

APPENDIX D - SOLO® TRIALS RULES

I. PURPOSE

Solo® Trials provides a venue for SCCA® members who wish to experience higher speeds than the current Solo® program allows and/or for whom the Time Trials program has not been available or desirable. Solo® Trials is a program for regions and drivers with a lower level of speeds, hazards, administrative complications and costs than Time Trials.

Background Motivation:

Several independent and marque autocross clubs, although considerably less regulated, have offered this type of program for many years without competition from SCCA®. Since region and member input indicated a need SCCA® has developed this new program. An added incentive to formulate this program for our membership was the potential to attract new members from the independent clubs who run this type of event into the SCCA® Solo® Program.

The Solo® Trials Program has three primary goals:

1. To be a venue for our members to compete in a safe, higher speed Solo® event;
2. To give SCCA® Regions, previously unable for various reasons to conduct Time Trials, a different type of Solo® event to offer current and potential members; and
3. To develop a cadre of new competitors and organizers experienced in Solo® Trials events who will be encouraged to consider involvement in Time Trial Events. With the achievement of these three goals the Solo® Trials Program will provide a more rounded Solo® program for our members.

II. CONCEPT

The Solo® Trials Rules specified within this Appendix are an extension of the Solo® Rules. They are exception or additions to those rules and as such, if a subject matter is not specific herein, the Solo® Rules governing that matter shall also govern a Solo® Trials event.

All Solo® Trials Events will generally be run on flat, expansive asphalt or concrete pavement with very minimal fixed objects present on the course site. Essentially, these events will be planned for sites such as airport facilities or very large parking areas that can have a defined perimeter to control access and be protected from unwanted entry. This program is not intended for racetrack facilities, which are used for Time Trials events or shopping mall-type parking lots that are commonly used for Solo® events. Extremely rare exceptions may be made for racetrack facility usage under special circumstances when the course design and locations of hazards present appropriate risks, such as an airport-based facility.

The course will be designated by pylons, and as in other Solo® events, displacement of these pylons will penalize drivers.

Solo® Trials events can be characterized as introductory Time Trials events, using pylon defined road courses and speeds in excess of those currently limited in the Solo® program are permitted but are more limited than for Time Trials events. Approved course designs will not normally permit potential vehicle speeds of the fastest Street, Street Touring®, or Street Prepared Category vehicles to exceed 95 mph.

Solo® Trial events will fall under the authority of the Solo® Development Coordinator (SDC) or designee and under the regulation of the National Solo® Rules, except as exempted by these Solo® Trials Rules.

III. PROCEDURE FOR SCCA® SANCTION

Regions wishing to participate in the Solo® Trials Program shall comply with the following:

1. Submit to the SCCA® National Office an event site approval, if applicable, and request for sanction which includes a proposed scale course design map with surrounding areas indicated.
2. All new sites are required to have an inspection to determine suitability for this program. Prior approved sites do not need any subsequent inspections as long as there have been no changes to the surface or other safety-related attributes since the initial inspection. Sanction will be granted after successful completion of course site inspection.

IV. SITE SELECTION AND COURSE DESIGN APPROVAL

Courses shall be placed on relatively level, smooth pavement surfaces and shall avoid incorporating elevation changes or abrupt high-speed maneuvers that could lead to loss of control.

The course design should limit straights (defined as a section of course where full acceleration is possible, regardless of whether it is totally straight or not) to a maximum of 1,200 feet, including the braking zone preceding a subsequent maneuver. The intent of this requirement is for the top speed of the fastest Solo® Street, Street Touring®, or Street Prepared Category cars to not normally exceed 95 mph at any point on the course.

The course shall be designed to provide the Chief Steward and the Safety Steward, or their designated representatives, a direct line of sight to all portions of the course or radio communications must be provided between all corner stations and those officials.

Prior event site inspection is mandatory and shall be coordinated with the Solo® Safety Committee (SSC). The inspection shall be made by the Divisional Solo® Safety Steward (DSSS) or a designated representative of the SSC. This inspection will ensure that:

1. The proposed course pavement and overall event facility is capable of supporting a safe event;
2. Proper worker safeguards are available and will be utilized; and
3. The event site can be appropriately secured from unwanted entry by unauthorized individuals.

A safety report on the acceptability of the site shall be filed with the SSC with copies to the SCCA® National Office. This report shall form the basis of SCCA® sanction and insurance issuance. Once a course site has been approved, it need not be inspected again unless there have been changes in pavement or to surrounding course areas. However, each subsequent event must go through all other sanction requirements.

V. SCCA® INSURANCE

Liability and Participant Accident coverage will be provided as indicated in the SCCA® Insurance Manual.

VI. EVENT OFFICIALS

The Chief Steward and Safety Steward shall be appointed by the Solo® Chairman of the host Region but may be subject to review by the Solo® Development Coordinator (SDC) or designee and/or the Divisional Solo® Safety

Steward (DSSS) if there is a need. All other officials may be appointed by the host Region without review.

All event officials must be SCCA® members in good standing. The selection of the Chief Steward and the Safety Steward shall be done with utmost care reflective of the type of event. It is recommended that the Chief Steward and Safety Steward have Time Trials experience but, as a minimum, these officials shall have five (5) years Solo® experience as an Event Chairman or a Safety Steward.

VII. ENTRANT ELIGIBILITY AND LICENSING

Drivers must be an SCCA® member, at least 16 years old, and possess a “full privilege” operator’s (driver’s) license from their state of residence.

Novice drivers may not participate in any Solo® Trials event. Drivers in a Solo® Trials event must have experience in at least four (4) parking lot-type Solo® events within the last two (2) years. Proof may be in the form of event results or a letter from a Regional Executive or a Divisional or National Solo® Official attesting to the experience level of the prospective entrant.

VIII. WORKERS

Events will operate primarily utilizing competitors, who are not competing at the moment, as course workers. This practice will duplicate the procedures currently in place for the Solo® Program. However, it is highly recommended that experienced Club Racing Flagging and Communications workers be used in a supervisory capacity. Prior to the beginning of competition runs, a workers training session will be held in order that each worker (driver) be familiar with what will be expected of them when they are placed on station.

IX. EVENT SAFETY REQUIREMENTS

1. A fire vehicle shall be provided that will be equipped to fight car fires. This vehicle must carry a minimum of 60 lbs. total capacity dry chemical fire extinguisher(s).
2. An ambulance must be on call and available to respond within five (5) minutes of a telephone call from the event site. A cellular phone must be available on site to minimize response time in the event of an emergency. At a minimum, one (1) individual certified in Advanced First Aid by the American Red Cross, or equivalent, along with an extensively equipped First Aid, kit must be present and available. If this individual is also a competitor, another certified individual must be on duty while he or she is competing. It is highly recommended that an ambulance be stationed on site and staffed with qualified personnel for the duration of the event.
3. A prearranged safety plan, approved by the SSC, must be in place to cope with major emergencies.
4. At least 20 lbs. of dry chemical extinguisher (total capacity) must be provided at each flagging station. Each station shall also be equipped, at a minimum, with a red and a yellow flag.
5. Radio communication shall be provided from each flagging station to event officials at the event control point.
6. At a minimum, each station shall have two workers.
7. Each flagging station shall be on the inside approach of its respective corner and be placed a minimum of 75 ft. from the course edge. It is highly recommended that the station be located behind a solid protection barrier such as, but not limited to, concrete, tire wall, or Armco.

X. VEHICLE SAFETY EQUIPMENT REQUIREMENTS

A vehicle safety inspection conducted in accordance with Solo® Rules Section 3.3.3 must be successfully completed prior to competition.

Competitors and officials are reminded that this inspection must be conducted with consideration to conditions of a Solo® Trials event. The Chief Steward is authorized to prevent any vehicle from competing that he or she believes to be inadequate. In addition, vehicles must meet the following applicable requirements:

1. Vehicles prepared to Club Racing specifications must meet all current GCR safety equipment requirements.
2. Vehicles prepared to Time Trials specifications must meet all current Time Trials safety equipment requirements.
3. Vehicles prepared to Solo® specifications must meet the following additional requirements:
 - A. Street Modified, Prepared, and Modified Category vehicles and all open vehicles must have a roll bar meeting current Solo® Appendix C standards. EXCEPTION: Open cars may substitute factory hardtops equipped with bolt-in fasteners. The brace may be removable but must be the same size/dimension as the tubing used for the hoop and be attached at the highest possible point on one vertical leg of the roll bar and the lowest possible point of the other vertical leg of the roll bar. Bolt-in roll bars are permitted. It is highly recommended that all Solo® prepared vehicles have roll cages meeting current Club Racing GCR requirements. Roll cages are highly recommended for all vehicles and, if installed, must conform to the current GCR.
 - B. All drivers in SCCA®-sanctioned Solo® Trials events in which a roll bar or roll cage is installed shall utilize either a five-, six-, or seven-point restraint harness meeting the following specifications. A 7-point restraint harness is recommended. Arm restraints are required on all open cars including open targatops, sunroofs, and T-tops. The restraint system installation is subject to approval by the Chief Technical and Safety Inspector.
 1. A 5-point system for use in automobiles where the driver is seated in an upright position consists of:
 - a. A 3-inch seat belt or an FIA or SFI 16.5 certified 2-inch seat belt.
 - b. An approximately 3-inch shoulder harnesses or FIA or SFI 16.5 certified 2-inch shoulder harnesses only if the HANS Device is used by the driver. Should the driver at anytime not utilize the HANS Device, 3-inch shoulder harnesses are required.
 - c. An approximately 2-inch anti-submarine strap. A 5-point harness is considered a minimum restraint system. 6- or 7-point systems are highly recommended in all cars including automobiles where the driver is seated in an upright position.
 2. A 6- or 7-point system recommended for use in all automobiles consists of:
 - a. A 3-inch seat belt or an FIA or SFI certified 2-inch seat belt.
 - b. An approximately 3-inch shoulder harness or FIA or SFI 16.5 certified 2-inch shoulder harness only if the HANS Device is used by the driver. Should the driver at anytime not utilize the HANS Device, 3-inch harnesses are required.
 - c. 2 or 3 approximately 2-inch leg or anti-submarine straps.

3. The shoulder harnesses shall be the over-the-shoulder type. There shall be a single release common to the seat belt and shoulder harnesses. 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 20° 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 bar/cage or part of the car structure. Only separate shoulder straps are permitted (Y-type shoulder straps are not allowed). H-type configuration is allowed.
 4. The single anti-submarine strap of the 5-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 harnesses.
 5. The double lag straps of the 6- or 7-point system may be attached to the floor as above for the 5-point system or be attached to the seat belt so that the driver sits on them, passing up between his/her legs and attaching either to the single release common to the seat belt and shoulder harnesses or attaching to the shoulder harness straps. It is also permissible for the let straps to be secured at a point common to the seat belt attachment to the structure, passing under the driver and up between his/her legs to the seat belt release or shoulder harness straps. All straps shall be free to run through intermediate loops or clamps/buckles.
 6. Each seat belt and shoulder strap of the harness (5-, 6-, or 7-point) shall have an individual mounting point (i.e., 2 for each seat belt and 2 for each shoulder strap minimum). 6- or 7-point system anti-submarine straps may share a mounting point with one or both seat belts. The minimum acceptable bolts used in the mounting of all belts and harnesses are SAE Grade 5. Where possible, seat belts, shoulder harnesses, and anti-submarine straps 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.
 7. Unless specifically mentioned herein, compliance with all driver restraint systems that comply with SFI 16.1, SFI 16.5, or FIA 8853/98 is highly recommended.
 8. Harness threading must be assembled in accordance with the manufacturer's instructions. Tech Inspectors are cautioned to inspect all belts and harnesses for wear, looking for abrasions, rips, tears, or other issues which would make a belt/harness of questionable value for its intended purpose. Vehicles with such issues will be prohibited from these events.
Street, Street Touring®, and Street Prepared category vehicles not equipped with a roll bar or a roll cage may not use an upper body restraint system other than the factory system.
- C. A hand-held fire extinguisher adhering to the following standards is highly recommended:
1. Halon 1301 or 1211; 2-lb. minimum capacity by weight.

2. Dry chemical; 2-lb. minimum with a positive indicator showing charge. Chemical: 10BC UL rated – potassium bicarbonate (Purple K) recommended; 1A-10BC UL rated multipurpose – ammonium phosphate and barium sulfate or Monnex.
3. The fire extinguisher shall be securely mounted in the cockpit. All mounting brackets shall be metal and of the quick-release type.
4. 125 cc shifter karts are permitted with the appropriate driver safety gear as specified in the Solo® Rules. However, depending upon surface irregularities of the site, the Divisional Solo® Safety Steward (DSSS) may prohibit these karts. Formula Junior karts are not permitted.

XI. DRIVER SAFETY EQUIPMENT REQUIREMENTS

The following equipment must be displayed for Tech Inspection and be used during competition by all drivers:

1. A helmet meeting the current Solo® requirements as a minimum.
2. All open cars and closed cars that do not have original equipment roll up windows must be equipped with a window net or the driver must wear an approved arm restraint system. Vehicles with original equipment roll up windows may compete without either a window net or a driver arm restraint if the driver side window is rolled up during competition.
3. Drivers of open cars shall wear goggles or face shields.
4. SCCA®-compliant fire resistant clothing as listed in the current Club Racing GCR is highly recommended for drivers of Solo® Street Modified, Prepared, and Modified Category vehicles, and Club Racing GT, Production, Formula, and Sports Racing vehicles. This includes suits, gloves, socks, and shoes. Fire retardant clothing is highly recommended for all drivers.
5. All drivers must wear 100% cotton (no blends) outer wear that effectively covers the body from neck to ankles and wrists at a minimum. All drivers must wear shoes that cover the entire foot.