

## Formula SAE<sup>®</sup>

### Flagging & Communications Guidelines for Corner Marshals

Experienced F&C Corner Marshals are needed to manage the dynamic events during the annual Formula SAE<sup>®</sup> competition. Following are guidelines and suggestions for insuring a safe, successful, and fun competition.

#### Organization:

- The Detroit SCCA Region recruits F&C Corner Workers to act as Corner Captains for the Friday afternoon Autocross Event and for the Saturday Endurance Event.
- Additionally, the Formula SAE organizing group recruits volunteers from local OEM and Supplier automotive companies to work corners for these on-track events. **Most of these volunteers are not experienced with race cars at all, much less F&C procedures, and will need to receive on-the-job training from the Corner Captains.**
- Each corner is typically manned by 1 or 2 Corner Captains and 6 to 8 volunteer workers.
- One Ambulance and two M.I.S. Safety Vehicles will be available to assist us with emergency or clean-up situations.
- Golf carts will also assist as tow vehicles to remove disabled cars.

#### Rules:

Corner Captains should be familiar with standard SCCA F&C procedures and guidelines as defined in the SCCA Flagging & Communications Manual (available at <http://MichiganTurnMarshals.org/training/Docs/2003 FC Manual MASTER PDF.pdf>)

Additionally, Captains should view a copy of the Formula SAE Rules (available on the FSAE website at <http://students.sae.org/competitions/formulaseries/rules/2009fsaerules.pdf>) to become familiar with how the dynamic events are conducted.

#### Suggested FSAE Rules sections to read:

D-1	Dynamic Events
D-3	Weather Conditions
D-7	Autocross Event
D-8	Endurance Event
D-9	Flags
D-14	Driving Rules
D-15	Definitions

#### F&C Manual sections:

VI.A	Marshal functions
VI.C	Normal Operations
VI.D	Emergency
VII.A	Comm procedures
VII.B	Emergency Comm
App A	Hand Signals

## Course Layout:

For both the Autocross and Endurance events, there are 5 to 7 corners laid out in a typical temporary parking-lot Autocross configuration with orange pylons and chalk lines defining the racing track.

Each corner will have the following equipment:

- 2-way Radio / Headset (Captain's responsibility)
- Fire Extinguisher
- Oil Dry / Broom
- Quick Jack (for moving disabled cars)
- set of Flags
- Extra Cones
- Drinking Water

Additionally the FSAE organizing committee will deliver drinks and munchies to the corner stations throughout the day.

As with any regular SCCA event, the Corner Captains are responsible for the station opening and closing procedures, and also for the management and coordination of their Corner Workers.

*This includes the following tasks:*

- Review personal experience, limitations, and medical restrictions.
- Designate an Assistant Captain.
- Go over the worker jobs and their locations along the track.
- Establish a worker rotation schedule.
- Review safety issues (crossing track, approaching and pushing cars, fire, etc).
- Teach basic hand signals and flag usage.
- Inform volunteers that using cameras & mobile phones is not allowed when track is hot.
- Identify restroom / port-a-potty locations.

## Specifics for the Friday Autocross Event:

- Is run like a typical SCCA Solo event (i.e. cars run against the clock).
- Corner Workers are safely positioned on the outside of the track to shag cones.
  
- One worker, typically the Captain, mans the radio.
- The SCCA Timing & Scoring Trailer acts as "Control" to receive calls for downed cones, missed slaloms, cars off course, and DNFs.
- The Course "Safety" Steward will handle other radio communications on the same channel dealing with disabled vehicles and/or emergency situations.
  
- Red flags are used to indicate that an incident has occurred and racing is halted. All cars on track at the time of a Red flag will get a re-run.
- Corner Captains need to exercise their best judgment to determine if a Red flag should be displayed and/or if a car is a DNF.
- We need to keep a safe spacing between cars, however we also need to keep Red flags to a minimum to keep the event running and on time.

## Specifics for the Saturday Endurance Event:

- Endurance is like no other event in SCCA!  
It is a combination of running an Autocross and a restricted race at the same time.
- Cars are grouped based on their timed performance during the Friday Autocross event:
  - 2<sup>nd</sup> fastest group will run first in the morning session
  - Fastest group will run immediately after lunch
  - Slowest group will run in the late afternoon
- The track will be configured with 6 corner stations + 1 Checker/Black Flag station + Start/Finish.
- All Corner Workers will be safely positioned on the outside of the track to shag cones.
- Additionally, Yellow and Blue Flaggers are positioned appropriately to signal to drivers.
- There is one Communicator per corner who will call in downed cones, missed slaloms, cars off course, missed passing, and cars disabled.
- Communications follows typical SCCA road racing radio protocols, with all calls going to/from "Control" (the Course Steward).
- A 2<sup>nd</sup> radio channel will be used for communications between EDS Timing and the Checker Flag station.
  - EDS will notify CF station approximately one lap in advance of the car's final lap.
  - Two workers should work in tandem; one on Comm & one waving the flag.
  - To ensure accurate communications, the station Communicator should always reply back to EDS with an acknowledgement.
- There will typically be 5-7 cars on the course.
- There will be 2 slaloms and 4 designated passing lanes along the course.
- Passing zones guidelines:
  - The Blue Flag is a command flag for this event.
  - Cars that are shown the blue flag MUST allow the car(s) following them to pass within the passing zone.
  - If driver ignores a blue-flag pass, Comm calls them in, and they will be penalized.
  - Passing is controlled by corner workers for entrance and exit blending.