



**SCITECH**   
FORUM

**23-27 JANUARY 2023**  
NATIONAL HARBOR, MD & ONLINE

# ***EVENT RECAP***

**#aiaaSciTech | [aiaa.org/SciTech](https://aiaa.org/SciTech)**

 **AIAA**

# THANK YOU FROM AIAA

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The 2023 AIAA SciTech Forum set an optimistic and energetic tone for this year. As the world's largest event for aerospace research, development, and technology, the forum was a tremendous success. It is clear the aerospace industry has not slowed down innovation, connection, and technical exchange as we emerge from the pandemic. We are grateful for so much support from AIAA members, sponsors, exhibitors, and Corporate Members.

We are excited to share with you the many dimensions of the forum in this recap. The numbers are impressive, yet the quotes from attendees, the pictures and videos of presentations and personal interactions, and the comments on social media illustrate the incredible impact of the forum experience.

Together, we broke forum records: **5,800** attendees representing **50** countries, **62** Corporate Members, **71** exhibitors, **780** technical sessions including **2,700+** technical presentations, and **29** companies and **400** job seekers at Meet the Employers.

Throughout the week, we heard important perspectives from across the generations working within the aerospace industry, along with related industries, focused on the daily key themes:

- › solving societal grand challenges,
- › investing in the future,
- › enabling progress through science and engineering,
- › accelerating confidence in this digital world, and
- › making Sci-Fi a reality.

The leadership of the AIAA SciTech Forum was visionary. Many thanks go to the members of the Guiding Coalition, the Forum Technical Chairs, and the Technical Discipline Chairs. This group of hardworking AIAA volunteers are the force behind curating the exciting and thought-provoking content we enjoyed all week. We especially appreciate the guidance from our AIAA Aerospace R&D Domain Lead and SciTech Executive Producer, Scott Fouse.

The technical program is one feature that sets an AIAA forum apart from other events in the industry. We delivered a deeper look at current research and technologies geared to solve specific problems with the largest technical program ever offered.

Several organizations looked to the forum as their place to make news. We were honored to host NASA Administrator Bill Nelson, along with NASA Deputy Administrator Pam Melroy and DARPA Director Stefanie Tompkins to announce their partnership on the Demonstration Rocket for Agile Cislunar Operations from the forum stage.

We also celebrated ingenuity, collaboration, and diversity with multiple AIAA member recognition activities. We welcomed the Class of 2023 AIAA Associate Fellows, we presented awards of excellence to 14 individuals, we recognized student paper winners, and we heard three Premier Lectures.

Your support of 2023 AIAA SciTech Forum helped ensure our community advanced the science, technologies, and policies that are shaping our industry's future. You helped our community continue fueling the collective human drive to explore, create, and be a part of something bigger than ourselves.

Thank you for bringing the forum theme to life to "Ignite the Future!"



Dan Dumbacher  
Executive Director  
American Institute of Aeronautics and Astronautics

“I had an incredible experience at the 2023 AIAA SciTech Forum. The HUB was a truly brilliant idea! We enjoyed showcasing our technology and education innovation with our Caltech students and collaborators at JPL, and having stimulating discussions with many attendees.”

SOON-JO CHUNG, Bren Professor of Control and Dynamical Systems, JPL Senior Research Scientist, Caltech

“I think the program’s been really cool. It’s been really nice to have opportunities to meet with folks in the young professional’s group.”

MAIA GATLIN, Georgia Tech Student and Diversity Scholar

“At a conference like SciTech you can meet and work with people who are just starting their career and people who have 50 years of experience in the business. There’s just no other forum in which you get that dynamic range of experience and interests, and all high enthusiasm!”

JOHN LANGFORD, Founder and CEO, electra.aero

“It’s days of jam-packed networking, personal growth, professional growth. I met a lot of people—made a lot of connections that I’ve personally never thought I would have accessible to me.”

MADLINE ROSSMAN, University of Maryland - College Park Student and Diversity Scholar

“Being able to carve out time and engage one-on-one for me has been the most energizing and exciting part of this week.”

ERIC RUGGIERO, Engineering Executive, GE Aerospace

“I’ve been a member of AIAA for over 30 years since I was in school pursuing my degree at Stanford. It’s a precious gem to have in the world to have an organization like AIAA bringing together people who have a passion for space, to discuss with people who are like-minded where we need to go and share a vision and move it forward.”

NELSON PEDREIRO, Vice President, Advanced Technology Center, Lockheed Martin

“Overall I had an excellent experience. I’m still very early in my career, but the conference experience has inspired me to write more often.”

(unattributed, from survey)

A large audience is seated in a conference hall, facing a stage. On the stage, a woman is presenting, and a large screen displays a presentation slide. The slide is titled "OUR FIRST CRAZY IDEA" and lists two bullet points: "\$10M Award SPACE for spaceflight, created the world's largest commercial space industry" and "\$10M investment by all 27 states has 7 copies". The word "AUDIENCE" is overlaid in large white letters across the center of the image. The background is a dark blue gradient with a grid pattern.

# AUDIENCE

# AUDIENCE COMPOSITION

# 5,857

ATTENDEES



## 37%

Nonmember Audience



## 33%

Student Attendees

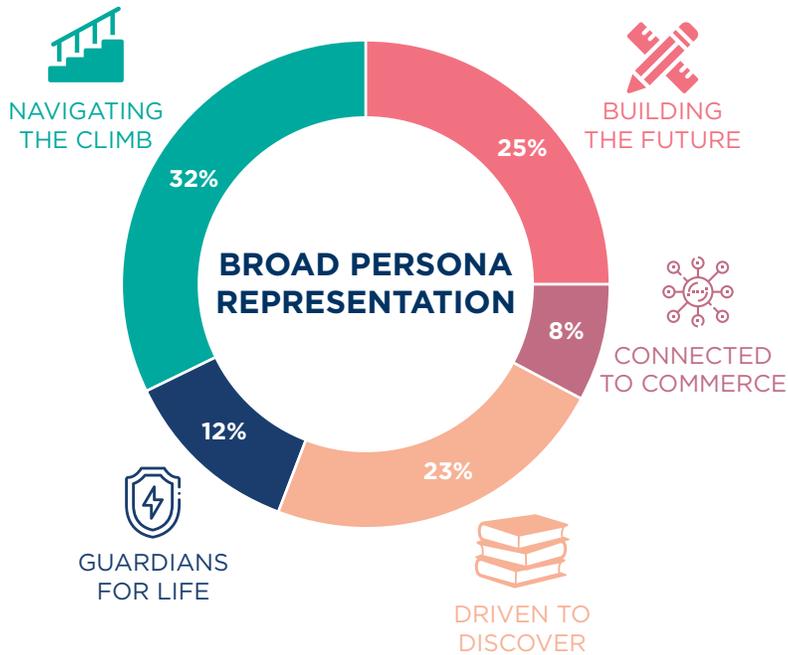


## 50

Countries



# AUDIENCE DEMOGRAPHICS



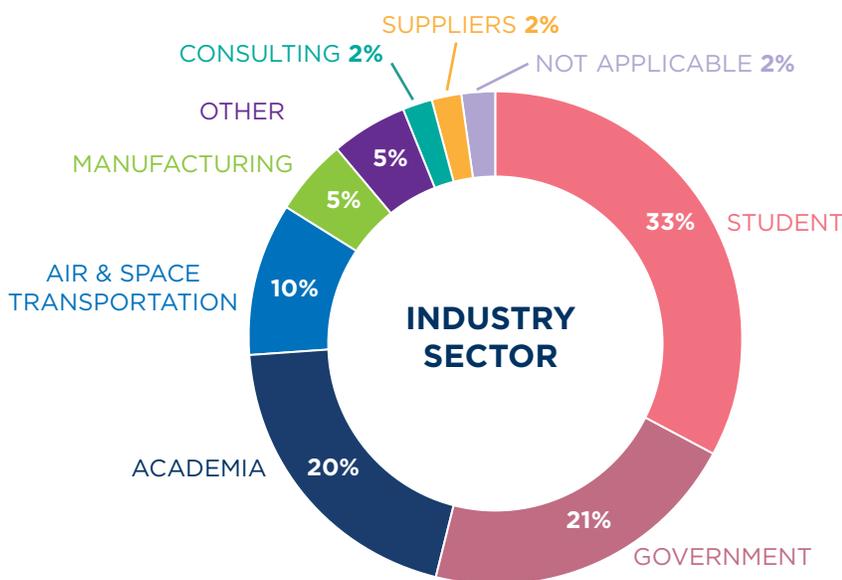
**BUILDING THE FUTURE:** Interested in tools and technology and eager to gain hands-on experience to solve problems or enhance career.

**CONNECTED TO COMMERCE:** Building strategic partnerships and connecting with fellow business people and policy leaders; selling a product or service with significant impact on the aerospace economy.

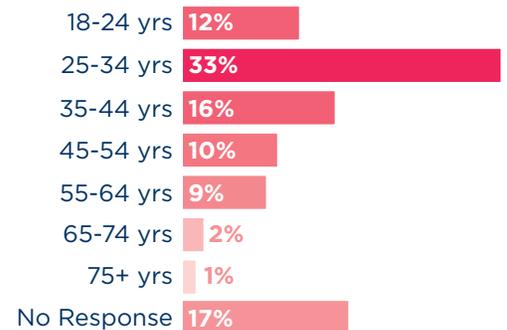
**DRIVEN TO DISCOVER:** Lifelong learner and teacher; exploring the intersection of science and technology and developing the next big ideas in aerospace.

**GUARDIANS FOR LIFE:** Years of experience building aerospace programs that impact society, committed to investing in meaningful change.

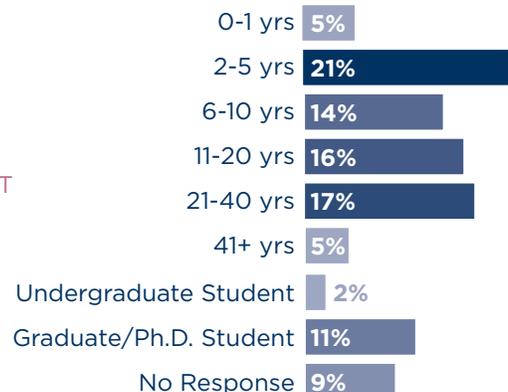
**NAVIGATING THE CLIMB:** Long, ambitious career ahead, looking for a breadth of ideas, connections, and experiences that will launch to the next level.



## AGE RANGE



## CAREER LENGTH



The image features a blurred background of people walking in a hallway. The scene is overlaid with a semi-transparent blue filter. Large, bold, blue letters spell out the word "PROGRAM" across the center. The word "PROGRAM" is written in a white, italicized, sans-serif font, positioned over the blue letters. The overall composition is dynamic and professional, suggesting a corporate or institutional setting.

*PROGRAM*

# TECHNICAL PROGRAM



**783**

Technical Sessions



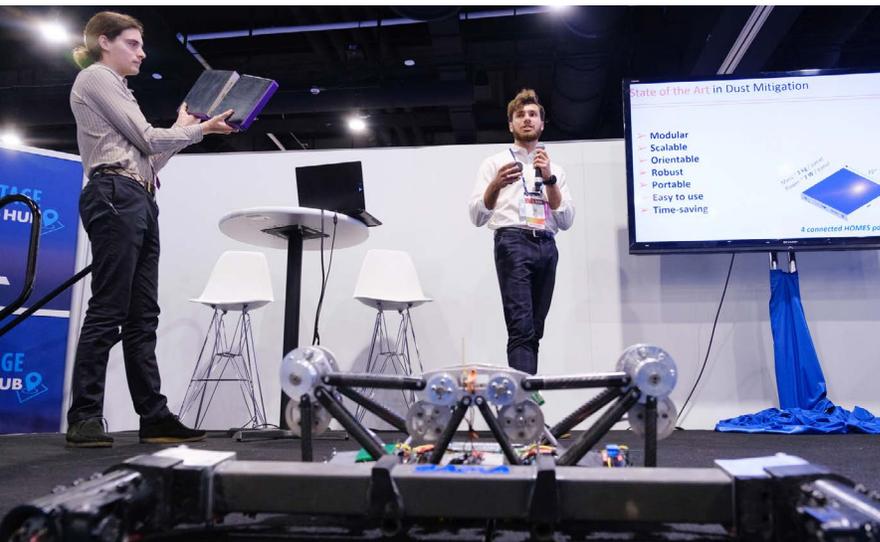
**2,707**

Papers Published



**7,078**

Published Authors





*MEDIA  
OUTREACH*

# MEDIA OUTREACH



**39**

Credentialed Reporters



**109**

Article Mentions



**210.4M**

Potential Reach



**\$55.5K**

Publicity value



# MEDIA COVERAGE



**SPACENEWS**  
 News Opinion Civil Commercial Military Sponsored More Categories Advertise

Civil

## NASA meeting works to define exploration architecture

Jeff Foust January 29, 2023

WASHINGTON — NASA officials met last week to review its overall exploration architecture, although it was unclear exactly what they agreed to and when they will make it public.

Agency leaders met at the Kennedy Space Center for what NASA calls the Architecture Concept Review, a meeting linked to the development of 63 objectives for its lunar and Mars exploration plans released in September.

**CANADA NEWS MEDIA**

HOME NEWS MEDIA POLITICS BUSINESS SPORTS TECH ART ECONOMY HEALTH INVESTMENT REAL ESTATE SCIENCE

SCIENCE

## Future Space Telescopes Could be 100 Meters Across, Constructed in Space, and Then Bent Into a Precise Shape

Published 8 weeks ago on January 30, 2023  
 by Henry Miller

It is an exciting time for astronomers and cosmologists. Since the *James Webb Space Telescope* (JWST), astronomers have been treated to the most vivid and detailed images of the Universe ever taken. JWST's powerful infrared imagers, spectrometers, and coronagraphs will allow for even more in the near future, including everything from surveys of the early Universe to direct imaging studies of exoplanets. Moreover, several next-generation telescopes will become operational in the coming years with 30-meter (~98.5 feet) primary mirrors, adaptive optics, spectrometers, and coronagraphs.

Even with these impressive instruments, astronomers and cosmologists look forward to an era when even more sophisticated and powerful telescopes are available. For example, *Zachary Condren* of the Massachusetts Institute of Technology (MIT) recently proposed a telescope with a *100-meter DSB-Space Telescope* that would be autonomously constructed in space and bent into shape by electrostatic actuators. His proposal was one of several concepts selected this year by the *NASA Innovative Advanced Concepts* (NIAC) program for Phase I development.

Condren is the Boeing Career Development Professor in Aeronautics and Astronautics at MIT and a member of the *Aerospace Materials and Structures Lab* (AMSL) and *Small Satellite Center*. His research integrates his expertise in processing science, mechanics, and design to develop novel materials and

**AEROSPACE AMERICA**

SEARCH | LOGIN | MENU

## Caltech's flying robot Leonardo could have applications from cities to Mars

BY PAUL BRINKMANN | JANUARY 27, 2023

**University's first public demonstration of robot draws crowd of hundreds at AIAA's SciTech forum**

AIAA SCITECH FORUM, National Harbor, Md. — Caltech researchers showed off

Electra.aero plans to first sell its hybrid-electric aircraft for cargo deliveries, then add seats for the passenger market. In this illustration, an Electra plane operated by Singapore charter company Yugo flies over the Manila Bay in the Philippines. Credit: Electra.aero

## Electra.aero announces \$85M in new funding, much of it prompted by U.S. Air Force award

BY PAUL BRINKMANN | JANUARY 26, 2023

**Company plans to fly demonstrator and full-scale prototype of its hybrid-electric airplane**

The Register + Follow View Profile

## NASA and DARPA team up to go nuclear in hopes of putting boots on Mars

Story by Laura Dobberstein · Jan 25 14 1 2 Comments

NASA and DARPA team up to go nuclear in hopes of putting boots on Mars  
 © Provided by The Register

**Fission reactor rocket should get them going quite fast**

US research agencies NASA and DARPA are teaming up to create a nuclear thermal rocket engine in hopes the tech will one day carry crewed missions to



# DIGITAL ENGAGEMENT



258,605

Impressions



9,640

Engagements



459

Tweets to  
#aiaaSciTech



15,994

Page Views



38,270

Video Views



+1,133

Overall Audience Growth

**Michigan Aerospace**  
1,743 followers  
4d · 🌐

Some of the amazing students in **Women in Aeronautics and Astronautics (WAA)** at **AIAA #SciTech**. They are ready to take on the world - and outer space, of course. Learn more about WAA: <https://lnkd.in/gHDvPjaE>

**Women in Aeronautics and Astronautics**  
waa.engin.umich.edu · 1 min read  
👍❤️🔥 118 6 comments · 3 reposts

**Judy Park (She/They) · 2nd**  
Chair of WoAA International · Graduate Research Assistant at V...  
1w · 🌐

It was my honor to lead the largest **Women of Aeronautics & Astronautics** committee meeting at **AIAA #SciTech2023**. Looking forward to next year's meeting with more pioneering and growing women and marginalized gender leaders of the **#aerospaceindustry**.

**Women of Aeronautics & Astronautics**  
1,681 followers  
1w · Edited · 🌐

Our largest-ever committee meeting at **AIAA #SciTech2023** was a huge success! About 50 attendees from all across our seven local chapters and from different AIAA communities, ranging from undergraduate students to professors and professionals, came together to discuss WoAA's initiatives and to network with each other. Looking forward to next year's committee meeting with even more of our community presence!

**#aiaascitech #aerospace #aerospaceengineering #diversityandinclusion #womeninaerospace #womeninaviation #womeninstem #aiaascitech #womeninengineering #networking #network #mentorship #outreach #community**

👍👍👍 You and 73 others 5 comments

**Carson Slabaugh**  
@SlabaughGroup

We had a great week sharing our work at the @aiaa scitech meeting! Our group presented papers on topics ranging from detonations to rockets to scramjets. Great to be back in-person this year.

11:44 AM · Jan 27, 2023 · 1,166 Views

**Hiro Ono / 小野雅裕**  
@masahiro\_ono

It was a great audience. Thank you very much!  
**#AIAASciTech @aiaa**



**DoD HPC Modernization Program**  
@DoD\_HPCMP

Kudos to these 2Lts and 2022 @AFAcademy grads, whose research won a best student paper prize at @AIAA #SciTech2023! Their work, which offers a new technique for predicting dynamic flight characteristics, used HPCMP's HPCs and CREATE-AV Kestrel. Read More:

linkedin.com  
HPCMP - High Performance Computing Modernization Program on LinkedIn: #... Congratulations to 2nd Lieutenants Molly Ellinger and Jacob Szymanski of the United States Air Force, whose HPCMP-facilitated research won a Best Paper ...

8:43 AM · Jan 27, 2023 · 613 Views

**NASA Aeronautics**  
@NASAaero

That's a wrap on **#AIAASciTech 2023** in National Harbor, MD! We had a great time engaging with all the NASA Aeronautics enthusiasts who stopped by our booth & attended the different speaker sessions. See you next time! 🌟 [nasa.gov/aero](https://nasa.gov/aero)

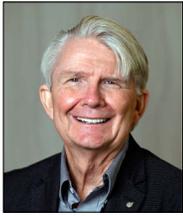
9:53 AM · Jan 27, 2023 · 10.7K Views

# *PARTNERSHIPS*



# ORGANIZERS & VOLUNTEERS

## 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



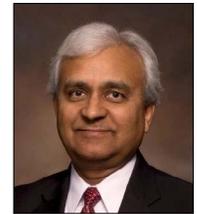
**Michele Miller**  
Ball Aerospace



**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)

# PARTNERS & SPONSORS

## EXECUTIVE SPONSORS



## SPONSORS



## CORPORATE MEMBERS

Employees from 62 Corporate Member and Partner companies participated

# EXHIBITORS

4th Phase Technologies, Inc

ADDiTEC

ADS CFD Inc

Aerospace Research Central (ARC)

Aerospace Village

Ahmic Aerospace LLC

AIAA Career Center

AIAA Mid-Atlantic Section

## **ALTAIR**

## **Ansys**

Aurora Flight Sciences, A Boeing Company

## **BETA CAE Systems USA, Inc.**

## **Blue Origin**

## ◆ **The Boeing Company**

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IC2 (Interdisciplinary Consulting Corp)

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NASA

National Academies of Sciences, Engineering, and Medicine

## **National Institute of Aerospace (NIA)**

National Reconnaissance Office (NRO)

National Research Council Canada

## **Northrop Grumman**

Notre Dame Turbomachinery Laboratory

Office of Naval Research

Overleaf

PACE Aerospace & IT

## **Raytheon Technologies**

Research in Flight

Scaled Composites

Scope AR

SIAM

SoftInWay Inc.

Space: Science & Technology, a Science Partner Journal

## **Spirit Aerosystems, Inc.**

Systecon North America

## **Tecplot**

Tesla

Texas A&M Turbomachinery Lab

Tri Models Incorporated

University of Maryland UAS Research and Operations Center

Aerospace Engineering & GLMartin Wind Tunnel @ University of Maryland

Virginia Tech

VirtusAero, LLC



Companies in bold type are AIAA Corporate Members. Companies with a star and bold type are AIAA Corporate Partners.

# 95%

of 2024 exhibits were sold during 2023. Only 13 booths remain on the 2024 floor plan. New options are under development.

# 7

companies increased their booth size for 2024

# 2 NEW

companies contracted on site for their first time ever participation in 2024

# the HUB

where great minds gather



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**8-12 JANUARY 2024  
ORLANDO, FLORIDA**

**SEE YOU IN 2024!**

Interested in sponsoring or exhibiting at the 2024 AIAA SciTech Forum or becoming a Corporate Member? Reach out to our team!

Sign up for Alerts

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