## 2. COURSE

Solo courses should be open enough to allow good competition between larger and smaller cars, and should not emphasize high speed, power-to weight ratio, extreme maneuverability, memory, or visual acuity. Regional, National Tour, and National Championship events shall be conducted on a paved surface.

## 2.1 COMMON SENSE AND SOLO COURSES

Although Solo events are non-speed events under the Solo Rules of the SCCA, speed alone is not the operative factor in determining what is and is not a proper Solo event. Hazard is the operative word; hazards must not exceed those encountered in legal highway travel. Generally, maximum speeds in the mid-50s to mid-60s (mph) are contemplated for Street and Street Touring category vehicles, and WITH LIMITED EXCEPTIONS AS DESCRIBED IN SECTION 2.2, MUST BE OBSERVED, since these are speeds with which the average driver is familiar from everyday road driving. But it is quite possible to set up a course on which speeds do not exceed 45 mph, but which is more hazardous than another course on which 65 mph is attainable. The same sort of reasoning must be applied to cornering speeds. If, for example, there are two identical 30 mph turns, one bordered by a 50 ft. drop off or a solid row of trees and the other by 50 ft. of flat, obstacle-free asphalt, the hazards involved are much different. The former is clearly not permissible in an SCCA Solo event and the latter clearly is. Each Event Chairman is cautioned to remember that entrants and workers must be SCCA members in Solo events or they are NOT covered by catastrophic insurance. Furthermore, by definition a Solo event is 30 — 2024 SCCA National Solo Rules 2. Course open to a total novice in any car that can pass safety (tech) inspection and courses must take this into consideration. IT WOULD BE POSSIBLE TO SET EXTREMELY STRICT AND RIGID LIMITS ON SOLO EVENTS REGARDING SPEED AND/OR COURSE DIMENSIONS. HOWEVER, IT IS NOT THE INTENT OF THESE RULES TO OUTLAW EVENT SITES WHICH CANNOT ACCOMMODATE A COURSE OF CERTAIN STATED DIMENSIONS OR CREATE THE IMPRESSION THAT, SO LONG AS SOME MAGIC SPEED LIMIT IS NOT EXCEEDED, THESE RULES ARE ADHERED TO.

Basically, Solo event speeds are limited to what is reasonable and prudent for the conditions encountered, SUBJECT TO THE CONSTRAINT THAT TOP SPEEDS BE WITHIN AN ALLOWABLE RANGE AS DESCRIBED INSECTION 2.2.

Laying out a course to comply with the safety requirements of these rules calls for the exercise of prudent good judgment and common sense. Failure to do so may subject an SCCA Region to severe sanctions.

# 2.2 COURSE SAFETY AND LAYOUT RULES

Courses must comply with Section 1 of these Rules which is mandatory of all SCCA Regions. The following set of course safety and layout rules are also required for all Solo events. WHEN THIS SECTION IS FOLLOWED, COMPLIANCE WITH SECTION 2.1 IS AUTOMATIC. When laying out a course, the size of the vehicles competing should be taken in consideration and the dimensions specified in the following rules are only minimums:

#### A.

Courses must be tight enough so that cars run the entire course in their lower gears. Speeds on straight stretches should not normally exceed the mid-60s (mph) for the fastest Street and Street Touring category cars. The fastest portions of the course shall be those most remote from spectators and property. Turns should not normally allow speeds in excess of 45 mph in unprepared cars. It must be remembered that sites themselves vary and not all sites will safely support the speeds shown in these guidelines (see Section 1.3). Conformity to these speed guidelines does not preclude reasonable and prudent consideration of the conditions encountered.

# **Guidelines To Corner Speeds Based on The Radius of a Turn**

The following table is a guideline for Regional officials and course designers; it shows values of cornering speeds versus corner radius (not diameter) for various lateral accelerations. This data should be considered in light of other calculations which estimate that a fast Street, Street Touring, or Street Prepared car can pull well in excess of 1.0 g in lateral acceleration, and can accelerate from 30 mph to 70 mph in less than 300 ft.

		Turn Radius (ft)										
		<u>20</u>	30	40	50	60	70	80	90	100	125	150
	0.9	16	20	23	26	28	31	33	35	37	41	45
	0.95	17	21	24	27	29	32	35	37	38	42	46
	1	17	21	24	27	29	32	35	37	39	43	47
	1.05	18	22	26	29	31	34	36	38	40	44	49
	1.1	18	22	26	29	31	34	36	38	41	45	50
Lateral g	3											
	1.15	19	22	26	29	32	35	37	39	41	46	51
	1.2	19	23	27	30	33	35	38	40	42	47	52
	1.25	19	23	27	31	34	36	39	41	43	48	53
	1.3	20	24	28	31	34	38	40	43	45	50	55
	1.35	20	25	28	32	35	38	40	43	45	50	55

B.

The course as laid out shall be on a paved surface which contains no dangerous holes, loose gravel, gratings, oily spots, or other hazardous features. Surface features (e.g., dips, crowns) which could cause a car to become airborne shall be avoided. **C.** 

The course boundary shall not normally pass closer than 25 ft. from solid objects. **D.** 

The Solo Safety Steward (SSS) shall have the authority to disapprove a course or site for karts only, when there are upright solid objects (e.g., light poles, fence posts, etc.) on the site within 50 ft. of the actual course. This does not include curbs. While safety systems for karts provide acceptable driver protection for most incidents, upright solid objects present potential hazard for which kart safety systems are not well suited. This

rule gives the SSS the option of excluding karts without having to declare the site unsafe for everyone. It is up to the judgment of the SSS whether the course design, surface, solid objects, and type of karts running present an unsafe mix. In most cases, the situation can be resolved by a course design change. Kart-specific hazards on the perimeter of the course shall be clearly marked alerting kart drivers to the possible hazard. Examples include light poles, fences, low hanging obstacles or cables, trees with low hanging limbs, etc.

#### Ε.

Special caution should be applied where negative-cambered turns are used.

F.

A long straight (over 150 ft.) should not terminate in an extremely sharp turn (e.g., a short radius U-turn).

G.

Except on permanent circuits such as kart tracks, the inner and outer limits of turns and corners should be marked by course markers; displacement of which results in time penalties. Corner limits must never be marked by curbs, buildings, poles, trees, soft shoulders, or other hazards likely to cause damage to a car or likely to cause a car to overturn.

H.

Cars on the course simultaneously shall not run in close proximity to each other.

I.

All portions of the course shall be visible to at least one course marshal who can communicate through signals or by electronic means with the starting line.

J.

Extreme care shall be taken in the location of the start, finish, staging, and timing areas. The timers and staging area must be placed well clear of the course in a safe area. The finish section and course exit should be clearly and carefully defined to safely restrict speeds. It is not recommended that competing cars be required to come to a complete stop immediately following the finish line. It is preferred that cars be required to slow to a walking speed within a controlled area before returning to the grid or paddock areas. A complete stop should be required only when unusual site conditions exist. In all cases, a sufficient distance past the finish line must be available to safely slow or halt any competing car from the highest possible speed attainable at the finish without locking brakes or wild maneuvering. It is recommended that an official be assigned to control the finish area. Particular care must be exercised in the finish area to keep it free from hazard to participants and non-participants.

K.

Entrance and exit lanes shall enter the course at separate points, though they may be close together. They will be kept clear for use by competing cars at all times.

L.

Portions of the course where significant braking is necessary shall not terminate at a point where participants, non-participants, or obstacles are directly in front at a distance closer than that required to bring a car to a halt even with brake problems, a stuck throttle, etc.

M.

Participants and non-participants must be kept at a safe distance from the course, particularly at the outside of turns and at the start and finish lines. Unless protected by

substantial barriers, non-participant areas must be roped off. The Solo Safety Steward shall have the authority to set minimum viewing distances from the course but such minimum viewing distances may not be less than 75 ft. from the course edge in unprotected areas (areas without adequate barrier protection such as concrete or tire walls). A Region may request a waiver of this minimum distance requirement from its Divisional Solo Safety Steward.

N.

Appropriate fire extinguishers, flags, and material for cleaning up fluid spills must be provided by the host Region.

### 2.3 COURSE DESIGN RULES

A.

All corners shall be negotiable without reversing by any car classified by make/model in the Solo Rules.

В.

The course shall be at least 15 ft. wide and single-file slalom markers shall be at least 45 ft. apart. Any series of three (3) or more course markers which are generally in a line and have the effect of a slalom are considered to be a slalom. Additional course markers associated with the slalom markers to form gates, boxes, etc., do not cancel this limit.

C.

A Solo event, other than a gimmick event in which time is not the only consideration, shall be a test of driving skill, not memory.

D.

The course shall be well marked with pylons or other markers. The base of each marker shall be outlined to permit accurate replacement if displaced.

E.

Cars should leave a gate/turn headed generally in the direction of the next gate/turn.

### 2.4 EVENTS AT RACE FACILITIES

Solo events planned for commercial race facilities, or a private facility that could reasonably be construed to be similar in concept to a commercial race facility, must have approval from the current Divisional Solo Safety Steward (DSSS). If in doubt, contact your DSSS.

### 2.5 PARTICIPANTS AND SPECTATORS AT SOLO EVENTS

All SCCA events have two (2) types of insurance:

1.

Participant insurance covers drivers, crew, and workers in hot areas (staging, grid, start, finish, course areas, etc.). Participants in hot areas must sign the event waiver or hold an annual waiver. Additionally, all people in hot areas should be SCCA members to have better insurance coverage (a weekend membership is acceptable). This includes passengers.

2.

Spectator insurance covers people (both participants and spectators) in cold areas (paddock, spectator areas, etc.). Spectators in cold areas do not need to sign the event waiver and minor spectators do not need to have a minor waiver. However, cold areas should be delineated from hot areas (by signage, streamers, banners, crowd marshals, etc.) to prevent spectators from unintentionally entering a hot area.

All minor participants must have the minor annual waiver signed by BOTH parents/guardians AND the minor. If a minor enters a site that requires a waiver for everyone, BOTH parents/guardians AND the minor must sign the minor annual waiver. One parent/guardian signature is NOT acceptable. Minors under 12 years of age are not permitted in hot areas per Section 1.3.2.O and as such are spectators and do not require a waiver.