SCCA
CLUB RACING

2006 EDITION

GENERAL COMPETITION RULES

Sports Car Club of America, Inc.
Club Racing Department
Building 300 B Street
Topeka, Kansas 66619

The General Competition Rules of the Sports Car Club of America are intended to assist in the orderly conduct of race events. They are in no way a guarantee against injury or death to participants, spectators, or others. No express or implied warranties of safety or fitness for a particular purpose are intended or shall result from publication of or compliance with these rules.

FOREWORD

It is hoped that the layout of the GCR will be of benefit to users. It must be remembered however, that the GCR is a reference book, and not a novel. To find the answer, the reader must first know the question. The index will help, but the Table of Contents will give a good idea of the general layout.

Effective January 1st, of each year, all editions of the SCCA General Competition Rules and all Court of Appeals rulings are superseded by the following SCCA General Competition Rules.

All dimensions are in inches unless otherwise noted.

The masculine pronouns he, him, his will be used generically, without actual reference to gender.

This book is the property of:

Name: _____

Address: _____

City: _____

State: _____ Zip: _____

Region: _____

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NOTE: Vertical solid bars, found in the outside margins, and *italicized text* indicate a change or an amendment has been made in adjacent sentences or paragraphs. A paragraph with a vertical bar, but no italicized text indicates a deletion.

1. CONTROL OF COMPETITION

1.1. NATIONAL CONTROL OF COMPETITION

The Automobile Competition Committee for the United States (ACCUS) is recognized by the FIA as the National Club (ASN) of the U.S.A. Under the terms of the International Sporting Code of the FIA, ACCUS is the sole authority for the control of international automobile competition in the U.S.A., its territories, and protectorates.

1.2. SCCA GENERAL COMPETITION RULES

The Sports Car Club of America, Inc., (SCCA) has established these General Competition Rules (GCR). The term GCR includes the Specification Books.

1.2.1. Application of the GCR

The GCR shall govern all Club Racing events sanctioned by SCCA. FIA listed events sanctioned by the SCCA shall also be governed by the Code.

1.2.2. Revision of the GCR

A. The SCCA may revise, in its sole discretion, the GCR or issue Supplements to it, at any time through "FasTrack," "Racing Bulletins," or "Tech Bulletins" in SportsCar, or the official SCCA web site. All supplements will have a published stated date.

B. Rules changes for National classes shall become effective the Monday after the Runoffs rather than January 1 of the following year so that competitors will have the opportunity to test rules changes in competition before January 1st.

C. If circumstances create a situation where a rule clarification or change is found necessary to be implemented **immediately**, the Board of Directors may issue a memorandum stating the change and its effective date. Those memorandums will be posted on the SCCA web site and shall be sent to all Chief Stewards, Chairmen of SOM, Race Chairmen, and Chiefs of Tech of any events that will be affected prior to publication in FasTrack.

1.2.3. Replacement of the GCR

Effective on January 1st of each year, all previous editions of the GCR will be superseded by the current edition. No revisions previously published in SportsCar will remain in effect unless included in the new edition of the GCR.

1.2.4. Interpretation and Application of the GCR

The GCR shall not be given a strained or tortured interpretation and shall be applied in a logical manner, keeping in mind that it cannot specifically cover all possible situations. The word "shall" (either positive "shall" or negative "shall not") is mandatory. The word "may" is permissive. If there is a conflict between the GCR and a Specification Book (PCS, GTCS, TCS, SSS, SMCS, ITCS, SRCS, FCS) the Specification Book has precedence over the GCR. If an item is not addressed in the Specification Book then the item is controlled by the GCR.

The interpretation and application of the SCCA General Competition Rules by SCCA officials shall be final and binding. In order to promote the sport of automobile competition, to achieve prompt finality in competition results, and in consideration of the numerous benefits to them, all members, including competitors and officials, expressly agree that:

A. Determinations by SCCA officials are non-litigable;

B. They will not initiate or maintain litigation of any kind against SCCA or anyone acting on behalf of SCCA to reverse or modify such determinations, or seek to recover damages or other relief allegedly incurred or required as a result of such determination; and

C. If a member, competitor, or official initiates or maintains litigation in violation of this provision, that member, competitor, or official agrees to reimburse SCCA for all costs of such litigation, including travel expenses and attorneys' fees.

1.3. RESERVATION OF RIGHTS
SCCA is a private, not for profit organization. It reserves the right to deny the issuance of any license, or to revoke any license previously issued, for any reason or no reason, except that it will not deny or revoke a license solely on the basis of race, creed, color, sex, or national origin.

2. ADMINISTRATIVE TERMINOLOGY
The following nomenclature, definitions, and abbreviations shall be used in the GCR, all Supplemental Regulations and Entry Forms, and for general use.

2.1. FIA (Federation Internationale de l'Automobile)
The International Federation of National Automobile Clubs.

2.2. FISA (Federation Internationale du Sport Automobile)
The International Sporting Commission which is appointed by the FIA to deal with competition matters.

2.3. THE CODE (Code Sportif Internationale of the FIA)
The International Sporting Code.

2.4. ASN (National Sporting Authority)
A national governing body of automobile competitions recognized by the FIA.

2.5. ACCUS-FIA (Automobile Competition Committee for the United States-FIA, Inc.)
The ASN of the United States of America.

2.6. SCCA (Sports Car Club of America, Inc.)
A non-profit organization, incorporated within the state of Connecticut, dedicated to the ownership, operation, and preservation of sports cars, and the arrangement and regulation of sports car events and exhibitions, the encouragement of safe and sportsmanlike conduct on public highways, and the development of technical information relevant to any of these

purposes. The SCCA is delegated the authority to sanction FIA-listed events by ACCUS-FIA. The address of SCCA is:

SCCA, Inc.
Club Racing
Building 300, B Street
Topeka, Kansas 66619

SCCA is sometimes referred to in the GCR as "National Office" or as the "Club Office."

2.7 CLUB RACING BOARD
The SCCA Club Racing Club Racing Board establishes rules and standards for the scheduling, organization, and conduct of SCCA-sanctioned Club Racing events, and the licensing of drivers and officials. The Board supervises the execution of these rules and standards.

The Club Racing Board may appoint specialized Advisory Committees to assist in the review of member requests for rules development, and changes to individual vehicle specifications. These committees are empowered to solicit and make recommendations to the Club Racing Board based on their research and knowledge of the items. The committee members serve at the discretion of the Club Racing Board and the Board of Directors.

2.8. SCCA DIVISIONS
Geographic separations of the SCCA, established for the administration of SCCA policies, competitions, events, and the GCR under the direction of the SCCA Club Racing Board and its subcommittees.

2.9. EXECUTIVE STEWARD
The individual appointed by the Board of Directors in each SCCA Division to supervise and administer SCCA policies and standards for designated classes of events and to train SCCA Stewards. The Executive Steward shall assign Stewards for all Club Racing events.

2.10. CAR (Automobile)
A self-propelled land vehicle running on four wheels, not in a line, which shall be in contact with the ground. At least two (2) wheels shall affect the steering and at least two (2) the propulsion.

2.11. CLASS
A group of cars, classified according to the provisions of the GCR.

2.12. CATEGORY
A combination of similar classes of cars.

2.13. COMPETITION
A contest in which a car takes part and which is of a competitive nature or is given a competitive nature by publication of results. Practice and qualifying for starting positions are included in the term "competition". A competition may also be referred to as a "race".

2.14. EVENT
An entire program of competitions.

2.15. SPEED EVENT
Competition in which more than one car is on the course at a time, vehicles are driven at maximum speeds, and a high level of driver and vehicle safety equipment is essential.

2.16. NON-SPEED EVENT
An event in which the hazards do not exceed those encountered in legal travel on public roads, and which therefore do not require drivers to hold Competition Licenses.

2.17. SANCTION
The documentary authority, granted by the SCCA, to organize and hold a competition.

2.18. SUPPLEMENTARY REGULATIONS
Regulations which are consistent with the GCR and which define the additional ground rules of competition for a specific event. (See Section 3.6.)

2.19. DRIVER
A person named as the driver of a car in any competition. Also, any person who drives a race car in any competition whether or not properly registered, entered, or named as the driver.

2.20. ENTRANT
A person whose entry is accepted for any competition. The signature on an entry form and the membership number shall be that of an individual SCCA member.

2.21. PARTICIPANT
Any person admitted to an event after having signed a SCCA authorized Release and Wavier of Liability Agreement.

3. EVENTS

3.1. CLASSIFICATION OF EVENTS
Events sanctioned by the SCCA shall be classified according to the persons eligible to take part, the categories of cars eligible to participate, and the awards offered.

3.1.1. FIA-Listed Events
The SCCA has been delegated the authority to grant sanctions for events listed on the FIA International Calendar. These events shall be organized and conducted according to the GCR and the International Sporting Code.

A. Full International FIA Event
Each year the FIA shall approve a calendar of Full International competitions open to holders of FIA Entrant's and Driver's Licenses issued by an ASN, shall designate various series of these Full International competitions counting toward international championships for drivers, manufacturers, hill climbs, etc., and shall designate the classes and categories of cars eligible

to compete in these championships. In those Full International competitions which do not count toward championships, the organizers may designate which classes and categories of cars are eligible to compete.

B. International FIA Events
ACCUS shall annually approve a calendar of International FIA competitions. These events shall be open to any holders of FIA Entrant's and Driver's Licenses issued by any ASN except that those whose names are on the FIA list of Classified Drivers are excluded unless they hold appropriate licenses issued by an ACCUS member club. Organizers may designate which classes and categories of cars are eligible to compete.

3.1.2. SCCA Events
SCCA may grant sanctions to organize various classes of events to be conducted in accordance with the GCR.

A. Interdivisional Championship Event
SCCA shall schedule an event each year called the SCCA Runoffs, open by invitation to the highest placing drivers in the National Point Championship Series held in each division. The SCCA Runoffs event shall determine the SCCA National Champion in each eligible class. (See 16.4., Interdivisional Championship Event.)

B. National Championship Events
Each year the SCCA shall designate a series of National Championship events in each division open only to drivers holding SCCA National Competition Licenses (Novice Permit and Regional License holders may not be on course during a National race or qualifying session). Each such event shall provide a competition for each class of car recognized in Section 17., Automobiles. (See Section 16., National Championship Racing.) There shall be at least five (5) race groups.

C. Regional Events
Regional events shall ordinarily be open to any drivers holding SCCA Vintage, Regional, and National Competition Licenses and to certain other drivers holding SCCA Novice Permits as provided in Section 5., Licenses. Regional events shall also be open to Canadian residents holding current ASN National Licenses who are twenty-one (21) years of age or older and who are members of SCCA. The Supplementary Regulations for a Regional event may also provide for the participation of drivers who are members of SCCA holding Competition Licenses issued by other SCCA-approved organizations. (See 17.1., Classification of Automobiles for classes of cars eligible to compete in Regional events.)

Note: the current organizations that have their licenses approved by SCCA for competition in Regional events are;

BMW CCA Club Racing (Full Competiton), FIA (issued by any

sanctioning body), ICSCC (Area Conference), IMSA, Midwestern Council of Sports Car Clubs MCSCC (Full), Porsche Club of America (Full Competition), SCCA Pro Racing, Waterford Hills Road Racing Club (Full), West Canada Motorsport Assoc (Amateur)., Ontario Region CASC (Regional), Confederation of Autosport Car Clubs CACC(Competition)., *SVRA, Historic Sportscar Racing (HSR), Vintage Motorsports Council (VMC).*

Note: the current organizations that have their licenses approved by SCCA for competition in Vintage events are:

SOVREN, Vintage Auto Racing Association (VARA), *Classic Sports Racing Group (CSRG).*

Any questions should be directed to the National Office.

D. Restricted Competitions
Restricted competitions are conducted under special Supplementary Regulations that limit participation to classes of cars not recognized in the GCR, or to invited drivers only. Vintage cars shall **NOT** be grouped with any other type of cars. Restricted competitions may be run concurrently with other classes of events. Restricted events shall be open to Canadian residents holding current ASN National Licenses who are twenty-one (21) years of age or older and who are SCCA members, unless otherwise stated in the Supplementary Regulations.

E. Driver Schools
SCCA Driver Schools shall be organized and conducted by regions of the SCCA, in full compliance with the GCR. As a minimum, cars shall be separated into open wheel and closed wheel groups in accordance with GCR 7.1.3. and will run separately. Driver School events shall be organized and conducted as separate speed events, and shall not be combined on the same day with other competitions or speed events, except when approved and sanctioned by SCCA. They shall not be open to any driver except students undergoing instruction, and their instructors.

3.1.3. Private Event Definition
A private event is one where no admission charge of any kind is made. Participants' entry fees or other charges to participants are not admission charges. Attendance at private events shall be limited to the following:

A. Drivers and entrants, plus a nominal crew, whose size may be limited by the Supplementary Regulations, not to exceed a total of six (6), including the driver and entrant.

B. SCCA members and their guests whose names have been furnished to the Registrar before the event; such guests shall identify themselves at Registration.

C. Any other individual having a specific assigned duty at the event, who holds and has available credentials for the assigned job, plus one guest each.

D Minors under twelve (12) years of age are not counted under these limitations.

E. Advertised non-spectator Club Races are considered private events

In addition, the classification of "private event" shall be removed and the appropriate insurance premium for a public event shall be considered due and payable if there is any local newspaper, radio, television, or similar publicity placed by or traceable to the course owner, the organizing region, or a representative of either of them.

3.2. COURSES

Notwithstanding definitions to the contrary, the word 'course' and the word 'circuit' may be used interchangeably in these rules.

3.2.1. The selection of any course for an event shall be subject to the approval of the SCCA. Specifically, the SCCA may:

A. Limit a course as to the classification of event to be sanctioned there.

B. Restrict the number of cars which may be started simultaneously or in total.

C. Restrict the number of entries which may be accepted for an event or a competition.

D. Restrict the course to certain classes and categories of cars.

E. Restrict the course to certain grades of drivers.

F. Disapprove the course for all SCCA speed events.

3.2.2. Measurement Of Courses

The official length of a course shall be measured along the centerline of the road.

3.3. INSURANCE

3.3.1. Insurance Requirements

All events sanctioned by the SCCA shall be insured for Event Liability and Participant Accident coverage. Event Liability coverage may be provided by the SCCA Event Insurance Plan or an equivalent policy if obtained in compliance with the procedures described in paragraph 3.3.5., "Alternative Liability Insurance Procedures for Events." Participant Accident coverage shall be provided by the SCCA Event Insurance Plan.

3.3.2. Insurance Availability

The Chief Steward shall delay the beginning of the event until he/she is satisfied that the insurance required under this section is provided.

3.3.3. Coverage And Limits
The minimum coverage and limits for competitive events are:

A. Event Liability Coverage
Bodily Injury and Property Damage Liability; Contractual Liability (written and oral); Personal Injury/Advertising Liability; Host Liquor Liability; Participant Legal Liability (including participant to participant liability); Official Vehicle and Personal Property Damage; Pollution-sudden and accidental; Medical Malpractice liability.

The policy shall designate as additional insureds, among others: The Sports Car Club of America, Inc., SCCA Pro Racing, Ltd., regions chartered by the Sports Car Club of America, Inc., and their respective officers, members, officials, car owners, drivers, pit crews, entrants, their successors and assigns, sponsors, advertisers, and land owners while involved in and acting in their capacity during the presentation or conduct of an event. Additional names may be required. An updated list will be available from the SCCA Risk Management Department.

Minimum Limits

General Liability (including participant legal liability) - $5,000,000 per occurrence CSL (*general aggregate applies per event*)
Directors, Officers, and Stewards Errors and Omissions Liability - $100,000
Medical Malpractice Liability (excess coverage) - $5,000,000
Official Vehicle and Personal Property Damage – $50,000, $500 deductible

B. Participant Accident Coverage - SCCA Event Insurance Plan is required.

Accidental Death - $25,000
Blanket Medical Reimbursement - $50,000
Disability Income - $100 per week for the first 104 weeks after a seven (7) day waiting period
Accidental Dismemberment - Up to $10,000 according to schedule

All Participants are covered by Participant Accident Insurance.

3.3.4. Increased Limits For Licensed SCCA Members
$1,000,000 medical expense reimbursement benefits are provided to SCCA members properly credentialed for an event.

3.3.5. Alternative Liability Insurance Procedures For Events
The organizers and/or promoters of any SCCA-sanctioned event which is to be insured with liability coverage other than that provided by the current SCCA Master Insurance Plan shall adhere to the following:

A. A fully worded and certified Liability Policy (or policies) of

insurance equivalent to the requirements set forth in Section 3.3.3 above shall be forwarded to the SCCA Risk Management Department so that receipt of the Liability Policy (or policies) will occur not less than twenty (20) days prior to the scheduled commencement of the event to be insured by such Liability Policy (or policies). The Risk Management Department in its sole discretion, shall determine whether the Policy is equivalent and acceptable.

B. If such fully worded and certified Liability Policy (or policies) is not received by a date twenty (20) days prior to the scheduled commencement of the event to be insured, the Risk Management Department shall have the right, but not the obligation, to cause the event to be insured for liability under the current SCCA Event Insurance Plan. Certificates evidencing such coverage and a billing for the appropriate premium charge therefore shall be sent to the event organizers and promoters. In case the premium charge is unpaid by a date fourteen (14) days prior to the scheduled commencement of the event, the Risk Management Department shall cause the event to be canceled.

3.3.6. Photo ID
Club Racing Photo ID cards are required for all licensed SCCA members registering as a participant at all SCCA events except for those possessing trial or temporary memberships. (See 6.2.1.C & D.) It must include a current photo of the member named on the photo ID card. The use of state issued driver's licenses, university ID cards, or any other cards of this type **ARE NOT ALLOWED**. The only acceptable forms are those issued by the SCCA National Office as a license, the Club Racing Department, the SCCA Pro Racing Department as a participant ID, or one issued by an SCCA region as a substitute for a license. Photo ID's will not be issued to temporary members (*90 days*). Instead, cardboard or wristband credentials shall be issued. The name, photograph, member number, and entry credential for the current event shall be clearly visible.

At all SCCA Sanctioned events requiring drivers to hold a National or Regional Competition License or Novice Permit, participants sixteen (16) years old and older may be issued pit credentials only if they hold the proper minor Crew License. All other minors under the age of eighteen (18) shall not be allowed to enter the pit area, or any other areas, which provide less protection than that provided for the general public. Participants who are members, and over the age of eighteen (18), may be issued crew (pit) credentials."

3.3.7. Scaffolding At SCCA Events
Scaffolding is prohibited unless its use is specifically authorized by the Event Chief Steward after consultation with the SCCA Risk Management Department. Separate insurance coverage for this exposure may be required as a condition of use.

3.4. SANCTIONS
An SCCA-sanctioned event may be organized by:

A. The SCCA.

B. An SCCA Region(s).

3.4.1. Required Approval
The names or emblem of the SCCA shall be associated only with events sanctioned by SCCA. Organizers shall not distribute Entry Forms or Supplementary Regulations for an SCCA event prior to obtaining an SCCA Sanction.

3.4.2. Application For SCCA Sanction
Every application for SCCA Sanction shall be submitted on the Official Form (revised 12/05), and shall be accompanied by the appropriate sanction fee, a draft of the Entry Form, Supplementary Regulations, and the Schedule of Events. Applications shall be submitted for approval forty-five (45) days prior to the scheduled date of the event and shall state:

A. The name and address of the applicant.

B. The organization or person on whose behalf the application is made, and the official position held by the applicant.

C. The nature and classification of the event for which a sanction is requested.

D. The date and place of the proposed event.

3.4.3. Sanction Procedures
The sanction is the documentary authority, granted by SCCA, to organize and hold a competition. Where there are two (2) classifications of races during one event, it shall not normally be permissible for races of both classifications to be run simultaneously. A Sanction Number and document will be issued, within five (5) working days, when all requirements listed below have been met and the application approved. Sanction Numbers will be issued only in writing, not via telephone, and application submission should be planned accordingly.

A. The event must be listed on the official SCCA calendar. To be considered a firm date request, the region's request must be confirmed in writing by the circuit owner/manager.

B. The course must be approved by the SCCA.

C. Sanction fees payable to the SCCA must accompany the Sanction Application.

D. Upon approval of the Application, the National Office will promptly assign a Sanction Number and issue a formal Sanction document to the organizers of the event. (See Section 3.1.2.)

E. There shall be no refunds of Sanction fees unless notice of cancellation is received by the National Office at least fifteen (15) days prior to the event.

F. Upon conclusion of all Regional, Double Regional, National and Double National events, the organizing region shall submit to the SCCA the Excess Sanction fee for every car exceeding 150, per sanction number, within fourteen (14) days following the event. No further sanctions will be issued to a region until this has been paid.

G. Upon conclusion of a National race, the organizing region will remit immediately to the SCCA the funds specified by the Board of Directors per paid entrant in National Championship classes only for a fund authorized by the Board of Directors to be distributed to entrants in the Interdivisional Championship events. No further sanctions will be issued to a region until this has been paid.

H. The organizing region will send Official Regional and National Race Results to the National Office within five (5) days of the event. Additionally, the organizing region will send one (1) copy of the National Race Results to the publisher of SportsCar and one (1) copy (including qualifying) to the appropriate Pointskeeper (National or Regional) within five (5) days of the event.

I. A Double National is defined as two National races at the same facility within a contiguous 3-day period. A Double National may be sanctioned by more than one region. Double National races will be run under the following conditions:

    1. One (1) per division.

    2. No more than one-fourth of the regions within in the division object.

    3. Should be held on a three (3) day National holiday weekend and should be a three (3) day event.

    4. There must be a separate qualifying session for each event.

    5. Standard points will be given for each event.

J. Vintage/Historic cars may be included on SCCA programs under the following conditions:

    1. Inclusion of the Vintage/Historic race event is specifically indicated in the SCCA sanction.

    2. The driver is an SCCA member.

    3. The driver holds an approved SCCA license.

    4. The Chief Steward of the race event will set the standards for car preparation, classes (if any), and driver conduct, and shall state these requirements in the Entry Form for the sanctioned event.

    5. Vintage/Historic cars shall not be allowed to be grouped

with any other SCCA racing classes (except in a Drivers' School).

K. Private Driving Schools can be accepted for credit towards a Novice Permit under the following conditions:

1. Give acceptance for license purposes of one (1) private Driving School in lieu of an SCCA School, at the discretion of the Chief Steward of the SCCA School or of the Divisional Licensing Representative.

2. The Club Racing Department will list those private schools whose graduates may receive the above-mentioned SCCA acceptance.

3. The private schools on the above list will pay SCCA a service fee.

L. Restricted Nationals are experimental events developed by the National Office under the auspices of the Director, Club Racing. These events may include semi-Pro events during a National, and or fewer National classes than those listed in the GCR.

3.4.4. Application For Event On Unapproved Course
In the case of an Application for Sanction to conduct an event at a course which is not already approved by the SCCA (see 3.2.), application shall be submitted at least two (2) months before the proposed event and shall be accompanied by a full description of the course and facilities, including a scale map.

3.4.5. Late Fee
A late fee of fifty (50) percent of the sanction fee shall be charged on all sanctions postmarked after the applicable deadline, unless prior arrangements have been made and approved by the National Office Sanction Administrator.

3.5. OFFICIAL PROGRAM

3.5.1. Any program offered to the public by the organizers shall contain the following information:

A. The words "Official Program" in prominent lettering and the SCCA emblem on the front cover.

B. The Sanction Number assigned to the event on the front cover.

C. A conspicuous announcement: "Held under the SCCA General Competition Rules."

D. The name of the organizer.

E. Name, location, and date of the event.

F. Schedule of planned competitions.

G. Names of entrants and drivers entered for each competition, with identifying numbers and marques for their cars.

H. A detailed list of awards for each competition, if other than those provided in the GCR.

I. The names of the principal Officials.

3.6. SUPPLEMENTARY REGULATIONS

3.6.1. The Supplementary Regulations shall establish for competitors and officials the specific conditions for an event. The Club Racing Board must approve all regulations different than those of the GCR prior to a Sanction being issued. *The Club Racing Department must approve all sanctions.* They shall contain the following information:

A. The name, location, dates, nature, and classification of the event.

B. The sanction number and type of sanction for the event.

C. An announcement conspicuously placed: "Held under the SCCA General Competition Rules."

D. The name and address of the organizers.

E. A complete description of the proposed event, including the length of individual competitions, and the classes of cars eligible.

F. Schedules and locations of activities, inspections, meetings, and competitions.

G. The name and address of the Registrar or other person to whom the entry is to be sent, closing date for receipt of entries, and amount of entry fee.

H. The names of the Chief Steward and the SOM.

I. The manner of determining results and awarding trophies and prizes.

J. Hours during the event when official scales shall be available for competitors to check the weight of their cars.

K. All other information necessary for the proper conduct of the event, not already included in the GCR.

3.6.2. Changes To The Supplementary Regulations
No changes shall be made to the Supplementary Regulations, except for the schedule and/or class groupings, after the beginning of the period for receiving entries unless unanimous agreement is given by all affected competitors already entered, or the Stewards of the Meeting so decide for reasons of safety or forces beyond their control. All schedule changes

shall be approved by the SOM. (See 6.9.1., Powers of the SOM.)

3.7. ENTRY FORMS

3.7.1. Entry Forms shall contain the following:

A. Spaces for full names, addresses, membership numbers, and license numbers of entrants and drivers, and for driver's Region of Record

B. Space for full description of cars to be entered.

C. An announcement: "Held under the SCCA General Competition Rules."

D. Spaces for signatures of entrants and drivers for waiver of liability and/or indemnity declarations, acknowledgment of the authority of the GCR, declaration that cars entered comply with the provisions of the GCR, persons to be notified in case of accident.

E. The Sanction Number assigned to the event.

F. A separate medical information card, containing at least the following information: name, current medications, blood type, date of last tetanus shot, and allergies shall be provided with all Entry Forms and submitted with all entries to SCCA events.

G. Any other information required for the clarification of all other details of the event.

H. A $10 surcharge for each Spec Racer, Formula SCCA, and Sports Racer SCCA car must be submitted to the SCCA National Office with the tow fund and excess sanction fees for the event.

3.8. ENTRIES

An entry made and accepted in accordance with the GCR and the Supplementary Regulations shall constitute a contract binding an entrant to take part in the competition entered unless prevented by forces beyond his or her control. The organizers shall comply with the conditions of entry, provided that the entrant has made every effort to take part in the competition. A breach of such contract may be treated as a breach of the GCR.

An entry is considered official and a competitor is considered entered in an event when:

A. A signed, completed, and official entry blank has been submitted and received by the organizers (subject to subsequent refusal per section 3.8.1).

B. The entry fee has been paid and received by the organizers.

C. All fines due and payable to SCCA must havebeen paid.

D. Dual entry is permitted under a single sanction number. Separate entry forms and fees are required for each class entered. Only one (1) Vehicle Logbook is required, but shall contain pictures of each configuration.

3.8.1. Refusal Of Entry
The organizers have the right to refuse an entry at their discretion without giving a reason for refusal. If an entry for any competition is refused, notification of such refusal shall be sent to the entrant at the address given on the Entry Form as soon as possible and normally at least five (5) days before the event. *With respect to the Interdivisional Championship event, "SCCA Runoffs". A competitor, whose entry has been refused, shall have standing only to protest and appeal such refusal of entry. He may do so up to 15 days before the start of the event.*

3.8.2. Falsification Of Entry
An entry which contains a false or incorrect statement may be determined to be null and void by the SOM or other First Court. The entrant may be deemed guilty of a breach of the GCR, the entry fee may be forfeited, and further penalties may be imposed. (See 14., Penalties.)

3.8.3. Withdrawal (Scratch) Of Entry
An entry may be withdrawn without penalty if the withdrawal is made in writing or by wire prior to the entry deadline date. In such cases, the organizers shall return the entry fee. For withdrawals after the entry deadline, return of all or part of the entry fee is at the organizers' discretion. However, an entrant or driver accepted to take part in a competition who does not take part in that competition but takes part in another on the same day may be held in violation of the GCR.

3.9. SUBMISSION TO RULES

3.9.1. Every person, body, group of persons, region of the SCCA, or organizer who applies for and is granted an SCCA sanction to conduct an event, or any person who applies for an SCCA license shall be deemed to have agreed to the following and so acknowledge in writing upon request:

A. He or she is familiar with the GCR.

B. He or she agrees without reservation to the consequences resulting from the GCR.

C. He or she renounces the right to have recourse, except with the written consent of the SCCA, to any arbitrator or tribunal not provided for in the GCR.

3.10. WAIVERS
All persons desiring to participate in an event shall sign the SCCA authorized Release and Wavier of Liability Agreement prior to being issued event credentials (passes).

3.11. ENTRY LIST
The organizers shall make the official list of competitors available to all entrants at no charge as early as possible prior to the commencement of the event.

3.12. RESULTS
The organizing region will send Official Race Results to the National Office within five (5) days of the event. Additionally, the organizing region will send one (1) copy of the National Race Results to the publisher of SportsCar and one (1) copy to the appropriate Divisional Pointskeeper (including qualifying) within five (5) days of the event. Additionally, the organizers shall provide Official Race Results for each entrant either during the event, or within seven (7) days after the conclusion of the event.

3.13. AWARDS
In SCCA Events, participants shall compete primarily for points and trophies. Financial awards may be offered.

3.13.1. Distribution Of Awards
The organizers shall distribute all awards immediately after determination of the Official Results of a competition, or after such additional time as the SCCA may allow.

3.13.2. Expense, Starting, And Appearance Money
Participants are free to accept, and organizers, car owners, or sponsors shall be free to offer such expense, starting, and appearance money as they may wish.

3.13.3. Prize Money
The SCCA may require as one of the conditions of sanction for an event that any prize money to be offered be placed in escrow a satisfactory period of time prior to the start of the event, and that the SCCA may control the distribution of these awards.

3.13.4. Trophies
In SCCA National Championship and Regional events, trophies shall be awarded on the following minimum basis for each class and category of car.

Number of Starters	Trophies Awarded For Finishing Position
2	1st position only
3	1st and 2nd
4	1st, 2nd, and 3rd

Race Officials shall ensure event awards are available for distribution at the end of each competition so placing drivers can take their awards (trophies) home with them before the end of the day.

3.13.5. Points For Co-Driver
In events that allow for nomination of co-drivers, such as endurance races, series points (if any) shall be awarded in full to any co-driver who completes the minimum distance stated in the Supplementary Regulations, or one-third (1/3) the distance if none is specified.

3.14. POSTPONEMENT, ABANDONMENT, OR CANCELLATION

3.14.1. All or part of an event may be postponed or canceled if:

A. Provision for doing so is made in the Supplementary Regulations for the event, or

B. The SOM order that all or part of the event be postponed or cancelled for reasons of safety or forces beyond their control.

1. Postponement. In consultation with the organizing region, the SOM may order a postponement for classes who were not afforded the opportunity to race (as opposed to practice or qualify), provided a scheduled date is available at the same facility within the same competition year. The postponed races shall be run under the original sanction number.

2. Cancellation. If an entire event (all classes, all sessions) is postponed for more than 24 hours, it is considered to be cancelled, and entry fees shall be returned. If an event is cancelled during the competition, then the entry fees shall be prorated by class and a reasonable portion of the entry fee shall be returned.

3. Credit for Start. If an entire event is cancelled, there shall be no credit for a start. If a race is postponed, the competitor has the option of either competing in the postponed race, or receiving a prorated refund and being classified as *DNS* for that race, provided they have participated in a practice session or are shown on the qualifying results for that race.

3.15. FLAGGING AND COMMUNICATIONS

3.15.1. General Organization

The Flagging and Communications Chief shall be responsible for the establishment and operation of the Flagging and Communications organization at each SCCA speed event. The purpose of this organization shall be to provide safe course control by:

A. Informing the drivers, through flags, lights, or other signals, of the conditions of the course, the condition of their cars, or of any unusual conditions affecting the running of the event;

B. Informing the Chief Steward and other Officials, through the communication network, of the condition of the course and the competing cars, and of any situation requiring decisions and/or action by the Race Officials;

C. Relaying information and instructions from the Chief Steward to the persons operating the various emergency vehicles and equipment around the course as well as to the race drivers and turn personnel;

D. Undertaking emergency action needed to protect the lives and

property of drivers, workers, or spectators in the event of an accident;

E. Maintaining a clear course.

3.15.2. Central Control Station
The Communications Chief shall have charge of the Central Control Station where all communications affecting the control of the event are carried out. The Central Control Station shall maintain immediate liaison with the Chief Steward and all corner stations.

3.15.3. Corner Stations

A. Number - There shall be a sufficient number of corner stations established and manned to keep the entire course under observation at all times and to protect all areas of the course not immediately visible to oncoming drivers.

B. Location - Each corner station shall be located in accordance with the following considerations: The flagmen to have a clear view of the area to be covered; maximum visibility of the flagmen to the oncoming drivers; maximum protection for the corner station crew from out of control automobiles.

C. Personnel - Each corner station shall be staffed with a minimum of two (2) people and should be staffed by at least four (4) people: a flagger, a communicator, a safety worker, and a corner captain who shall be designated to be in charge of the station. The yellow flag shall be displayed when a corner worker or other personnel move to a less protected or unprotected area.

D. Equipment - Each corner station should be equipped with at least the following:
   1. Device for communicating immediately, privately, and without interference with the Central Control Station, other corner stations, and other stations as appropriate.
   2. The following flags or signaling paddles: Yellow, yellow and red striped, white, blue with a yellow stripe, black, and red.
   3. One dry chemical type fire extinguisher of at least 20-pound size although two (2) 10-pound extinguishers are recommended.
   4. Pry bar of sufficient length (4-5 feet).
   5. Broom (push type).
   6. Oil/gasoline absorbent material.
   7. Blanket or fire sheet.
   8. Vest or arm band to distinguish the Corner Captains.
   9. Pair of Day-Glo orange re-entry gloves.
   10. 20-foot length of half-inch rope.
   11. Flame/Heat resistant gloves.
   12. Each black flag station shall additionally be equipped with black and mechanical black flags, plus a blackboard or other means of displaying simultaneously the affected car's number or the word **"ALL."**

3.16. EMERGENCY SERVICES - MEDICAL & FIRE SAFETY

3.16.1. Purpose

A. To establish equipment and personnel needed to effect a workable medical, fire, and safety plan. Detailed plans need to be based on the specific conditions at the event facility and local, state or federal protocols and regulations.

B. The Chief Medical Officer needs to be familiar with local, state, and federal regulations for accident and medical emergencies.

C. A copy of the medical, fire and safety plan for each track must be submitted by the Divisional Executive Steward to the Club Office and the following officials prior to the beginning of the racing season: Divisional Administrator Medical Safety, Club Racing Department, Risk Management Department, National Administrator of Stewards, National Administrator Medical Safety, National Administrator Race Control.

3.16.2. Personnel

3.16.2.1. Medical Personnel
The following minimums apply:

A. There will be a Chief Medical Officer who is either: 1) Physician, MD or DO, preferably with and EMS background and licensed to practice in at least one (1) state or, 2) Paramedic or equivalent (advanced life support technician) with an active license or, 3) PA (Physicians Assistant) or APN (Advanced Practice Nurse) trained and experienced in EMS and emergency medicine with an active license.

B. There should be a second licensed medical person (EMT, paramedic, physician's assistant, registered nurse, etc.) to assist the Chief Medical Officer(s) and may serve as the Medical Records Secretary.

C. Medical personnel shall report to the Chief Medical Officer for the event.

D. It is recommended the initial medical response, which may be an ambulance, occur within two (2) minutes.

3.16.2.2. Fire Fighters

A. There shall be at least one (1) person assigned to each fire truck who is trained to use the equipment on the truck. It is recommended two (2) persons be assigned to each fire truck.

B. At least twenty (20) percent of the Flagging and Communication specialist should have experience in fighting actual or simulated vehicle fires.

C. Fire fighters shall report to the Assistant Chief Steward-Safety unless there is a Chief of Emergency Services assigned.

3.16.2.3. Wrecker

A. There shall be at least one (1) person assigned to a wrecker who is trained to use the equipment.

B. Wrecker personnel shall report to the Assistant Chief Steward-Safety unless there is a Chief of Emergency Services assigned.

3.16.3. Equipment

3.16.3.1. Ambulance

A. There shall be at least one (1) ambulance which shall meet all requirements for the jurisdiction *(where "jurisdiction" means the governing body, such as a township, city, or county)* in which the event occurs for Advance Life Support at the track during any competition event. Basic Life Support is acceptable only if the track medical facility is equipped and staffed for Advance Life Support.

B. Arrangements for transportation from track by EMS service should be in the medical operations protocol.

3.16.3.2. Fire Truck
There shall be one (1) fire truck which shall be equipped to fight automobile fires. It is recommended the vehicle be stationed so it can reach any point on the racing surface within two (2) minutes at a speed not to exceed fifty (50) mph.

3.16.3.3. Wrecker
There shall be one (1) wrecker which shall be capable of lifting any race car in the event. The wrecker may also serve as a fire truck if so equipped.

3.16.3.4. Telephone
There shall be an operating telephone or radio in the tower or medical duty station which can contact community emergency services and hospitals.

3.16.3.5. Other Recommended Equipment

A. It is recommended the Emergency Services Team be equipped with the following:
   1. Sharp knife
   2. Bolt cutters, 3-foot
   3. Fire axe
   4. Pry bars, 2-foot and 6-foot
   5. Rope, (3/4-inch nylon/or strap, 6000-lb test), 30 feet
   6. Bow saw (30-inch blades) or equivalent tool
   7. Tool box, containing: vice grip pliers, hammer (5-lb), cold chisel (9-inch by 1-inch), small pry bar, screwdrivers (flat head and Phillips), "Y"-shaped chisel, tin shears, hack saw and blades, adjustable crescent wrenches (large and small).

8. Oil dry compound

B. The equipment should be carried on the fire truck, wrecker or MERV (Multiple Emergency Response Vehicle).

C. If a power compound rescue tool and trained operator is on call and available within ten (10) minutes, it does not have to be located at the event site.

D. Comparable equipment may be substituted with the advance approval of the Divisional Executive Steward and Divisional Medical Administrator.

3.16.4. Operating Rules

3.16.4.1. Emergency Plan
The Chief Medical Officer and the Assistant Chief Steward-Safety shall, before allowing the commencement of racing (including practice and qualifying), verify that a written emergency plan has been prepared and distributed to all emergency and supervisory personnel.

3.16.4.2. Briefing
All emergency service personnel should have a briefing to review duties, duty stations, equipment, race circuit characteristics, vehicle, and other protocol.

3.16.4.3. Dispatching
The dispatching of emergency vehicles on the track shall be authorized by the Chief Steward. Dispatching procedures shall be agreed on in advance by the Chief Steward, Chief(s) of Flagging and Communications, Chief Medical Officer, Chief of Emergency Services (if assigned), and Assistant Chief Steward-Safety.

3.16.4.4. Hospital Arrangements

A. The Race Chairman and Chief Medical Official shall establish a primary route to the primary and secondary hospital prior to an event, and advise the vehicle drivers.

B. The Chief Medical Official shall confirm, well in advance of the event, the availability of adequate hospital staff and facilities and the protocols to be followed.

3.16.4.5. Identification of Personnel
Emergency services personnel should be readily identifiable by some means other than the usual passes (e.g., vest, arm bands, jackets).

3.16.4.6. Start of Race
All emergency vehicles shall be equipped, staffed and engines running for the first lap of each race group.

3.16.4.7. Suspension of Racing
Racing shall be suspended if the personnel specified in 3.16.2.1. and

3.16.2.2., or the equipment specified in 3.16.3., are no longer on the premises or are unable to perform their assigned duties.

3.17. SCHEDULING

3.17.1. Divisional Scheduling Representative

A Divisional Scheduling Representative is appointed for each division by the Divisional Executive Steward. The term of appointment shall be from July 1st until June 30th of the following year.

3.17.2. Scheduling Policies and Procedures

Immediately upon appointment, the Divisional Scheduling Representative shall prepare a list of available National Championship race dates for the following calendar year for his or her Division. The schedule of available dates may note and assign traditional dates on a tentative basis, may recognize holiday weekends established by tradition or law, and may otherwise be formulated in compliance with the following scheduling policies:

A. There shall be at least six (6) National Championship races in a division, unless a waiver is granted by the Board of Directors.

B. In conflicts involving a non-spectator and a spectator race, preference will be given to the spectator races.

C. Wherever possible, avoid scheduling National Championship races on consecutive weekends.

D. A region shall not conduct more than two (2) National Championship events.

E. There shall not be more than two (2) National Championship events on any one course.

F. No National races shall be scheduled after Labor Day weekend.

G. Scheduling of National Championship races on three (3) consecutive weekends in the same division is prohibited. Waiver of this policy can only be made by the Board of Directors.

H. The Club Racing Department, working with each Divisional Executive Steward, and the Area Director, is to establish the ratio of drivers schools to Nationals for each racing division.

I. Principal SCCA Club events will not be scheduled on National Convention dates.

3.17.3. Exceptions to Scheduling Policies

Requests for exceptions to the above scheduling policies shall be made in writing to the Manager of Club Racing and to the Divisional Scheduling Representative. Their recommendation requires the approval of the Chairman of the Club Racing Board.

3.17.4. Date Requests

The list of available National Championship race dates shall be mailed

by the Divisional Scheduling Representative to the Regional Executive of each region in the division no later than August 15th. Written requests for National Championship race dates shall be returned to the Scheduling Representative no later than October 15th. To be considered a firm date request, the region's request shall be confirmed in writing by the circuit owner or manager.

3.17.5. Final Schedule
The Scheduling Representatives shall mail copies of the final racing schedule for their division to the Manager of Club Racing (WITH THE APPROPRIATE NON-REFUNDABLE FEES), Chairman of the Club Racing Board, and the Regional Executives of all regions in their division, and to the Scheduling Representatives of the other seven divisions no later than December 1st.

3.17.6. Schedule Changes
The Scheduling Representative shall notify the parties in 3.17.5., as changes are made in the final schedule.

3.17.7. Calendar Listing Fees
A calendar listing fee was established in 1968 for subsequent National, Regional, Restricted, and Driver School events as a condition for SCCA calendar approval. Change-of-date requests are considered as new applications, and a separate fee is required. Only one (1) fee is required for each weekend of racing.

Calendar listing fees, payable to SCCA, are forwarded to the Scheduling Representative with date applications. On approval of the date, the fees are forwarded to the National Office. If a date request is denied, the Scheduling Representative returns the fee to the applicant. The purpose of the calendar listing fee is to bring about a more stable calendar as promptly as possible. The calendar listing fees are separate and distinct from the Sanction fees.

4. ENTRANTS, DRIVERS AND CREW

4.1. POSSESSION OF LICENSE
Every driver who registers for an event shall be in possession of a current license of the grade required for that classification of event (See 3.1., Classification of Events), and a current SCCA Membership Card. SCCA National licenses shall be accepted at any SCCA event unless otherwise specified by the Supplementary Regulations. All entrants shall be members of SCCA and are subject to all provisions of the GCR.

4.1.1. Presentation of License
A driver or entrant, where Entrant Licenses are required, shall show his or her license to an official on demand.

4.2. AUTHORIZED EVENTS
SCCA-licensed drivers and officials may participate in any events except those which have been specifically disapproved by the SCCA Club Racing Board or the Executive Steward of the Division concerned.

4.3. ASSUMED NAMES

In events requiring SCCA National or Regional Competition Licenses, or Novice Permits, drivers shall not race under assumed names, unless authorized by the Manager of Club Racing. All official documents (entry, waivers, etc.) shall be signed with the driver's legal name.

4.4. CREW MEMBERS

Any individual may be a Crew member.

4.4.1. Responsibilities

1. Drivers and entrants shall at all times during an event be responsible for the conduct of their crew. An offense during an event against the GCR or the Supplementary Regulations committed by a crew member is directly chargeable to the driver and the entrant. For purposes of this section, an event begins with the opening of registration and ends when the driver, entrant and all crew members have left the track property.

2. Pet owners shall be fully responsible for actions of their pets, and for any liability arising there from.

4.5. CONDUCT

Entrants, drivers, and participants at an event shall conduct themselves according to the highest standards of behavior and sportsmanship, particularly in relationship with other competitors and officials, and in a manner that shall not be prejudicial to the reputation of the SCCA or to the sport of automobile racing. Failure to do so may result in a penalty as provided in Section 14., Penalties. Any person signing an event waiver for a minor shall be held responsible for that minor.

4.6. ALCOHOLIC BEVERAGES, NARCOTICS, AND DANGEROUS DRUGS

1. Consumption of alcoholic beverages by any driver *or any participant* is expressly prohibited until all practice, qualifying, and racing activity for his or her class is concluded for the day. Any crew member who is impaired by the consumption of alcohol may be excluded from the event, and the driver and entrant penalized. (See 4.5.) Any driver who has consumed any alcoholic beverage on the day of an event, other than as provided above, shall not participate, and may be excluded. Consumption of alcoholic beverages in the pits is prohibited. (See 6.6.4., Alcohol, Narcotics, and Dangerous Drugs, with respect to officials' use of alcohol and drugs.)

2. The use of any narcotic or dangerous drug, as defined by Federal law or by the law of the state where the event is being held, by any participant is specifically prohibited. Any participant who uses narcotics or dangerous drugs during an event or on the grounds where an event is being held shall not participate, may be excluded from the event by the Chief Steward or the Chief of the official's specialty, may be removed from the grounds at the order of the Chief Steward, and may be penalized as provided in

Section 14., Penalties.

4.7. MEDICAL RESPONSIBILITY OF DRIVERS

No driver shall compete in any event unless he has been examined by a physician within the period specified in Section 5., Licenses, of the GCR, and certified by him or her to be medically fit to drive in speed events.

4.7.1. Medical Condition Affecting Fitness of Driver

Any known medical condition (including pregnancy) which could affect medical fitness to compete shall be reported immediately to the Medical Review Board. The driver cannot compete until recertified by the Medical Review Board.

4.7.2. Involvement in Accident at an Event

A driver who is involved in an accident in which his or her car rolls over, collides with a stationary object hard enough to cause structural damage to his or her car, who is aware of possible injury from an accident, or who is directed to do so by an official shall report to the Chief Medical Officer of the event as soon as possible. Any driver at an event transported off-site to a medical facility shall not subsequently compete in that event without a medical release signed by the attending physician at the treating facility or the event Chief Medical Officer.

4.8. DRIVER OR OFFICIAL REVIEW

The Divisional Executive Steward is authorized to convene a court to review a driver's or official's conduct, car legality, competition record, and/or other matters. Such a court shall have the power to invoke penalties as specified in Section 14., and may also revoke licenses, or may return the driver to school. The driver or official shall have the right to appeal this decision as specified in Section 15.

5. LICENSES

5.1. LICENSE GRADES

5.1.1. Competition

A. Novice Permit
B. Regional
C. National
D. Vintage
E. Minor (See 5.8.)

5.1.2. Official

A. Regional
B. Divisional
C. National
D. Senior

5.1.3. Steward

A. Steward-in-training
B. Divisional
C. Divisional Chief
D. National
E. National Chief

F. National Series Chief
G. Senior

5.2. EXPIRATION OF LICENSE
All licenses shall indicate the month and year of expiration. This shall coincide with the SCCA membership anniversary date. Competitors, once registered, may participate for the duration of the weekend, even though his/her membership may lapse during that period.

5.3. PARTICIPATION REQUIREMENTS
A competition license holder shall participate in the minimum number of SCCA races specified for his or her grade of license. No credit shall be given for the following:

1. Drivers Schools
2. Races held as part of a Drivers School
3. Events not sanctioned by the SCCA
4. Events resulting in a DNS or DNF

5.3.1. Credit for One Race Per Event
A driver shall receive credit for only one race per sanctioned event, regardless of the number of races entered.

5.4. MEDICAL REQUIREMENTS

1. Every applicant for a Competition License or Permit shall submit a completed physical examination on the SCCA form to the National Office. The examination date shall be no more than three (3) months prior to the date of application. A current physical examination form must be submitted every five (5) years for applicants ages 16-35; every two (2) years for applicants ages 36-59; and every year for applicants age sixty plus (60+). A member shall maintain continuous membership and license for physical examination form to be valid.

2. Medical forms are available from regions and from the National Office.

3. A Competition License shall not be issued to any applicant who has an organic abnormality of the heart as shown in an EKG and a Vector-Cardiogram. Those with a possible history of cardiac abnormality may obtain a license only with the consent of the Medical Review Board, through the National Office.

4. A Novice Permit may be issued to an applicant who has diabetes that requires insulin, provided the Divisional Medical Director approves. Existing licenses may be renewed subject to normal renewal requirements and approval by the Medical Review Board, through the National Office.

5.5. NOVICE PERMITS
As provided in Section 5.5.1 below, Novice Permits will be issued to enable student drivers to obtain the training and experience needed for Regional Licenses.

With an active membership, a Novice Permit is valid for 24 months, with the following exceptions:

1. Minors must have current waiver on file at National Office
2. Drivers over age 60 must have a physical every year. (GCR 5.4)
3. Drivers requiring a medical waiver must have a physical every year. (GCR 5.4)

If the requirements have not been completed by the expiration date of the permit, the applicant shall start over with no credit given for previous schooling or racing.

5.5.1. Novice Permit Issuance
An SCCA Regular, or Spouse member who is over sixteen (16) years of age, who holds a valid Operators Permit in his or her state of residence which allows the solo operation of a motor vehicle, may apply for a Novice Permit. For applicants under the age of majority (typically eighteen (18) years of age but see Section 5.8.1), only the National Office may issue permits. All others may be issued by the National Office, a Divisional Licensing Chairman, or a Region by submitting the following:

A. Completed current medical form. (See 5.4.)
B. Fee of $110. Good for 2 years, includes GCR. (Region retains $50)
C. Two (2) passport photographs.
D. Proof of age.
E. A completed Novice Permit Application.
For applicants under the age of majority, the following must also be submitted:
F. A completed Parental Consent, Release and waiver of Liability, Assumption of Risk and Indemnity Agreement.
G. A completed Minor's Assumption of Risk Acknowledgment.
H. A copy of both sides of their State Operator's Permit.

The applicant will receive the Novice Permit, with one (1) photo attached. At the time of issue, the applicant shall either purchase a current GCR or have one in his or her possession. The GCR and Spec books may be purchased either from the region or SCCA (800) 770-2055. This Permit shall be presented at Driver School.

5.5.2. Driver School Requirements
Holders of Novice Permits shall meet the following minimum Driver School requirements before they may participate in a Regional race:

A. Obtain the signature of the Chief Steward attesting to participation at each SCCA Drivers School attended.

B. Complete a total of at least six (6) hours of in-car, on course time at Drivers School events.

C. Complete at least two (2) Driver School events with a "Satisfactory" rating.

5.5.3. Applicants with Prior Racing Experience
The Chief Steward of an SCCA Driver School, or the Divisional License Chairman, may waive all or part of the Drivers School requirements for drivers with prior racing experience. Only the Divisional License Chairman, the National Administrator for Driver Licensing, or the Manager of Club Racing may waive anything other than Driver School requirements. Applicants under the age of eighteen (18) may only be waived by the Director of Club Racing. If at any time the Club has no Director of Club Racing, the Club Racing Manager or designated department head shall process applicants.

5.5.4. Private Driving Schools
Completion of a course at an SCCA accredited private driving school may be submitted in lieu of one SCCA Driver's School, and credit for it granted at the discretion of the Chief Steward of an SCCA school or the Divisional Licensing Chairman upon completion of three (3) hours in-car on course time at SCCA schools. A list of accredited driving schools will be published in SportsCar or may be requested from the Club Office. Schools are subject to being disapproved at any time. Certificates issued to students before disapproval shall be honored. Applicants under the age of eighteen (18) may apply only to the Club Racing department for waiver of one (1) SCCA Driver's School.

5.5.5. Racing on a Novice Permit
Upon completion of Driver School requirements, the holder of a Novice Permit shall:

A. Participate in two Regional events and obtain the signature of the Chief Steward attesting to satisfactory performance.

B. Complete the requirements for a Regional license within a maximum of two (2) years from date of issue.

C. A driver who logs six (6) Regional races on the Novice Permit, and then applies directly for a National License may be licensed for a fee of $*75*. Applicant shall supply official results for any races beyond the two (2) required.

5.5.6. Revocation
A Novice Permit may be revoked by the Divisional License Chairman appointed by the SCCA for his division of record, upon recommendation of the Chief Steward of an event.

5.6. REGIONAL COMPETITION LICENSE REQUIREMENTS
Holders of Novice Permits who are current SCCA Regular, or Spouse members in good standing and who have satisfactorily completed the Driver School requirements and two (2) Regional events must apply to the National Office for a Regional Competition License.

Submit the following to:
SCCA
Competition License
Building 300, B Street
Topeka, Kansas 66619

Novice Permit with approving signature of the Chief Steward or the Chairman SOM of the second "satisfactory" event with a current medical form (See 5.4.) and the appropriate license fee payable to SCCA.

5.6.1. Refusal to Approve License; Appeal
Refusal by the Chief Steward or Chairman SOM to approve the Regional Competition License application may be appealed by the applicant to the Divisional License Chairman for final decision.

5.6.2. Novice Permit as Temporary License
Once a Novice Permit holder has completed the requirements for a Regional Competition License and has had the permit signed on the back page, he or she may photocopy the entire permit. The photocopy is valid for the three weekends immediately following the submission of the Novice Permit to the National Office. The original shall be submitted as above. If the Permit holder elects to run six (6) races on the logbook as provided in 5.5.5., he or she shall use the original Novice Permit and not a photocopy.

5.6.3. Renewal of Regional Competition License
Renewal forms will be mailed automatically. Regional License holders may apply for renewal by submitting to the National Office:

A. Completed renewal application with a record of completing at least two (2) events during the preceding twelve (12) months.

B. A completed Medical form. (See 5.4.)

C. The appropriate license fee payable to SCCA.

D. A "Special Handling Fee" may apply. (see 5.14.)

5.6.4. Applicants with Prior Racing Experience
Participation requirements for issuance or renewal of a Regional License may be waived in total or in part only by the Divisional License Chairman of the applicant's Division of Record, the National Administrator of Driver Licensing, or the Manager of Club Racing. Applicants under the age of eighteen (18) may only be waived by the Director of Club Racing. If at any time the Club has no Director of Club Racing, the Club Racing Manager or designated department head shall process applicants.

5.7. NATIONAL COMPETITION LICENSE REQUIREMENTS

5.7.1. Drivers who are current SCCA Regular, or Spouse members in good standing and who have completed at least four (4) Regional events as a Regional Competition License holder within the license year may apply to the National Office for a National Competition License.

Submit Regional Competition License with record of completion of at least four (4) events in the past twelve (12) months, signed by applicant. The two (2) events run as a Novice do not count. Send in a current medical form (See 5.4.) and the appropriate National License fee.

5.7.2. Completion During Regional/National Event
A driver satisfactorily completing his/her license upgrade requirements or receiving a waiver from the Divisional Licensing Administrator during a Regional/National event needs only Chief Steward approval to enter that National event.

5.7.3. Renewal of National Competition License
Renewal applications will be mailed automatically. National Competition License holders may apply for a renewal by submitting:

A. Completed renewal application with a record of completing in the preceding twelve (12) months either three (3) SCCA Sanctioned National, Professional, or FIA events, or two (2) SCCA Sanctioned National, Professional, or FIA events, and one (1) Regional event, or four (4) SCCA Sanctioned Regional events. A driver who has not met these participation requirements shall contact his or her Divisional License Chairman for a waiver of the requirements.

B. A completed medical form. (See 5.4.)

C. The appropriate license fee payable to SCCA.

D. A "Special Handling Fee" may apply (see 5.14.).

5.7.4. Applicants with Prior Racing Experience
Participation requirements for issuing or renewing a National Competition License may be waived in total or in part only by the Divisional License Chairman of the applicant's Division of Record, the National Administrator of Driver Licensing, or the Manager of Club Racing. Applicants under the age of majority may only be waived by the Director of Club Racing. If at any time the Club has no Director of Club Racing, the Club Racing Manager or designated department head shall process applicants.

5.8. LICENSING OF MINORS
No one under sixteen (16) years of age may be issued a Novice Permit or Competition License *except by the National Office*.

5.8.1. Age of Majority
The age of majority for licensing purposes is determined by state law but is typically 18 years of age. Certain states may impose higher age limits and all license applicants must be of the age of majority for the state they are residing in.

5.9. CANADIAN "ASN CANADA FIA" LICENSING

5.9.1. Canadian residents holding a current ASN Professional Grade "A" or better license may apply to the National Office with the appropriate fee for issuance of an SCCA National Competition License.

A. Applicant shall be a current member of SCCA.

B. Application shall include a copy of the current ASN License and ASN Medical form.

C. The normal requirements of this Section may be followed thereafter.

5.10. VINTAGE COMPETITION LICENSING

Holders of Novice Permits who are current SCCA Regular, or Spouse members in good standing and who have satisfactorily completed the Driver School requirements and two (2) Regional events, within the preceding 24 months, may apply to the National Office for a Vintage Competition License.

Submit Novice Permit with approving signature of the Chief Steward or the Chairman SOM of the second "satisfactory" event with a current medical form (See 5.4.) and the appropriate license fee payable to SCCA.

5.10.1 Renewal of Vintage Competition License

Renewal forms will be mailed automatically. Vintage License holders may apply for renewal by submitting:

A. Completed renewal application with a record of completing at lease two (2) Vintage or SCCA sanctioned Regional events in the preceding twelve (12) months.

B. A completed medical form. (See 5.4.)

C. The appropriate license fee payable to SCCA.

D. A "Special Handling Fee" may apply (see 5.14.).

5.10.2. Applicants with Prior Racing Experience

Participation requirements for issuance or renewal of a Vintage License may be waived in total or in part only by the Divisional License Chairman of the applicant's Division of Record or the Manager of Club Racing. Applicants under the age of eighteen (18) may only be waived by the Director of Club Racing. If at any time the Club has no Director of Club Racing, the Club Racing Manager or designated department head shall process applicants.

5.11. FIA LICENSE INFORMATION

Applicants for FIA Licenses shall hold a current SCCA National Competition License, SCCA Pro License or SCCA Dual License and shall have successfully completed five (5) National events in the previous twelve (12) months prior to application.

Applications for an FIA Driver's License shall be accompanied by the appropriate fee and two (2) passport photos.

FIA Entrant's Licenses are also available from SCCA, on request and on payment of the appropriate fee.

5.12. LICENSE FEES – INCLUDES GCR

Novice Permit	$110.00 (Good for 2 years)
Regional License	$75.00
National License	$75.00
Vintage License	$55.00 (no GCR)

FIA Driver	$200.00
Letter of Authorization	$75.00 (per driver)
FIA Entrant	$200.00 (per car)

5.13. SPECIAL HANDLING FEE

A special handling and/or FAX transmission fee shall be charged for any special attention over and above the normal processing time for a competition license.

Special handling is a twenty-four (24) hour turn around process. The license is returned via Federal Express.

The Special Handling Fee of $125.00 is in addition to the normal appropriate license fee.

5.14. PROBATION LETTER AS A LICENSE

1. When probation is given as a penalty the Chairman of the Stewards of the Meeting (SOM) shall issue a Probation Letter to the competitor. The Chairman SOM shall confiscate the competitor's license and enclose the license and a copy of the Probation Letter with the Observer's Report. While the probation is effective immediately, the designated probation period does not begin until the competition license, as well as any imposed fine, is received by the Chairman SOM or the National Office.

2. The competitor shall use the Probation Letter as his/her license until the terms of the probation have been met completely.

3. Upon completion of the terms of probation, the competitor shall send the completed Probation Letter to the Club office via registered mail for the return of his/her license.

5.15. OFFICIALS' LICENSING SPECIALTIES

1. *Emergency Services*
2. Flagging and Communications
3. Grid/Pits
4. *Race Administration*
5. Registration
6. Scrutineering
7. Sound Control
8. Starters
9. Stewards
10. Timing and Scoring

NOTE: Emergency Services to include three sub-areas of Medical, Fire Rescue, Course Marshal.

NOTE: Race Administration to include Race Chairman, Radio Tech, Paddock, Hospitality, Data Coordinator, Press, Announcer, etc. (functions that are not hot-track related and may not be included in every event).

6. OFFICIALS AND THEIR DUTIES

6.1. OFFICIALS

The staff of principal officials, whose duty it shall be to direct the control of the event, may include:

Stewards of the Meeting (SOM)
Chief Steward/Series Chief Steward
Assistant Chief Steward-Safety
Race Chairman
Chief Starter
Chief Course
Chief Flag
Chief of Communications
Chief Timer and Scorer
Chief/Series Chief Technical and Safety Inspector (Scrutineer)
Chief *Emergency Services*
Chief Observer
Chief Pit
Chief Grid
Chief *Race Administration*
Chief Registrar
Judges
Chief Sound Control

They shall be termed "Officials" and may, with the exception of the SOM, have assistants also termed "Officials," to whom any of their duties may be delegated. Any worker is considered an official.

6.2. RACE OFFICIAL LICENSES

It is required that all Officials under SCCA control at all SCCA sanctioned events shall either be licensed in the specialty or hold a logbook in the specialty, except physicians and nurses. These licenses are to be checked at Registration (preferred) or by the Chief of the Specialty at each event.

6.2.1. Official Membership Requirements

A. SCCA Runoffs®: All officials shall be licensed members of SCCA.

B. Other Events: Only licensed members may be placed and/or work in hazardous areas. Non-members may work only in areas where the hazards do not exceed those to the general public. Exception: Employees of Services hired by the region or track who will be entering a restricted area such as ambulance, wrecker and fire crews are recommended to be, but do not have to be SCCA members. For the purpose of determining a hazardous area, the definition "outside the protection of a positive barrier" will be used.

C. Participant photo ID cards are required for all persons registering as Driver, Crew, or Officials at all SCCA events, except for temporary or trial members. These are to be accepted by all regions at all events regardless of issuing region. It must include a current photo of the member named on the photo ID card

(see 3.3.6). Members with temporary / trial memberships will not have photo ID's and therefore shall be issued cardboard or wristband credentials for Hot Pit Access.

D. Temporary / Trial Memberships and Licenses are available.

E. This membership / license is good for 90 days from the date of issue, is renewable, and allows for individuals to receive certain regular membership privileges. The issuing region may charge fees.

6.2.2. Minimum Grades of Licenses
At the following event grades, the listed minimum license grades are mandatory:

A. National Championship Events - National License minimum for Chief Starter, Chief Timer and Scorer, Chief of Flagging and Communications, Chief Scrutineer, *Chief of Grid, Chief of Pit, and Chief of Emergency Services.*

B. Regional Events - Divisional License minimum for all specialties *listed in section 6.2.2.A*.

C. Driver Schools - National License minimum for all above Chiefs of Specialty, except Timing and Scoring.

D. The Chief Steward at Driver's Schools shall be a National Chief Steward. The Chief Steward at National Championship Event shall be a National Series Chief Steward.

E. The Assistant Chief Steward-Safety shall be at least a Divisional Steward.

F. The Stewards of the Meeting must include, at a minimum, a Chairman and one other licensed steward in addition to any Stewards-in-Training.

6.3. REQUIRED OFFICIALS
At every event there shall be a Chief Steward, at least two (2) SOM, an Assistant Chief Steward-Safety, and a Chief Medical Official, in addition to other officials as necessary.

6.4. RIGHT TO SUPERVISION
The SCCA reserves the right to designate a qualified person to evaluate any competition.

6.5. APPOINTMENT

6.5.1. Interdivisional Event
All officials shall be appointed by SCCA.

6.5.2. SCCA National, Regional, and Restricted Events
All Stewards shall be appointed by the Executive Steward of the Division. All other Officials shall be appointed by the Region conducting the event,

subject to approval by the Executive Steward.

6.6. CONDUCT

6.6.1. Conflicts of Interest

A. The Chief Steward, Series Chief Steward, Assistant Chief Stewards, and the Stewards of the Meet shall have no financial, employment, business interest or significant personal relationship with the organizer or sponsor of an event. Membership or holding an office in an SCCA region shall not be deemed to be a conflict of interest in the absence of other evidence.

B. It is recommended that a Steward not operate a session in which a family member, co-worker, or with whom there is significant business, financial, or personal relationship is an entrant or driver.

C. A Steward of the Meet shall not be involved in a hearing involving a family member, co-worker, or any person with whom there is significant business, financial, or personal relationship.

6.6.2. Standards of Behavior

Every Official shall conduct himself or herself according to the highest standards of behavior. Failure to do so may result in loss of official appointment for the event, or other penalty as determined by the SOM.

6.6.3. Loss of License

A. Any license holder (whose actions are deemed by the SCCA Club Racing Board to be contrary to the best interest of SCCA) may have his or her license revoked, either for a period specified by the Club Racing Board, or permanently. This action is appealable to the Board of Directors.

B. Any license holder may be denied renewal of license for lack of participation, conduct in violation of the GCR, or acting contrary to the best interests of SCCA.

C. Any license holder may have his or her license down graded at any time for lack of participation, conduct in violation of the GCR, acting contrary to the best interests of SCCA, or inability to perform satisfactorily at the current license grade.

6.6.4. Alcohol, Narcotics, and Dangerous Drugs

Consumption of alcoholic beverages by an official is expressly prohibited until all practice, qualifying, and racing activity is over for the day, and thereafter until the individual official's duties have been completed for the day. Any official who has consumed any alcoholic beverages on the day of the event contrary to the above shall not participate, and may be excluded by the Chief Steward or Chief of the offender's specialty, and may be penalized as provided in Section 14., Penalties. Consumption of unauthorized controlled/dangerous substances is prohibited at any time.

6.6.5. Medical Condition Affecting Fitness of Official/Worker

Any known medical condition (including pregnancy) which could affect the ability to perform some or all of the assigned duties of the specialty shall require a request for reassignment based on the recommendations of the person's physician. Some medical conditions (including pregnancy) may require reassignment to non-hazardous areas only.

6.7. PLURALITY OF DUTIES

The same person may hold more than one official position. The Chief Steward, Series Chief Steward, and Chairman SOM shall have no plurality of duties.

6.8. SEPARATION OF DUTIES

An Official shall not perform duties other than those clearly attached to his or her appointment or appointments.

6.9. STEWARDS OF THE MEETING (SOM)

The SOM shall be responsible only to SCCA, and they shall have the duty of enforcing compliance with the GCR and Supplementary Regulations. They shall act primarily in a judicial capacity, and therefore shall not incur any responsibility for the organization or execution of an event.

6.9.1. Powers of the SOM

A. Settle any dispute within the administrative functions, or protest arising from an event, subject to the rights of appeal provided by the GCR.

B. Hear and act on Requests for Action from the Chief Steward. (See 6.11.4.)

C. Impose any penalty permitted by the GCR and Supplementary Regulations. (See Section 14., Penalties)

D. Appoint substitutes to replace any Stewards or Officials not able to perform their duties. This power shall be used by the remaining Steward or Stewards to ensure that there are always at least two (2) SOM.

E. Modify the Supplementary Regulations. (refer to 3.6.2, Changes to the Supplementary Regulations)

F. Alter the schedule.

G. Modify the position of the starting or finishing lines where necessary to ensure the safety of drivers and spectators.

H. Amend the results of a competition:

1. Based on a correction or error by the Chief Timer and Scorer.

2. To take into account a time, distance, or lap penalty against a competitor.

3. To change the sequence of finishing positions in case a competitor is disqualified.

I. Postpone a competition for reasons of safety or forces beyond their control.

6.10. CHAIRMAN OF THE SOM

One of the SOM shall be appointed Chairman of the SOM for the event. He or she shall not be a member of the organizing Region at National events, and should not be for Driver's Schools/Regional events.

6.10.1. Observer's Reports

As soon as practical after the conclusion of an event, (not later than ten days), the Chairman of the SOM shall forward to the SCCA Manager of Club Racing a report to include:

A. Details of all protests.

B. Actions taken.

C. Penalties imposed (including reprimands and suspensions to be noted in driver's file).

D. Notice(s) of intention to appeal and appeals, including appeal fee(s).

E. Fine(s) collected.

F. Full details of any accidents.

G. Official Results of all competitions.

H. General comments and recommendations of the SOM on the organization and conduct of the event.

6.11. CHIEF STEWARD/SERIES CHIEF STEWARD

The Chief Steward is the executive responsible for the general conduct of the event in accordance with the GCR and the Supplementary Regulations. He or she shall have the powers and the duties set out in Sections 6.11.1., to 6.11.4., "Series Chief Steward" shall be substituted for "Chief Steward" in these rules when a Series Chief Steward is carrying out a Chief Steward's duties.

6.11.1. Execution of the Event

The Chief Steward shall:

A. Execute the program of competitions and other activities safely by controlling drivers, their cars, the Officials, and workers from the commencement of activities until the time for protests from the last competition has expired.

B. Ascertain whether Officials are at their posts and report the absence of any of them to the SOM.

C. Ensure that all Officials and workers are provided with necessary information.

D. Collect all reports and other official information for the determination of results.

E. Prepare any information required to enable the Chairman of the SOM to prepare the report.

F. Authorize a change of driver or car.

G. Convey to the SOM any proposal to modify the schedule of competitions.

H. Prevent an ineligible driver from competing.

6.11.2. Maintenance of Order
The Chief Steward shall:

A. Keep order in conjunction with the authorities who are policing the event and who are responsible for public safety.

B. Exclude from the event any entrant, driver, crew, Official, worker, or SCCA member who is guilty of misbehavior.

C. Exclude from participation a worker or Official who is ineligible for the position to which he or she is assigned or who the Chief Steward determines is incapable of carrying out his or her duties.

D. Order removal from the premises any person who refuses to obey the order of any responsible Official or of a public safety officer.

E. Prohibit from competing any driver or car considered dangerous.

F. Convey to the SOM a report dealing with the misbehavior of any entrant or driver. This may be accompanied by a Request for Action. (See 6.11.4.)

G. Receive protests from entrants, drivers or officials and immediately transmit them to the SOM.

6.11.3. Powers of the Chief Steward
The Chief Steward may:

A. Disqualify a driver or an ineligible car.

B. Remove technical inspection stickers.

C. Disallow qualifying times.

D. Direct cars to be impounded at any time during the event.

E. At his or her discretion and without necessarily receiving a

request to do so, order disassembly and inspection of any entered car to ascertain its conformance with the GCR. If the car is found to be eligible for the competition in which it is entered, the race organizers shall stand the expense of the disassembly, inspection, and reassembly. If it is not eligible, the entrant shall bear the expense, in addition to whatever penalties the SOM may direct after receiving the Chief Steward's report.

F. Convey to the SOM a report of any breach of the GCR or Supplementary Regulations. This report may be accompanied by a Request for Action. (See 6.11.4.)

G. Impose a fine of up to $100.00.

H. Prevent an ineligible car from competing.

I. Reprimand (14.5.).

J. Impose time, lap, event points, or position penalty (14.7.).

Note: Penalties imposed by the Chief Steward shall not incur automatic penalty points. In the event that the Chief Steward's action is protested and the protest is disallowed, thus upholding the Chief Steward's action, the Stewards of the Meet may assign penalty points as listed in 14.14. Automatic Penalties.

6.11.4. Requests for Action
The Chief Steward may submit to the SOM a Request for Action describing a suspected breach of the GCR or the Supplementary Regulations. The SOM shall act on this Request in the same manner as they would act on a protest, and shall have the same authority to levy penalties as in a protest. The Chief Steward shall not submit a Request for Action for any single breach of the rules for which he has already imposed a penalty as outlined in Section 6.11.3.

6.11.5. Chief Steward's Action
The Chief Steward may file a Chief Steward's Action (CSA) describing a breach of the GCR or the supplemental regulations and the corresponding action taken as outlined in Section 6.11.3

6.12. RACE CHAIRMAN

6.12.1. The Race Chairman shall be responsible for the organization of an event. Specifically, he or she shall:

A. Determine with the promoters, organizers, and the Chief Steward the schedule and all other activities to occur during the event, draft the Supplementary Regulations, and see that all Entry Forms are printed and mailed.

B. Arrange that insurance conforming to SCCA requirements is procured, and that a copy of the Insurance Certificate is presented to the Chairman of the SOM and the Chief Steward prior to the commencement of the event.

C. See that qualified Officials and workers are appointed and that they are on station.

D. Arrange for the use of the course and all necessary facilities.

E. Arrange for emergency vehicles and equipment.

F. Arrange for trophies and their proper distribution.

G. Arrange for receipt and acknowledgment of entries.

H. Arrange for proper registration of all entries.

I. Arrange for the distribution of Official Results to the SOM, entrants, the organizers, and the SCCA.

J. Obtain the necessary equipment to conduct all post-race and pre-race inspections as required at all SCCA race events.

K. Arrange, in conjunction with the Chief *of Emergency Services,* the required equipment and facilities in accordance with Section 3.16.

6.13. CHIEF STARTER
The Chief Starter shall operate directly under the supervision of the Chief Steward. The Chief Starter gives directions to competing drivers by flag, hand, and body signals prescribed by the GCR with respect to starting, suspending, and ending a race.

6.14. COURSE CHIEF
The Course Chief shall be responsible for final preparation and maintenance of the course and other related duties assigned to him or her by the *Chief of Emergency Services in conjunction with the* Chief Steward.

6.15. FLAG CHIEF
The Flag Chief shall be responsible for recruiting, training, and assigning qualified persons to corner stations. At least twenty (20) percent of the Flagging and Communications specialists should have had experience in fighting actual or simulated vehicle fires.

6.16. COMMUNICATIONS CHIEF
The Communications Chief shall be responsible for the establishment and operation of the communications system, which shall include all corner stations and a central control. He or she shall, in conjunction with the Chief Flag Marshal recruit, train, and assign qualified persons to operate and maintain the system at an event. A race log shall be kept of all communications on the race network by person(s) in the immediate vicinity of the Operating Steward.

6.17. CHIEF TIMER AND SCORER

6.17.1 The Chief Timer and Scorer shall be responsible for the accurate timing and scoring of the event in accordance with the GCR. Specifically,

he or she shall:

A. Recruit, train, assign, and supervise qualified personnel to time and score the event.

B. Furnish the Chief Steward and the SOM any times and results that they may request.

C. Maintain records of official times and lap charts for all competing cars.

D. Compile and publish the Official Results of all competitions, submit copies of completed Official Results to the Race Chairman for distribution to the SOM, the organizers, and the SCCA, and submit complete Official Results within seven (7) days to the Divisional Pointskeeper.

E. At spectator events, work closely with the Press Officers, press, and other media, as well as with circuit, radio, and/or television announcers, providing qualifying information, results, and any other data requested, as quickly as possible.

6.18. CHIEF / SERIES CHIEF TECHNICAL AND SAFETY INSPECTOR (Scrutineer)

6.18.1. The Chief Technical and Safety Inspector or Series Technical and Safety Inspector shall ascertain that the cars comply with the GCR, Specification Books, and Supplementary Regulations. Specifically, he or she shall:

A. Approve cars that comply with all safety regulations.

B. Conduct inspections of cars at the request of the Chief Steward.

C. Report to the Chief Steward any cars that he or she finds do not conform with requirements of the GCR or the appropriate Specification Books.

6.19. CHIEF *OF EMERGENCY SERVICES*

The Chief *of Emergency Services* shall be responsible, in conjunction with the Race Chairman and Assistant Chief Steward-Safety or *Chief Medical Official*, for staffing and equipping the medical organization in accordance with Section 3.16., Emergency Services.

6.20. DRIVER OBSERVERS

The Observers shall occupy posts along the course assigned to them by the Chief Steward, or by the Chief Observer if one is nominated. As soon as a competition is started, each Observer shall be under the orders of the Chief Steward, to whom he or she shall report all incidents which occur on the section of the course for which he or she is responsible. At the conclusion of each competition, Observers shall give the Chief Steward a written report of all incidents or accidents witnessed by them.

6.21. PRESS OFFICER
The Press Officer advises the Officials on press information and acts as liaison with the promoter's press director, if any. Chief Officials and SOM shall cooperate with the Press Officer in carrying out his or her responsibility to apprise the press on matters of public interest.

6.22. CHIEF REGISTRAR
The Chief Registrar shall be responsible for accepting, certifying, and processing all entries and credentials for drivers, crew, and Officials and the posting of all required signs/placards in the registration area.

6.23. ASSISTANT CHIEF STEWARD-SAFETY

6.23.1 The Assistant Chief Steward-Safety is responsible to the Chief Steward, and shall be responsible:

A. To investigate accidents and forward the originals of all reports including original releases to the Risk Management Department of SCCA.

B. To notify Risk Management Department, the same day via telephone, of any accident which involves serious injury to a participant or any injury to a spectator.

C. To mail copies of the material sent to the Risk Management Department to the Divisional Safety Administrator.

D. During the event, to report to the Chief Steward any hazards which require further investigation or action.

E. To perform such duties as are delegated by the Chief Steward.

F. If no Emergency Services Chief is assigned, to supervise Emergency Services personnel and equipment in conjunction with the Race Chairman (pre-event) and the Chief Medical Officer (during the event).

6.24. JUDGES

6.24.1. Judges are optional and may perform one or more of following duties:

A. Starting Judges shall point out to the Chief Steward any false starts immediately after they occur. Finishing Judges declare the order in which cars cross the finish line. Judges of the Fact shall decide whether a car has touched or passed a given line or shall rule on other facts of the same type provided in the Supplementary Regulations.

B. A protest shall not be made against the decision of a Judge.

C. An error by a Judge may be corrected by him or her with the approval of the SOM.

6.25. SOUND CONTROL CHIEF

6.25.1. The Sound Control Chief shall be responsible for monitoring racing vehicles at sound-controlled events in accordance with the GCR and the SCCA Sound Control Manual. Specifically, he or she shall:

A. Review or establish sound meter monitoring location.

B. Establish how reading(s) shall be made.

C. Advise the Chief Steward of the readings.

D. Submit post-race reports to the Chairman of the SOM.

E. Monitor weather and ambient conditions throughout the day.

F. Perform field calibration in accordance with the Sound Control Manual for sound meter, microphone, or other instruments.

G. Obtain yearly calibration of equipment from manufacturer or qualified laboratory.

6.26. COMPLIANCE CHECKING CREW

When assigned to an event by the Club Racing Department, all members of this crew will have the official status of an Assistant Chief Steward. Their sole responsibility is to advise the Chief Steward of cars not in compliance with the GCR and/or the Supplemental Regulations for the event. The Chief Steward may delegate all or any part of his powers under 6.11.3., and 6.11.4., to them.

7. QUALIFYING AND STARTING

7.1. FORMING THE GRID

7.1.1. Number of Cars Allowed on the Course

A. The maximum number of cars that may be started simultaneously on any course shall be twenty-five (25) per mile.

B. The maximum number of cars that may occupy a course in practice, qualifying, or a race shall not exceed twenty-five (25) per mile, and then only if an extreme speed differential does not exist between the fastest and the slowest cars.

C. Only the Executive Steward of the Division may authorize an increase in this number or may require a decrease for any or all car classes.

7.1.2. Grouping Cars by Class

A. All cars shall race in their respective classes. One (1) car in a class shall constitute a class. A car shall not compete in more than one race class in the same race group.

B. The running of cars in classes and/or categories for which they were not designed or intended is strongly discouraged. The Chief Steward shall approve the proposed classification. He or she shall not approve if the car is so dissimilar or the car/driver combination otherwise unsuitable so as to pose a hazard to safety or an impediment to the fair competition among the other cars in the class and race group.

7.1.3. Combining Classes

A. Any Formula class may be combined with Sports Racing cars.

B. Whenever possible it is preferable to combine Sports Racing cars with appropriate Formula classes than with Production or GT cars.

C. Whenever possible it is preferable to not combine FA, FM, FC with FV and/or F500. FV may be combined with F500.

D. SCCA Spec Racer may be combined with G and H Production and GT-Lite.

E. Formula cars shall not be combined with cars from any other category except Sports Racing. This does not apply to race groups consisting of solely Vintage/Historic cars.

F. Whenever possible it is preferable to not combine GT1, AS, T1, T2, T3 classes with DSR, CSR, SRF, S2000, FP, GP, HP, GT-Lite.

7.1.4 Additional Classes

Competitions for classes, other than those specified in Section 17., Automobiles, shall not jeopardize a full schedule of competitions for the recognized classes. Organizers may also schedule extra competitions for other classes, provided specifications are clearly set forth in Supplementary Regulations.

7.1.5. Starting Positions

A. Cars shall be positioned at the start in order of their official qualifying times without regard to engine displacement or class, with the fastest cars nearest the starting line, unless the Supplementary Regulations specify a different method.

B. In case of a tie in qualifying times, the second fastest lap, then the third fastest, etc., shall be used to break the tie.

C. It shall be the car/driver combination which qualifies a starting position.

D. The fastest qualifier shall have the choice of the inside pole position (nearest the direction of the first turn) or the outside. Absent a choice, the pole position is assumed to be the inside. When outside position is chosen, the second qualifier will be

inside, the third outside, the fourth inside, etc. Continue to alternate the entire grid.

E. Non-Qualifiers may be gridded behind qualifiers by the Chief Steward per GCR 16.1.2.

F. Cars not in position on the grid prior to the one (1) minute signal (7.5.1 and 7.5.2) shall relinquish their starting positions and shall start from the back of the field.

7.1.6. Oversubscribed Classes
Qualifying for an oversubscribed single class race shall be split into two (2) groups. The race grid shall be split into two (2) groups. The grid shall be determined in accordance with 7.1.5., Starting Positions. If the Chief Steward determines that there is a significant difference in track conditions between the two (2) qualifying sessions, he or she may recommend the parallel column procedure to the Stewards of the Meeting. If they approve, one-half of the grid shall be taken from each session and gridded in columns (e.g., one column of a 2-2 grid from each session). The fastest car overall, regardless of track conditions, shall have the pole position and be followed by the cars from its session in order of qualifying time.

7.1.7. Tire Warmers
Pre-heating of tires prior to competition by electrically heated covers or similar means is prohibited on the grid.

7.2. STARTING THE ENGINE
In all SCCA competitions, engines shall be started with a starter operated by the driver in normal driving position, except F500, and an on-board or supplementary power supply. Carburetor or fuel injection systems may be manipulated and/or primed in the process of starting cars. Push starts are permitted only as specifically authorized herein.

7.2.1. Push Starts on the Grid
A driver unable to start the car on the false grid may push start provided the car is back in position prior to the-one minute signal. Push starts on the false grid shall be under the supervision of the Grid Marshal to guarantee they are done in a suitable manner. After the one-minute signal, the right to start the car by push starting is relinquished.

7.2.2. Late Starters
After the field has left the grid, the Chief Steward may add an alternate entry that has started or permit a gridded entry to push start and join the field at the back of the pack. The Chief Steward shall direct whether the car may enter the track during the pace lap or start from the pit exit after the green flag has been displayed.

7.3. THE START

7.3.1. Starter's Orders
Drivers and automobiles shall come under the orders of the Starter from the time the Chief Steward delegates this control to the Starter until the competition is completed.

7.3.2. Classification of Car as a Starter
To be considered a starter, a car shall receive the green flag at the start or, in the case of an aborted start, cross the control line. *Cars that are on the course, not in the pits, when the green is displayed shall be considered starters.* Cars entering the race after the start shall also be considered starters. A car shall enter the race before the checkered flag is displayed in order to be classified as a starter.

7.3.3. False Start
A false start shall occur when a driver under the Starter's orders moves forward from his or her prescribed position before the start. In the case of a rolling start, this movement shall refer to improving the driver's position in relation to the moving field by moving out of line or passing prior to the waving of the green flag. If the Chief Steward determines that a false start has occurred, and the race has been started, that driver or drivers may be black-flagged and held in the pits or at the start line for a period of up to one minute. Other penalties may also be imposed. (See 14., Penalties)

7.3.4. Aborted Start
Should an aborted start occur and additional pace laps be run, those additional laps will be scored as race laps and timing will start when the pole car crosses the timing control line unless otherwise specified by the Supplementary Regulations for the event.

7.3.5. Starting Line for Timing and Scoring
For a rolling start, the starting line shall be the control line on the crossing of which the timing commences unless otherwise provided in the Supplementary Regulations.

7.4. STARTER

7.4.1. Responsibility
The Starter shall operate directly under, and shall carry out the orders of, and shall be responsible solely to the Chief Steward.

7.4.2. Function
The Starter shall control the competing drivers by conveying to them the orders of the Chief Steward during the practice and during competitions until the competitions are concluded. During this period cars are "under the Starter's orders."

7.4.3. Location
The Starter shall be stationed so as to be at all times in a location of maximum visibility to the competing drivers. The Starter shall have immediate communication with the Chief Steward.

7.4.4. Equipment
The Starter shall be equipped with a complete set of signal flags required by the SCCA General Competition Rules.

7.5. SCCA STANDARD START (ROLLING START)
The following rolling start technique shall be known as the SCCA Standard

Start and shall be utilized at all SCCA races, unless an alternate procedure has been approved by the Divisional Executive Steward and is set out in the Supplementary Regulations for the event.

1. On instruction of the Chief Steward, a signal, plainly audible or visible to the full grid, shall be given at five (5) minutes and at one (1) minute prior to the scheduled starting time of each race. This will alert drivers to man their cars, and crews to complete last-minute preparations.

2. At the one-minute signal the Starter or Grid Marshal shall give the signal to start motors.

3. *At or before the expiration of the one-minute period,* the Starter or Grid Marshal shall signal the *field* to begin the pace lap.

4. The pace car, with emergency lights flashing, shall position itself at the head of the pack. It shall proceed at a constant slow speed, the front row drivers having been instructed not to pass the pace car until the green flag has been displayed. If a pace car is not utilized, the "pole" car shall serve the same function as a pace car from its position in the front row. In the event the race is not started, necessitating another pace lap, depending on conditions, the pace car may overtake the field and resume its function, provided the front row drivers have been previously advised of this plan. Otherwise, the "pole" car shall assume the duty of the pace car, remaining in this front row position. *Once the pace car pulls off for the start, the pole car shall maintain the speed of the pace car just prior to the pace car pulling off.*

5. During the pace lap, the Starter shall be positioned at a safe location where the *majority of the drivers in the approaching field can clearly see him or her.* The Starter shall remain motionless, with the green flag hidden, and no other flags visible.

6. Upon determining that the approaching field is at a constant slow speed, well bunched and in line, and close enough that all drivers can see the flag, the Starter shall suddenly and continuously wave the green flag, until all cars have passed the start line. The race shall be under way throughout the field at the instant the green flag is waved and passing may occur at any point, within reasonable safety standards.

7. If the Starter determines that the field is not in good order, or that some drivers have improved their positions by moving out of line or by passing prior to the waving of the green flag, the Starter shall abort the start by making no flag movements whatsoever, and at the same time shake his or her head in a negative manner, to indicate that a start shall not take place. This will inform the drivers to proceed on another pace lap. All flag stations shall display double yellow flags during all pace laps. Drivers will raise one hand to indicate that the start is aborted. (Except as provided in 7.6.2)

8. There shall be one (1) pace lap; all laps after the first pace lap count as race laps.

9. A car may not improve its position in the field once it comes under the Starter's orders, regardless of circumstances. A car that fails to start with the pack or falls out of position during a pace lap relinquishes its grid position. It may rejoin the field only at the rear of the pack. A car that improves its position is guilty of a false start and may be penalized as provided in 7.3.3., False Start.

10. It is to be emphasized that the SCCA Standard Start is a rolling start, not a "flying" start. While the pace lap may proceed at a brisk pace, the field shall be slowed at a sufficient distance before the start line to allow orderly grouping of the field. The actual speed immediately prior to the start is somewhat dictated by the types of cars, size of the field, and course layout. Only one (1) Official shall be designated to brief the front row drivers before each race, preferably the Starter, acting under the orders of the Chief Steward.

11. At the discretion of the Chief Steward an additional un-scored pace lap may be authorized.

7.6. SPLIT STARTS

1. Split starts are recommended where there is a large differential in speed or cornering ability between the classes or categories in a single race group. The procedures for a split start shall be set out in the Supplementary Regulations or explained at a Drivers' Meeting. The group containing the car with the fastest qualifying time shall start first.

2. The second group also should be led by a pace car which should keep the first group in sight (on the longest straight). If the first group gets a green flag, then the second group's race will be considered to start no matter what flag the starter displays. This will allow the starter to display a yellow flag if warranted by an incident in the first group. Anyone jumping the start in the second group may be penalized.

3. A starting judge should be appointed for a split start.

7.7. RESTARTS

When a race is restarted, each pace lap shall count as a race lap. In a timed race, the clock shall be restarted when the field is dispatched. No replenishment of or assistance to cars shall be allowed after a race is stopped and before it is restarted. However, any method of restarting the engine is permitted.

If a race is stopped, the Chief Steward may:

1. Order a complete restart according to the original starting positions; **Note: A car which completes the pace lap for the first**

start is considered a starter.

2. Restart the cars in a single file in the overall order in which they completed their last completely scored lap;

3. Restart from a scoring tape or a lap chart whichever best fits the conditions at hand.

8. TIMING, SCORING, FINISHES, AND WINNERS

8.1. TIMING AND SCORING

1. The Timing and Scoring systems described in this section shall be required for SCCA National races. It is recommended that these systems be used at Regional races and Drivers Schools.

2. The Chief of Timing and Scoring should employ the Timing and Scoring systems described below in recording the performance of cars in competition. These systems should enable the Timing and Scoring staff to produce the following information: a set of grids for each race group, a set of time cards for each car from qualifying and the race, continuity tapes, independently prepared lap charts, provisional results, and final results. Titles as used in this section are used in a functional sense. The Chief of Timing and Scoring may delegate any task to any member of the Timing and Scoring staff as appropriate.

3. Should there be insufficient staff to run two separate systems as described, the Chief of Timing and Scoring should notify the Chief Steward. The Chief Steward may then decide to waive the two-system requirement, allowing the Chief of Timing and Scoring to use the Timing and Scoring staff in the most productive manner possible. In this case, the Timing system should be used to establish grid positions and the Scoring system should be the primary source of information for tabulating race results. Overall timing of class leaders during races is recommended to provide the information described in section 8.9.2. Any protests concerning the Timing and Scoring requirements will not be accepted.

4. The Timing system:

   A. It is recommended that an electronic timer (such as a Chronomix, a Meca, a Heuer, Alge, or similar device) be used. The timer shall be actuated by a photoelectric cell or other means on the timing control line. Times should be recorded to the 1/1000th of a second. The minimum acceptable resolution for an electronic timer is 1/100th of a second. The electronic timer may provide data to an appropriate computer program capable of processing the data and printing results.

      Transponder/transmitter systems used in SCCA Club Racing shall be manufactured by AMB or be compatible with AMB systems. Those other transponder/transmitter systems which are currently in use may continue to be used, but shall

not be the primary system for any National race.

1. There shall be a minimum of three independently prepared tapes. The tapers shall record the car numbers in the order they cross the timing control line. The tapers should indicate "yellow flag," "black flag," or "red flag," as personally observed and/or officially observed or reported. "Checkered flag" should be written on the final tape when the checkered flag has been displayed. These tapes should be compared and audited, corrected if necessary, and then the car numbers will be matched with the times recorded by the electronic timer. These tapes may be shared with the Scoring System.

B. An acceptable alternative to an electronic timer is a group of Timers with stopwatches. The stopwatches should time to the nearest 1/100th of a second. The minimum acceptable resolution for a stopwatch is 1/10th of a second. Timers will record the cumulative time of passage for their assigned car(s), then compute and record the individual lap time. Timers should note on the time card for each assigned car such occurrences as "pit stop," "black flag," "checkered flag," "off course," etc., as personally observed and/or officially observed or reported. At the end of each session, the Timer will indicate on the time card the fastest lap time for each assigned car.

C. For the start of a qualifying session, the electronic timer (and/or stopwatches) shall be started simultaneously on a signal given by the Chief Timer.

D. At the end of each qualifying session, the Chief Timer shall audit the time cards produced from the timing system. These time cards should show the cumulative times as well as the lap times. Once the Chief Timer is satisfied that the times are correct, a Provisional Grid should be prepared, as described in GCR 7.1.5, Starting Positions, and posted. At the expiration of the protest period, these Provisional Grids may be considered final.

E. For the start of a race, the electronic timer (and/or stopwatches) shall be started simultaneously when the first car crosses the timing control line at the completion of the pace lap.

F. At the end of each race, the Chief Timer shall audit the time cards produced by the timing system. Once the Chief Timer is satisfied that the times are correct, and the order of finish agrees with the Scoring system, Final results should be prepared as described in GCR 8.9.2, Final Results.

5. The Scoring system:

A. There shall be a minimum of three independently prepared

tapes. The tapers shall record the car numbers in the order they cross the timing control line on consecutively numbered sheets. The sheet number should coincide with the overall leader's completed laps. The tapers should indicate "yellow flag," "black flag," or "red flag," as personally observed and/or officially observed or reported. "Checkered flag" should be written on the final tape when the checkered flag has been displayed. These tapes should be compared and audited, corrected if necessary, and then distributed to the Charters. These tapes may be shared with the Timing System.

B. A minimum of three independent lap charts should be prepared. These charts can be done either on paper or on a computer and can include charts generated by the Timing system. They shall be prepared so that position and lap count are indicated on different axis. Each car's number shall be entered on the chart in the order recorded on the tape, appearing on the chart only once for each lap. Some method shall be used to indicate on the lap chart all cars taking the checkered flag as shown on the final tape. The Charters should indicate the overall and class position and laps completed for each car.

C. At the end of each race, the Chief Scorer shall compare the three charts. Once the Chief Scorer is satisfied that two of the three charts are correct, Provisional Results may be posted as described in GCR 8.9.1. It is strongly advised that the Chief Scorer determines what errors prevented the third chart from agreeing with the other two.

8.2. CONTROL LINE

A car crosses a control line when any portion of the car first intercepts the vertical plane of the control line, as observed by the officials assigned to record the passage, who may be aided by suitable automatic or semi-automatic equipment.

8.3. DEAD HEATS

In case of a dead heat, the competitors concerned shall share the prizes allotted to their places in the Results. (See 16.2.4., Dead Heats, with respect to allocation of National Race points.)

8.4. FINISHERS

1. In order to be considered a finisher, a car shall complete half the distance covered by the overall winner of the race. If the race length is an uneven number of laps, divide the overall winner's laps by two and round down to the nearest whole integer. A car has five (5) minutes after the checkered flag is displayed to complete his or her lap.

2. A car may be considered a finisher if it is pushed across the control line or driven using on-board power (e.g. starter motor). This may only occur in the pit lane. Pushing a car on the racing surface is strictly forbidden.

8.5. SHORTENED RACES

1. If a race is stopped at less than fifty (50) percent of it's scheduled time or distance and is not restarted, it shall be considered incomplete. Championship points shall not be awarded, and organizers shall not be required to distribute trophies or other awards.

2. A race that is stopped at fifty (50) percent or more of its scheduled time or distance, and not restarted, shall be scored as a complete race as of the end of the last completely scored lap (even if that lap is less than fifty (50) percent of the scheduled distance).

8.6. WINNER

The winner shall be the competitor who covers the prescribed distance of the competition in the least time, or the greatest distance within the prescribed time of the competition. If the race is shortened, the leader of the last completely scored lap is the winner, provided the race is completed. (See 8.5.1.)

8.7. CHECKERED FLAG

The checkered flag shall be displayed first to the winner as he or she completes the prescribed distance of the course or crosses the finish line after completing the prescribed time, and then to the other finishers as they cross the finish line. If the checkered flag is displayed first to the wrong car, the race shall still finish when the actual winner crosses the finish line.

8.7.1. Late Checkered Flag

If the checkered flag is not displayed at the scheduled end of the race (in other words, if a race is one or more laps longer than scheduled), the race shall be scored as if it had ended at the scheduled length.

8.7.2. Winning Car Not Running

In timed duration races if the winning car is not running at the expiration of the prescribed time, the checkered flag shall be displayed to the highest placing car still running. The winner is not required to take the checkered flag.

8.8. LAP RECORD

The official lap record for each class, at each circuit, shall be set during a race and not in practice or qualifying. When a driver is disqualified for an illegal car, the lap times (lap record) are disqualified also.

8.9. RESULTS

8.9.1. Provisional Results

A. One of the two lap charts or a printout showing order of finish and number of laps completed for each car shall be posted and titled as Provisional Results. The time of posting shall be noted on the Provisional Results and an announcement made.

8.9.2 Final Results

1. At the expiration of the protest period, Provisional Results may be considered final. The Final Results should be titled as Final or Official Results and shall include the following types of information: description of event, timing and scoring information, and driver information.

2. The description of the event shall include: location of event, date, sanction number, name of conducting region, length of course, and duration of race (laps or miles).

3. The timing and scoring information shall include: total number of entries, including DNF's and DNS's, the overall and class finishing positions for all starters, the number of laps completed for all starters, the overall time of the race, the winner's margin of victory, the winner's average speed, the fastest lap time for all starters and any new course records.

4. The driver information shall include: driver's full name, hometown, state, region of record, car number, car make and model, and car year as required per GCR. It is required that the competition license number be included in the driver information.

5. Optional information to show on the Final Results includes: the overall time and average speed for each class winner, pit stop information, accident reports, and sponsorship. This may be provided on documents (i.e. Entry List) other than "Final Results" and submitted to the national office, divisional pointskeeper and other officials.

6. When a car is disqualified, excluded, or withdrawn, the results should list the cars in the original finishing order, noting the cars that have been affected. The results should show the final overall and class positions, as adjusted, for all finishers. The disqualified car (or cars) should be footnoted thusly: "Car number (X) is disqualified (or excluded or withdrawn); all subsequent cars moved up."

8.10. MEDIA

It is strongly recommended that at spectator events the Chief Timer and Scorer meet with the Course and Regional Press Officers in order to establish close cooperation with the announcer and all media, and to arrange for fast transmission of unofficial and official Timing and Scoring information to these people.

The track announcer and all media at spectator events should be furnished as quickly as possible with Unofficial Qualifying times as they occur, thus providing constantly updated unofficial grid positions, but making certain that this information is clearly titled "Unofficial." When the qualifying times become Official, together with the Official Grid, these should be transmitted at once to the announcer and media. During the race, up-to-date standings should be provided, as well as average speed records established, etc.

These can be Unofficial until verified or corrected. Within a very few minutes after the completion of each spectator race, and prior to the preparation of Official Results which require time consuming auditing and verification, Unofficial Results showing at least the top ten (10) finishers, the winner's average speed, fastest lap turned in miles per hour, time and/or distance separating the first three finishers, and overall time for the race should be transmitted to the track announcer and media. Again caution is recommended to ensure that this information is clearly labeled "Unofficial."

It is always preferable that the Circuit announcer and any radio and television announcers receive information relating to Timing and Scoring from members of the Official Timing and Scoring personnel, via the Circuit or Regional Press Officer.

9. RULES OF THE ROAD

9.1. ON-COURSE

9.1.1. DRIVER CONDUCT

A. It is the responsibility of all drivers to avoid physical contact between cars on the race track.

B. All competitors have a right to "racing room" on the marked racing surface. "Racing room" shall be generally defined as sufficient space on the marked racing surface so as to allow a competitor to maintain control of his car in close quarters, under racing conditions.

C. It shall be incumbent on all drivers to preserve the right of his fellow competitors to racing room on the race track. Abrupt changes in direction so as to impede or affect the path of a car attempting to overtake or pass may be interpreted by Officials as an attempt to deprive a fellow competitor of his right to racing room.

9.1.2. Passing

The responsibility for the decision to pass another car and to accomplish it safely rests with the overtaking driver. The overtaken driver has the responsibility to be aware that he or she is being overtaken and not to impede the overtaking car. The overtaken driver shall not block. Any driver who fails to make use of the rear view mirror, or who appears to be blocking another car seeking a pass, may be black flagged and/or penalized. (See 14., Penalties)

9.1.3. Hand Signals

A. Before entering the pits from the course, the driver should signal by raising an arm.

B. An overtaken driver shall point to the side on which an overtaking driver should pass.

C. The driver of a stalled car shall raise both arms to indicate that he

or she shall not move until the course is clear.

9.1.4. Off-Course Excursions
The driver is required to follow the pavement or marked course during a competition, and shall not gain an advantage from an off-course excursion. Unless otherwise provided by Supplementary Regulations, whenever a driver leaves an artificially marked course or an airport circuit with all four (4) wheels, he shall re-enter the course at the same spot where he went off, and cannot simply re-enter further down the course, subject to the directions of the Corner Worker controlling re-entry.

9.1.5. Counter-Race Direction Driving or Towing
During an event it is expressly forbidden to drive or tow a car, at any time under any conditions, in a direction opposite to that in which the event is being run without the specific approval of the Chief Steward. Infraction of this rule may result in a penalty. (See 14., Penalties)

9.1.6. Stopping on a Course; Accepting Assistance

A. If a driver is forced to stop his or her car on the course, he or she shall make every effort to place the car in such position that it will not be a danger or obstruction to other competitors.

B. Drivers shall obtain no assistance during the race other than from their pit crews and in the pits. This does not preclude assistance by Race Officials for safety reasons.

C. For assistance during restarts, see 7.7.

9.1.7. Use of the Engine Self-Starter on Course
Cars shall not be moved under power of the starting device while on course, except to move them from a hazardous position to one of greater safety or under provisions of GCR 8.4. paragraph 2.

9.1.8 Passengers
No one shall ride outside the cockpit area or on the coach work of any automobile at any time, including victory laps.

9.2 SAFETY CAR (Pace Car)

9.2.1 Operation and Control
The Chief Steward is responsible for the operation and control of the pace car(s). At the discretion of the Chief Steward, a safety car may be used to control the field in emergency situations and provide for expeditious restarts. The safety car driver and communicator /observer shall be approved by the Chief Steward. The driver shall be a current or previous National license holder or have other qualifying experience. No car shall pass the safety car unless directed to do so by an official in the safety car. In the event the safety car is not dispatched in front of the lead car, the official shall wave cars by until the leader is behind the safety car. Any car passing the safety car without being directed to do so may be black flagged, penalized per Section 14, or both. The safety car, emergency lights flashing, shall proceed at steady, reduced speeds appropriate to

track conditions and gathering the field. The field shall follow the safety car in a safe and sportsmanlike manner, evenly spaced in single file, allowing sufficient racing room for fellow competitors. The lead car shall keep pace with the safety car and shall not balk the field. The safety car shall maintain the established pace and exit the course, lights out, prior to the restart. Drivers shall maintain the pace established by the safety car and shall not improve their positions or begin racing until the green flag has been displayed and the race restarted.

9.2.2 Procedure
When the double yellow is displayed, drivers shall make every effort to safely catch the field and form up behind the Pace (Safety) Car or race leader. Drivers of cars that are disabled or cannot keep the pace should not hold up the field. These drivers shall signal that their vehicle is disabled by raising an arm, pulling to the side of the course, and staying well off the racing line. Other drivers may safely pass the signaling vehicle. Drivers of disabled cars should seek assistance at the nearest corner station or pit at the first opportunity. All cars shall pass the incident area well under control and in single file.

9.3. RAIN RACING PROCEDURE
If a race is started in the dry, and it starts to rain on all or part of the course, the Chief Steward may use the following procedure: If the race has covered half distance or more, it may be stopped with the checkered flag at any time. If the race has not reached half distance, the black flag "ALL" procedure shall be used to bring all cars into the pits, and fifteen (15) minutes will be allowed for installing rain tires if the driver elects to do so. At that time cars shall be restarted in single file in the positions that they had the lap before the black flag was displayed.

9.4. FLAGS

9.4.1. The names and described flags below are used in racing to convey the commands or information indicated. They shall be obeyed immediately and without question. The directives of Section 9.4 shall not be amended by any event Supplemental Regulations.

9.4.2. Meaning of Each Flag

A. GREEN FLAG (Solid Green)
A race is under way the instant the green flag is displayed. This flag shall normally be in possession of the Starter only, and shall not ordinarily be displayed at the flag stations around the course. When displayed, the green flag indicates that the course is clear.

B. YELLOW FLAG (Solid Yellow)
STANDING YELLOW -- Take care, Danger, Slow Down, NO PASSING FROM THE FLAG until past emergency area.

WAVED -- Great Danger, Slow Down, be prepared to stop -- NO PASSING FROM THE FLAG until past emergency area.

DOUBLE YELLOW, DISPLAYED AT ALL STATIONS — Indicates

the entire course is under a yellow condition. SLOW DOWN, NO PASSING. This flag condition may be used with or without a Pace (Safety) Car, including pace lap(s). Cars may carefully pass emergency vehicles. Cars may also pass other cars that are disabled and cannot keep the pace as signified by a raised arm on the part of the driver of the disabled car (see GCR 9.2.2.).

NOTE: A driver may encounter several flags before reaching the emergency area. The requirements are still the same "SLOW DOWN, NO PASSING."

C. BLUE FLAG (Blue with Diagonal Yellow Stripe)
Another competitor is following you very closely or is trying to overtake you. This flag may be displayed standing or waving, depending upon the speed with which you are being overtaken.

D. SURFACE CONDITION FLAG (Yellow with Vertical Red Stripes)
Take care. Oil has been spilled, or a slippery condition exists, or debris is present on the racing surface. This flag is displayed standing.

E. WHITE FLAG (Solid White)
Caution – you are approaching a slow moving race car (e.g., with mechanical trouble), ambulance, or other emergency vehicle on the racing surface. Take care. This flag shall be shown standing for two (2) flag stations prior to the vehicle. A standing white flag shall also be displayed during the first lap of a practice or qualifying session to indicate the location of the flagging stations.

F. BLACK FLAG (Solid Black)
CLOSED BLACK FLAG (Furled) Pointed or shaken at an individual car from the Starter's stand (optionally, accompanied by a number board indicating the car number): WARNING! You have been observed driving in an unsafe and/or improper manner. If the action continues, you shall be given an OPEN BLACK FLAG.

BLACK, OPEN - Displayed from the Starter's stand, and accompanied by a number board indicating the car number: Proceed directly to the pits and the location designated by the Chief Steward or event Supplementary Regulations for consultation with Officials. **DO NOT TAKE ANOTHER LAP**. NOTE: This flag and accompanying number board may be additionally displayed at another station location elsewhere on the course.

BLACK, OPEN, DISPLAYED AT ALL STATIONS - The session has been halted. Practice/qualifying/racing has stopped and all cars shall proceed directly to the pits. This flag condition shall be accompanied by an 'ALL' sign displayed at the Starter's stand and the sign may be repeated at stations located elsewhere on the course. If the session/race is restarted, it is done under the provisions of GCR Section 7.7 "Restarts."

NOTE: THE BLACK FLAG CAN ONLY BE DISPLAYED BY ORDER OF THE CHIEF STEWARD AS RELAYED THROUGH RACE

CONTROL.

G. MECHANICAL BLACK FLAG (Black with Orange Ball)
There is something mechanically wrong with your car. Proceed to your pit *or designated black flag area* at reduced speed.

H. CHECKERED FLAG (Black and White Checks)
You have finished the race (or practice/qualifying session). Continue cautiously to the pits.

I. RED (Solid Red)
Displayed at each station and on the Starter's stand - **EXTREME DANGER - THE SESSION HAS BEEN STOPPED.** Come to an immediate, controlled stop at the side of the race track (indicated by an official at that location or as specified in the event Supplementary Regulations). When released by an Official, proceed cautiously to the pits.

NOTE: THE RED FLAG CAN ONLY BE DISPLAYED BY ORDER OF THE CHIEF STEWARD AS RELAYED THROUGH RACE CONTROL.

9.4.3. Lights Instead of Flags
The Supplementary Regulations shall state where on the course and for what purpose lights shall be used.

9.4.4. Stopping a Competition
When it is necessary to stop a competition, the Chief Steward may:

A. Order a Black Flag and an "ALL" sign to be displayed on the Starter's stand (this sign may be repeated at stations located elsewhere on the course) and a Black Flag to be displayed at all flag stations around the course. These flags shall inform all drivers that they shall stop racing immediately and proceed to the pits, exercising extreme caution.

B. Order a red flag to be displayed simultaneously at all flag stations. Further instructions shall be conveyed by the Corner Officials. Once a red flag has been displayed, it shall not be withdrawn until all cars have come to a stop.

C. Order the Checkered Flag to be displayed to the lead car if fifty (50) percent or more of its scheduled time or distance has been completed.

10. PIT AND PADDOCK

10.1 RULES OF THE PITS

10.1.1 Pit Area Defined
The Supplementary Regulations for an event shall designate a hot pit area in which competing cars and their equipment and crews shall be placed during their assigned time to use the track for practice, qualifying, or racing ("track time"). This area shall be divided by a protective barrier

into storage space for tools and equipment and "hot pits." The "hot pit" shall be the pit area in which the car itself is placed and which is part of or connects with the access road leading directly to the track.

There may be a definite place in the pits assigned by the Chief Pit Marshall, or selected with his or her assent, for the accommodation of each competing car's equipment and crew, and in which repairs shall be accomplished during track time. Fueling is not permitted in the hot pits or on the false grid unless authorized by the Supplementary Regulations or the Chief Steward.

10.1.2 Required Equipment
In the "hot pit" lane, fire extinguishers, with a nominal ten (10) pound dry chemical agent capacity having a minimum UL 60 BC or ABC rating, shall be placed at fifty (50) foot intervals along the pit wall. If the event calls for refueling stops during the race, each pit crew shall provide one (1), minimum ten (10) pound /60 BC or ABC rated fire extinguisher for their own use.

10.1.3 Number of Authorized Crew Members in the Pits
A car shall have a crew of no more than four (4) attendants in the pits in addition to the driver or drivers. This number may be modified by the Supplementary Regulations or at the discretion of the Chief Steward.

10.1.4 Authorized Personnel in the Pits
Any crew member in the pits shall be a member of the SCCA and hold an SCCA license. Minors sixteen (16) years of age and older may be issued pit credentials only if they hold the proper minor Crew License. All other persons under eighteen (18) years old, are prohibited from entering the pit area or any other hazardous area. Any known medical condition (including pregnancy) which could affect medical fitness to perform the duties of a crew member may prohibit admittance to the pit area or any other hazardous area.

10.1.5 Control
Pit crews are at all times under the control of the Pit Marshall.

10.1.6 Pit Barrier
Unless the car is actually in the hot pit, no one shall be allowed across the pit barrier, except that not more than two (2) crew members may do so for the purpose of signaling to the driver.

10.1.7 Overshooting the Pit
If a pit-bound driver overshoots his or her pit, the car shall either be pushed back into the pit by hand, or else continue for another lap. No car may be pushed back to the pit under conditions which would constitute a hazard.

10.1.8 Retiring to the Paddock
A car once moved to the pits shall remain there or on course during its track time. A car that enters the paddock during qualifying and subsequently re-enters the track shall forfeit any qualifying times recorded prior to re-entry. A car that is removed from the pits or course during a race is ineligible to return during that period of track time, except when provided

for in the Supplementary Regulations or when approved by the Chief Steward.

10.1.9 Pets
Pets are prohibited in the pits.

10.1.10 Air Bottles/Gas Cylinders
All compressed air bottles/gas cylinders, with a pressure in excess of 200 psi, shall have a protective structure around their gauges and valves when in the pit/grid/pre-grid areas.

10.1.11 Fueling of Vehicles
Fueling is not permitted in the pits or on the false grid unless authorized by the Supplementary Regulations or the Chief Steward.

10.2 RULES OF THE PADDOCK

10.2.1 Paddock Area Defined
Any area on the race track grounds where a car is located, other than during its track time is called the Paddock. If possible, it will be delineated in the Supplementary Regulations and equitable amounts of space in it assigned to each competitor.

10.2.2 Pets
A pet may be in the paddock, provided it is enclosed in a vehicle or on a leash. When a pet is on a leash, it shall be controlled by an adult, and the leash may not exceed ten (10) feet in length.

11. TECHNICAL AND SAFETY INSPECTION
In order to enter the race course at any time during an event, a vehicle shall display a Tech Sticker signifying successful completion of technical and safety inspection as prescribed in the following sections. Passing safety inspection and receiving a Tech Sticker is an indication that the car is safe to go on course. It is not a certification of legality.

11.1. ANNUAL INSPECTION
A full and complete Technical and Safety Inspection shall be performed by a Licensed Scrutineer (Divisional/National) on each car once a year. The year shall be defined as the calendar year. If the car passes Tech, the logbook shall be stamped with the "official" inspection stamp, dated, and signed. Annual Tech may be performed in December of the preceding year.

11.1.1. Minimum Safety Inspection
Minimum Safety Inspection—Minimum inspection for each event thereafter shall consist of reviewing the Vehicle Logbook. If it is in order, a Tech sticker shall be issued.

11.1.2. Reinspection
A car shall be reinspected if damage or deficiencies from the car's previous event(s) are noted in the logbook or the car changes category. Inspection above the minimum level (see 11.1.1) may be performed on a vehicle whose logbook indicates no competition for three (3) months or more during the current year; or on vehicles as specified in Supplemental Regulations; or

at the request of the Chief Steward. Throughout the racing season, the Tech crew is encouraged to perform regular reinspections through walk around observation in the pits and paddock, or through special impounds by group or class with the concurrence of the Chief Steward.

11.2. FULL INSPECTION

11.2.1. The points covered at Technical and Safety Inspection shall be:

A. Eligibility for class entered - compliance with the GCR and Specification Books. Each car shall have a complete and up-to-date logbook. (See 17.3., Vehicle Logbook)

B. Appearance suitable for competition.

C. Appearance neat and clean. Specifically, cars that are dirty either externally or in the engine or passenger compartments, or that show bodywork damage, structural or surface rust, or that are partially or totally in primer, or that do not bear the prescribed identification marks shall not be approved for competition.

D. Tires - 120 mph-rated or better unless otherwise specified or controlled.

E. Brakes - Shall be pedal-operated, working directly on each wheel, and in good working order. Rolling brake tests are prohibited. ABS or Anti-lock braking systems are not allowed except in Showroom Stock and Touring. To satisfy this rule, the ABS shall be disabled by removing or disconnecting all of the wheel sensors.

F. Body Panels - Shall be securely mounted. Fender skirts and hub caps shall be removed.

G. Exhaust System - Shall be directed away from the body and shall terminate at or behind a point which is equidistant from the front and rear hubs.

H. Hood and Engine Compartment - Shall be securely fastened.

I. Suspension and Steering - Shall be of suitable design and in good working order. Four wheel steering is prohibited.

J. Leakage and Caps - There shall be no visible fluid leaks. Monza (flip-top) gas caps are prohibited.

K. Lights - Brake lights on cars so equipped and taillights on Formula cars shall operate properly.

L. Seats - Shall be securely mounted. (See Section 18., Roll Cage)

M. Seat Belts and Shoulder Harness - Shall conform to Section 20.

N. Passenger Seat Back - If a folding seat, it shall be securely bolted

or strapped in place.

O. Roll Cage/Roll Bar - Shall comply with Section 18.

P. Tonneau Covers and Boot Covers - Shall be removed.

Q. Firewall and Floor - Shall comply with Section 17.21.

R. Mirrors - Shall provide driver visibility to the rear of both sides of the car.

S. Driver Safety Equipment shall comply with Section 17.23., Driver Safety Equipment. The scrutineer performing the inspection shall affix a dated, non-removable sticker or decal to helmets that comply with Section 17.23.2. This sticker or decal and the other drivers' safety equipment which must be worn may be checked by Grid or Scrutineering personnel on the starting grid.

T. Holding Tanks - Oil holding tanks and engine transmission breathers shall comply with Section 17.26., Oil Holding Tank and Breathers.

U. Wood rim steering wheels are prohibited.

V. The driver shall not be exposed to header tanks or unshielded fuel and water lines. "Aeroquip" lines are considered to be shielded lines.

W. Windows shall be clear or uncolored. Officials may require the replacement of windshields that are considered a safety hazard.

X. On all carburetors, (except SU, C and D Sports Racers with motorcycle-type carburetors and Formula 500 Mikuni VM38) with a non-threaded fuel inlet fitting, the fitting shall be replaced by drilling and tapping the carburetor body for a threaded fitting.

Y. Four wheel (All-Wheel) drive is prohibited except in Showroom Stock and Touring.

Z. Non-metallic wheel construction is prohibited. Non-metallic chassis construction is prohibited, except in ASR, CSR, DSR, S2000, and FA, where it is allowed.

AA. The mounts for video / photographic cameras shall be of a safe and secure design. The body of the camera (recording unit) shall be secured at a minimum of two (2) points on different sides of the camera body, neither of the attachments may be elastic or plastic. If a tether is used to restrain the camera, the tether length shall be limited so that the camera can not come in contact with driver. These rules of attachment do not apply to the remote lens of "lipstick" cameras, which weighs approximately 2 oz. The remote lens of these cameras may be secured with items such as cable ties and racer's tape.

Helmet mounted cameras are prohibited regardless of size, weight, or location of camera on the helmet.

BB. Cool suits are allowed in all classes. Water tank mounts shall be of a safe and secure design.

CC. Data collection devices are considered to be instrumentation and are therefore allowed in all classes that permit the installation, replacement or addition of gauges, indicators or instruments.

DD. *Active suspensions and* traction control systems, as installed by the automobile manufacturer and unmodified, are allowed only in Touring *and* Showroom Stock.

11.3. IMPOUND

A. Post-race impound is mandatory at all National Championship events and recommended at all other events.

B. It is recommended that there be at least one (1) nominal ten (10) pound dry chemical agent capacity, minimum UL 60 BC or ABC rated, CO2 or equivalent Halon fire extinguisher present in the impound area.

11.3.1. Minimum Impound Inspection

The first three (3) finishers in each class shall be immediately impounded for a minimum of thirty (30) minutes after the completion of each race, unless otherwise provided in the Supplementary Regulations. The Chief Steward may direct that additional finishers in any class be impounded immediately following a competition. It is the driver's responsibility to ascertain his or her finishing position and present his or her car to impound immediately, without going to the paddock, if among the top three (3) in class. Failure to do so promptly may result in a penalty. Each impounded car shall be given an inspection that shall, at minimum, include verification of conformity to the minimum weight and track dimensions where applicable for the class. During the weighing, if there is any doubt about the weight, the car shall be weighed in both directions. If there is any other doubt about the car's conformity to the rules, any appropriate methods may be used by the Technical Inspector to determine the car's legality.

11.3.2. Impound Waiver

A waiver of appearing at post-race impound may be implemented at non-National Championship events in the presence of the Chief of Tech prior to the race with the approval of the Chief Steward.

11.3.3. Official Scales

A. The scales at the event are the official scales for the event. The times when they are available shall be published in the supplemental regulations so drivers may compare their car's weight to the official measurement.

B. Individual scale pads that weigh a single wheel are preferable.

Platform scales, or individual scales that weigh one axle (two wheels) at a time, are acceptable. Scales or test weights shall be certified.

11.3.4. Certification
The scales shall be certified by:

A. On-site certification by a commercial scale service within ninety (90) days prior to the event, **OR**

B. Use at the track of certification weights, minimum 250 pounds total for individual wheel scales and minimum 750 pounds total for platform scales.

11.4. MEASUREMENT STANDARDS
The following specifications shall meet the standards set below unless otherwise specified or unrestricted in the individual category or class preparation rules. Any specification not listed herein shall meet stock factory specifications unless otherwise specified or unrestricted in the individual category or class preparation rules. *For these specifications, the tolerance shall be equivalent to ½ of the final digit of the specification (e.g. .01" tolerance equals +/- .005").* Absolute maximum means tolerances of +0.000 inches or +0.00 millimeters. Absolute minimum means a tolerance of -0.000 inches or -0.00 millimeters. Measuring devices available to scrutineers differ from location to location so it is the responsibility of the driver to insure that measurements comply with these rules.

1. Weight is absolute minimum.
2. Track is absolute maximum.
3. Rim width is absolute maximum.
4. Wheelbase has a tolerance of +/- 1"
5. Valve size is absolute maximum.
6. Throttle bore and/or venturi size is absolute maximum.
7. Drum brake size is nominal i.d. plus manufacturer's "turning" tolerance.
8. Disk brake rotor diameter has a tolerance of +0.1".
9. Engine cylinder bore is absolute maximum before allowable overbore.
10. Engine stroke length is absolute maximum.
11. Valve lift is absolute maximum.
12. Compression ratio is absolute maximum

12. SOUND CONTROL

12.1. GENERAL
This Section shall establish SCCA test procedures, instrumentation, and environmental requirements for determination of race vehicle sound emissions.

Competitors carry sole responsibility to determine that their vehicles comply with Sound Control Regulations at each event. Mufflers may be required.

Sound Control will be in effect for all events. All cars will be monitored and readings will be posted for competitors' information. A driver registering a single sound level reading over 103dB shall not be black flagged. If a driver is black flagged due to sound, the car shall not re-enter the course until corrective steps are taken.

1. The Chief Steward need not seek out and advise each individual competitor of his violations of the sound levels. However, the Chief Steward shall ensure that a competitor can determine his sound readings after each session at the place established via the Supplementary Regulations or other official notification. Competitors will use these readings to monitor their legality.

2. The Sound Control Chief, and/or Team, may offer advice to the competitors. This advice, however, shall be in no manner construed to imply that said suggested corrective action(s) absolves competitor from complying.

3. Vehicle sound emission is not a constant factor which can be trimmed to barely legal (in the manner of engine displacement or vehicle weight); sound emissions may vary significantly from morning to afternoon, and day-to-day; therefore, the competitor is advised to target his sound level at least 2 or 3 decibels under the limit to allow for meteorological variations.

12.2. STANDARDS

The primary standard for SCCA Sound Control shall be a sound pressure level of 103db "A" frequency weighted (dba) measured on the fast response setting at 50 feet (+/- 2 feet) from the edge of the track pavement, and/or artificial markers indicating track edge.

12.3. EQUIPMENT

1. A sound level instrument (meter) which meets American National Standards Institute (ANSI) Specification S1.4-1971, Class 2, Type S2A or better, and provides the following features:

    A. Demountable microphone
    B. Fast response (not peak)
    C. "A" frequency (scale) weighing
    D. Max. (maximum) hold
    E. General accessories shall include:
        1. Tripod
        2. Microphone cable for remote operation, fifty (50) foot minimum
        3. Operating Manual
        4. Infield calibrator
2. Weather (meteorological instruments to support sound readings):
    A. Barometer, capable of reading 0.1 inches of mercury (recommended).
    B. Thermometer, accurate to +/- 1 degree Fahrenheit (wet bulb thermometer recommended).
3. General equipment
    A. Tape Measure, fifty (50) foot minimum

12.4. MEASUREMENTS

The SCCA Sound Control criteria is a composite of Federal Standards and the Society of Automotive Engineers' specifications.

1. GENERAL: Proper location and use of all test instrumentation is essential to obtain valid measurements. Operating Manuals or other Manufacturer's literature should be referenced for both recommended operation and precautions to be observed.

2. TECHNIQUE:
   A. Acoustic calibration procedures should include extension cable influence.
   B. Field calibration shall be done at least every four (4) hours while in the operating mode.
   C. Weather conditions should be recorded every hour when conditions are unstable, or otherwise every two (2) hours.

12.5. MICROPHONE

1. The microphone shall be:
   A. 3.5 feet (minimum) above the ground surface.
   B. 2.0 feet (minimum) above the level of the roadway.
   C. No more than 6 feet above the level of the roadway.
   D. Two hundred (200) feet or more away from any tunnel or overpass through which the target vehicle passes.

2. The microphone shall be mounted on a tripod, remote from the sound meter, using at least fifty (50) feet of cable.

3. Whenever possible it is recommended (but not mandatory) that the microphone shall be located on the outside of the track between race car and outside perimeter of the racing facility, aimed into infield areas.

13. PROTESTS

13.1. WHO MAY PROTEST

The right to protest shall rest with any entrant, driver, organization, or official taking part in the competition in question. Each, alone, may protest any decision, act, or omission of the organizers, an official, entrant, driver, or other person connected with the competition, which the protestor believes is in violation of the GCR, the Supplementary Regulations, or any conditions attached to the sanctioning of the event by SCCA (hereafter in this section collectively referred to as "the rules"). A protest against a car is also a protest against its driver and entrant.

13.2. LODGING A PROTEST

A protest shall be made in writing, specifying which sections of the GCR or other applicable rules are alleged to have been violated, and signed by the protestor. It shall be addressed to the Chief Steward and delivered to him in person or to an Assistant Chief Steward at the control point for the race. It shall be promptly forwarded to the Chairman of the SOM.

13.2.1. Protest Fee
The protest shall be accompanied by a protest fee of $50 ($25 for Regional Races and Driver's Schools).

13.3. Time Limits

A. The SOM may extend these time limits in exceptional cases where the protestor can demonstrate that evidence pertinent to the protest was not available within the time limit, or where the protestor can demonstrate he or she was unable to meet the deadline due to circumstances beyond his or her control.

B. A protest against the validity of an entry or qualification and conformity to the rules of an entrant, driver, or car shall be lodged no later than one hour before the start of the race segment of a competition.

C. A protest against any driver's action or other mistake or irregularity occurring during a competition shall be made within thirty (30) minutes of the conclusion of the competition.

D. A protest against a starting position or handicap shall be made within thirty (30) minutes of announcement of starting position or handicaps.

E. A protest against the results of a competition shall be made within thirty (30) minutes of their posting.

F. A protest against a Race Official shall be made within thirty (30) minutes after completion of the competition or notification of Official's Action.

G. Any action initiated by the Chief Steward shall be received by the SOM prior to thirty (30) minutes after the posting of the Results of the last race, except a Request for Action resulting from a post-race inspection. Such Requests shall be made within a reasonable time after discovery of the suspected violation of the rules.

13.4. PROTESTS AGAINST CARS
Entrants or drivers taking part in a competition (See 2.13., Competition, for definition) may protest a car in the same competition for not conforming to the rules. The protestor may request that the car be disassembled, inspected, or any other test made, provided he or she posts a bond with the SOM sufficient to cover the total expenses of disassembly, inspection, and reassembly. A protest may be reduced in scope but not added to at the time the bond is set. Once a bond is posted, the stipulated inspections shall be completed, unless the protest is wholly or partially withdrawn by the protestor. The SOM shall apportion the costs incurred, including reassembly, up to the point of withdrawal, provided no illegality has been discovered.

In the event a car is found in non-compliance, a claim that the non-

compliant item(s) offer no performance advantage shall have no influence on any ruling.

13.4.1. Establishment of Bond

A. The bond shall be established by the SOM after consulting separately with the protestor and the protestee, and with the Chief Technical Inspector, and any other experts whose advice the Stewards believe shall be useful.

B. Items covered by the bond may be priced individually, with consideration given to possible logical linking of some items. This cost schedule shall be set up prior to initiation of the inspection. The bond may be awarded after tear down on a predetermined apportionment basis. Apportionment of the bond after the fact is not permitted, except where the protestor has withdrawn all or part of the protest.

C. The bond shall be by cash or check.

D. Where the circumstances warrant, the SOM shall require the protested party to post bond and/or sign a repair order with a service establishment to cover the costs of disassembly and inspection. The bond shall be established in the same manner as a protestor's bond.

E. In the event of a protest involving verification of camshaft specifications, the SCCA Technical Services Department offers verification services for protest and/or compliance resolution according to the following requirements:

1. A complete description of the vehicle/engine combination should be included (i.e. make, model, year, VIN #, engine code, displacement, etc.).

2. A known stock example of the camshaft in question must be included with the protested camshaft. The sample cam must be of the same make, model and year of the protested camshaft.

3. An accurate description of the intake and exhaust valve arrangement relative to the #1 cylinder is required (i.e., EX / IN, EX / IN, EX / IN, EX / IN).

4. The engine firing order and crankshaft rotation direction is required. **NOTE:** For camshaft testing purposes, crankshaft rotation is determined by looking at the front of the engine, NOT from the driver's seat.

5. The cost for each camshaft test is $100. Provisions for shipping to and from the national office should be included in the bond.

6. Upon receipt of the above information and samples, a

complete camshaft comparison will be produced within 5 working days. This information will be conveyed to the Chairman SOM directly via fax or mail.

13.4.2. Conduct of Inspection
The inspection and/or disassembly shall be conducted under the supervision of the SOM. They shall determine which portions of the inspection and/or disassembly, if any, may be observed, and by whom. Any additional item(s) found during the inspection shall be forwarded to the Chief Steward.

13.4.3. Refusal to Allow Inspection
Refusal of an entrant or driver of a protested car to allow inspection under the terms established by the SOM shall result in immediate disqualification, six (6) month suspension, and a two hundred fifty dollar ($250) fine. (See 14.14.4.)

13.4.4. Disposition of Bond
If the car conforms to the rules, the protestor shall forfeit the bond. If the car does not conform to the rules, the protestor's bond shall be returned, and the protested party shall stand the expenses. Awarding of the bond on a predetermined apportionment basis is permitted.

13.4.5. Time of Disbursement of Bond; Appeal Escrow
The tear down bond shall be sent to the Manager of Club Racing to be held in escrow until the time limit for appeal has passed, an appeal has been rejected (See 15.5., Decision to Hear Appeal), or an appeal has been finally decided by SCCA.

13.4.6. Preservation of Evidence
Any recorded evidence such as technical data or inspectors' reports or measurements shall be forwarded to the Club Office with the tear down bond (See 13.3.4.). The Chairman SOM shall accept any parts tendered by the owner for safekeeping pending appeal. The SOM shall have the authority to impound parts.

13.5. HEARING A PROTEST
The SOM shall hear the protest as soon as practical after the protest is lodged. All parties concerned shall be given adequate notice of the time and location of the hearing. They shall be entitled to call witnesses, but shall state their cases in person. In the absence of a party, judgment may go by default. Each party or witness shall be heard separately and in private. If judgment cannot be given immediately after the hearing, all parties shall be informed of the time and method by which the decision shall be conveyed. Anyone who has filed a protest, been protested or is the subject of a Chief Stewards action shall remain until a ruling has been issued, or until expressly released by the Chairman SOM.

13.6. DISTRIBUTION OF AWARDS

1. Distribution of awards shall commence after the period for receiving protests has elapsed. When a protest which would affect distribution of awards has been lodged, distribution shall be withheld until the protest has been settled. The SOM, if notified

of an intention to appeal their decision, shall order awards, which may be affected by the outcome of the appeal, to be withheld pending the decision of the Court of Appeals.

2. Pending the decision of the Court of Appeals, the results of the competition shall be considered Provisional.

13.7. JUDGMENT

All parties concerned shall be bound by the decision given, subject only to appeal as provided in Section 15., Appeals.

13.8. REASONABLENESS

It is expected that protests shall be reasonable, logical, and based on sound evidence, thus well-founded. A well-founded protest shall further be defined as one upon which reasonable men or women may differ. A protest may be well-founded even if not upheld.

13.8.1. Forfeiture of Protest Fee

If a protest is judged to be not well-founded, the protest fee shall be forfeited.

13.8.2. Vexatious or Bad Faith Protests

A protestor who has acted in bad faith or in a vexatious manner may be penalized by the SOM.

13.9. RULES INTERPRETATION

To obtain a determination on the legality of a vehicle or component, without filing a formal protest, a competitor may request such a ruling from the Club Racing Office. The Chairman of the Stewards Program will then convene a first court. Their decision would then be reviewed by the Court of Appeals. The fee for this service is $250. A portion of this fee may be refundable at the discretion of either or both courts. Penalties or penalty points will not be assessed in the event of a negative ruling. *A non-compliant ruling will be published; a compliant ruling will not be published.*

14. PENALTIES

All participants shall be subject to control by SCCA, the organizing SCCA Region, other organizers, and all appointed officials of the event. (See 2.21., Participants)

This Section provides the penalties for violation of the GCR and the Supplementary Regulations.

14.1. BREACH OF THE RULES

In addition to any other offenses or violations of specific rules, each of the following shall be deemed a breach of the GCR.

1. Bribery or attempt to bribe anyone connected with the event; and the solicitation of, acceptance of, or offer to accept a bribe.

2. Any action having as its objective participation in a competition of a person or car known to be ineligible or not properly entered or credentialed.

3. Any fraudulent proceeding or act prejudicial to the interests of the SCCA or of car racing generally.

4. Reckless or dangerous driving, either on course or in the pits and paddock.

5. Failure to obey a direction or order of an Official.

6. Refusing to cooperate with, interfering with, or obstructing the actions of the Chief Steward, the SOM, other Courts, or Court of Appeals in the performance of their duties.

7. Unsportsmanlike conduct.

8. Physical violence towards any other participant or spectator at the event.

14.2. WHO MAY BE PENALIZED

Any organizer, entrant, driver, crew member, official, worker, guest of the above, or SCCA member may be penalized.

14.3. HEARING

No penalty shall be imposed by the SOM except after a hearing that follows the procedures set out in 13.4., Hearing Protest, whether the matter is brought to the attention of the SOM by Protest or by a Chief Steward's Request for Action (See 6.11.4., Request for Action).

14.4. IMPOSITION OF PENALTIES

14.4.1. Penalties

The penalties in increasing order of severity are:

A. Fine ($1-$99) (15.6., 6.11.3.)
B. Reprimand (14.5.)
C. Loss of event points (14.7)
D. Fine ($100-$249) (14.6)
E. Fine ($250) (14.6.)
F. Probation of competition privileges (14.9.)
G. Time, Lap, or Position (14.7.)
H. Disqualification from competition (6.11.3., and 14.8.)
I. Suspension of competition privileges (14.10.)
J. Loss of accrued points (14.11.)
K. Expulsion from SCCA (14.12.)

14.4.2. Multiple Penalties

Multiple penalties may be imposed. Consecutive penalties may be imposed (i.e., two thirty (30) day suspensions, total sixty (60) days; two (2) months' suspension and six (6) months' probation). Both suspension and probation, each for the maximum allowable term, may be imposed for a single violation.

14.5. REPRIMAND

A reprimand against an SCCA driver shall be noted in his or her license file.

14.6. FINE
A fine of up to $250 may be imposed. Fines shall be in whole dollar amounts only. Outstanding fines (in excess of $250) are appealable to the Board of Directors.

14.7. TIME, LAP, Event Points, OR POSITION
Penalties expressed as loss of time, loss of completed laps, loss of event points, or loss of finishing position may be imposed.

14.8. DISQUALIFICATION
Disqualification from competition (GCR Section 2.13.) may be imposed on an entrant, driver, or car.

14.9. PROBATION
Probation is effective immediately. However, the designated probation period does not begin until the competition license, as well as any imposed fine, is received by the Chairman SOM or the National Office. Probation may restrict the driver to competing in his or her division, restrict the driver to certain types or level of events, require the driver to perform specified event related activities, or require the driver to attend an SCCA Driver's School. The driver shall be required to notify the Chief Steward at any event he or she participates in, prior to his or her first on track session, that he or she is on probation. Failure to do so is a violation of probation. (See 14.9.3., and 5.15.)

14.9.1. Term of Probation
Probation may be for up to six (6) months, except that up to ten (10) months may be imposed between September 1st and September 30th, and nine (9) months may be imposed on or after October 1st, or a specified number of *SCCA event days*.

14.9.2. Notice of Probation
Written notice shall first be given by faxing or emailing the Club Racing Department on Monday following the event with notification of any drivers who have been placed on probation at the event. Written notice shall *also* be provided by including the confiscated license and tear-off coupon from the probation letter with the Observer's Report from the event which will be mailed to the SCCA *Club Racing Department* within ten (10) days of the event. (6.10.1)

14.9.3. Violation of Probation
Failure to comply with the terms of probation may be the basis for further penalties by a First Court appointed for the purpose of hearing the violation, by a Court of Driver Review (See 4.8., Driver Review), or by the SOM at the event where the violation occurs.

14.10. SUSPENSION
Suspension of SCCA licensed privileges may be imposed for up to twelve (12) months. When a penalty of suspension is imposed, the license holder shall immediately surrender his or her license to the Chairman of the Court. While the suspension is effective immediately, the designated suspension period shall not begin until the receipt of the surrendered license by the Chairman of the Court or the National Office and the payment of any fines

imposed.

A member whose license has been suspended by Club Racing shall not participate in a Club Racing event using any other grade or form of license.

In addition to suspension of competition privileges, a competitor, in cases where the vehicle is found to be mechanically illegal, will have the infraction noted in the vehicle logbook.

14.10.1 Notice Of Suspension
Written notice must be given by faxing or e-mailing the Club Racing Department on Monday following the event to notify them of any drivers who have had their competition privileges suspended at the event. Please supply the name of the member, membership number, event date/ location where suspension occurred and Chairman, SOM's name. Written notice shall be provided by including the appropriate paperwork and the suspended competition license with the Observer's Report from the event which will be mailed within ten (10) days of the event. (6.10.1)

14.11. LOSS OF ACCRUED POINTS
Loss of accrued points may be imposed.

14.12. EXPULSION
Expulsion from the SCCA may be imposed as provided by the SCCA bylaws.

14.13. LOSS OF AWARD
Any entrant or driver who is disqualified in any competition shall automatically forfeit all rights to awards in that competition.

14.14. AUTOMATIC PENALTIES

1. Penalties assessed by the Stewards of the Meeting or the National Court of Appeals will accumulate points resulting in automatic probation or suspension.

   A. Reprimand (Ref. 14.5.) -1 point
   B. Fine (Ref. 14.6.) - $1 - $99 no points
      $100 - $249 1 point
      $250 or more 2 points
   C. Time, loss of lap or finishing position (Ref. 14.7.) - 3 points
   D. Probation of SCCA competition privileges (Ref. 14.9.) - 3 points
   E. Disqualification from competition (Ref. 14.8.) - 4 points
   F. Suspension of SCCA competition privileges (Ref. 14.10.) - 6 points
   G. Loss of accrued points (Ref. 14.11.) - 7 points

2. When multiple penalties result, from a single action, only the most severe penalty will accumulate points. Accumulation of eleven (11) points in a consecutive three (3) year period will result in "Probation of SCCA Competition Privileges" for six (6) months or six (6) events (to be determined by the Executive Steward).

Accumulation of fifteen (15) points in a consecutive three (3) year period will result in "Suspension of SCCA Competition Privileges" for six (6) months. The imposition of either of the two (2) penalties, probation or suspension, will not result in additional points.

3. A Statement of Facts Affidavit shall be used ONLY if a competitor has received a current competition license from the Central Licensing Department and does not have it in his/her possession at the event. If the Statement of Facts Affidavit cannot be verified by Central Licensing, the competitor shall receive an automatic penalty consisting of disqualification from the event and a sixty-(60) day license suspension. The imposition of this penalty may be appealed.

4. Refusal to permit disassembly (tear down) in a Protest/Request for Action is an automatic penalty of disqualification, six (6) month suspension, and two-hundred-fifty dollars ($250.00) fine.

14.15. AMENDMENT OF RESULTS
When an entrant or driver is disqualified, the Stewards of the Meeting shall advance the subsequent competitors in the finishing order and advise the Chief of Timing and Scoring of any consequent amendment to the results.

14.16. PUBLICATIONS
The SCCA shall have the right to publicize a notice that any person, organization, or car has been penalized and the reasons for the action. Any person or organization referred to in the notice shall have no right of action against SCCA or against any person for publishing such notice or for its contents.

15. APPEALS

15.1 RIGHT TO APPEAL
Any person, entrant, or organization named as a party to a protest or Chief Steward's Request for Action, shall have the right to appeal any decision or penalty imposed by the Stewards of the Meet (SOM). In addition, the Chief Steward of the event shall have the right to appeal any decision or penalty imposed.

15.2 JURISDICTION
The Chairman of the Board of Directors, SCCA, Inc., will appoint a three (3) member Court of Appeals each year to review and render a final decision on any appeal filed under this section. It is the intent of these provisions to provide for resolution of differences before a Court composed of individuals with individual and collective expertise in racing matters.

15.3 JURISDICTION OF THE FIA
A right to appeal to the FIA shall be recognized only if the dispute in question arises from competition listed on the FIA calendar, and if the appeal is brought before the ACCUS.

15.3.1. International Events
ACCUS has delegated to SCCA the authority to establish Courts of Appeal to settle disputes arising from International events sanctioned by SCCA.

15.3.2. Full International Events
ACCUS will establish Courts of Appeal to settle disputes arising from Full International Events.

15.4. APPEALING AN ADVERSE RULING
An appeal permitted under the GCR shall be started by filing a written notice of appeal with the SCCA, Inc., at its headquarters, or as provided in section 15.4.3. The notice of appeal shall specify the party making the appeal, shall state the decision or portion thereof appealed, shall explain the reason or reasons why the appeal should be decided in their favor, shall include all information the appellant wishes the Court to consider, and as applicable, which part(s) of the GCR, Category Specifications and/or Supplemental Regulations of an event, are considered to have been enforced in a manner that was not fair or equitable to the appellant. The Notice of Appeal shall be U.S. Government postmarked or registered with a carrier service (i.e., UPS, Federal Express, etc.) within ten (10) days after the announcement of the decision being appealed has been given to the appellant and shall include the appropriate appeal fee of $125.00, payable to SCCA, Inc. A minimum of $50.00 of the appeal fee will be retained by the SCCA on all appeals that are filed, unless otherwise determined by the Court of Appeals. An appeal properly started may be withdrawn, without penalty, by written notice to the SCCA, Inc., prior to start of the review of the appeal by the National Court of Appeals. Review of the appeal shall have started when members of the Court have physically received copies of the appeal and begin review at a regular session of the Court.

15.4.1. Fines, Licenses, Financial Obligations
All fines must be paid in cash or by check with US funds. Fines imposed by the SOM, Chief Steward and/or suspended licenses shall be received by SCCA, Inc., before an appeal will be heard. When a Letter of Probation is issued, the competition license also must be surrendered to the SOM or Chief Steward, and then forwarded to SCCA, Inc. Any appeal received by SCCA, Inc., will not be heard until said license is received by SCCA, Inc. Any other financial obligation owed SCCA, Inc., or any of its chartered Regions, and duly reported to be in arrears to SCCA, Inc., shall be received by SCCA, Inc., before an appeal will be heard.

15.4.2. Stay of Decision
An appeal filed on a penalty rendered by the SOM or other Court involving either a suspension of competition privileges or expulsion from the SCCA, will permit the appellant to enter and compete in subsequent races until the appellant's appeal has been decided and a decision announced by the Court of Appeals. The results and awards from these races shall be considered Provisional until the Court's ruling upholds or overturns the suspension or expulsion, at which time the Provisional Results and awards will be considered Final and Official. If the Court of Appeals ruling upholds the suspension or expulsion, the awards won by an appellant in races while awaiting the Court of Appeals ruling will be considered null

and void. Race results for those events will be revised to entirely remove the appellant's name, and other information, from the Final and Official Results.

15.4.3. Dual Sanction Weekends
On a dual event weekend, (i.e., where more than one sanction number has been issued by Club Racing; Double Regional, National, Regional/National, or any other combination permitted), a party who has had their competition privileges suspended (per GCR 14.10.) may, by filing a Notice of Intent to Appeal together with the appeal fee with the Chairman of the Stewards of the Meet (SOM), be allowed to compete in the other event that weekend that is being conducted under a different sanction number than the one where the party was suspended. The notice of appeal shall be filed within ten days of the date the decision of the SOM was given to the appellant. THIS APPEAL CANNOT BE WITHDRAWN. The party may compete in subsequent events until the Court of Appeals renders its ruling. On a single event weekend, if a competitor's competition privileges are suspended by the SOM, that competitor is prohibited from further competition activities during that event from the time the decision is rendered. A notice of an Intent to Appeal at a single sanctioned event may not be accepted by the SOM for any reason at any time.

15.4.4. Well Founded Appeals
For an appeal to be considered well founded, it shall be based on sound evidence. Reasonable people may differ on the interpretation of the evidence. An appeal may be determined to be well founded even if the decision of the first Court remains unchanged by the Court of Appeals.

15.5. HEARING APPEALS
All properly filed appeals (per GCR 15.4.) shall be heard by the Court. The Court will review the SCCA Official Observer's Report, the Notice of Appeal, containing all the evidence the appellant wishes the Court to consider; and will make any other inquiries it feels warranted, before making its decision. It may, at its discretion, require the appellant to submit any additional evidence it deems necessary for an equitable decision; hear directly evidence from any person deemed to have pertinent information or necessary data prior to making a decision; permit other parties to the decision under appeal to make written comments on the appellant's Notice of Appeal; and/or seek information from any source it desires. The Court of Appeals shall make every effort to make its final decision and render a decision on the appeal, within (30) days of its receipt of the Notice of Appeal.

No member of the Court shall have taken part as a competitor or Official in the event in which the Court will render a decision, or shall have been directly or indirectly interested or involved in the matters under consideration. The Court shall determine the procedure for hearing an appeal which procedure shall not be subject to appeal.

15.6. JUDGMENT OF THE COURT OF APPEALS
After considering all material it deems relevant, the Court of Appeals shall meet privately, reach its decision, and prepare a written opinion. It may decide that the penalty or other action of the SOMs or other body appealed from should be nullified, mitigated, affirmed, increased, or a

different penalty imposed, but it shall not order a competition to be re-run. The Court of Appeals may order a rehearing by the original SOM committee at the Court's discretion. Penalties imposed by the Court of Appeals shall incur automatic penalty points outlined in 14.14.1. The Court may order the return or forfeiture of appeal fees or of stay bonds. The Court shall direct the disposition of protest fees and teardown bonds, if any, in those cases where the original Court's decision is nullified or otherwise changed. The Court's decision shall be final, binding and not subject to further appeals by any other party, either within the SCCA organization or outside the Club.

15.7. PUBLICATION AND EFFECT OF DECISION

SCCA, Inc. will distribute a copy of the final decision of the Court to all parties of the appeal as soon as possible after the decision becomes final and will use its best efforts to publish said final decisions as soon as possible after finalization. Persons, entrants, or organizations referred to in each said decision shall have no right of action against SCCA, Inc., or any person publishing such notice, and said decision shall be final and binding. Any penalty of the Court shall be effective immediately or as stated in its decision. Penalties involving time, disqualification, suspension, or loss of points shall be made effective from the date of the conclusion of the event involved.

15.8. BAD FAITH APPEALS

If the Court determines that the appellant has acted in bad faith or in a vexatious manner, it may deem such conduct a breach of the GCR and impose any penalty listed in section 14., for said breach.

15.9. APPEALS AFFECTING FINAL POINTS STANDINGS

For all National Races held less than 31 days prior to the commencement of the Runoffs, any appeal affecting the National Championship points standings within a division, including all evidence, must be received in the National Office within 48 hours after either the receipt of a judgment issued by the Stewards of the Meet or the completion of the event, whichever comes last. Runoffs invitations to all parties named in or affected by the appeal will be held until the appeal has been finalized. An " Intent to Appeal" will not be accepted. This rule shall supercede any other time allowances for filing an appeal.

16. NATIONAL CHAMPIONSHIP RACING

16.1. REQUIRED PROCEDURES

16.1.1. Duration of Races

To be counted for National points, a race shall be scheduled for a number of laps equaling at least forty-five (45) miles. The SOM may reschedule all or any of the races to thirty (30) minutes if conditions so require.

16.1.2. Practice/Qualifying

There shall be at least forty-five (45) minutes in total of practice and/or qualifying time available to each class. All cars entered in the event shall practice and qualify by race group. Each competing driver/car combination shall qualify within a maximum of 120% of the qualifying time of the fastest qualifier in his or her class in order to be permitted to start the race

unless waived by the Chief Steward. Each group shall have at least two (2) sessions. Qualifying shall be in race groups. National practice may be combined with Regional practice and qualifying. National qualifying shall not be combined with Regional practice or qualifying.

16.1.3. Official Times

A. At all National Championship events, grid positions shall be determined by official qualifying times certified by the Chief Timer. See 7.1.5., Starting Positions, and 7.1.6., Over Subscribed Classes.

B. Any other method of determining starting position shall be described in the Supplementary Regulations and approved by SCCA.

16.1.4. Combining Professional and National Races
Whenever Professional races are combined with National races at the same event, absolute conformity to the National Championship race requirements shall be maintained.

16.2. DIVISIONAL CHAMPIONS
The SCCA shall designate a champion in each division for each class of car eligible to compete in National Championship events. Winners of these championships shall be designated Northeast, Southeast, Central, Midwest, Southwest, Northern Pacific, Southern Pacific, and Rocky Mountain Division Champions in each class.

16.2.1. Divisional Championship Points
Championships shall be determined annually on the basis of a driver's accumulation of points earned in his or her best performances in a maximum of six (6) National Championship races. No more than two (2) races shall be outside the division in which the driver's Region of Record is located.

16.2.2. Ties
Ties in the final point totals shall be resolved on the basis of each driver's record of first place finishes; then if necessary, second place finishes; then if necessary, third place finishes, including those finishes in excess of a driver's best six, if any. If two or more drivers have accumulated the same number of first, second and third place finishes in the races counted, they shall be considered tied for the position in the standings.

16.2.3. Point Awards
Points in SCCA National Championship events shall be awarded to all finishers through 9th place as follows:

POSITION	POINTS
1st	12
2nd	9
3rd	7
4th	6
5th	5

6th	4
7th	3
8th	2
9th	1

16.2.4. Dead Heats
In the case of a dead heat for any position, the total points involved based on the number tied shall be divided evenly among those tied. Example: If the dead heat is for second place involving two cars, the points from second and third place shall be added together and divided by two to obtain the points awarded for a dead heat for second place. Eight (8) would be the number of points awarded each driver; there would be no third place points awarded in that event. Points shall continue starting with fourth place, etc.

16.2.5. Points Awarded Only to One Driver
Points shall be awarded to one driver per car placing in one predesignated competition per championship event. When more than one driver competes in a given car, neither shall be awarded points.

16.3. DRIVER'S DIVISION

16.3.1. Region of Record
If an SCCA driver is a member of only one SCCA region, that region shall be the driver's Region of Record. If an SCCA driver belongs to more than one SCCA region, the driver shall designate one region as the Region of Record.

16.3.2. Division of Record
A driver's division shall be determined by his official Region of Record as recorded in the membership files at the SCCA National Office.

16.3.3. Change of Division
Change of Division of Record shall be **PRIOR** to the conduct of the third National in **EITHER** incoming or outgoing division, whichever is earlier. A driver desiring to change their division for the purpose of accumulating National Championship points is responsible for notifying the Manager of the Membership Department, in writing, and shall also provide written confirmation of membership in a region in the division to which they are transferring.

Such notification and confirmation shall be received, in writing, by the Manager of the Membership Department at the National Office, prior to the conduct of the third National Championship event in **EITHER** incoming or outgoing division. It is the responsibility of the driver to initiate action to ensure such notification and confirmation reaches the Club Racing Division of the National Office.

16.3.4. Points in One Division
A driver entering more than one car shall accumulate all National Points in the same division and shall not accumulate points with one car in one division and another car in another division.

16.4. INTERDIVISIONAL CHAMPIONSHIP EVENT
SCCA shall schedule an event each year titled the **SCCA RUNOFFS®**. The winner of each class in the **SCCA RUNOFFS®** shall be designated the National Champion in that class.

Supplementary Regulations defining driver and car eligibility and other details of this event shall be published by the SCCA.

The 2006 Event date is October 9-15, 2006.

16.4.1. Invitations to the SCCA Runoffs®
Invitations may be issued to the highest placing drivers in each class of the National Championship point series held in each division.

As a minimum, a driver shall have been classified as a starter in at least four (4) National Championship events *in the current race season*, of which two (2) shall have been in his or her Division of Record, and a finisher in at least three (3) National Championship events, and qualifying in the same class (or classes) for which their entry is accepted, but they may drive any car eligible for that class.

16.4.2. Defending National Champions
When determining the number of invitations to be issued for the **SCCA RUNOFFS®**, a *current* defending National Champion will not be included in that count. *Current* defending National Champions who do not qualify as an entrant to the **SCCA RUNOFFS®** the following year may be accepted as an entry in the same class under the following conditions:

A. Shall hold a current SCCA National Competition License.

B. *Participation in the Runoffs without having been a starter in the same class in at least four national championship events during the current year. This cannot be invoked two years in a row.*

C. Cannot bump anyone from the field of starters who is an accepted entry.

D. May not participate in the **SCCA RUNOFFS®** Travel Fund distribution, unless otherwise qualified.

16.4.3. Late Entries

A. Entries shall be postmarked with a US Government Postmark by a date announced annually by the SCCA.

B. An entrant who fails to file an entry application to the SCCA by the required date may apply for a late entry to the Club Racing Department. The application shall be accompanied by a late fee, **NON-REFUNDABLE**, in the amount of five hundred dollars ($500.00), payable to SCCA, in addition to the normal entry fee.

C. The late entry applicant forfeits any claim he or she may have to participate in **SCCA RUNOFFS®** Travel Fund distribution or any

contingency money that may be posted by the SCCA.

D. A late entry applicant cannot bump or otherwise change the status of an entrant who has entered on time and has been accepted. The decision on acceptance of a late entrant may be made on a date announced annually by the SCCA.

16.5. MINIMUM GRADES OF LICENSES

16.5.1. Drivers
National Championship races are open to holders of SCCA National Competition Licenses only.

16.5.2. Officials
See 6.2.2.A., Minimum Grades of Licenses

17. AUTOMOBILES
17.1. CLASSIFICATIONS
Descriptions of the automobiles eligible to compete in the various SCCA Club Racing competition events are carried in the GCR and category specification books. Their amendments and clarifications are published in SportsCar and the Official SCCA web site.

Organizers of SCCA Regional, National Championship, and Interdivisional Championship events shall provide competitions for the following classes and categories. Note: ( ) Indicates identification markings per 17.5.

Note: Classes such as Improved Touring, Super Production, Formula S, Legends, etc.; have been, created for competitors to race at a Regional Competition level. These classes will not be eligible for National Competition as they were created with the express understanding that they remain Regional Competition Classes only. There may be other classes added to this philosophy, as we require places for our members to race cars that do not fit within our National Competition program.

17.1.1. Production Category Classes:

E Production	(EP)
F Production	(FP)
G Production	(GP)
H Production	(HP)
Super Production	(SP) - Regional Only

Section 17.1.1., continues in the Production Car Specifications Book.

17.1.2. GT Category Classes:

GT-1	(GT1)
GT-2	(GT2)
GT-3	(GT3)
GT-Lite	(GTL)

Section 17.1.2., continues in the GT Category Specifications Book.

17.1.3. Showroom Stock Category:

B	(SSB)
C	(SSC)

Section 17.1.3., continues in the Showroom Stock Specifications Book.

17.1.4. Improved Touring Category Classes: (Regional Classes Only)

S	(ITS)
A	(ITA)
B	(ITB)
C	(ITC)

Section 17.1.4., continues in the Improved Touring Category Specifications Book.

17.1.5. Sports Racing Category Classes:

A Sports Racing	(ASR) - Regional Class Only
C Sports Racing	(CSR)
D Sports Racing	(DSR)
Sports 2000	(S2)
Spec Racer Ford	(SRF)

Section 17.1.5., continues in the Sports Racer Category Specifications Book.

17.1.6. Formula Category Classes:

Formula Atlantic	(FA)
Formula Continental	(FC)
Formula Vee	(FV)
Formula Ford	(FF)
Formula 500	(F5)
Formula Mazda	(FM)
Formula S	(FS) - Regional Only

Section 17.1.6., continues in the Formula Category Specifications Book.

17.1.7. Sedan Category Class:

American Sedan	(AS)

Section 17.1.7., continues in the American Sedan Category Specifications Book.

17.1.8 Touring Category Class:

Touring 1	(T1)
Touring 2	(T2)
Touring 3	*(T3)*

Section 17.1.8., continues in the Touring Category Specifications Book.

17.1.9 Spec Miata Class:

Spec Miata	(SM)

Section 17.1.9., continues in the Spec Miata Category Specifications Book.

17.1.10 Optional Regional-Only Classes

Super Production Class (SP) (Regional Class Only): Cars which exceed the preparation limitations of the applicable Production or GT Specifications but which meet the general regulations of Section 17 of the GCR for GT category cars. This includes cars not listed in the GT or Production spec pages.

Legend Cars (LC) (Regional Class Only): Cars that are manufactured by 600 Racing and comply with current Legend Car Rules, as published by

600 Racing. Homologation is required on all Legend Cars, and therefore they shall also comply with the SCCA Legend Car Homologation Request sheet. Competitor must be in possession of the current Legends Car Rules at all competitions. It is recommended that they be grouped with cars of similar weight, configuration and speed potential.

Note: Legend Cars are not eligible for any other Club Racing category. Modifications outside of those permitted in the current Legend Car rules shall render the car ineligible for SCCA Club Racing competition.

17.1.11. Participation Level

A. A National Championship class shall retain its National Championship status as long as the average number of qualifiers remains at 3.5 or more per event, in the top five (5) divisions per class.

B. When the average number of qualifiers in a class at Nationals falls below 3.5, the class shall be allowed one additional year to bring the participation level above the current requirement. Alternatively, it may be immediately consolidated into an existing class. If, in the grace year, the class does not exceed current requirement per National race, it shall either be consolidated into an existing class or revert to a Regional only class.

C. A Regional Class with participation levels 0.5 above the participation requirements outlined in paragraph 17.1.11.A. for two (2) successive years may be considered for inclusion in the National Championship racing program, except Improved Touring.

17.1.12. Change of Specifications
Specifications on cars classified for the first time, or reclassified, may be changed on thirty (30) day's notice during the first year of competition if the advance estimates of performance are grossly inaccurate.

17.1.13. Homologation Requirements
Homologation is required for all Formula and Sports Racer cars registered after January 1, 1983. All Formula and Sports Racer cars shall be homologated for their class. All Formula and Sports Racer cars applying for a re-homologation, conversion, dual homologation or a new homologation in a different class shall comply with the current rules. Homologation forms must be on file with SCCA Inc., Topeka, Kansas for any car to be allowed to compete in any SCCA event.

The SCCA Club Racing Technical Manager, with the approval of the Club Racing Board Chairman, may deny Homologation of any car that is determined to be of a configuration that is unsafe, of a configuration that is incompatible within the relevant class structure, or incorporates design characteristics or conditions that are fundamentally divergent from standard safety considerations.

Modifications may be made to a vehicle after it has been homologated as

long as said modifications stay within the scope of the rules.

17.2. GENERAL PROVISIONS

To compete in an SCCA sanctioned event, all cars shall comply with the requirements of the GCR and of the specifications for their category and class. If these General Provisions and Specific Provisions for a category/class shall conflict, the specific category/class provisions shall take precedence.

17.3. VEHICLE LOGBOOKS

1. A standard SCCA Vehicle Logbook shall be used by all competitors at all SCCA competitions, unless excepted by the Supplementary Regulations.

2. Only one Logbook shall be issued for each vehicle (other than as a *continuation of the original* or replacement). *When a continuation logbook is issued the original issuance date of the logbook shall be written on the front page of the continuation logbook. (It is not necessary to present all old logbooks for issuance of annual inspection stamp or a tech sticker.)* The possession of two Logbooks for one vehicle shall be deemed a breach of the rules under 14.1.3., Breach of Rules (Fraud).

3. A complete description of the vehicle, its safety roll bar/roll cage, and the required photographs shall be entered in the places provided. All changes of ownership of the vehicle shall be recorded as provided.

4. ASN Canada FIA Vehicle History Logbooks shall be accepted at all SCCA events.

5. The Vehicle Logbook shall be issued only by a Nationally licensed Technical Inspector, who shall also complete the required vehicle information in the front and back of the Logbook. He or she shall conduct a thorough inspection of the vehicle, as provided in Section 11., Technical and Safety Inspection. The logbook issue date is the date of registration.

6. Identity Numbers:

   A. Each vehicle shall have an identity number corresponding to that of its logbook permanently stamped on its roll bar.

   B. The first digit(s) corresponding to the region's identity number shall be separated from the balance of the numbers by a dash (-).

   C. The car numbering system, beginning with (001), shall be issued consecutively as the vehicles are registered during a thorough inspection.

7. All Formula and Sports Racing Cars registered after January 1, 1983 are required to be Homologated by SCCA and issued a

Certificate of Approval. Exceptions: Spec Racer Ford, FSCCA, SRSCCA, and Shelby Can-Am. The original certificate shall be presented along with the car for issuance of a new Vehicle Logbook. Additionally, former Spec Racer Renaults may compete in Vintage/Historic events using their originally issued logbook.

8. At each event, this Logbook and the Certificate of Approval (for cars required by these rules to have one) shall be presented at Technical Inspection with the signature of the driver/entrant for that event in the space provided. During Technical Inspection all deviations regarding both safety and legality shall be noted by the Technical Inspector. If a waiver for the event is permitted, by the Chief Steward or his/her designated representative, the duration of the waiver shall be noted and complied with by the competitor.

9. If a car is protested during an event and found to be illegal, the results of this protest shall be noted by the Chairman SOM, or delegated to another official, such as the Chief Scrutineer.

10. In the event the vehicle is involved in an accident or is damaged due to a mechanical failure, the damage shall be noted in the Vehicle Logbook by the accident investigator or Chief Technical Inspector.

11. In the event the Vehicle Logbook is not available at Technical Inspection, the vehicle may be accepted for competition only after a thorough inspection during which all details required for the issuance of a logbook shall be recorded.

17.4. FUEL

All cars shall use fuel, as defined below, unless a specific exemption is made in the provisions for a specific category/class.

17.4.1. Permitted Fuel

Permitted fuel is herein defined as gasoline. Gasoline is a mixture of refined hydrocarbons. Gasoline is an electrical insulator and its relative effectiveness as an insulator is represented by its dielectric constant (D.C.). The average D.C. of gasoline, as measured by an SCCA Fuel Check Meter (High Desert Engineering HDE-1), is defined as "0.0". Gasoline may be tested and certified at SCCA events by the determination of the dielectric constant using the SCCA Fuel Check meter and through the application of various chemical analyses (e.g., Reagent "A" and Reagent "D" tests).

SCCA Approved Fuel Meter: High Desert Engineering Model G-01
SCCA Approved Reagent Test(s) Germane Engineering Reagent "A"
Germane Engineering Reagent "D"

Fuel Standards:

Classes	Type	DC max	Reagent A	Reagent D
All SS, SM, T, IT, SRF, Olds SR running as CSR (exc. rotary)	Gasoline w/ no added oil	15	No black pos.	No pos.
All other classes (incl. 2-cycle w/ oil injection)	Gasoline w/ no added oil	0	No pos.	No pos.
All 2-cycle w/o oil injection	Gasoline w/ oil mixture	2	No pos.	No pos.
All rotary engines	Gasoline w/ or w/o oil mixture	15	No black pos.	No pos.

Use of propylene oxide, ethylene oxide, paradioxane, and basic nitrogen or sulfur-bearing compounds (i.e. pyridine, aniline, pyrrole, dimethylsulfoxide, etc.) is prohibited.

17.4.2. Fuel Sample Acquisition
All cars shall be equipped with an easily accessible sampling valve/port located between the fuel tank and the carburetor(s) or fuel injectors to facilitate acquisition of fuel samples. To avoid fuel spillage, the fuel sampling valve/port shall not consist of removing a fuel line from any fuel system component unless a dry break fitting has been installed. A capped and/or sealed "T" may be fitted inline, or a capped and/or sealed auxiliary sample port may be fitted to a fuel system component (carburetor, fuel rail, etc.) without using a dry break fitting. Under no circumstances is siphoning of fuel from the fuel tank/ cell acceptable.

If possible, the sampling valve/port should not be located in the engine compartment. Cars equipped with a factory fuel pressure test port (e.g. fuel injected SS, T, IT, SRF, etc.) or competitors having factory fuel pressure test equipment available, are not required to have an additional fuel sampling port. On all other cars, to avoid fuel spillage it is recommended that a valve or dry-break fitting be installed in the fuel line. In all cases competitors shall provide the appropriate tooling necessary to safely obtain the fuel sample. A manned fire extinguisher shall be present whenever fuel samples are being acquired.

17.5. IDENTIFICATION MARKINGS
Each car shall carry identification numbers and class letters per 17.5.1., and 17.5.2., SCCA logos, and any markings required by the Supplementary Regulations. Driver's suits shall display the SCCA patch. (See Figures 1, 2, and 3)

17.5.1. Numbers and Class Letters
Numbers shall be placed on the front and both sides of the car so that they are legible. All Formula cars with a rear wing shall have legible numbers on each rear wing side plate. Numbers shall be no more than two (2) digits, and shall meet the approval of the Chief of Timing and Scoring. Three (3) digit numbers may be used when individually approved in advance by the

Chief of Timing and Scoring. Class letters shall be placed on both sides of the car so that they are legible. Rear numbers and class letters are recommended.

17.5.2. Size of Numbers and Class Letters
Numbers shall be at least eight (8) inches high, with a 1.5 inch stroke on a contrasting background (rear winged Formula cars shall have as large a number as possible on their rear wing side plates). Metallic (reflective) numbers and class letters are prohibited. The distance between two (2) numbers shall be at least as wide as the stroke of the numbers. Class letters shall be at least four (4) inches high, with a half (1/2) inch stroke on a contrasting background.

17.5.3. SCCA Logo
Each car competing in an event shall display the official SCCA field logo (see Figure 1) unobstructed and prominently on both sides of the car and adjacent to the side numbers. A third logo shall be displayed on the front of the car unobstructed and prominently near the front number. The logo shall be on the spoiler of cars so equipped. Each driver's suit shall display the official SCCA uniform patch logo (see Figures 1 and 2).

Logos and decals of sanctioning bodies other than SCCA shall be removed or covered (car and driver's suit).

Vintage cars when participating in vintage events may use the four (4) inch diameter "SCCA Wire Wheel" in place of the current field logo.

17.6. ADVERTISEMENTS AND GRAPHICS
Advertising and graphics (names, symbols and logos) may be displayed on cars provided they are in good taste and do not interfere with identification marks and SCCA logos.

17.7. MECHANICAL CONDITION
The Chief Technical and Safety Inspector shall have the responsibility for approving every car before it is allowed to take part in a competition. The inspection procedures used to carry out this responsibility are set out in Section 11., Technical and Safety Inspection. A driver or entrant whose car is disapproved and who drives it in competition or who presents it for recheck after disapproval without the corrections specified may be penalized as provided in Section 14., Penalties.

17.7.1. Alterations or Damage After Inspection
Cars which have been altered or damaged after they have been approved at technical and safety inspection shall be subject to reinspection and reapproval.

17.8. LOSS OF BODYWORK
All major body components such as front and rear hoods, fenders, doors, and windscreens shall be maintained in normal position throughout the competition. If loss of bodywork is a safety hazard, the car may be black-flagged. A car completing a competition with bodywork missing may be penalized.

17.9. WEIGHT
All cars shall meet or exceed the minimum weight specified with driver, exactly as they come off the race circuit, at the conclusion of a race or qualifying session. Cars found to be underweight at impound are subject to penalty and shall have it noted on the next page of the Vehicle Logbook. The car shall be weighed at the next event and meet the proper minimum weight before being allowed to qualify.

17.9.1. Ballast
Ballast may be added to all cars as required, to meet minimum weight, provided it is securely mounted within the bodywork and serves no other purpose.

17.10. NOISE
The maximum sound pressure level from a car on track shall be measured as provided in Section 12., Sound Control.

17.11. BATTERIES
Battery location is unrestricted within the bodywork (except Showroom Stock, *Spec Miata,* Touring, and Improved Touring). If located in the driver/passenger compartment, wet cell batteries shall be in a nonconductive marine type container or equivalent. The hot terminal shall be insulated on all cars. All batteries (on-board power supplies) shall be attached securely to the frame or chassis structure independent of the marine type container.

17.14. AERODYNAMIC SKIRTS
Aerodynamic skirts are prohibited in Club Racing.

17.15. ACCUMULATORS (e.g., Accusumps)
An accumulator (e.g., Accusump) may be installed (except for Touring, *Spec Miata,* and Showroom Stock). Location is free, but it shall be securely mounted within the bodywork. All oil lines that pass into or through the driver/passenger compartment shall be of metal braided hose (e.g., Aeroquip).

17.17. TRACK
Track is the distance between the centerlines of the wheels as raced, without driver, measured at a horizontal plane through the wheel hub centerline. Alternatively, it may be measured from the inside of one wheel at the hub centerline height to the outside of the other wheel, then conversely from the outside of the first wheel at hub centerline to the inside of the second wheel. The two (2) dimensions obtained are to be added together and divided by two to obtain the average. Measurements are to be taken at both front and rear of the wheels and averaged to compensate for toe-in/out. Under certain circumstances it may be preferable to measure from the outside of one wheel to the outside of another and from this dimension deduct the thickness of one wheel. This should be repeated 180° opposite to the first measurement and the two dimensions averaged.

17.18. WHEEL RIM WIDTH
Wheel rim width shall be measured at the base of the bead seat.

17.19. LIGHTS - BRAKE AND TAIL
All non-Formula cars shall have two operating red brake lights. All Formula (open wheel) and Sports Racer cars shall be equipped with a red taillight of at least the equivalent illumination power of a fifteen (15) watt bulb. This light shall be mounted as high as possible on the centerline of the car and be clearly visible from the rear. The taillight shall be illuminated when ordered by the Chief Steward.

17.20. VENTILATION
All closed cars shall run with both front door windows fully open. Holes for ventilation in quarter or rear windows on Production or GT cars are not allowed, unless specified in PCS, GTCS.

17.21. FIREWALL AND FLOOR
Firewall and floor shall prevent the passage of flame and debris into the driver's compartment. Belly pans shall be vented to prevent the accumulation of liquids, except composite/honeycomb structures. All rear-engined Formula cars are required to have an undertray, from driver's foot area to the firewall, for protection of legs and torso.

17.22. FIRE SYSTEM
All cars shall be equipped with an On-Board Fire System except Showroom Stock, Touring, *Spec Miata,* and Improved Touring.

17.22.1. On-Board Fire System Requirements

A. On-board fire systems shall use Halon 1301 or 1211, with a five (5) pound minimum capacity (by weight). There shall be a minimum of (2) nozzle locations, one in the driver's compartment and one in either the engine area or the fuel cell area. Manual or Automatic release is allowed. (GT cars see Section 17.1.2.D.10. f., or 12.1.2.F.3.e.). On-Board fire systems may use AFFF or equivalent surfactant foam material (i.e. SPA Lite, ZERO 2000, Coldfire 302), 2.25 liter minimum capacity (by volume). If such a system is used, the appropriate atomizing nozzles shall be used. All AFFF fire system bottles shall incorporate a functional pressure gauge and shall be marked with the manufacturer's recommended "filled weight." All AFFF fire systems shall be serviced according to manufacturer's specifications.

   CO2 cartridge propellant fire extinguishing systems are permitted, provided that the seal of the manufacturer specified CO2 cartridge is unpunctured and the fire bottle is equal to the weight specified by the system manufacturer.

B. The fire system cylinder shall be securely mounted, in such a manner that it can be checked during a Technical Inspection and may be removed for weighing periodically for compliance to full weight shown on the cylinder. (Weight is without valve assembly.) The release mechanism shall be within reach of the driver when belted in the car.

C. All on-board fire systems shall be identified with circle "E" decal. In GT and Production cars, two (2) circle "E" decals may be

required, one at the release location and the second on the outside bodywork in line with or as near to the release location as possible.

D. On Formula and Sports Racing cars, a circle "E" decal shall be located on the outside bodywork as near to the release location as possible. On-board fire systems may also use CEA614 provided that the lines and nozzles are replaced in accordance with the manufacturers (3M) instructions. All FM100 fire suppression systems will be considered illegal in any SCCA competition vehicle effective 1/1/97.

E. The firing safety pin*(s)* shall be removed from all on-board fire systems prior to going on-track.

17.22.2. Hand-Held Fire Extinguisher Requirements
The following are acceptable for Showroom Stock, Touring and Improved Touring cars:

A. Halon 1301 or 1211, two (2) pound minimum capacity by weight.

B. Dry chemical, two (2) pound minimum with a positive indicator showing charge. Chemical: 10 BC Underwriters Laboratory rating, potassium bicarbonate (Purple K) recommended, 1A10BC Underwriters Laboratory rating multipurpose, ammonium phosphate and barium sulfate or Monnex.

C. The fire extinguisher shall be securely mounted in the cockpit. All mounting brackets shall be metal and of the quick-release type.

17.23. REQUIRED DRIVER SAFETY EQUIPMENT
The following equipment shall be in good condition and free of defects, holes, cracks, frays, etc.

1. Driving suits that effectively cover the body from the neck to the ankles and wrists, manufactured of fire resistant material, worn with underwear of a fire resistant material. One piece suits are highly recommended. All suits and underwear shall be made of the following accepted fire resistant materials: Nomex, Kynol, FPT, IWS (wool), Fiberglass, Firewear™, Durette, Fypro, PBI, Kevlar, NASAFIL, or any suit carrying an SFI 3-2A/1 or higher certification patch. Underwear of PROBAN is approved. The following specific manufacturer(s) material combinations are also recognized: Simpson Heat Shield, Leston Super Protex, FPT Linea Sport, *Carbon X,* and Durette X-400. Underwear is not required with three-layer suits or with suits carrying FIA standards of 8856-1986 or 8856-2000 or SFI 3-2A/5 or higher (e.g., /10, /15, /20) Certification Patch. FIA homologated driving suits and underwear are recommended.

2. Crash helmets approved by the Snell Foundation with Snell sticker 1995 or later Special Application (SA95), or by the SFI with a SFI Sticker 31.1a for open faced helmets and a SFI sticker

31.2a for closed faced. **Effective 1/1/07, Snell SA95 helmets will no longer be permitted (e.g. SA2000 minimum).** (NOTE: Snell M rating is not allowed.) The back of each driver's helmet shall be labeled with a minimum of the driver's name. The use of a head and neck support system is highly recommended. Accident damaged helmets should be sent by the driver or his or her representative to the Snell Memorial Foundation, 3628 Madison Ave., North Highland, CA. 95660 (ph) 916-331-5073 (attn. Edward B. Becker). Details of the accident should be included. Freon based total loss helmet cooling systems are not allowed.

3. Gloves made of leather and/or accepted fire resistant material containing no holes.

4. Socks made of accepted fire resistant material.

5. Face coverings (balaclavas) of accepted fire resistant material for drivers with beards or mustaches. Hair protruding from beneath a driver's helmet shall be completely covered by fire resistant material. As an alternative to balaclavas, a full helmet skirt of accepted fire resistant material may be used. Double-layer balaclavas are recommended. If balaclavas are used voluntarily, they shall be of accepted fire resistant material.

6. Goggles or face shields, preferably made of new impact resistant materials, for drivers of open cars.

7. A driver's restraint system meeting SCCA standards (See Section 20.) shall be used at all times while on the track.

8. Shoes, with uppers of leather and/or nonflammable material that at a minimum cover the instep. Ventilation pinholes by the manufacturer are allowed.

17.24. SCATTERSHIELDS/CHAIN GUARDS

The installation of scattershields or explosion-proof bell housings shall be required on all cars (except Showroom Stock, *Spec Miata,* Touring and Improved Touring) where the failure of the clutch or flywheel could create a hazard to the driver. Chain drive cars shall be fitted with a protective case/shield to retain the chain in case of failure.

Minimum material specifications are:
.125 inch SAE 4130 alloy steel
.250 inch mild steel plate
.250 inch aluminum alloy
NHRA or SFI approved flexible shields.

17.25. DETACHABLE PANELS/SUNROOFS

Detachable hardtops, detachable panels, and detachable doors (e.g., Lotus 7) shall be removed, unless authorized in the Category Rules or Specification Book for that car to remain in place. Movable panels such as sliding sunroofs shall be closed. Glass sunroofs must be removed. Metal sunroofs may be retained if bolted in. All sunroofs may be replaced with panel or replacement skin of the same material as the original

surrounding roof material. Note: Specification Books take precedence over GCR rules.

17.26. OIL CATCH TANKS, FILTERS, AND BREATHERS
Oil holding tanks and engine breathers, whether directly or indirectly ventilating the crankcase, and all transmission/transaxle breathers shall be equipped with oil catch tanks. Minimum catch tank capacity shall be one U.S. quart for the engine and transmission/transaxle. Oil holding tanks and oil filters may be mounted in the driver/passenger compartment. A metal bulkhead shall prevent exposure of the driver to oil spillage. Oil catch tanks shall vent into the engine compartment or outside the driver's compartment. A crankcase vacuum breather that passes through the oil catch tank(s) to exhaust systems or vacuum devices that connect directly to exhaust systems is prohibited.

17.27. MASTER SWITCH
All cars, except Showroom Stock and Touring shall be equipped with a master switch easily accessible from outside the car. Spec Racer Fords shall be wired per RFSRII. The master switch shall be installed directly in either battery cable and shall cut all electrical circuits but not an on-board fire system. *All terminals of the master switch shall be insulated to prevent shorting out.* It shall be clearly marked by the international marking of a spark in a blue triangle and mounted in a standard location. Off position shall be clearly indicated at the master switch location. The standard locations shall be as follows:

1. FORMULA AND SPORTS RACING CARS -- In proximity to the right-hand member of the roll bar, but in a location so that it cannot be operated accidentally. It can be mounted on a bracket welded to the inside of the upright member or mounted so that the operating lever or knob is outside of the body panel immediately in-board of the upright member. This is the standard location on Formula cars built to the Constructor's Association requirements for Formula 1.

2. CLOSED SPORTS RACING CARS, PRODUCTION CARS, IMPROVED TOURING AND GT CARS -- In front of the windshield on either the cowl or on top of the fender, but close enough to the windshield to be accessible if the car is overturned. Alternatively, it may be mounted below the center of the rear window or on a bracket welded, clamped or bolted to the roll cage or dash, easily accessible through the open window. (Drilling of holes in roll cage to attach the bracket is prohibited.)

3. OPEN PRODUCTION, GT AND IMPROVED TOURING CARS - May exercise a choice among the above locations.

17.28. STEERING WHEEL LOCKS
Steering wheel lock devices shall be removed (except Showroom Stock and Touring).

17.29. FORMULA CAR VISIBILITY
The driver of all Formula cars shall have a field of vision of not less than ninety (90) degrees to either side (total of 180 degrees) with both eyes

by turning his or her head, but without lifting his or her head forward or otherwise moving from the normal driving position. Plexiglas or similar uncolored transparent material may be substituted for existing bodywork. "Token" portholes do not satisfy this requirement. Only a structural member such as a roll bar brace or frame tube may interrupt the required field of vision.

17.30. WINDOW SAFETY NETS
Window safety nets shall be used on the driver's side window of all closed cars. As of January 1, 1995 and thereafter, all window nets shall meet SFI Specification 27.1., and shall bear an "SFI Spec 27.1., Label" to that effect. The window net shall be equipped with a quick-release device. Nets shall be attached to the roll cage; plastic buckles and elastic cords are not permitted. Holes in the rollcage to accommodate either support rod is unacceptable unless bushed and welded completely. Refer to Figure 4, "Proper Window Net Installation," for additional information on mounting methods. Closed cockpit sports racers may use arm restraints in lieu of a window net.

17.31. TOWING EYES
All cars without an exposed roll bar shall have a towing eye or strap, front and rear that does not dangerously protrude from the bodywork when the car is racing, to be used for flat-towing or hauling the vehicle. A removable towing eye carried inside the car is not acceptable, except in formula cars and sports racers. These towing eyes or straps shall be easily accessible without removal or manipulation of bodywork or other panels. Towing eye minimum ID two (2) inches.

The required tow eyes must be strong enough to tow the car from a hazard such as a gravel trap. Front tow eye may be mounted in the driver / passenger side window openings, or any location forward of the windshield. If mounted in the driver/passenger side window openings, it must be attached to the forward roll cage down tube as close to the base of the windshield as possible. If the front tow eye is located in the side window openings there shall be one on each side of the car. Rear tow eyes must be accessible rearward of the rear axle centerline.

17.32. WHEEL FANS
Wheel fans are permitted, unless otherwise restricted.

17.33. WINDSHIELD CLIPS/REAR WINDOW STRAPS
Windshield safety clips and rear window safety straps shall be installed on all closed cars (except Showroom Stock, *Spec Miata,* Touring and Improved Touring).

Three (3) clips (3 inch x 1 inch x 1/8 inch) shall be bolted or riveted to the body at the top of the windshield.

Two (2) clips (3 inch x 1 inch x 1/8 inch) shall be bolted or riveted to the cowl and extend over the bottom edge of the windshield. Clips shall be spaced a minimum of twelve (12) inches apart.

It is recommended that three (3) one (1) inch wide strips of steel or aluminum be installed behind the windshield to support it from collapsing

inwards if it becomes damaged. The rear window shall be secured with two (2) metal straps (1 inch wide x 1/8 inch thick) bolted or riveted to the body at the top and bottom of the rear window.

17.34. FUEL AND OIL LINES
All fuel and oil lines, including gauge and vent lines, that pass into or through the driver/passenger compartment, shall be of steel tube or metal braided hoses or bulkheaded.

17.35. DATA COLLECTION DEVICES
Data collection devices are considered to be instrumentation and therefore allowed in all classes that permit the installation, replacement or addition of gauges, indicators or instrumentation.

17.36. OIL AND OIL ADDITIVES
Any oil or oil additive may be used. Oil additives are defined as: Any liquid or particulate compound(s) delivered into the engine via the engine oil for the purpose of friction/temperature reduction, and/or metal surface conditioning (i.e. PTFE resins (Teflon, "Slick-50"), Molybdenum Disulfide, etc.).

17.37. CRYOGENIC TREATMENT
Cryogenic treatment of components is allowed unless specifically prohibited in the category or class preparation rules.

17.38. AUTOMATIC TRANSMISSIONS AND HAND CONTROLS
Automatic transmissions are prohibited in all classes. However, the use of alternative transmissions, including automatic transmissions, and/or hand controls may be approved on a case-by-case basis. Such approval shall be in writing from the Club Racing Technical Manager and shall be in the driver's possession at all competitions.

CAR DECALS 3 REQUIRED
(8-1/2 x 3-1/2 inches)

Item #2608

OFFICIAL SCCA FIELD LOGO

Item #2606

KILL SWITCH

Item #2607

ON BOARD FIRE SYSTEM

SCCA OR SCCA CLUB RACING
UNIFORM PATCH

Item #3619

Item #3637

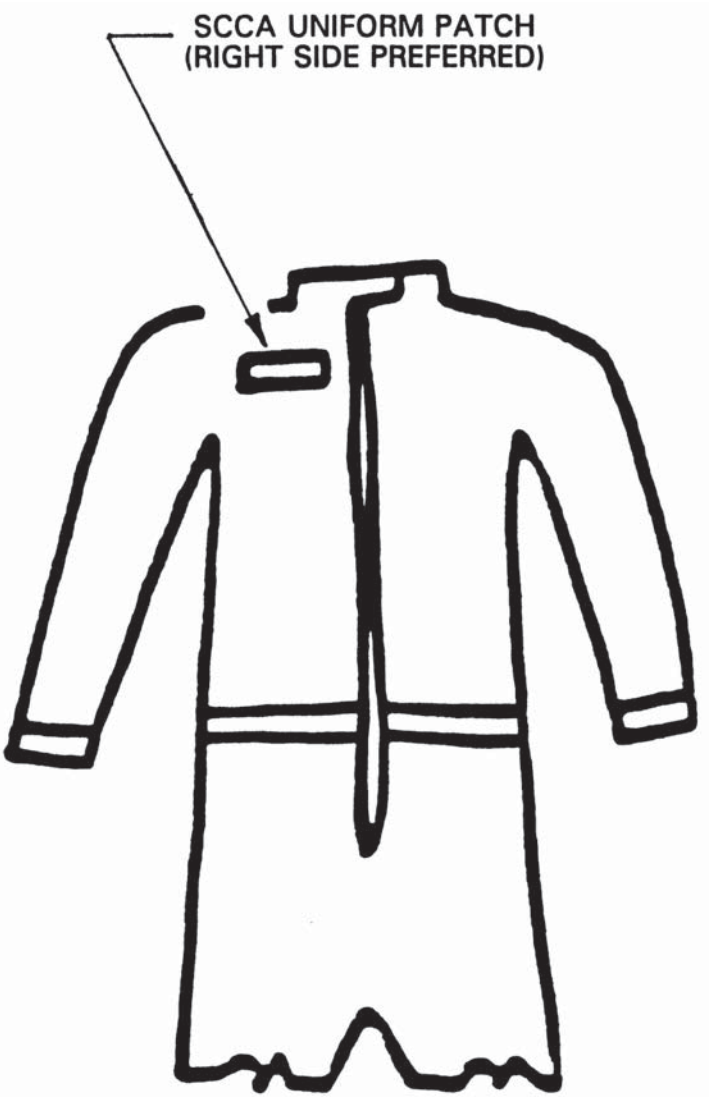


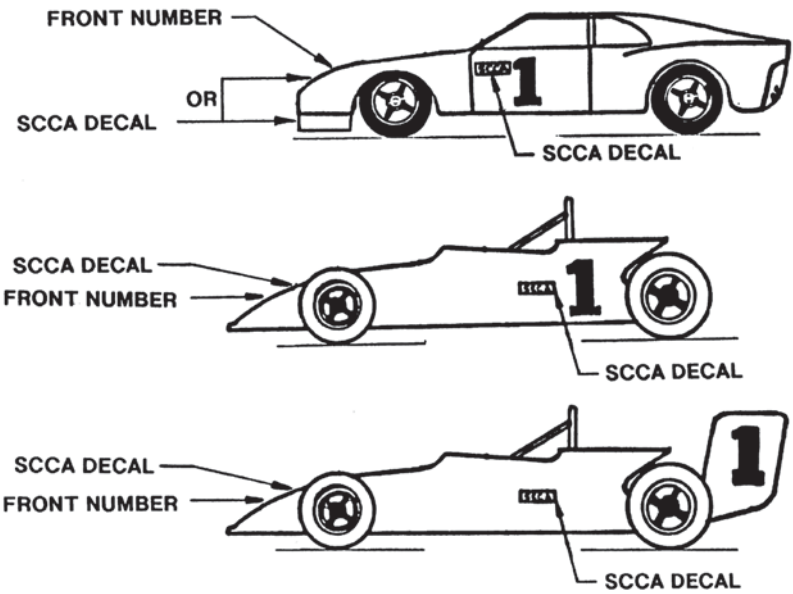
Figure 2

IDENTIFICATION MARKS

Each automobile competing in an SCCA-sanctioned speed event shall display the official SCCA logo, unobstructed and prominently on both sides of the automobile adjacent to the side numbers.

Sports Racer and Formula Automobiles: The SCCA logo shall be displayed on the front unobstructed and prominently near the number.

GT, Production, and Showroom Stock Automobiles: The SCCA logo shall be displayed on the front of the vehicle and shall be affixed to a vertical surface so that it shall be easily seen when viewed from the front.



PROPER WINDOW NET INSTALLATION

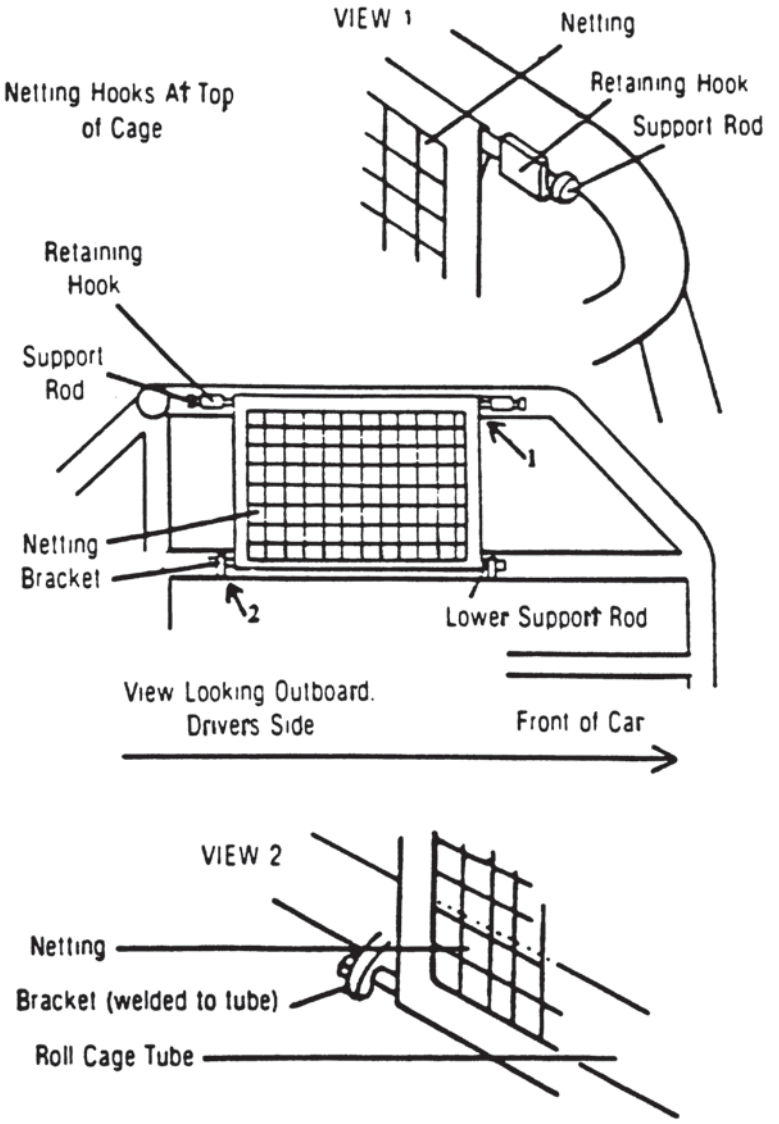


Figure 4

18. ROLL CAGES

These general specifications are for all automobiles. Roll cages are required in all automobiles.

Roll cages may be of two (2) designs, low front hoop (top of steering wheel) or high front hoop (top of windshield). Specific installations are subject to approval by the Technical and Safety Inspectors at each event.

The Technical Staff of Club Racing shall have the responsibility to ensure specification compliance with SCCA safety standards. To that end, the Technical Staff of Club Racing may or may not accept alternate construction standards from any source that significantly vary from SCCA standards of protection.

18.1. BASIC DESIGN CONSIDERATIONS

1. The basic purpose of the roll cage is to protect the driver if the car turns over, runs into an obstacle such as a guardrail or catch fence, or is struck by another car. It shall be designed to withstand compression forces from the weight of the car coming down on the rollover structure and to take fore/aft and lateral loads resulting from the car skidding along on its rollover structure.

2. A system of head rest to prevent whiplash and rebound, and also to prevent the driver's head from striking the underside of the main hoop shall be installed on all vehicles. Racing seats with integral headrests shall also meet this requirement and have a support to the main hoop. Seats homologated to, and mounted in accordance with FIA standard 8855-1999 or higher need not have the seat back attached to the roll structure. The head rest on non-integral seats shall have a minimum area of thirty-six (36) square inches and be padded with a non-resilient material such as Ethafoam® Ensolite® with a minimum thickness of one (1) inch. *It is strongly recommended that padding meet* SFI spec 45.*2 or FIA Sports Car Head Rest Material.* The head rest shall be capable of withstanding a force of two-hundred (200) lbs., in a rearward direction. The head rest support shall be such that it continues rearward or upward from the top edge in a way that the driver's helmet can not hook over the pad.

3. Forward braces and portions of the main hoop subject to contact by the driver's helmet (as seated normally and restrained by seatbelt/shoulder harness) shall be padded with non-resilient material such as Ethafoam® or Ensolite® with a minimum thickness of one-half (1/2) inch. Padding meeting SFI spec 45.1 *or FIA 8857-2001 is strongly* recommended.

4. No portion of the safety roll cage shall have an aerodynamic effect by creating a vertical thrust.

5. Roll cage or chassis design shall prevent engine intrusion into the driver compartment.

6. Material:

A. Seamless, or DOM (Drawn Over Mandrel) mild steel tubing (SAE 1010, 1020, 1025) or equivalent, or alloy steel tubing (SAE, 4130) shall be used for all roll cage structures. Proof of use of alloy steel is the responsibility of the entrant.

B. Minimum tubing sizes (all Formula, Sports Racing, GT, and Production Category automobiles, and all automobiles registered prior to June 1, 1994) for all required roll cage elements (All dimensions in inches):

Vehicle Weight	**Material**	
Without Driver	**Mild Steel**	**Alloy Steel**
Up to 1500 lbs.	1.375 x .095	1.375 x .080
1500-2500 lbs.	1.50 x .095	1.375 x .095
Over 2500 lbs.	1.50 x .120	1.50 x .095
	1.625 x .120	
	1.75 x .095	

C. Minimum tubing sizes for (all Showroom Stock, Touring and Improved Touring Category auto-mobiles registered after June 1, 1994) for all required roll cage elements (All dimensions in inches):

Up to 1500 lbs.	1.375 x .095 DOM / Seamless / Alloy
1501-2200 lbs.	1.500 x .095 DOM / Seamless / Alloy
2201-3000 lbs.	1.500 x .120 DOM / Seamless / Alloy
	1.625 x .120 DOM / Seamless / Alloy
	1.750 x .095 DOM / Seamless / Alloy

(American Sedans may construct to these specs regardless of weight.)

3001-4000 lbs.	1.750 x .120 DOM / Seamless / Alloy
Over 4000 lbs.	2.000 x .120 DOM / Seamless / Alloy

Note: ERW tubing is not permitted in any car registered with SCCA after of 01/01/2003.

Main hoop: 4 bends max., totaling 180º ± 10º
Front hoop: 4 bends max. or
Front downtubes: 2 bends max.
Rear hoop supports: No bends.

If any of the above bend requirements cannot be met, all components of the roll cage shall be fabricated from the tubing size(s) listed for the next heavier category of automobiles.

D. For purposes of determining tubing sizes, the vehicle weight is as raced without fuel and driver. The minus tolerance for wall thickness should not be less than .010" below the nominal thickness. Improved Touring roll cage tubing sizes

are to be calculated based on the published vehicle weight minus 180 lbs.

E. An inspection hole at least 3/16 inch diameter, but no greater than 1/4 inch diameter shall be drilled in a non-critical area of *the front and rear hoop as well as the one of the supplemental braces* to facilitate verification of wall thickness. *Formula Cars and Sports Racers with alternate roll structures are not required to have inspection holes, the wall thickness will be indicated on the back of the homologation certificate.*

7. General Construction

A. One (1) continuous length of tubing shall be used for the main hoop member with smooth continuous bends and no evidence of crimping or wall failure. The radius of bends in the roll cage hoop (measured at centerline of tubing) shall not be less than three (3) times the diameter of the tubing. Whenever possible, the roll cage hoop should start from the floor of the car, and, in the case of tube frame construction, be attached to the chassis tubes by means of gussets or sheet metal webs with support tubes beneath the joints to distribute the loads. It is recommended that gussets be used

B. Welding shall conform to American Welding Society D1.1:2002, Structural Welding Code, Steel Chapter 10, Tubular Structures. Whenever D1.1 refers to "the Engineer" this shall be interpreted to be the owner of the vehicle. Welds shall be continuous around the entire tubular structure.

All welds shall be visually inspected and shall be acceptable if the following conditions are satisfied:

1. The weld shall have no cracks.

2. Thorough fusion shall exist between weld metal and base metal.

3. All craters shall be filled to the cross section of the weld.

4. Undercut shall be no more than 0.01 inch deep.

C. Aluminum bronze or silicon bronze welding technique is permitted, but extreme care shall be used in preparation of parts before bronze welding and in the design of the attaching joints.

18.2. SHOWROOM STOCK ROLL CAGE

1. Full width roll cages are required in all Showroom Stock automobiles. Roll cages installed in Showroom Stock automobiles are for driver safety and shall be contained entirely within the

driver/passenger compartment without removing any panel or accessory not specifically authorized in these rules. The carpet/padding may be cut around the mounting base plates.

A. The cage need not be removable. It shall be bolted and/or welded to the car.

B. It shall attach to the car at no more than eight (8) points, consisting of the basic cage with six (6) points and two optional braces.

C. The forward part of the cage shall be mounted to the floor of the vehicle. In addition, if the two optional braces referred to in 18.2.1.B are utilized they shall be mounted, one on either side, from the forward section of the cage to the firewall or front fender wells (see GCR Section 18.2., Figure 1). No braces shall pass through the front firewall.

D. Rollcage gussets shall be no thicker than .125". A maximum of two gussets per rollcage joint are allowed.

2. Removable roll cages and braces shall be very carefully designed and constructed to be at least as strong as a permanent installation. If one tube fits inside another tube to facilitate removal, the removable portion shall fit tightly and shall bottom by design and at least two (2) bolts shall be used to secure each such joint. The telescope section shall be at least eight (8) inches in length. Minimum bolt diameter is 3/8 inches.

3. For tubing sizes for front and main hoop and all required bracing, see 18.1.6.C.

4. Main Roll Hoop:

   A. Main roll hoop (behind the driver) shall extend the full width of the driver/passenger compartment and shall be as near the roof as possible. It shall incorporate a diagonal lateral brace to prevent lateral distortion of the hoop (See Figure 1). Any number of additional reinforcing bars are permitted within the structure of the cage. It is required that the horizontal brace behind the driver's seat (described in Section 18.2.10) continue from the diagonal to the passenger side main hoop upright or that a second diagonal be installed in the main hoop.

5. Front Roll Hoops:

   A. The front or side hoops shall follow the line of the front pillars to the top of the windshield (as close to the roof as possible) then horizontally to the rear attaching to the main hoop. These two side hoops are to be connected together by a tube over the top of the windshield, or

   B. A front hoop following the line of the front pillars and

connected by horizontal bars to the main hoop on each side at the top may be used, or

C. A top "halo" hoop following the roof line from the main hoop to the windshield with forward down tubes following the line of the front pillars to the floor.

D. The front or side hoops may extend through the dash pad. This includes the forward part of the door panel if it is an extension of the dash panel.

E. One (1) bar is recommended in a horizontal plane between forward cage braces in the dash area.

6. Bracing:
The main roll hoop shall have two braces extending to the rear attaching to the frame or chassis. Braces shall be attached as near as possible to the top of the main hoop not more than six (6) inches below the top and at an included angle of at least thirty (30) degrees. On cars where the rear window/bulkhead prohibits the installation of rear braces (e.g., Honda del Sol), the main hoop shall be attached to the body by plates welded to the cage and bolted to the stock shoulder harness mounting points. This installation design must also incorporate a diagonal bar connecting the top of the main hoop to the lower front passenger side mounting point ("Petty Bar").

A. Rear hoop braces may pass through the factory bulkhead or panel separating the driver/passenger compartment from the trunk/cargo area/, fuel tank/fuel cell area, provided the bulkhead is sealed around said cage braces. Metal tape may be used to seal the openings between the bulkhead and the tubes.

7. Side Protection:
Effective 1/1/07 and permissible 10/1/05 two (2) side tubes connecting the front and rear hoops across *both* door openings *are* mandatory. Door side tubes may extend into the door. NASCAR-style side protection is permitted. The door window glass, window operating mechanism, inner door trim panel, armrest, map pockets, and inside door latch/lock operating mechanism may be removed and the inner door structural panel may be modified, but not removed to facilitate this type of side protection. The stock side impact beam and the outside door latch/lock operating mechanism shall not be removed or modified.

8. Mounting Plates:

A. Each mounting plate shall be at least .080 thick if welded and 3/16" thick (with appropriate backing plates) if bolted. There shall be a minimum of three (3) bolts per mounting plate if bolted.

B. Each mounting plate shall not be greater than 100 square inches and shall be no greater than twelve (12) inches or less than two (2) inches on a side.

C. Whenever possible, mounting plates shall extend onto a vertical section of the structure (such as a rocker box).

D. The mounting plate may be multi-angled but must not exceed these dimensions in a flat plane.

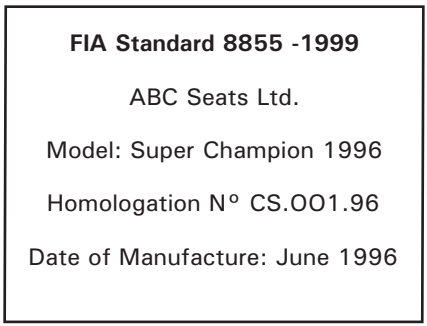
E. Any number of tubes may attach to the plate or each other.

9. Hardware: (Bolts)
All hardware shall be Grade 5 or better. 5/16" minimum diameter.

10. In order to provide a secure seat back support a section of tubing equal to the roll bar shall be installed horizontally from the main hoop upright to the diagonal brace. This tube shall be no higher than shoulder height. The driver's seat shall be firmly mounted to the structure of the car. In cars where the seat is upright, the back of the seat shall be firmly attached to the main roll hoop, or it's cross bracing.

Seats homologated to and mounted in accordance with FIA standard 8855-1999 or higher need not have the seat back attached to the roll structure. The homologation labels must be visible. Seat supports shall be of the type listed on FIA technical list No.12 (lateral, bottom, etc).

Fig. 18.2.10.A



Letters must be at least 8mm high
Sample FIA seat homologation label

SHOWROOM STOCK REMOVABLE ROLL CAGE
Tubing Joints - See Figures 2, 3, and 4

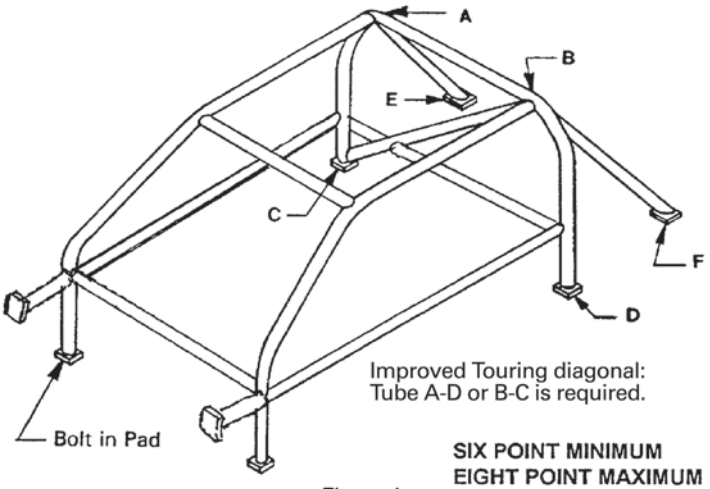


Figure 1

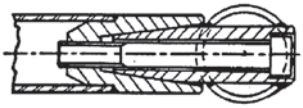


Figure 2

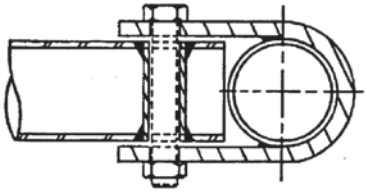


Figure 3

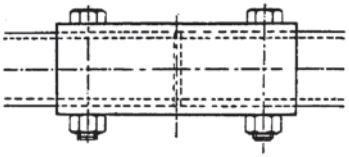


Figure 4

18.3 TOURING ROLL CAGES

1. All cars registered after 1/1/03 shall conform to these roll cage rules. Effective 1/1/08 all Touring cars shall conform to these roll cage rules. Full width roll cages are required in all Touring automobiles. Roll cages installed in Touring automobiles are for driver safety and shall be contained entirely within the driver/passenger compartment without removing any panel or accessory not specifically authorized in these rules. The carpet/padding may be cut around the mounting base plates.

   A. The cage shall be welded to the car*, and all mandatory tubes shall use welded joint construction*.

   B. It shall attach to the car at no more than eight (8) points, with the forward section of the cage attaching to the front bulkhead or front fender wells (see GCR Section 18.2., Figure 1).

   C. The front down tubes of the cage shall be mounted to the floor of the vehicle.

2. For tubing sizes for front hoop, main hoop, and all required bracing, see GCR Section 18.1.6.C. It is recommended that gussets (flat steel, tubing, etc.) be utilized to strengthen the joints of all required cage elements.

3. Main Roll Hoop:

   A. Main roll hoop (behind the driver) shall extend the full width of the driver/passenger compartment and shall be as near the roof as possible. It shall incorporate a diagonal lateral brace to prevent lateral distortion of the hoop (See Figure 1). Any number of additional tubes/braces are permitted within the structure of the cage. It is required that the horizontal brace behind the driver's seat (described in Section 18.2.10) continue from the diagonal to the passenger side main hoop upright or that a second diagonal be installed in the main hoop.

4. Front Roll Hoops:

   A. The front or side hoops shall follow the line of the front pillars to the top of the windshield (as close to the roof as possible) then horizontally to the rear attaching to the main hoop. These two side hoops are to be connected together by a tube over the top of the windshield, or

   B. A front hoop following the line of the front pillars and connected by horizontal bars to the main hoop on each side at the top may be used, or

   C. A top "halo" hoop following the roofline from the main hoop to the windshield with forward down tubes following the line

of the front pillars to the floor.

D. The front or side hoops may extend through the dash pad. This includes the forward part of the door panel if it is an extension of the dash panel.

E. One (1) bar is required in a horizontal plane between forward cage braces in the dash area.

5. Bracing:
The main roll hoop shall have two braces extending to the rear attaching to the frame or chassis. Braces shall be attached as near as possible to the top of the main hoop but, not more than six (6) inches below the top and at an included angle of at least thirty (30) degrees. On cars where the rear window/bulkhead prohibits the installation of rear braces (e.g., Honda del Sol), the main hoop shall be attached to the body by plates welded to the cage and bolted to the stock shoulder harness mounting points. This installation design must also incorporate a diagonal bar connecting the top of the main hoop to the lower front passenger side mounting point ("Petty Bar").

A. Rear hoop braces may pass through the factory bulkhead or panel separating the driver/passenger compartment from the trunk/cargo area/, fuel tank/fuel cell area, provided the bulkhead is sealed around said cage braces. Metal tape may be used to seal the openings between the bulkhead and the tubes.

6. Side Protection:
Two side protection tubes (door bars) are mandatory on each side of the car. NASCAR-style side protection is required on the driver's side and is optional on the passenger side. The driver's window safety net may be mounted to this side protection and the top cage tube. NASCAR-style side protection tubes shall extend into the door. The door window glass, window operating mechanism, inner door trim panel, armrest, map pockets, and inside door latch/lock operating mechanism may be removed only if it interfered with the installation of NASCAR-style side protection tubes. The inner door structural panel may be modified, but not removed to facilitate this type of side protection. The stock side impact beam and the outside door latch/lock operating mechanism shall not be removed or modified.

7. Mounting Plates:

A. Each mounting plate shall be at least .080 thick.

B. Each mounting plate shall not be greater than 100 square inches and shall be no greater than twelve (12) inches or less than two (2) inches on a side.

C. Whenever possible, mounting plates shall extend onto a vertical section of the structure (such as a rocker box).

D. The mounting plate may be multi-angled but must not exceed these dimensions in a flat plane.

E. Any number of tubes may attach to the plate or each other.

8. The driver's seat shall be firmly mounted to the structure of the car. In cars where the seat is upright the back of the seat shall be firmly attached to the main roll hoop, or it's cross bracing, so as to provide aft and lateral support. Seats homologated to and mounted in accordance with FIA standard 8855-1999 or higher need not have the seat back attached to the roll structure. The homologation labels must be visible. Seat supports shall be of the type listed on FIA technical list No.12 (lateral, bottom, etc).

18.4. GT AUTOMOBILES ROLL CAGES

All GT automobiles shall have full width roll cages. Open automobiles without full windshields may have a low front hoop. All closed automobiles shall have full height (top of windshield) front hoops.

18.4.1. Main and Front Hoops

A. Main Hoop:
The main hoop (behind the driver) shall be full width of the cockpit. The main hoop shall be as near to the roof as possible on closed automobiles and not less than two (2) inches above the driver's helmet on open automobiles, with the driver seated normally and restrained by seat belt/shoulder harness. Low front hoops shall be cowl height, or at a minimum, a straight line drawn from the top of the main hoop to the top of the front hoop shall pass over the driver's helmet.

B. Front Hoop:

1. The front hoop shall follow the line of the front pillars to the top of the windshield and be connected, by horizontal bars, to the top of the main hoop on each side (as close to the roof as possible).

2. Two (2) side hoops following the line of the front pillars to the top of the main hoop may be used. These two (2) side hoops are to be connected by a horizontal bar over the top of the windshield. (See Figure 6), or

3. A top "halo" hoop following the roof line from the main hoop to the windshield with forward down tubes following the line of the front pillars to the floor.

4. Double "ear-type" joints are allowed, provided that they are fully welded at all mating surfaces.

C. Fabrication:
The main hoop shall be one continuous length of tubing with smooth continuous bends with no evidence of crimping or

wall failure. The minimum radius for all bends shall be three (3) times the tube diameter measured from the tube centerline. Whenever possible, the roll hoops should start from the floor of the automobile, and, in the case of tube frame construction, be attached to the tubes by means of gussets or metal webs in order to distribute the loads. On automobiles of frameless construction, consideration should be given to using a vertical roll hoop of 360 degrees completely around the inside of the automobile and attached with suitable mounting plates.

18.4.2. Bracing
All required bracing shall be the same diameter and wall thickness as listed in 18.1.6., Material. (Main and Front Hoops)

All main hoops shall incorporate a diagonal brace (same diameter and wall thickness as main hoop) to prevent lateral distortion of the main hoop.

A. Main Hoop Bracing:
Main hoops shall have two (2) braces extending to the rear, attaching to the frame or chassis. Braces shall be attached as near as possible to the top of the main hoop (not more than six (6) inches below the top) and at an included angle of at least thirty (30) degrees. Open cars with a low front hoop shall have (Effective 1/1/99) two braces extending from the main hoop to the low front hoop. These braces shall be mounted no lower than six inches below the top of the main hoop as illustrated in Figure 7A.

B. Removable Bracing:
Removable bracing shall incorporate connectors of the double lug, tapered, or muff-type as shown in Figures 9, 10, and 11. The double-lug type shall include a doubler, gusset, or capping arrangement so as to avoid distortion or excessive strain caused by welding.

C. Front Hoop Bracing:
There shall be two (2) braces extending forward from the front hoop to protect the driver's legs. It is recommended that this bracing extend to the bulkhead in front of the driver's feet; but, in any case, it shall be integrated into the frame or chassis to provide substantial support for the front hoop.

18.4.3. Side Protection - Open and Closed Automobiles

A. The minimum side protection shall consist of a side tube connecting the front and rear hoops across both the door openings. Additionally, there shall also be either a diagonal tube from the front hoop to the rear hoop bisecting the door opening below the horizontal side tube, or not less than two (2) horizontal side tubes. Additional tubing may be added. NASCAR-style door bars are recommended.

B. In automobiles with full roll cage installations including side bars, interior door panels may be altered, replaced, or removed. When

door panels are removed, all sharp edges or projections shall be protected.

18.4.4. Mounting Plates:
The thickness of mounting plates bolted to the structure of the car shall not be less than the thickness of the roll hoop or brace that they attach and shall be backed-up with a plate of equal dimensions on the opposite side of the panel, with the plates through-bolted together. A minimum of three (3) bolts per mounting plate is required for bolted mounting plates. All hardware (bolts) shall be Grade 5 or better with 5/16" diameter minimum. Mounting plates welded to the structure of the car shall not be less than .080" thick. Whenever possible the mounting plates should extend onto a vertical section of the structure (such as door pillar).

18.4.5. Driver's Seat
The driver's seat shall be firmly mounted to the structure of the car. In cars where the seat is upright, the back of the seat shall be firmly attached to the main roll hoop, or it's cross bracing. Bulkheads, firewalls, rear decks, or similar structures of suitable strength may be used as a substitute for the main roll hoop or cross bracing to provide the required seat back support.

Seats homologated to and mounted in accordance with FIA standard 8855-1999 or higher need not have the seat back attached to the roll structure. The homologation labels must be visible, see Fig. 18.2.10. A. Seat supports shall be of the type listed on FIA technical list No.12 (lateral, bottom, etc).

18.5. ROLL CAGES, FORMULA AND SPORTS RACING AUTOMOBILES
All Formula and Sports Racing automobiles are required to have full roll cages. Cage may be of two designs, low front hoop (top of steering wheel) or high front hoop (equal to rear hoop) but with no diagonal brace. Two (2) seat Sports Racers shall have full cockpit width cages per Figure 7A. All tube frame automobiles shall have both front and rear hoops formed of tubing per 18.1.6. On automobiles of full monocoque construction, a fabricated sheet metal front hoop structure may be approved upon specific application to the SCCA. All Formula Car and Sports Racing roll cage tubing specifications must meet the current GCR specifications, effective 1/1/98.

18.5.1. Main Hoop
The main hoop shall be constructed of tubing per 18.1.6. The minimum bend radius shall not be less than three (3) times the tube diameter measured from the tube centerline. The main hoop shall not be less than two (2) inches above the driver's helmet, seated normally and restrained by seat belt/shoulder harness. A straight line drawn from the top of the main hoop to the top of the front hoop shall pass over the driver's helmet. On Formula cars and single seat Sports Racers the vertical members of the main hoop shall not be less than fifteen (15) inches apart (inside dimension) at their attachment to the chassis. If the hoop does not go to the belly pan, proper gussets and tube triangulation shall be used under its attachment. On monocoque chassis the main hoop shall be welded to mounting plates not less than .080" thick. It is important that these plates be attached to the chassis in such a way as to spread the loads

over a wide area. There shall be a plate of equal thickness on the inside of the monocoque with solid rivets or bolts (5/16" minimum bolt diameter) through the non-ferrous material.

18.5.2. Front Hoop

Low front hoops must be no lower than the top of the steering wheel. It is recommended the hoop extend to the belly pan. If not, it shall be attached to the chassis with gussets and triangulation in order to spread the loads. In automobiles of full height (top of the steering wheel) monocoque or composite construction, a steel cap plate, not less than .080" thick must be attached as a rub block.

18.5.3. Roll Cage Bracing

A. The main hoop must have two forward braces extending from the hoop and attached to the frame, monocoque, or front hoop. Braces must be attached as near as possible to the top of the hoop but must not be more than six (6) inches below the top and at an included angle of at least thirty (30) degrees. If these braces do not extend to the front hoop, an additional brace or gusset (14 gauge - .078" minimum thickness) must be installed between the lower frame rail and the upper frame rail at the point of attachment of the forward hoop brace. If these braces do not extend to the front hoop, an additional brace or gusset must be installed at the point of attachment to the main rear hoop or lower frame rail or other major frame member in such a manner as to reinforce the attachment point to help prevent collapse of the frame rail at the point of attachment. These tubes shall be 1" x .080" minimum and gussets shall be 14 gauge - .078" minimum thickness.

   Two seat Sports Racers with full width main hoops must incorporate a lateral brace to prevent lateral distortion of the hoop (See Figure 7A). All bracing on full width cages must be the same diameter and wall thickness as the main hoop. Formula and single seat Sports Racers under 1500 lbs., may use bracing with a minimum dimension of 1.0" diameter by .080" wall thickness. Braces attached to monocoque chassis must be welded to plates not less than .080" thick and backed up on the inner side by plates of equal thickness using bolts of Grade 5 or better with 5/16" minimum diameter.

B. The front hoop must have two (2) braces near its top extending forward to protect the driver's legs. It is recommended that this bracing extend to the bulkhead in front of the driver's feet; but in any case it must be integrated into the chassis to provide substantial support for the front hoop. Full width front hoop bracing shall be a minimum dimension of 1.0" diameter by .080" wall thickness tubing.

   Formula and single seat Sports Racers under 1500 lbs., may use tubing with a minimum dimension of 1.0" diameter by .080" wall thickness. When monocoque construction is used as bracing for the front hoop, it must be approved on an individual basis. If a

high front hoop is used, it must be similar in shape to the rear hoop and have two horizontal tubes connecting the top of the front hoop to the top of the main hoop. The bracing for the main hoop remains the same.

C. Removable bracing must incorporate connectors of the double-lug, tapered, or muff-type as shown in Figures 9, 10, and 11. The double-lug type must include a doubler, gusset, or capping arrangement so as to avoid distortion or excessive strain caused by welding.

18.5.4. Composite Chassis Safety Structures

A. The basic purpose of safety structures is to protect the driver. This purpose is the primary design consideration.

B. All cars must have at least two (2) roll over structures, but the use of titanium is prohibited.

The first roll over structure must be in front of the steering wheel, not more than 25cm forward of the steering wheel rim, and at least as high as the top of the steering wheel rim.

The second roll over structure must not be less than 50cm behind the first. It must be high enough for a line extending from the top of the front structure to the top of the rear structure to pass over the driver's helmet when he is seated normally in the car with his helmet on and the seat belt fastened. This second structure behind the seat must be symmetrical about the lengthwise centerline of the car and comply with the following dimensions: The top of the roll bar must be at least two (2) inches (5cm) above the driver's helmet when the driver is seated in a normal driving position. No second roll structure on a composite chassis will be considered unless it contains a main hoop having a minimum tubing size of 1.375" x .080" wall thickness. Supplemental braces must have a minimum tubing size of 1.00" x .080" wall thickness.

The roll bar must be capable of withstanding the following stress loading applied simultaneously to the top of the roll bar:

1.5 (X) laterally
5.5 (X) longitudinally in either direction.
7.5 (X) vertically
where (X) = the minimum weight of the car.

The induced loads must be carried over into the primary structure of the chassis.

The ability of the roll bar to bear and distribute the load through the chassis must be demonstrated satisfactorily in test conditions to the SCCA. In conjunction with SCCA, manufacturers of cars utilizing carbon fiber composite survival cell construction will be required to designate repair locations capable of proper evaluation and damage repair. In the event of damage to the chassis, repairs can only be made at these locations.

Proper documentation must be made in the vehicle logbook. No car will be allowed to compete after damage without following this procedure.

18.5.5. Exceptions for Formula Cars and Sports Racers
Any roll hoop design which does not comply with the specifications in 18.5., will only be considered if it is accompanied by engineering specifications signed by a registered engineer. No alternate roll hoop will be considered unless it contains a main hoop having a minimum tubing size of 1.375" x .080" wall thickness. The roll bar must be capable of withstanding the following stress loading applied simultaneously to the top of the roll bar: 1.5 (X) laterally, 5.5 (X) longitudinally in both the fore and aft directions, and 7.5 (X) vertically, where (X) = the minimum weight of the car.

18.6 PRODUCTION ROLL CAGE
All automobiles shall have full width roll cages. Roll cages may be of two (2) designs, low front hoop or high front hoop. Specific installations are subject to approval by the Technical and Safety Inspectors at each event. The Technical Staff of Club Racing, with the concurrence of the Club Racing Board, shall have the responsibility to ensure specification compliance with SCCA safety standards. Alternate structures which do not meet the following criteria will not be considered unless they are eligible under GCR Section 18.6.2. Cars that are not in compliance with these roll cage requirements but were issued logbooks and/or "gold cards" prior to 1/1/05 may continue to use their existing roll cages until 1/1/07.

a. Main Hoop:
For all cars, the main hoop (behind the driver) shall be full width of the cockpit.

1. Closed Automobiles:
   a. The main hoop shall be as near to the roof as possible on closed automobiles

2. Open top Automobiles:
   a. The main hoop shall be not less than two (2) inches above the driver's helmet on open automobiles, with the driver seated normally and restrained by seat belt/ shoulder harness as illustrated in Figure 7A.
   b. Open top automobiles without a windshield may use an asymmetric main hoop provided:
      1. The main hoop shall be full height (over the driver) for at least 50% of the width of the hoop as illustrated in Figure 7A.
      2. On the passenger side of the car, the hoop shall be at least as high as the top of the rear corner of the door as illustrated in Figure 7A.
      3. All cars must have correct shape main hoop by 1/1/2007.

b. Front Hoop:
For all cars, the front hoop shall be full width of the cockpit.

1. Closed Automobiles and open top automobiles with a windshield:
   a. The front hoop shall follow the line of the front pillars to the top of the windshield and be connected, by horizontal bars, to the top of the main hoop.

   b. Instead of a single front hoop, two (2) side hoops following the line of the front pillars to the top of the main hoop may be used. These two (2) side hoops are to be connected by a horizontal bar over the top of the windshield. (See Figure 6)

   c. Another option is a top "halo" hoop following the roof line from the main hoop to the windshield with forward down tubes following the line of the front pillars to the floor.

   d. Double "ear-type" joints are allowed, provided that they are fully welded at all mating surfaces.

   e. It is recommended the hoop extend to the belly pan. If not, it shall be attached to the chassis with gussets and triangulation in order to spread the loads.

   f. It is recommended that the vertical bars of the front hoop be connected by a horizontal bar at a point above the driver's legs

   g. All front hoop options (a, b, c) shall be connected to the main hoop in the following manner.
      1. On open top cars, attachments shall be no more than six inches below the top of the main hoop.
      2. On closed top cars, attachments shall be as close to the roof as possible.

2. Open top Automobiles without a windshield and with a high front hoop design.
   a. Front hoop requirements for open top automobiles with a windshield are to be followed with the following exceptions.
      1. Since the windshield frame is to be removed with the windshield, there is no requirement to follow the line of the A-pillar.
      2. Since there is no windshield for the hoop to be above, the front hoop shall be above the driver's line of sight.

3. Open top Automobiles without a windshield and with a low front hoop design
   a. Low front hoops shall be cowl height, or at a minimum, a straight line drawn from the top of the main hoop to the top of the front hoop shall pass over the driver's helmet (See figure 7A).

b. Open cars with a low front hoop shall have two braces extending from the main hoop to the low front hoop. These braces shall be mounted no lower than six inches below the top of the main and front hoops as illustrated in Figure 7A.

c. Fabrication - Open and Closed Automobiles

The main hoop shall be one continuous length of tubing with smooth continuous bends and no evidence of crimping or wall failure. The minimum radius for all bends shall be three (3) times the tube diameter measured from the tube centerline. Whenever possible, the roll hoops should start from the floor of the automobile, and, in the case of tube frame construction, be attached to the tubes by means of gussets or metal webs in order to distribute the loads. On automobiles of frameless or uni-body construction, consideration should be given to using a vertical roll hoop of 360 degrees completely around the inside of the automobile and attached with suitable mounting plates.

18.6.1. Bracing - Open and Closed Automobiles
All required bracing shall be the same diameter and wall thickness as listed in 18.1.6., Material. (Main and Front Hoops)

All main hoops shall incorporate a diagonal brace (same diameter and wall thickness as main hoop) to prevent lateral distortion of the main hoop. *The brace shall either be in the plane of the main hoop or extend from the top of one rear brace (see Figure 7C) to the bottom of the opposite brace. In the case of braces in the plane of the main hoop, the brace must be attached at both ends to the main hoop, span at least 50% of the main hoop, and at least 75% of the height of the main hoop.*

a. Main Hoop Bracing:
Main hoops shall have two (2) braces extending to the rear, attaching to the frame or chassis. Braces shall be attached as near as possible to the top of the main hoop (not more than six (6) inches below the top) and at an included angle of at least thirty (30) degrees. Rear braces may penetrate required bodywork provided the resulting hole serves no other function, and the holes are sealed around the braces.

b. Removable Bracing:
Removable bracing shall incorporate connectors of the double lug, tapered, or muff-type as shown in Figures 9, 10, and 11. The double-lug type shall include a doubler, gusset, or capping arrangement so as to avoid distortion or excessive strain caused by welding.

c. Front Hoop Bracing:
There shall be two (2) braces extending forward from the front hoop to brace the front hoop and protect the driver's legs. It is recommended that this bracing extend to the bulkhead in front

of the driver's feet; but, in any case, it shall be integrated into the frame or chassis to provide substantial support for the front hoop. Front braces may penetrate required bodywork provided the resulting hole serves no other function, and the holes are sealed around the braces.

18.6.2 Exceptions
When it is manifestly impractical or unsafe to construct and install a roll structure meeting the minimum requirements as set forth above, an alternate design roll structure may be submitted to the SCCA Technical Staff who may, in a proper case, accept such alternate roll structure design on a specific case by case basis.

18.6.3 Side Protection - Open and Closed Automobiles

a. The minimum side protection shall consist of a horizontal side tube connecting the front and rear hoops across both the door openings. Additionally, there shall also be either a diagonal tube from the front hoop to the rear hoop bisecting the door opening below the horizontal side tube, or not less than two (2) horizontal side tubes. Additional tubing may be added. NASCAR-style door bars are recommended.

b. In automobiles with full roll cage installations including side bars, interior door panels may be altered, replaced, or removed. When door panels are removed, all sharp edges or projections shall be protected.

18.6.4. Mounting Plates:
Bolt In cages
The thickness of mounting plates bolted to the structure of the car shall not be less than the thickness of the roll hoop or brace that they attach and shall be backed-up with a plate of equal dimensions on the opposite side of the panel, with the plates through-bolted together. A minimum of three (3) bolts per mounting plate is required for bolted mounting plates. All hardware (bolts) shall be Grade 5 or better with 5/16" diameter minimum.

Welded in cages
Mounting plates welded to the structure of the car shall not be less than .080" thick. Whenever possible the mounting plates should extend onto a vertical section of the structure (such as door pillar).

18.7. APPENDAGES
The following procedures are approved for modification to roll bars/cages that do not meet the two (2) inch required minimum: The old main hoop may be cut off near the chassis mounting and a new main hoop of equal tube size or a section of equal tubing size may be added, and inner tube(s) must be used to mate all sections together. All braces must be minimum distance from top of hoop per GCR Section 18. All welding for this modification must be arc welded (min.). The inner tube(s) must be rosette welded three (3) places near top and bottom.

Figure 5

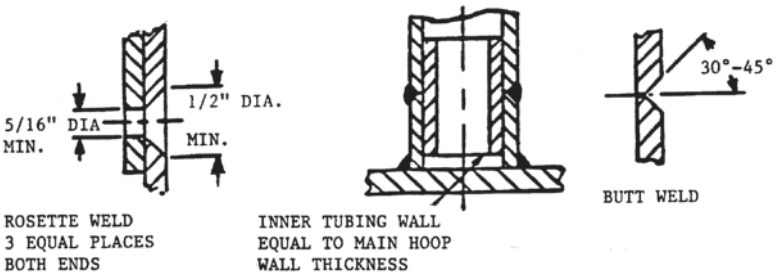


Figure 6: RECOMMENDED ROLL CAGE
HIGH FRONT HOOP OPEN AND CLOSED, GT

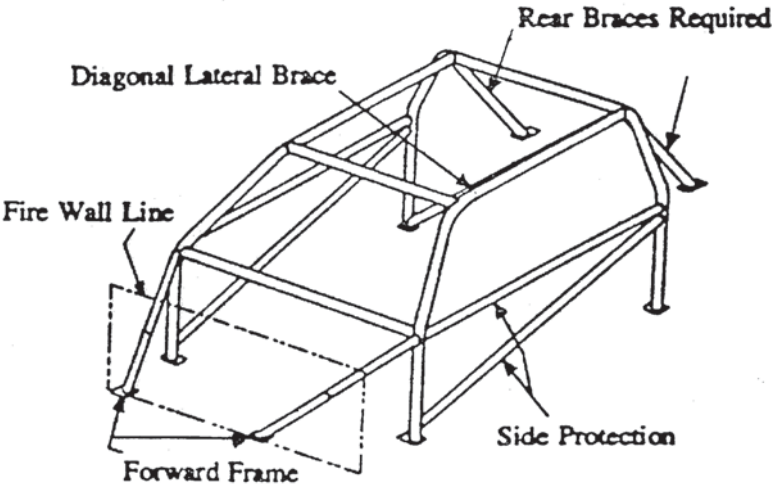
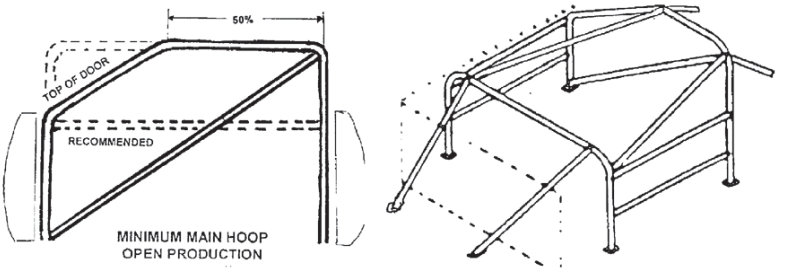


Figure 7A: MINIMUM REQUIREMENTS FOR ROLL CAGES IN OPEN TOP CARS WITH LOW FRONT HOOP



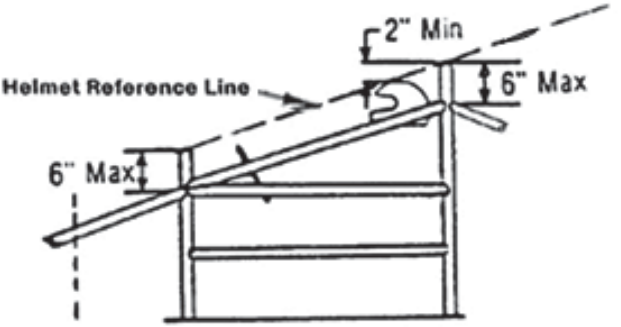


Figure 7B: RECOMMENDED ROLL CAGE OPEN-TOP CARS WITH LOW FRONT HOOP

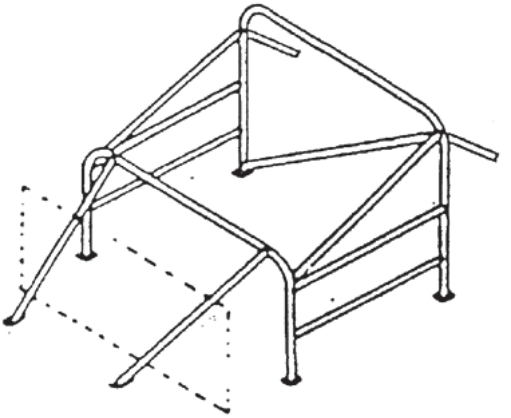
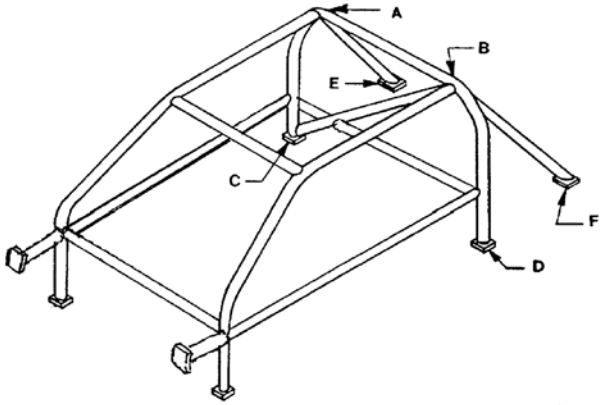
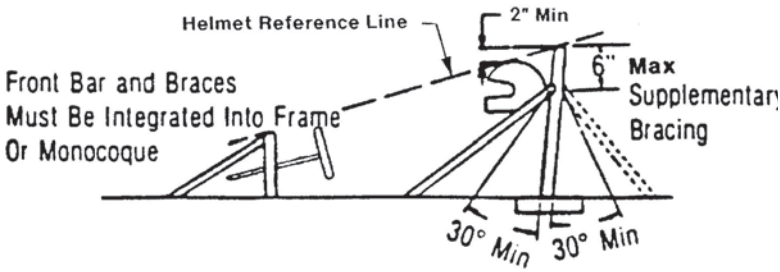


Figure 7C Prod Car Diagonal



Diagonal brace may run B-C, A-D, B-E, or A-F.

Figure 8



REMOVABLE ROLL BAR BRACES
ATTACHMENT DETAILS

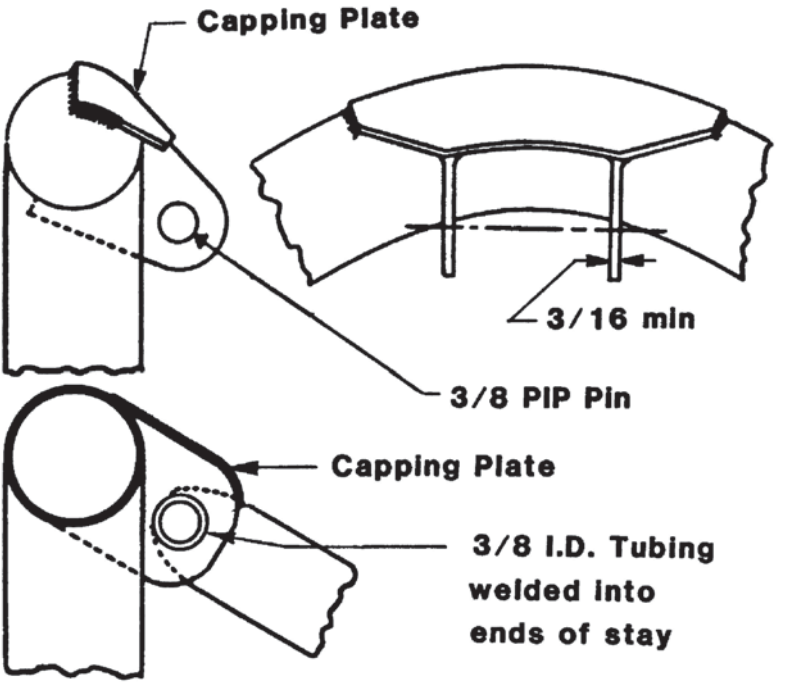


FIGURE 9

Removable Roll bar Braces Attachment Details

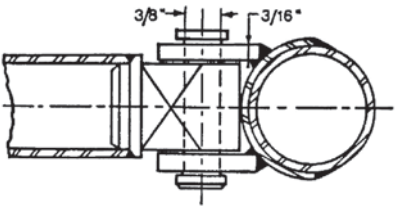


FIGURE 10

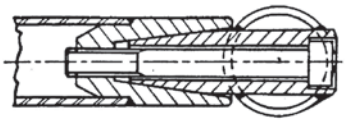


FIGURE 11

19. SAFETY FUEL CELL SPECIFICATIONS

All cars must be equipped with a safety fuel cell complying with these specifications, except for Showroom Stock, Touring, Spec Miata, and Improved Touring. All safety fuel cells shall be constructed and certified in accordance with the FIA FT-3 *or higher (FT-3.5, FT-5, etc.)* specifications. All safety fuel cells shall consist of a foam-filled fuel bladder enclosed in a metal container at minimum.

There is no restriction of fuel cell capacity or dimensions of the fuel cell, except where otherwise specified. The installation of more than one cell is permitted.

19.1. *Installation*

Internal body panels may be modified to accommodate the installation of fuel cells as long as modifications serve no other purpose. In the event If installation includes encroachment into the driver's compartment, a metal bulkhead must prevent exposure of the driver to the fuel cell. The fuel cell must not be installed any closer to the ground than 6 inches, unless enclosed within the bodywork or OEM floor pan.

1. *There must be a metal bulkhead between the driver/passenger compartment and the compartment containing the fuel cell. This includes fuel cells that are flush mounted with driver/passenger compartment panels or otherwise exposed to the driver/passenger compartment.*

2. *Fuel cells must be located within 12 inches of the standard tank or alternate tank as shown in the PCS/GTCS. The 12-inch measurement is taken from the perimeter of the stock and alternative fuel cell. Free fuel filler location is allowed with installation of a safety fuel cell.*

19.2. CONTAINER

1. GT and Production Category
   The bladder shall be installed in a container of .036 inch steel, or .059 inch aluminum that fully surrounds the bladder.

2. Sports Racing Category and Formula Cars
   The fuel bladder shall be completely surrounded by a container (which may also be a part of the structure or bodywork of the car) to ensure rigid and secure mounting of the bladder and provide additional protection. A minimum of .036 inch steel, .059 inch aluminum, or an approved equivalent is required for all vehicles.

19.3. *FILLER CAP AND VENTS*

A positive locking fuel filler cap (no Monza/flip type) shall be used. and Fuel pickup openings and lines, breather vents, and fuel filler lines shall be designed and installed so that if the car is partially or totally inverted, fuel shall not escape.

If the fuel filler cap is located directly on the fuel cell, a check valve is not required, provided the filler cap is a positive locking type and does not use an unchecked breather opening. If the filler cap is not located on the fuel

cell, a check valve must be installed on the fuel cell to prevent fuel from escaping if the cap and filler neck are torn from the tank.

Fuel cell breathers shall vent outside the car. The cell need not incorporate a drain fitting. It is recommended that all lines, filler openings, and vents be incorporated in a single fitting located at the top of the fuel cell.

In Formula and Sports Racer cars registered prior to January 1, 1994, the filler cap and neck are exempt from the bulkhead requirements of GCR 19.1.1.

Factory installed gas tank evaporative emission control devices must be removed from all Production and GT Category cars. Fuel cell vents must not discharge into the driver/passenger compartments, even if installed that way by the manufacturer. The fuel system cannot vent through the roll bar/roll cage structure.

19.4. ROTARY MOLDED CELL

The use of rotary molded fuel cells not having a bladder, or not contained in a metal can, is allowable in those cars that do not require the use of a fuel cell, but where they are an allowed option.

20. DRIVER'S RESTRAINT SYSTEM

All drivers in SCCA sanctioned speed events shall utilize either a five, six *or seven* point restraint harness meeting the following specifications. *A seven-point restraint harness is recommended.* Arm restraints are required on all open cars including open Targa tops, sunroofs and T-tops. The restraint system installation is subject to approval of the Chief Technical and Safety Inspector.

1. A five point system, for use in automobiles where the driver is seated in an upright position, consists of a three (3) inch seat belt, an approximately three (3) inch strap over the shoulder type of shoulder harness, and an approximately two (2) inch anti submarine strap. *A Five-point harness is considered a minimum restraint system. Six or seven-point systems are highly recommended in all cars including automobiles where the driver is seated in an upright position.*

2. A six *or seven* point system, recommended for use in *all* automobiles, consists of a three (3) inch seat belt *or an FIA approved two (2) inch seat belt (SFI 2-inch seat belts are not currently allowed),* approximately a three (3) inch strap over the shoulder type of shoulder harness, and two approximately two (2) inch leg or anti submarine straps. *The seven-point system also has an approximately two (2) inch anti-submarine strap.*

3. The material of all straps shall be Nylon or Dacron polyester and in new or perfect condition. The buckles shall be of metal to metal quick release type except in the case of leg straps of the six point *or seven*-point systems where they attach to the seat belt or shoulder harness straps.

4. The shoulder harness shall be the over the shoulder type. There

shall be a single release common to the seat belt and shoulder harness. When mounting belts and harnesses it is recommended that they be kept as short as reasonably possible to minimize stretch when loaded in an accident.

The shoulder harness shall be mounted behind the driver and supported above a line drawn downward from the shoulder point at an angle of twenty (20) degrees with the horizontal. The seat itself, or anything added only to the seat shall not be considered a suitable guide. Guides must be a part of the roll cage or a part of the car structure.

Only separate shoulder straps are permitted. ("Y" type shoulder straps are not allowed.) "H" type configuration is allowed.

5. The single anti submarine strap of the five point system shall be attached to the floor structure and have a metal to metal connection with the single release common to the seat belt and shoulder harness.

6. The double leg straps of the six point *or seven*-point system may be attached to the floor as above for the five point system or be attached to the seat belt so that the driver sits on them, passing them up between his or her legs and attaching either to the single release common to the seat belt and shoulder harness or attaching to the shoulder harness straps. It is also permissible for the leg straps to be secured at a point common to the seat belt attachment to the structure, passing under the driver and up between his or her legs to the seat belt release or shoulder harness straps.

   All straps shall be free to run through intermediate loops or clamps/buckles.

7. Each seat (lap) and shoulder belt of the harness (5, 6, or 7 points) shall have an individual mounting point (i.e. 2 for seat belt and 2 for shoulder belt minimum). Six *or seven* point system anti-submarine straps may share a mounting point with one or both seat (lap) belt(s). The minimum acceptable bolts used in the mounting of all belts and harnesses is SAE Grade 5. Where possible, seat belt, shoulder harness, and anti submarine strap(s) should be mounted to the roll structure or frame of the car. Where this is not possible, large diameter mounting washers or equivalent should be used to spread the load. Bolting through aluminum floor panels, etc., is not acceptable.

8. All driver restraint systems shall meet one of the following: SFI specification 16.1, FIA specification 8853/1985 including amendment 1/92 or FIA specifications 8853/98 and 8854/98.

   A. Restraint systems meeting SFI 16.1 shall bear a dated 'SFI Spec 16.1' label. The certification indicated by this label shall expire on December 31st of the 2nd year after the date of manufacture as indicated by the label.

B. Restraint systems complying with FIA specification 8853/1985 including amendment 1/92 shall be no more than five (5) years old. (Not all manufacturers are dating every belt in a set. They may be dating one of a pair of shoulder or lap belts or may only be dating one belt in an entire set. Scrutineers are reminded that restraint systems need only one date label.)

C. Restraint systems homologated to FIA specifications 8853/98 and 8854/98 will not have a date of manufacture label. Instead they will have a label containing the Manufacturer's Name, Type of Harness Designation and Date of Expiration which is the last day of the year marked. All straps in this FIA restraint system will have these labels. FIA restraint systems with the certification 'D ####.T/98' are equal to FIA specifications 8853/98 and 8854/98, and are therefore, acceptable restraint systems. FIA two-inch seat belts with the certification 8853/98 are acceptable restraint systems when used in conjunction with their corresponding FIA shoulder harness and anti-submarine straps.

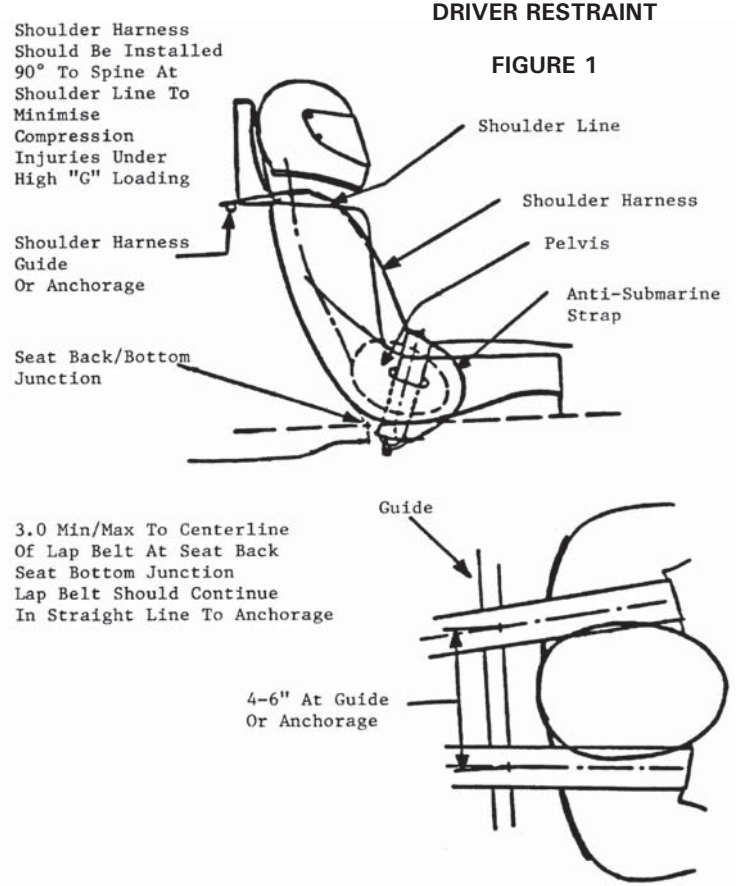
D. If a restraint system has more than one type of certification label, the label with the latest expiration may be used.

9. Harness Threading: Assemble in accordance with manufacturers instructions.

10. FIA certified 2-inch shoulder harnesses are allowed when the HANS® device is used by the driver. SFI 2-inch shoulder harnesses are not currently allowed. Should the driver, at anytime not utilize the HANS® device, then 3-inch shoulder harnesses are required. The replacement cycle for the 2-inch harnesses shall be per GCR Section 20.8.

DRIVER RESTRAINT

FIGURE 1



21. OVAL TRACK RACING RULES

This section is intended as a guideline and recommendation for SCCA Club Racing events conducted entirely on paved oval tracks.

21.1. Events

Club Racing Oval Events are to be sanctioned as Regional or Restricted Regional racing events. National Races may not be conducted as Oval Events. Driver's Schools may be conducted as Oval Events, but not as a substitute for a road course driver's school. Regions conducting Oval Drivers Schools are encouraged to seek out local drivers who have experience at that track to advise students at the Oval Drivers School.

All items of GCR Section 3 which apply to Regional or Restricted Regional events shall apply to Oval Events.

Depending on the length and banking of the oval course being used, it is recommended that regions consider restricting the faster classes (GT1, FA, and CSR) from competition at Oval Events.

Oval Events may consist of any combination of practice sessions, qualifying sessions, heat races, and feature races. On tracks of less than 1 mile in length, it is recommended that qualifying be conducted one car at a time.

21.2. Courses
Courses for Oval Events must be approved by the Divisional Executive Steward prior to applying for a race sanction. These approvals shall expire at the end of the calendar year or upon written notification to the region by the Executive Steward which ever comes first.

21.3. Timing And Scoring
Timing and Scoring standards may be modified in favor of short-track scoring techniques. It is not necessary to time every lap of every car during a race, though an overall time for the winner should be recorded.

21.4. Flagging And Communications
Generally, all communications with the drivers while they are on course shall be done via flags at the Starters Stand and/or signal lights around the course. It is recommended that Flagging and Communications personnel be stationed around the course so as to communicate to Race Control the observations they make regarding the condition of the course or the nature of any incidents within their field.

21.5 Rules of the Road

21.5.1. Racing Surface
For the conduct of all competitions (qualifying or race), the racing surface shall be defined as only the marked, paved race track and it's curbing. Pit lanes, their entries and exits; grass verges; etc.; are expressly excluded from the racing surface.

21.5.2. Flags
For Oval Events, flags will normally be only displayed at the Starter's Stand. Flags may be supplemented by signal lights displayed around the course. The flags used in an Oval Event shall be as defined in GCR 9.4 with the following exceptions:

A. RED FLAG – Come to a stop as soon as possible on driver's left (for counterclockwise tracks) or driver's right (for clockwise tracks). Then proceed very slowly and with great caution to the hot pit area and await further instructions.

B. Yellow Flag and/or Yellow Light
STANDING YELLOW — Take care, Danger, Slow Down, NO PASSING. The entire course is in a yellow flag condition.
WAVED — Great Danger, Slow Down, be prepared to stop, NO PASSING. The entire course is in a yellow flag condition.
DOUBLE YELLOW – Not used.

C. SURFACE CONDITION FLAG (Yellow with Vertical Red Stripes) – Not used. Any course condition warranting a surface condition flag is cause for displaying a Yellow Flag until the course condition can be corrected.

D. WHITE FLAG (Solid White) – The leader is starting his last lap. The White Flag shall be waved to the leader and then to each successive car during that lap.

21.5.3. Practice / Multi-Car Qualifying

A. During practice and multi-car qualifying sessions, all cars must enter the pit area and stop at their pit at the first opportunity after observing a yellow flag or yellow light at any flag or light station on the track. No car shall re-enter the track from the pit lane until the course becomes green again.

B. The scheduled practice time is total running clock time, not on-track green flag time, subject to event scheduling requirements.

21.5.4. Single-Car Qualifying

A. The number of warm-up laps, timed laps, and cool-down laps allowed in a qualifying session will be defined in the supplementary regulations and/or announced at the drivers meeting.

B. Cars will qualify in an order determined by the Chief Steward. If a random drawing is used to determine qualifying order, details of the drawing will be announced prior to the drawing. Positions in the qualifying order are reserved as long as the car is in the qualifying line prior to the order to begin its qualifying attempt.

C. If a car does not proceed with the qualification attempt when ordered to do so, the qualifying order position will be forfeited. The car may be penalized further by the loss of one qualifying lap.

D. A qualifying attempt shall be considered started when the front *tires* of the car cross the starting line after the qualifying start signal is given by the Starter.

E. If the car stops anywhere on the course after the qualifying start signal is given by the Starter, the driver will be charged with an attempt. Time permitting, those cars having started a qualifying attempt, but unable to complete the attempt, will be permitted to begin a second qualifying attempt. First priority for a second qualifying attempt will go to cars that failed to receive any qualifying time during their first attempt.

F. In the event qualification cannot be held or completed within the allotted qualification time, the field, or remaining field, will be filled by means of a seeded lottery by those drivers who have entered, but who have not qualified.

21.5.5. Races

A. Initial Race Start
   1. A pace car may or may not be used. If no pace car is used,

the responsibility of pacing the field will fall to the pole car.

2. The number of pace laps prior to the start of the race will be announced by the Chief Steward.

3. On the final pace lap prior to start, the pace car, if used, will turn its lights out and accelerate to leave track.

4. The pole car will bring the field gradually up to speed for possible start.

5. Cars shall not improve position prior to crossing start/finish line. (Pulling out of line alongside the car in front of you is improving your position.)

6. In case of an aborted start, the starter will display a standing green flag to the field. After the cars have entered turn one, the course will go yellow and the field will reform on the back straight for a restart.

B. Yellow Light/Flag Condition

1. In the event of a yellow flag, the lead car is responsible for controlling the field and getting the field to slow down in a smooth, orderly fashion.

2. A pace or safety car may be employed to bring the field under control. Whenever a pace car is used, it will remain out for a minimum of two laps subject to race conditions and at the discretion of the Chief Steward. The Chief Steward may designate to the lead car the duties of pace car to safely pace the field to a restart or to slow the field down gradually prior to a safety car entering the track.

3. In case of a pass in progress when the yellow light goes on, the over-taking car is expected to fall back and take station behind the car he was attempting to pass. The field does not race to the start/finish line.

4. The running order as of the last completed green flag lap immediately prior to the yellow flag shall determine the running order for the re-start.

5. Any yellow light or flag at an oval track is a full course yellow, whether or not there is a safety car. The lead car will slow the field down to permit the entire field to “bunch up” single file behind the leader. The track will stay yellow until the field is consolidated behind the leader. Drivers strung out around the track are expected to quickly move up to catch “the pack” while observing the yellow flag situation.

6. Cars entering the pits during a yellow flag condition, or cars responsible for causing the yellow flag condition, shall, assume a position at the rear of the formed pack on rejoining the field.

C. Restarts

1. On the lap prior to a possible yellow-to-green restart, the field will be notified of a possible restart on the next lap by:

   a. Safety car turning lights off and exiting the track.

   b. If no safety car is used, Starter indicating one more lap.

2. In either case, the lead car gradually brings the field up to speed for a possible restart.

3. At the instant the starter waves the green flag, all yellow lights will go green. Racing resumes immediately over the entire track.

21.5.6. Driving Conduct

A. It is the responsibility of all drivers to avoid physical contact between cars on the race track.

B. All competitors have a right to "racing room" on the marked racing surface. "Racing room" shall be generally defined as sufficient space on the marked racing surface so as to allow a competitor to maintain control of his car in close quarters, under racing conditions.

C. It shall be incumbent on all drivers to preserve the right of his fellow competitors to "racing room" on the race track. Abrupt changes in direction so as to impede or affect the path of a car attempting to overtake or pass may be interpreted by Officials as an attempt to deprive a fellow competitor of his right to "racing room".

22. DEFINITIONS

22.1. GLOSSARY

NOTE: Should any of the definitions contained in this Glossary appear to be in conflict with a specific rule, then the GCR or Specification Book will take precedence.

2 Cycle - A reciprocating engine in which the intake, compression, combustion and exhaust phases are completed each revolution of the crankshaft.

4 Cycle - A reciprocating engine in which the intake, compression, combustion and exhaust phases are completed each two revolutions of the crankshaft.

A-Pillar - The forward most roof support in a passenger car, which also serves as the side support for the windshield.

Accelerator Pedal - A foot-operated device which allows the driver to vary the degree of opening of the induction system throttle(s).

Accessible - Capable of being reached without removal of other components.

Accumulator - A pressurized free-piston device, in which the compression of a fixed volume of air by the piston, upon the application of a force caused by fluid under pressure, provides a pressurized reservoir of the fluid.

Active Suspension *- Automatic ride height and / or roll control by an active system receiving power from a pump or compressor.*

Adhesive - A bonding agent designed to cause two or more components to adhere to each other without fusing them into a single component.

Adjustable Timing Gear - A camshaft drive gear or sprocket which permits a range of angular adjustment of the outer portion relative to the attachment point of the driven camshaft.

Advance Curve - The degrees of distributor advance from the static setting as a function of rotational speed, usually achieved by a system of rotating weights, springs, and limit stops within the distributor body.

Advance Plate - The plate inside a distributor on which the ignition points are mounted, which is free to rotate over a prescribed angle in response to the actions of the advance mechanism(s), thus altering the phase relationship of the points and distributor cam.

Advance Springs - Springs which provide the restoring force against the actions of the advance mechanism(s) in a distributor.

Aerodynamic Device - An attachment to, or an integral part of, a car intended to generate atmospheric downforce by the action of air flowing through or around the attachment.

Aerodynamic Skirts - Body panels, movable or fixed, at the bottom of the sides of a car's body, which aid in the creation of "ground effects" downforce by ensuring that little air passing under the car can escape at the sides.

Aeroquip Line - A brand name, used generically, for a braided metal-covered hose.

Air Cleaner - An induction system component intended to filter particulate matter from the incoming air.

Air Dam - An air control device at the lower front of a car, intended to divert some of the air which would normally pass under the car when the car is in motion.

Air Horn - See Velocity Stack.

Air Pump - An engine-driven pump intended to provide a supply of air (without fuel) to the engine to assist in the reduction of pollution components.

Air Throttle - The valve which allows the driver to modulate the volume of air passing into a fuel injection induction system.

Airfoil - An aerodynamic device or part of a car which the flow of air over its surface will generate a vertical force by creating a pressure differential between top and bottom surfaces.

Alter (verb) - To change a component by modifying.

Alternator - A component intended to generate current with which to maintain a proper level of charge in the on-board storage battery.

AN Coupler - A threaded high pressure hydraulic coupling of the type normally used with metal braided hose.

Annular Discharge - A carburetor type in which the fuel is introduced into the flowing air from an annulus on the periphery of the main duct.

Anti-Roll Bar (Sway bar) - A torsion control device connected to a car's structure, and to moving portions of the suspension, which is intended to control body roll. (Some types of ARB may also serve as a suspension component.)

Anti-Submarine Strap - A safety strap intended to provide additional support against motions of the driver's lower torso in the forward direction.

Aspect Ratio - The ratio of tire section height to section width, expressed as a percentage.

Attachment Points (Suspension) - The locations at which the fixed and moving ends of a shock absorber are mounted and/or the location of the suspension component on the frame or structure of a car.

Automatic Transmission – A transmission which is capable of allowing a car to start from a stop without use of a clutch, which may be shifted from gear to gear without use of a clutch, and in which such shifting of gears is accomplished by hydraulic, pneumatic, or electric actuation.

Automobile - See Car GCR 2.10.

Axle Housing - The housing which contains axle shafts and may provide support for wheel hubs.

Axle Shaft - A shaft whose purpose is to carry rotational drive from a differential or transaxle to the driven wheels, or simply to support one (1) or two (2) undriven wheel hub(s).

Axle Tube - See Axle Housing. Also, the beam connecting the rear wheels on a front wheel drive car.

Backing Plate - A braking component used in drum type brake systems, generally to support the brake shoes and wheel cylinder(s) at a wheel.

Baffle - A plate or panel in a fluid container, which is designed to inhibit the rapid transfer of the fluid within the container when it is subject to changing dynamic forces.

Balance (Verb) - To minimize the dynamic off-axis forces of rotating components, or to equalize the weights of like reciprocating components.

Balance Pipe - A tubular induction system component which connects two (2) or more independent branches of the system.

Ball Joint - A bearing coupling, generally in suspension or steering systems, consisting of two (2) mating surfaces, one (1) convex and one (1) concave, which permits a range of angular displacements of the two (2) attached shafts over a prescribed range.

Ballast - Non-functional mass fastened inside a car to increase the weight of the car.

Base Circle - The constant radius portion of a camshaft lobe which is closest to the centerline of the camshaft.

Battery (Storage) - An on-board electrical storage component which may be used to activate electrical devices or systems, such as starter, ignition, etc.

Battery Box - A covered container for an on-board storage battery.

Beam Axle - A solid, non-rotating axle connecting the undriven wheels of a car.

Bearing - A mechanical component provided to allow connected parts to move with respect to one another in a manner consistent with durability and minimal friction.

Bearing Carrier - A housing in which the bearings carrying a shaft are mounted.

Bell Housing - A nominally bell-shaped extension or attachment to the engine or transmission which serves as a coupler between these assemblies, and usually encloses the clutch/flywheel assembly.

Belt Drive (Car) - A drive system in which the engine power is coupled to the driven wheels through a flexible belt and pulleys.

Bezel/Rim – Outer trim components which determine the assembled appearance.

Bias Ply Construction - A tire construction in which the structural plies of the main carcass form an angle considerably greater than zero relative to a cross section of the tire.

Big End - The crankshaft end of a connecting rod.

Blanking Sleeve - A replacement for a thermostat designed to divert the flow of cooling water away from the cooling system bypass circuit.

Block - The elemental component of a reciprocating engine which contains at least the cylinder location(s) and the crankshaft mounting points.

Blueprinting - The practice of engine improvement achieved by the use of selected standard parts and/or by optimizing the factory machined surfaces of stock engine components to achieve the most advantageous specifications within the normal range as defined by the manufacturer for that engine.

Within the above definition of blueprinting, any procedures that involve the following are not permitted unless specifically authorized:

a) The addition of material of any kind to any component (this includes, but is not limited to, the addition of sleeves/bushings and the application of anti-friction, oil shedding and thermal barrier/retention coatings).

b) The machining, tooling or any other physical or chemical modification (including shot blasting) of any surface that was not originally a factory machined surface. Glass or other media blasting for cleaning purposes only is allowed as long as it does not remove or modify the base material of the original part.

c) Mixing/matching of parts from any other year, make, model or type of vehicle or engine.

d) Balancing procedures that involve spot machining of all rotating and/or reciprocating parts (i.e. one rod/piston assembly must remain untouched).

Note: Under no circumstances may any factory specification be exceeded as a result of any permitted blueprinting operation(s) (i.e. compression ratio, valve lift, bore, stroke, etc.).

Body - All parts of the car licked by the airstream and situated above the belly-pan/floor with exception of the roll bar or cage. For Formula and Sports Racing cars, further exceptions are those units definitely associated with the function of the engine or transmission.

Body Panel - A replaceable section of the body.

Bodywork - See Body.

Bolt Pattern - The arrangement of bolts or other fasteners used to join two (2) components.

Boost - The degree of induction pressurizing in a turbo/supercharged engine.

Boot Cover - A cover for the area behind the driver/passenger seating area in an open car.

Bore - The diameter of a cylinder.

Boss - A protrusion from a casting or forging which provides the surface(s) and/or structure necessary to accomplish particular function of the component.

Brake Light - A signaling light mounted on the rear of the car, which may be actuated only by driver braking actions.

Brake Lining/Pad - Replaceable friction material which accomplishes braking action by making rubbing contact with the brake drum or rotor.

Brake Rotor - The disc component of a braking system, which is attached to a wheel hub and provides a friction surface for braking actions.

Braking System - A system, including hydraulic and mechanical components, which allows the driver to reduce the velocity of a car.

Breather Vent - An aperture which allows the flow of air into or out of an enclosure.

Bulb - A lighting system component which contains the actual light emitting element(s).

Bulkhead - A partition separating compartments.

Bump Steer - The change in toe-in or toe-out which results from changes in suspension geometry as the wheel(s) rises or falls from its neutral position.

Bump Stop - A cushioning pad which acts as the limit to suspension travel in one vertical direction.

Bumper - A semi-rigid attachment to the structure of a car at the front or rear, which is intended to absorb a portion of low speed front or rear collision forces.

Bumper Block - See Bump Stop.

Bushing/Bush - A sleeve or tubular insert, whose purpose is to reduce the dimension(s) of an existing hole.

C-Pillar - The body roof support bordering on the rear window or hatch.

Caliper - A braking system component which is the disc brake equivalent of a wheel cylinder, and converts hydraulic pressure into mechanical braking force at a wheel.

Cam Carrier - That portion of a reciprocating engine that contains the supporting bearings for an overhead camshaft.

Cam Cover - Equivalent to a valve cover in an engine with an overhead cam.

Camber - The angle of a wheel relative to true vertical. Negative camber implies that the top of the wheel is closer than the bottom to the car's centerline.

Camber Compensator - A wheel location device designed to control the wheel camber under varying conditions of bump/rebound.

Camshaft - An engine component, driven by the crankshaft, whose function is to actuate the valves, and often, to drive other engine components.

Camshaft Timing - The phase relationship of the camshaft to the crankshaft, which determines when in the crankshaft cycle the valves will open.

Canard - A near-horizontal aerodynamic device normally mounted at the extreme front of a (race) car.

Carburetor - The component of a non-fuel injection induction system which achieves the mixing of fuel and air to create a combustible mixture.

Car - See GCR 2.10.

Caster - The angle which the swivel axis of a steered wheel makes with the vertical in the fore/aft direction.

Catalytic Converter - An emissions control device in the exhaust system which reduces emissions by catalysis.

Catch Tank - A container with the purpose of collecting liquid, generally lubricant, vented from an engine, transmission, transaxle, or differential and preventing the loss, from the car, of the liquid.

cc - Cubic centimeter (a unit of volume).

Center-Lock - A type of road wheel/hub which is retained by a single central fastener.

Centerline - A line coincident with the axis of rotational symmetry of a component.

Centrifugal Clutch - A clutch which automatically engages in response to an increase from low engine speed, and disengages upon return to low speed operation.

Chain Drive - A drive system in which the engine power is transmitted through a chain and sprockets.

Chapman Strut - An adaptation of the McPherson strut for a rear suspension (without steering swivel).

Check Valve - A valve designed to prevent the flow of a fluid in one direction, while allowing relatively unimpeded flow in the opposite direction.

Choke - A carbureted induction system mechanism which, when actuated, causes an enrichment of the fuel/air mixture to assist cold starting.

Clinch Nut - A threaded female fastener which has been distorted on one end to supply a gripping force when assembled to a stud or bolt thread.

Clutch - A device whose function is to permit the driver to engage/disengage a power coupling between the engine and the transmission or transaxle.

CO - Carbon monoxide.

Cockpit - The driver/passenger volume within a car in which driver control devices, gauges, and seating are provided.

Coil - The transformer component of an ignition system which converts each low voltage pulse into a pulse of sufficiently high voltage to bridge the gap in a spark plug and initiate combustion in the engine.

Coil-Over Shock - A tubular shock absorber which contains top and bottom mounting locations for a coaxial coil spring, and is used with such a spring supporting the weight of the car.

Cold Air Box - An engine carburetor attachment of unspecified size and composition, whose purpose is to provide a source of ambient air alternate to that existing in the engine compartment.

Component - A constituent part of an assembly.

Compression Ratio - Reciprocating engines: the ratio of the sum of swept plus unswept volumes to the unswept volume. Rotary engines: the ratio of the largest to the smallest volume of the working chamber.

Compression Ring - A reciprocating engine component which is intended to seal the gap between the piston and cylinder wall against the pressure differential arising from compression, induction or combustion.

Compressor (AC) - The engine-driven pressurizing pump in an automotive air conditioning system.

Concentric - Two components or objects are concentric if they share a common centerline.

Condenser (AC) - The portion of an automotive air conditioning system in which the refrigerant in vapor phase is converted to liquid phase.

Connecting Rod - A component physically connecting a piston to a crankshaft in such a way as to convert the rotary motion of the crankshaft to a reciprocating motion of the piston.

Constant-Velocity Joint - A type of universal joint in which the angular velocities of input and output shafts are held approximately equal.

Cool Suit - A driver's safety suit which has provision to be cooled by a circulating liquid.

Cooling System - Those components directly associated with the cooling of an engine, including any hoses, fans, radiators, etc.

Cowl Induction - An arrangement in which the incoming air for an induction system is ducted from the cowl area below the windshield.

Crank-Triggered Ignition - An ignition system in which the triggering pulses are obtained from a pickup and wheel connected directly to the crankshaft, or to an intermediate pulley.

Crankshaft - The rotating engine component which, driven by piston/connecting rod assemblies, transmits, for external coupling, the torque resulting from the combustion process.

Crossflow Head - A cylinder head in which the intake and exhaust ports for each cylinder are on opposite sides of the head.

Crown - The top face of a piston at which combustion takes place.

Curvature - The dimension defined by the maximum distance between a curving surface and the straight line between its ends.

Cylinder Liner (Sleeve) - An insert in an engine block which defines the path followed by a piston in its reciprocating motion.

Dash board - *See instrument panel.*

Decamber (Verb) - To make the wheel camber more negative.

Deck - Generally the rearmost upper body panel of a car, but not present in all cars.

Deck Height - The distance between the top of the piston at its outer edge and the machined surface which forms the head/block interface of the block.

Deck Lid - The access door into the volume (often "trunk") beneath a deck.

Differential - A gear assembly, physically separate from the transmission, whose purpose is to reduce the rotational velocity transmitted from the engine/gearbox, while providing a division of driving force to two (2) wheels.

Differential Housing - The housing in which the differential (final drive) gears are mounted.

Disc Brake - A braking system which relies on the friction between a

suitable material in the form of a “pad” and a rotating disc to supply the braking force at a wheel.

Discriminator Valve - A check valve designed to install on the vent line of a fuel cell, allowing vapors to vent while retaining liquid.

Dish - A concave piston crown.

Displacement (Engine) - Reciprocating engine: the swept volume of one (1) cylinder times the number of cylinders. Rotary engine: the difference between the largest and smallest volumes of the working chamber, times the number of lobes, times the number of rotors.

Distributor Cap - An ignition system distributor component which contains the high voltage distribution contacts and means for securing the high voltage wires.

Dome - A convex piston crown.

Door Panel - The inner shell of a door which normally supports the trim.

Dowel - A tubular or cylindrical pin, the sole purpose of which is to make positive location of two assembled components possible.

Drive Belt - A continuous flexible reinforced elastomer band which provides the driving force for engine accessories, when attached by pulley to a rotating part of the engine, such as the crankshaft.

Drive Shaft - The mechanical drive train coupling between transmission and differential, which may allow an angular displacement of the driving and driven axes by the use of universal, constant velocity, or flex joints.

Drive Train - Those components in a car which produce and convey the driving power to the ground, and the housings containing these parts.

Dry Break Coupling - An attachment to an on-board fuel cell/tank filler neck/hose which is designed to prevent the spillage of fuel during refueling operations.

Dry Sump - An engine lubrication system in which the residual lubricant is pumped to an external storage tank by a “scavenge pump,” and an additional pump or pumps return a supply of pressurized lubricant to the engine from the storage tank.

Dry Tire - A race tire, often with groove-less tread, intended strictly for use in competition under dry conditions.

Dryer (AC) - A component of an automotive air conditioning system which is intended to remove water from the refrigerant.

Duct/Ducting - A tube or passage for conveying a material, usually air.

Dust Shield - A cover intended to protect disc brake components from mud, dirt, etc.

Eccentric Shaft - The analog of a crankshaft in a rotary engine, the shaft driven by the actions of the rotor.

EGR Valve - An engine pollution control device which channels a portion of the exhaust gases back into the combustion regions of the engine.

End Plate - An air control panel mounted at each end and perpendicular to a wing, intended to maximize the efficiency of the wing by preventing spillage of flowing air at the ends.

Engine - The primary power plant of a car, including all physically attached ancillary components necessary for power production.

Engine Air Box - An induction system attachment, generally part of the bodywork, which ducts air from an opening protruding into the airstream to the induction system intake(s).

Engine Case - See rotor housing and/or block.

Engine Compartment - The loosely defined volume, nominally enclosed by panels on top and sides, which is the normal location of the engine in a car.

Engine Mount - A passive mechanical coupling used to support the weight of an engine at its attachment points to the structure of a car.

Engine Steady Bar (Torque suppressor) - A constraining beam or rod intended to resist the tendency of an engine to rotate on its mounts in reaction to torque forces.

Epitrocoidal Curve - The contour of the interior surface of a rotary engine rotor housing, which, with the rotor, determines the volume of the working chambers at any point in the rotation of the rotor.

Evaporator (AC) - That portion of an automotive air conditioning system in which the transition from liquid phase to vapor phase occurs.

Exhaust Pipe - A duct of unspecified dimensions, whose function is to convey exhaust products toward the rear of a car and away from the driver.

Exhaust Port - The duct within a cylinder head or rotor housing through which the exhaust gases pass from the exhaust valve(s) to the outer flange of the head.

Exhaust System - A passive system, whose components serve to convey the exhaust of an engine past the driver and away from the car.

Expansion Tank - A container, often operating at system pressures, which is designed to contain engine coolant on expansion at operating temperatures.

Extension - An external modification resulting in more material on the

outside of the component than originally existed.

Fairing - A covering intended to divert airflow in a specific region of a car, to reduce air drag.

Fan - A rotating bladed device intended to provide a cooling flow of air to a heat exchanger.

Fan Belt - A flexible drive belt which is used to drive a water radiator cooling fan, and, often simultaneously, furnish drive to one (1) or more other rotating attachments to the engine.

Fasteners – Any mechanism which serves no other purposes than to cause a component to maintain a fixed position (i.e. bolt, nut, screw, etc.).

Fender - The body panel covering a road wheel assembly.

Fender Flare - An attachment to an existing fender which extends the fender outward so as to more completely cover the tire within.

Fender Skirt - A removable fender extension which partially closes the wheel opening, smoothing the air flow in this region.

Filler Cap - A closure which prevents the loss of fuel from the filler neck/hose when the car is in use, but which may be removed for refueling.

Filler Neck/Hose - The attachment to a fuel cell/tank through which fuel is supplied from a source external to the car.

Final Drive Housing - See Rear Axle Housing.

Final Drive Ratio - The ratio of input to output shaft motions in a final drive or differential.

Fire Extinguisher - An on-board container of specified capacity charged with approved fire extinguishing material which provides the driver or others with the capability to control small fires. See GCR Section 17.

Fire System - An on-board fire extinguishing system designed to be activated in the event of fire, whose purpose is to extinguish or retard the fire, thus providing a measure of protection for driver and car. See GCR Section 17.

Firewall - A vertical (plus or minus ten (10) degrees) metal panel separating and protecting the driver/passenger compartment from the engine compartment, preventing the passage of flame and debris. Metal ducts may penetrate the firewall, but must begin and end outside of the driver/passenger compartment. No intakes are allowed in the firewall.

Firing Order - The order in which the cylinders in a reciprocating engine produce power under normal conditions.

Flare (Verb) - 1. To extend by extrusion or attachment a fender so as to

more completely cover the tire mounted within (Noun) - 2. Extruded end of a pipe or tube.

Flat Bottom - A race car construction in which the underside of the car is nominally flat and contains no "ground effects" shaping or ducting.

Flex Joint - A coupling designed to fulfill the function of a universal joint, but employing flexible materials to achieve changes in the drive axis.

Float - A carburetor component which, with an associated valve, controls the fuel level in the reservoir supplying the carburetor jet(s).

Float Chamber - The carburetor component which contains the reservoir of fuel supplying the jet(s).

Float Valve - The shut off valve actuated by a carburetor float, which controls the maximum level of the fuel in the float chamber.

Floor Pan - The section(s) of a car normally used as a supporting platform for seats and to physically separate the interior (cockpit) area from the underside of the car.

Fluid - Any material which readily flows at the specified temperature, e.g., liquids and gases at room temperature.

Flywheel - An engine attachment whose normal functions are to provide a gear appropriate for starter engagement, to provide a friction drive surface and attachment points for a clutch pressure plate, and to smooth the flow of power.

Frame - The minimal configuration of a car necessary to contain all running gear and to provide support for the body. Not present on "frameless" or "unibody" cars.

Fuel - The chemical mixture which, when mixed with air, is burned in an engine to produce power.

Fuel Cell - A crash-resistant container for the on-board fuel supply of a car.

Fuel Distribution Unit - A fuel injection induction system component which accomplishes the distribution of fuel to the injection nozzles.

Fuel Injection - A system, including mechanical and/or electrical components, whose function is to provide fuel, via pressurized nozzles, to the engine in lieu of carburetion.

Fuel Line - A hose or tube which conveys fuel from one point to another.

Fuel Metering Unit - A component of a fuel injection system which, under external control, determines the quantity of fuel supplied to the engine at any given time.

Fuel Pickup - The attachment to a fuel tank or fuel cell at which point the

supply line(s) leading to the fuel pump(s) are attached.

Fuel Pump - A pump, mechanical or electromechanical, whose function is to cause the transport of fuel from the fuel cell or tank to the induction system.

Fuel Tank - A conventional OEM container, not of the safety fuel cell type, for the on-board fuel supply of a car.

Gas Cap - See Filler Cap.

Gasket - A sealing component of unspecified composition which is intended to prevent the leakage of a fluid (air, water, oil, etc.) at the interface between two demountable assemblies.

Gauges - Mechanical or electronic readouts of automotive parameters.

Gear - A toothed drive train component used, in mesh with another gear, for the transmission of rotational force.

Generator - An engine-driven attachment which produces direct current to replenish an on-board storage battery.

Girdle - An engine component whose purpose is the structural reinforcement of the bottom end of an engine block by the replacement of the main bearing caps with a continuous block of material containing equivalent bearing mountings.

Grille - The decorative covering for the grille opening.

Grille Opening - The opening in the front of a car, through which cooling air is ducted to the radiator(s), and in some cases, to other accessories, or to the engine.

Ground Effects - A term for a car design in which airflow produces a significant pressure differential between the upper and lower portions of the body/chassis, creating downforce on the assembly.

Gudgeon Pin - English term for piston wrist pin.

Gusset - A brace generally formed by attaching, by welding, a plate at or near the junction of two structural beams or tubes, providing reinforcement particularly in the plane including the tubes and the plate.

H.D. - Heavy duty.

H.T. - High tension. English term for spark plug voltage in regard to ignition components.

Hand Brake - A braking system component causing a braking action on one (1) or more wheels, or on another part of the drive train, which may be actuated and locked in the engaged position by the driver.

Hardtop - A removable rigid substitute for a convertible or roadster top.

Hatchback - A hinged body component containing the rear window which, in the open position, gives access to the interior of a car from the rear.

Head Rest - See Head Restraint.

Head Restraint - A cushioned, fixed restraining object intended to protect the driver under conditions which cause the driver's head to be thrust rearward.

Header - A multibranch exhaust system assembly, whose function is to convey the exhaust products from more than one cylinder to one or more exhaust pipes.

Header Tank - A component of an engine cooling system, generally at the top or above the radiator, which is often used as the filling point for the system.

Headlight Cover - A protective cover for headlight(s) which is part of the original configuration of the body design.

Heat Riser Tube - An attachment to an induction system which provides a source of warmed air, generally from the exhaust system, as an aid to cold running.

Heat Sink - A part of a system used to convey and dissipate heat from another part of the system.

Helicoil - A commercial repair for internal threads.

Homologation - A system whereby the manufacturer/competitor certifies that a Formula or Sports Racing car, as produced, complies with all of the applicable specifications.

Hood - The panel or assembly of panels which cover the engine compartment.

Horn - The audible signaling device with which highway cars are equipped.

Hot Terminal - The terminal of a storage battery which is not connected to the frame or chassis of the car.

Hub - A component to which a road wheel is attached, which provides support for the wheel, and has the capability, via attached internal bearings to rotate on a fixed shaft.

Hub Caps - Decorative removable attachments to the central area of road wheels.

Hub Carrier - A suspension component which provides the means for mounting a rotating wheel hub, and for attachment of suspension components and stabilizers.

Idler Shaft - A shaft which rotates, or supports another component which rotates, without itself transmitting the rotational force.

Ignition System - A system which converts on-board storage battery supply voltage into a timed sequence of high voltage pulses suitable for igniting engine combustion mixtures in a controlled manner.

Independent Suspension - A suspension system in which either wheel on the referenced end of the car can undergo its normal vertical motions without directly influencing the motions of the other wheel.

Induction System - Those engine components directly associated with the creation and conveyance of the combustible mixture, and any functional associated attachments thereto.

Injection Nozzle - The fuel induction system component through which fuel is forced under pressure to form a combustible mixture with air.

Inlet Port - The cylinder head duct leading to intake valve(s).

Insert (Strut) - The replaceable portion of a suspension strut, basically a tubular shock absorber with the necessary fastening element(s) for the upper strut mounting point.

Instrument - An indicator or readout which, when active, contains information about some aspect of car operation for driver reference.

Instrument Panel - A panel*, the associated mounting bracket(s), and HVAC ducting components,* located within the cockpit of a car, and in a position convenient for driver visibility, which may provide a mounting area for various gauges and controls. *Also referred to as a dash pad or dash panel.*

Intake - An opening through which fluid/air enters an enclosure.

Intercooler - A heat exchanger associated with a turbocharging or super-charging system, which is intended to reduce the temperature of the incoming air or air/fuel mixture, and is located in ducting between the turbo/super-charger and the engine.

IR - Individual runners. (No balance pipe, no plenum)

Jack Points - Locations on the underside of a car suitable for the application of a lifting jack.

Jack Shaft - A shaft which transfers a driving force from one element of an engine to another, such as the drive for an oil pump and/or distributor, taken from an overhead camshaft.

Jet - A carburetor aperture component which is used to meter air and/or fuel flowing into the mixing region of the carburetor by presenting restriction to the flow.

Kill Switch - See Master Switch.

L.T. - Low tension. English term for battery voltage in regard to ignition components.

Limited Slip Differential - A differential which is designed in such a way as to overcome the normal action of a differential to apply most of the available torque to the least loaded wheel, and instead to apply a significant portion of the torque to the most loaded wheel.

Linkage - A link or system of links (cables, rods, etc.) which convey a mechanical force from one location to another.

Lip-Type Rear Spoiler - A directly attached aerodynamic device which generates downforce from the action of air flowing over a single surface, creating a turbulent depression away from the direction of motion.

Lobe Center - The angular position of a camshaft, defined as that position in the rotation at which the lift of an associated tappet will be greatest.

Locked Differential - A variation of the limited slip differential in which no relative slippage of the two driven wheels is permitted under any conditions.

Lubricant - A substance which, when interposed between components moving with respect to each other, reduces friction and promotes durability. (see 17.36)

Luggage Compartment - The region within the bodywork of a car which is designated as being intended for the carrying of luggage.

Magneto - An ignition system component which generates the electrical power for ignition of combustion with a system of magnets and coils in relative motion.

Main Bearing Cap - A reciprocating engine component which has provision for nominally half of one main crankshaft bearing, and which, when attached to the engine block, may also provide lateral location for the crankshaft.

Manifold - A passive device for conveying gases into or out of an engine, generally to achieve the connection of differing numbers of ducts.

Master Cylinder - A hydraulic component of the braking system which produce positive pressure in the hydraulic lines on the application of mechanical force.

Master Switch - A safety switch which can be actuated by the driver or other to disable all operating electrical functions, without disconnecting the electrical supply to any fire system present.

McPherson Strut - (See strut type suspension) A front suspension type utilizing a strut with integral tubular shock absorber and coil spring, with the steering swivel axis that of the strut/shock. Upper location is by strut only.

Metallic - A material having iridescent or specular (mirror-like) reflective qualities (e.g. aluminum foil).

Metering Rod - A carburetor component which aids in the metering of fuel flow.

Mirror (Rear View) - A reflective device whose sole purpose is to enable the driver's field of vision to extend in a rearward direction.

Modify - To change a component by reworking, but not by replacing.

Monocoque - A frameless construction in which the main structure of a car is composed of a permanent assembly of panels to which the running gear, suspension and body are attached.

Motor Mount - See Engine Mount.

Mudguard - A partial fender, generally not contiguous with the car body.

Muffler - A component, whose function is to reduce the sound level from an exhaust system.

NASCAR-Style Door Bars - If installed, shall consist of one or more sidebars that intrude into the door cavity and connect the main hoop to the front hoop

Needles (Carb) - Tapered carburetor fuel flow metering shafts, or tapered shafts used in float shutoff valves.

Nitride (Verb) - To heat process ferrous metal components so as to increase the surface hardness.

O-Ring - A seal or gasket, generally made from an elastomer or metal, in the shape of a torus with a circular cross section.

O E M - Original Equipment Manufacturer.

Offset Key - A metal drive key for coupling a shaft and a pulley, wheel, or sprocket, in which opposite radial ends of the key are offset to achieve adjustment of the phase relationship of the driving and driven parts.

OHC (Overhead Cam) - A type of reciprocating engine in which the camshaft(s) are located in the cylinder head(s), and act on the valves, either directly or through a linkage.

OHV (Overhead Valve) - A type of reciprocating engine in which the camshaft(s) are located in the engine block, and act on the valves through linkage, generally including pushrods and rocker arms.

Oil Filter - An engine accessory intended to intercept all or a portion of the lubricant circulating from the oil pump, and to remove, by trapping, solid particles from the lubricant.

Oil Galley - A passage within an engine block which carries the flowing lubricant to various internal distribution points.

Oil Line - A hose or pipe, external to the engine, which conveys lubricating oil from one point to another.

Oil Pan - An oil sump fixed to the bottom of an engine.

Oil Passage - A duct within an engine component intended to convey lubricating oil.

Oil Pump - A mechanically-driven pump designed to draw lubricant from a reservoir, or sump, and supply it under pressure to the balance of the lubrication system.

Oil Strainer - A screen surrounding the oil pickup in an engine which is intended to keep relatively large solid particles from being drawn into the pump.

Oil Sump - The container in which the return lubricant from the engine is collected to form the supply from which the pump may draw.

Outline - A line that marks the outer limits of an object or figure.

Overhang - The distance which the end of the bodywork extends away from the wheels at the referenced end of the car.

Panhard Rod - A rear axle lateral locating device, which has one end connected via a link to the axle housing, and the other end connected to the car structure or bodywork.

Parkerizing - A commercial process in which a metal part, usually a camshaft, is treated to increase resistance to break-in scuffing.

Parking Brake - See Hand Brake.

Parking Light - A non-racing lighting component, frequently combined with lighting components of other functions, intended to illuminate the extremities of a car while parked.

Phase - The angular relationship between two rotating components, or between one (1) rotating component and a periodic event.

Pickup (Suspension) - The location of attachment of a suspension component on the frame or structure of a car.

Pilot Bearing - A bearing, generally within one end of a shaft, which is intended to support another shaft under conditions of relative rotary motion.

Piston - A reciprocating engine component whose functions are to provide a partial vacuum with which to induce the flow of fuel/air into the combustion region, to convert the combustion pressures to reciprocating motion, and to expel exhaust gases.

Piston Ring - A reciprocating engine component which, when mounted on a piston, provides either sealing or oil control functions when the engine is in operation.

Pitman Arm - A steering system component which translates the rotation of the steering gears to a linear motion of steering links.

Plenum - An induction system chamber generally interposed between carburetor(s) or air intake(s) and ducts feeding ports.

Points (Ignition) - The switch portion of a distributor actuated by cam lobes, which interrupts the current flowing through the primary windings of an ignition coil, thus generating high voltage pulses which are conveyed to the spark plug.

Polish (Verb) - To reduce the roughness of a surface by mechanical, chemical, or electrochemical means.

Port - See Intake, Exhaust Ports.

Power Brakes - A braking system in which the driver-initiated mechanical force acting on a master cylinder is assisted by a servo mechanism, generally derived from manifold vacuum.

Power Steering - A steering system in which the driver-initiated force acting on the steering gears is assisted by a servo mechanism, usually involving an engine-driven hydraulic pump.

Pressure Equalizing Device - A braking system component intended to equalize or allow adjustment of the relative pressures in separate branches of the hydraulic system (e.g. front/rear).

Pressure Plate - The clutch assembly component which provides the force necessary to couple the engine to the next component in the drive train through friction surfaces.

Pressure Regulator Spring - A spring whose installed force determines the pressure at which a valve or valve system will open to allow the flow of fluid.

Profile (Verb) - To measure or to reshape the contour of a camshaft lobe, rocker arm or similar component.

Propeller Shaft - See Drive Shaft.

Proportioning Valve - A braking system component intended to allow adjustment of the hydraulic pressures available in separate branches of the system (e.g., front/rear).

Pulley - A rotational attachment for a drive belt.

Pushrod - A cylindrical or tubular reciprocating engine component which transmits a reciprocating motion arising from camshaft rotation to or

toward the valves.

Pushrod Tube - An engine component which encloses a pushrod in the region between the engine block and the cylinder head.

Qualifier - (a) One who receives a time, or (b) One who is waived into a race by the Chief Steward and starts the race.

Racers Tape - Generally duct tape, an adhesive, fabric-backed tape.

Rack and Pinion - A type of steering system, or the gear components thereof, in which the rotary motions of a pinion gear attached to the steering shaft act on a rack, or linear gear.

Radiator (Cooler) - A heat exchanger intended to remove heat from engine or gear fluids.

Radius (Verb) - To contour an abrupt edge on a component by increasing the radius of the transition.

Rain Tire - A racing tire intended solely for competition in wet conditions.

Ram Air - A type of induction system in which the incoming air is obtained from an extension into the airstream outside the bodywork.

Ratio (Gear) - The number of rotations of the drive shaft which produces one (1) rotation of the driven shaft(s).

Rebound - A suspension term referring to motion in the upward direction.

Reciprocating Engine - An internal combustion engine in which the driven actions of one or more pistons are converted to the rotary motion of a crankshaft.

Relief Valve - A check valve intended to vent at a predetermined pressure differential.

Remote Reservoir Shock Absorber - Any shock absorber or dampening device which uses an externally mounted (connected either by hose or “piggy back” design) fluid and/or gas reservoir.

Repair (Verb) - To remove the effect(s) of accidental damage to a component, returning it to original or legally modified dimensions and function.

Replica - A component identical to or very similar in appearance and function to the original which it replaces.

Resistor Spark Plug - An ignition system spark plug containing electrical resistance which is intended to reduce radio interference.

Ride Height - The distance from level ground to the specified portion of

the car, with the tires, wheels, air pressure, etc., as normally raced.

Rim Width - The distance between the opposing lateral sides of a road wheel in the region where the bead of a tire seats. Measuring method per tire and rim association standard.

Ring Gear - The main driven gear in a final drive assembly, driven by a pinion gear. Also the starter engagement gear on a flywheel.

Rocker Arm - A valve train component which transfers the motions of the camshaft, often with a multiplication of travel, to a valve.

Rocker Cover - See Valve Cover.

Rocker Panel - The body panel closest to the ground extending along either outer side of a car between the wheels.

Rod End - A load-bearing threaded mechanical coupling with angular freedom of the relative axes and which allows rotation of the inner portion with respect to the outer, i.e. heim joint.

Roll Bar - A safety device designed to protect the driver from injury in the event of a roll over accident. See GCR Section 18.

Roll Cage - An extension of a minimal roll bar, designed to protect the driver from injury from accidental forces in several directions. See GCR Section 18.

Roller Cam Follower - An engine component (tappet) which utilizes a rolling member to contact the camshaft.

Rotary Engine - A non-reciprocating engine of the NSU-Wankel type.

Rotary Engine Rotor - The main rotating component of a rotary engine, which essentially accomplishes the compression, power delivery and exhaust functions of a reciprocating engine in constrained rotation in a specially shaped housing.

Rotary Piston - See Rotary Engine Rotor.

Rotor Housing - The housing of a rotary engine in which the rotor rotates. Analogous to the engine block of a reciprocating engine.

Rub Strip - Expendable material added to bottom of a car to prevent contact with the road surface from damaging non-expendable portions of the car.

Runner - A duct of an induction system leading to the cylinder head.

Running Light - A signaling light of specified size and location, which can be activated by driver control, and is intended to improve the ability of other drivers to detect the signaling car.

Scattershield - A stationary safety device intended to protect the driver in

the event of catastrophic clutch/flywheel failure.

Scraper - A passive internal attachment to an oil pan whose purpose is to control the return flow of lubricant by removing it from the rotating crankshaft.

Seal - A conformable sealing component generally used to inhibit the passage of fluids along the shafts of moving parts, such as valves, master cylinders, etc.

Seat Belt - A safety strap, generally containing the attachment/release mechanism for all other safety straps, intended to restrain the driver against forces tending to move the driver. See GCR Section 20.

Section Width - The lateral cross section of a tire, sidewall to sidewall.

Servo Assist - The application of mechanical assistance, through vacuum or hydraulic or other external action, to reduce the forces required from the driver.

Shaved Tread - A tire tread which has been abraded or cut to reduce the tread depth.

Shift Fork - A transmission or transaxle component which directly moves gears into engagement or disengagement in response to driver actions.

Shock Absorber - A device intended to dampen the actions of road springs.

Shot Blasting - See Shot Peening.

Shot/Glass Peening - A treatment, consisting of impelling small glass or metal balls into metal parts, intended to reduce stresses in components.

Shoulder Harness - A safety strap assembly intended to restrain the driver's upper body under conditions of rapid reduction of forward velocity. See GCR Section 20.

Side Marker Light - A small light fixture normally mounted on the side of a fender, which is intended to make the car more readily visible from the side under appropriate conditions.

Signal Light - A light fixture used to signal turns or, in some cases, stops.

Slave Cylinder - A hydraulic system component which achieves the conversion of hydraulic pressure to mechanical force, usually to accomplish a disengagement of the clutch.

Space Frame - An automotive frame constructed of multiple small tubes. See also Tube Frame.

Spark Plug - An engine component which, by means of high voltage supplied by an ignition system, initiates the combustion of the air/fuel

mixture.

Specification - A detailed presentation of parameters which determine the performance or suitability of a system or assembly of systems to accomplish design goals.

Spherical Bearing - A load-bearing connector in which the central portion is convex and the outer portion is concave, allowing both angular displacements of the axes and relative rotation.

Spider Gears - Components of the torque division section of a conventional differential gear assembly.

Spindle (Stub Axle) - The shaft, and integral assembly supporting a wheel hub, and often, braking and/or steering components.

Spoiler - A panel attached to the body of a car at the front or rear, intended to alter the airflow around or under that end of the car when in motion.

Spring Cap - See Valve Spring Retainer.

Spring Shock - A suspension assembly containing a coil spring surrounding a tubular shock absorber.

Spring Washer - A spacer designed to exert force against securing pressure, thus reducing the tendency of an attached threaded fastener to separate.

Sprocket - A gear made specifically for use with a drive chain.

Stabilizer - An attachment to the suspension system, not usually part of the suspension, which aids in maintaining the relative alignment of a wheel or wheels to the car.

Starter (Self Starter) - An electrical device which is used to initiate normal engine operation by converting electrical energy into mechanical rotation of the engine.

Starter Ring - The gear on the outer periphery of a flywheel for application of drive from a starter.

Stayrod - A rigid reinforcement bar or rod interconnecting opposite sides of a car at structurally significant locations.

Steering Arm - The rigid link in a steering system which conveys the steering action from the steering gears and leakage to a wheel assembly.

Steering Column - The shaft forming the connection between the steering wheel and the steering gear, through which driver-initiated steering motions are transmitted.

Steering Linkage - The various components, exclusive of gears, steering column and steering wheel, which transmit the driver's steering motions to the steered wheels.

Steering Lock - The degree of turning motion given to the steering wheel, and hence to the steered wheels. "Full lock" denotes the maximum available turning angle.

Steering Lock Mechanism - An antitheft device used to lock the steering shaft or wheel when the ignition key is withdrawn.

Streamlining - Smoothing the airflow over a portion of the car.

Stroke - The length of travel of an engine piston from uppermost to lowermost positions.

Strut (Stabilizer) - A rigid beam used to assist in the location of suspension components.

Strut Type Suspension - Strut suspension consists of three pivoting attachment points including a single upper attachment point, the spindle being mounted on a telescoping post with no vertical movement at the top attachment point.

Stub Axle - See Spindle.

SU-type Carburetor - Any single barrel automotive-type side draft, overhead sliding piston type carburetor regardless of manufacturer.

Surround - To enclose on all sides.

Sunroof - A movable panel in the roof of a car, which may normally be partially opened from within the car.

Supercharger - An induction system compressor component, mechanically driven from the engine, which provides forced flow of the fuel/air mixture into the engine by the generation of positive pressure.

Suspension Bushing - A hollow cylindrical mounting component which acts as a bearing, allowing constrained motion, between a suspension component and attachment point.

Suspension Control Arm - A beam or frame intended to limit the normal motion of the affected suspension part to predetermined paths.

Swaged Fitting - A tubing fitting which utilizes some form of extrusion of the tubing to form a seal against the leakage of pressurized fluid from within the tubing.

Sway Bar - See Anti Roll Bar.

Synchronizer - A transmission component which aids in matching speeds of two gears as they are engaged.

System - An assembly of components with an identifiable primary function.

T-type Top - A body design in which the roof contains, above the front seats, two (2) removable panels separated by a fixed section which joins to the balance of the roof.

Taillight - The running (parking) light assembly at the rear of a car, which may include lights with stop and/or turn signaling functions.

Tap (Verb) - To cut threads in a hole to retain a stud or bolt with threads of matching pitch and diameter.

Tappet - (Cam follower, valve lifter) An engine component which, in contact with the camshaft, follows its rotating profile, resulting in a programmed reciprocating motion suitable for actuating valves.

Targa-Type Top - An automotive roof design in which the area over the front seats is removable.

T D C - Top dead center, referring to the rotational position of the crankshaft when the number one piston is farthest from the crankshaft.

Thermostat - An engine cooling system regulator device which is intended to control the temperature of the coolant by modulating the flow through an aperture.

Throttle Butterfly - An induction system component which may effectively vary the area of the induction port when turned (in response to driver input) from parallel to the flow in the port ("full throttle"), to almost perpendicular to the flow ("closed throttle").

Throwout Bearing - A bearing which, in response to driver actuation, accomplishes the application of the force needed to release the friction clutch through the actuation of the pressure plate.

Tie Rod - The link connecting a portion of the steering system which is fixed to the chassis to a sprung wheel.

Time (Verb) - To adjust the phase relationship of ignition and crankshaft, or of camshaft(s) and crankshaft.

Timing Belt - A toothed belt used, with appropriate pulleys, to convey drive force in a synchronous manner from the crankshaft to one or more camshafts.

Timing Gear - The engine gear or sprocket attached to a camshaft and driven by the crankshaft via gear(s) or chain.

Tire Tread - The portion of a tire containing the material intended to be in road contact while a car is in straight-ahead motion.

Toe (-In, -Out) - The measure of the position of the wheels on either axle of a car with respect to each other, with reference to the fore/aft direction.

Tonneau Cover - A cover for the passenger portion of an open car.

Top (Removable) - A removable covering for an open car, normally supplied for protection against the elements.

Torque Biasing Differential - A form of limited slip differential.

Torque Converter - An engine-driven power transmission device which couples driving and driven shafts with a variable speed reduction.

Torque Suppressor - See Engine Steady Bar.

Torsion Bar - A bar or beam intended to act as a springing medium, in which the "springing" is derived from resistance to twisting along the main axis of the bar.

Track - The distance between the center of the rims of two wheels at one end of a car, with any angular adjustments at normal settings and steered wheels in the straight ahead position.

Traction Bar - A link to an axle housing or hub carrier which resists torque reaction from the wheel by acting in compression or tension.

Trailing Arm - A wheel control linkage locating the wheel in the fore/aft direction, which is attached to the car structure at the forward end of the arm, and to the wheel carrier at the rear of the arm.

Transaxle - A component containing the mechanisms necessary to achieve the combined functions of a transmission and a differential.

Transistor Ignition - A system of ignition in which electronic components are utilized.

Translucent - Permitting the passage of a reasonable amount of visible light. In the case of fluid containers, permitting the visual assessment of fluid levels by observing these through the container.

Transmission (Gearbox) - An assembly of driver-selectable gears in an independent housing, located between the engine and driven wheels, whose function is to alter the rotational velocity reaching the wheels.

Transparent - Offering very little resistance to the passage of visible light, suitable for use in the line of sight.

Transverse Engine - An engine located in a car such that the crankshaft centerline is nominally perpendicular to the normal direction of car motion.

Trim - Coverings or attachments whose function is solely cosmetic.

Trued Tread - The tread of a tire which has been cut after mounting on a wheel so as to ensure that the surface of the tread is equidistant from the center of the wheel at all angles of rotation.

Trumpet - See Velocity Stack.

Trunk Area - The spare tire and/or luggage region inside the body of a car.

Tub - The central contiguous assembly of stressed panels which form the basic structure of a frameless car.

Tub-based (non tube-frame) Car - A non-tube frame car has a stock floor pan, firewall, door pillars, sills, windshields conforming to stock profile, and window frames, etc.

Tube Frame Car - A car intended solely for racing, whose main structure or frame is fabricated from an assembly of tubes welded into the desired configuration.

Tuftriding - A commercial surface hardening process for ferrous metals.

Turbo Boost Control - An adjustment which causes a change in the degree of turbo boost available.

Turbocharger - An induction system compressor component, driven by exhaust gases from the engine, which provides forced flow of the fuel/air mixture into the engine by means of positive pressure.

Undertray (Belly Pan) - An attachment to the underside of a car intended to smooth airflow and/or to offer driver protection in this region of the car.

Unibody - A type of construction in which the main car structure is fabricated from an assembly of panels and reinforcements, permanently fastened together, generally by welding, into a single unit.

Universal Joint - A mechanical drive train component which permits a change in direction of the axis of rotation conveying the force.

Unswept Volume - The enclosed volume existing in a cylinder/cylinder head with the piston at its closest approach to the cylinder head.

Vacuum Advance Mechanism - An ignition distributor mechanism which, under the influence of manifold vacuum, changes the ignition timing in a prescribed fashion.

Valve - A reciprocating engine component which may be opened or sealed in phase with crankshaft rotation, so as to control the induction of fuel/air mixtures or the exhaust of products of the combustion process.

Valve Cover - A cylinder head attachment whose function is to contain lubricants and to protect the valve actuation mechanism from outside contaminants.

Valve Guide - A sleeve bearing whose function is to provide axial location of a valve, while allowing normal reciprocating motions.

Valve Keeper - The component, generally two-piece, which secures the

valve spring retainer to the valve stem in a cylinder head.

Valve Relief - A cutout in a piston crown to allow close approach of a valve.

Valve Seat - The area in a cylinder head in which the head of a valve under spring pressure forms a gas seal.

Valve Size - The diameter of the head of a valve.

Valve Spring Retainer (Collar) - A valve train component which serves the dual purpose of containing the outer end of the valve spring(s), and, by means of valve keepers, connecting the valve stem to the spring.

Valve Spring Shim - A valve train component whose purpose is to allow the adjustment of the seated valve spring pressure by effectively changing its seated length.

Valve Stem (Engine) - The shaft portion of a reciprocating engine poppet valve.

Valve Stem (Wheel) - The attachment to a road wheel through which pressurizing air is admitted/released.

Vapor Lock - A condition in the fuel delivery system caused by the existence of vapors, rather than liquid fuel, in the fuel pump, resulting in abnormal fuel delivery.

Variable Ratio Drive - A power transmission device in which at fixed input shaft rotational velocity the rotational velocity of the driven shaft is continuously variable over a prescribed range of ratios.

Velocity Stack (Air Horn/Trumpet) - An induction system attachment, generally in the form of a cylindrical flare, used to alter the dynamic coupling between carburetor and the mass of incoming air.

Vent - An aperture which allows pressure equalization between a semi-sealed volume and the outside of this volume by providing a flow path for gases.

Ventilation - Cooling a component by an intentional flow of air, or modifying a component so as to facilitate this process.

Venturi - A region of constriction in an air duct of a carburetor in which, through the actions of incoming air flow, a reduced pressure is created to induce the inflow of fuel through one or more jets.

Vibration Dampener - Generally a rubber-mounted rotating circular disc or pulley whose function is to reduce the amplitude of vibrations in the mechanism or part to which it is attached.

Visible - Capable of being seen, perceptible to the eye, apparent, evident.

Voltage Regulator - An electronic or electromechanical device intended to regulate the charging actions of an alternator or generator.

Watts Linkage - A rear axle lateral location system which employs a frame/body-mounted central pivoting attachment (bell crank) for two (2) lateral links, whose opposite ends are attached to either end of the axle housing or vice versa.

Wave Washer - A thin, continuous spring washer.

Welding – The process of fusing one or more components into a single unit by means other than adhesives or fasteners (i.e. TIG, MIG, soldering, brazing, etc.).

Wheel - Flange and Rim.

Wheel (Steering) - The cockpit-mounted control device, normally circular, which allows the driver to exert manual force with which to control the car's direction of motion.

Wheel Cover - A removable decorative covering for a road wheel.

Wheel Cylinder - A hydraulic component of the braking system, which produces mechanical force at the wheel brakes in response to positive hydraulic pressure.

Wheel Fan - An integral part of or attachment to a wheel assembly with blade-like elements, intended to improve brake cooling.

Wheel Spacer - A plate of unspecified thickness or material which is mounted between a road wheel and hub to increase the distance from the inside of the wheel to the hub, thereby increasing track.

Wheel Trim Rings - Decorative removable attachments to road wheels effectively covering the rim area of the wheels.

Wheel Well - The volume under a fender.

Wheelbase - The distance between the front and rear axle centerlines of a car, with the front wheels in the straight ahead position.

Windage Tray - An internal baffle attachment to an engine oil pan which is intended to help maintain a sufficient supply of lubricant at the location of the oil pickup under cornering, braking or acceleration.

Windows:

A. **Door or Side** - The opening where the window normally is raised or lowered in a door. Does not include a "vent" window whether fixed or movable.

B. **Quarter (1/4)** - On a 2-door or 4-door vehicle, the window to the rear of the rearmost door. Such windows are not generally raised or lowered, but they may be hinged and open to the rear. Quarter windows are not "rear" windows.

C. **Rear** - Rear windows are positioned at right angles to the longitudinal axis of the car.

Windshield (Windscreen) - An attachment to the bodywork of a car intended to divert the flow of air from forward motion without obstructing forward vision.

Windshield Pillar - A body component which extends nominally upward from the cowl area, forming one supporting attachment for the windshield.

Wing - An aerodynamic attachment to the structure of a car specifically intended to generate downforce from the action of air flowing over the upper and lower surfaces, creating a pressure differential.

Wiring Harness - Bundles of electrical wires which provide the electrical links in a car.

Wishbone Type Susp. - A form of suspension in which the lower (and often upper) locating links are in the form of a wishbone or "A-frame", and provide the lateral and at least a portion of the fore/aft wheel location.

Working Chamber - The volume in a rotary engine which is defined by the case and the two adjacent rotor tip seals, and which will vary in capacity with position in rotation.

Worm and Sector - A steering gear type in which the steering forces from the driver are transmitted to the steering linkage via a worm gear and a sector gear in mesh.

Wrist Pin - The one-piece physical link between a connecting rod and a piston.

Zerk Fitting (Grease gun fitting) - A small check valve attachment to a bearing housing through which pressurized lubricant may be applied to the bearing.

22.2. FACTS AND FORMULAS

Facts and Formulas to be used at all SCCA events.

1 inch = 2.54 cm = 25.4 mm

1 cubic inch = 16.387 cubic cm

1 millimeter = .03937 inch

1 meter = 1.0936 yards

1 kilometer = 1000 meters = .62137 mile = 1093.6 yards

1 mile = 1,760 yards = 1.60934 kilometers

Miles per hour = kilometers per hour x .62137

Kilometers per hour = miles per hour x 1.60934

1 cubic centimeter = .061 cubic inch

1 liter = 61.03 cubic inches = 1000 cubic centimeters (cc)

1 kilogram = 2.21 pounds

1 pound = 453.6 grams

1 hundred-weight (cwt.) = 112 pounds (British), 100 lbs (U.S.)

1 U.S. gallon = 231.18 cu. in. = 3.785 liters

6 U.S. gallons = 5 Imperial (British) gallons

1 mile per hour = 1.467 feet per second

Cylinder volume (displacement) =

$$\frac{3.1416 \times \text{bore} \times \text{bore} \times \text{stroke}}{4}$$

Engine displacement = Cylinder volume times number of cylinders

$$\text{Compression ratio} = \frac{V1 + V2}{V2}$$

Where V1 is total volume of one cylinder
V2 is volume of space above piston at top of stroke

Piston speed (ft. per min.) = 2 x RPM x stroke in feet

$$\text{Brake Horsepower (BHP)} = \frac{\text{RPM} \times \text{torque (in lbs ft.)}}{5252}$$

Note: Formula is actually: $\frac{6.28 \times \text{RPM} \times \text{torque}}{33{,}000}$

6.28 into 33,000 we get 5250

$$\text{Torque} = \frac{\text{BMEP} \times \text{Swept volume (in cc)}}{2473}$$

$$\text{Frontal Area (for figuring air resistance)} = \frac{T \times H}{144} \text{ (square feet)}$$

Where T is front tread in inches, H is overall height in inches.

$$\text{MPH} = \frac{\text{RPM} \times \text{wheel diameter (in inches)}}{\text{gear ratio} \times 336}$$

Note: Wheel diameter is overall diameter of the inflated tire, not the nominal diameter of the wheel.

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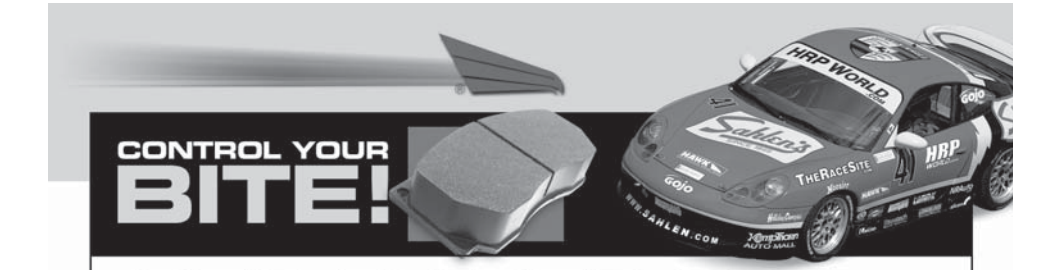
AMERICAN SEDAN
CANADIAN AMERICAN CHALLENGE CUP
CAN AM
FAST FIVE
FAST FIVE PACESETTER CHALLENGE
FASTRACK
FORMULA CONTINENTAL
FORMULA SUPER VEE
FORMULA VEE
MATTERS OF THE MOMENT
NATIONAL RACING SCHOOL
OLYMPUS RALLY
PACESETTER CHALLENGE
POR
PRESS ON REGARDLESS
PRO RALLY
PRO SOLO
PRO SPORTS 2000
RACETRUCK
RUNOFFS
SCCA
SCCA PRO RACING
SOLO I
SOLO II
SPEC RACER
SPORTSCAR
TRANS AM
WIRE WHEEL
WORLD CHALLENGE

NOTES:



DTC-70 DTC-60

Hawk Performance proudly introduces the new DTC Series Brake Pads.

Dynamic Torque Control

Advanced friction torque technology combined with exceptional brake controllability. Currently consisting of three friction compounds, these unique formulations have been developed to provide extremely smooth braking performance while providing excellent torque control characteristics unmatched by any other brake pad.

DTC-70

Designed to meet the demands of NASCAR Nextel Cup, Busch, Craftsman Truck, Hooters Cup, Champ Car, Formula Atlantic, Pavement Super Late Models and ROAD RACE / SPORTS CAR / GT RACING.

These unique friction formulations offer very high torque values while providing excellent release & modulation characteristics.

Often times you will see teams use the higher torque pad in the front and the lower torque pad in the rear.

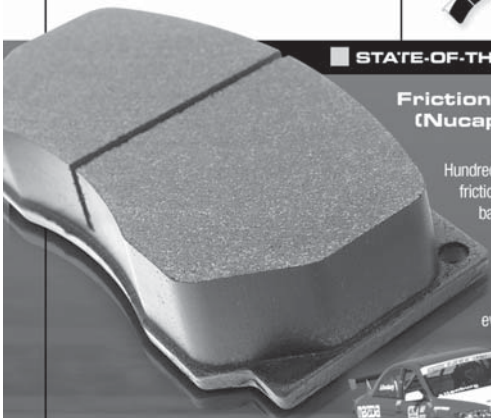
DTC-60

Slightly less Coefficient and bite than DTC-70. Excellent when used for lighter racecars and splitting friction from front to rear. Smooth braking feel while maintaining torque & control qualities in severe temperature environments. Can use all around on intermediate braking tracks.

"The brakes were awesome".
"…Its so controllable at threshold braking…"
- Travis Kvapil

RACE PROVEN PERFORMANCE

STATE-OF-THE-ART BONDING METHOD



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