

Plan for Today

- 0900-1130: AIAA Leadership Training
 - Breakout Sessions for READ, IOD, TAD, Board Directed Committees
- 1130-1300: Lunch on your Own
- 1300-1600: Workshop Focused on Membership Enhancement
 - Setting the Space with Membership Demographics
 - Breakout Sessions/Roundtable Discussion to help solve the program
 - Communicating Results to the Group

AIAA Council Integrated Leadership Training

Orlando, FL
January 7, 2024

Agenda for Leadership Training

- 0900 - 0945: AIAA 101
 - AIAA History, Mission, Goals, Strategic Vision
 - Domain Approach Overview
 - AIAA Foundation
 - AIAA Governance
- 0945 - 1030: Leading by Influence
- 1030 - 1130: Breakout Sessions for READ, IOD, TAD, Board Directed Committees

Purpose of Council Integrated Training

- Gain familiarity with AIAA
 - AIAA's governance, goals and mission
- Understand volunteer leader expectations
- Understanding the key issues facing the Institute and the actions taken to address these issues
 - Domain Approach
- Leading by Influence
 - Ensuring movement at the speed of the market
 - Succession Planning

AIAA 101

What all leaders need to know

What is AIAA?

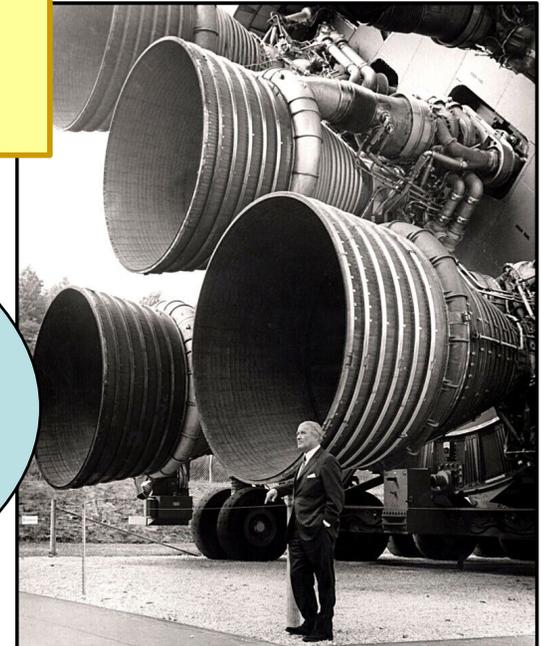
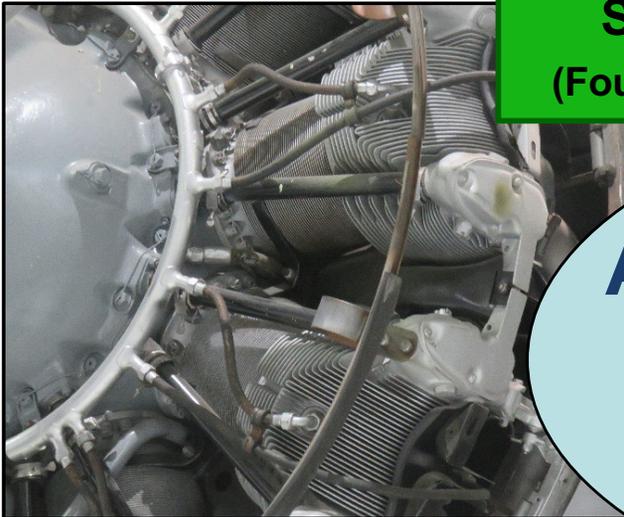
- AIAA Is Non-Profit Corporation Under IRS Code 501(c)(3)
 - Formed For Educational or Scientific Purposes
 - Non-profit Postal Rates
 - No Corporate Income Tax
 - Incorporated In The State Of New York
 - Provides Advocacy - Limited Lobbying Permitted
- Governed by a President, the Board of Trustees, and the Council of Directors
- AIAA Professional Staff is led by the Chief Executive Officer
- Revenue & Expenses ~\$20 M/Year

Origins of AIAA

**Institute of the
Aeronautical
Sciences**
(Founded 1932)

**American
Rocket
Society**
(Founded 1930)

Formed the
**American Institute of
Aeronautics and
Astronautics (AIAA)**
in 1963

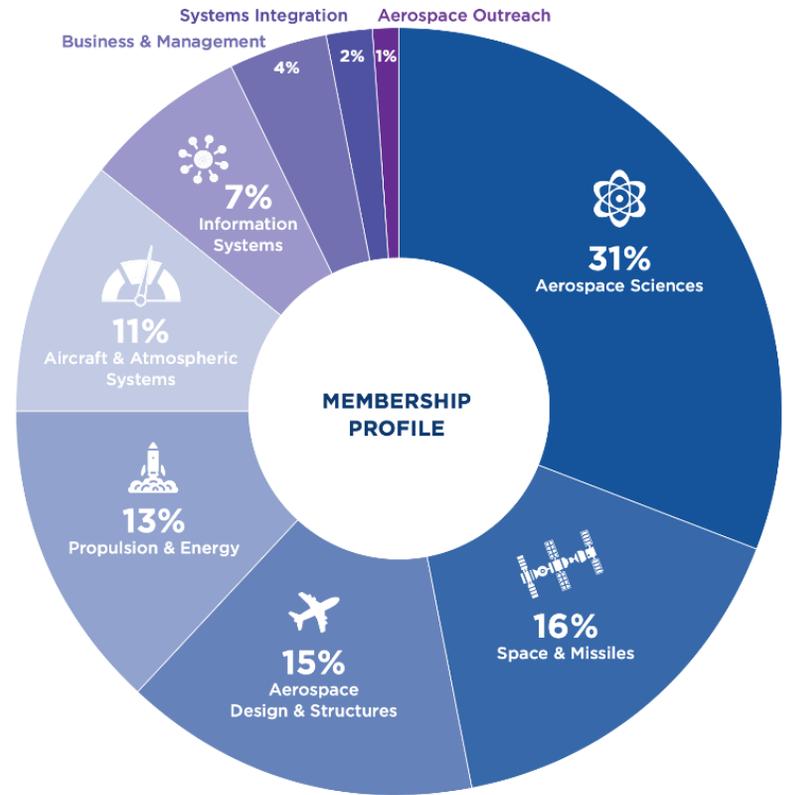
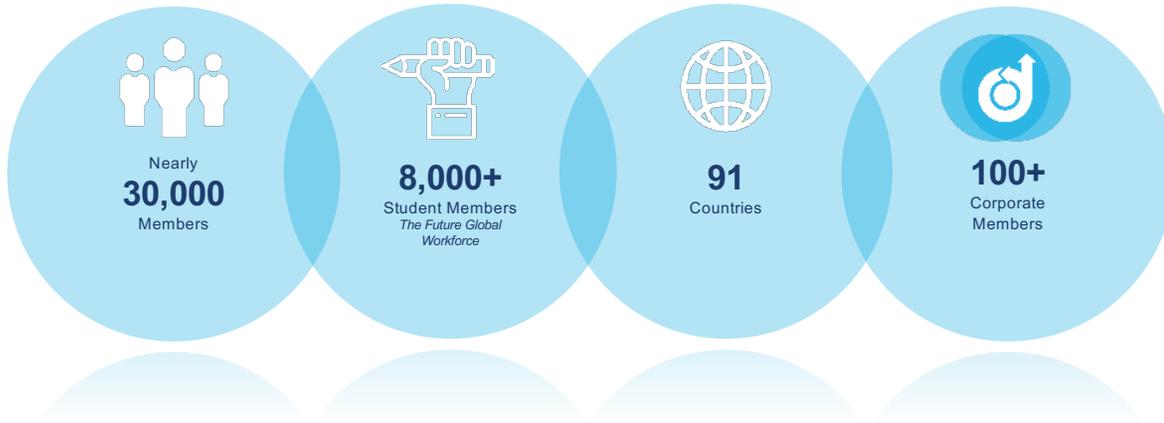


Mission, Vision, Tagline

- **Our Mission:** AIAA exists to help aerospace professionals and their organizations succeed.
- **Our Vision:** AIAA's vision is to be the voice of the aerospace profession through innovation, technical excellence, and global leadership.
- **Our Tagline:** *"Shaping the Future of Aerospace."* It reflects our belief that AIAA members are continually shaping the future of aerospace through their creativity, ingenuity, and passion for aerospace engineering and science.

AIAA Today

AIAA MISSION:
To help aerospace professionals and their organizations succeed



AIAA Member Engagement & Resources

EVENTS

In-person and Virtual



10,000

FORUM PARTICIPANTS

5,200

TECHNICAL PRESENTATIONS

SCITECH FORUM

ASCEND

DEFENSE FORUM

AVIATION FORUM

MEMBER PARTICIPATION

71 TECHNICAL COMMITTEES

21 INTEGRATION & OUTREACH COMMITTEES

56 LOCAL SECTIONS ACROSS 7 GEOGRAPHIC REGIONS

20 COMMITTEES ON STANDARDS

TECHNICAL RESOURCES

8 PEER-REVIEWED JOURNALS

Meeting Papers/Proceedings

Aerospace America – the flagship publication of AIAA

Technical, business courses, and online learning

Aerospace Perspectives Webinars

Career Center

AIAA Upcoming Events



AIAA SciTech Forum
8–12 January 2024
Orlando, Florida



AIAA DEFENSE Forum
16–18 April 2024
Laurel, Maryland



AIAA Awards Gala
15 May 2024
Washington, DC



AIAA AVIATION Forum
29 July–2 August 2024
Las Vegas, Nevada



ASCEND
30 July–1 August 2024
Las Vegas, Nevada

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



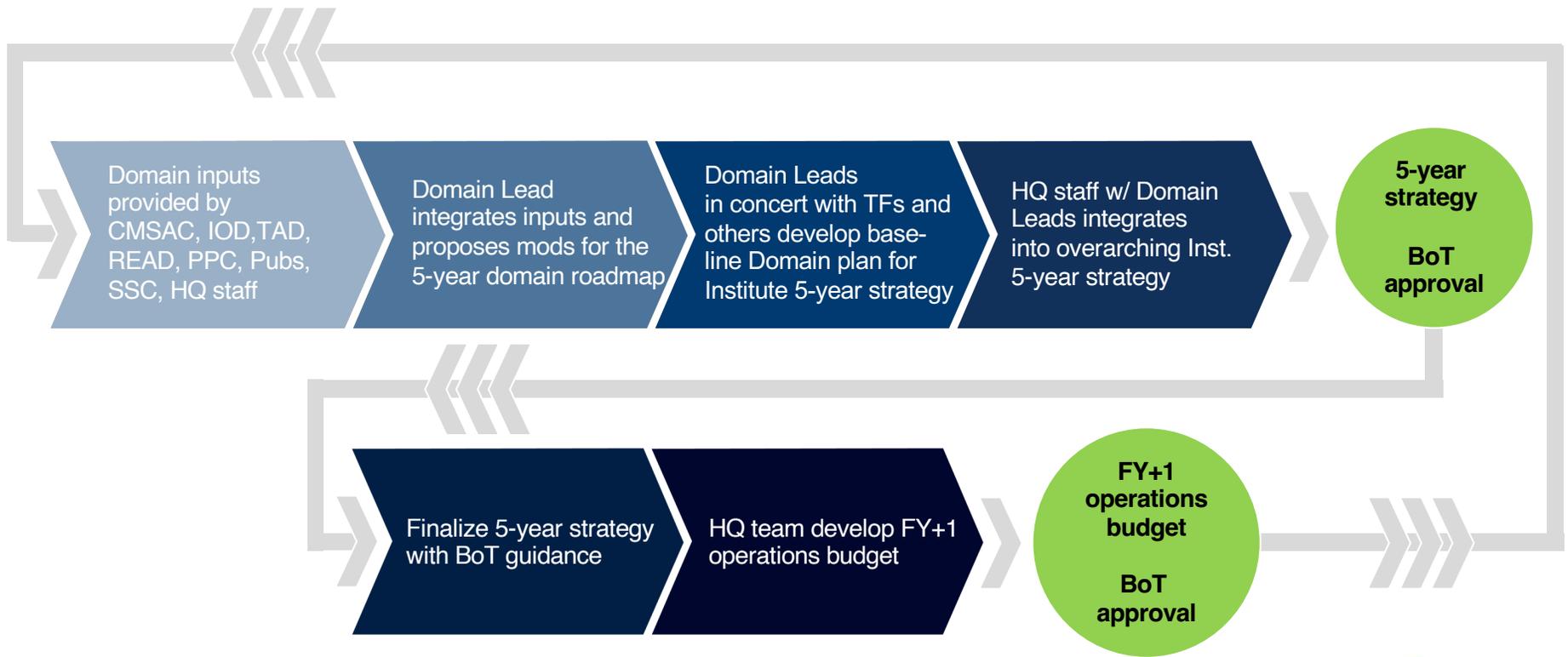
THOUGHT LEADER Be the thought leader in technology and capability advancement

- 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.

Customer Needs Drive AIAA



Domain Vision Development Logic Flow



AIAA Domain Priorities



AERONAUTICS

System solutions applied by private industry, government programs to address commercial and policy customer needs

- Aviation Decarbonization and Sustainability
- Advanced Air Mobility
- Certification
- Hypersonics and Supersonics



R&D

Research performed by academic institutions, government laboratories, industry laboratories to be utilized by system solutions

PROBLEMS | ISSUES | PRIORITIES

- Transformative Systems Engineering
- Autonomy / Artificial Intelligence / Machine Learning
- Advanced Manufacturing and Advanced Materials
- Resilient and Assured Systems



SPACE

System solutions applied by private industry, government programs to address commercial and policy customer needs

- Space Traffic Coordination
- Space Sustainability
- Space Exploration
- Outpacing the Space Threat
- Competitive and Burgeoning Space Economy

Domain Task Forces

Aeronautics

- **Advanced Air Mobility**
 - Phase 2 to be assessed by new Aero DL
- **Carbon Emissions & Sustainability**
 - Phase 2 to be assessed by new Aero DL
- **Certification**
 - Mike Borfitz and Nick Lappos
 - Report out at SciTech 2024
- **High-Speed Flight**
 - Todd Magee Rodney Bowersox,
 - Formal Launch at SciTech 2024

Aerospace R&D

- **Transformative Systems Engineering**
 - Jim Faist
 - Focus on procurement, system modeling
- **Autonomy/AI/ML**
 - John Valasek
 - Current focus: challenge / competition development
- **Advanced Materials/Advanced Manufacturing**
 - In formation

Space

- **Space Traffic Coordination**
 - Roger McNamara
 - Phase 2 in development
- **Cislunar Ecosystem**
 - Dennis Paul
 - Focus on economic, policy impacts
 - Partnerships with counterpart associations

New Domain Leads



AERONAUTICS

Russell Boyce

Mission Assurance Pty Ltd
AIAA Fellow



AEROSPACE R&D

Greg Zacharias

Pasteur Labs
AIAA Senior Member



SPACE

Brent Sherwood

Blue Origin (retired)
AIAA Associate Fellow

New Domain Leads



Aeronautics: Russell R. Boyce, Mission Assurance Pty Ltd (AIAA Fellow)

Russell previously served as Director of UNSW Canberra Space and was Professor and Chair of Hypersonics at the University of Queensland. Additionally, he has advised the MILO Space Science Institute and Australian Space Agency and chaired the Australian Academy of Science's National Committee for Space and Radio Science.



Aerospace R&D: Greg Zacharias, Pasteur Labs (AIAA Senior Member)

Greg previously served as Chief Scientist for the Director of Operational Test and Evaluation, Office of the Secretary of Defense (2018–2021) and Chief Scientist of the United States Air Force (2015–2018). He was cofounder and later president of Charles River Analytics. He also has served on the National Research Council and the USAF Scientific Advisory Board.



Space: Brent Sherwood, Blue Origin (retired) (AIAA Associate Fellow)

Brent recently retired from Blue Origin as Senior Vice President, Advanced Development Programs. Before joining Blue Origin, he held various positions at NASA Jet Propulsion Laboratory and The Boeing Company. Brent is a former chair of the AIAA Space Architecture Technical Committee.

Encouraging STEM Education

S.T.E.A.M

SCIENCE | TECHNOLOGY |
ENGINEERING | ARTS | MATHEMATICS

Funded **1,700+** K-12 classroom grants

Awarded **1,400+** aerospace scholarships

Supported **450+** students conferences

Engaged **28,000+** students

Sponsored hands-on design & engineering
competitions

Inspired **350,000+** students and **2,000** educators
through hands-on programming annually

K-12
Outreach

Design
Build
Fly

Diversity
Scholars
Program

Educator
Resources

Scholarships &
Graduate
Awards



The AIAA Foundation prides itself on its commitment to the continued study of science, technology, engineering, and mathematics. This commitment has been made possible for the past 25 years with the support and generosity of our esteemed donors.

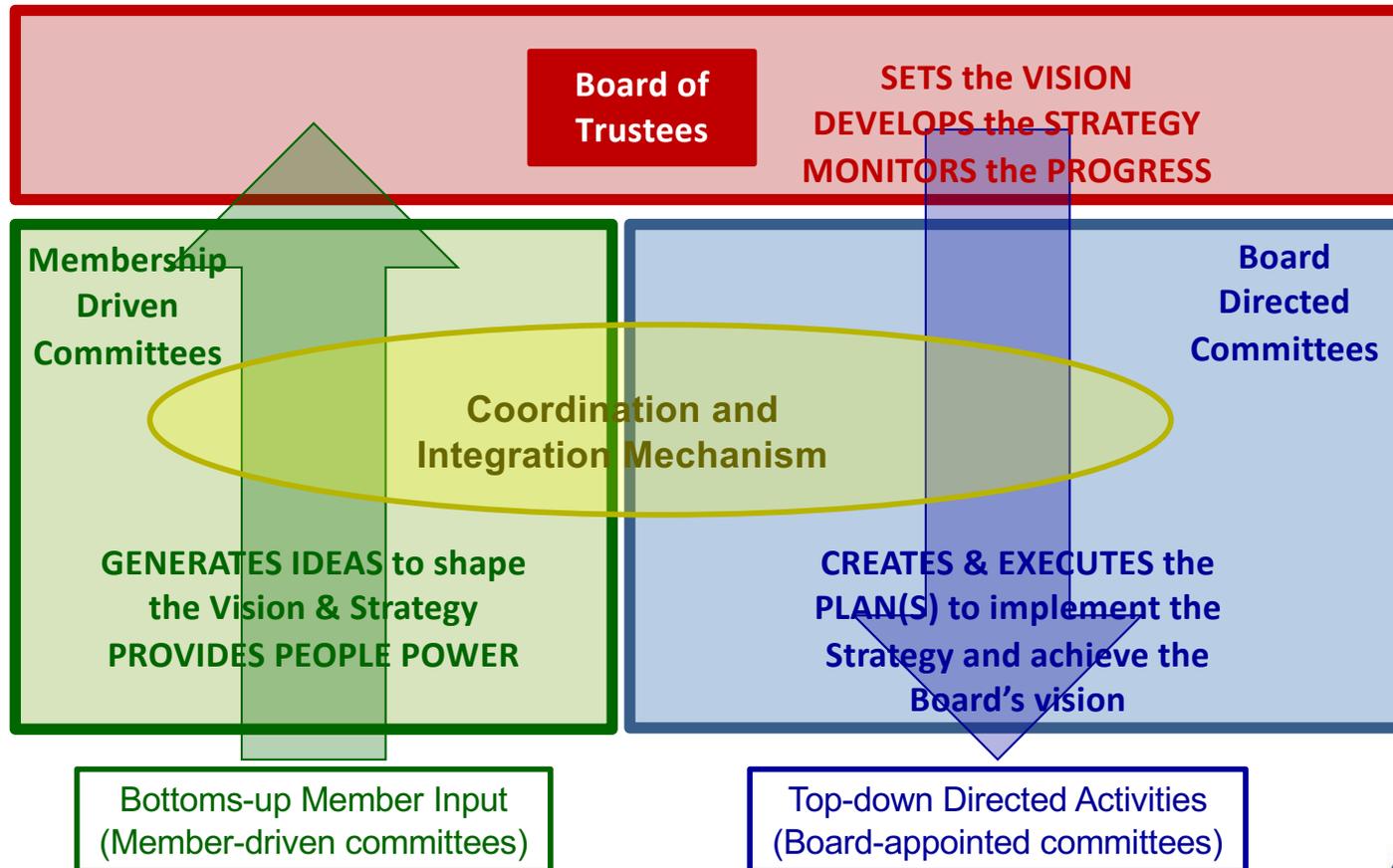
AIAA Governance

[Link to AIAA Governance 101 video
\(Everything you wanted to know but
were afraid to ask!\)](#)

AIAA Governance Model

- Governance Philosophy.
 1. The Board of Trustees provides the Vision & Strategic Direction.
 2. Board-directed committees support the Board Strategy.
 3. The Council of Directors is the Voice of the Members.
 4. Provide for Continuous Innovation.
 5. Intentional Talent Development.
- Executing the Strategy is a partnership between the Board, the Council and Staff.
- Document our processes.
- Flexibility is key to adapting to the changing needs of the market.

Philosophy of Governance Approach



Roles of the AIAA Professional Staff

Partnership, Coordination and Integration Mechanism

- Develop and Implement the Institute Business Model.
- Strategy Integration across the Institute.
- Product Delivery.
- Day-to-Day Operations.
- Financial Accountability.

Governance Model



Governing Document Hierarchy

Institute Constitution

- Legal document, defines AIAA as an organization.
- Owned by the membership.

Institute Bylaws

- Defines the organizational structure, roles and responsibilities and outlines key processes.
- Allows for flexibility.
- Owned jointly by the Board of Trustees and the Council of Directors.

Operating Procedures

- Board, Council, READ, IOD and TAD.
- Details on day-to-day operations; how to get things done!
- Owned by each governance element.

Committee Charters

Committee Operating Procedures

- Each Section, TC, IOC and Board-directed Committee will have a “charter” that defines its purpose, make-up and high-level operation.
- As needed, committees may also have operating procedures to document the details of how they do business.

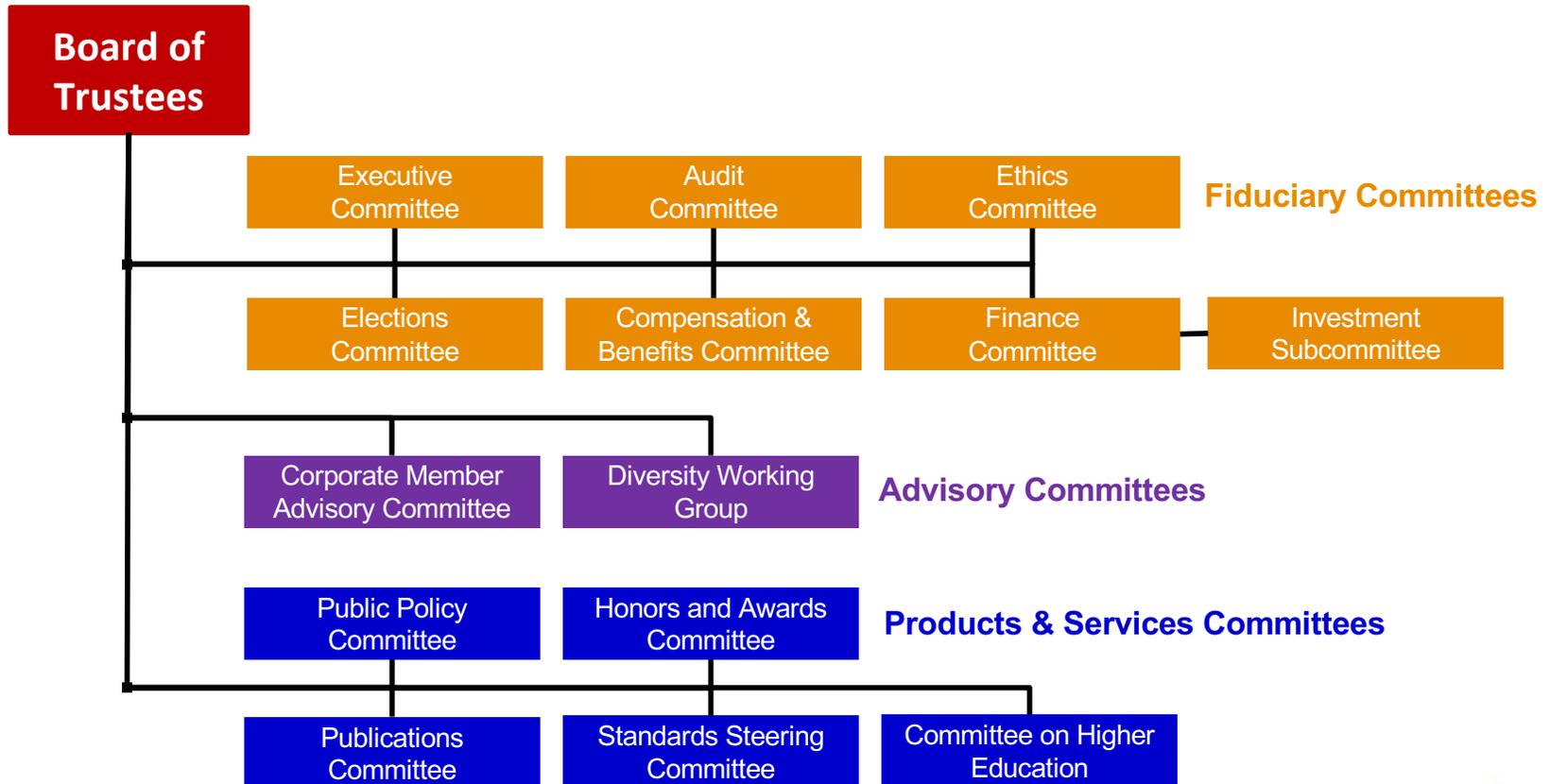
AIAA Board of Trustees

- The Board is a 13-person committee:
 - 3 Officers:
 - President
 - President-elect (selected by the membership) or Past President
 - Treasurer (selected by the Board).
 - 9 Members-at-Large (selected by the Council)
 - Secretary (AIAA Chief Executive Officer, non-voting)

AIAA Board of Trustees

- The Board of Trustees is a strategic body.
 - The Board is to focus on the direction of the Institute.
 - It is not a representative body made up of the various member constituencies.
 - The Board should look to the Council and the Advisory Committees to get specific input from a given group or demographic.
- The Board uses committees to address specific tasks and management of projects.

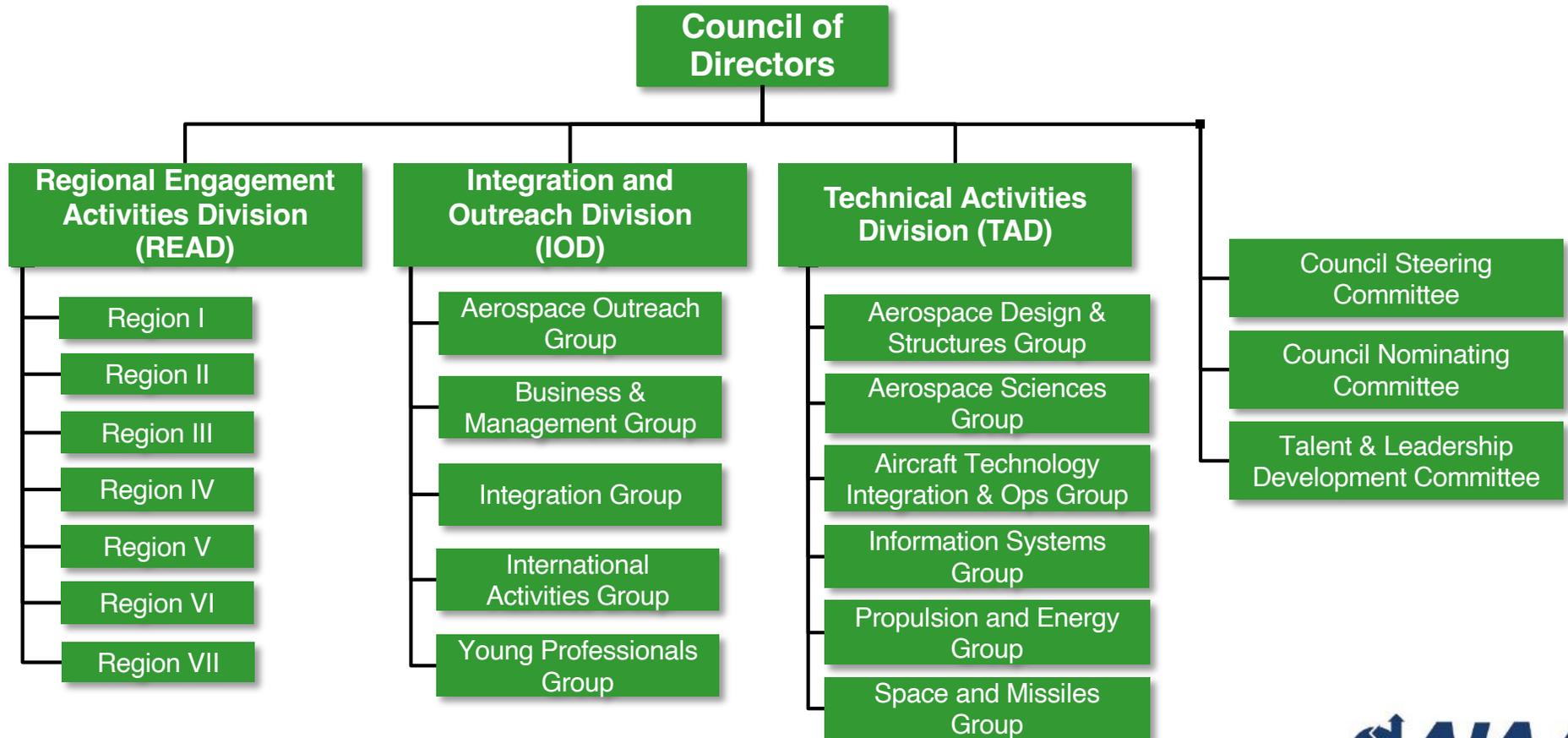
Board-Directed Committees



AIAA Council of Directors

- Speaker of the Council
 - Presiding Officer
 - Non-voting
 - Elected by the Council
- Members of the Council (voting)
 - Chiefs of READ, IOD and TAD (selected by Division leadership)
 - Regional Directors (elected by members of the Region)
 - Integration & Outreach Group Directors (elected by the membership)
 - Technical Group Directors (elected by the membership)

Council of Directors Committee Structure



Roles of the Council of Directors

- The Council is the Voice of the membership.
 - Provides direct input to the Board of Trustees.
- Provides a “home” for ALL AIAA members and an opportunity to connect with all areas of the community.
- Implementation of the strategic vision.
 - Working with AIAA Staff and Board-directed Committees.
- Responsible for the technical excellence of the Institute.
- Ensure *integration* and *collaboration* across READ, IOD and TAD.
 - Integration across all member-driven activities.
 - Sharing of best practices.
 - Leveraging the talent of the membership.

Division-level Overview (READ, IOD, TAD)

- Each Division is Chaired by a Chief.
 - Elected by the respective Division leadership.
- Management of the group - and committee-level activities.
 - READ has responsibility for Regions, Sections and Student Branches. ALL AIAA members fall inside of READ.
 - IOD is the primary integration interface that addresses missions, programs and societal aspects
 - TAD orchestrates the technical discipline interface for the Institute.
- All are responsible for technical content and ensuring technical excellence.
 - Development of forum content, standards, continuing education courses, etc.
- Provide input to AIAA Task Forces.
- The goal is for the Divisions is to work in an integrated manner to achieve the goals of the Institute and provide the best value for the aerospace community.

...and that concludes

AIAA 101

But wait! There's more!



AMERICAN INSTITUTE OF
AERONAUTICS AND ASTRONAUTICS