

Policies and Procedures for Closed-Track Races

Starting Order

Teams draw for starting order during Team Check-In. The number drawn at check-in will be used as the starting order for the first day, along with the team's placement along pit row throughout the entire event. Pit row space will be numbered consecutively, starting with the space closest to Turn 1. Efforts will be made to locate teams with multiple cars next to each other.

Running Time

All teams will be released at a regular interval (nominally one minute) starting at 9:00am on each race day. Teams participating in the Classic Division may run for 3 hours in the morning and 3 hours in the afternoon. Teams participating in the Open and Advanced Divisions may run for 8 hours. The time starts when the team is released from the Start Line. For example, the third team will be released at 9:02am. If in the Classic Division, the team may run from 9:02am – 12:02pm and 2:02pm – 5:02pm. If in the Open or Advanced Divisions, the team may run from 9:02am – 5:02pm.

Time officially starts when the car is released onto the track, per the flagger's countdown. If a team is not ready at their time slot, time will start according to the official clock. The official race clock will be placed near the Pit Entrance for your convenience.

Only complete laps are counted towards the team's total. Laps are counted as complete once the front of the vehicle crosses the plane of the pit wall or crosses the start/finish line.

Horns and Passing

Per Rule 5.10.2, each solar car must have a horn producing at least 92 decibels and mounted as far to the front as possible. At scrutineering, all vehicles will be inspected with regard to this regulation.

While on the race track, solar cars wishing to pass must sound their horn to express their intent to the solar car being passed. This warns the solar car being passed to stay to the inside of the track. Solar cars being passed may not pass another vehicle until the faster solar car has completed the pass (no 3-wide passing). The pass is considered started upon indication of horn.

If there are complaints that the horn is not heard by solar cars being passed, a race official will cross to the Start/Finish line and raise two signs, one indicating the team's number, and another noting to honk the horn. The driver must then honk the horn for the race official to confirm that the horn is still operational. If the horn is shown to be malfunctioning, the solar car must exit the track to pit lane upon conclusion of the lap. The solar car may not be readmitted onto the track until an audible inspection is conducted by a race official. Solar cars with malfunctioning horns may not pass unless

clearance is given by race officials (e.g. to clear solar cars broken down or moving extremely slowly).

Radio Check

Teams must be in continual radio contact with their driver. If a team loses radio communication with their driver, the team or their judge must inform the scoring tent that they have lost radio communication. A race official will cross to the Start/Finish line and raise two signs, one indicating the team's number and another noting that the driver should radio back to their team. If radio communication is not established, the driver must exit the track to pit lane upon conclusion of the lap. The solar car may not be readmitted onto the track until a radio test is successfully conducted.

Driver Change Area

An area of the track side of the pit wall will be designated as the driver change area. This area is designed for teams to change their drivers without having to exit and re-enter the track. The area may also be used for other housekeeping tasks, such as providing additional water to the driver, changing radios and/or batteries, etc. Repairs may be done in the driver change area only if it takes 2 minutes or less and is cleared by the team's judge. If a repair is started in the driver change area and it takes more than 2 minutes, the team will be asked to push their solar car past the pit wall for further repairs.

Only two cars may occupy the driver change area at one time. Teams requesting use of the driver change area must clear the request with the scoring tent to ensure that the space is available for use.

Once the solar car enters the driver change area, the safety officer must cross the pit wall, move two paces behind the solar car, and flag. Once the safety officer is in place, up to 2 other team members may cross the pit wall and complete the errand and/or repair. The driver being replaced may also exit the car at this time. Once the driver change and other tasks are complete, the non-driving team members must cross back over the pit wall. After all members are safely on the garage side of the pit wall, the safety officer may stop flagging and cross the pit wall. When all members have safely returned, and no vehicles are approaching in pit lane (or when clearance is given by the supervising judge), the driver is free to continue down the pit lane onto the main track area.

Caution

Cautions are issued over the PA and radios by the scoring tent or PA announcer. Cautions are applied to specific areas of the track (turn 1, 2, 3, 4, front straightway, and/or rear straightway). When cautions are issued, no passing may occur in the applicable areas until the caution is cleared by the scoring tent. Cautions are typically issued when a solar car has broken down on the track.

Breakdowns

A solar car may break down on the track during the race session. When a breakdown occurs, the team will notify the judge that their vehicle has broken down, and that they will retrieve their trailer. The judge accompanies the team to the trailer and sits in the front passenger seat of the support vehicle. The judge should then notify the scoring tent that the support vehicle is ready to retrieve the broken down vehicle. When ready, the scoring tent will ask the team to move their support vehicle to the support vehicle entrance and stop at the pit wall. Once the pit lane is clear and the announcement made over the PA, a race official will clear the support vehicle to enter the track. When on the track, flashing yellow lights shall be used if equipped.

The support vehicle must yield to solar car traffic when entering the track. Support vehicles may pass solar cars, using the prescribed method used by solar cars. Solar cars may not pass support vehicles, except when they are stopped in position on the track. Once the support vehicle is in place in front of the broken down solar car, the safety officer must set up cones behind their solar car to warn vehicles of the obstruction. The safety officer must stand at the end of the line of cones waving a safety flag. Once the safety officer is in place, other team members (upon clearance from the judge) may exit the support vehicle and assist in loading the solar car onto the trailer. The driver may also help at this time. Once the solar car is secured onto the trailer, all team members (other than the safety officer, must return back to the support vehicle. When all team members are in the support vehicle, the team shall signal to the safety officer to return to the vehicle. The support vehicle may use the same entrance to exit the track.

Pit Lane / Garage Area Speed Limit

Pit lane is defined as the part of the track on the track side of the pit wall. Solar cars must drive slowly in pit lane at all times. A penalty may be issued if the solar car speeds down pit lane.

No passing is allowed in pit lane unless cleared by the team judge. This should be a rare situation where the slower car is moving very slowly towards the pit exit, and a faster solar car is completing the lap before exiting the track. In this scenario, the slower solar car shall drive next to the pit wall, and the faster solar car shall drive in the outer lane. A horn indication shall be used, similar to passing procedures on the track.

The garage area is defined as the area on the garage side of pit wall and the garage itself. Solar cars in this area must be traveling at walking speed or less.

Spotters

One team member from each team may be designated as a spotter and watch the race from the stands. This allows the spotter to help notify the driver of obstructions, upcoming vehicles, and imminent passes. Spotters should start assembling at the scoring tent no later than 15 minutes before each race session. Spotters will be escorted across the track 10 minutes before the first solar car is released in the session.

They must remain until the session is complete. Spotters should carry an adequate supply of liquids with them to hydrate them during the whole race session.

Routine Penalties during Closed-Track Races

- (1) The Texas Motor Speedway requires, by contract, that no one sit or stand on the pit wall. Standing or sitting on the pit row wall will result in a one lap penalty.
- (2) All persons taking part in the Solar Car Challenge must wear a hat when they are outside the garage. We recommend a wide-brim hat to provide much needed protection for the ears and neck in 107 degree conditions. Not wearing a hat outside the garage will result in a one lap penalty.
- (3) Solar cars driving in the garage area, as defined above, must be traveling at walking speed or less. Traveling too fast will result in an appropriate penalty.

Sportsmanlike Conduct

Race officials expect each team to conduct themselves in a sportsmanlike manner. Teams should be courteous to one another and respect the privacy of each team's private communications. As such, any teams found intentionally eavesdropping on another team's radio communications shall be assessed an unsportsmanlike conduct penalty, per the judge's discretion. Other unsportsmanlike conduct may be similarly penalized, per Rule 27.8

Communications with Race Officials

Teams are encouraged to talk with race officials on a regular basis. If a team desires to take a particular action, please inform the team judge of your intentions. The judge is your official liaison with the race organization and is empowered to provide decisions on behalf of the race. If there is an issue that a judge cannot resolve, teams can call for clarification to another race official, such as the Technical Director or Assistant Race Director.

Water Station Responsibility

The race provides water to teams through the five days of the event (July 17-21). This year, we are asking each team to volunteer one team member to help with this responsibility during one of the racing periods. These volunteers, working with race staff, will insure that everyone has water and other refreshments.

Identification of Participants

The Race will provide each race participant (students, chaperones, teachers) with an identifying wrist band at Team Check-in. This makes it easier for Race Staff to provide better security during the event. Participants must wear the wristband for access to the garage, and for race-sponsored meals.

Drivers for each team will have a special wristband identifying them as "qualified" to drive in the race. This implies that the driver has a State Driver's License, and has passed Scrutineering checks. This driver wristband will be worn in lieu of the general participant wristband.