of Minnesota; and **Eric C. Geistfeld** and **Thomas E. Schwartzentruber**, University of Minnesota

2022 AIAA/CEAS Aeroacoustics Best Paper Award
"Extension of Traditional Beamforming Methods to the Continuous-Scan Paradigm" (AIAA-2022-1154) by **David Morata** and **Dimitri Papamoschou**, University of California, Irvine

BEST STUDENT PAPERS

This award will be presented during the sponsoring committee's meeting.

2022 AIAA David Weaver Thermophysics Best Student Paper Award
"Numerical Investigation of Film Coefficient Engineering Methodology for Dissociated, Chemically Reacting Boundary Layers" (AIAA-2022-1907) by **Justin Cooper**, NASA Johnson Space Center; **Giovanni Salazar**, Corvid Technologies; and **Alexandre Martin**, University of Kentucky

STUDENT PAPER COMPETITIONS

The following Student Paper Competitions are being held in conjunction with the forum:

Applied Aerodynamics

Atmospheric and Space Environments

Computational Fluid Dynamics

Multidisciplinary Design Optimization

EXPOSITION HALL

EXPOSITION HOURS

TUESDAY, 28 JUNE

1300–1630 hrs // *Exposition Hall Open*

1730–1900 hrs // *Welcome Happy Hour*

WEDNESDAY, 29 JUNE

0845–1630 hrs // *Exposition Hall Open*

THURSDAY, 30 JUNE

0845–1400 hrs // *Exposition Hall Open*

1130–1330 hrs // *Lunch with the Exhibitors*

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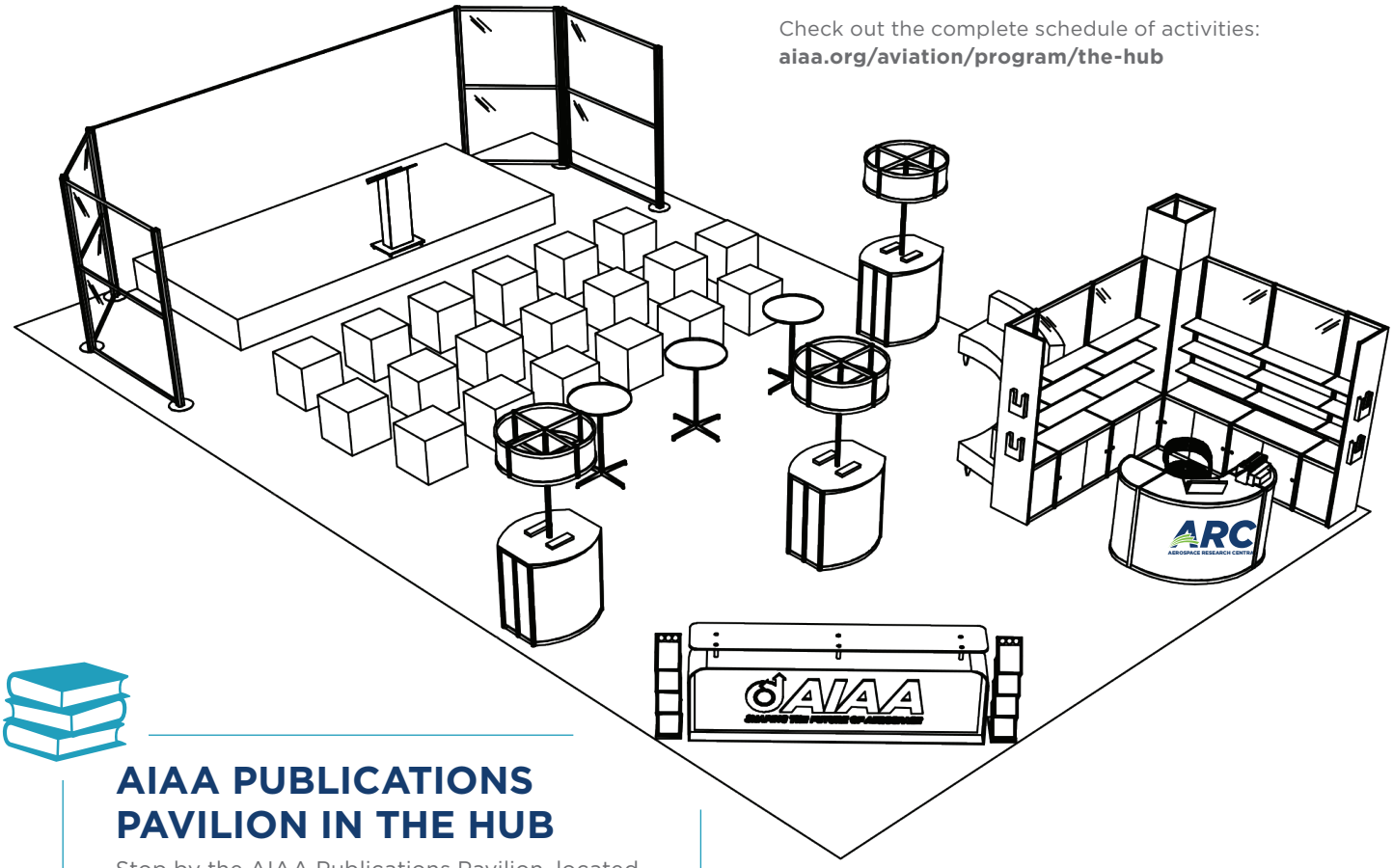

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Check out all the STUDIO interviews starting on 29 June, 2022:
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AIAA Illinois Section — 106

104 S Wright St.
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The Illinois Section of AIAA, a part of Region III, contains three Student Branches of AIAA. These branches include University of Illinois Urbana-Champaign, University of Illinois Chicago, and Illinois Institute of Technology. Members from the board of each group will be staffing the table and would love to talk about what we do on a more local level of AIAA, whether that be questions or just a chat!

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Fabreeka International 417

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Northrop Grumman 321

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

Northrop Grumman is a technology company, focused on global security and human discovery. Our pioneering solutions equip our customers with capabilities they need to connect, advance and protect the U.S. and its allies. Driven by a shared purpose to solve our customers' toughest problems, our 90,000 employees define possible every day.

NTS 407

2125 E Katella Ave, Suite 250
Anaheim, CA 92806
www.nts.com

NTS is the undisputed leader in testing, inspection and certification for the aerospace industry. With 1,300 employees and over 28 labs in North America, NTS leverages rich experience and technical expertise to create best-in-class queue times, on-time delivery, and rigorous testing programs. NTS provides advanced commercial and government aviation and aerospace testing for aircraft, airframes, systems and components. Key services include the full suite of RTCA DO-160 requirements including direct effects lightning, MIL-STD-810, and MIL-STD-461. With the top experts in aviation and space testing, NTS is able to offer a one-stop-shop, globally accredited by leading regulatory agencies.

Photron USA, Inc 307

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Photron is a worldwide leader in high-speed imaging. Used in internationally renowned research laboratories, industrial test facilities and universities in more than 30 countries, Photron FASTCAM high-speed cameras are trusted to provide high quality results in the challenging high-speed applications found in aerospace, military, manufacturing, and research environments. Photron,Äôs comprehensive product range and ability to record video at up to 2.1M fps with unmatched light sensitivity make us the first choice of engineers, scientists, technicians, and other camera users around the world. Photron cameras set new standards for resolution, frame rate, and light sensitivity in small, lightweight, and High-G camera bodies.

Research in Flight 401

1919 N Ashe Ct
Auburn, AL 36830
www.researchinflight.com

Research in Flight is the maker of the FlightStream® flow solver software. FlightStream® is a 21st century reimagining of panel methods that couples viscous flow, flow-separation, advanced CAD import and complex vehicle aero-propulsion analysis. FlightStream® eliminates the costly process of volume mesh generation and mesh-dependency on flow-field solutions and stability, making it a very useful tool in conceptual and preliminary design phases. FlightStream® provides the ability to design airplanes within an optimization pipeline in a fraction of the time taken by conventional CFD solvers.

Rolls-Royce 100

450 S Meridian Street
Indianapolis, IN 46225
www.rolls-royce.com/products-and-services/defence.aspx

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

Scope AR 221

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.

Society for Industrial and Applied Mathematics (SIAM) 108

3600 Market Street, 6th Floor
Philadelphia, PA 19104
www.siam.org

Visit the Society of Industrial and Applied Mathematics booth and take advantage of the on-site promotion: buy 2 books and receive a 40% discount. SIAM textbooks, monographs, software manuals, and handbooks are a leading source of knowledge for the applied mathematics and computational science and engineering communities. Topics include computational fluid dynamics, modeling and simulation, dynamical systems, control, and computational, network, and data science. Interested in writing a book? Speak to the editor, who will explain how SIAM partners with authors to publish quality books at competitive prices.

Tecplot 409

3535 Factoria Blvd. SE, Suite 550
Bellevue, WA 98006
www.tecplot.com

Tecplot, Inc. 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.

GENERAL INFORMATION

AIAA Registration Hours

Registration is located at Salon A on the Lower Lobby Level of the Chicago Hilton.

SUN, 26 JUNE	MON, 27 JUNE	TUES, 28 JUNE
1300–1900 hrs	0700–1700 hrs	0700–1730 hrs
WED, 29 JUNE	**THUR, 30 JUNE**	**FRI, 1 JULY**
0700–1730 hrs	0700–1700 hrs	0700–1530 hrs

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.

Network Name: **Hilton Chicago Meeting**
Password: **AVIATION**

Social Media at #AIAAaviation

Follow us on Twitter **@aiaa** and Instagram **@aiaaerospace** throughout the event for more news and event details, and use the hashtags **#AIAAaviation** to join the conversation!

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 on 27 June 2022. 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.

Employment Opportunities

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

Membership

AIAA is your vital lifelong link to the collective creativity and brainpower of the aerospace profession and a champion for its achievements. **aiaa.org/member.**

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 AVIATION Forum badge, one must register for the forum.

Nondiscriminatory Practices

AIAA accepts registrations irrespective of age, race, creed, sex, sexual orientation, color, physical handicap, and national or ethnic origin.

Anti-Harassment Policy

It is the policy of AIAA to maintain a professional environment at its events that is free from all forms of discrimination, harassment and conduct that can be considered unprofessional, disruptive, inappropriate or discourteous. Full details can be found at **aiaa.org/about/Governance/Anti-Harassment-Policy**

Restrictions

Photos, video, or audio recording of sessions or exhibits, as well as the unauthorized sale of AIAA-copyrighted material, is prohibited.

AIAA Photography and Video Notice

Attendance at, or participation in, this American Institute of Aeronautics and Astronautics (hereinafter "AIAA") event constitutes consent to the use and distribution by AIAA, its employees, agents, and assignees of the attendee's image and/or voice for purposes related to the mission of AIAA, including but not limited to publicity, marketing, other electronic forms of media, and promotion of AIAA and its various programs and events. Please contact AIAA Communications Senior Manager Rebecca Gray at rebeccag@aiaa.org with requests or questions.

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, **27 June - 1 July: 0730 hrs**

Speaker Ready Room

Speakers who wish to practice their presentations may do so in room **4P** on the 4th level. 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, 6 July.**

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

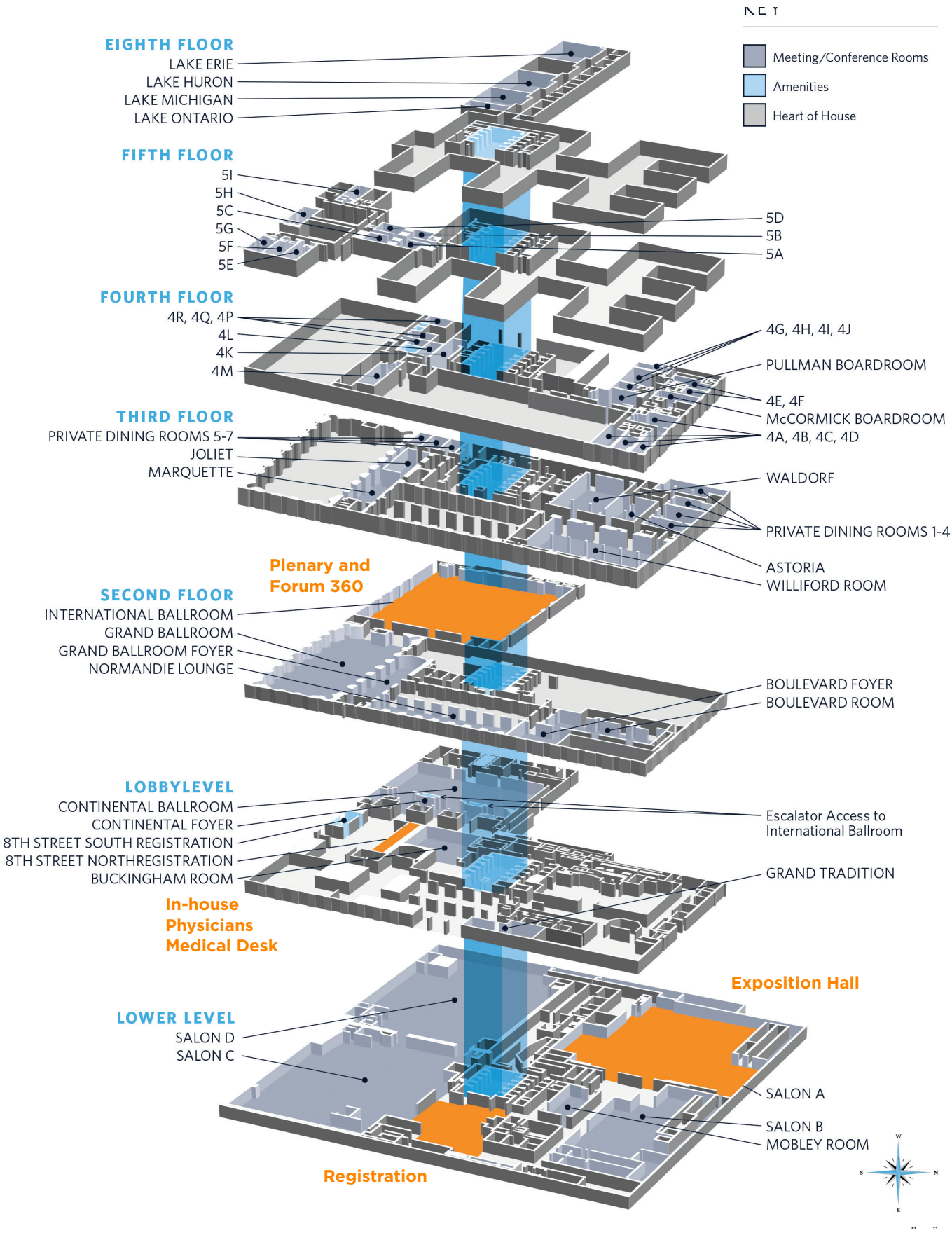
MOST UPDATED LISTING OF MEETING CAN BE FOUND HERE

TIME	COMMITTEE AND ANCILLARY MEETINGS/EVENTS	ROOM
	Sunday, 26 June	
1500-1600	**APATC Education Subcommittee**	4A
1500-1600	**APATC Liaisons Subcommittee**	4B
1500-1600	**APATC Honors & Awards Subcommittee**	4C
1500-1600	**APATC Membership Subcommittee**	4E
1500-1600	**APATC Planning Subcommittee**	4F
1500-1600	**APATC Publicity & Publications Subcommittee**	4G
1500-1730	**GTTC New Members Briefing, Awards and Conferences Subcommittees**	Marquette
1600-1700	**APATC Technical Activities**	4K
1700-1800	**APATC Steering Committee**	4A
1800-2000	**ATIO Group Meeting**	McCormick
1800-2000	**Applied Aerodynamics Technical Committee**	Marquette
	Monday, 27 June	
1100-1200	**Computational Methods for Multi-Phase Flows**	PDR #1
1300-1500	**Standards Committee (Nomenclature Discussion)**	PDR #6
1300-1600	**Public Policy Committee Meeting**	Pullman
1600-1800	**Flight Testing Technical Committee Meeting**	McCormick
1730-1830	**Reduced Complexity Modeling & Analysis (FFP)**	Waldorf
1800-1900	**Laminar Flow Control (FFP)**	PDR #6
1800-2000	**General Aviation Technical Committee Annual Meeting**	Pullman
1800-2000	**UQ in Fluid Dynamics DG (FDTC)**	PDR #5
1800-2100	**Cadence Reception**	Joliet
1900-2000	**APATC Workshop Collaboration Working Group**	PDR #1
1900-2000	**Leading Edge Vortices (FAC)**	Waldorf
1900-2000	**Turbulence Model Benchmarking (CFD)**	4K
1900-2100	**Uncertainty Quantification in Fluid Dynamics (CFD)**	McCormick
1900-2100	**Transition Discussion Group Meeting**	C5
1900-2200	**HyTASP Technical Committee**	Buckingham
1900-2230	**Aircraft Design Technical Committee Meeting**	C3
2000-2100	**Massively Separated Flows (FFP)**	PDR #6
	Tuesday, 28 June	
0900-1000	**Product Support Technical Committee Meeting**	Pullman
0900-1100	**The Boeing Company Career Networking Event**	Buckingham
0900-1200	**AIAA Aeronautics Domain AAM Task Force Kickoff Meeting**	McCormick
1000-1200	**Flow Quality Working Group**	PDR #6
1300-1500	**The Boeing Company Career Networking Event**	Buckingham
1300-1600	**Future of Ground Test Working Group**	PDR #6
1600-1900	**High-Order CFD Methods**	Lake Michigan
1800-2000	**Human Machine Teaming Technical Committee Meeting**	Pullman
1800-2000	**CFD2030 Steering Committee Strategy Meeting**	PDR #1

COMMITTEE MEETINGS

TIME	COMMITTEE AND ANCILLARY MEETINGS/EVENTS	ROOM
	Tuesday, 28 June	
1800-2000	**Transformational Flight Integration Committee**	Joliet
1800-2100	**Air Transportation Systems Technical Committee Meeting**	McCormick
1800-1930	**High Speed Air-Breathing Propulsion Technical Committee Meeting**	Willford C
1900-2000	**FDTC Fluid Applications and Control Subcommittee**	4K
1900-2100	**Atmospheric and Space Environments Technical Committee Meeting**	Willford A
1900-2100	**Thermophysics Technical Committee Meeting**	PDR #6
1900-2100	**Plasmadynamics and Lasers Technical Committee Meeting**	Buckingham
1900-2100	**CFD Sub-committee Meeting**	Astoria
1900-2100	**Meshing, Visualization & Computational Environments Technical Committee Meeting**	Willford B
1900-2100	**Fundamentals of Fluid Phenomena Subcommittee**	C2
1900-2200	**Solid Rockets Technical Committee Meeting**	PDR #4
	Wednesday, 29 June	
0900-1100	**The Boeing Company Career Networking Event**	Buckingham
1100-1200	**2023 AIAA AVIATION Forum Technical Program Planning**	Continental C
1300-1400	**Model Deformation Measurement Working Group**	PDR #6
1300-1500	**The Boeing Company Career Networking Event**	Buckingham
1300-1800	**PEGASAS Team Meeting**	PDR #1
1700-2030	**Vertical and Short Takeoff and Landing Technical Committee Meeting**	Willford B
1730-1830	**APATC Low Boom Discussion Group**	PDR #6
1800-2000	**JHTO/UCAH Hypersonic Community Career and Networking Social**	Continental A
1800-2000	**CFD2030 Integration Committee Meeting**	Continental B
1900-2000	**Inlets, Nozzles and Propulsion Systems Integration Technical Committee**	McCormick
1900-2100	**Multidisciplinary Design Optimization Technical Committee Meeting**	Buckingham
1900-2100	**Aircraft Operations Technical Committee Meeting**	Pullman
1900-2100	**Modeling and Simulation Technical Committee Meeting**	PDR #4
1900-2100	**Fluid Dynamics Technical Committee Plenary Meeting**	Continental C
1900-2100	**Unmanned Systems Integration & Outreach Committee (USIOC)**	C1
1900-2200	**Air Traffic Management Integration Committee Annual Meeting**	PDR #1
	Thursday, 30 June	
0800-1200	**WT Uncertainty Committee on Standards**	PDR #6
0800-1500	**The Boeing Company Interviews**	Continental B
0930-1600	**PEGASAS Annual Meeting**	Buckingham
1300-1400	**Writing Qualities**	PDR #6
1730-2030	**Ground Test Technical Committee Conference Close-Out Meeting**	Continental A
	Friday, 1 July	
0800-1500	**The Boeing Company Interviews**	Continental B
0930-1600	**PEGASAS Annual Meeting**	Buckingham
1130-1330	**PEGASAS Team Meeting**	PDR #1

VENUE MAP


KEY
Meeting/Conference Rooms
Amenities
Heart of House
EIGHTH FLOOR
LAKE ERIE
LAKE HURON
LAKE MICHIGAN
LAKE ONTARIO
FIFTH FLOOR
5I
5H
5C
5G
5F
5E
5D
5B
5A
FOURTH FLOOR
4R, 4Q, 4P
4L
4K
4M
4G, 4H, 4I, 4J
PULLMAN BOARDROOM
4E, 4F
McCORMICK BOARDROOM
4A, 4B, 4C, 4D
THIRD FLOOR
PRIVATE DINING ROOMS 5-7
JOLIET
MARQUETTE
WALDORF
PRIVATE DINING ROOMS 1-4
ASTORIA
WILLIFORD ROOM
Plenary and Forum 360
SECOND FLOOR
INTERNATIONAL BALLROOM
GRAND BALLROOM
GRAND BALLROOM FOYER
NORMANDIE LOUNGE
BOULEVARD FOYER
BOULEVARD ROOM
LOBBYLEVEL
CONTINENTAL BALLROOM
CONTINENTAL FOYER
8TH STREET SOUTH REGISTRATION
8TH STREET NORTHREGISTRATION
BUCKINGHAM ROOM
Escalator Access to International Ballroom
GRAND TRADITION
In-house Physicians Medical Desk
Exposition Hall
LOWER LEVEL
SALON D
SALON C
SALON A
SALON B
MOBLEY ROOM
Registration
W
S
N
E

DESIGN OF ELECTRIFIED PROPULSION AIRCRAFT

ONLINE SHORT COURSE

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DETAILS

- 19 July–11 August 2022
- Tuesdays and Thursdays, 1300-1500 hrs ET, USA
- 16 Total Hours
- Available On Demand
- Cost: $895 USD Members
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  $1,095 USD Nonmembers

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CALL FOR PAPERS OPENS 22 AUGUST 2022

Abstracts are due 4 November 2022, 2000 hrs ET USA

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