AIAA Town Hall

17 February 2023

Laura McGill AIAA President

Allen Arrington
AIAA Speaker of the Council

Dan Dumbacher
AIAA Executive Director



Agenda

- > Welcome
 - Featured Guest Presenter:
 - Ryan Graves, Chair of AIAA UAP Integration Outreach Committee
- > Financial Status
- ➤ Strategic Plan Update
- ➤ Domains Update
- ➤ Upcoming Events & Highlights
- ➤ Board of Trustees and Council of Directors Highlights
- ➤ Open Discussion



AIAA Strategic Plan

MISSION

AIAA EXISTS TO HELP AEROSPACE PROFESSIONALS AND THEIR ORGANIZATIONS SUCCEED

CORE STRATEGIES



DATA DRIVEN Use the appropriate data in the analysis of decisions



CURATE CONTENT Be the leader in curated aerospace content



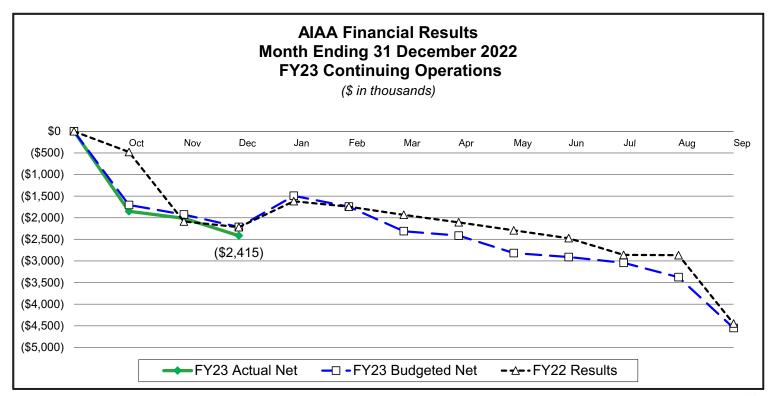
THOUGHT LEADER Be the thought leader in technology and capability advancement

GOALS

- 1: INCREASE ENGAGEMENT and overall customer growth.
- 2: IMPROVE VOLUNTEER & LEADERSHIP DEVELOPMENT for AIAA's future.
- 3: ALIGN VOLUNTEER ACTIVITIES to the strategic plan in partnership with AIAA staff.
- 4: ACHIEVE POSITIVE net revenue.
- 5: REFLECT SOCIETY'S DEMOGRAPHICS in AIAA membership & leadership.



FY23 YTD Operating Results by Month





Domain Key Topics

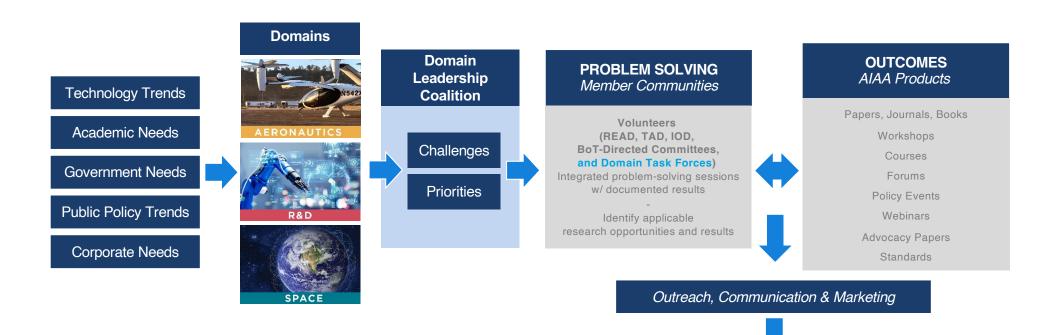


- Advanced Air Mobility
- Certification
- · Hypersonics and Supersonics

- Autonomy / Artificial Intelligence / Machine Learning
- Resilient and Assured Systems
- Advanced Manufacturing and Advanced Materials
- Cislunar Propellant Depots
- Space Sustainability
- Space Exploration
- · Outpacing the Space Threat
- Competitive and Burgeoning Space Economy



Customer Needs Drive AIAA



Purposeful Outcomes / Results



Domain Outcomes: Task Forces

Aeronautics

- Carbon Emissions & Sustainability
 - Commercial Aviation is primary focus; impacts to climate change beyond carbon emissions
 - Developing AIAA Impact Plan— Aviation 2023
- Advanced Air Mobility
 - Needs identified: testing, certification, standards, skills
 - Recommendations to BoT— SciTech 2023, new phase launching
- Certification
 - Assessing current landscape; emphasis on certification for the emerging next generation of technology and operations
 - Launched—SciTech 2023

Aerospace R&D

Transformative Systems Engineering

- Focused on four subtasks: System of Systems Architecture Integration; Dynamic Mission Requirements; Budget Integration; Mission Metrics
- Launched—September 2022, subtask workgroups launched and working

Autonomy/Artificial Intelligence/Machine Learning

- Focus on low TRL and enabling technologies
- Formation in work; strong coordination with TAD and ISG

Space

- Space Traffic Management
 - Support policymakers with relevant technical perspectives and advocacy for effective US governance of space traffic management/coordination
 - Recommendations to Congress and publication of "Satellite Orbital Safety Best Practices Guide"
- Cislunar Ecosystem
 - Coordination of government, aerospace and adjacent industry, and supporting institutions to promote permanent, sustainable human presence off-world between LEO and the lunar surface
 - Task Force and work groups formed; initial definitional/taxonomy white paper at ASCENDxTexas



Upcoming Events and Highlights





2023 SciTech Forum – Incredible Return

- Largest SciTech Forum in AIAA history
 - Doubled in size since 2014
- > 5,800+ attendees; 1,700+ students
- ➤ Nearly 3,000 technical sessions
- > 71 exhibitors/sponsors
 - 95% onsite re-commits to 2024 SciTech Forum.
- ➤ Key News and Announcements
 - NASA/DARPA, Electra.Aero, Boeing, NASA JPL, University of Michigan
 - AIAA (AAM Task Force, Digital Twin White Paper)











Upcoming Events









AVIATIAN 6
FORUM



11–13 April 2023 Johns Hopkins University 12–16 June 2023 San Diego, California 23–25 October 2023 Las Vegas, Nevada



ASCEND Opportunities

- ASCEND 2022 reached 1,200 in-person attendees
 - Driving toward 2,000 attendee goal
- Increase show floor experiences
- AIAA Community Technical Excellence is our Core Strength
 - Attract 350+ technical papers
 - Educational Webinars Planned
 for 28 Feb, 1 & 2 March to
 encourage engagement
- 2023 Call for Content: Closes 15 March









ASCEND Attendee Feedback



Event Performance

Nearly all ASCEND participants (90%) indicated that the event met or exceeded their expectations. ASCEND's Net Promoter Score (37) also reflected the highest performance mark in the event's history – 11 points higher than in 2021 and 20 points higher than in 2020.



Performance Drivers

Participants described that ASCEND provides an opportunity to network and build connections within the field, including those that do a similar line of work as well as those outside of their direct area of expertise. Many underscored the opportunity to hear technical updates, gain knowledge of what is coming and have the chance to connect with leaders in the industry.



Successes & Deficits

Participants were satisfied with most elements of ASCEND and, particularly, with the core value drivers of the event: the networking and content/sessions.

The most frequently requested optimizations included 1. the addition of more technical content (or reducing conflicts created by concurrent sessions), 2. inclusion of additional exhibitors, and 3. space for additional networking opportunities.



2024 Forum Co-location



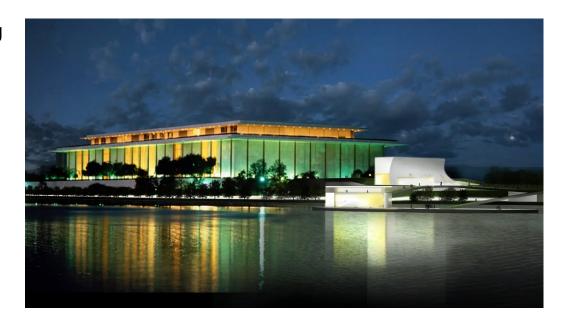


- ➤ 28 July 2 August 2024, Caesars Forum, Las Vegas
- > Two co-located forums with common networking and integrated show floor
- Collaborative content across aviation and space domains as appropriate
- Emphasis on continuing AVIATION and ASCEND experiences
- ➤ 4,000+ attendees across both events



2023 AIAA Awards Gala

- The John F. Kennedy Center for the Performing Arts, Washington, DC
- > 18 May 2023 | 1730-2100 hrs ET
- Celebrate an exceptional new class of AIAA Honorary Fellows and Fellows, Premier Award Winners, Trailblazing STEM Educators, and Kahn Scholarship Winners
- First-class venue with panoramic views of Washington, DC, and Virginia
- Reserve seats and packages today!
- AIAA.org/Gala





Congratulations to our Honorees

2023 AIAA Honorary Fellows

Mark Drela, Massachusetts Institute of Technology

James G. Maser, Aerojet Rocketdyne

William A. Sirignano, University of California, Irvine

2023 AIAA Fellows

Behçet Açıkmeşe, University of Washington

Steven J. Beresh, Sandia National Laboratories

Charles F. Bolden Jr., The Charles F. Bolden Group

Helmut Ciezki, DLR - German Aerospace Center

Capt. Meredith B. Colket III, Combustion Consulting Services, LLC, United Technologies Research Center (retired)

Daniel DeLaurentis, Purdue University

Christopher D'Souza, NASA Johnson Space Center

Ismet Gursul, University of Bath

Kauser S. Imtiaz, NASA

R. Steven Justice, The Ginn Group

Raymond M. Kolonay, Air Force Research Laboratory

Rodney Makoske, Lockheed Martin

Jill Marlowe, NASA

Pamela Melroy, NASA

David G. Mitchell, Mitchell Aerospace Research

Eugene Morelli, NASA Langley Research Center

Scott E. Palo, University of Colorado Boulder

Surendra Sharma, NASA Ames Research Center

Robert T.-I. Shin, MIT Lincoln Laboratory

Rickey J. Shyne, NASA Glenn Research Center

Leena Singh, MIT Lincoln Laboratory

Michael Sinnett, Boeing Commercial Airplanes

Lawrence W. Stephens, Lockheed Martin Missiles and Fire Control

Mitchell L.R. Walker II, Georgia Institute of Technology

Brian L. Wardle, Massachusetts Institute of Technology

Michael E. White, Office of the Under Secretary of Defense for Research and Engineering

Michael Winter, Pratt & Whitney

Thomas H. Zurbuchen, NASA (retired)



Congratulations to our Honorees

2023 AIAA Premier Award Winners

AIAA Award for Aerospace Excellence **Double Asteroid Redirection Test (DART) Team, NASA/Johns Hopkins University**

Applied Physics Laboratory

AIAA Public Service Award Bill Nye, The Planetary Society

AIAA Reed Aeronautics Award John S. Langford III, Electra. Aero

AIAA Distinguished Service Award **David R. Riley, Boeing Research & Technology (retired)**

AIAA International Cooperation Award Vincent A. Orlando, MIT Lincoln Laboratory

AlAA Engineer of the Year Award Alison A. Nordt, Lockheed Martin Advanced Technology Center

AlAA Goddard Astronautics Award Charlie Atkinson, Jennifer Love-Pruitt, Michael T. Menzel, and Lee D. Feinberg,

NASA Goddard Space Flight Center/Northrop Grumman Team – James Webb Space

Telescope

AIAA Lawrence Sperry Award Phillip J. Ansell, University of Illinois at Urbana-Champaign



2023 Student Conferences & Design/Build/Fly

Region I

31 March – 1 April 2023 University at Buffalo

Region II

27 – 28 March 2023 University of Tennessee Knoxville

Region III

24 – 25 March 2023 University of Dayton

Region IV

31 March – 1 April 2023 New Mexico State University

Region V

21 – 22 April 2023 University of Missouri, Kansas City

Region VI

25 – 26 March 2023 University of California Davis

Region VII

Fall 2023 Host School TBD



Upcoming AIAA Leadership Development Opportunities

Spring

- > TC and IC Chair Orientation, May
- AIAA Town Hall, May

Summer

- Committee Leadership Development June (on-site in coordination with AVIATION Forum)
- Section & Student Branch Leadership Development—July/August

Fall

- Section Chair Orientation September
- Student Branch Chair Orientation September
- > AIAA Town Hall September
- ➤ Committee Leadership Development October (on-site in coordination with ASCEND)



Upcoming Elected Positions for 2024

- ➤ Board of Trustees
 - Members at Large 3 open positions
- Council of Directors
 - Speaker of the Council
 - Region III Director
 - Region VI Director
 - Young Professional Group Director-Elect
 - Aerospace Design and Structures Group Director
 - Aerospace Sciences Group Director

Reminder: 2023 Election ballot closes today. Please vote!



Board and Council Highlights



New Editors in Chief



Journal of Aircraft (JA)

Mark Drela

Terry J. Kohler Professor of Fluid Dynamics, Department of Aeronautics and Astronautics Massachusetts Institute of Technology



Journal of Air Transportation (JAT)

Craig R. Wanke

Chief Engineer

MITRE Center for Advanced Aviation System Development



Council of Directors (Elections)



Technical Activities Division, Chief-elect **Dr. Lesley Weitz**The MITRE Corporation

Director, Aerospace Sciences Group

At the May Council of Directors meeting, TAD will nominate an interim Aerospace Sciences Group Director to fill the remaining year of Lesley's term.



Regional Engagement Activities Division, Chief-elect

L. Jane Hansen

Cateni Consulting

Chair, Student Branch Committee



Council of Directors

> READ

- Melbourne, Australia, section approved, first new professional section since 2003 (Adelaide)
- Adopted a provisional chartering/dechartering approach to ensure that Student Branches are sustainable

> TAD

- Focused on member engagement, highlighting diversity and inclusion
 - Continued growth of TC membership (2,588, up 158 from 2020)
 - Increased female membership to 13% (up from 11% in 2020)

> TAD & IOD

- > Reengaging their communities to support ASCEND
- ➤ IOD Expanding the Community
 - > WoAA added new chapters, including international presence
 - Transitioned the Unidentified Aerospace Phenomenon COI to a full committee within the IOD Integration Group



We need to work together...

- Supporting the Board's strategic vision
- Ensuring alignment across all committees/divisions
- Communicating priorities and program updates
- Understanding the roles and responsibilities as defined in the governance model
- ➤ Building events momentum bringing communities together with technical excellence and enthusiasm



Questions and Open Discussion



Thanks for attending the AIAA Town Hall!





AMERICAN INSTITUTE OF AERONAUTICS AND ASTRONAUTICS