



## AIAA Survivability Technical Committee Charter

Version	Revision date	Revisions Made by
00	May 1989	Robert E. Ball
01	13 September 1998	
02	09 November 2002	Ameer G. Mikhail
03	15 July 2014	Jaime J. Bestard
04	01 May 2018	Adam E. Goss
05	17 January 2024	Steven R. Broussard
06	02 February 2026	Adam E. Goss

### 1. Committee Name

Survivability Technical Committee (SURTC)

### 2. Scope

#### 2.a SURTC Overview

Founded in 1989 by Dr. Robert E. Ball with the help of Mr. Dale B. Atkinson, Mr. Nikolaos Caravasos, Dr. Lloyd H. Smith, Mr. John Vice, and Dr. Vincent Volpe, the SURTC was created to promote the development of survivability as a design discipline for both air and space systems. It is composed of a diverse working group of professional members from academia, industry, and government representing the aircraft (fixed and rotary wing) and spacecraft communities. Its members provide subject matter expertise in diverse applications of the survivability discipline. The embodiment of the SURTC contributions to the discipline has been the 1985 publication by Dr. Robert E. Ball, an AIAA Fellow, of “The Fundamentals of Aircraft Combat Survivability: Analysis and Design” as part of the AIAA Education Series, followed by its second edition in 2003, and third edition in 2025.

#### 2.b SURTC Charter

The SURTC was established in 1988 and officially started on May 1st 1989 with the following charter:

To promote the development of survivability as an aerospace design discipline, including both the assessment (analysis and testing) of survivability and the development of technologies to improve survivability for fixed and rotary-wing aircraft and space systems. Aerospace survivability refers to the capability of a system to avoid and/or withstand hostile environments, manmade and otherwise (e.g., orbital debris, micrometeorites, bird strike). Susceptibility and vulnerability are the two pillars of survivability. Susceptibility is the inability of an aerospace system to avoid the hostile mission environment. Vulnerability is the inability of an aerospace system to withstand the man-made hostile environment. Other essential elements of survivability are crashworthiness and reparability (i.e., the ability to rapidly repair a damaged system). Aerospace survivability addresses threats that include weapons encountered in



combat, adverse climatic conditions, and other environments hostile to an aerospace system (natural and manmade).

#### *2.c SURTC Mission*

The SURTC mission is to promote the development of survivability as an aerospace design discipline, including both the assessment (analysis and testing) of survivability and the development of technologies to improve survivability for fixed and rotary-wing aircraft and space systems.

#### *2.d SURTC Vision*

The SURTC aims to be a leader in the development of the aerospace survivability discipline for AIAA, the survivability, and the aerospace communities at large.

### **3. Governance**

The SURTC falls under the Aerospace Design and Structures Group (ADSG) within the AIAA's Technical Activities Division (TAD). TAD supervises all technical activities of the Institute, including national meetings, educational seminars, and technical inputs to all other AIAA activities. Its purpose is to verify that all such activities are appropriate and in the best interest of the AIAA membership, and to suggest the generation of new initiatives in the same vein.

### **4. Roles and Responsibilities**

*4.a.* SURTC organizes survivability sessions at AIAA Conferences (SciTech and Defense forums) to promulgate developments and foster collaborative research in the survivability discipline. The committee also supports publications in the AIAA Aerospace America magazine, the development of specifications and handbooks, academic competitions for aircraft survivability design, and the publication of position papers on topics of interest to the community.

*4.b.* In order to achieve its vision and comply with its mission, the SURTC will:

- I. Continue to provide venues to network and cultivate innovative solutions to survivability issues through the sponsorship and active recruiting of contributions to relevant symposia and scientific publications;
- II. Continue to promote excellence in survivability through the management and promotion of the AIAA Survivability Award, nominations for AIAA Membership upgrades, and other recognitions; and
- III. Develop professional development activities to maintain and grow the professional cadre of survivability scientists and engineers.

*4.c.* In 1993, the committee established the AIAA Survivability Award and since then has been responsible for its management, presenting a biennial award to recognize outstanding achievement or contribution in the design, analysis, implementation and/or education of survivability in aerospace systems. In June 2024, the award was renamed to the Atkinson-Ball Survivability Award to honor Mr. Dale B. Atkinson and Dr. Robert E. Ball, the principal founding members of SURTC with commitment to excellence in Survivability.



## 5. Leadership

This section delineates roles and responsibilities of officer positions in the committee, how each is elected, and the term of each position. An organizational chart is provided in Section 6.

### ***Chair***

The Chair, having previously served as a Vice-Chair, serves for a two-year term beginning on 1 May of the first year and ending on 30 April of the second year. The responsibilities of the Chair include:

- Management and supervision of all SURTC activities;
- Primary liaison between the SURTC, the TAD, and AIAA;
- Overseeing the election of the next Secretary;
- Starting and/or ending the charters of subcommittees with the consent of the SURTC;
- Approval and submission of annual report;
- Approval of all official SURTC publications;
- Nomination of Subcommittee Chairs and Subcommittee participants as well as other SURTC Officers;
- Recruitment of SURTC members;
- Maintaining a strategic vision for the SURTC;
- Planning, organizing, and chairing SURTC activities.

### ***Vice-Chair***

The Vice-Chair, having previously served as Secretary, serves for a two-year term beginning on 1 May of the first year and ending on 30 April of the second year. The responsibilities of the Vice-Chair include:

- Management and supervision of all SURTC activities in the absence of the Chair;
- Review of all official SURTC publications;
- Recommendation of Subcommittee Chairs and Subcommittee participants as well as other SURTC Officers to the Chair;
- Recruitment of SURTC members;
- Planning, organizing, and chairing SURTC activities in the absence of the Chair.

The Vice-Chair can delegate some responsibilities to up to two officers that do not hold other SURTC positions.

### ***Secretary***

The Secretary is elected by the SURTC and serves for a two-year term beginning on 1 May of the first year and ending on 30 April of the second year. The Secretary pledges a six-year commitment to the SURTC in order to rotate to Vice-Chair subsequent the end of the two-year term as Secretary, and to Chair subsequent the end of the two-year term as Vice-Chair. The responsibilities of the Secretary include:

- Recording, publishing, and distributing the minutes and action items for all SURTC meetings;



- Approval and submission of yearly SURTC roster;
- Drafting a SURTC annual report;
- Making recommendations to the Vice-Chair and Chair regarding the composition of the SURTC in order to focus recruitment efforts;
- Maintaining an annual calendar of events, deadlines, and configuration control of the SURTC SharePoint.

The Secretary can delegate some responsibilities to up to two officers that do not hold other SURTC positions.

#### ***Executive Steering Subcommittee Chair***

The Executive Steering Subcommittee Chair, having previously served as Chair, serves for a two-year term beginning on 1 May of the first year and ending on 30 April of the second year. The responsibilities of the Executive Steering Subcommittee Chair include:

- Advising the Secretary on the development of the annual report;
- Identifying and raising ad hoc issues for the SURTC to consider;
- Supporting the Chair in the planning and organizing of SURTC activities as required.

The Executive Steering Subcommittee Chair is supported by up to four advisors that do not hold other SURTC positions. All Executive Steering Subcommittee advisors are appointed by the Executive Steering Subcommittee Chair and serve for the same term. All Executive Steering Subcommittee advisors provide ad-hoc counsel and recommendations to maintain the long-term continuity of the SURTC.

#### ***Deputy (Executive Steering Subcommittee)***

The Executive Steering Subcommittee Deputy Chair can substitute the Executive Steering Subcommittee Chair in his/her absence or upon request.

#### ***TC Liaisons***

Technical Committee Liaisons are appointed by the Vice-Chair and serve for the same term as the Vice-Chair. Liaisons help identify opportunities to enhance Committee influence through joint activities with other technical committees and/or organizations, such as:

- Conferences / Technical Forums
- Working groups on Standards, Public Policy, etc.
- Short course development
- Publications
- Outreach / STEM / student competitions

#### ***Rules & Bylaws Officer***

The Rules and Bylaws Officer is appointed by the Vice-Chair, serves for the same term as the Vice-Chair, and supports the Vice-Chair by codifying committee rules and maintaining the bylaws.



### ***Membership Officer***

The Membership Officer is appointed by the Secretary, serves for the same term as the Secretary, and supports the Secretary by maintaining a membership roster and recommending AIAA membership upgrades.

### ***Social Media Officer***

The Social Media Officer is appointed by the Secretary, serves for the same term as the Secretary, and supports the Secretary and the TC by maintaining the SURTC SharePoint, including its configuration management. This officer is also responsible for devising new ways to coordinate TC activities using SharePoint and/or social media outlets.

### ***Conferences Subcommittee Chair***

The Conferences Subcommittee Chair, also referred to as the AIAA Technical Discipline Chair (TDC), is elected by the SURTC and serves for a two-year term beginning on 1 May of the first year and ending on 30 April of the second year. The responsibilities of the Conferences Subcommittee Chair include:

- Planning, organizing, and conducting SURTC-sponsored sessions in AIAA conferences;
- Coordinating the AIAA co-sponsorship of non-AIAA survivability events;
- Arranging for SURTC representation on separate panels or sessions of other conferences;
- Reports on activities during survivability conferences (AIAA and otherwise).

The Conferences Subcommittee Chair is supported by up to four advisors that do not hold other SURTC positions. All Conferences Subcommittee advisors are appointed by the Conferences Subcommittee Chair and serve for the same term. The Conferences Subcommittee Chair can delegate some responsibilities to these advisors on an ad-hoc basis.

### ***Deputy (Conferences)***

The Conferences Subcommittee Deputy Chair can substitute the Conferences Subcommittee Chair in his/her absence or upon request.

### ***Awards Subcommittee Chair***

The Awards Subcommittee Chair is elected by the SURTC and serves for a two-year term beginning on 1 May of the first year and ending on 30 April of the second year. The responsibilities of the Awards Subcommittee Chair include:

- Managing the recruitment and evaluation of nominations and the selection of a recipient of the AIAA Survivability Award;
- Establishing new awards as required and developing and updating award guidelines for major AIAA awards;
- Working with the Secretary to encourage member upgrades to Honorary Fellow, Fellow, Associate Fellow, and Senior Member;
- Presenting service awards as appropriate.



The Awards Subcommittee Chair is supported by up to four advisors that do not hold other SURTC positions. All Awards Subcommittee advisors are appointed by the Awards Subcommittee Chair and serve for the same term. The Awards Subcommittee Chair can delegate some responsibilities to these advisors on an ad-hoc basis. All Awards Subcommittee advisors provide support in the development of award guidelines, in the evaluation and selection of award recipients, and provide advice when requested by SURTC members when preparing award nominations.

***Deputy (Awards)***

The Awards Subcommittee Deputy Chair can substitute the Awards Subcommittee Chair in his/her absence or upon request.

***Publications Subcommittee Chair***

The Publications Subcommittee Chair is elected by the SURTC and serves for a two-year term beginning on 1 May of the first year and ending on 30 April of the second year. The responsibilities of the Publications Subcommittee Chair include:

- Promoting and recruiting articles for survivability publications;
- Preparing a yearly article for the December issue of Aerospace America highlighting the achievements of the SURTC and the survivability community at large;
- Recruiting and submitting appropriate items for aerospace publications (e.g., journal articles).

The Publications Subcommittee Chair is supported by up to four advisors that do not hold other SURTC positions. All Publications Subcommittee advisors are appointed by the Publications Subcommittee Chair and serve for the same term. The Publications Subcommittee Chair can delegate some responsibilities to these advisors on an ad-hoc basis.

***Standards Officer***

The Standards Officer is an advisor of the Publications Subcommittee Chair and serves as a liaison with other AIAA committees, particularly the AIAA Standards Executive Council, the AIAA Director of Standards, and all other committees to ensure that survivability is addressed in AIAA and/or AIAA-sponsored standards. Other responsibilities of the Standards Officer include:

- Promoting the standardization of terminology within the survivability discipline and making this terminology widely available;
- Providing a mechanism for ensuring that lessons learned from past survivability developments are made available to new programs and that the state-of-the-art of survivability technology is available and applied where appropriate through the proliferation of survivability standards;
- Coordinating with other AIAA committees and providing ad-hoc survivability consultation to ensure future AIAA standards comply and advance aerospace survivability;
- Consulting with survivability experts in the community with knowledge in technical areas of interest to provide adequate advice.



### ***Education Subcommittee Chair***

The Education Subcommittee Chair is elected by the SURTC and serves for a two-year term beginning on 1 May of the first year and ending on 30 April of the second year. The responsibilities of the Education Subcommittee Chair include:

- Developing survivability educational programs for universities and colleges;
- Fostering relevant continuing education courses and programs for scientists and engineers involved in the survivability community and/or interested in aerospace survivability;
- Managing the development and implementation of webinars, short courses, and other outreach activities that will improve the understanding of the aerospace survivability discipline.

The Education Subcommittee Chair is supported by up to four advisors that do not hold other SURTC positions. All Education Subcommittee advisors are appointed by the Education Subcommittee Chair and serve for the same term. The Education Subcommittee Chair can delegate some responsibilities to these advisors on an ad-hoc basis.

### ***Outreach Officer***

The Outreach Officer is an advisor of the Education Subcommittee Chair and serves as a liaison with other AIAA technical committees and the AIAA Foundation to include survivability in design competitions. The Outreach Officer is also responsible for developing materials and activities to involve local chapters and universities in the survivability discipline.

## **6. Structure**

The SURTC is structured to best accomplish its mission and benefit the survivability community and AIAA with the manpower and other resources it has at its disposal. A current SURTC organization structure is shown in Figure 1. Committee leadership (Chair, Vice-Chair, and Secretary) focus on institute activities while subcommittee leadership (Executive Steering, Conferences, Awards, Publications, Education) are predominantly functional activities. Supporting roles (TC Liaisons, Rules and Bylaws, Membership, Social Media) provide both technical and administrative functions. Changes to the structure may occur through a vote



called for by the SURTC Chair requiring a simple majority of all votes cast.

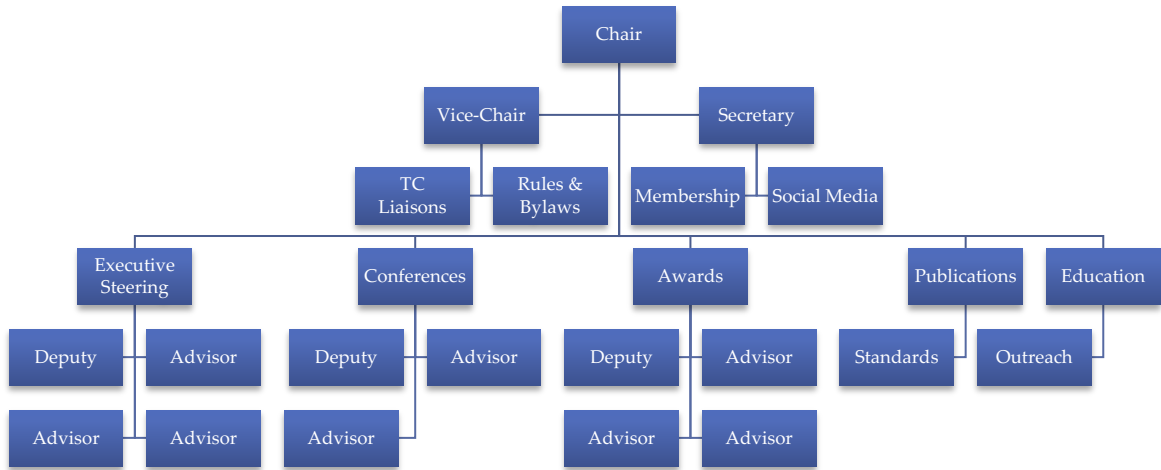


Figure 1. SURTC Organizational Structure

The current election cycle of the SURTC follows the pattern in Table 1. All SURTC Officers can hold only one position within the SURTC. Officers can resign from their positions by notifying the SURTC Chair and the latter can resign from his/her position by notifying the Executive Steering Subcommittee Chair. Officers automatically resign from their positions if they are elected to a different position within the SURTC. Upon resignation, the deputy Subcommittee Chair or Vice-Chair takes the position or the SURTC Chair appoints a replacement for the remainder of the term.



Table 1. SURTC Position Cycle

Officer	2024			2025			2026			2027			2028			2029			2030		
	P1	P2	P3	P1	P2	P3	P1	P2	P3	P1	P2	P3	P1	P2	P3	P1	P2	P3	P1	P2	P3
Chair	F	B					F	B					F	B					F	B	
Vice-Chair	F	B					F	B					F	B					F	B	
Secretary	F	B			E	F	B				E	F	B			E	F	B			
Steering	F	B					F	B					F	B					F	B	
Awards	F	B			E	F	B				E	F	B			E	F	B			
Conferences	F	B			E	F	B				E	F	B			E	F	B			
Publications					E	F	B				E	F	B			E	F	B			
Education					E	F	B				E	F	B			E	F	B			
Rules/Bylaws					A	F	B				A	F	B			A	F	B			
TC Liaisons					A	F	B				A	F	B			A	F	B			
Membership					A	F	B				A	F	B			A	F	B			
Social Media					A	F	B				A	F	B			A	F	B			

**Legend:**  
 B: New Term Begins    E: Election    F: Former Term Ends    A: Appointment

**Notes**  
 Years are divided into three four-month periods:  
 P1 – 1 January to 30 April;  
 P2 – 1 May to 31 August;  
 P3 – 1 September to 31 December.  
 There are no elections for Vice-Chair, Chair, or Executive Steering Subcommittee Chair. The Secretary rotates into the Vice-Chair position at the end of his/her term. The Vice-Chair rotates into the Chair position at the end of his/her term. The Chair rotates to the Executive Steering Subcommittee Chair position at the end of his/her term.

**7. Membership**

The SURTC membership consists of individuals that are interested in participating in the continued development of survivability as an engineering/design discipline for aerospace systems. The SURTC seeks to maintain a membership which reflects a breadth of background within the Survivability discipline; a cross section of qualified and recognized experts in industry, Government and academia; a reasonable geographic distribution of its membership; and a balance of management and technical skills.

The SURTC is limited to 50 members. Membership is for two-year periods (starting on 1 May of the first year and ending on 30 April of the second year) and is automatically renewed contingent on (a) the active participation of the member in committee activities (e.g., subcommittees, meetings, etc.) and (b) continued membership in AIAA.



Very active members and members possessing a particular expertise critical to the SURTC’s operation, including those holding office, can be reelected beyond their term or at the discretion of the Chair, their term can be extended.

The following membership categories were updated by AIAA on 4 August 2010:

- Regular Member: Voting SURTC members who have active AIAA memberships. Every TC is limited to 50 regular members.
- Alumni Members: Non-voting SURTC members who are recognized for their former contribution to the committee and continue to play an important role mentoring committee activities. Alumni members are appointed at the discretion of the SURTC Chair, with approval of the AD SG Director. Alumni members do not count toward the SURTC membership limit.

**8. Meetings**

The committee meets biannually under the guidance of its Chair, in conjunction with a conference event (e.g., AIAA SciTech Forum, AIAA Defense, Aircraft Survivability Symposium) and/or virtually. A typical meeting includes such topics as planning future technical meetings and reviewing past meetings.

Between meetings, committee business is conducted through regular mail, e-mail, the committee’s website, telephone, and videoconferences. Minutes are issued to every member after each meeting.

**9. Committee Website**

<https://engage.aiaa.org/communities/community-home?CommunityKey=87d024c3-cd2c-48ae-95a8-5983bb0cea9f>

**10. Charter Revision**

The committee’s charter should be reviewed every two years as the chair takes office and updated if appropriate.

Table 2 reflects the SURTC Chairs since the committee’s inception.

*Table 2. AIAA SURTC Chairs*

<b>Years</b>	<b>Chair</b>	<b>Institution</b>
1989 – 1992	Dr. Robert E. Ball	Naval Postgraduate School
1992 – 1994	Mr. Nikolaos Caravasos	The Boeing Company
1994 – 1995	Dr. Vincent Volpe	Institute for Defense Analyses
1995 – 1997	Mr. Donald J. Wallick	Institute for Defense Analyses
1997 – 1998	Mr. Eric R. Schwartz	The Boeing Company
1998 – 2000	Dr. Lloyd H. Smith	ASI Systems International



2000 – 2002	Mrs. Kathleen M. Atkins	Lockheed Martin Corporation
2002 – 2004	Dr. Joel E. Williamsen	Institute for Defense Analyses
2004 – 2006	Mr. Michael R. Weisenbach	Department of Defense
2006 – 2008	Mr. Ronald M. Dexter	SURVICE Engineering Company
2008 – 2010	Dr. Stephen R. Whitehouse	Applied Research Associates, Inc.
2010 – 2012	Mr. Alex G. Kurtz	United States Air Force
2012 – 2014	Mrs. Suzan L. DeRosa	Sikorsky Aircraft Corporation
2014 – 2016	Mr. Jaime J. Bestard	United States Air Force
2016 – 2018	Mr. Jeff Kloos	General Electric
2018 – 2020	Mr. Michael Schuck	SURVICE Engineering Company
2020 – 2022	Mr. David Liu	United States Air Force
2022 – 2024	Mr. Steven R. Broussard	The Boeing Company
2024 – 2026	Dr. Adam E. Goss	United States Air Force