COMMITTEE CHARTER
AE-9 Electrical Materials Committee
January, 2019

1.0 GENERAL

This charter establishes the objectives and operating procedures for SAE International (SAE) AE-9 Electrical Materials Committee.

The AE-9 Committee shall operate according to the provisions of this charter and in accordance with the procedures established by the Executive Standards Committee and the Aerospace Council of SAE International as reflected in the Executive Standards Committee (ESC) Policy and Aerospace Council Organization and Operating Guide.

2.0 SCOPE AND OBJECTIVES

2.1 Scope

SAE AE-9, Electrical Materials, is a technical committee in SAE's Electronics and Electrical Systems Group with the responsibility to develop and maintain SAE Technical Reports (including Standards and Material Specifications) for use in aircraft and engine electrical and avionic systems, including hardware items.

The SAE AE-9 Committee shall:

a) Develop and publish SAE Technical Reports (AIR's, ARP's, and AS's).

b) Recommend changes to documents being reviewed and/or initiate new documents.

2.2 Objectives

SAE AE-9 shall utilize and coordinate the knowledge, experience, and skills of technical experts in the field of electrical & magnetic materials for hybrid aerospace, to assess the technical aspects of related aerospace vehicle systems and components, to obtain a uniformity of requirements and procedures, to stimulate industry interest, and to pursue and resolve in an expeditious manner tasks of mutual technical interest.

The detailed objectives of SAE AE-9 are as follows:

- Promote the study and discussion of subjects within the scope of the committee.
- Develop, generate, interpret, maintain, and disseminate Aerospace Standards (AS), Aerospace Recommended Practices (ARP), Aerospace Information Reports (AIR), and Technical Reports within the committee disciplines as needed by industry, regulatory and government activities.
• Develop technical criteria and procedures to ensure compatibility of system components when operating individually or integrated within the systems.

• Harmonize testing methodologies to assist with global implementation

• Study and (where possible) coordinate industry and future regulatory authority activity – aiding understanding and interpretation of related regulations where appropriate

• Promote participation in working with other technical committees to accomplish objectives shared by other technical groups, especially those in the Electrical Systems Group.

• Facilitate technical forums, presentations, and field trips to improve the overall knowledge of the members of the committee.

2.3 Initial Project

The committee was initially established to develop industry standards initially in the following fields:

• Soft magnetic materials aging & degradation
  - AIR Aging mechanisms of Co-Fe magnetic materials

• Permanent magnetic materials aging & degradation
  - ARP environmental testing of magnets

• Electrical insulation systems in an aerospace environment
  - AIR Environmental degradation of HV insulation systems

3.0 ORGANIZATION

3.1 Technical Committee Structure

The Committee will comprise technical experts from industry (aircraft OEMs, engine OEMs, suppliers, testing laboratories, relevant associations), government (regulatory authorities, defense agencies) and consultants/academia.

3.2 Officers

The Committee shall have Co-Chairpersons and may have a Vice Chairperson and Secretary who serve for two years. Officers may serve three consecutive terms (not to exceed a total service of six years). Nominations for new committee officers will be made to the outgoing Co-Chairpersons by committee members.

3.2.1 Co-Chairpersons

The AE-9 Co-Chairpersons will be individuals who have demonstrated support for the committee and expertise in the field of materials used in electrical applications. The Co-Chairpersons are nominated by the Committee and the nomination is forwarded to the Aerospace Council for review and approval.

Duties of the Co-Chairpersons include:

• Plan and conduct meetings in conjunction with SAE Staff
Coordinate meeting agendas and forward to SAE for distribution
Manage and assign projects to expedite the work of AE-9
Review membership annually to maintain an active and balanced committee
Appoint the Vice Chairperson and Secretary
Establish subcommittees or working groups, appoint their chairperson, and supervise their operation
Ensure the committee operates within its defined scope and according to SAE policies and procedures
Monitor committee ballots
Elevate issues, concerns, problems or Opportunities to Aerospace Council

3.2.2 Vice Chairperson

The Vice Chairperson is appointed by the AE-9 Co-Chairpersons to assist in the management duties of the committee.

Duties of the Vice Chairperson include:

- Assist the Chair
- Chair meetings in the absence of the Chair
- Assume the Chair’s responsibilities in the event of prolonged absence or resignation of Chair
- Identify potential candidates for offering or revoking membership based upon participation

3.2.3 Secretary

Appointed by the Co-Chairpersons, the Secretary is responsible for recording all meeting minutes and such other functions as may be directed by the Co-Chairpersons.

Secretary responsibilities include:

- Prepare minutes of meetings and forward to SAE for distribution
- Assists SAE in maintaining records of disposition on committee matters
- Monitor and record meeting attendance
- Write technical correspondence as agreed by the committee

3.3 SAE Staff Representative

An SAE Staff Representative shall be assigned to AE-9 to assist in accordance with Aerospace Council Guidelines.

4.0 MEMBERSHIP

4.1 Committee Participation

Committee membership shall be in accordance with Aerospace Council guidelines. The Committee will strive for an equitable balance of representation of technical experts from aircraft OEMs, engine OEMs, suppliers, testing laboratories, regulatory authorities, and consultants (Producer, User, and General Interest). SAE membership is strongly recommended, but it is not a requisite for committee membership.
The primary classifications of participants include: Voting Member, Liaison, and Mailing List Recipient.

4.1.1 Voting Member

Voting Members are to contribute to the work of AE-9, vote on all ballots in a timely manner, and maintain active participation. Balance among the different interest groups of voting members (user, producer, general interest) shall be maintained.

Individuals who have interest and expertise in the activities of the AE-9 Committee may request voting membership. Requests should be submitted to the Committee Co-Chairpersons, who determines the voting membership interest group and notifies SAE Staff. Names are forwarded to the Aerospace Council for approval.

4.1.2 Liaison

Liaisons coordinate with parallel activities occurring in the government, other associations, and related SAE Technical Committees and may serve in an advisory capacity on specific projects. Liaisons receive ballots and may provide comments; however, they do not have an approval/disapproval vote.

4.1.3 Mailing List Recipient

Mailing List Recipients receive information on Technical Committee meetings. They do not receive information related to Technical Report ballots.

4.2 Member Responsibilities

In discharging their responsibilities, members function as individuals dedicated to the objectives of the AE-9 Committee and not as representatives of any organization with which they may be associated. Governmental employees participate in accordance with government regulations.

Members are expected to actively support the work being accomplished within the committee by supporting telecons, attending meetings, sponsoring projects, participating in discussion forums, and reviewing and responding to ballots.

Members may provide technical or informational comments during the balloting process. Technical comments must include suggested text revisions, otherwise they will be considered informational comments.

A member who is absent from three or more consecutive committee meetings may have his/her voting membership revoked by the AE-9 Co-Chairpersons. A member, who fails to vote on three consecutive ballots without justification, may have his/her voting privileges revoked.

5.0 OPERATION

5.1 Project Authorization

Each proposed project document, including document revisions, must be approved by the Committee Co-Chairpersons. The Committee Co-Chairpersons assign a sponsor for proposed new documents or revisions to existing documents. The sponsor is responsible for all coordination necessary to prepare the new document or revision for ballot to the committee membership.
5.2 Voting

Aerospace Standards, Recommended Practices, and Information Reports are voted on by the Committee members following the process outlined in the Aerospace Council Organization and Operating Guide. Resolution of the comments will be coordinated by the document sponsor. After resolution of the comments, a letter ballot is circulated to all members of the committee for final approval. Only Committee members may vote on ballots. Vote results are tabulated in accordance with Aerospace Council Guidelines.

Voting on ballots shall be monitored by the Committee Co-Chairpersons and Document Sponsor and the results reported to the Committee when a specification is approved by the Committee membership.

5.3 Meetings

The Committee holds periodic (typically twice a year) face-to-face meetings. Virtual meetings of the Committee will be scheduled when the need exists to conduct committee or individual specification business in between face-to-face meetings.

The Committee meeting agenda shall be prepared by the co-chairpersons and disseminated with the next meeting announcement by SAE staff.

All Committee meetings shall be conducted in accordance with established SAE procedures and practices.

Meeting minutes shall be recorded by the Secretary and posted on the committee website.

5.4 Attendance

Attendance at the meetings is open to anyone with an interest in aircraft or powerplant electrical systems and their equipment. Attendance shall be monitored and recorded by the Secretary and SAE staff through the attendance register.

6.0 Revisions to Charter

Amendment to this charter is accomplished by a member submitting a written proposal to the committee. The proposal will be forwarded to the Co-Chairpersons at least 30 days prior to the meeting where it will be reviewed. Proposed amendments require a two-thirds approval of the members present. A quorum of greater than 50% of the eligible voting membership must be present. Any comments submitted to the Co-Chairpersons by the committee members prior to the meeting must be discussed by the committee prior to a vote on the amendment.