SAE The Engineering Society For Advancing Mobility Land Sea Air and Space®
INTERNATIONAL
400 Commonwealth Drive, Warrendale, PA 15096-0001

RECOMMENDED PRACTICE

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Submitted for recognition as an American National Standard

(R) TECHNICAL COMMITTEE GUIDELINES

1. Scope

1.1 These Guidelines were written to provide information needed by SAE technical committee members. Subject matter covers relations of technical committees to the SAE organization and, in broad terms, committee operating procedures.

1.2 The Guidelines are the outgrowth of the principles and policies of the Society, and they reflect the philosophies, traditions, and methodology that have emerged from years of successful operations of SAE technical committees.

1.3 These Guidelines are necessarily brief and presented in an outline form. For additional information, refer to the latest issue of the SAE Technical Standards Board Rules and Regulations (TSB 001) and appropriate Council Operating Practices.

2. References

2.1 Applicable Documents—The following publications form a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply.

2.1.1 SAE PUBLICATIONS—Available from Technical Divisions, SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

TSB 001—Technical Standards Board Rules and Regulations

TSB 002—Preparation of SAE Technical Reports—Surface Vehicles and Machines: Standards, Recommended Practices, and Information Reports (formerly J1159)

TSB 003—Rules for SAE Use of SI (Metric) Units (formerly J916)

SAE AMS Editorial Procedure and Form

SAE Committee Guidelines Manual

3. SAE Objective

3.1 The objective of the Society is to promote the Arts, Sciences, Standards, and Engineering Practices connected with the design, construction, and utilization of self-propelled mechanisms, prime movers, components thereof, and related equipment. SAE serves its members and the General Public through meetings and programs developed by its various Engineering Activities and Sections, through its Placement Committee, and through its publications; *it serves industry, government, and the public*

through the development of technical reports[1] *including engineering standards and recommended practices, and distributing these documents.*

4. SAE Technical Standards Board

4.1 Organization—The SAE Technical Standards Board is the agent of the SAE Board of Directors with authority to direct and supervise all SAE Cooperative Engineering Programs, including standardization, research, and the participation in technical committee activity of other organizations. Figure 1 shows its position in the Society's structure, the councils, and a few examples of technical committees it administers.

4.2 Philosophies

4.2.1 The SAE Technical Standards Board will consider those projects for which industry, government, the public, or other responsible agencies have expressed a need and which lend themselves to cooperative solution. Within their own operations, technical committees frequently generate projects meeting the previously noted criteria.

4.2.2 The SAE Technical Standards Board expects its councils/divisions to set up their own organizations, procedures, and programs within their scopes and the limits of the SAE Technical Standards Board's *Rules and Regulations.*

4.3 Recognition of Achievements—Annually, the Board awards a maximum of 30 Certificates of Appreciation to technical committee members and to individuals representing SAE in other organizations. Nominations for awards are submitted through the councils to the Certificates of Appreciation Committee by the various technical committees. Supporting data outlining the basis for nomination is required.

5. Councils/Divisions of the SAE Technical Standards Board

5.1 The SAE Technical Standards Board delegates to its councils/divisions the authority to direct and approve (see 8.4) SAE Standards, Recommended Practices, Information Reports, Draft Technical Reports, and Technical Data Reports (subject to the right of anyone to appeal a decision to the Board). The councils are authorized to establish committees that may be needed to accomplish this assignment.

5.2 Committee Sponsor—The chairperson of each council may appoint annually council members to act as sponsors for committees functioning directly under the council. The council chairperson may appoint the technical committee chairpersons as members of the council and as sponsors for their committees. The committee sponsor shall represent the committee to the council, and serve as liaison between the committee and the council. During periods when a committee is without a sponsor, the council chairperson will perform such functions.

[1] The term "technical reports" as used in these Guideposts stands for the end product of a committee's efforts and may consist of an SAE Standard, Recommended Practice, Information Report, or Aerospace Material Specification.

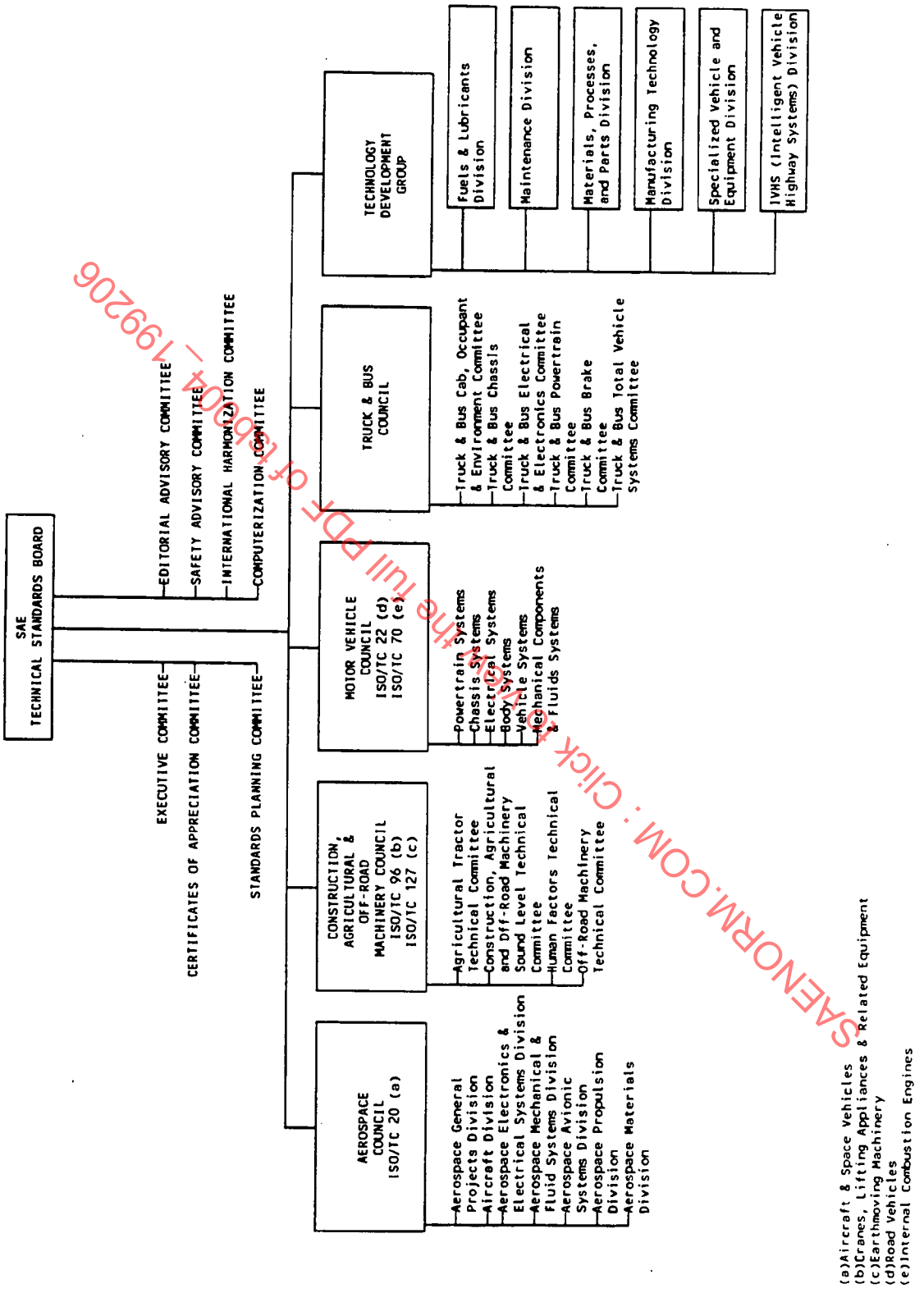

FIGURE 1—SAE TECHNICAL STANDARDS BOARD ORGANIZATION

6. SAE Technical Committees

6.1 Objectives—The objectives of a technical committee are to coordinate and utilize the knowledge, experience, and skill of engineers and other qualified individuals on technical problems within the scope of its activities to:

a. Conduct necessary investigations and develop technical reports.

b. Review technical reports periodically, revise as necessary, and maintain content abreast of latest technology.

c. Advise, consult, and cooperate with industry, government, educational institutions, the public, other standardizing bodies, and other SAE committees and members.

d. Assist committees of the SAE Engineering Meetings Board in the preparation and presentation of papers at national meetings and specialty conferences.

6.2 Principles—The end products of the committee's work are offered as the best judgment of a group technically competent to deal with the problems covered and do not represent an industry-trade position. Employers of committee members are not committed by an action of an SAE committee. Over many years, the extensive use of SAE technical reports clearly indicates that committee members, working as individuals, do produce results that are practical and useful to industry, government, and the public.

6.3 Scope—A technical committee shall be responsible for a field of endeavor, as defined by its scope. In cases where projects overlap areas of interest of another council's/division's committee, the originating committee shall submit the project(s) for review and approval to the other concerned committee and its council prior to issuance. A committee is established when a new major project area is to be undertaken and no existing committee is available. A committee is discharged when the assigned work is completed and there is not further need for its services. The councils/divisions retain responsibility for periodic review of technical reports developed by their disbanded committees.

6.4 Membership

6.4.1 QUALIFICATIONS—All participants are appointed to SAE technical committees by the committee chairperson on the basis of their individual qualifications which enable them to contribute to the work of these committees. Overall, committee membership should attain an equitable balance of representation by knowledgeable *parties at interest*. All relevant points of view should be invited to participate. SAE membership is not a prerequisite for committee membership.

6.4.2 SAE policy dictates that SAE technical committee members act as *individuals* and not as agents or representatives of their employers. Their actions are accepted as personal actions based on sound technical judgment and do not necessarily represent their employer's attitudes or views.

6.4.3 GRADES—Committee participants shall be classified as *member, liaison member, and consultant member, or committee officer. Liaison and consultant* members are appointed by the chairperson on the basis of need for their particular services. *Liaison members* relay information to and from paralleling activities of other committees and organizations. *Consultant members* supply advice on the specific program for which they have been appointed. *Liaison and consultant members* are not eligible to vote on committee actions except at the request of the committee chairperson.

6.4.4 Governmental agency employees may be appointed as *members, liaison members, or consultant members* of the committee with aforementioned responsibilities and privileges.

6.4.5 BALANCE—Overall Technical Committee membership shall attempt to attain an equitable balance of representation by knowledgeable persons at interest so as to provide a competent and authoritative committee. In considering the equitable balance of a committee, the individual's point of view as a producer, user, consumer, or regulator shall be considered. The number of members on a technical committee may vary depending on the specific needs.

6.5 Organization—Typical organization patterns are shown in Figure 2.

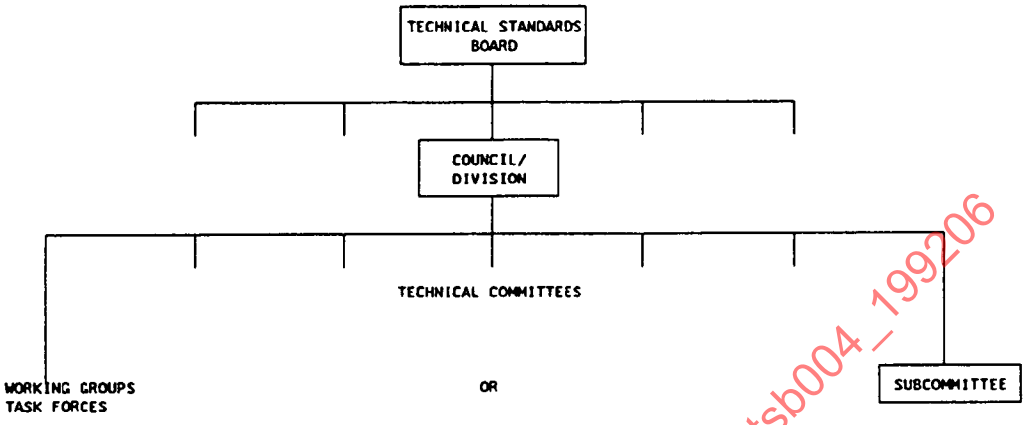

FIGURE 2—TYPICAL TECHNICAL COMMITTEE ORGANIZATION

6.6 Officers—The committee shall always have a chairperson and may have a vice-chairperson and secretary.

6.6.1 The chairperson and vice-chairperson of a newly formed committee shall be appointed by the council/division chairperson with advice of council members. Existing committees shall nominate a chairperson and vice-chairperson annually for council approval. The chairperson may become a member of a council by appointment by the council chairperson.

6.6.2 The secretary shall be appointed annually by the committee chairperson.

6.6.3 Reasonably frequent rotation of committee chairpersons is encouraged, for example 2 or 3 year terms. However, renominations of chairpersons who have served five or more consecutive years shall be reviewed and approved by the council.

6.6.4 It is the duty of the chairperson to:

a. Plan and conduct meetings.

b. Establish subcommittees, appoint their chairpersons, and supervise their operation.

c. Establish working panels, including appointment of their chairpersons and/or individual member work assignments, and supervise their operation.

d. Assign projects so as to balance and expedite the committee's work.

e. Act for the committee between meetings, subject to confirmation at the next meeting.

f. Supervise and report voting on all committee reports.

g. Review the membership annually to maintain an active and balanced committee.

h. Recommend revisions of committee procedures as needed.

i. Arrange for the nomination of candidates for the SAE Technical Standards Board Certificate of Appreciation Award. Candidates must be nominated by April 1.

j. Serve as chairperson of the steering committee (or executive committee), if applicable.

k. For additional duties of the chairperson, refer to SAE TSB 001.

6.7 Executive Committees (Figure 2): When a technical committee has numerous subcommittees, projects, or is so large as to make meetings of the entire group impractical, an executive committee may be established to organize and manage the affairs of the committee. The executive committee shall include all committee officers, and may include all subcommittee chairpersons and such additional members as may be desirable to form an efficient working group. The technical committee officers shall be the officers of the executive committee.

6.8 Subordinate Structure

6.8.1 Subcommittees, working groups, or task forces are organized to carry out specific continuing technical segments of the committee's scope. The original chairperson shall be appointed by the parent technical committee chairperson; thereafter, the chairperson may be nominated by the group, subject to review and approval by the parent technical committee chairperson. It is desirable that the chairperson be a member of the parent committee.

The original membership will be appointed by either the parent committee chairperson or by the subcommittee chairperson. Thereafter, membership matters are handled by the subcommittee chairperson.

Duties of subcommittee officers in relation to their subcommittees are the same as those of the technical committee officers in relation to the technical committee, except as outlined in the SAE Technical Standards Board Rules and Regulations.

6.8.2 WORKING TECHNICAL PANELS (FIGURE 2)—When a committee or subcommittee wishes to have several of its members work together in preparation of a draft technical report, a temporary (ad hoc) working panel may be formed. After completion of its task, responsibility for review and maintenance of resulting technical reports reverts to the committee or subcommittee, and the panel is discharged.

6.9 SAE Staff Representative—An SAE Staff representative will advise the committee officers on procedures and assist the committee in its organization and operation, attend meetings, and assure that meeting minutes are prepared and properly distributed.[2] SAE staff representative performs tally of committee voting and disseminates results of balloting.

7. Relationships with Other SAE and Non-SAE Groups

7.1 Intra-SAE Relationships—As a primary principle, each SAE technical report should be reasonably self-contained or cross-reference other SAE documents. Development of a draft technical report will often require use of data which falls within the scope of another SAE committee. In these instances, liaison should be established by formation of a joint subgroup, by membership on or from that committee, or through the SAE staff. In any event, comments and/or approval by the consultant committee should be solicited by the committee preparing the draft technical report. Adherence to this principle will avoid duplication of effort and will insure against conflicts and ambiguities. Because of his intimate knowledge of SAE activities, the SAE staff representative can help the technical committee in its relationships with other Society groups. See 6.6 in SAE TSB 002.

7.2 Liaison with Other Organizations—Technical committees should coordinate their efforts with parallel activities in other organizations such as the American National Standards Institute, American Society for Testing and Materials, American Iron and Steel Institute, American Petroleum Institute, and the Aerospace Industries Association. To maintain this liaison, the SAE Technical Standards Board ap-

[2] When the chairperson or the appointed secretary records the minutes, a copy (or copies, as appropriate) should be forwarded to the SAE office where they will be reviewed and distributed. They will be maintained for five years and made available for inspection and for distribution as appropriate.

points individuals to represent the Society. It is the duty of the representatives to report developments to the appropriate SAE committee, and to present SAE views which are the consensus of the concerned SAE committee(s) to these organizations.

7.2.1 Representatives of SAE on American National Standards committees or standards committees of other standards writing organizations shall be appointed by the Chairperson of the SAE Technical Standards Board.

7.2.2 Representatives of SAE on non-SAE standards committees shall report to a technical committee or, if none exists, to the appropriate council.

7.2.3 Representatives of SAE shall, where feasible, develop SAE positions regarding draft technical reports developed by such non-SAE committees through consultation with the appropriate SAE technical committee or council.

7.2.4 The representative of SAE shall report activities of the non-SAE committee annually and shall advise the technical committee or council of the SAE vote on approval or disapproval of standards or other substantive matters coming before the non-SAE committee. The SAE representative may seek additional SAE support in backing up the SAE position through the appropriate SAE committees and councils.

7.3 American National Standards Institute

7.3.1 Approval of American National Standards by American National Standards (ANS) committees for which SAE is sponsor, cosponsor, or secretariat shall be by the appropriate SAE council on either recommendation of the appropriate SAE committee or the SAE representatives on the American National Standards Committee.

7.3.2 Upon approval by SAE of an ANS for which SAE is *sponsor, cosponsor, or secretariat,* the subject standard shall be considered an approved SAE Standard. In the event that SAE is not the publisher of the subject standard as an ANS, but does provide coverage of the subject matter contained in the standard in the SAE Handbook or other SAE publications, such SAE publications will be revised as soon as possible after SAE approval of the ANS but not later than one year after such approval. When SAE coverage of the subject matter is approved in advance of a revision to the ANS, the Society will immediately initiate a revision of the ANS.

7.4 Joint Sponsorship with Other Organizations—SAE joint sponsorship of committees with outside organizations is discouraged, unless such joint sponsorship is of direct benefit to SAE committees. Where possible, SAE should perform its standardization and cooperative engineering functions without the establishment of jointly sponsored groups.

7.4.1 In cases where SAE technical committee work or technical projects are of major interest outside of SAE (for example, splines and screw threads), cooperation is encouraged in established SAE sponsored organizations such as the American National Standards Institute (ANSI) and the Coordinating Research Council (CRC).

7.4.2 Where joint sponsorship of a project with an outside organization is proposed, specific SAE Technical Standards Board approval is required.

7.4.3 Any technical reports resulting from such cooperative activity will be subject to normal SAE review and approval procedures. In such technical reports, recognition of the participation of outside groups is appropriate.

7.5 Cooperation with Government Agencies—Technical committee cooperation with government agencies in developing technical reports of mutual interest is encouraged. Such technical reports will be identified by normal SAE numbering systems when published by the SAE, and appropriately cross-referenced when issued in some other manner.

7.5.1 Where there is a divergence of technical opinion on a proposed technical report between a committee and interested governmental agency, the committee may offer the government its technical opinion in the form of comments upon a proposed government prepared specification or standard. If the committee so chooses, and with review and approval by the appropriate council, the committee's technical opinion can be published in the form of an SAE technical report.

7.6 SAE Participation in International Standards

7.6.1 SAE may serve as the U.S. technical secretariat for ANSI in International Organization for Standards (ISO) and International Electro-Technical Commission (IEC) technical committees, subcommittees, and working groups only when approved by the SAE Technical Standards Board.

7.6.2 In administering such ISO and IEC technical secretariats, SAE shall form a U.S. Technical Advisory Group (TAG) consistent with procedures of the American National Standards Institute. Membership on the TAG shall follow the rules governing membership on SAE technical committees. Appointments to the TAG shall be subject to confirmation by the appropriate SAE council. The TAG will call upon cognizant SAE technical committees and outside activities, if appropriate, to assist in developing U.S. positions on proposed ISO or IEC standards and in the development of draft standards.

7.6.3 SAE shall follow the provisions of the "ANSI Procedures for U.S. Participation in the International Standards Activities of the ISO/IEC."

8. Technical Committee Technical Reports—The major effort of technical committee activity is the development of technical reports for publication by the SAE.

8.1 Development—The initial work on a draft technical report is usually handled by a task force which presents its work to a parent group, preferably well in advance of a meeting date. Corrections to the proposal are officially recognized at the meeting of the parent group and documented in the minutes. Depending on procedures established for each group, mailing or draft technical reports may be handled directly by the chairperson, the SAE staff representative, or by a delegated member.

8.2 Guides for Preparation of Technical Reports—Annually, a large number of documents are developed by the technical committee for publication. It is not practical for the SAE staff to restyle them.

8.2.1 Technical committees will use the following SAE publications:

a. SAE TSB 002—*Preparation of SAE Technical Reports - Surface Vehicles and Machines: Standards, Recommended Practices, Information Reports*

b. SAE TSB 003—*Rules for SAE Use of SI (Metric) Units - establishes the rules for the use of Systeme International (SI) units in SAE documents including specifications and standards.*

c. *AMS Editorial Procedure and Form* for the preparation of Aerospace Material Specifications (AMS) and other Aerospace Material Documents

d. *Aerospace Council's Organization and Operating Guide for Aerospace Cooperative Engineering Program* for the preparation of Aerospace Standards, Military Standards, Aerospace Recommended Practices, and Aerospace Information Reports.

8.3 Committee Correspondence—It is required that all correspondence within and between committees be classified by subject so that it may be readily identified. Copies of committee correspondence should be sent to the chairperson and SAE staff representative. Committees shall use technical committee correspondence forms which are available, upon request, from the SAE staff representative. Committees shall not use SAE stationery or stationery with a company or business letterhead.

8.4 Approval

8.4.1 Draft technical reports, submitted to a council for approval, in general, should have the unanimous approval of the committee making such a submittal. Where unanimous approval cannot be achieved, draft technical reports shall have the approval of at least three-quarters of the responding committee

members who have not waived their vote. Dissenting views, including those of liaison and consulting members shall accompany draft technical reports when they are circulated to the council for final review and approval prior to publication. The committee's reasons for not accepting the dissenting views should be included.

8.4.2 Committee draft technical reports shall normally require confirmation by letter ballot, except when they are submitted for final voice vote approval. In such instances, the draft technical reports shall be distributed to the members of the voting group at least two weeks prior to the meeting. Where a single draft technical report is a joint project of two committees reporting to separate councils, it shall be submitted to both councils for review and approval.

8.4.3 The SAE Technical Standards Board retains the authority for final review and approval when dissenting views cannot be reconciled.

8.5 Publication and Timing—After approval by the council, the individual technical report will be published at the earliest opportunity by SAE Staff.

8.5.1 The preparation of technical reports intended for publication in the SAE Handbook should be scheduled so that council approval can be obtained prior to the closing date set by the Publications Committee. At least six weeks should be allowed for circulating drafts to the councils. Timing on technical reports which are to be released in individual form is not as critical with respect to publication date. The SAE staff representative should be consulted as required, to determine target dates.

8.5.2 DISTRIBUTION AND USE—A basic tenet of SAE technical committee operating policy is that technical reports produced by technical committees are advisory in nature. The use of such technical reports by industry, government, or other responsible agencies is entirely voluntary.

8.5.3 Early recognition by the SAE membership of new or revised technical reports is highly desirable. This provides better service for members, government, and the public, and may result in beneficial comment leading to further improvement. For these reasons, information should be submitted by the technical committee chairperson to *SAE AUTOMOTIVE ENGINEERING or AEROSPACE ENGINEERING* as a news item, or, if the technical report has wide appeal, it may be given more extensive treatment. With a view to providing increased service, notice of all new and revised technical reports will appear as soon as possible after council approval in the *AUTOMOTIVE ENGINEERING or AEROSPACE ENGINEERING* magazine.

8.6 Review—Each technical report shall be reviewed at least every five years. The staff advisor shall initiate such reviews. At such reviews, the technical report may be reaffirmed, revised, or canceled. If reaffirmed, no formal ballot of the affected council is needed, but the council should be informed of the action. Regular balloting of the council is required for a revision or cancellation.

8.7 Metric Unit Policy

1. All new technical reports including standards, recommended practices, and information reports, will be expressed in metric units (SI) effective December 31, 1990.
2. Each council and division reporting to the Technical Standards Board will develop and adopt a plan by which existing technical reports can be converted to SI units.

9. Some General Considerations for Technical Reports—SAE technical reports are to be limited to technical and engineering considerations. They are not to include provisions that are of a commercial nature such as prices, warranties, allocation of risk or loss or conditions of acceptance or rejection, nor are such considerations to be a basis for SAE documents.

9.1 Minimum Requirements—SAE technical reports should be written in terms of performance rather than design so as not to exclude any technically adequate equipment, product, design, material, or process. Where technical requirements are established to achieve a stated purpose, such requirements should be the minimum required to achieve such purpose. In terms of standardization or inter-