

2013 CCSCC Safety Steward Class

Course Syllabus:

Introduction:

This class qualifies you to be a Safety Steward for 2013 Champaign County Sports Car Club (CCSCC) autocrosses. This class will be offered at the CCSCC autocross school, and, if needed, after the CCSCC autocross school.

This class is divided into several sections:

How to Become a Safety Steward, How to Get an Assignment as Safety Steward of Record, Duties of the Safety Steward, and, most importantly, **How to Check a Course to Make Sure it is Safe**. The class will rely upon the backgrounds of the instructors to cover much of the material.

There are actually multiple jobs as Safety Steward. The Safety Steward of Record (SSR) is the licensed Safety Steward that is assigned by the Safety Chair (Greg Lukach) to supervise and be responsible for the safety of an event. The Safety Chair assigns all Safety Stewards of Record (SSR). There are also Safety Stewards needed so that the Safety Steward of Record can participate in the event. This person simply is Safety Steward of the heat that the Safety Steward of Record is competing in. He is known as the "Assistant Safety Steward". It is highly desired that the Assistant Safety Steward be licensed by having had the Safety Steward training course. The Safety Steward of Record selects the Assistant Safety Steward. If there is no licensed Safety Steward available, he can name an unlicensed CCSCC club member to serve as "Acting Safety Steward". The Acting Safety Steward's only responsibility is to monitor the event while the Safety Steward of Record is competing and consult with the Safety Steward in case of the need to discuss a safety issue. He can stop the event (and should) in case of a safety concern until the Safety Steward can be brought up to speed and make a decision. Un-licensed Acting Safety Stewards should not be used unless absolutely necessary and then the Safety Steward of Record should select a CCSCC autocross committee member, a CCSCC Board Member, or an experienced CCSCC autocross entrant to be Acting Safety Steward.

How to become a CCSCC Safety Steward

1. Take this course.
 2. You must take it every year.
 3. When you attend events, offer to be the Assistant Safety Steward.
- When you are a CCSCC Safety Steward, you are always a Safety Steward. If you notice a problem, it is your responsibility to discuss it with the Safety Steward of Record. You are never NOT a Safety Steward. If there are enough workers and you are not needed for another position, volunteer to help as a safety steward. For example: you can walk around the grid and pits checking to make sure it is safe.

How to get a Safety Steward of Record Assignment:

The Safety Chair assigns Safety Stewards of Record. Volunteer with the Safety Chair. The Safety Chair will expect you to work as Assistant Safety Steward for at least two events before you are a Safety Steward of Record. Previous experience as Safety Steward or Solo Safety Steward may qualify you also, if you have taken the course. The decision of the Safety Chair is final.

Duties of the Safety Steward:

- Review the course for safety.
- Advise the event chair in the running of the event.
- Make sure the site boundaries and safe areas are clearly marked, announced and watched.
- Make a final course pre-run prior to the start of the event.
- If Jr. Karts are running, arrange for a Kart Steward and discuss with him safety for karts.
- Meet with course workers and explain their jobs, stressing safety.
- Wear something that identifies you as SS as provided by CCSCC.
- Appoint an Assistant Safety Steward to be Safety Steward while competing.
- Stay at the site during competition. Appoint an Acting Safety Steward if necessary to leave temporarily. If called away permanently, find a replacement or stop the event.
- Make sure that if someone is working on their car at the event and need to lift it to get under it they do so only in the pits and use jackstands. *If there are >2 heats, additional monitoring of the pit area will be required.*

- The Safety Steward of Record works with the event chair to make sure the event is safe. To do that, the Safety Steward of Record should be involved in looking at the course right after it is set up, but **SHOULD NOT HELP LAY OUT THE COURSE**. The reason for this is because the Safety Steward must not become the course designer. He must remain neutral and evaluate the course for safety, not style, not philosophy, not become 'invested' in the course. In the rare case that the event chair is having difficulty laying out the course and time is becoming an issue, the Safety Steward of Record should find an experienced autocrosser who has course design experience to help get the course designed and ready to run. In no case should the Safety Steward assist in the design.
- The Safety Steward should drive the course at least once at competitive speed in a car other than his own. The event chair should ride with him. This is before he approves the course. If major changes are made, he should consider driving the course at speed again.
- The Safety Steward has the responsibility to rule on the safety of the course. If he approves the course, the event chair should "set the course". At that point, no changes will be made to the course unless the safety steward is consulted and approves. No significant changes should be made if at all possible. At this point the event chair should arrange to get the course marked, a map made, and should announce that the course is open to walking.
- The Safety Steward should place the corner worker stations in safe places on the course and put the extra cones, the red flag and the fire extinguisher in place at the corner stations.
- The Safety Steward should work with the event chair to assign workers for the heat he is working. He should explain the jobs to the workers before sending them to their positions. Some worker positions must be assigned to experienced workers.

These include: Corner Captains, Timing & Scoring, Starter and Grid Captain. The Safety Steward of the first heat should assign the workers for the second heat during the first heat by circulating on the grid to get the assignments done.
- The Safety Steward of Record, or his designee should run the drivers' meeting and should read 'Things to say to all Autocrossers' to them. He should also be able to answer questions about the event.
- The Safety Steward of Record should work with the event chair, working together in a pleasant way to get a safe course design. But the Safety

Steward of Record does have the final say on the safety of the course design and any other safety question.

HINTS:

No CCSCC event has ever been cancelled due to a safety related problem that the event chair refused to remedy. The key to working with event chairs as SS is to confer with them in a pleasant yet forceful manner. Talk to them and work out problems, but don't let safety violations or concerns continue. You are responsible for the safety of all participants or spectators.

The starter should be observed and supervised at the beginning of each heat to help him know when to let cars start their run. The timing crew also should be talked to. The starter is under control of the timing crew and the SS. It is good to state in no uncertain words that the starter only listens to the timing crew and the SS.

The corner Capt. should oversee the safety of his corner workers. If he has inexperienced corner workers, he should mentor them.

All photographers outside the spectator area must be accompanied by a dedicated spotter to keep them out of harms way.

How to tell if a course is safe.....

There are two parts to making sure a course is safe. First is the general layout rules for our courses. *Always consider a novice driver when evaluating a course.*

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 65 mph for the fastest Stock, Street Touring, and Street Prepared category cars. The fastest portions of the course shall be those most remote from spectators and property. Tight turns should not normally allow speeds in excess of 45 mph in unprepared cars. More importantly, there must be sufficient runoff room for any turn.

B. The course shall normally be on a paved surface which contains no dangerous holes, loose gravel, gratings, oily spots, or other hazards. Dips, crowns, etc. which could cause a car to become airborne must be avoided.

C. The course boundary should not pass closer than 25 ft from solid objects. Note that neither a curb nor grass is a solid object, but the course should NEVER head directly towards a curb nor grass within 25 feet, nor

should it have a turn within 25 feet of a curb or grass while heading towards the curb or grass.

D. The Safety Steward 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. It is up to the judgment of the SS whether the course design, surface, solid objects, and type of karts running present an unsafe mix. In some cases, the situation can be resolved by a course design change. CCSCC will sometimes not allow Karts even if the event is missing the hazards listed above for various safety related reasons.

E. A long straight (over 150 ft) should not terminate in an extremely sharp turn.

F. The inner and outer limits of turns and corners should be marked by cones; 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.

G. Cars on the course simultaneously shall not run in close proximity to each other. This almost always excludes crossovers unless they are very carefully designed. Special precautions must be taken if the event chair's course has a crossover in it. Extra course worker stations may be needed. It is usually best not to cross over the course if possible. The starter should be coached to minimize this possibility.

H. Each portion of the course shall be visible to at least one corner worker who can communicate through signals or by electronic means with the timing vehicle.

I. It is very important to take into consideration 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.

Competing cars should NOT be required to come to a complete stop immediately following the finish line. Instead they should be required to slow to a walking speed before returning to the grid or pits. A sufficient distance past the finish line must be available to safely slow any competing car from the highest possible speed attainable at the finish without locking brakes or wild maneuvering.

J. Portions of the course where significant braking is necessary shall not terminate at a point where participants, nonparticipants, 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.

- K. 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. The minimum viewing distance may not be less than 75 ft from the course edge in unprotected areas.
- L. Appropriate fire extinguishers, flags, and material for cleaning up fluid spills must be available.
- M. When Formula Junior (FJ) cars use the same course layout as all other classes, no car in the grid may be in motion when FJ karts are moving under their own power except when the last Kart of the run begins its run a single car may move to the starting line, but may not enter the course until the last kart exits the course.
- N. All corners shall be negotiable without reversing by any car participating in the event.
- O. The course shall be at least 15 feet wide and slalom markers or gates shall be at least 45 feet apart (about 18 paces).
- P. An autocross event shall be a test of driving skill, not memory.
- Q. The course shall be well marked with cones. The base of each cone shall be outlined to permit accurate replacement if displaced.
- R. Cars should leave a gate headed generally in the direction of the next gate.
- S. Tricky or confusing courses are a safety hazard. Since CCSCC runs multiple cars on the course at the same time, if the course is so confusing that someone might get lost, cars could approach each other and either have an accident or interfere with the safety of the event. Tricky or confusing courses should not be designed/approved.
- T. Use as few cones to delineate the course as possible.
- U. Sometimes an event chair has a “cute” or “Trick” idea about the course. Talk him out of using it. The entrants will hate it and it will confuse entrants, especially new ones, and if they get lost they are not safe.
- V. The course should mostly be made up of well delineated gates, offsets, slaloms, sweeping curves, and short straightaways. They should not be so tight that there is no ‘flow’ to the course.

Helpful Hints:

The key to being a successful safety steward is to be able to work with the event chair and others. There is no substitute for good people skills. There is no reason for an event to turn into a disagreement between the safety steward and the event chair. But the safety steward must make sure that the event is safe and he has the final say.

Sometimes the Safety Steward is approached by a well-meaning entrant who is concerned about the safety of the event. It is important that the Safety Steward listens carefully to any safety concern and checks it out. But once a course is set after being approved by the safety steward and suggestions from other safety stewards have been listened to, it is potentially too late for the entrant to request changes in the course. It is best to offer a complete refund to the complaining entrant and suggest that if he is not comfortable running this course, he shouldn't do so. But you should not postpone the start of the event because of the entrant's concerns. However, you should listen and make sure that his concerns are well taken care of. Often the entrant doesn't indicate his concerns until very late before the event. If you make a significant change in the course (for whatever reason) after the course is set, you will need to pre-run the course again, give a reasonable time for walkthroughs, and postpone the drivers' meeting until everything else has been taken care of. This could take up to an hour. However, if there are unforeseen safety issues, this must be done.

If there is a safety related problem:

1. Ask the event chair to stop the event until the problem is resolved. The event chair is required to stop the event when asked to by the SS. The event chair and SS should work together on solving any safety problems.
2. Announce to the entrants that the event is suspended temporarily.
3. If the SS's concern cannot be resolved or the event chair doesn't cooperate:
 - Call a meeting of all CCSCC autocross committee members and CCSCC board members present to discuss the problem. At this point, the SS and CCSCC autocross committee members / board members can still restart the event if the concerns of the SS are remedied. The SS has final say. After this point, the event is no longer restartable.
 - Announce the event is cancelled over the intercom and see that the course is torn down and all equipment is packed up and secured. Write a report about the problem for CCSCC board action. All entry fees will be refunded.
4. At any time during this process, the autocross / board committee can replace the SS with another licensed SS. However, this should be done only when there is some problem that is not safety related and the event chair will be replaced at the same time.

References:

2011 SCCA Solo Rules:

http://www.houscca.com/solo/courses/Course_Design_4-1-2.pdf

2011 Solo Technical Bulletins

<http://cms.scca.com/documents/2011%20Tech/2011%20Tech%20Bulletins.pdf>

2011 Stock Classifications

<http://cms.scca.com/documents/2011%20Tech/2011%20stock%20listings.pdf>

Rules Proposals for 2012

<http://cms.scca.com/documents/2011%20Tech/Rule%20Proposals%20for%202012.pdf>

Solo Course Design Manual:

http://www.houscca.com/solo/courses/Course_Design_4-1-2.pdf