



**Flagging and Communications
Training and Reference Manual**

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Introduction

Welcome to the Lake Erie Communications Family

We're glad you joined our community of dedicated, professional corner workers! Motor sports is exciting and you are now an important part of the sport!

Lake Erie Communications (LEC) was formed in 1962 when the Mid-Ohio course was built. Members of Race Communications Association (RCA) from Watkins Glen assisted the "father" of LEC, Bill Benham, in training a group of people in the basics of Flagging and Communication (F&C). Bill developed LEC into an important and integral part of motor sports in Ohio. After Bill's untimely death in 1977, Sam Oram took the helm and was the patriarch of LEC until November 1995.

Sam's dedication to the sport and to LEC cannot be matched, and he is sorely missed. Today, a committee of three continues LEC activities in Sam's memory.

LEC members volunteer their time to ensure safe racing is possible at Mid-Ohio and Nelson Ledges. We primarily work Sports Car Club of America (SCCA) events, but we are also committed to events presented by other motor sports groups, such as ALMS, GrandAm, TransAm, AMA, and SVRA.

This manual provides the information necessary to train you to perform corner duties in a professional and safe manner. The instructions follow the guidelines of the SCCA General Competition Rules (GCRs).

The information in this manual is an accumulation of time-proven methods of safe and effective race activities. Lake Erie Communications thanks all members (past, present, and future) who contributed to the information contained in this publication. All suggestions for improvement are requested and appreciated.

Licensing

Upon completion of the LEC school, you will receive a Student Log Book. While you are on your log book (your first six days on course), make sure you give your book to the Corner Captain as soon as you get to the corner. Your Corner Captain will guide you to help you progress in your F&C skills. At the end of the day, the Corner Captain will record your progress in your logbook.

Remember, we're here to help you. Do not be afraid to ask questions. Listen to and learn from your Corner Captain(s).

SCCA will send you your Regional F&C license, which you must show when you register for each event. You must work 24 days (12 events) before you can upgrade to a Divisional license, and another 32 days (16 events) before going to your National license.

Registration

You must register for each race event. When you first arrive at the track, you must show your credentials, sign insurance waivers, and receive your entry sticker or wristband. Registration hours are always posted in *The Lake Erie Communicator*, the monthly publication that lists events and pertinent times. Try to get to the track in time to register well before the morning assignment meeting.

Note: Always have your SCCA membership card, license, and photo ID ready for registration.

Race Personnel

Race Event Officials

Each race requires many people for success. The following chart lists each position and describes the responsibilities of the person in the position.

Position	Duties/Responsibilities
Race Chairman	Organization of the event.
Chief Registrar	Accept, certify and process all entries and credentials for drivers, crew and officials, as well as post all required signs in the registration area.
Chief Technical and Safety Inspector (Scrutineer)	Inspect competition cars and driver equipment to ensure the items comply with the GCR, Specification Books and Supplementary Regulations.
Chief of Grid	Coordinate false grid activity, including: <ul data-bbox="472 804 1485 972" style="list-style-type: none">• checkup on drivers for proper equipment (helmet, gloves, seat belts, window net) to ensure the competitor is ready to enter the race course;• place cars in proper qualifying order in preparation for the start of a race;• inform drivers of time remaining before the start of a session.
Pit Marshall	Maintain order and safety in pit lane, including: <ul data-bbox="472 1056 1463 1171" style="list-style-type: none">• divide competitors into two rows for the pace lap of a race;• observe cars when they come into the pits during a session and ensure safety of driver and crew.
Chief Starter	Gives directions to the competitors by flag, hand and body signals, as prescribed in the GCR for starting, suspending or ending a race and as directed by the Chief Steward.
Chief Course Marshal	Final preparation and maintenance of the course and other related duties assigned by the Chief Steward, such as disabled competition car pickup during or after a session.
Chief Timer and Scorer	Provide accurate timing and scoring of the event in accordance with the GCR.
Stewards of the Meet (SOMs)	Enforce compliance with the GCR and Supplementary Regulations; act in a judicial capacity.
Chairman of the SOM	Coordinates SOM committee activity.
Chief Steward	Oversees general conduct of the event in accordance with the GCR and the Supplementary Regulations.
Assistant Chief Steward - Safety	Responsible for general safety of the event, including checking competition vehicles when brought in for mechanical problems.

Position	Duties/Responsibilities
Chief Race Medical Official	Staff and equip the medical organization in accordance with the Medical and Fire Safety regulations.
Chief Sound Control Judge	Monitor racing vehicles at sound-controlled events in accordance with the GCR and the SCCA <i>Sound Control Manual</i> .
Chief of Communications	Operate Race Control, including <ul style="list-style-type: none">• set up and operate the communication system;• maintain liaison between the race SOMs and all flag stations;• inform SOMs of course and race conditions, including location of disabled competition cars, emergency vehicles and so forth, to maintain the safe operation of the race course.
Chief of F&C/Flag Marshal	Recruit and train F&C personnel and assist in assigning workers to corner stations at each event.

Who's Who in Race Control

Race Control is the command center of each event. The corner stations are the eyes and ears of Race Control. When you relay information to Control, the information is recorded by hand in the race log and officials make decisions based on the information you give over the phone network. The following chart lists the people in Control and what they do.

Position	Duties/Responsibilities
Control	Operate Race Control, including <ul style="list-style-type: none">• monitor and respond to phone traffic in an orderly, professional manner;• pass information to the Operating Steward;• follow instructions from the Operating Steward and pass same to corner stations.
Operating Steward	Run the session, including <ul style="list-style-type: none">• determine when to begin the session;• make decisions about necessary action for clearing incidents;• determine when to end the session.
Copy/Logger	Keep accurate log of all phone communication between Control and the corner stations.

Race Personnel

Corner Station Positions

Ideally, each corner has a minimum of three people. However, you may sometimes find yourself wearing more than one hat at a time when worker numbers are low. The following chart describes each position at the corners, including “luxury” positions.

Position	Duties/Responsibilities
Corner Captain	Supervise activity on the corner, including <ul style="list-style-type: none">• assign positions and rotation to corner workers;• make decisions regarding needs during an incident;• ensure safety at all times;• mentor new workers..
Phone Person	Monitor and operate the communication link with Race Control and relay to corner captain course of action, as necessary.
Yellow Flagger	Monitor race conditions as competitors go through and leave the corner, including <ul style="list-style-type: none">• face counter-race (back to traffic) to watch for incidents between the corner and the next corner station;• inform drivers of incidents by turning around to face the competitors, and holding or waving the yellow flag.
Blue Flagger	Monitor race conditions as competitors approach the corner, including <ul style="list-style-type: none">• communicate with competitors by displaying flags as required (except the yellow flag);• verbally or physically move the Yellow Flagger if personal safety requires it;• leave station to assist disabled cars as necessary.
Point/Safety	Monitor race conditions from an area away from the station that is anticipated as a “trouble” spot to assist disabled cars as necessary. Note: Not all stations require a point.

Our Purpose

LEC corner workers supply information to competition drivers during practice, qualifying, and races using flag signals, lights, or other signals. Each flag communicates information about course or race conditions that can affect the safety of drivers or workers.

Corner workers assist drivers of disabled or damaged vehicles to ensure complete safety.

Corner workers maintain a clear course, ready for competition cars.

LEC forwards information to the Stewards in charge of the event. Any situation that requires a decision and action to ensure safety, good course conditions, or mechanical defects of competition cars are given to the Stewards. LEC Control personnel pass instructions from the Stewards to the corner workers, emergency vehicle personnel, medical personnel, and fire personnel.

Characteristics of a Quality Corner Worker

A quality F&C participant has the following traits:

Reliability

- Be on time. *Five minutes early is ten minutes late.*
- Attend all events you said you would. Assignments are determined from the returned confirmation cards and e-mail responses. If you must cancel, be sure to call immediately.
- Follow your Captain's instructions. If you feel your personal safety is threatened by an instruction, talk to the F&C Chief.

Common sense

- Use good judgment.
- Think logically.

Knowledgeable

- Become familiar with the information provided in this manual.
- Work as many events as possible. The more you work, the more experienced you will become.

Discipline

- Accept assignments as given.
- Follow instructions without question unless your personal safety is threatened.

Teamwork

- Work with others on your corner, which is essential to a safe race day.
- Don't be a "hero."
- Cooperate with other workers, which ensures your safety during the day.

The "Unofficial" Uniform

While there is no "official" uniform for corner workers, SCCA recommends wearing all white, such as coveralls or slacks and a long-sleeved shirt. White reflects sunlight, so you will remain cooler. Long sleeves protect your arms from flying debris and fire.

Many people in LEC also embroider the back of their garment with "LAKE ERIE COMMUNICATIONS" in navy blue. Also, each person who completes the LEC training, receives an LEC, which we recommend you sew onto the left sleeve of your "whites." This attire does present a professional image of the group. A clean, neat appearance also projects a professional image.

General Safety Rules

- **Your safety comes first.**
 - Your safety comes above all other considerations. If you feel your safety is threatened, discuss your concern with your Corner Captain and move away from the danger.
 - Your second priority is the safety of your coworkers on the corner station. Without putting yourself in danger, move your fellow workers to safety when necessary.
 - Your third priority is the safety of a driver. Remove the driver from danger whenever possible.
- **Always stand when cars are on course.**
 - Sitting on guardrails, in chairs, or anywhere within the hot area of the station is strictly prohibited.
 - Make sure all visitors, such as drivers or stewards, are also standing when the track is "hot."
- **Never turn your back to oncoming traffic.**
 - When you go to a disabled or damaged car, keep away from the track surface, if possible.
 - Keep an eye on on-coming traffic.
 - When you get to the car, stand on the side of the car that is AWAY from the track. In other words, keep the car between you and on-coming traffic.
 - Use every available precaution when you need to move a car. Don't be afraid to ask for more assistance.
- **Never cross the track without your captain's permission, and always wait for a point.**
- **Always take a fire bottle with you to a disabled vehicle.**
- **Have a plan of action before you get to the car.**
- **Keep calm. Don't panic.**
- **Never take a helmet off a driver.**
- **Never move an injured driver.**

Getting to the Corner

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You can get to some stations at both tracks by driving on the track surface. The remaining stations require you to drive or walk through the infield or on an access road. The following lists each station and how to get there.

Nelson Ledges

Corner #	Access By	Directions
2	Infield	Follow dirt road (just after the infield side of the bridge) to station. Park outside the fence.
3	Infield	Follow dirt road to station. Park outside the fence.
4	Infield	Follow dirt road to station. Park outside the fence.
6	Track	Drive to station on track. Park behind the station
7	Track	Drive to station on track. Park behind the station as close to the trees as possible.
9	Track	Drive to station on track. Park before the station as close to the trees as possible.
10	Track	Drive to the station on track. Park in the break in the trees before the station.
11	Infield	Follow the dirt road heading toward station 4; follow around to station 11. Park outside the fence and tires.
12	Access Road	Drive over the bridge and follow the access road toward the front gate. Park outside the fence across from Registration and the restrooms.
13	Infield	Leave your car in the paddock area. Walk around pit entrance to the station.

Getting to the Corner

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Mid-Ohio

Corner #	Access By	Directions
1/1A	Infield	Drive over the bridge to the infield. Go through the gate at the bottom of the bridge (right side). Park close to the gate. (You will walk to 1A in rotation.)
2	Access road	Drive up the access road toward Registration. Park in the grass outside the fence near the break for the station.
3	Access road	Drive up the access road toward Registration. Park in the grass outside the fence near the break for the station at the start of the keyhole.
4	Access road	Drive up the access road toward Registration. Bear right before the track exit and continue around the keyhole. Follow the road to station. Park well back from the station.
5	Track (for regional or national events)	Enter the track at pit exit. Follow around to station. Park inside the station between the guardrails. Park away from any safety vehicles in the station.
	Access road (for pro events)	Drive up the access road toward Registration. Bear right before the track exit and continue around the keyhole. Follow the road until it ends. Park away from the fence. Walk across the track to station.
7	Track	Enter the track at pit exit. Follow around to station and beyond to break in wall. Park behind the wall and near the station.
8	Track	Enter the track at pit exit. Follow around to station. Park inside the station between the guardrails. Park away from any safety vehicles in the station.
9	Infield	Drive over the bridge. Park near one of the concession stands. Walk down through the field to the station.
10	Infield	Drive over the bridge and follow the access road to the end. Drive through the grass to the left of the road to the station. Park outside the fence.
11	Infield	Drive over the bridge and follow the access road to the end. Drive through the grass to the right of the road to the station. Park outside the fence.
13	Access road	Follow the road from the LEC area to the right of the Honda pavillion. Park at the top of the hill. Walk down to station.
14	Access road	Follow the road from LEC area to the right of the Honda pavilion. Park near the hill. Walk over the hill to station.
15	Access road	Follow the road from LEC area to the right of the Honda pavilion. Park outside the fence at the break near the station.
16	Track	Leave your car in the LEC area. Walk down false grid and across the track to station.

What to Wear

You must wear full coverage clothing (long sleeve, fire retardant) when working a corner. White cotton is recommended. White distinguishes you as a corner worker and provides a background for clear visibility of the flags.

Wear sturdy shoes or boots. Make sure your footwear provides good traction on all surfaces, good ankle support, full protection, and comfort for standing on your feet all day. Many corner workers wear combat boots, hiking boots, or work boots with steel toes.

A hat protects you from the sun and other elements (such as rain).

Do not wear jewelry, as it can get caught on racecar parts.

Equipment to Bring

You need the following equipment:

- Cutting tool (such as a seat belt tool), which is kept in a protective holder, to cut seat belts or window nets in an emergency
- Fire retardant, orange gloves for signaling and to protect your hands in an emergency
- Whistle

Note: If you wear your whistle on a lanyard, make sure the lanyard has a break-away release to avoid entanglement in the moving parts of race cars.

The following optional equipment is also helpful:

- Ear protection (earplugs or muffs)
- Rope (used to pull open wheeled cars to a safe position)
- Personal fire extinguisher
- Paper and pen or pencil
- Comfortable chair
- Extra warm clothing
- Rain gear, preferably in white or a neutral color, including rain boots
- Other comfort items, such as insect repellent, sun screen, sun glasses, and a cooler for food and liquids

Equipment Provided by the Track or Region

The track or region supply the following corner equipment:

- Communications device

Note: Both Nelson Ledges and Mid-Ohio use landline phones. Each station has a headset, cord, and activation box.

- Flags (2 yellows, 1 blue, 1 yellow/red stripe, 1 white, 1 green, 1 black, and 1 red)

Note: The Black Flag stations also get the “meatball” and checker flags, as well as a number board.

- Arrow boards to direct traffic
- Fire extinguishers (generally two 10 pound dry chemical)
- Pry bar to pry metal away from a tire or to open a car door
- Oil dry to soak up oil spills
- Corner packets, which include incident report forms, pass under yellow forms, note paper, pens/pencils, corner personnel roster, evaluation forms, and other pertinent information
- Push broom

Phone Check-In

The first person to arrive at the station should get the phones out, connect them to the box, and check in with Control. This ensures that nothing is wrong with the landline equipment.

Captain's Meeting

At the beginning of each race day, the station captain holds a brief meeting. The purpose of the meeting is to

- Introduce all workers
- Sign the roster
- Set up the rotation
- Review standard hand signals
- Point out unique corner problems
- Discuss incident operations and response plan for the unexpected
- Find out worker experience
- Learn about any medical conditions

Note: If you are on your logbook, give it to the captain. Let the captain know what you feel you need help with. Don't be afraid to ask questions. The captain will assess your work during the day and write down in your logbook your strong points and areas that you need to work on.

Equipment Setup

Get the equipment out of the track box when you get to the station.

- Each station has two fire bottles.

Keep one at the station within easy reach, but in a place where you won't trip over it.

Place the second fire bottle at a strategic point along the track where the bottle might be useful. Some corners have natural sites for bottle placement, such as a break in the tire wall. The break provides a safe access to the track. Putting a bottle at the break avoids carrying a heavy bottle all the way from the station.

- The bucket(s) of oil dry should stay at the station. If a car leaves fluid on the track, especially oil, you will need the oil dry to soak up the liquid.
- If the broom is separated, connect the brush to the handle. Keep the broom at the station completely out of the way to avoid injury. You will use the broom to spread oil dry as necessary or to sweep debris off the track.
- Unroll the blue, yellow, and surface flags. Put them at the spot where you will display the flags.

Keep the remaining flags rolled up, but close at hand in case they are needed.

- Put your personal gear in a place that is not in the way of running the station.

Keep your gear away from any area where spectators can get to it. We're always busy and can't keep watch over our own belongings.

Check the Track

Take a walk on the course to check your area of responsibility for debris. Remove any debris, such as stones or grass, before the first session begins. Between each session, the Captain will send people out to check the track again.

Worker Rotation

The Captain decides the rotation on the corner. Sometimes, when stations are wells taffed, the Captain is not included in the rotation. The Captain's responsibility is similar to a supervisor -- make sure the corner runs effectively and efficiently.

The Captain will set up the rotation so everyone works each position at least once during the day. Many Captains use the Phones-Yellow-Blue-Safety (P-Y-B-S) format. For each session, you move to the next position in the P-Y-B-S rotation. The following illustrates this rotation scheme with four workers during four sessions:

	Session 1	Session 2	Session 3	Session 4
Phones	Dave	Judy	John	Sue
Yellow	Sue	Dave	Judy	John
Blue	John	Sue	Dave	Judy
Safety/Point	Judy	John	Sue	Dave

Note: If you have special needs or problems, tell your Captain. The Captain might need to alter the rotation to accommodate your needs.

For example, if for some reason you can't run, such as from an injury, the Captain might decide to substitute another person on your rotation into the Safety/Point position.

Closing Down the Station

At the end of each race day, all the equipment must be properly put away. Do not start closing down the station until Control releases you for the day.

- Return the track equipment (fire bottles, broom, oil dry) to the box.
- Unplug the phones from the box. Neatly roll up the cord (at Mid-Ohio, use the orange carrier).
Mid-Ohio: Put the headset and cord in the separate phone box. Lock the box.
Nelson Ledges: Put the cord, box, and headset in the plastic container. Put the container in the track box on Saturday; bring the phone container in with the flags and packet on Sunday.
- Roll up each flag. At Mid-Ohio, roll all the flags together in the green flag and secure it with the rubber band(s). At Nelson Ledges, put each flag into the denim bag.
- Make sure all track equipment is in the box and all personal gear is out of the box. Lock it.
- Return the flags and corner packet to the LEC area at Mid-Ohio and to the tech shed at Nelson Ledges.

Course Check

Before each session, Control asks for a course check. The phone person responds, in station order, by

- standing up,
- checking the track, and
- saying, "<station #> clear."

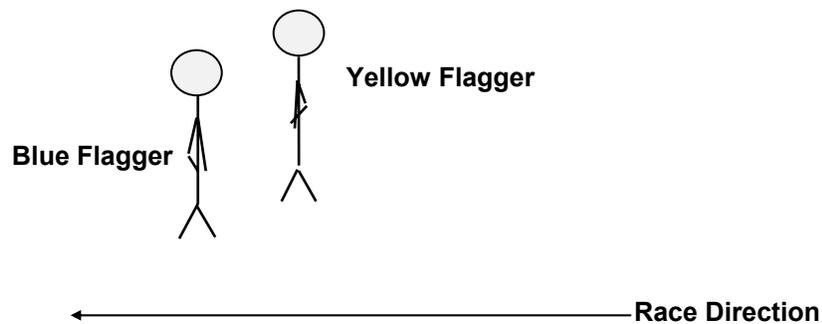
Note: Phone procedures for course check are detailed on page 26.

The phone person should **always** pay attention to what is going on over the landline net. **always** be prompt with your course clearance and **always** respond immediately when Control calls you.

Worker Positions

When cars are on course, the **blue flagger** must always face oncoming traffic. The **yellow flagger** must always face departing traffic.

At most corners, the flaggers stand face-to-face with the yellow flagger a couple of steps to the inside of the corner.



This positioning lets the blue flagger display the blue flag without obstruction. If an incident occurs, this positioning allows space for the yellow flagger to turn around to face traffic and display the yellow flag to competitors. The Blue Flagger can step out of the way and check the incident in order to assess needed action.

The flaggers should **always** position themselves in a protected area that can stop a car traveling at race speed or out of control, such as behind a barrier.

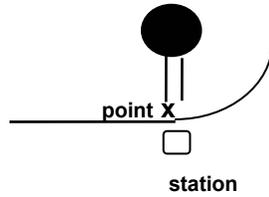
The **phone person** must be in a position within range of the flaggers, but in a way that he or she can move quickly when an out-of-control car comes within range of the station. This lets the phone person relay information to the flaggers.

Note: Some stations, such as 11 at Mid-Ohio, do not allow the Phone Person to get close to the flaggers. Make sure you know your hand signals (beginning on page 31).

The **safety/point** position depends on the corner configuration. The following are only recommendations for the corners that have point positions at Nelson Ledges and Mid-Ohio.

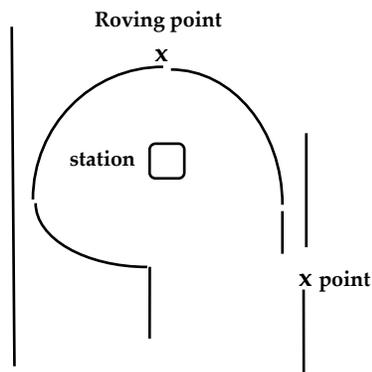
Nelson Ledges

Station 4: Across track, atop hill under the tree.

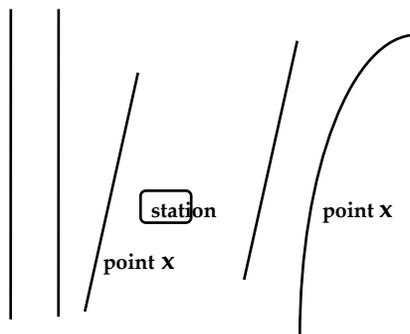


Mid-Ohio

Station 3: - Across track in the break at the entrance to the corner.
- Across track in the break at the exit of the corner.

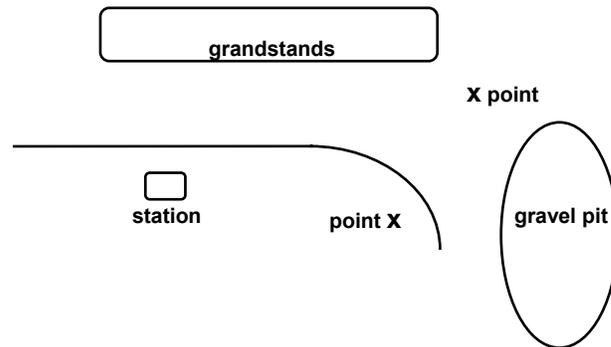


Station 5: - Within the station behind the guardrail at the exit of turn 1.
- Across track, behind the concrete under the Starter's stand.

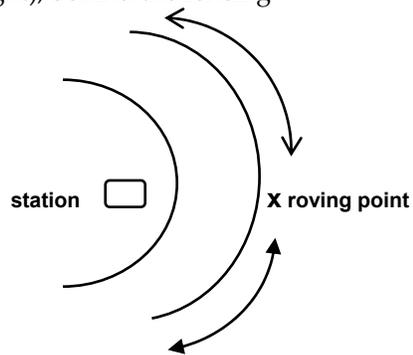


Working the Corner

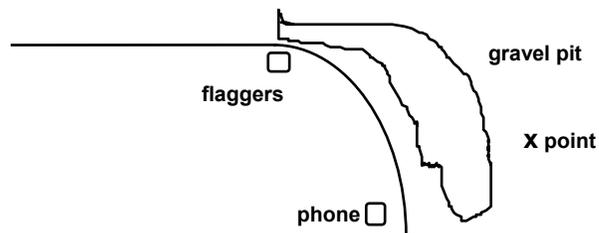
Station 7: Across track in the break after the grandstands.



Station 8: Across track (driver's right), behind the fencing



Station 11: Across track in the break halfway down the gravel pit.



CAPTAIN

- Supervise corner operations.
- Help workers with their performance.
- Make decisions when an incident occurs and direct workers to clear the incident.
- Release emergency equipment as directed by Control.
- Advise Control of corner operations and any unusual situations.
- Use hand signals to communicate information to workers on point or over long distances.
- Evaluate worker performance.

BLUE FLAGGER

- Keep eyes on oncoming traffic.
- Warn yellow flagger of impending danger, such as a car coming towards the station. As necessary in such situations, do the following:
 - ⇒ Blow whistle.
 - ⇒ Push or pull the yellow flagger to safety.
- Display the blue flag to competitors when faster cars approach slower cars.
- Display other flags (surface, white, black, red) as instructed by your captain or phone person, or as course conditions warrant.
- Respond to disabled cars, as necessary (see page 19).

YELLOW FLAGGER

- Display the yellow flag properly (standing for a car off track or waving for a car on track) for any incident within the corner's area of responsibility.
- Display the double yellow flags for the first lap of practice sessions and during full course yellow conditions as instructed by Control.

PHONE PERSON

- Relay all instructions from Control to the captain and all station personnel.
- Inform station personnel about incidents at other stations, as this information could affect your station.
- Inform Control of changing track conditions.
- Inform Control of competition car mechanical problems.
- Inform Control of metal-to-metal contact.
- Report incident information to Control.
- Keep Control informed about incident cleanup progress.

SAFETY/POINT

- Observe the course and cars in both directions.
- Respond to disabled cars on your side of the course, as needed.
- Use hand signals to communicate information to workers at the corner station.

Responding to Cars

When a vehicle goes off course, or is involved in an on-track incident, you might need to respond to help get the car moving again, help the driver get out, or put out a fire. Generally, only one person goes to a vehicle. If necessary, the captain will send a second person upon a hand signal request from the first responder for help.

When you respond to a car, you must remember three things:

- Take a fire bottle with you.
- Have a plan of action before you get to the car.
 - Your Captain will describe different scenarios and the possible plan of action.
 - Your Captain will explain when and when not to go to a disabled car.
- Make sure you are safe from the time you leave the station until you return to it.
 - To ensure you are safe going to the disabled car, choose a path either behind barriers or very close the barrier on the hot side of the track. If you are on the hot side of the traffic, constantly keep an eye on the oncoming traffic. This might mean moving backwards at times.
 - To ensure you are safe, always position yourself on the “safe side” of the car. This is the side **away** from oncoming traffic. The car is your protection.

In other words, **think before you leap**. Remain calm and do your job with confidence.

When you get to the car, do the following:

1. Make contact with the driver to ensure he or she is okay.

Note: If the driver is unconscious or seriously injured, signal for an “ambulance now.” Do not attempt to remove the driver from the car **unless** there is a fire. **Never** attempt to remove a driver’s helmet.

2. Make sure there is no fire.

Note: If there is a fire, get the driver out of the car immediately. Use your fire extinguishers to put out the car. If you cannot extinguish the fire, signal for a “fire truck now.”

3. When you determine that the driver is okay, there is no fire, and that the car is not going to move on its own, get the driver out of the car and to a safe location.

Note: If the car is in an unsafe location, try to move the car to a safe place. If you cannot move the car without assistance, signal for a wrecker or rope tow “now,” whichever is appropriate.

4. If necessary, remove debris from the track when it is safe to do so. If necessary, get a point from your station.

5. Signal to your station what equipment is needed to move the car (wrecker, rope tow, tilt bed) and whether it is needed “now” or at the end of the session.

Note: If you need the vehicle moved “now,” remain with the car until the equipment arrives to assist the course marshal.

6. Return to the station at the earliest time of safety.

Attending to the Driver

When a driver gets out of the car, keep an eye on him or her.

- The driver might be disoriented after a hard impact. Ask the driver to sit or lie down, and signal for an ambulance “now.”
- Watch for heat exhaustion on hot days. Signs to look for are
 - difficulty holding his or her head up,
 - profuse sweating,
 - inability to walk, and
 - physical illness.

Give the driver fluids, and apply cold towels to his or her neck and face.

When the driver is injured and remains in the car, do the following:

- Signal for an ambulance “now.”
- Talk to the driver to keep him or her calm. Explain that help is on the way.
- Ask the driver if he or she has any neck pain. If so, get into a position that lets you support the driver’s head with your hands. Hold the driver’s head until an EMT relieves you.

Note: This might require getting into the car.

- If the driver has a wound with severe bleeding, use a clean cloth (if possible) or your glove to apply pressure directly over the wound until an EMT relieves you.

End of Session Cleanup

If you left a car for pickup at the end of the session, begin preparations once the track is cold.

- Return to the car with the driver.
- If the pickup is by a rope tow, tell the driver to
 - put on his or her helmet and gloves,
 - get into the car, and
 - buckle up.
- When the emergency vehicle arrives, assist the course marshal to hook up the car.

What Each Flag Means

Flags communicate information to the drivers on course. The meaning of each flag depends on the color and the way in which you display it. Display all flags overhead, with exaggerated motion to gain drivers' attentions.

The following table identifies each flag, describes the meaning of the communication, and when to use the flag. The TIPS that follow each flag description offer helpful information for proper use of the flag.

Color	Status	Meaning for Drivers	Use
Blue 	Stationary	<ul style="list-style-type: none"> Check your mirrors Faster traffic approaching you 	When faster cars come up behind slower cars
Blue 	Rocking	<ul style="list-style-type: none"> Check your mirrors Faster traffic approaching you Expect to be passed 	When cars considerably faster approach a slower car, such as when the leaders come up to back markers
 TIPS: <ol style="list-style-type: none"> In general, do not show the blue flag during the first lap of a race. Do not overuse the blue flag. When you see two or more cars running together for several laps, do not show them the blue. They are racing and are quite aware that the cars are behind them. If more than one faster car approaches a slower one, hold out your fingers to indicate the number of faster cars coming up behind the slower car. During the pace lap of the race, memorize the first five cars and the last five cars. This helps you recognize when the leaders approach the back markers. 			
Yellow 	Stationary	<ul style="list-style-type: none"> Disabled car off course Maintain control of the car Do not pass between the flag and the incident or the next station, whichever comes first 	When a car drives or spins off the racing surface onto the grass or runoff area
Yellow 	Waving	<ul style="list-style-type: none"> Car stopped on the track Maintain control of the car Do not pass between the flag and the incident Heads up – you might need to alter your line 	When a car stops on the track (for any reason)

Color	Status	Meaning for Drivers	Use
Yellow 	Double	<ul style="list-style-type: none"> The whole course is in a yellow condition Do not pass Pace car might be (or might not be) on course 	When Control calls for a full course yellow, including pace laps
 TIPS: <ul style="list-style-type: none"> ❶ Snap the flag into position as soon as a car goes off course. This helps the drivers notice the flag immediately. ❷ If a car on course is in an extremely dangerous position, use your free arm to slow down the oncoming traffic, and ask for a backup yellow at the previous station. <p>Note: At Mid-Ohio, use the arrow board to tell drivers which side of the track to use. At other tracks, use your free arm to indicate which way to go.</p> ❸ Do not look back at the incident. Keep your eyes on the oncoming cars. Depend on your Captain or Blue Flagger to let you know when you can drop the flag.			
Yellow and Red Stripes (surface flag) 	Stationary	<ul style="list-style-type: none"> Debris or fluids on track Track surface changed 	<ul style="list-style-type: none"> When a car dumps oil or another fluid on the track When it begins to rain When you have standing water at your station When car parts are on track When a car leaves grass or mud on the track after re-entering.
White 	Stationary	<ul style="list-style-type: none"> Slow moving cars ahead Emergency vehicles ahead 	<ul style="list-style-type: none"> When a competition car slows below race speed When an emergency vehicle is on course, such as a wrecker, rope tow, tilt bed, ambulance, or fire truck
 TIPS: <ul style="list-style-type: none"> ➤ For emergency vehicles, the white flag is shown as the vehicle passes the station and remains up until the vehicle has reached two stations past your station. For example, if you are at Station 2, show the white flag until the vehicle has reached Station 4. <p>When the emergency vehicle reaches the incident, the white flags remain up until the vehicle stops or leaves the racing surface. Once the vehicle is in the runoff area, drop the white flags; the station with the incident flags the incident with the appropriate yellow flag condition. When the emergency vehicle returns to the track surface, either</p>			

with the car or without it, show the white flag two stations back again.

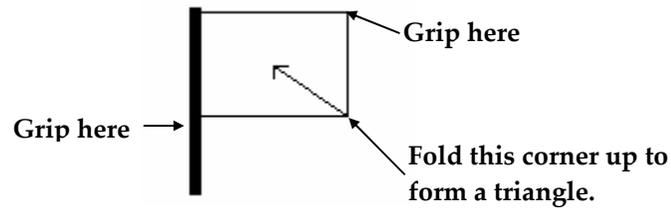
Color	Status	Meaning for Drivers	Use
Black with orange circle (mechanical or meatball flag) 	Stationary	<ul style="list-style-type: none"> • Something is wrong with the car • Go to pit lane immediately 	When Control asks for a “meatball” on a particular car
 TIPS: <ul style="list-style-type: none"> ➤ The “meatball” flag is shown only at the Black Flag station (station 10 at Nelson Ledges and station 14 at Mid-Ohio). It is displayed with a number board that shows the number of the car with the problem. 			
Black 	Stationary	<ul style="list-style-type: none"> • The session has been stopped • Slow down • Proceed to the pits immediately 	When Control calls for “All stations, black flag”
Red 	Stationary	<ul style="list-style-type: none"> • The session has been stopped due to unsafe conditions on track • Stop on track as soon as safely possible 	When Control calls for “All Stations, Red Flag” WARNING: Only Control can use this phrase. Do not say it on the phone network. Control will tell you when to let the cars proceed to the pit lane.
Green 	Waving	<ul style="list-style-type: none"> • Course is green • Session or race has begun 	Only the Starter uses this flag
Checkered 	Waving	<ul style="list-style-type: none"> • The session or race is over • Return to the pits immediately 	<ul style="list-style-type: none"> • During practice, station 10 at Nelson Ledges and station 14 at Mid-Ohio display this flag when directed by Control • Only the starter uses this flag during a race

How to Hold the Flags

Only two flags are held constantly when cars are on course: the blue flag and the yellow flag. Keep the other flags close at hand, but out of sight of the drivers.

To hold the flag while on corner:

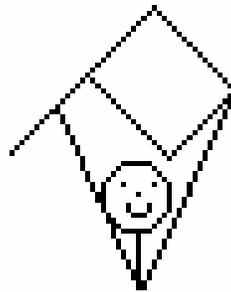
1. Grip the upper corner away from the pole in one hand and the pole with the other hand.
2. Flip the flag so the bottom part folds up onto the top part to form a triangle.
3. Tuck the top end under your arm to “hide” the flag with your body.



How to Display a Stationary Flag

To show the flag to drivers, you need to bring the flag out in front of you and raise it above your head. The folded part of the flag falls down naturally when you pull it out from under your arm.

Position the flag on a slight angle above your head. This lets the driver(s) see the flag, as well as your eyes.



Holding the flag over your head

TIP: The motion of moving the flag over your head is what grabs the attention of the driver. Exaggerate your movement to ensure drivers notice your flag.

How to Rock a Flag

On occasion, you may need to “rock” the blue flag to tell a driver a very fast car is approaching. To rock the flag:

1. Raise the flag above your head as you would for a stationary flag.
2. Hold the flag taut and move it back and forth (left to right or right to left) across your head.

How to Wave a Flag

When a car stops on track in your corner zone, you must wave the yellow flag to warn drivers about the situation. If you are at a Black Flag station, you may also need to wave the checkered flag to end practice sessions.

To wave a flag:

1. Drop the flag from under your arm.

Note: Make sure you grip the flagpole at the point where the bottom of the flag is attached to the flag.

2. Move the flag in a figure-8 motion in front of your body.

The “communications” part of F&C is broken down into two areas:

- communication with Control by the phone circuit
- communication between corner workers by hand signals

Communication With Control

Control is the base of race operations. All stations inform Control of track conditions through the phone circuit (also called a landline). This let’s the Operating Steward, who monitors the LEC phone network, to make prompt decisions as necessary to ensure the safe running of an event.

The Phone Person on each corner relays information to Control as action occurs on track and, conversely, relays instructions or information proved by Control to the Corner Captain and other corner workers. When on the phone, keep aware of all communication on the network, even if it has nothing to do with your station.

When relaying information to Control, make sure the microphone is very close to your lips. Project your voice, especially when there are cars on track.

When you need to contact Control, do the following:

1. Identify your station and flag condition.

Examples

Control from one, no flag.

Control from three, yellow flag.

Control from one, waving yellow.

Eight is trailing white for three-two blue.

2. Wait for Control to acknowledge you.
3. Provide concise, clear, and complete information about the current situation.

Communication Equipment Check

When you first get to the station in the morning, get the phones out.

- At Nelson Ledges:
 - A. Plug the extension cord into the box at the station.
 - B. Plug the other end to the headset box.
- At Mid-Ohio:
 - A. Unwind the cord from the orange holder.
 - B. Plug one end into the phone box.
 - C. Plug the other end into the headset box.

Once you are hooked up, check in with Control:

STATION 4: *Control, station four is here.*

Course Check

Before each session, Control asks for a course check to ensure the track is clear for race conditions. The course check is done in station order, as follows:

<u>Nelson Ledges</u>	<u>Mid-Ohio</u>
2	1
3	1A
4	2
6	3
7	5
9	7
10	8
11	9
12	10
13	11
Rescue 1	13
Grid	14
Start	15
	16
	Dispatch
	Start
	Pit Out
	Medical

To clear your station, check your portion of the track, then say, “[station number] clear.”

Note: Some tracks require you to say, “[station number] clear and ready.” This is not used at Nelson Ledges or Mid-Ohio.

If your area of track is not clear, make sure you tell Control your condition. For example, if you have an emergency vehicle, it is important for Control to know that the session cannot start yet.

Examples

Two has a rope tow, otherwise clear.

Three has workers sweeping the course.

After the course check is done, Control will come back to you for more information about your unclear area, such as to ask how long it will take to sweep the corner.

How to Describe an Incident

When an incident occurs in your station's area, give Control as much information as possible to form a clear picture of what happened and what the current situation is. In most cases, wait until the *dust settles* before calling in the incident. Use a note pad to make notes of exactly what happened.

Unless asked to elaborate, briefly provide the following information:

1. Car number
2. Car color
3. How the car got off course
4. Current location of the car (driver's left, driver's right, center track)
5. Proximity to the station
6. Other helpful information as it becomes available (driver's condition, car's condition, whether car is in a safe position, whether worker is going to the car)
7. What is needed to remove the car

The following example shows a normal "spin and go" incident call:

STATION 4 *Control from four yellow.*

CONTROL *Go four.*

STATION 4 *Car three two blue spun off driver's right just beyond the station. Car is running. Will let you know.*

CONTROL *Copy four. Car three two blue spun off driver's right.*

STATION 4 *Control from four.*

CONTROL *Go four.*

STATION 4 *Three two blue has continued. We are green.*

CONTROL *Thank you, four.*

If a competition car spins off track and immediately re-enters the course, you can call the incident after it is over. The call would happen as follows:

STATION 4 *Control from four.*

CONTROL *Go four.*

STATION 4 *Car three two blue spun off driver's right just beyond the station and continued. We were momentarily yellow.*

CONTROL *Copy four. Car three two blue spun off driver's right and continued.*

Phone Procedures for Emergencies and Priorities

If you have an emergency situation at your station, call Control immediately:

STATION 7 *Emergency, emergency at station seven.*

CONTROL *Go seven.*

If you are at another station, hold all calls until the emergency situation is cleared, unless your station also has an emergency situation.

Emergency situations include

- Hard impact into a wall (concrete or tires), another competition vehicle, or a corner station
- Flip
- Over 90 percent track blockage
- Heart attack (this might not be known until you get to the disabled vehicle)

In these situations, after telling Control that you have an emergency, request all the emergency vehicles you think are required for the incident. Race Control generally automatically sends the wrecker, fire truck, and ambulance as soon as a station calls an emergency; therefore, make sure you really have an emergency before calling it.

A “priority” call is slightly different than an emergency call. Use “priority” to indicate that something has happened or could happen to a vehicle that might become an emergency (such as a fire on a moving car). or to tell Control that something is important about a car currently in a Black Flag or Meatball situation.

The following is a typical priority call for a situation that could cause more problems:

STATION 12 *Priority at twelve.*

CONTROL *Go twelve.*

STATION 12 *Car three red has a fire under the engine compartment.*

CONTROL *Control to all stations. Please show three red your fire bottle. Let us know if the car lands somewhere or comes into the pits. Control to Rescue One, please stand up the fire truck.*

The following is a sample priority call for a situation concerning a car in a Black Flag or Meatball situation:

STATION 12 *Priority at twelve.*

CONTROL *Go twelve.*

STATION 12 *Car four six white has stopped across from our station with a flat left front tire.*

CONTROL *Copy twelve. Do you need the car removed now?*

STATION 12 *A wrecker now, please.*

“Emergency” calls require emergency vehicles right away. “Priority” calls generally do not need emergency vehicles immediately; however, the information is important to the progress of the current session.

Phone Procedures for Black Flag and Mechanical Flag Calls

When Race Control asks for a black flag or mechanical flag on a car, the landline must remain silent until the car reaches the first call-by station (station 7 at Nelson Ledges, station 9 at Mid-Ohio).

If you have an incident, such as a car spinning off and continuing, taking notes and call in the held call after the black or mechanical flagged cars enters the pits. Generally, Race Control will ask for held calls.

If you have something to say about the flagged car, break the silence.

Control – 7 with information about car xx.

If you have an emergency at your station, break the silence.

Control – 3 Emergency

Wait for Control to acknowledge you; then, explain your emergency and what vehicles you need, e.g., ambulance now. The call-by of the flagged car will continue as Race Control works with the emergency.

Calling Emergency Vehicles Around the Track

Race control will announce when an emergency vehicle enters the track (at Mid-Ohio, stations 5, 8, or 11 will announce when their vehicles enter the track) and ask for white flags two stations back, as well as for stations to call the vehicles by. To call an emergency vehicle by your station, simply state

Wrecker by [station number]

This provides information to Race Control about the whereabouts of the vehicle and informs the station three stations back that they can drop the white flag.

This same procedure applies to slow competition vehicles on course.

Phone Procedures for the Start of a Race

- The start of a race session requires additional information that is not needed during practice and qualifying sessions.
- Race Control announces when the pace lap is underway and commands that all stations be double yellow (full course yellow).
- The last two stations (stations 12 & 13 at Nelson Ledges; stations 14 & 15 at Mid-Ohio) before the start line announce the arrival and status of the pack.

Pack at station 12 – forming up nicely.

Pack at station 14 – strung out.

- The first three stations (station 2, 3, & 4 at Nelson Ledges; stations 1, 2, & 3 at Mid-Ohio) announce if they are clear or not after the green flag.

Station 2 clear.

Note: Maintain radio/phone silence for the first lap of each race session, unless you have an emergency at your station. Control will ask for held calls once the first lap has been completed.

Cooperation Between Stations

In some cases, an incident might occur in a section of a station territory where you cannot clearly see the incident or problem. You can ask assistance from the next station to make the call.

STATION 4 *Control – 4, yellow.*

CONTROL *Go 4.*

STATION 4 *Car four six green drove off driver's right and is over the hill near station 7. Station 7 will have to let us know where the car landed.*

STATION 7 *Station 7 copies. Car four six green has stopped driver's right against the tire wall. Worker responding.*

When a flagger needs to cross track, the phone person may ask for a point from the previous station.

STATION 7 *Control – 7, yellow.*

CONTROL *Go 7.*

STATION 7 *We need a point from station 5 to cross our responder.*

STATION 5 *Five copies.*

There are times when going through Control would waste precious time. For example, when a car has an incident in the previous station's area, but out of sight to personnel at that station, make a direct call to the station

Station 7, go waving yellow.

Sometimes, you might see something on a car, or perhaps a car that goes off course too far away from your viewpoint. It is all right to ask the next station for a car number without going through Control

Station 10, what's the number of the last car going by you now?

Writing Witness Statements

At times, the Operating Steward will request that station personnel write a *witness statement* for an incident. To ensure you remember the facts of the incident, write down information in your notepad. This will help you write your statement later.

When you write your witness statement, make sure you are clear, concise, complete, and correct. These statements may be used by the Stewards of the Meet in making decisions, as well as by the SCCA Court of Appeals. Accuracy is extremely important.

Write legibly. Complete all the identification information at the top of the form (see the next page).

Make sure you chronologically and logically explain the incident. What did you see happen? When did each action occur? Answer the following questions:

- What was the flag condition?
- What cars were involved?
- How did the incident unfold?
- What was your vantage point?
- Where did the cars stop?
- Did any car continue?
- Was there damage to any of the involved cars?
- Were the cars picked up immediately, or were they left for pickup at the end of the session?
- Were any of the drivers injured?

Do not include opinions in your witness statement. Simply state what happened.

On the reverse side of the form, diagram what happened. Make sure your diagram and the statement match. Double-check your car numbers, locations, and so forth.

Communication With Corner Workers Over Distances

When extensive car noise or distance prevents audible communication, use hand signals to communicate with your fellow corner workers. Always keep your signals simple (K-I-S-S) and use the universal corner signals.

Signaling Numbers

The numbering system corresponds to touching the arm at the joints:

Touch This	One Time	Two Times	Three Times
	To Indicate This Number		
Shoulder	1	4	7
Elbow	2	5	8
Wrist/Hand	3	6	9

0 (zero): Wipe your arm from your shoulder to your hand.

To signal numbers:

1. Start with your arm at the side of your body and use an exaggerated arm swing across your body to touch the part of the arm for the first digit of the number.

Note: Make sure you exaggerate each swing to the arm. For example, to signal the number “4,” swing your arm across your body two times to the shoulder.

2. Use the opposite arm to signal the second digit of a number, if applicable.

Signaling Colors

The following signals indicate colors:

To Signal This Color	Point to This
Black	Side of head (hair color)
Blue	Eyes (from the side)
Red	Lips (from below)
White	Check (white uniform)
Green	Front pocket (money)
Yellow	Crotch
Brown	Seat of pants

Other Signals

The following hand signals are necessary to learn immediately. They will help you communicate with station personnel quickly and efficiently when you respond to a car or when you are working a point.

To Signal This	Do This	Illustration
Ambulance	Form the letter "A" by touching your hands over your head	
Checker flag	Figure 8 motion with arm	
Corner/station	Bend arm up at the elbow and run the other hand around the elbow	
Driver	Extend arms to show steering motion	
EMT	Cross forearms at shoulder height, to one side	
Fire truck	Form the letter "F" with hands extended to one side	
Flag, stationary	Extend arm to side, shoulder high, without motion	
Flag, waving	Extend arm to side, shoulder high, with vertical motion	
Flag, take down	Blow whistle and simultaneously extend arm shoulder high with thumb up, then rotate hand until thumb points down	
Green flag	Blow whistle and move arm in circular motion above head	
Help	Pat top of head with one hand. For lots of help, pat top of head with one hand, and then the other hand	
Negative	Umpires safe sign (sweeping motion in front of your body)	
Now	Starting at your shoulder, emphatically point to the ground	
Oil	For the letter "O" with arms extended to one side	
OK	Thumbs up	
Rope tow	Form the letter "T" with arms at shoulder height	
Tilt bed	Form the letter "T" with arms at should height, and tilt arms up and down (like a see-saw)	
Wrecker	Form the letter "W" with arms over your head	

The following table shows other signals we use for general information. As you get more experience, these signals will become second nature to you.

To Signal This	Do This	Illustration
Ambulance	Form the letter "A" by touching your hands over your head	
Blocking	Pose of football lineman	
Broken	Mimic breaking a stick	
Buried	Mimic digging a shovel	
Cancel	Umpires safe sign (sweeping motion in front of body)	
Check	Make a large check mark in front of your body	
Cockpit	Mimic grabbing crotch, and then point to armpit	
Color	Arms parallel to the ground, one above the other in front of your chest	
Dragging	Swing your arm like you are dragging something	
Driver out	Motion steering a wheel, and then thumb out	
Dumping	Extend arm to the side with thumb up, then rotate until thumb points down	
Engine running	Points skyward and rotate hand	
Face shield	Put hands in front of your face	
Flat tire	Slap both hands to your chest	
Flip	Palm down, then rotate palm up	
Gas	Put your fist to your chest	
Gloves	Mimic putting on gloves	
Ground hog	Show fist and wrist above and behind other forearm	
Halfway	Cut at center of waist	
High centered	One forearm teetering on the fingers of the other hand	
Hit	Closed fist into open palm	
Hood or trunk open	Put your elbows together and move your arm like alligator jaws	
Lap	Slap your thighs	
Last lap	Use both hands to make the letter "L"	

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To Signal This	Do This	Illustration
Meatball	Make a square with your hands, and then "punch" the middle	
Metal to metal	Hit fist into palm of other hand	
Mirrors	Hold both hands out, and look back and forth from hand to hand	
Mustache cover	Cover upper lip	
No power	"Cut throat" motion	
Nose	Touch your nose	
Number	Cross your arms in front of your chest to form an "x"	
Over	Hand over opposite arm	
Passing	Pass one hand over the other	
Phones	Point to ears	
Point	Close your fist and extend the arm into the air	
Porta-Power	Put your hand on your biceps	
Question	Hold hands at shoulder height, palms up	
Rear	Pat your rear end	
Rough ride	Serpentine one hand and arm	
Slippery	Rub hands together parallel to the track surface	
Smoke	Pantomime smoking a cigarette	
Smell	Grab nose	
Spin and continue	Make a circular motion with arm, and then point in race direction	
Stand by	Parade rest, then wave	
Tail lights	Open and close hand by back pocket	
Time	Point to your watch	
Under	Hand under opposite forearm	
Water	Pantomime drinking water from a glass	
Wheel hop	Pantomime a basketball dribble	

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To Signal This	Do This	Illustration
Wheel position	Touch right elbow for RIGHT FRONT Touch left elbow for LEFT FRONT Touch right ankle for RIGHT REAR Touch left ankle for LEFT REAR	
Wheel rub	Hold hands perpendicular to the track surface and rub together	
Wheel wobble	Hold hand vertical to the ground and wobble	