Women of Aeronautics and Astronautics
WoAA’s Mission

To provide support, empowerment, and networking opportunities for women, gender minorities, and other underrepresented individuals in the aerospace field, beginning with university students

- Increase female and minority participation in the aerospace field through technical and professional development
- Create a safe and welcoming place for minorities through mentoring and outreach
- Build a supportive community within aerospace
WoAA History

2018
- University of Maryland WoAA chapter members, UMD Department Chair & Dean of Engineering work with AIAA Board Members
- Discussed making a national organization
- Reached out to other schools that had similar organizations to create national coalition
  - University of Michigan, MIT, Stanford, Purdue, Georgia Tech, WPI

2019 & 2020
- Ran a panel event at SciTech 2019
- Became an official committee within AIAA in July 2019
- Held an international panel at IAC 2019
- Gained 11+ new chapters over 2019-2020 academic year
- Held mentoring event SciTech 2020
- Additional board events included outreach at AIAA Propulsion & Energy, volunteering for IAC STEM Days, and virtual panels
<table>
<thead>
<tr>
<th>International WoAA Board</th>
<th>Individual WoAA Chapters</th>
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<tr>
<td>● Elected board of university students and young professionals</td>
<td>● Starting our expansion efforts at the university and college level</td>
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<td>● Maintain database with support materials for all chapters to access</td>
<td>● Individual chapters provide regular professional, technical, outreach/service, and community development opportunities for their members</td>
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<td>● Provide programming, virtually and at conferences, based on our pillars:</td>
<td>● Each chapter has a liaison, who can contact all other liaisons and the international board directly</td>
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<tr>
<td>○ Professional Development</td>
<td>● All WoAA members invited to serve on the international subcommittees</td>
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<td>○ Technical Development</td>
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<td>○ Member Advancement and Awards</td>
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American Institute of Aeronautics and Astronautics (AIAA)

Created in 1963, AIAA is the world’s largest technical professional society dedicated to the global aerospace profession.

AIAA Integration and Outreach Committees (IOCs)

AIAA IOCs focus on the cross-discipline integration/programmatic and societal interface/outreach areas of interest of the Institute. There are four categories of IOCs: Aerospace Outreach, Business and Management, Integration, and Young Professionals.

International WoAA

International WoAA is an AIAA Aerospace Outreach IOC. International WoAA supports the creation of WoAA university chapters.
WoAA Board

WoAA Leadership
- Chair: Alex Straub
- Vice Chair: Julia Di
- Secretary: Rosemary Davidson

WoAA alumni board

Professional Development
Chair: Annika Rollock

Technical Development
Chair: Matt Marcus

Outreach
Chair: Sanjana Tewathia

Member Advancement/Awards
Chair: Saumya Sharma
Co-Chair: Sarah Gomez

Expansion Chapter
Chair: Harshini Sivakumar

Professional/Industry Chapter
Chair: Laura Zaidenberg
WoAA Structure

International WoAA Subcommittees

**Professional Development** - Connects young professionals with students and provides opportunities for WoAA members to further their professional career.

**Technical Development** - Provides programming and workshops for WoAA members to advance their technical skills.

**Outreach** - Reaches out to and educates pre-collegiate students to support and encourage their interest in the fields of aeronautics and astronautics.

**Member Advancement and Awards** - Facilitates academic and industrial career advancement for members through the collection and distribution of resources, including job opportunities, grants, and scholarships.

**Expansion** - Works to establish new chapters and provide them with the necessary connections and support.
Typical Chapter Membership

**Chapter members:**
- Typically 10-30 active members, ranging from <10 to 50+
- All groups surveyed include women
- Some with men & non-binary folks
- Class year ranging from freshmen - graduate students

**Exec board members:**
- 3 -- 13 members
- Typically all female, but not exclusively
- Class year ranging from freshmen -- graduate students

**Board selection:**
- Either by calendar or school year
- May be by nomination/vote by group or by application/ interviews/decision by board
- May give priority to previous exec members, esp. for president
Purdue held a First Year Engineering Social with interested freshmen.

MIT held a high school outreach day for female students interested in aerospace.

The University of Maryland held a photo campaign at the Engineering Picnic.

Georgia Tech held a workshop in the Yang Aero Maker Space.
WoAA Events

- **May 2020**
  - DIY Hovercraft Tutorial
  - Grad school vs. Industry Panel

- **June 2020**
  - WoAA Info Sessions
  - Resume workshops
  - Introduction to Astrodynamics Workshop
  - Grad School Funding Panel

- **Future Events and Initiatives**
  - Diversity & Inclusion Series
    - Microaggressions & Racism in Aerospace
  - Mentoring
  - Conference networking
  - WoAA Pals for K-12
  - Outreach events at the undergraduate level
Technical Development

Goal: Foster growth in technical skills and expertise, and currency amongst members

- Workshops and Tutorials
  - Intro to coding
  - Computer Modelling
    - CAD
    - CFD
    - FEA
  - LaTeX
  - Orbital modelling
  - Machining/shop skills

- National Panels and Seminars
  - Summer grad school series
- Stories highlighting member tech accomplishments
- Design Challenges
- Planning of technical conference events
  - Panels
  - Technical sessions
Areas for Collaboration

- Have a WoAA liaison attached to at least each of the six TADs
  - TCs or Groups interested in working with a WoAA liaison should contact us

- **Role of Liaisons:**
  - Point of contact between the committees
    - Advertise each other’s events
  - Collaborate on conference sessions
  - Provide direction to WoAA on emerging technologies
  - Networking and mentorship
THANK YOU FOR ATTENDING!

Questions?

Email: woaa@woaaofficial.org

WoAA Engage: https://engage.aiaa.org/communities/community-home?CommunityKey=f4029906-f3fb-4f61-a8ef-0fe56429e17c