

# American Institute of Aeronautics and Astronautics Technical Committee Chair's Manual

# **June 2021**

This manual was prepared by the AIAA Technical Activities Division to assist Technical Committee Chairs in effective leadership of their Committee



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#### 1 Introduction

This Chair's Manual was developed by the American Institute of Aeronautics and Astronautics (AIAA) Technical Activities Division (TAD) to provide a better understanding of AIAA and of the role of Technical Committees (TCs) in the Institute (hereafter referred to as "Committees"). This manual provides context for your Committee within AIAA, expectations for the role of chair, guidelines for operation, and possibilities for extending the influence of your Committee to advance the state of the aerospace industry. Additional references and templates are included for your use.

This manual is a companion to, and not a substitute for, the Chair training that is held each January in association with the Science and Technology Forum and Exposition (SciTech). These sessions provide in-depth discussions with seasoned committee chairs, and are structured to encourage exchange of experiences, lessons learned, and different approaches to operating a Committee. A new chair is expected to participate in a session prior to the beginning of his or her term and should attend again while chair.

If you have comments on this document or any other TAD activities, please send them to your Group Director or Staff Liaison to Technical Activities at AIAA Headquarters

Enjoy the time you have in operating your Committee. TAD leadership is standing by to help make this one of the most meaningful and exciting experiences in your professional career.

### 2 AIAA and the Role of Committees

# 2.1 AIAA Background

The American Institute of Aeronautics and Astronautics (AIAA) is the oldest and largest technical society serving the aerospace profession. Approximately 30,000 professional and student members are active in a broad range of aerospace programs, sciences, and technologies. The purpose of AIAA is to advance the arts, sciences, and technologies of aerospace and to nurture and promote the professionalism of those engaged in these pursuits. AIAA operates as a 501(c)(3) nonprofit organization.

AIAA was formed on January 31, 1963 by the merger of the American Rocket Society (established in 1930 as the American Interplanetary Society) and the Institute of the Aerospace Sciences (established in 1932 as the Institute of the Aeronautical Sciences).

**AIAA's vision** is to be the voice of the aerospace profession through innovation, technical excellence, and global leadership.

AIAA's mission is to help aerospace professionals and their organizations succeed.

AIAA is proud to be "Shaping the Future of Aerospace." To support these tenets and to best serve the members of AIAA, the Board of Trustees maintains a Strategic Plan that is updated annually to guide the Institute's investments and activities. The current Standing Committees for AIAA can be found at https://www.aiaa.org/get-involved/committees-groups.

The AIAA is governed by a series of legal documents and organizational elements. The Legal document that defines the name, purpose and governance of the organization is the "Articles of Incorporation". The AIAA Articles of Incorporation are on file with the state government of New York and are approved by Membership. The AIAA also has a Constitution optional document which identifies high-level scope, purpose and principals of the organization and is approved by Membership. The AIAA By-Laws defines the overall organizational structure and operational parameters for major elements. Modifications must be approved by the Board of Trustees and the Council of Directors. Finally, each organizational element (regardless of how they are chartered) adopts policies and procedures to establish how they will achieve their chartered purpose.

The overview for the top-level organizational structure is given in Figure 1.

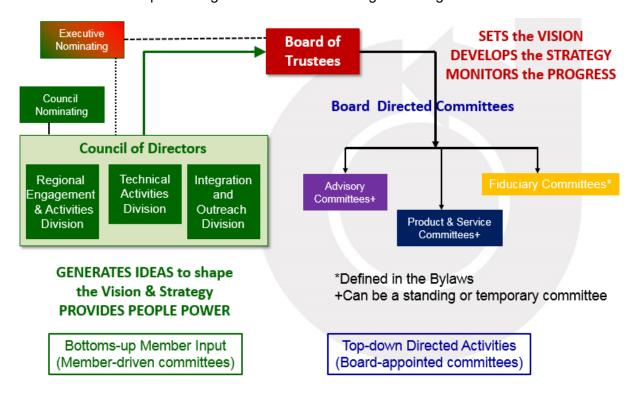


Figure 1. AIAA Top Level Organizational Structure

Your Committees are one of the principal ways members contribute to the advancement of the aerospace industry. There are numerous opportunities and activities by which a Committee can assert its influence, including:

- creating technical forums and conferences
- developing workshops and courses for professional development

- presenting awards recognizing outstanding technical work of scientists and engineers
- developing new aerospace standards
- undertaking projects to further AIAA's educational outreach
- developing public policy or information papers

AIAA's active public policy and public information programs give its members a voice in government decisions affecting the aerospace industry. AIAA members have contributed technical expertise and policy guidance to Congress and the Executive Branch, regularly testifying before the House and Senate on aerospace issues. AIAA is also recognized as a credible source of aerospace information by the media, for which the Institute regularly provides timely information in response to major events and initiatives.

## 2.2 Technical Activities Division (TAD)

TAD is the AIAA organizational home for Technical Committees and is the largest of AIAA's standing committees. TAD is led by the Technical Activities Chief (TAD Chief) who is elected by the TAD Group Directors and TCs. Key attributes (illustrated in Figure 2) for the TAD structure are:

- Technical Committees are formed into "groups" led by a Director (elected) and Deputies (appointed). Group Directors also serve on the AIAA Council of Directors (CoD).
- TAD has appointed liaisons with other AIAA standing committees to represent TAD and provide for mechanisms for joint activities.
- Regional Deputy Directors Technical, who provide the link to the Regional Engagement Activities Division (READ).
- TAD has various subcommittees. The Technical Activities Executive Steering
  Subcommittee and the Technical Integration Subcommittee (TIS) are the subcommittees
  most likely to interact with a TC. The TAD Exec subcommittee provides key guidance
  and continuity of activity for TAD through the year. TIS identifies new directions for TAD
  and works on various projects as directed by TAD leadership.



# **Technical Activities Division (2022-2023)**

# Jeff Hamstra – Chief, Technical Activities Division Staff Liaison: Angle Lander

#### AEROSPACE DESIGN AND STRUCTURES GROUP Jeanette Domber, Director

Masoud Rais-Rohani – Deputy Director for Cross-Institute Coordination Dawn Phillips Price – Deputy Director for Forum Coordination TBD – Deputy Director At Large Walt Silva – Deputy Director for TC Coordination

Adaptive Structures – Roeland de Breuker
Design Engineering – Clifton Davies
Materials – Steven Arnold:
Multidisciplinary Design Optimization – Vladimir Balabanov
Non-Deterministic Approaches – Vicente Romero
Spacecraft Structures – Samuel Bradford
Structural Dynamics – William "Bill" Welsh
Structuries – Stephen Clay:
Survivability – Steven Broussard
Systems Engineering – Jeffrey Newcamp

## AEROSPACE SCIENCES GROUP Lesley Weitz, Director

Steve Beresh, Martiqua Post – Deputy Directors for Fluid Sciences
Aeroacoustics – Judith Gallman
Aerodynamic Measurement Technology – Sean Kearney
Atmospheric and Space Erivironments – Stephen McClain
Fluid Dynamics – Timothy Eymann
Ground Testing – Ryan Kew
Meshing, Visualization & Computational Environments – Carolyn Woeber
Plasmadynamics and Lasers – Trevor Moeller
Thermophysics – Jason Rabinovitch

Joao Luiz Azevedo, Crystal Pasiliao - Deputy Directors for Flight

Sciences
Applied Aerodynamics – Jim Coder
Astrodynamics – Kyle DeMars
Atmospheric Flight Mechanics – Sarah D'Souza
Guidance, Navigation and Control – Julie Parish
Modeling and Simulation – Peter Zaal

INFORMATION SYSTEMS GROUP Michel D. Ingham, Director Misty Davies – Deputy Director Stephen Blanchette– Deputy Director

Communications Systems – Tom Butash
Computer Systems – Jim Paunicka
Digital Avionics – Arthur Tank
Human-Machine Teaming – John-Paul Clarke
Information and Command and Control Systems – Jimmie McEver
Intelligent Systems – John Valasek
Sensor Systems and Information Fusion – David Faulk
Software – Christoph Torens

## PROPULSION AND ENERGY GROUP Rusty Powell, Director

Stephanie Sawhill – Deputy Director for Forum Coordination Wayne Hurwitz – Deputy Director at Large and Operations

Timothy O'Brien, Deputy Director for Air Breathing Propulsion
Gas Turbine Engines - Eric Ruggiero
High Speed Air Breathing Propulsion – Joel Malo-Molina
Inlets, Nozzles, and Propulsion Systems Integration – Melissa Carter
Pressure Gain Combustion – William Hargus

Mitchell Walker – Deputy Director for Rocket, Space & Advanced Propulsion
Electric Propulsion – Richard Hofer
Hybrid Rockets – Mario Kobald
Liquid Propulsion – Vineet Ahuja
Nuclear and Future Flight Propulsion – Jim Cavera
Propellants and Combustion – Venke Sankaran
Solid Rockets – Weslev 'Wes' Ryan

Ashwani Gupta – Deputy Director for Energy Aerospace Power Systems – Jeremiah McNatt Energetic Components and Systems – Stephanie Sawhill Terrestrial Energy Systems – David Carrington

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# AIRCRAFT TECHNOLOGY, INTEGRATION, AND OPERATIONS GROUP Richard Mange, Director

Megan Scheidt – Deputy Director for Cross-Institute Coordination David Levy – Deputy Director for Forums

David Maroney – Deputy Director for Aircraft Operations
Aircraft Operations – Tom Reynolds
Air Transportation Systems – Peng Wei
Flight Testing – Derek Spear
Product Support – James Chou

Luca Maddalena – Deputly Director for Aircraft Technologies
Aerodynamic Decelerator Systems – Michael Petersen
Aircraft Design – Jason Merret
Balloon Systems – Mike Smith (Acting)
Electrified Aircraft Technology – Phillip Ansell
General Aviation – Nicoletta Fala
HYTASP. – Matthew Zuber
Lighter-Than-Air Systems – Alan Farnham

#### SPACE AND MISSILES GROUP Lawrence Robertson, Director Karen D. Barker – Deputy Director

Ron Kohl – Deputy Director

Life Sciences and Systems – Ryan Kobrick
Microgravity and Space Processes – Sunii Chintalapati
Missile Systems – Dustin Otten
Reusable Launch Vehicles – Amrutur Anilkumar

Small Satellite – Kerrie Cahoy Space Architecture – Sandra Haeuplik-Meusburger Space Automation and Robotics – Erik Komendera Space Settlement – Eric Joyce Space Logistics – Koki Ho

V/STOL Aircraft Systems - Geoffrey Jeram

Space Operations and Support – Ron Freeman Space Resources – Christopher Dryer Space Systems – Zack Krevor Space Tethers – Matthew Cartmell Space Transportation – TBD

Weapon System Effectiveness – Tim Wadhams

TAD Liaisons
Ethics Committee – Lesley Weitz
Honors and Awards – Jim
Guglielmo
Publications – Wayne Hurwitz

Guglielmo Publications – Wayne Hurwitz Standards – Ron Kohl USNC/TAM - Paul Palies

TAD Regional Liaisons Region 1 – Vanessa Aubuchon Region 2 – Joseph Majdalani

Region 3 – Robert Bruckner
Region 4 – Sidney Chocron
Region 5 – TBD

Region 6 - Catherine (Caite) Beck Region 7 - TBD

Technical Integration Subcommittee (TIS) Megan Scheidt (Chair), Steve Beresh, Misty Davies, Ron Kohl, David Maroney, Timothy O'Brien, Masoud Rais-Rohani

Last modified: Nov 17, 2022



Figure 2. TAD Organizational Structure (as of Nov 2022)

# 3 Committee Roles and Responsibilities

The activities of Committees should be focused on the following objectives:

- Add value for AIAA members, the Institute, and the aerospace industry
- Support the AIAA Vision, Mission, and Strategic Plan
- Represent the Technical Area for and on behalf of AIAA
- Provide Technical Forums and Products that serve your constituency
- Provide a forum for Committee Members to identify and address issues of interest to them and their home organizations
- Reach out to and coordinate with appropriate TCs, Integration & Outreach Committees (IOCs) and AIAA Standing Committees as appropriate for your projects
- Develop activities that create synergy across technologies, systems, and products (e.g. Conferences, Working Groups, etc.)
- Solicit regional and local Involvement in areas where the Committee meets, conducts activities, holds technical forums, or where its constituency or members reside.

As you lead your Committee to continue or embark on new activities, you may find it helpful to remind your members of their responsibility in representing AIAA and the Industry.

## 3.1 Committee Structure and Leadership

Within the TAD organization, Chairs have the authority to structure their Committees as they choose, provided certain minimum requirements are met. However, it is recommended a structure similar to that shown in Figure 3 is used. The structure consists of leadership, subcommittees, and liaisons dedicated to engage in the various aspects of a Committee.

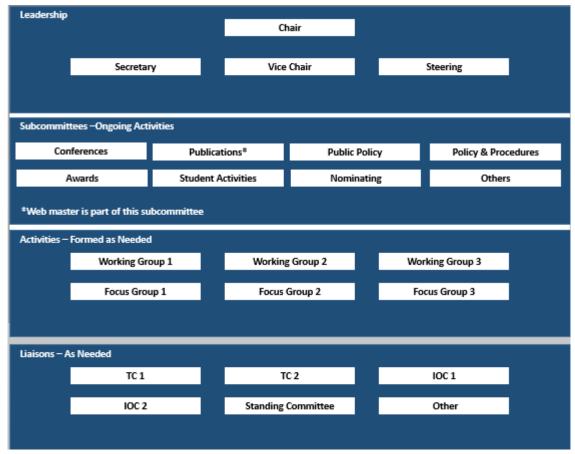


Figure 3. – Example Committee structure

## 3.2 Committee Leadership

The chair, supported by a vice chair and secretary, along with a steering group are typically considered the leadership for Committees. Leadership-specific roles and responsibilities are shown in Table 1. Requirements are indicated in the second column by the letter **R**, best practices by the letters **BP**.

The steering group is chaired by the Vice-Chair and develops the overall plan for Committee activity. It is the source of Committee strategy, plans, and activities, and provides the Chair with a group to work ad hoc items, develop an Annual Report and Three-Year Plan, and develop issues the Committee should be undertaking and working between meetings. The Steering group usually consists of the Chair, Vice-Chair, and Chair of each standing subcommittee.

Key goals for the leadership team are:

- ✓ Operate Committees in accordance with AIAA policies and guidelines
- ✓ Launch initiatives and projects consistent with the Committee vision, goals, and objectives
- ✓ Ensure momentum through Succession Planning

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- o Provide for the nomination and election of the next Chair
- o Appoint subcommittee chairs as required
- ✓ Encourage member participation in national AIAA Activities
  - Events, Elections, Honors and Awards, Regional Student Paper Conferences, etc.
- ✓ Establish liaison assignments with related groups to ensure communication and coordination

Table 1. Roles and Responsibilities for Committee Leadership (R – Requirement, BP – Best Practice)

Role	Required or BP	Responsibilities
<u>Chair</u> 2-year term, generally	R	$\sqrt{\ }$ Add value for the Committee and its members, the members of AIAA, the Institute, and the aerospace community
accedes to the chair role after	R	√ Lead and manage the Committee in accordance with AIAA policies and guidelines
election to vice chair.	R	$\sqrt{}$ Establish and execute the Vision, Goals, and Objectives for the future of the Committee
	R	√ Evaluate Committee's health, via the TC assessment tool, and use the results to shape goals and objectives. See Appendix 2 for additional details.
	R	√ Prepare/update Committee Charter and submit to the AIAA website. See Appendix 3 for a charter template.
	BP	√ Flow down communications from TAD to Committee members
	BP	√ Regularly flow up issues, suggestions, and status from Committee to your Director and share TAD response with Committee members
	R	$\sqrt{}$ Ensure momentum through Succession Planning
	R	o Provide for the nomination and election of the next Committee Chair
	R	o Appoint Subcommittee Chairs as required
	BP	√ Encourage member participation in national AIAA Activities
	BP	o Events, Elections, Honors and Awards, Regional Student Paper Conferences, etc.
<u>Chair</u>	R	√ Coordinate with AIAA Staff members when scheduling meetings in conjunction with AIAA Conferences and Events, or at AIAA Headquarters to ensure appropriate accommodations and meals.



Role	Required or BP	<u>Responsibilities</u>
	R	o If meeting with an AIAA sponsored conference, send a request for meeting space to the Staff Liaison for Technical Activities so that it can be directed to the appropriate AIAA Event Planner, approximately 3 months in advance of the event. If your Committee has met at an AIAA Conference in the past, most likely you will be contacted regarding upcoming Committee meetings several months prior to the event. If you are not contacted, please contact the Staff Liaison for Technical Activities as soon as possible.
	R	√ Assure Committees have at least two meetings during the year. These meetings can be conducted in conjunction with an AIAA-sponsored conference, at AIAA Headquarters, or at some other location which is sponsored by a Committee Member's organization.
	R	√ Control the Committee's membership roster, updating it annually.
	ВР	o Select membership from a broad spectrum of candidates to balance membership as appropriate for your technical area to best represent industry, government, academia, women, minorities, retired, management levels, etc.
	BP	o Recruit one or two YP member(s) each year. YP members are young professionals up to the age of 35.
	R	o Provide the membership roster for the upcoming year to your Group Director or Deputy Director by 31 January
	BP	o Promote membership upgrades (e.g. senior, associate fellow, fellow)
	BP	o Intervene with non-AIAA members (as identified by AIAA Staff), to establish or renew membership
	BP	$\checkmark$ Assure that the Committee has and maintains a website using the AIAA based tools
	BP	√ Provide home organization support for members through endorsement letters or other activities
	BP	√ Support the Annual Council Workshops (typically held in association with SciTech in January)
	R	√ Submit the Committee's Annual Report /other reports as appropriate.
	BP	√ Establish liaison assignments with related Committees to ensure communication and coordination.



Role	Required or BP	Responsibilities
	R	√ Ensure the Committee submits an annual highlights article for Aerospace America. Appendix 4 provides guidelines and suggestion on form and content of these articles.
	BP	√ Attend Chair training more than once
	R	√ Support the Chair in all duties as assigned
<u>Vice-Chair</u>	R	$\sqrt{}$ Serve in the absence of the Chair
Elected and	BP	√ Chair the Steering Subcommittee
succeeds chair; elected by the	ВР	<ul> <li>√ Lead assigned Subcommittees as Chair (e.g., Membership)</li> </ul>
end of the	BP	$\sqrt{}$ Participate in development of goals and strategies
chair's first year	R	Assist Chair in executing his/her responsibilities
	BP	√ As Chair-Elect, develop future strategy - building on current activities
	BP	$\sqrt{}$ Attend Chair training prior to succeeding chair
	R	$\sqrt{}$ Take minutes at the Committee meetings.
	R	√ Publish and distribute minutes to all members
	R	√ Maintain an external distribution list and email minutes to them
<u>Secretary</u> Appointed by Chair	R	√ Maintain a current member list to include email and phone contact information, home organization, location (e.g. time zone), beginning year of membership on the Committee, member status (e.g., officer, member, associate member, international member, alumni member, etc.), and AIAA member status (e.g., member, life member, senior member, associate fellow, fellow, or honorary fellow)
	ВР	√ Maintain and publish a list of current work assignments (e.g., chair, subcommittee memberships, highlights article editor, etc.)
	BP	√ Develop conflict-free meeting schedules (for members with multiple subcommittee assignments)
	BP	$\sqrt{}$ Maintain a calendar of events and publish yearly
	R	√ Maintain Annual Report and Three-Year Plan



Table 2. Roles and Responsibilities for Subcommittee Leadership (R – Requirement, BP – Best Practice)

Role	Requirement or BP	<u>Responsibilities</u>
	R	$\sqrt{}$ Lead the work of the subcommittee – Develop meeting agendas
	BP	√ Serve on the Steering Committee
	R	$\sqrt{}$ Coordinate with the Chair & other Subcommittee Chairs
	BP	$\sqrt{}$ Coordinate with other TCs and IOCs as appropriate
Subcommittee Chair Appointed by Chair or	BP	$\sqrt{}$ Ensure that tasking plans are compatible with resources available and that requirements are met
elected by subcommittee	BP	$\sqrt{}$ Provide focus through which specific interests and concerns of subcommittee members can be expressed
	R	$\sqrt{}$ Coordinate with Secretary on subcommittee meeting location and time
	R	√ Chair subcommittee meetings – Delegate duties if unable to attend meetings
	R	$\sqrt{}$ Assist Chair in preparation of Annual Report, etc.

#### 3.3 Subcommittees

Subcommittees should be formed by the Chair to support specific Committee objectives. Members of the Committee are assigned to work on the subcommittees in accordance with their individual areas of knowledge and/or expertise. Identified below are common subcommittees and their operational goals and objectives. The roles and responsibilities for subcommittee chairs are shown in Table 2.

#### 3.3.1 Policy & Procedures Subcommittee

Properly functioning subcommittees are critical for success and to ensure that the momentum your Committee has achieved is not lost when the Chair leaves. A Policy & Procedures subcommittee provides continuity by maintaining:

- ✓ Charter
- ✓ Election Processes
- ✓ Conference Planning guidelines
- ✓ Guidelines for establishing and conducting technical working or focus groups

#### 3.3.2 Membership Subcommittee

Planning for future membership is critical to the long term success of a Committee. The Membership Subcommittee serves to:

- ✓ Plan activities to support new membership process
- ✓ Review membership needs relative to departing members and new initiatives (technical discipline, organization, strengths, etc.)
  - o Identify inactive members for release
- ✓ Strive for balance in membership:
  - o Industry / Government / Academia / International / Young Professionals
  - o Technical expertise across Committee's charter
  - o Diversity in seniority, gender, ethnicity, geographic location, etc.
- ✓ Solicitation of new members
- ✓ Coordination with other subcommittees (e.g., conferences, publications, working groups)
- ✓ Review nominations
- ✓ Provide recommendation on selections
- ✓ Enhance Committee membership status
  - Senior member
  - Associate fellow
  - o Fellow
  - Honorary fellow

Committees are encouraged to actively pursue a goal of at least five Young Professionals.

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#### 3.3.3 Technical Subcommittee

Committees with several technical specialties may want subcommittees that can focus in those areas. Assignments to these subcommittees are made by the Chair based on members' knowledge and experience.

#### 3.3.4 Publications Subcommittee

A Publications Subcommittee provides support for all publishing activities.

Potential activities for a Publications Subcommittee include:

- ✓ Promote technical area publications (books, journals, manuscripts, etc.)
- ✓ Develop highlights article for Aerospace America
- ✓ Supports editors-in-chief and editorial advisory boards by suggesting new advisory board appointees, associate editors, and manuscript reviewers
- ✓ Support Institute-wide publishing initiatives such as the launch of a new journal or book series
- ✓ Support preparation of public policy papers
- ✓ Develop and maintain Committee guidebooks
- ✓ Publishes Committee member biographical information for internal distribution
- ✓ Draft conference overview articles
- ✓ Submit appropriate news items to Aerospace America
- ✓ Coordinate articles for a dedicated issue of an AIAA journal
- ✓ Publish newsletters
- ✓ Collect and disseminate information on conference proceedings
- ✓ Publish and maintain Committee website
- ✓ Provides liaison with the AIAA Publications Standing Committee

#### 3.3.5 Awards Subcommittee

AIAA has many awards throughout the year and support is usually requested in selecting the recipients. In addition, Committees may have awards of their own. An awards subcommittee handles all award activities. AIAA strongly recommends that each Committee submit two or more nominations for national awards that are aligned with the interest of Committee.

The Awards Subcommittee may:

- ✓ Establish and execute awards in compliance with TAD and Honors and Awards (HAC) Standing Committee requirements. See Appendix C TAD Honors and Awards Process and Procedures in the TAD Policy & Procedures.
- ✓ Ensure best candidates are nominated actively solicit nominations
  - Must be submitted through AIAA website on standard form
- ✓ Provide nominations for all AIAA awards as appropriate
- ✓ Establish an annual best paper award for their field or conferences.

Additional information about Technical Awards: To accomplish the goal of recognizing the most respected individuals worldwide, awards subcommittees should be aware that:

- ✓ AIAA membership is not required, however AIAA service/participation may be a discriminator between otherwise equal candidates
- ✓ In order to maintain the prestige and integrity of AIAA's technical awards, the overseeing Committee(s) must ensure a healthy nomination pool
  - Expectation is for two or more new qualified nominations each cycle minimum requirement is at least three nomination packages (consisting of at least two new nominations and any carryover nominations) on file at AIAA Headquarters on or prior to the deadline date
  - Relying solely on the Call for Nominations does not support a healthy nomination pool (see Nominating Subcommittee below)
- ✓ It is recommended that other resources (separate from the Award Selection subcommittee) be stood up to solicit new nominations from outside the Committee enlisting the support of past Committee Leadership for this activity is a best practice.

#### 3.3.6 Nominating Subcommittee

A nominating subcommittee separate from the Awards Subcommittee that organizes past Committee members and other well-respected members of the technical community to provide high quality candidate pools for awards is very important in maintaining a distinguished and vibrant national award.

#### 3.3.7 Education Subcommittee

An Education Subcommittee seeks and supports educational activities such as short courses and colloquia related to the Committee's area of expertise. This subcommittee aggressively supports furthering education at colleges and universities through its liaison with the academic community and its support of AIAA student membership. Activities of this subcommittee may include:

- ✓ Support Professional Education activities
- ✓ Develop and present Short Courses or Workshops
- ✓ Develop Tutorials
- ✓ Provide/Coordinate Technical Experts to support AIAA Education Activities

#### 3.3.8 Student Activities Subcommittee

Activities may include:

- ✓ Sponsor and conduct student competitions:
  - Design competitions
  - Student papers
- ✓ Coordinate Committee resources to support AIAA Student Activities and Events
  - Competition Judges
  - Paper Reviewers

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- Professional Mentors
- ✓ Develop and disseminate Educational Materials
- ✓ Sponsor Student Scholarships
- ✓ Engage Student Chapters local to Conference venues
- ✓ Provide liaison with the AIAA Education standing committee

#### 3.3.9 Standards Subcommittee

#### Activities may include:

- ✓ Review Standards in development and provide comments as appropriate
- ✓ Identify opportunities to serve Member/Industry needs by developing new Standards Committees can publish various levels of Standards through the AIAA Committee on Standards (CoS):
  - o Guide
  - Recommended Practice
  - Special Report
  - Standard
- ✓ Provide liaison with the AIAA Standards Executive Committee (a standing committee).

#### 3.3.10 Conference Subcommittee

Committees have an important responsibility for organizing and supporting technical meetings and conferences. These meetings and conferences typically involve other Committees and/or technical societies, and so significant coordination and groundwork are required.

The Conference Subcommittee supports all conference-related activities including:

- ✓ preparation of all conference approval documentation and coordination through TAD
- ✓ overall management and technical program content of conferences/workshops
- ✓ coordinating with other Committees and conference organizing groups for collocated meetings and/or jointly sponsored conferences and workshops
- ✓ sponsoring sessions/papers in the Committee's technical area at AIAA and other society conferences.

Additional details and expectations on conference planning:

- ✓ Conferences must be financially viable for AIAA
- ✓ Registration Fees will reflect the budgeted costs, e.g.
  - Equipment
  - Food and Beverage
  - Staff Support and Travel
  - Decorations
  - Venue specific
  - Conference Organizing Procedures and Policies are codified
  - AIAA Staff develops budgets, contracts facilities, coordinates support, and manages the activities – you must use this expert resource

# GAIAA.

# **Technical Activities Division**

#### 3.3.11 Public Policy Subcommittee

Through public policy activities, Committees can provide members with opportunities to influence national decision makers.

AIAA has a very active Public Policy Committee that requires Committee support to:

- ✓ Develop and communicate authoritative position papers on important policy issues
- ✓ Conduct workshops that present their findings to key public opinion leaders
- ✓ Provide timely information in response to breaking events and initiatives
- ✓ Coordinate expert testimony and information presented to Congress
- ✓ Foster relationships with the media and the public to give them a better understanding of how aerospace programs benefit the nation's economy, security, and technological growth
- √ Identify key public policy issues

## 3.4 Activities (Working and Focus Groups)

Many Committees create ad hoc groups to work on a specific topic. A working group is a focused team with a defined objective and life. They are meant to address timely subjects and can be created or deleted as the Committees wish. Working groups are affiliated and work through Committees. Focus groups differ in that they are only affiliated with Committees but do not necessarily report their activities and results through the Committee. An example of a focus group is the Turbine Engine Test Working Group (TETWOG) which is a specialty group of technical specialists that meets to share expertise and experience within their community. They are affiliated with the Ground Test Technical Committee (GTTC) but do not meet with the TC.

Some examples of working groups include:

- √ develop new standards or practices
- √ address specific problems in a Committee's discipline or program area
- ✓ develop a new Committee for an unrepresented technical area or program.
  - Authorization to begin development of a possible Committee is done through TAD. See Appendix 5 for more details.

Working groups should be sponsored by a Committee, chaired by a Committee member, and can be open to non-Committee and non-AIAA members as appropriate. These groups may meet during the year, or at conferences. Care should be taken that obsolete or ineffective groups are disbanded in a timely manner. Focus Groups should have at least one Committee member identified as a liaison.

Keys to working group success are:

- ✓ Have a clear objective and plan
- √ Identify a product
- ✓ Identify target audience
- ✓ Include key stakeholders from target audience

✓ Establish exit criteria so as to know when you're done

#### 3.5 Liaisons

Liaisons should be appointed by the Chair to other Committees or technical societies that have closely related interests. These focal points attend the related group's meetings (if possible), exchange meeting minutes, and report on significant activities.

Liaisons may help identify opportunities to enhance Committee activities through Joint Activities:

- ✓ Conferences/Technical Forums
- ✓ Working Groups on Standards, Public Policy, etc.
- ✓ Development of Short Courses
- ✓ Publications

#### 3.6 Committee Membership

Chairs have significant latitude and authority regarding membership and organizational structure. The Chair decides overall size\*, organizational representation, who is selected for membership, how the officers are selected, how the Committee is structured, and how assignments are distributed. Overall the operation of the Committee is within the discretion of the Chair. The following information is provided to help Chairs better understand these latitudes and authorities.

\* Chair selection of new members is often facilitated by a membership subcommittee. Membership of a Technical Committee shall be limited to a maximum of 50 people.

Sections 4.1 through 4.5 specifically address membership of TCs.

#### 3.6.1 Selecting New TC Members

In August of each year, the Institute solicits nominations for TC membership from a wide variety of sources including: the Board of Trustees, TAD, TC/IOC Chairs, Section Chairs, all AIAA Student Faculty Advisors, all AIAA corporate-member contacts, and various government agencies, administrators, and commands. Prospective candidates are asked to fill out the online nomination form from the AIAA website or submit a hard copy of the form to AIAA Headquarters.

Membership on a TC signifies that one is a volunteer agent for one's professional sector and organization. In accordance with the written endorsement from the nominee's management or parent organization, it is understood that each appointed member should travel nominally twice per year to participate in meetings and devote time to committee business with parent organization funding. International members may be unable to travel twice yearly due to the cost of travel and should be excused from this expectation if appropriate.

Chairs should consider their individual Committee's structure as well as its short- and long-term needs when selecting new members. Member nomination forms provide the Chair with a good indication of the individual's background and experience. However, if the nomination form does not give enough information to make a decision, the Chair should contact the individual directly to find the information needed. Also, if possible, the Chair should describe the various positions on the TC for which the new member is being considered and ask the individual to suggest the areas where he/she can be of greatest value and/or benefit to the committee.

AIAA Headquarters provides TC Chairs with a complete package of application forms for prospective nominees in November each year. In selecting new members, the Chair should maintain a balance covering work affiliation (government, industry, and academia), professional interest/experience, geographical location, age, gender, etc.

By 31 January of each year, Chairs must submit a recommended roster of TC members (including the new nominees selected) to AIAA Headquarters along with a copy to their Deputy Director. Approval of each TC roster by the Deputy Director is required. By April of each year, AIAA Headquarters will send notification to all new members of their selection by mail.

The membership selection schedule is as follows:

- √ 1 August Call for nominations sent out by AIAA headquarters
- √ 1 November Nominations due back to AIAA
- √ 15 November Nomination packages sent from AIAA to TC chairs
- √ 31 January TC selection process complete and proposed rosters to Deputy Directors
  and HQ
- √ 30 April AIAA notifies new members

Please note: all new members should be advised that membership in AIAA is mandatory for all TC members and if they are not currently members of AIAA, they have 45 days to join after they are notified of their acceptance. If they do not join within 45 days, they must be removed from the TC. If they are AIAA members already, their membership must be in good standing. Chairs can request their TC Roster from AIAA Staff. TC members can join AIAA or renew their AIAA membership by calling customer service at 800.639.2422 or visiting the AIAA website at www.aiaa.org.

Chairs should also retain a copy of the TC nomination form for each member of the Committee.

#### 3.6.2 Membership

TCs are encouraged to include young professionals as part of Technical Committees. TC's are encouraged to broaden their membership by recruiting non–U.S. citizen AIAA members.

#### 3.6.3 Term of Membership/Renewal

Although the normally accepted term of membership on a TC is three (3) years for actively participating members, each member technically serves for three consecutive one-year periods. If a member actively participates on the committee, he/she should automatically be considered for a second and third one-year term of membership, provided AIAA affiliation has been maintained. Additionally, if a member elects to resign from the TC, the TC Chair may:

- ✓ Elect to remove the individual from the committee without replacement
- ✓ Accept a substitute representative from the same organization to continue for the remainder of the term (with voting or non-voting status established prior to acceptance).
- ✓ Accept a new member from the same organization to begin serving a new three-year term (provided the applicant submits a nomination form to AIAA Headquarters)
- ✓ Replace the individual with a new member from the package of application forms sent by AIAA Headquarters the previous November.

#### 3.6.4 Extended Assignments

Any member of the TC may be carried over on special assignment beyond the three-year term of membership at the discretion of the TC Chair and with the approval of the Group Deputy Director. An extended member is counted toward the 50 total membership maximum. This approach may be used when:

- ✓ The individual possesses a particular expertise critical to the TC's operation;
- ✓ The individual is working on a committee assignment that requires his or her knowledge and/or background;
- ✓ The individual is serving as Chair-elect after three years of service on the TC, and/or is serving as TC Chair.

Extended or special assignments may or may not require the member be a formal member of the committee. As an example, one may serve as a conference technical program chair for a conference and not be a committee member.

#### 3.6.5 Inactive Members

Volunteer organizations rely heavily on the enthusiasm and dedicated participation of its members. If Committee members become inactive for significant periods of time, chairs have the right and obligation to provide the member with the opportunity to reengage or be removed from the committee. Inactive members may be dropped during any period of their membership. In addition, members with an expired AIAA membership will be removed from the Committee if membership is not renewed.

# 3.7 Administrative Responsibilities

A variety of administrative activities are required as part of running Committees. A calendar of key events is presented in Appendix 6.

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#### 3.7.1 Annual Reports

Annual Reports are due to Directors by January 31st.

#### 3.7.2 Committee Funds

Any Committee may choose to have their funds held at AIAA Headquarters. AIAA Headquarters holds the funds in a specially designated custodial account. A separate bank account for each Committee's funds is not opened. Headquarters handles all the tax issues, accounting, paperwork etc. When the Committee needs a bill paid, the Chair sends a check request (by email; no verbal orders accepted) to the Staff Liaison who submits the information to AIAA's Accounting Team. Additional documentation (such as a W-9 Form, receipts, or an invoice from the vendor) may be requested before payment can be processed. AIAA staff can either mail the check to the vendor or back to the Chair. Checks can only be requested by the Chair and cannot be made out directly to the Chair.

The requests should go to the Staff Liaison.

Additional income can be submitted by sending the funds to Headquarters with a short explanation. Be sure to identify which Committee the funds are intended.

Committees do not get credited with interest on their funds. They also do not get charged any administrative or handling fees. Balance information will be sent by the staff liaison to the Chair, who may also request a balance or activity report at any time.

If someone wants to give the Committee a check, please have it made out to AIAA, or to AIAA [Committee Name]. Checks should be forwarded to the attention of TC Staff Liaison, AIAA, 12700 Sunrise Valley, Suite 200, Reston, VA 20191. If the check is made out only to AIAA, be sure to include the name of the Committee on the check or on the stub.

## 3.8 TAD Funds for Committee Special Projects

Operating funds are set aside for Committees to fund special projects. Requests may be made at any time, and need to be used by the end of the fiscal year, which occurs on September 30<sup>th</sup>. Allotments are made on a first-come, first-served basis at the discretion of the Directors and the TAD Chief. Funds not allocated by the end of the fiscal year will revert to the general operating fund – they may not be cashed to use at a later time.

Any Committee is eligible to apply for these funds, regardless of whether or not it has other sources of funding or whether or not it has other funds on hand. However, any Committee applying must have a charter on file with AIAA Headquarters, as well as an up-to-date roster.

There are several types of funding:

#### 3.8.1 Funding from Directors

Each Technical Group Director is given a specific allotment of funds. Committees apply to their Technical Group Director for funding. If the Director approves the request, he or she sends it to

headquarters for fulfillment. The money will be held for the Committee at AIAA headquarters until reimbursement or payment is made.

The Directors may fund all or only part of a request, at their discretion.

#### 3.8.2 Chief-Technical Funds

These funds may be used after the Technical Director has allocated all of the funds for his or her technical group. Requests must go through the Technical Director to the Chief-Technical and the Chief sends an approval form to the Staff Liaison for fulfillment. The Chief may elect to fund all or only part of the request.

#### 3.8.3 Suggestions on Obtaining Funding

Requests will generally be approved if:

- ✓ It is an event that supports/promotes:
  - o The mission of the Committee
  - Aviation/aerospace in general
  - Student-Committee interaction
  - Student-Industry interaction
- ✓ It is an outreach aligned with the Strategic Plan/Vision.
- ✓ It is an enhancement/improvement to an activity or event that requires funding beyond what is budgeted for that year

Requests will be turned down if:

- ✓ The funding is of personal benefit to any member or close relative of a member of the Committee
- ✓ Any funded activity would violate the AIAA Code of Ethics (located on the AIAA website)
- ✓ The funding request is for capital equipment (computers, projectors, etc.)
- ✓ The request is for a recurring/yearly expense

#### 3.9 Committee Activities

Committees use a wide range of activities and approaches to create value to the membership and keep group efforts vibrant. Listed below are examples and approaches that can be used.

#### 3.9.1 New Member Orientation Program

Before the first Committee meeting each year, the Chair should conduct an orientation program for new members. At this time, new members are provided access to Committee documentation (Guidebook, member biographies, membership composition summary, work assignments, contact list, calendar of events, latest Annual Report and Three-Year Plan, and minutes of the last meeting).

It is important to emphasize the benefits to the new members of being involved from the beginning. Have the new members volunteer for subcommittee assignments at the TC orientation program. Those who don't volunteer should be assigned to subcommittees before the conclusion of the orientation program so that they are involved and feel a part of the Committee. The Chair or Vice-Chair should give a presentation describing:

- ✓ AIAA operations and how the Committee fits into the national organization
- ✓ scope and principal areas of interest
- ✓ goals, objectives and Three-Year Plan
- ✓ membership selection process and requirements
- √ organizational structure and standing subcommittee responsibilities
- ✓ officer and subcommittee chair selection process and terms of office
- ✓ meeting attendance requirements and policy
- √ subcommittee assignments
- √ special assignments
- ✓ calendar of Events for the upcoming year

New members should leave the orientation briefing with a thorough understanding of how the Committee works and what is expected of them.

#### 3.9.2 Electing a New Chair

One of the responsibilities of a Chair is to preside over the election of his/her successor. The TC chair term is limited to two years, so a consistent and documented process for establishing a successor is a must.

Chair elections should be done by December or January of the year in which the Chair takes office (i.e., if the tour as Chair begins in May 2020, the Chair should elect his or her successor by December 2020 or January 2021). There are two reasons for this:

- ✓ It allows the Chair-elect to serve one and a half years as Vice-Chair (using the example above, the Chair-elect would serve from December 2020 to April 2022 as Vice-Chair before taking over as Chair in May 2022).
- ✓ The Chair-elect can participate in the Chair's Workshop typically held in January at the SciTech Forum and Exposition before taking on the responsibilities of Vice-Chair.

A typical calendar of events for elections would be:

- ✓ In May, the Chair-elect succeeds the current Chair who stays on the Committee as pastchair until the next Chair-elect cycle.
- ✓ Chair-elect is selected by vote in December or January of the first year of the Chair's tenure and takes the position of Chair-elect in the following May (serving one year as Chair-elect)

✓ This approach provides a year to prepare to be Chair (as Chair-elect) and during the
Chair's first year, the previous Chair is still on the Committee to provide support, offer
experienced backup, and answer questions.

An alternate approach used by some Committees is:

- ✓ First Meeting of the Election year Members advised that nominations are being accepted for the positions of Chair.
- ✓ End of September Nominations should be closed
- ✓ October/November ballot prepared by the steering subcommittee.
- ✓ December The election can take place by written vote (distribute and collect ballots), oral vote (telephone), by email, or at a full Committee meeting (through either secret or open ballots).

#### 3.9.3 Guidebook

In order to assist members in performing assignments more efficiently, many Committees have developed and maintain a guidebook. The guidebook provides background and reference information necessary to carry out assigned functions effectively. The guidebook also serves as a "corporate memory." Its aim is to:

- ✓ Specify the scope and goals of the Committee
- ✓ Document the organization
- ✓ Record of previous efforts to convey to all members (but especially new members) the breadth and depth of the Committee.

The guidebook typically contains a description of:

- ✓ AIAA organization and structure
- ✓ Objectives, goals, approach, and structure
- ✓ Programs and initiatives
- ✓ Membership (including name, title, address, fax, home, and work telephone numbers)
- ✓ Standing subcommittee assignments and responsibilities
- ✓ Duties and responsibilities related to specific task assignments
- ✓ Annual events
- ✓ Conference/meeting requirements and guidelines
- ✓ Annual subcommittee reports
- ✓ Annual Report and Three-Year Plan
- ✓ Copies of minutes from the previous two meetings
- ✓ Copies of minutes from the previous two steering subcommittee meetings

Developing and maintaining a guidebook (web or electronically-based) is typically a publications subcommittee task. Guidebooks should be updated regularly.

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#### 3.9.4 Member Biographies

Chairs should ask each member of the Committee to provide a one-page biographical sketch (including a picture) that can be compiled and provided to members at the first full. This will help better acquaint members and provide the Chair with additional information supporting Committee task assignments such as chairing technical sessions or subcommittee assignment.

#### 3.9.5 Member Upgrades

Chairs should encourage members to upgrade their AIAA membership at the appropriate times, with the aid of the Membership subcommittee. Generally, the Secretary should identify a member's AIAA status on the Committee Roster, which provides for potential references that are required to advance into Associate Fellow, Fellow, and Honorary Fellow membership grades.

Appendix 7 contains descriptions of the member grades and qualifications.

#### **4** Points of Contact

Chairs should keep in mind that the Deputy Director of their group is the primary link between TAD and their Committees. The Deputy Director assures that there are no Committee conflicts with respect to AIAA policies, bylaws, plans, and schedules. He/she occasionally attends Committee meetings, assists the Chair whenever requested and/or required, coordinates inter-Committee activities, and represents the Committee on TAD.

For staff contacts, please visit the AIAA website, click on Contact Us and the Staff Directory. The Headquarters Staff is there to assist you, so do not hesitate to contact them if you need help or information.

#### **Headquarters phone number:**

703.264.7500 or (toll-free, U.S. only) 800.639.2422 (800.NEW.AIAA)

#### **Staff Liaison for Technical Activities:**

Angie Lander Senior Program Manager, Technical and Integration Communities 703-264-7577 angiel@aiaa.org

Mali Goebel Member Communities Specialist 703-264-7548 malig@aiaa.org

# **Appendix 1. Making Committees Work**

#### **Making Committees Work**

#### How to get things done and enhance your career

BY CARL SELINGER

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The committee meeting was supposed to start at 6 p.m. and last 2 hours. But the meeting didn't start until 6:15, and it reached the third hour before we'd gotten past the second item on the agenda. The conversation kept wandering off track, and side conversations broke out. As one colleague said to me after a similarly frustrating marathon meeting: "Well, that's three hours of my life that I won't have anymore."

Sound familiar? Clearly, this is not the way to run a committee, whether at work or when volunteering for activities in school, professional societies such as the IEEE, or the community. There must be a better way—and there is. Early in my career I was fortunate to read an article entitled "How to Run a Voluntary Committee Without Being Lynched," written by a traffic engineer named Paul Box, and since then it has framed the way I participate in and chair committees—to which I've added a few things I learned on my own. In properly run committees, you have the opportunity to learn management skills and make contacts that can boost your career, and get something done as well. Here are some ways of improving the effectiveness and satisfaction of working on a committee.

TREAT COMMITTEE WORK AS REAL WORK. Why is it that committees often fail to work? One underlying reason is that people tend to regard a committee as different from work, perhaps even an opportunity to relax a bit. This is especially true with volunteer committees. But you're there to accomplish something—not to twiddle your thumbs. So be businesslike: set agendas and follow them. Get people to accept responsibility for tasks and then hold them accountable for getting them done. Follow-up is crucial: make sure action items are sent around quickly after meetings, so all members (including those who couldn't attend) know what they are supposed to do, whom to contact if there are delays, and so on. Peer pressure is a great motivator—sometimes the only motivator—since additional compensation or recognition is not always available for committee work.

**THE CHAIR SHOULD MANAGE**—and not end up doing all the work. The chair of the committee needs to manage and lead, and people will look to the chair to do that. It's not good if the chair starts taking on a lot of the work because she or he feels uncomfortable asking members to do things; he or she will soon burn out and lose the other people who joined and expected to be involved. The chair must learn to delegate.



Early in my career I led a professional society committee that had to prepare a report on various transportation issues. There were about 15 corresponding members on the committee (I never did meet any of them), so, as chair, I split up the work into about six or seven discrete tasks and assigned each task to two different members, the idea being to have a better chance of getting a response from at least one person. If both responded, then I melded their reports. This proved effective, because only about half of the members responded and I was able to fashion their responses into a publishable document.

**TREAT COMMITTEES LIKE TEAMS**. Make sure everyone understands the big picture—what the committee is doing and why—and identify a role for each person, if possible. If you're the chair, think about how to organize efforts and divvy up tasks so that everyone has meaningful work to do. Give people recognition for their efforts. Write thank-you notes regularly, send memos or letters to people who deserve special recognition for a job well done, and send copies to their bosses or others to share that recognition. Does this really make an impact? You bet! I learned once that a thank-you letter I sent to a committee member ended up taped to his **refrigerator at home.** 

**GET ACTIVE MEMBERS.** Nothing is more important than having active and capable people on committees. Such people do not grow on trees; sometimes you have no control over who volunteers (or is volunteered) for the committees. But when you do have control, don't be shy in soliciting volunteers. Go up to people at professional society meetings, find them in the company cafeteria, or phone or e-mail them and ask if they want to be involved. Tell them that it will involve some real work, that it will be for a good cause, and that it will be interesting and fun (and then make it come true).

**GET RID OF DEADWOOD**. Keep the enthusiasm and vigor of the committee by asking unproductive or no-show members to resign. How can you do this diplomatically? If people are not showing up for meetings or responding to messages, you need to tell them: "You must be very busy these days, as you haven't been able to attend recent meetings or do what you said you would do, so I'll understand if you don't have the time to participate in the committee." This will smoke them out, and either they will resign or get energetically involved again. By the way, do not ask them if they want to stay on the committee, because they will feel guilty and say yes, which solves nothing.

**INFORMALLY IDENTIFY FUTURE** committee leaders. If you are chairing a long-lived committee, as is common with professional societies, it's important to realize that you won't be chair forever. You need to do succession planning to keep infusing life into the committee. Don't create a forbidding amount of work so that no one will want to take over. Instead, identify current members who might be willing and able to take over and talk to them. I once headed a professional society committee of about 10 members, and here's how I orchestrated the process to select my successor: after I identified three people who were the most suitable to be future chairs, I reorganized the committee's work into three areas. After the committee agreed to this at the next meeting, I then said that there should be three cochairs, one to cover each area of activity, and asked for volunteers. Of course, the three people I had in mind volunteered. A year later I left the committee, and one of those three naturally took over as chair.



Committees *can* work—but only if you put in the effort to *make* them work. Volunteering for committees is a great way to get involved in businesses and in professional societies. You'll learn new skills and subjects and rub elbows with people you might not normally get a chance to work with. This can open the door to potential mentoring relationships and, yes, job offers. On one of my earliest professional society committees I got to work with several leaders in the field whom, as a neophyte professional, I never would have gotten the opportunity to meet otherwise. And, to my surprise, a few years later I was named chair of that committee and thus learned many leadership skills at an early age. Making committees work enables good things to happen, both in accomplishing the work of the committee and in giving your career a boost.

#### ABOUT THE AUTHOR

✓ Contributing editor CARL SELINGER, an aviation and transportation engineering consultant in Bloomfield, N.J., has given his seminar on the soft nontechnical skills, "Stuff You Don't Learn in Engineering School," throughout the United States. His book of the same title has been published by Wiley/IEEE Press. For more information, go to http://www.carlselinger.com/ seminars.html.

# **Appendix 2. TC Assessment Tool**

The TC Assessment tool was created to assist in self assessments of general health and wellness of Committees. The tool:

- ✓ Is based upon best practices and TAD guidelines for Committee operation
- ✓ Is used to encourage introspection about the effectiveness of your Committee
- ✓ Supports planning to focus on areas of interest to your Members
- ✓ Includes Guidelines and Expectations for Committees:
  - Mandatory or minimum requirements for a healthy Committee are identified in the 'Min Regmts for TC' worksheet, included in this assessment file
  - No Committee is expected to conduct all of the suggested activities, however a number of rewarding activities can be supported simultaneously with the enthusiasm and engagement of all the members

Your Group leadership (Deputy Directors and Director) can assist you in evaluating possible Committee changes.

The tool (TAD\_Committee Self Assessment\_V03) can be requested from Directors or Deputy Directors.

Various levels of requirements (extracted from the tool) are illustrated below.

Mandatory Requirements:

Item	Associated Metric(s)
Committee <sup>1</sup> Holds Two or More Face-to-Face Meetings Each Year	# of Meetings Attended by 50% or Higher of Membership
% of Members Attending Face-To- Face Meetings	% of Members Attending
% of Committee Membership Turned Over Each Year	% Turnover
Committee Website is Up-to-Date	Y/N
Committee submits an Annual Report that provides the required information	Y/N
TC annually submits an AA Highlights Article	Y/N
Chair-Elect attends Chair Training the year prior to becoming Chair	Y/N



# Minimum Requirement for Healthy Committee:

ltem	Associated Metric(s)
Committee Membership - Representation Reflects Cross Section of Industry, Government, and Academia	Ratio of Organizations (Industry/Gov't/University)
Committee Membership - Quantity	20+ Minimum Requirement for Healthy Committee (30+ Nice to Have)
Non-Participating Members are Not Renewed for Membership (regardless of term)	% Dropped
Committee Members Contact Information and Committee Assignments Up-To-Date and Readily Available to all Members	Y/N
Chair Selection Process in Place and Committee is Up-to-Date in Identifying Next Chair (ensuring adequate transition)	Y/N

Nice to Have, but at Least One is Minimum Requirement for a Healthy Committee:

Item	Associated Metric(s)
Sponsors Annual/Bi-Annual Conference (Major Committee Activity³)	# of Conferences, # of Papers, # of Sessions, Average # of Attendees Per Session, % of Committee Participating
Sponsors National Award (Major Committee Activity)	Average # of New Nominees (non-TC Members), % of Committee Participating
Develops AIAA Standard (Major Committee Activity)	# of Standards in Work and Average Time to Develop a Standard, % of Committee Participating
Develops Educational Tools/Kits or Sponsors Scholarship (Major Committee Activity)	# of Educational Products or Scholarships, % of Committee Participating



Conducts Student Paper/Design Competition (Major Committee Activity)	# of Students/Universities Participating , % of Committee Participating
Develops AIAA Position Paper (Major Committee Activity)	# of Position Papers or Public Policy Key Issues Developed, % of Committee Participating
Develops Book, Dedicated Journal/Aerospace America Issue, or other Publication (Major Committee Activity)	# of Manuscripts Published by the Committee, % of Committee Participating
Sponsors Major AIAA Event (e.g. Design, Build, and Fly Competition)	# of Major Events Sponsored, % of Committee Participating
Participates in Workforce or Professional Development Activities (Major Committee Activity)	# of Activities, % of Committee Participating

# **Appendix 3. Sample Committee Charter**

AIAA NUCLEAR AND FUTURE FLIGHT PROPULSION TECHNICAL COMMITTEE OBJECTIVES AND PROCEDURES

#### 1.0 INTRODUCTION

The Nuclear and Future Flight Propulsion Technical Committee (NFFPTC) has interests in conducting activities towards the understanding of physical mechanisms and associated technologies that lead to the implementation and design of nonchemical, high energy propulsion systems, other than electric thruster systems. Propulsion systems included are: nuclear thermal propulsion, gas core, fusion, antimatter, beamed energy, solar sails, tethers and electromagnetic launchers.

As currently structured, the NFFPTC membership consists of members with a broad representation from the advanced propulsion community that encompasses industrial organizations, governmental organizations, universities and organizations representing several nations.

The purpose of the NFFPTC is to act as an open forum regarding the current status and emerging technology needs for nuclear and future flight propulsion applications.

#### 2.0 OBJECTIVES

The objectives of the NFFPTC are:

- A. To ensure and maintain an active, continuous membership on the NFFPTC, which is representative of the advanced propulsion community.
- B. To coordinate with the appropriate organizations and agencies to determine the future needs for nuclear and future flight propulsion systems.
- C. To encourage and support technical interchange between the appropriate government agents, universities and contractors to advance nuclear and future flight propulsion technology.
- D. To encourage and support the implementation and improvement of nuclear and future flight related propulsion education.

At any time the NFFPTC can amend its committee objectives and procedure charter with approval by a majority of its membership.

#### 3.0 ORGANIZATION

The NFFPTC organizationally consists of three officers and six subcommittees. The officers are the Chair, the Vice-Chair, and the Treasurer. The subcommittees are:

- A. Membership
- B. Awards
- C. Propulsion Conference
- D. External Affairs
- E. Education

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#### F. Publications

#### 4.0 SUBCOMMITTEE RESPONSIBILITIES

The responsibilities of each of the subcommittees are:

#### A. Membership

The NFFPTC membership subcommittee shall update and maintain NFFPTC membership listing with regard to affiliation, position, address, phone number, fax number, and year of selection to the NFFPTC; update and maintain subcommittee assignment listings; transmit communications concerning membership application forms, ground rules, supervisory approval forms and termination dates; provide letter of welcome for new NFFPTC members, letter to remind of commitment to responsible manager and letter of appreciation for outgoing members; nominate NFFPTC members for the position of Chair, Vice-Chair, and Treasurer, as well as respond to requests for AIAA nominations for various functions as requested.

#### B. Awards

The NFFPTC awards subcommittee shall establish and administer award programs in the nuclear and future flight propulsion field to acknowledge major technical, academic, and professional contributions in this area, as required. This subcommittee shall also participate in the selection of the AIAA Wyld Propulsion Award recipient, on a yearly basis, as well as respond to requests for AIAA awards as requested.

#### C. Propulsion Conference

The NFFPTC propulsion conference subcommittee is to organize Nuclear and Future Flight Propulsion sessions for the annual Joint Propulsion Conference (JPC).

#### D. External Affairs

The NFFPTC external affairs subcommittee shall prepare and publish articles, as well conduct public relation activities to promote the advancement of nuclear and future flight propulsion technology and technical committee membership work in this area. Activities to be undertaken by this subcommittee includes producing yearly, the Highlights of Nuclear and Future Flight Propulsion Article published in *Aerospace America*, as well as the NFFPTC Annual Report, at a minimum.

#### E. Education

The NFFPTC education subcommittee shall promote and conduct appropriate aerospace education activities (short courses, home study programs, video, conference seminars, for example) that can increase the education level of the public, students (pre-college and college), policymakers, and professionals interested in the nuclear and future flight propulsion technology area, as required. This subcommittee shall initiate courses for the working engineer to improve technical proficiency in nuclear and future flight propulsion. The subcommittee will also act as a liaison between the AIAA Headquarters Education Committee and the NFFPTC to improve the awareness and understanding of nuclear and future flight propulsion systems and related technologies.

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#### F. Publications

The NFFPTC publications subcommittee is responsible for soliciting papers for publication in AIAA journals, as well as provides technical reviewers for such journals upon request. Additionally, this subcommittee shall develop and promote publications such as a newsletter and technical AIAA books/materials to communicate the technical work associated with the NFFPTC and the nuclear and future flight propulsion systems area, in general.

**4.0** AIAA NUCLEAR AND FUTURE FLIGHT PROPULSION TECHNICAL COMMITTEE - 3 YEAR PLAN (JANUARY 1998 TO JANUARY 2001)

This plan describes the activities of the Nuclear and Future Flight Propulsion Technical Committee (NFFPTC) for the period from January 1998 to January 2001.

#### A. MEETINGS

Regular meetings of the NFFPTC are held twice yearly, at the Annual Symposium on Space Nuclear Power and Propulsion, held in Albuquerque, New Mexico, and at the AIAA/SAE/ASME/ASEE Joint Propulsion Conference. Other special meetings may be called as required.

#### **B. ACTIVITIES**

The principal activities of the NFFPTC subcommittees are presented in the Subcommittees Responsibilities Section of the NFFPTC Objectives and Procedures Charter.

#### C. STRATEGIC PLANS

In addition to the routine business of the committee, a long-range plan has been established to improve the efficiency of NFFPTC operations and to increase the impact of the NFFPTC on the community at large. The objectives are given below for the Chair and each of the subcommittees:

#### D. Membership

Evaluate membership relative to representation of the nuclear and future flight propulsion community (industry, government and academic). Solicit membership where necessary.

- ✓ Prepare and issue a NFFPTC Membership Handbook.
- ✓ Increase associate representation on NFFPTC by two members.

#### E. Awards

- ✓ Implement an AIAA NFFPTC "Best Paper" Awards Program.
- ✓ Participate in the Wyld Award Committee.

#### F. Propulsion Conference

- ✓ Organize a large number of high-quality JPC technical sessions.
- ✓ Negotiate with ASME to reduce overlaps in JPC sessions.

#### G. External Affairs

- ✓ Prepare NFFPTC highlights article in *Aerospace America* each year.
- ✓ Prepare a nuclear and future flight propulsion systems technical assessment article in Aerospace America within the next 2 years.
- ✓ Develop and maintain a high-quality nuclear and future flight propulsion systems web site

#### H. Education

- ✓ Prepare a TBD short course for JPC.
- ✓ Prepare and present useful nuclear and future flight propulsion systems
- ✓ Information materials for pre-college students and the public, in general.

#### I. Publications

- ✓ Increase the number and quality of AIAA technical journal articles in the nuclear and future flight propulsion systems area.
- ✓ Create and maintain an AIAA NFFPTC newsletter.

# Appendix 4. Aerospace America Highlights Article

Each year in the December issue of *Aerospace America* (AA), Committees publish an article summarizing the accomplishments and setbacks of their technical specialty during the calendar year. The analytical twist and incisive style of each piece must show that the authors are the profession's foremost experts telling it like it was — good, bad, and why. The following guidelines are provided to help in preparing a "Highlights Article":

- ✓ Begin soliciting inputs for the article from subcommittee members in June.
- ✓ Solicit information from the foremost industry and government organizations in your field. Be sure to include two color photographs that represent the year's achievements.
- ✓ Request that all inputs be submitted by the middle of July.
- ✓ Designate the committee's clearest and most concise writer to follow up with sources and compile the first draft.
- ✓ Follow the instructions sent to you by AA staff for manuscript preparation.
- ✓ Review the draft and make sure analytical and interpretive phrases and sentences are included as appropriate.
- ✓ If time permits, distribute the draft to selected committee members (Chair, Vice-Chair, etc.) and invite review and comment.
- ✓ Make sure the article has captured the committee's feelings about how the Committee's specialty area performed during the past year.
- ✓ Send the final draft, two photographs, and the designated writer's name, address and telephone number to the Production Editor, *Aerospace America*, by 1 September

The "Highlights" are approximately 600 words (5,000 characters) double-spaced to occupy one page in the magazine and 1,300 words (10,000 characters) for a two-page article. TAD has established these limits. All pictures and technical content must be cleared for public release prior to submission and no line art, charts, or tables are to be included.

(A word of caution: *Aerospace America* sets and strictly adheres to the above requirements on article length. Editing of the article to meet length restrictions will be done, either by the Committee or by the *Aerospace America* editorial staff. It is strongly suggested that Committees edit their own articles to the specified length to minimize problems.)

Remember: these articles are to reflect this year's activity in a particular discipline. They are NOT reports on committee activities or prognostications of future events. The magazine staff will edit all articles.

In general, the Committee's designated writer will have one or two days in which to review the galleys prepared by the magazine staff. Once the galleys are prepared, nothing can be added without compensatory deletion.



This article gives each Committee the opportunity to showcase its specialty, and all Committees are expected to participate in the Highlights issue.

# **Appendix 5. Starting a New Technical Committee**

Technical Committees (TCs) generally start as a sub-committee of an existing TC, as a Working Group (WG), or as an Integration and Outreach Committee (IOC). Once established with a clear scope, charter, and active members, a group may propose a new Technical Committee.

In order to establish a new TC, the following must be demonstrated:

- ✓ No current TC adequately covers the subject area.
- ✓ There is a significant community that will continue to support this technical area.
- ✓ The group is well organized and has a plan for the future (e.g., clear scope and/or charter, established leadership to start the committee)

If the subcommittee, working group, or IOC wishes to propose a new TC, please identify a New TC Point of Contact (POC) that will follow these steps:

- 1. Contact the TAD Group Director of the group within which your TC would likely reside, the Technical Integration Subcommittee (TIS) Chair, and/or the TAD Chief. Notify them of your intent to propose a new TC. Provide evidence that the above criteria are met.
- 2. If the TAD Executives (TAD Chief, Group Directors, and TIS Chair) agree that the above criteria are met, the TIS Chair will work with you to develop a timeline for the new TC proposal review and approval.
- 3. The new TC POC develops a New TC Proposal briefing in the provided template.
- 4. The TAD Executives review the New TC Proposal briefing and provide comments to the New TC POC.
- 5. If approved by the TAD Executives, the TIS Chair sends the New TC Proposal briefing to the current TC Chairs for review and comment. At least two weeks should be allowed for review and comment.
- 6. The New TC POC dispositions comments received from the current TC Chairs.
- 7. The TAD Executives review the comment dispositions and make a recommendation on presenting the New TC Proposal to the AIAA Council of Directors.
- 8. The TAD Group Director of the group where the new TC will reside will present the New TC Proposal to the Council of Directors (note: the TAD Group Director may ask the New TC Proposal POC to present the proposal). The Council of Directors votes to approve or reject the New TC Proposal.
- 9. The New TC is active immediately upon approval by the Council of Directors.

Depending on how long it takes to establish a viable community, this process can take anywhere from a few months to two years. This timeline ensures that there truly is a need for a new TC.

# **Appendix 6. Committee Calendar of Events**

AIAA TC Committees operate on a 1 May to April 30 calendar year.

1 May - Start of annual year for Committees and new terms begin for TC chairs and members.

TAD meets in May.

**June -** Committees should by now have a designated author for the *Aerospace America* Highlights Issue. Deputy Directors and Directors collect Committee reports for next TAD meeting.

**1 August** - TC Nomination period begins. AIAA Headquarters sends out nomination packages to all Committee chairs, members of TAD, members of the Board of Trustees, Section chairs, faculty advisors, corporate contacts, etc.

TAD meets in August or September.

**September** – Highlights articles are due in September 1 to *Aerospace America's* managing editor.

**October** – Issue of *Aerospace America* where a TC nomination form appears.

**1 November** – Nomination period closes. AIAA Headquarters sends all nominations received to each TC along with a current roster for correction and the annual report format.

**December** – Highlights issue of *Aerospace America*. Deputy Directors and Directors collect Committee reports for next TAD meeting.

**January** – Chair training and workshop session is held at the SciTech Form and Exposition. TAD meets at this conference.

- **31 January** Corrected rosters for the following year are due; Committee annual reports are due to Deputy Directors.
- **15 February** Annual reports are due from Directors to TAD Chief.
- **30 April** End of term for Committees.

# **Appendix 7. AIAA Membership Grades and Qualifications**

Refer to www.aiaa.org for additional membership details.

#### 1.0 ASSOCIATE MEMBER

Persons interested in the development or application of aeronautics and astronautics.

#### 2.0 MEMBER

Persons who have achieved a bachelor's degree in science or engineering or equivalent qualifications through professional practice.

#### 3.0 SENIOR MEMBER

Individuals who have demonstrated a successful professional practice in the arts, sciences, or technology of aeronautics or astronautics for the equivalent of at least eight years ... or who have at least eight years of continuous professional membership in AIAA.

#### 4.0 ASSOCIATE FELLOW

Individuals who have accomplished or been in charge of important engineering or scientific work ... or have done original work of outstanding merit ... or have otherwise made outstanding contributions to the arts, sciences, or technology of aeronautics or astronautics. Nominees must be Senior Members with at least 12 years of professional experience (four years of post-graduate studies may be included, if applicable). Three AIAA member references with the standing of Associate Fellow, Fellow, or Honorary Fellow are required. Nomination forms are due by 15 April; references are due by 15 May. Newly elected Associate Fellows receive a certificate and lapel pin and are honored at the Associate Fellows Dinner held in conjunction with the Aerospace Science Meeting and Exhibits each January.

#### 5.0 FELLOW

Individuals with distinction in aeronautics or astronautics and who have made notable valuable contributions to the aerospace arts, sciences, or technologies. Nominees must be Associate Fellows. Three AIAA member references (of specific AIAA member grades) are required. Nomination forms are due by 15 June; references are due by 15 July. Newly elected Fellows receive a certificate and lapel pin and are honored at the Aerospace Spotlight Gala in May.

#### 6.0 HONORARY FELLOW

Individuals of eminence in aeronautics or astronautics distinguished by long and highly contributive careers in the aerospace arts, sciences, or technologies. Nominees must be Fellows. Nomination forms are due by 15 June; references are due by 15 July. Newly elected Honorary Fellows receive a certificate and lapel pin and are honored at the Aerospace Spotlight Gala.

#### 7.0 HONORARY MEMBER

Individuals of distinction who are associated with aeronautics or astronautics. Individuals who receive this special honor have been elected and approved by the AIAA Board of Trustees.