# CRCA MARSHAL MANUAL



# Canada's First and Most Accomplished Marshalling Club

(June 2025 Rev. 1.0)

# **FORWARD**

When you become a track marshal you become a first line, boots on the ground, race official. Other than the starter, marshals are the only race official to communicate and interact directly with competitors on a live track. You are as close to the action as anyone can get and often have the best vantage point when something goes wrong. There are many other officials involved in conducting a race event, but you are the communications link that keeps things running smoothly and you are the first to take action when something happens on the track.

Marshalling is not rocket science but it does require a degree of focus and alertness and a rudimentary understanding of the rules in order to ensure the safety of everyone; competitors, marshals, photographers, and spectators. The knowledge and skill it takes to be a good marshal is acquired by ingrained habits and almost automatic reactions to on-track activities that have been developed through being on station and participating.

The purpose of the CRCA Marshal's Manual is to provide the basic information you need to get you on station and participating safely and confidently as you gain valuable "on the job" training. The marshalling procedures in this manual have been developed over many years and reviewed and updated often, in order to create the safest environment possible for all participants.

This manual is an important preparation for your trackside experience, so please read it carefully and often. Keep it as a reference in the future in order to stay sharp and accurate in what you do trackside.

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# THE PURPOSE OF MARSHALLING

The primary purpose of marshalling is to provide a safe race course by communicating to riders, through flags and other signals:

hazards ahead of them (yellow flags)

the condition of the course (debris flag)

the condition of their bikes (black flag)

race status (red flags)

other unusual situations affecting the running of the event (wildlife, spectators)

A marshal's role extends beyond managing on-track incidents with flags and hand signals. They are responsible for taking emergency actions when needed to safeguard the lives and property of riders, workers, and spectators during incidents.

For example, responding to a vehicle trackside.

Equally crucial is to inform the Race Control and other officials, usually via radio or hard-wired phone system, of all the above situations.

Finally marshals are licensed race officials. While doing all of the above they also monitor rider behaviour for potential issues, rule violations or anything else that may require decisions and/or action by race officials. Marshals are often called upon to make written statements about what they observed before, during, and after a racing incident.

Prospective marshals must be 18 years of age and must initially complete an approved basic training program. They are subsequently evaluated on their performance prior to being licensed as qualified marshals.

# WHAT MAKES A GOOD MARSHAL?

<u>Be on time</u>. If you won't make it to something you have committed to, notify the contact person as soon as you know you aren't going to attend. The worst thing to deal with is a no-show.

<u>Be ready</u> for the day ahead. Be familiar with what you need to get through the day. Plan to have everything you need with you trackside at the beginning of the day. Familiarize yourself with the equipment checklist.

<u>Be reliable</u>. Although being on time with everything you need is a good start, there's more to reliability than that. Reliability also involves being tuned into what you are being asked to do and performing that function as effectively as you can.

<u>Be knowledgeable</u>. Common sense, good judgment and the ability to think logically will help you through many situations. Natural ability in this regard is not as important as the continuing ability to learn and steadily improve. Most of this knowledge is obtained while marshalling, however, a thorough knowledge of the operating procedures in this manual and the relevant Race Regulations is imperative to a professional, well organized operation like CRCA.

<u>Have fun!</u> We are here, working for free, rain or shine, at mostly our own expense, because we love it! Be yourself, have fun, pay attention, learn and participate! The ability to remain an individual and make your own judgment calls within the framework of the Race Regulations and a multi-layered, team environment will carry you far in any racing organization.

# RACE ORGANIZATION STRUCTURE

# RACE DIRECTOR

The Race Director oversees and directs the execution of the days events. Subject to any instructions the director may give, the Clerk is the person that oversees the performance of on-track operations.

# THE CLERK OF THE COURSE

The Clerk of the Course, or "The Clerk", is legally responsible to oversee and implement due diligence measures in the co-ordination of all track activities including marshals, service crews, competitors, etc. The Clerk is technically overseen by the Race Director, however The Clerk is solely responsible to ensure all on-track rules are followed by all participants and to issue penalties when the rules are violated. Although the Race Director has authority, The Clerk retains his authority over everything on-track. Often, particularly at regional level racing, a separate Race Director is not needed and The Clerk is referred to as The Race Director.

# CHIEF COURSE MARSHAL

The Chief Course Marshal is responsible for the co-ordination and operation of the marshals and is responsible to The Clerk.

# TOWER PHONE OPERATOR

The Tower Phone Operator controls the flow of information relayed over the communications network and reports directly to the Chief Course Marshal.

# **CORNER SENIOR**

The Corner Senior is responsible to the Chief Course Marshal for the safe and efficient operation of their assigned corner. The Senior also has the responsibility of establishing a comfortable working environment by ensuring fellow marshals understand and follow procedures.

# PHONE OPERATOR

The Phone Operator is responsible to the Corner Senior and maintains a two-way communication with the Tower Phone Operator, keeps a detailed written account (when needed) of incidents and situations that occur on the corner, and relays all information to the Corner Senior and Control.

# FLAG MARSHAL

The Flag Marshal is also responsible to the Corner Senior. The primary duty of the Flag Marshal is to alert competitors of potential danger in the section of track downstream from their position using flags and hand signals.

### SAFETY MARSHAL

The Safety Marshal is responsible to the Corner Senior and is wholly concerned with safety on the corner. This includes their own safety, as well as that of fellow marshals, race officials, competitors, and spectators. The Safety Marshal, under the direction of the Corner Senior, is the first to go to the aid of a competitor.

# OTHER EVENT PERSONNEL WHO MAY INTERFACE WITH MARSHALS

- Starter and Assistant Starter
- Fire, Extrication & Recovery Crews
- Track Service Crews
- Medical Crews

# OTHER EVENT PERSONNEL WHO DO NOT REGULARLY INTERFACE WITH MARSHALS

- Timing and Scoring
- Pit Marshals
- Grid Marshals

- Technical Inspection Crews
- Paddock Marshals
- Registration

All of these event personnel are usually volunteers who work together to produce every race. There are many ways to volunteer and many marshals are also qualified in other areas. All are vital to the success of all motor racing.

# **GENERAL PROCEDURES**

Consumption of intoxicating substances by any participant is expressly prohibited until all competitions are concluded for the day. Any individual suspected of violating this policy may be excluded from participation at that and possibly subsequent events.

Everyone that is attending an event for a particular purpose (not a spectator) and has signed a waiver, is a participant. This includes all officials, crew, riders, and outside response crews. An intoxicated participant not only risks sanctions but also could lead to legal problems.

If you feel your performance may be affected negatively for any reason (not only the above), you should discuss your concerns confidentially with the Chief Course Marshal (CCM) prior to the morning meeting.

Any time you arrive at any track, your very first task is to register. Make sure you complete any necessary online registrations, such as "Speedwaiver" in the days leading up to the event. At Registration, you will be required to show your proof of registration with Speedwaiver. You may be asked for your marshalling license or asked to sign another waiver. After doing so, you will be assigned credentials for the event, which should be worn at all times while participating in the event.

Signing the insurance waiver protects the Organizer from legal claims due to your participation. You are waiving certain rights to legal recourse in the event you suffer injury or property damages while participating.

Once you have your credentials, park your vehicle in the area designated, if any. Gather your gear and head to the morning assembly area *before* the designated time. If you are at an unfamiliar track, it is a good idea to plan to be there even earlier the first few days

# PERSONAL EQUIPMENT

- ✓ A whistle and leather gloves are mandatory
- ✓ Baseball Hat, Tilley
- ✓ Ear Protection
- ✓ Sun Screen & Lip Balm
- ✓ Sunglasses
- ✓ Sturdy, sensible shoes or boots
- ✓ Folding Chair
- ✓ Extra Water
- ✓ Warm jacket, wool hat, extra layers, warm gloves, dry socks
- ✓ Rain gear
- ✓ Food and Drinks
- ✓ First Aid items (Band-Aids, aspirin, tissues, allergy kits, prescriptions, inhalers, etc)
- ✓ Scissors
- ✓ Clamping Device
- ✓ Pencils, pens, pocket knife
- ✓ Something to carry it all in. A 5 gallon pail is cheap, waterproof and makes a good seat!

Remember: you should expect to be trackside for the whole day. It is recommended that you bring everything you might want or need.

The outermost layer of clothing must be white.

NEVER wear red or yellow on your legs, arms, or torso.

# THE MORNING MEETING

The purpose of the morning meeting is to make sure the event is adequately and safely equipped and staffed. This process helps to identify any last-minute adjustments that may be required, such as handling unexpected absences due to illness or injury, or accommodating marshals who arrive without prior notice. While we encourage you to inform us ahead of time if you're planning to join, we strive to welcome unexpected arrivals whenever possible.

You must arrive early enough to hand in your logbook, receive your corner assignment for the day, obtain equipment, and meet your team.

Your corner assignment will tell you who the Corner Senior is and your designated role for the day.

The next step is to gather the equipment specific to your designated role. For instance, if you're assigned as the phone operator, ensure you have the radio and headset. If you're a flag marshal, grab the flags.

There should always be a designated Senior, however, if there are no other designated roles, identify who your teammates are and cooperatively obtain flags fire extinguisher, and radio equipment.

Inspect headsets for defects, damage and adjust for comfort. Plug the headset into the radio and turn it on. Make sure you are on the correct channel and do a "test 1 2 3" transmission to make sure you are able to transmit and receive clearly. It is recommended that you use a full headset always. Do not rely solely on the radio's limited audio capability or a speaker mic.

Always have a headset available even if you don't plan to use it. You may unexpectedly NEED it.

Inspect the flag container for needed repair and that all flags are present and serviceable. You must have the following flags:

✓ 1 red ✓ 1 white ✓ 2 yellow ✓ 1 blue

✓ 1 green 
✓ 1 yellow and red (debris)

✓ 1 black

**Before the meeting starts** make sure you are physically / psychologically ready, brought all your gear to the meeting, turned in your logbook, been assigned a position, identified your Senior, obtained and tested all of your assigned equipment.

If your station has been designated to be a remote black / checkered flag station make sure you have those flags and the number board.

The Morning Meeting will start sharply at the designated time by the CCM. The CCM will thank everyone for coming out and deliver any needed information concerning the days operations. At larger events, the organizers may attend and address the marshals. On rare occasions this has included well-known racing figures.

Once the meeting has concluded it is time to make your way to your assigned corner. Sometimes this is a short walk and sometimes you will be permitted to drive your vehicle closer to or even onto your station. Sometimes there are provisions for getting you to your corner. Do not plan on being able to get to your vehicle until after racing is done for the day.

# PRE-COURSE CHECK PROCEDURES

#### 1. Comm Check:

As soon as you arrive at your station, switch on the radio with headset connected, send a test transmission, and monitor its functionality. This step helps identify any station-specific communication issues early between you, Control, and other stations around the course. It also signals that the station's Phone Operator is ready for the upcoming Course Check.

- **2. Equipment Check**: Ensure all necessary equipment is available and in good working condition. This includes fire extinguishers, brooms, and oil dry, which are provided at each station and collected after the event by Track Services. Inspect the broom, oil dry, and fire extinguishers for serviceability.
- **3. Mandatory Equipment Check**: Ensure each marshal station has the following items fully functional before racing begins:
  - ✓ Radio / Phone equipment
  - ✓ Set of Flags
  - Fire Extinguisher(s)
  - ✓ Report forms / writing paper
  - ✓ Per
- **4. Fire Extinguisher Inspection**: Confirm that the pin is securely in place and the dial indicator is in the green zone. Turn the extinguisher upside down and shake it to "fluff" the contents.
- **5. Reporting Issues**: Immediately notify Control of any deficiencies for resolution by Track Services. Do not contact Track Services directly. All communications must go through Control to ensure awareness and coordination.
- **6. Track Inspection**: Take your broom and walk the racing surface from your flag position to the next, carefully checking for debris such as bolts, water, oil, or other materials. Remove any debris far from the track's edge, especially near red-and-white curbing. Collect bulky debris and store it at your station.
- **7. Barrier and Cone Check**: Visually inspect barriers for any displacement or damage. Ensure traffic cones, if present, are correctly positioned.
- **8. Notes for Track Services**: Make a note of any "track services" issues that they may want to know about. Any issues that could affect the days operations should be reported immediately to Control.

# THE SENIOR'S MORNING BRIEFING

After communications are established, all equipment is present and serviceable, and a track walk complete, your Senior will conduct a morning briefing in which they will inform you of any supplemental information regarding the days operations. This will include corner specific procedures and define impact zones, "no go" zones, "safe" spots, where fire extinguishers are placed, and where to place a disabled vehicle. Each person's experience is assessed and your Senior will assign roles and position and rotate staff accordingly.

All of this must be completed before the Morning Course Check starts.

# THE MORNING COURSE CHECK

The Morning Course Check entails Control requesting that each station sequentially indicate that all of the morning station checks are done and that there are no issues preventing the start of the first session. The designated Phone-Op must be on the radio for this check and thereafter until the Corner Senior designates a different operator. This marks the official start of the day. At this point, all personnel are considered on duty. While the start of operations is usually announced, it's crucial to stay vigilant, as bikes may enter your sector at high speeds without prior notice.

# **CORNER STATION DEFINITION**

The flag jurisdiction of each station extends from their flag position to the next flag position in race direction. This defines your station's area of responsibility. This is the area covered in your track walk. Anything that occurs in this area will be flagged and reported to control by your team. Corner Safeties will respond, and your Corner Senior will direct and guide the team's efforts.

Usually Corner Safety and Phone Operator jurisdiction is identical to Flag jurisdiction, however there are some exceptions. Often Corner Safeties from an adjacent corner have better access or an adjacent Phone Op has a better view, so it is established and agreed between Seniors and Control before the day begins that the adjacent Phone-Op will communicate or an adjacent Safety will be a designated responder for an incident you are flagging. These cases are usually well established practices at a given location and you should be informed of this in the Senior's Morning Briefing as needed.

# **GENERAL TRACKSIDE SAFETY**

These rules apply to *anyone* trackside, regardless of who they are or why they are there. All marshals must adhere to and insist on the compliance of others to these few simple rules.

<u>Stay alert at all times</u> even after the checkered flag has been delivered by the starter. Remember, a good rule to follow is that a vehicle can appear in your sector at speed at anytime unless the track is officially closed such as before the Morning Course Check or at designated lunch breaks.

<u>Never turn your back to traffic</u>. Always keep one eye on oncoming traffic. Do not rely on others to keep you safe. Be ready to abandon your post in an instant if needed. When yellow flagging stand sideways and move your head A LOT!

<u>Have an escape plan</u> and inform others around you what your intentions are in the event you need to abandon your position. Work out an overall plan with your team.

<u>Stay on your feet</u> while race vehicles are approaching from up track. You will never be able to avoid an oncoming racing vehicle if both feet are not on the ground and you are ready to move quickly.

<u>Do not lean on guardrails or concrete barriers</u>. Barriers flex and distort when struck. They are designed to give way while spreading the force of an impact over time, reducing injury to the competitor. They are NOT designed to keep race vehicles away from you or to necessarily protect you. They are there to protect riders. Keep feet and legs away from barriers and be ready to move as a barrier is struck even far away from you.

Be aware that there may be a non-marshal on your corner with permission (i.e. a photographer) and they may not be aware of trackside etiquette. As a marshal, it is your responsibility to approach them politely, explain any issues with their actions, and guide them on how to adhere to the correct procedures. A simple reminder of how to stay safe is almost always met with a polite nod and immediate action. Dangerous behaviour and any other issues with abusive, dismissive, or repeated behaviour must be reported to control for immediate action.

# **FLAG MARSHAL**

<u>NEVER TURN YOUR BACK TO ONCOMING TRAFFIC</u>. A flag marshal's responsibility is to observe the corner jurisdiction, but always keep one eye on approaching race vehicles. Turn your attention away only as needed. Rapidly moving your attention back and forth between on coming traffic and the incident at hand. The only exception to this is when you are "face to face" flagging. (see page 9)

<u>Keep flags out of sight when not in use</u>. At speed even small patches of color (yellow or red in particular) can distract riders and they could react in such a way as to cause an incident. Flags need to be completely out of sight unless in use. The faster the bike, the more critical this is.

<u>Always face oncoming traffic when displaying a yellow flag</u>. When an incident occurs, your body language and even facial expression sometimes even more than the yellow flag will alert a rider to the degree of hazard ahead. This communication between a yellow flagger and a rider is a rudimentary element of what a marshal does.

<u>Do not leave your flagging position</u> to attend to an incident. The primary concern during an incident is flag coverage. It is the first thing to happen and the last thing to stop. During the incident, the purpose of the yellow flag is to reduce the risk of the incident worsening. The yellow flag is no longer needed when the incident is clear or it has been established as a permanent situation.

<u>Flag only those incidents in your sector</u> unless directed to by your Senior or Race Control. An exception is when flagging to "forewarn" or for "full course" flags.

<u>Do not flag incidents that are well off the racing surface</u>. When in doubt, display the flag and your Senior will prompt you to stop if needed.

# FLAGS USED AT DISCRETION OF MARSHALS

Yellow Flag



The yellow flag is a signal of danger of any nature **at or beyond** the station displaying the flag. Overtaking is still permitted under a steady yellow. Passing is not allowed in a waved yellow zone until a rider has passed the incident.

### STEADY YELLOW

Indicates there is an obstruction located off the course in your sector.

OR

There is a slow moving bike in your sector.

OR

The following station is displaying a waved yellow.

If an obstruction will remain in position, off track, for the remainder of the session the yellow flag shall be shown motionless for two laps and then withdrawn unless otherwise directed by the Clerk of the Course.

# **WAVED YELLOW**

There is an obstruction **on the track or in a hazardous area close to the edge of the track**. Workers and riders may be on or near the course. The Corner Senior or the Clerk may request preceding posts to display a motionless yellow flag. When the obstruction will remain in position for the remainder of the session the yellow flag **shall be waved for two more laps, shown motionless for two laps and then withdrawn.** 

# DOUBLE WAVED YELLOW

There is a rider and / or bike down on the racing surface. This currently only used for national and international bike racing.

# Waved or Steady?

Put simply, a rider should expect to have to alter their racing line and / or slow significantly when encountering a waved yellow flag because there is something on track or critically close to it.

Anything off track and clear of any likely impacts with other bikes running *under normal racing conditions*, should be covered with a steady yellow flag. If the bike is behind a barrier or far enough off track that it poses little to no hazard to competitors, no flags are needed.

Any time a person is trackside and exposed to race traffic (not behind a barrier) a waved yellow flag is needed. This includes dismounted riders, marshals, safety crews and anyone else. A steady yellow flag to cover a bike pulled off should be waved when the rider dismounts and then revert back to steady when the rider is in a safe location, behind a barrier. This has become known as the "boots on the ground" rule.

# If a rider is not on their bike and not in a safe location, wave yellow.

Bikes can slow unexpectedly, mid-sector. They may stop on or off track or finally get the gear they were looking for and take off. While displaying a steady yellow for a slow bike, look for smoke, debris such as oil or small parts, and any other indications of a problem. Sounds and smells reveal a lot, so sniff and listen while watching. Any pertinent observations should be reported to control.

# **Pointing**

When necessary, during the display of a yellow flag, riders should be instructed by means of hand signals to keep to the side of the course that is not obstructed. It is a good habit to do this with every waved yellow flag.

# Forewarning

Due to the nature of a given incident, and regardless of how visibly and physically you flag, a waved yellow flag still may not be enough of a warning to oncoming competitors. In these cases the preceding station should display a steady yellow flag to "forewarn" of the upcoming waved yellow at the following station. A forewarning flag is usually displayed by request of the waved yellow station's Senior, or Race Control but ultimately it is **at the discretion of the Clerk**. If you feel a forewarning flag is urgently needed it is better to display it while informing control and they will decide whether to continue with it or not.

# Debris Flag



# YELLOW FLAG WITH RED STRIPES

The yellow and red striped flag informs riders to take care. It is used to warn of a slippery surface such as caused by the presence of oil, water and/or debris on the course surface. The flag shall be displayed for two laps or until the surface returns to normal.

This flag is displayed to indicate to a rider that adhesion has deteriorated in your zone. This can be due leaked fluids, sand, rain, standing water, debris, or anything else that degrades the ability of the tires to do their job.

When a normal rain starts, the track colour changes from light (dry) pavement to completely dark (wet). When all the rain drops on the ground combine into one solid colour; "all your dots connect", the debris flag should be displayed for two laps.

If an item on the track is small, light, flat (or combinations of these) and easily avoidable or posing little hazard of damage by hitting or driving over it, a debris flag is used. As a rule, if the debris is "bigger than a bread box," a waved yellow is needed instead. It is also used to notify a sidecar rider that his passenger has left them.

# Debris Flag (cont'd)

When displaying a debris flag it should be presented as a "steady" flag then, while holding the loose end, use the stick to point at the location of an object or along the line of a leaked fluid. Continue to alternate these actions for every rider or group of riders until all of them have been shown where the debris is.

# Rain Flag



WHITE FLAG WITH RED CROSS (Rain drops in this sector) is used instead of a debris flag in the event of rain. It is always waved and at the onset of rain. Currently used only in national and international bike racing.

Face to Face Flagging

When enough marshals are present, Face to Face flagging may be employed. This is done with two flaggers in the flagging position, one facing upstream and one facing downstream. The marshal facing oncoming traffic is responsible for white and green flags for cars and comms for bikes. The other flagger is responsible for yellow and stands with their back to traffic while the marshal facing traffic is responsible for the safety of both. Although this allows for more efficient flagging, an added risk also exists.

# Mirror Flagging

Mirroring is done when a flagger cannot see the next flag station due to stationary obstacles. In addition to flagging all you see, you must also watch for prompts from the control flagger in order to flag the part of your station's sector that you cannot see. The control flagger is usually where the communicator and / or Senior are stationed. The Senior or Phone-Op will usually be the control flagger also.

When mirror flagging, the control flagger will indicate the required flag using hand signals or 'prompt flags. When using prompting flags, the control flagger should only display the flag long enough for the you to get the message. When the control flagger drops their flag, you should *continue to display the flag until given the signal to drop it.* 

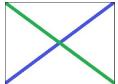
# **FLAGS USED AT START**

### Green Flag



A waved green flag is used at Start for starting races. Alternatively a national or provincial flag may be used.

# <u>Green and Blue Furled Flags</u> (Half-Way)



A green flag and blue flag furled and crossed in an X pattern is displayed at start to indicate the half-way point.

# Blue and White Flag (Last Lap)



Divided diagonally into blue and white halves, shown motionless by the Starter, it informs the riders that there is one lap to go.

### Checkered Flag



End of session. This flag is displayed at Start or a remote location designated by the Clerk.

If you are a designated checkered flag station, don't forget the flag!

# FLAGS USED EXCLUSIVELY ON THE INSTRUCTIONS OF THE CLERK

If you have any of these flags never display them without specific instruction from control to do so. These should be kept separate from the rest of the flags on your station in order to avoid using them accidentally. This DOES happen. If you are flagging remotely from the actual station, your Senior will usually insist that these flags stay on station with him or her.

# Red Flag



Waved at all marshal posts, it informs all riders to cease racing, slow down significantly from normal speed, proceed slowly to the pits and be **prepared to stop at any time** if signaled to do so.

# Blue Flag



The blue flag, displayed at Start informs a rider that they are about to be lapped by the leader.

Although this flag is normally displayed at Start, the Clerk may request that you display this flag to a rider. It is done in the same manner as described below for Black flags.

### Black Flag



Held steady and displayed accompanied by a number on a board, it informs the rider of the bike designated by that number, to return to the pits at the conclusion of the current lap and await instructions from the Officials. This flag is displayed at Start or a remote location designated by the Clerk.

The black flag is held steady and shown directly to one bike, making eye to eye contact with the rider and presenting the flag to that rider only. Then pointing at the rider with the stick of your flag while still holding the loose end.

A Black flag simply means return to the pits and report to race officials.

If you are a designated black flag post, it is usually required that the bike number also be shown simultaneously. Don't forget the number board!

# **HAND SIGNALS FOR FLAGGERS**



STEADY YELLOW
One arm held at right angles to the body in steady position



WAVED YELLOW
One arm held outright and waved vigorously up and down.



# **DEBRIS FLAG**

Some time ago we simply called this "the oil flag," thus, the hand signal is large "O" (for Oil) shaped by both arms. It can be easier if you interlock your fingers to hold the position. It started out as the oil flag but has been used to indicate to riders anything that may cause an unexpected loss of adhesion. As the name changed, both flag and signal have not.



# RED

A large arm gesture ending with your hand landing on your head as if you are capping yourself off. Later bringing the other hand across throat and remaining there was added to the signal making it even more recognizable.

# STOP FLAGGING



Both hands in front of you, palms down starting at shoulder height and moving downward keeping palms facing down. Used to tell a remote flagger to stop displaying a particular flag. Preceded by a hand signal or prompt flag.

# THE SHRUG

IMAGE NEEDED Used after any signal to indicate a question or to say "I don't know."

# THE PITS



Preceded by a vehicle number this signal used to indicate that the vehicle has entered the pits. One hand "chopping" under the armpit on the opposite side.

# **SAFETY MARSHAL**

Some marshals love to flag, some love to be the Phone-Op. Some love to work as a safety marshal. If this element of marshalling is the direction you would like to go, a dedicated Safety Marshal always walks the paddock inspecting bikes and talking to crews (if they aren't too busy!) in order to familiarize themselves with the equipment you may have to deal with. Do a paddock walk at your earliest convenience on every race weekend in order to be fully prepared for the weekend. Lastly, although not necessarily a concern, it is nice when rider sees a familiar face in a time of need.

# In the Morning

Always check your extinguisher and discuss corner specific procedures with your Senior, regardless of anyone's level of experience. Specifically, you must be clear on impact and "no go zones", "safe" spots, where fire extinguishers are placed, and where to place disabled bikes, and anything else you feel you are not clear about. Note there are very few "no go zones" in bike racing. The Safety Marshal almost always responds, on track or off.

Check your extinguisher by ensuring the pin is in place and secured, and the gauge needle is in the green zone. The powder in a fire extinguisher is somewhat like talc. It is very fine and compacts. If the contents have compacted for some time, the extinguisher will work poorly or not at all. Turn the fire extinguisher upside down, shake it, and gently bump it to break up any compaction that may have occurred.

At the end of the morning briefing you should be clear about where you will stand and how you will respond to the inevitable, predictable rider errors and their consequences.

# On Duty

A rider taking a corner a little too fast or trying a creative racing line will wind up "in the usual spot" in the run-off. We all know what happens at our favorite corner when a rider is unfamiliar with the track, suffering from over-confidence or charging a little too hard.

When you arrive at your post take a good look at the surrounding terrain... rocks, holes, water, uphill / downhill etc. Plan the route you will take when responding to an incident or if a bike comes directly at you. Make a note of where *not* to go.

Continue to monitor such plans for viability in view of any changes during the day due to track conditions, weather, class of bike on track and other trackside personnel.

When it comes to photographers and other people allowed trackside, you have a responsibility to ensure they are acting in a safe manner by not interfering with your ability to observe and respond or violating general trackside safety guidelines. If you notice something, a polite reminder from any marshal is all it takes. Most people allowed trackside are instructed to follow the direction of a marshal so they are usually ready and willing to comply with a request. If they do not, simply report the situation to Control to deal with. Never confront or escalate any situation just a friendly request or reminder then contact Control if needed.

Now that you are on station, alert, prepared and ready, the real job begins. Safety Marshals, when not responding are a great adjunct to the normal race control functions of a corner station. During "down time between incidents" you are watching rider behaviour, adherence to rules, changes in track conditions (debris) and barriers, and mechanical issues with bikes. Many times it's the Safety Marshals who first notice issues, making them invaluable to an efficient and effective station.

# **Mechanical Difficulties**

While rider error issues can be predictable, mechanical failures are not. They can arise quickly and unexpectedly with harsh consequences. Mechanical issues can be as simple a bike not working anymore and the rider just needing to get the bike to a safe place. They can also be very serious. A critical failure can lead to a bike and rider leaving the track violently.

This latter type of incident is the reason for bike safety features, helmets and leathers, safety barriers, marshals, medical and rescue crews, track procedures and new innovation in all of these areas.

# Responding to an Incident

Most times an incident will be nothing more than a bike riding off track, regaining control, possibly stopping, then re-entering the track. If the rider is mounted, there is no reason to respond, simply direct them safely back on track while looking for possible mechanical issues. If it is obvious they shouldn't continue, get the rider to stop and head to a safe location. If you are unable to stop or direct the rider off track, report your concerns to Control via your Senior immediately.

# Rider Up

If a bike goes down and the rider gets up and attends to their bike, wait to see if they remount and attempt to continue, if so, observe for damage and either help them back on track or help them to park it.

If a rider goes down, gets back up but needs help to move their bike or simply walks away from it, ask them to help you move it or direct them to safety while responding to recover the bike yourself.

Bikes, particularly ones that are on or close to the track, in a tight impact zone, or otherwise highly exposed should not be responded to until flags have been established and bikes are responding to the flags. Look to your Senior for guidance as to how and when to go out in the open or on track.

Your Corner Senior will already be looking for a gap for you. Also, Control may decide to shut down the session instead of having you respond in "racing conditions."

If the bike is in a place with good visibility for oncoming competitors, not in a critical impact zone, far enough off track, it may not be necessary to respond if the rider has made it to safety and there is no sign of fire.

In some ways being a safety for bikes is opposite to that for cars in that safeties almost never respond on track or close to moving race cars but working safety for bikes *requires* this.

#### **Disabled Bikes**

If a bike is not going to continue, the rider should open their visor to indicate they have no medical issues and raise their arm to indicate they need to be picked up.

Although we are almost always responding in the open, we should do so in the safest manner possible. Get as close as needed while staying behind barriers or as far from racing traffic as possible and try to make eye contact with the rider. When you get the riders attention, try to establish if they think they will continue.

Attempt to determine the status of the disabled bike by initiating non-verbal communication with the rider from a distance. Intuitive hand signals like; a thumbs up or thumbs down, slicing hand motion at the throat, etc., can be used to determine if the bike is in a condition to continue or that a bike pickup is required.

In any case, if the bike is not going to continue, direct the rider and bike to a safe location and aid them as necessary.

Due to position on track, time left in the session, and/or number and class of bikes on track, Control may request we leave the bike where it is when we would normally respond. If so simply direct the rider to safety and let the rider know they will be picked up.

# Bike Down

When a rider goes down there are two areas of concern: the rider, and the bike. Although it may seem counter-intuitive your primary concern is not the rider. While initiating your response, make eye contact with the rider and direct them to safety if possible. Your priorities are as follows:

- 1. bike on track
- 2. rider on track
- 3. bike off track on fire
- 4. downed rider off track
- 5. bike off track, rider up

A bike down on track, particularly on the racing line, becomes your main concern because the rest of the competitors are at risk of hitting it, causing a second incident that will likely be serious. Most riders will tell you that *a bike down on track is the most dangerous and pressing issue* in that moment. Your Flagger / Senior will begin pointing bikes "to the good side" of the track while you begin your response. Many times a bike down on track will be enough to illicit a shutdown, especially if it is leaking, however, in a race or qualifying session, the location of the bike and the time remaining in a session are factors race control will consider while assessing a potential shutdown. The marshal's role is to report the position and condition of the bike in a timely and accurate manner.

When responding stay behind barriers as long as possible. When not behind a barrier, stay as far away from the track surface as possible for as long as possible and *avoid turning your back to traffic whenever possible*. Only head toward the track when parallel to the bike you are responding to.

Immediately upon arriving at the bike, **turn the electrical switch off** without locking the steering, stand the bike up avoiding contact with leaking fluids and hot parts. Squeeze the clutch to make the bike roll. If the clutch is inoperable, use the shifter to find neutral to allow the bike roll. If this can't be done, and you can't move the bike get off the track and immediately signal for bike pickup (the "T" for tow hand signal.)

Always take your fire extinguisher wherever you go, however do not take it on track unless you need it. Leave it at the edge of the track along the path to the safe location you will be taking the bike to. Don't forget to recover the fire extinguisher after dealing with the bike.

# Fire

Do not mistake steam for smoke. Steam is white and indicates a coolant (water) leak. Grey smoke is usually "non-fuel" related and possibly due to grease or oil leaking onto a hot surface or a very hot engine. This can result in a small fire, easily handled by your fire extinguisher. Black smoke is "fuel rich" which often indicates a gasoline fire and *can* be the sign of a big fire in the works.

Light or moderate gray smoke usually do not indicate a fire. The more smoke there is, the more likelihood of fire though. Do not pull the pin on your extinguisher until you see flame.

As you approach look and sniff for leaking fluids. Coolant, gasoline, and oil all smell different.

When you get to the bike watch out for hot parts and immediately **turn the electrical switch off**. Look for a "kill switch" or ignition key on the handlebars. (Remember your paddock walk?)

The next priority is to direct the rider to the nearest safe location while turning your attention to the fire, but keep an eye that the rider is doing what you asked. Non compliance may be a sign of potential injury, however as any paramedic will tell you a rider complaining or angry over a racing incident is usually not that bad off.

If you have a fire and there is any doubt that you can extinguish it yourself, keeping a watch for oncoming race traffic, give the fire signal and after it has been returned to you by your Senior or Phone-Op, focus your efforts back on the bike.

# How to Fight a Fire

When using a fire extinguisher **do not approach directly from downwind**. The smoke must be moving away from you not towards you. If you have to circle around to approach the fire correctly do so while maintaining situational awareness of oncoming traffic. **Face traffic as much as possible**. Dry chemical is very fine and a respiratory irritant. **Avoid inhaling the powder and protect the rider from this as much as possible**. Avoid a rider's face, head and upper torso unless necessary. It is rare to have to protect a rider from fire like this and rescue crews will usually arrive within seconds but this *has* happened.

Once positioned upwind and as close as safely possible, grasp the handle and **pull the pin**, **aim at the base of the fire and squeeze the handle** to dispense the contents of your fire extinguisher onto the base of the fire. **Use a sweeping motion** that covers the base of the flames. As the fire begins to extinguish it may be necessary to get closer to complete the job. Spilled fuel can ignite around you. If the ground is wet with gas stay off the wet spots if possible and **watch for potential flashbacks**.

If there is more than one Safety Marshal at the station, the second Safety Marshal should stay a few feet back from the first one and be prepared to cut a path through a flashback for the first marshal to retreat if necessary.

# Rider Down

If a rider is down, has not signaled they are OK, after giving them a chance to collect their composure, a medical emergency is assumed. Your Senior will inform Control of the situation and a shutdown followed by medical and rescue deployment will occur. As you approach quickly confirm the need for medical aid. A fast "yes" or "no" decision is all that is needed.

Signs that medical aid may be needed:

- mechanism of injury
- not looking to you for direction
- moving very slowly
- not getting up
- tapping their head
- quarding
- vocalization
- combativeness

The first criteria that may indicate injury is termed the "mechanism of injury". The hard and "odd angle" impacts of a high speed mechanical failure will immediately be suspected of causing injury. A bike leaving the track on a long fast straightaway is often responded to with a fire, medical, and rescue response just because of the forces involved in such an incident. When responding, the nature of the incident should give you some idea of what to expect.

All downed riders must present themselves, in their leathers with helmet in hand to race medical before going back on track.

### Medical Aid

In no circumstances should a marshal move or aid a fallen rider. Emergency medical services are always available at very short notice. A marshal should talk to the rider and assure them that medical assistance is on the way and will be arriving very very soon. If the emergency medical team ask for details of the incident and fallen rider behaviours please provide as many details as were observed. A description of a low side crash or a high side crash is very helpful for the emergency medical response team.

# **Unresponsive Riders**

After your own safety, and moving the bike off track, your job is to protect an unresponsive rider from further harm as best you can until help arrives. That means observe consciousness and breathing and inform the medical team on arrival if changes have occurred.

Do not move an unresponsive rider. If they are on track, respond as close as safely possible to the the rider and point traffic away from the rider. A marshal all in white, standing near the track is very visible compared to a rider laying down on their own. Your primary purpose is not to attend to the rider but to mark where they are while pointing traffic away from you.

Emergency crews will arrive in seconds. Direct them to you then step back. *Be very brief* when giving any information the medics may request. Be prepared to assist if asked.

# Clean up

When you have done all you can and the emergency aspect of the incident is under control, your Corner Senior needs the bike numbers involved and to identify any issues needing correction such as debris and displaced barriers. Signal the bike number(s) involved and for bike pick-up as needed. When Bike Pick-up arrives, you may help load the bike. Make sure to request a new fire bottle if you have discharged one. The last thing is to help with clean up, usually by sweeping the track clean while track services repairs barriers and the like. This is also an ideal moment to reposition any displaced traffic cones; if you can find them!

In the event of a Class 3 Incident, *do not touch or move the bike* involved in the incident until instructed to if at all. Last, you may be asked to complete an incident report.

# SAFETY MARSHAL HAND SIGNALS



AMBULANCE
Hands should be held
above the head, fingertips
to fingertips, forming a
letter "A"



FIRE TRUCK
Rotary movement of either arm above the head.



BIKE PICK UP
Arms held out at right angles to the body forming the letter "T"



ALL CLEAR
Both hands across lower body
and moved rapidly from side to
side across the front of the
body.



I WANT TO GO ON-TRACK Both hands held up high and straight. This signal can be used to ask about retrieving debris that is on the track or cross to the other side.



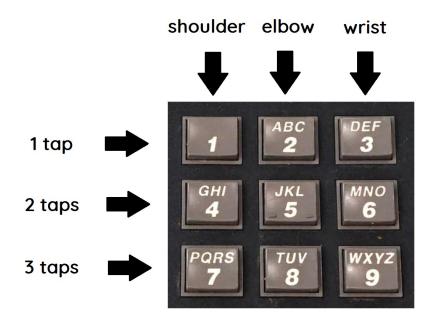
<u>DEBRIS ON TRACK</u>
The circling of the arms mocking the letter "O" at the side of the body indicates a slippery course or debris on the course.

# **Bike Numbers**



To start, cross arms in front of chest. Place a hand on the opposite shoulder, elbow or wrist to indicate a number, switching sides for each digit. Zero is shown by sliding one hand from shoulder to wrist.





# **Hand Signals to Riders**

# **POINTING**



Expressively point to the *desired* portion of the track. Sometimes using a large arcing pointing motion.

# YOUR BIKE IS ON FIRE



Expressively display your fire extinguisher to the rider

# **COMMUNICATOR (Phone-Op)**

The term "You are the eyes and ears of control" has been spoken in reference to corner communicators since phones were first used in marshalling. At Calabogie and Mosport (CTMP), Control cannot directly see the entire track and must rely entirely on your descriptions, tone, and their own track experience to construct a mental image of the situation. Based on what you say, they may decide to hold off and let things clear up or shut the race down and send emergency crews. This is achieved, in part, by utilizing precise terminology that both you and Control have a shared understanding of and can interpret accurately.

Unlike other areas of marshalling, this does not take as much physical effort, however it does require quick, clear, and precise communication skills to be a really good communicator. This is a skill that nearly everyone can develop because it is not based on linguistic skill but on using and understanding the correct terms for a given situation, in order to be able to relay maximum information with minimum words.

# In the Morning

On arrival at your station immediately establish communications with Control. This is one tick box off of their morning prep check list. Watch and listen for the station before and after yours to check-in. If they do not, they may be having issues that require your assistance. When everyone is checked in and ready, the web of emergency communications is established and Control can now "see" the entire track.

The above should be established before the Senior's briefing. Often there will be information from Control to be disseminated to all marshals. Control often requests information such as a headcount for lunches or shirt sizes for promoter tee shirts. Be listening for this type of communication before and during the Senior's briefing and inform your Corner Senior immediately.

About 20 minutes before the scheduled start of the day, after your sector has been walked and cleared of debris and all of your staff is present at your station, your Corner Senior will conduct the Senior's briefing as discussed earlier. This should completed and everyone in place for the start of the day's activities by 5 minutes before start, at which time Control will conduct it's first course check.

#### Course Checks

Course checks are a very simple and fast way for Control to illicit a "yes or no" response from all stations to a question such as: "Is everyone ready?"

The first course check at T-5 minutes before start is exactly this and is as follows:

CONTROL: Control to all corners. Course Check for ready.

CORNER 1: One Ready CORNER 2: Two Ready

CORNER 4: Four Ready... and so on until all communicators have said "Ready"

CONTROL: All stations, thank you. We have a green track.

There are only two possible responses to this check; "**Ready**" if your Senior is satisfied that everyone is in place and prepared for racing, or "**Hold**" if your station is not ready. Do not give any other information at this time. Control will note your hold and request more information at the end of the course check.

All other course checks are performed the same way, with only two responses. Usually Control will give instructions or information once to all corners then ask for a course check to ensure it was understood by all Communicators / Corner Seniors.

# Course Checks (cont'd)

CONTROL: Control to all corners, Just want to let you know we are having hot dogs for lunch today.

Course Check for Understood. CORNER1: One Understood

CORNER2: Two Hold

CORNER4: Four Understood... and so on until all communicators have said "Understood" or "Hold"

CONTROL: All stations, thank you. Corner 2 you held?

CORNER2: Did you say hot dogs or hamburgers?

CONTROL: We said hot dogs CORNER2: Hot dogs, Understood CONTROL: Thank you Corner 2

If you miss your turn, come in at the end of the course check.

Course checks are done in a number of different situations. Any time the entire track is displaying the same flag (red for shutdown for example), Control will request a course check to ensure all stations understand and are complying.

With red flags in particular, the faster the entire course is red, the faster the emergency response can be. Control over racing traffic must be established before emergency crews can respond. Course checks should be fast and clean. Be ready for your turn and only say the key word Control is looking for.

After the morning course check, the track is green and open for racing. A bike *could* appear at speed at any time, without warning and the entire crew should be ready. Always be listening.

# Bikes on Track

If you are using a headset, it can get uncomfortable. Sometimes moving one earpiece off one ear and alternating this from time to time can help. Sometimes you may want to remove a radio headset completely, but communication with Control must be effective. Regardless of whether you intend to use it, *always take a headset in case you really need it*.

Speak loudly and clearly and make sure that the mouthpiece is almost touching your lips. If you can't "kiss" the mic, it is too far away.

Listen for and keep your Senior informed of all flag status changes on other corners This allows them to anticipate a pending red flag or forewarning request and to monitor bikes that may have been involved but have continued.

Relay all information and messages to your Corner Senior in real time. If needed, write down information you need to remember. Being a Communications Marshal often feels like an English to English interpreter. You hear information in your ear and automatically comes out of your mouth in real time. You are the eyes and ears of control but you are also the voice of control at your station.

All numbers are reported by digit. bike 32 is bike three-two not thirty-two.

# **During an Incident**

Repeat back all emergency hand signals given.

Advise Control as soon as possible if a tow truck, cleanup or repair work are required. Never interrupt another corner's call unless your call is an emergency and theirs is not,

Assess the situation and think for a quick second what the terminology is that you need to use to relay to a "blind" Tower Phone-Op. This takes practice and is the key to being a great communicator. Many good communicators practice their technique in their head over and over so that it is available and accurate when needed. Again this is more memory and habit than linguistic skill.

# During an Incident (Cont'd)

Your first transmission when any incident occurs, regardless of severity is always your corner number and flag status. When reporting an incident, Control is only concerned with the following:

Your corner number and the flag status

Then bike number and colour

Then a brief but scripted description of the incident. The verbiage to use is precise and well understood by Control. This method gives Control critical information very quickly with no ambiguity.

When a rider goes off the racing surface still on the bike and vertical the term to use is "**rode off**." When a bike lays down and slides it is termed a "**low side**." The rider is usually still mounted when the incident begins.

When a bike is still upright but the rider falls or is ejected off the bike a "**high side**" has occurred. Next is to inform control whether the bike or rider are on track or off. For bikes/riders that are not on the racing surface, "**off-track**" (& how far) is used. For bikes/riders that remain on the racing surface, "**on track**" is used.

Next is to state which side of the track the bike is on regardless if it is on track or off. The terms are "rider's right" "rider's left" or "centre track."

Next is to state where in the corner the problem is; "entrance," "apex," or "exit."

Next is to state what the rider is doing right now. Specifically "**rider up**" or "**rider down**" and what the rider appears to be doing.

All of this can be compacted into a small check list of terms and format to use:

- corner number and flag status
- bike number and color
- rode off / low side / high side
- on or off track
- rider's right, rider's left, centre track
- entrance, apex or exit
- rider up or down

After a while proper terms will come as sentences.

"bike three-four black rode off rider's left at the exit and continued safely we are no flags."

"bike eight-three yellow low sided rider's left at the apex and is now 10 feet off track rider is up and heading to safety."

"bike four-seven green with blue high sided rider's left entering my corner and struck the barrier. The bike is off track riders left, rider is down on track and on the racing line."

Once the bike has come to rest, as a Communicator, your attention goes primarily to the rider. Any rider movement is a good sign, lack of rider activity *could* be an emergency. A raised arm means the bike will not run, but the rider is likely OK. Riders are instructed to lift their visors and make eye contact with race officials to indicate they are not hurt. A visor left down is an indication of a need for medical help

Comment only on what a rider IS doing but never what they are NOT doing

# During an Incident (Cont'd)

For example, if a rider is moving around but trying to get up, it is acceptable to say "the rider is down but appears to be getting up."

If that same rider is not moving, it is not acceptable to say "the rider is down and not moving."

The correct terminology is "rider is down."

Control will understand what you are *not* saying and react accordingly. When control hears "rider is down" a few times they will be already anticipating a possible medical emergency.

The above transmissions are done quickly using mutually understood verbiage. A lot of information can be passed very quickly when both you and Control "speak the same language." After you have communicated the above, Control will sometimes want to know how it happened. THIS is when you give a detailed but still brief account of what happened. Do not offer this until asked. Control will also ask for clarification of anything not clear to them; remember, they are blind and going on only your words.

When giving this secondary report do not assume to know the rider's intentions. Never say "The rider deliberately rode off" for example. It is acceptable to say "It appeared as though it could have been deliberate."

# A Typical Call

CORNER10: Control, Corner 10, waving yellow

CONTROL: Go ahead 10

CORNER10: bike one six, white

low sided off track

rider's left

exiting my corner

and hit guardrail

bike is just off the race surface

rider is down off track.

Be ready to be specific as to location of the bike/rider in your sector. Use commonly understood landmarks that you and Control understand. If you are new to your station, your Senior may have some knowledge of commonly used landmarks and what language Control will know it by, such as "the drag tower", "the run-off" or "the little red shack."

Regularly update control as to progress with clearing the incident. The last transmission is usually informing Control that you are "no flags"

### **EMERGENCY EMERGENCY**

Ambulance, Fire and Rescue crews are requested by your Senior either in response to hand signals from the responding safety or simply on their own judgment. An emergency call takes precedent over all other messages except another corner's emergency call. You may break into any message with an emergency call starting with "Emergency Emergency Emergency". Then specify the vehicle(s) you require and the location (corner number, rider's right or left, entrance, apex or exit.) Say all of this in your first transmission, do not wait for control to respond after saying Emergency Emergency Emergency.

# **EXAMPLE**

CORNER11: Emergency Emergency Emergency ambulance rider's left exit of corner 11.

Control will dispatch the appropriate vehicle(s) either over the phone line or on a separate radio network. When any station calls an emergency, all radio traffic stops other than Control and the station with the emergency and tracking of emergency vehicles.

Never give or ask the condition of a rider over comms.

# Shutdown

In the event of a shutdown, control will instruct all corners to display a waved red flag then do a course check to make sure all stations are in compliance. When displayed, riders must *not stop* but slowly continue around the track. They are only allowed to stop if the track is impassable or they are signaled to do so by a marshal. Barring this, they must stop in hot pit lane and await instructions from officials.

CONTROL: "Control to all corners, red flag, red flag," CONTROL: "Course check for red beginning with corner 1"

CORNER1: "Corner 1 Red" CORNER2: "Corner 2 Red" CORNER4: "Corner 4 Red" ...etc

# Tracking

When Control is focused on a particular bike, they may request tracking. The usual situations pertain to last lap & checkered flag, black flags, red flags, slow race traffic, and emergency vehicles. Tracking is used to:

- differentiate a bike of interest from the rest of the competitors for Control
- monitor the progress of a slow bike or service vehicle
- identify the leader for the starter on last lap and checkered flag
- locate a bike for black flags

# Hold all Non-Emergency calls during tracking

# Race Start

During a formation lap, any bike that becomes disabled, stops, or pits should be covered with the appropriate flags and immediately reported to Control.

Control will announce when the formation lap is underway. Under normal circumstances, all stations are "no flags" except the last two stations before start should display a steady yellow and waved yellow respectively and radio silence is maintained. As the field forms on the starting grid, if the last bike is significantly behind (for example just arriving at corner 10 at Shannonville) a call "Last Bike leaving 10" should be made. This alerts the starter that they may not have all bikes gridded when it looks like they do.

If the starter is satisfied that a start is in order they will give the field a green flag, if not a steady yellow.

# If there is no start all stations immediately display steady yellow

Control will often prompt for this but it should happen automatically, particularly if you are in Corner 1 or 2. All bikes must see a yellow flag at all stations. When every bike has passed you, the yellow is not longer needed but watch out for stragglers and make sure they get a yellow also. When start occurs, under normal circumstances all stations should already be "no flags."

#### A typical start

CONTROL: "Formation lap is underway"

CONTROL: "Bikes are gridded" CONTROL: "We have a start"

# No Start

If the starter decides a start is not in order Control will announce a "no start" and all corners go steady yellow.

CONTROL: "Formation lap is underway"

CONTROL: "Bikes are gridded"

CONTROL: "No start, steady yellow all around"

The last corner still waves their yellow flag.

# Slow Race Traffic & Emergency Vehicles

Any slow bike is covered with a steady yellow flag. When reporting this to control, it can usually be done in one transmission if radio traffic is light. All subsequent stations will either make a single transmission or say nothing if other radio traffic is occurring. These calls track the slow bike until it pits or stops. When this bike pits, the last station before pit reports that the slow bike has now pitted. If the bike stops, control should be informed immediately while displaying the appropriate flag. Control will likely not reply to every station, however they will acknowledge when the bike pits.

CORNER10: "Control, corner 10 steady yellow for 24 Red, slow in my sector."

CONTROL: "Copy bike 24 Red slow in 10" CORNER11: "11 steady yellow for 24 Red"

CORNER13:"24 Red Pits" CONTROL:"24 Red Pits"

In the *extremely rare* event that a service vehicle is on track with moving bikes, this same protocol is followed.

# Black Flags

When a bike needs to be shown a black flag, it will be announced by Control. The first station to see the bike in question reports them in their sector. The "black flag bike" is tracked for two stations before the black flag station. The person delivering the black flag reports they have them in sight, then reports when it has been delivered and if there was an indication of acknowledgment. This bike is not tracked on the air however, the last station before pit in will report whether the bike pitted or not. If the bike did not pit, the process repeats with two stations tracking for the black flagger, until the bike pits.

"Radio Silence" must be maintained during any tacking: black flags, last lap, checkered flag. Hold all non-emergency calls, but if you have an emergency, make the call immediately.

CONTROL: "Control to all corners, we need a black flag on 575 Red with Black"

CORNER2: "575 Red and Black in 2"

CORNER6: "575 Red and Black, second of three in 6" CORNER8: "575 Red and Black, third of three in 8"

CORNER10: "Black flag to 575 Red and Black, acknowledged"

CORNER13: "575 Red and Black pits

# Lead Changes

Every time the lead changes in your sector the new leader is announced.

CORNER4: "New leader 44 blue in 4" CONTROL: "New leader 44 blue in 4"

# Last Lap & Checkered Flag

At the scheduled time, Control will request that the last lap flag be displayed. This is often done on a separate radio / phone network than the one we use. The only information a Corner Communicator normally gets is that its last lap / checkered flag.

Sometimes Start is on the same network and deals with Control the same way we do. It is always nice being able to listen to what start is doing and they often have valuable marshalling skills that allow them to act as a marshalling station if the need arises. Any assistance Start may give us though is a courtesy on their part. Start is not a marshal station and should not be regarded as such. For example, if Corner 1 is waving yellow, Start does not forewarn, the last marshal station before start should display a steady yellow (if required) even if Start helps out with their own waved or steady yellow.

Sometimes, the checkered flag is displayed from a designated marshal station somewhere around the track. In this case, Control will request the station to display the checkered flag and confirm compliance. This is done to expedite the exit of bikes into the pits. The station displaying the checkered flag will report the number and color first and last bike to receive the checkered flag and regular tracking of the last bike will follow.

If the leader is in a pack of lapped and to be lapped bikes, it may be difficult for the starter to identify which bike they should give the "Last Lap" signal to. In this case the starter may request tracking. When tracking is requested, the first station to see the bike in question makes a call stating where that bike is right now. When that bike reaches the first "tracking station" that station reports bike number and colour in their corner and the leader's position in the pack. This is repeated by the next station, which is the last before the Start/Finish line. This may be repeated twice; once for Last Lap and again for the Checkered Flag.

CONTROL: "Control to corners 13 and 14, please track bike two-two black for last lap and

checkered"

CORNER13: "13 Copy" CORNER14: "14 Copy"

CORNER5: "two-two black in 5"

CORNER13: "two-two black 3rd of five in 13" CORNER14: "two-two black 3rd of five in 14"

# All other calls must wait unless they have an emergency or the lead changes

As is normally done, all lead changes in your corner need to be announced immediately, even if you don't know the number of the new leader.

CORNER10: "new leader in 10" ← good

CORNER11: "new leader is one-four green"

CORNER10: "new leader, one-four green in 10" ← better

# After the Checkered

For all deployments of a checkered flag, the "first to see checkered" will be announced. The last station before pit in makes a note of the number and colour. When that bike enters the pits, the last station before pit in should report "bikes are pitting." Any bike failing to pit after this is reported immediately as "runner on the front straight."

# After the Checkered (cont'd)

When the "last to see checkered" call is made, all stations between the checkered flag station and pit in will observe and report if the last bike passes anyone. Any change in "last bike" is reported immediately by the corner in which the pass was made by calling "new last bike [number, colour, and corner number]."

When the current last bike pits, the last station before pit in calls "last bike pits." This indicates to control that all race traffic is "clear of the course."

Unless asked to by Control, no additional tracking is needed and the above should happen automatically with no prompting from control.

If your radio stops working signal the nearest station until they return your signal.



RADIO INOPERATIVE
Both hands expressively cupping
on and off both ears

# **Incident Reports**

Regardless of your function (Communicator, Flag Marshal, Safety Marshal, or Senior), you are likely to be asked to submit an Incident Report from time to time. Incident Report forms should be found in the station's clipboard. All items must be filled out including a simple diagram of the incident. When completed correctly these can be of great value to Race Control.

Date:	Corner:	Track:	
Event:	Time of inc	cident:	
Session:	Flag status	Flag status:	
Type of Incident:			ı
☐ side-to-side contact	☐ unsafe re-entry	☐ pass under yellow	ı
□ nose-to-tail contact	☐ racing room / blocking	□ other	
competitor was thinking. A simple, obje	d it. Do not speculate on what you did notive account of exactly what you witned	essed is all that is needed.	CRCA - Incident Report

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# **On Track Sessions**

All sessions fall into one of four classifications. Unofficial Practice, Official Practice, Qualifying, and Races. All events have an official practice, qualifying and a race.

At the beginning of *every* session observe for helmet straps, visors down and that leathers and gloves are fully "zipped." Monitor bikes for leaking fluids, smoke and loose bodywork. All marshals regardless of function should monitor all of the above and for changing track conditions for the entirety of all sessions and report any issues promptly to Control.

# **Practices**

The basic difference between an official and an unofficial practice is that issues with bikes or riders during an official practice can affect the subsequent event. Riders can be penalized in the race for issues during official practice. Also, in the event qualifying is canceled due to extenuating circumstances, lap times during an official practice are often used to set the race grid. Unofficial practices are usually not affiliated with or have any effect on an official race. They are usually run as "lapping days" prior to official practice days. These are usually low key days and a good opportunity for new marshals to get comfortable. Finally, due to the lower impact of a shut down during a practice versus qualifying or a race, Control will red flag practice sessions more readily.

# Qualifying

These sessions are where the bikes are fastest and the riders push the limit the most. Bikes are the lightest in fuel, have the softest tires, corner the hardest and reach the highest top speeds and the riders know they only need to go a few laps and not an entire race. The point of qualifying is not to finish first but to go the fastest. This is the most important time to be alert and focused. If possible (safe) to do so, Control will tend more toward leaving permanent situations as such until the end of the session instead of red flagging a qualifying session.

# Races

Even before a race starts there are flags to display. At the start the bikes are in close proximity to each other and battling for the best position. Flags must be quickly and visibly displayed and comms clear and succinct. As the race progresses it can turn into what looks like a hot qualifying session or a laid back Thursday practice. Stay alert when the action is heating up. During a race, Control will be more hesitant to red flag unless faced with an emergency. Permanent situations will certainly be left as such.

# At the End of the Day

As a matter of courtesy and respect toward the track owners, track employees and your fellow marshals, please collect all trash from the day's activities (including cigarette butts) and bring it back to the paddock for proper disposal. Please DO NOT toss trash into the tires. It stinks and promotes disease carrying rodents and insects. Again please take everything you brought..."pack in, pack out."

# Rider Behaviour

In general, riders must race safely and respect other competitor's right to their part of the track. Any infractions listed below will incur penalties and will likely affect the outcome of the session. All marshals while performing their specific roles as Flaggers, Communicators, Safeties, or Seniors have a collective responsibility as race officials and sometimes judges of fact to report any of these violations to Control as soon as possible

# **ENTERING THE PITS**

Before entering the pits from the Course, Riders shall signal by raising an arm at least one corner before Pit-In.

# **EXITING THE PITS**

Riders entering the track must not cross the blend line and must merge safely into traffic.

# DIRECTION OF TRAVEL

During a session it is forbidden to ride in a direction opposite to race direction.

# **ASSISTANCE**

Riders shall obtain no assistance during a Race other than from their pit Crews in the pits, and themselves elsewhere on the race course. This does not preclude assistance by Officials for safety reasons.

# RIDING OFF COURSE

The rider is required to follow the marked Course during a Competition and shall not gain an advantage from an off-Course excursion. In the event a bike leaves the racing surface, the rider is required to first regain control of their bike, stop if necessary, and re-enter the track safely and as close to where they left the track as possible without riding in a counter-race direction.

# **OVERTAKING**

Overtaking riders are responsible for the decision to pass another bike and to accomplish the pass safely. Overtaken riders are responsible for being aware that they are being overtaken and shall not deliberately impede the overtaking bike.

# **RACING ROOM**

Competitors have a right to "racing room" on the racetrack. "Racing Room" is defined as sufficient space on the racetrack to allow competitors to maintain control of their bikes in close quarters, under racing conditions. Maneuvers liable to hinder other riders, such as deliberate crowding beyond the edge of the track, are prohibited.

<u>BLOCKING</u> is defined as being 'Movement in Reaction' and also includes taking an unusual or abnormal line to inhibit or prevent passing.

PHYSICAL CONTACT Competitors shall avoid physical contact with other competitors

<u>RIDING DOUBLE</u> No one shall ride as a passenger on a competitor's bike at any time, including victory laps.

# **DISABLED BIKES**

If a rider feels/knows there is a problem with their bike they should indicate this to following riders by raising a hand. The rider should keep to one side of the track and off the racing line and allow others to pass safely.

# Rider Behaviour (cont'd)

# STOPPING ON THE COURSE

If a bike stops on the Course, the rider should do so in such a manner as to cause no obstruction to other Competitors, as far as possible off track and preferably on the side opposite the racing line. (Not in an impact zone)

# **INOPERATIVE BIKES**

Riders who stop and do not intend to continue should raise their visor, keep it in the open position, and try to establish direct eye contact with the nearest official to inform track officials that they do not require emergency assistance.

Riders are recommended to dismount and get behind protection as soon as it is safe to do so. They should watch for signals from officials who are there to assist.

# DROPPING OIL

A competitor who drops oil on the racing surface, may be subject to a penalty if it is determined that the competitor obviously and knowingly continued riding in order to return to the pits, instead of pulling off track in a safe area.

NO ONE ALLOWED ON TRACK during a live session other than marshals and race rescue / medical.

<u>FAIRINGS</u>, <u>BELLY PANS</u> and any other major body work must remain in its intended position during any session.

<u>RIDERS MUST NOT CONTINUE</u> after crashing until they are certain they are physically and their bike is mechanically sound to do so. They also must report to Race Medical and Tech Inspection for evaluation when their session ends.

RIDERS MUST OBEY MARSHAL'S flags, hand signals, and directions.

# HAZARDOUS BIKES / RIDERS

Any bike or rider posing a hazard to other competitors because of insufficient speed, fluid spilling, repeated riding errors or rule violations will be penalized up to and including exclusion from the event.

### WHEELIES ARE OK!

BUT...riders should not do any "long deliberate" wheelies close to (within 60m) of another rider.

For exact rule definitions refer to the following Rule Books. These were also referenced when writing this section:

RACEMoto.ca FIM Moto GP FIM WSBK CSBK



# **WORKING WITH CARS**

# CASC-OR Appendix H – Flag And Light Signals And Rules Of The Road

CASC-OR is the regional governing body for auto racing in our area (Ontario Region). Their rules apply to racing that is regional in scope such as BARC and BEMC events. National level (pro) events, are governed by ASN Canada (FIA). Although traditionally there have been differences between regional and national rules, today they are the same.

CASC-OR Race Regulations in italics

2.1.1 The minimum size of the signaling flags is  $600mm \times 800mm$ . The red flag will measure  $800mm \times 1000mm$ .

# 4.0 FLAGS USED AT DISCRETION OF MARSHALS

Yellow Flag



4.1.1 The yellow flag is a signal of danger of any nature **at or** beyond the station displaying the flag. Overtaking is not permitted. SLOW DOWN. The No Passing zone begins at the Flag Station where the yellow flag is shown and extends in a perpendicular imaginary line over the track surface and runoff area. It ends after a second perpendicular imaginary line across the track surface at the first Flag Station displaying a green flag. PROCEED THROUGH YELLOW FLAG SECTOR IN SINGLE FILE, WHICH MAY BE STAGGERED.

# 4.1.2 Yellow flags may be shown in 4 ways:

# a) ONE FLAG MOTIONLESS (STEADY)

When the yellow flag is shown "motionless" it shall be moved with a side-to-side rocking motion.

### The course is unobstructed.

OR

there is an obstruction located off the course or in the next sector.

OR

the following station is displaying yellow flag(s).

When the obstruction will remain in position for the remainder of the session the yellow flag shall be shown motionless for two laps and then withdrawn.

ASN describes a steady yellow flag as "danger beside the track."

# b) ONE FLAG WAVED

**The course is obstructed**. The obstruction is located on or immediately adjacent to the course. Workers may be on or near the course. The corner captain or the Clerk may request preceding posts to display a motionless flag.

ASN describes a waved yellow as "great danger on or near the racing surface."

# 4.0 FLAGS USED AT DISCRETION OF MARSHALS (cont'd)

c) TWO FLAGS WAVED (DOUBLE WAVED YELLOW) Be prepared to stop.

**The course is seriously or completely obstructed**. Workers may be on the course. The corner captain or the Clerk may request preceding posts to display a motionless flag.

ASN describes a double waved yellow as "Great Danger, the track may be partially or completely blocked, workers may be on the course, Slow Down significantly, Be prepared to stop or take other avoiding action."

When an obstruction is such that there is one car width or less of available track surface for race traffic, a double waved yellow should be displayed. This has been described as "the flags you wave while waiting for a red flag command from Control," however what seems to be total chaos can sometimes clear up and resolve without the need to shut down. The key is to quickly identify which cars are still under power and can clear the incident by continuing or getting off track and which cars will not move. As the incident clears you will downgrade to a single waved yellow then steady if necessary then "no flags" or waved green.

# **POINTING**

4.1.4 When necessary, during the display of a yellow flag, drivers shall be instructed by means of hand signals to keep to the side of the Course that is not obstructed.

# PERMANENT SITUATIONS

Section 4.1.2 also describes how to flag permanent situations.

When showing a steady yellow, and "the obstruction will remain in position for the remainder of the session the yellow flag **shall be shown motionless for two laps and then withdrawn.**"

If you are currently waving, and "the obstruction will remain in position for the remainder of the session the yellow flag shall be waved for two more laps, shown motionless for two laps and then withdrawn."

If a permanent situation resolves after going no flags, a waved green flag should be displayed for two laps.

### **FULL COURSE YELLOW**

- d) TWO FLAGS MOTIONLESS AT ALL STATIONS AND BY THE STARTER Slow down significantly, **stay to driver's right of the track** and be alert for response vehicles, recovery vehicles or Safety Car entering the track from any of their locations. This may occur with or without the Pace/Safety Car. Also known as full course yellow.
- 4.1.6 Under full course yellow, it may be permissible to pass a disabled car with an obvious problem (see Section 7.13), providing it can be done safely.

ASN states double steady yellow "is required whenever it becomes necessary to dispatch an ambulance or other service vehicle onto the racing surface."

A Full Course Yellow becomes a Restart when "Lights out on the Safety Car" is announced and all stations change from Double Steady Yellow to Single Steady Yellow.

## 4.0 FLAGS USED AT DISCRETION OF MARSHALS (cont'd)

Debris Flag



#### 4.2 YELLOW FLAG WITH RED STRIPES

The yellow and red striped flag informs Drivers to take care. It is used to warn of a slippery surface such as caused by the presence of oil, water and/or debris on the Course surface. The flag shall be displayed for <u>four</u> laps or until the surface returns to normal.

Green Flag



#### 4.3 GREEN FLAG

A waved green flag may be shown for two laps replacing the yellow flag(s) at the site of an incident once the Course has been cleared.

A waved green shall be displayed at the first flagging position after a local yellow flag.

Any time a yellow flag (steady or waved) is being displayed at a station, the next station after should be showing a waved green flag for the entire time of the yellow. Both green and yellow are initiated and stopped at the same time, making sure that all vehicles that saw a yellow flag also see a green flag before the green is dropped. Both stations go "no-flags" whether a permanent situation exists or not. The no passing under yellow rule applies until the cars reach your green flag. Watch out for drivers passing before they reach you! This rule violation must always be reported ASAP to control for remedy.

# White Flag



## 4.4 WHITE FLAG

4.4.1 The white flag informs Drivers that they are about to overtake a vehicle which is travelling on the Course at a much slower speed than the Competitors. The white flag shall be shown when a service vehicle is on the Course or when a competing Car is moving at a reduced speed.

4.4.2 A waved white flag indicates a slow-moving vehicle is between that flag station and the following flag station. A steady white flag is displayed at the flag station preceding the station showing the waving white flag. The white flags will progressively follow the slow-moving vehicle around the circuit. If the vehicle stops on the Course, the white flag shall immediately be replaced with a yellow flag.

Unlike bikes, a slow competitor or service vehicle is covered with white flags, not yellow. Keep this flag handy. When waving a white flag anticipate the need for a waved or steady yellow if the car stops.

Also look for smoke, debris such as oil or small parts, and any other indications of a problem. Sounds and smells reveal a lot, so sniff and listen while watching. Any pertinent observations should be reported to control. Also remember to downgrade to a steady white when you see the next station start to wave. When they go steady you are done with the white flag for now.

White flags are used to indicate a moving emergency vehicle in your or the following sector.

# Stopped emergency vehicles on or off track are covered by waved yellow and white flags.

White flags are also used to indicate the back of the pack during a safety car deployment (full course yellow) until all cars are collected behind the safety car. This is only done during safety car deployments (virtual or actual) and *not on pace laps or restarts*. "Lights out on the safety car" means drop one yellow and *no more white flags*.

## 4.0 FLAGS USED AT DISCRETION OF MARSHALS (cont'd)

## Blue Flag

4.5 BLUE FLAG

The blue flag informs Drivers that they may be about to be overtaken by a faster Car. When the blue flag is waved, it draws the Driver's attention either to the closeness of the Car about to overtake, or to the high speed at which it is approaching. The blue flag may be shown motionless when the faster Car is still

some distance away and when the flag marshal feels that overtaking will take place in the following sector.

# 3.0 FLAGS USED EXCLUSIVELY ON THE INSTRUCTIONS OF THE CLERK OF THE COURSE

## Red Flag



3.3.1 Waved at all marshal posts and by the Starter, it informs all Drivers to cease racing, slow down significantly from normal speed, **stay to driver's right of the track** and be alert for response vehicles, recovery vehicles or clean up vehicles entering from any of their locations and **prepared to stop at any time**. For warm-up, practice or qualifying sessions, competitors will proceed around to their pit box unless otherwise directed by officials.

For races, competitors will proceed around to pit lane and stop in the fast lane unless otherwise directed by officials. The lap on which the flag is displayed will not be scored.

3.3.3 In the case of a session suspension by red flag, the session clock will not be stopped unless otherwise directed by the Clerk.

# Red is always waved except at pit out where it is held steady.

Black and White Flag (Misconduct Flag)



3.5.1 Divided diagonally into black and white halves, shown motionless by the Starter **and other location if specified in the Supplementary Regulations**, and accompanied by a number on a board, it informs the Driver of the Car designated by the number that his/her conduct or driving has been observed as being unsporting or unsafe. It is a warning; if the behavior continues the Driver may be shown the Black Flag.

#### Black Flag

3.4.1 Held steady and displayed by the Starter or other location specified in the Supplementary Regulations and accompanied by a number on a board, it informs the Driver of the Car designated by that number, to return to the pits at the conclusion of the current lap and await instructions from the Officials.

3.4.2 Held steady and displayed by the Starter accompanied by the word "ALL" on a board, and at all marshal posts, informs all Drivers that the current Course session has been halted, they shall stop competing, no passing, slow down, and that they shall return to the pits at the conclusion of the current lap. Drivers shall be prepared to stop at any time.

3.4.3 In the case of a session suspension by black flag ALL, the session clock will not be stopped unless otherwise directed by the Clerk

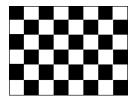
## 3.0 FLAGS USED EXCLUSIVELY ON THE INSTRUCTIONS OF THE CLERK OF THE COURSE (cont'd)

Black Flag with Orange Disk - 'Mechanical Black Flag' The Meatball



3.6.1 The orange disk shall be 400mm in diameter. Shown motionless by the Starter **or other location specified in the** *Supplementary Regulations*, and accompanied by a number on a board, it informs the Driver of the car designated that the Car has mechanical problems likely to endanger the Driver or others. The Driver shall stop at his/her pit on the next lap.

## Checkered Flag



3.2 BLACK AND WHITE CHECKERED FLAG
It indicates the end of a Competition session when waved at the finish line or other location specified in the Supplementary Regulations.

## Pit Out

- 3.3.2 [Red flags] When displayed at pit out informs the driver that they cannot exit from pit lane to the track.
- 4.1.3 If the pit lane exit is within a yellow zone, the Pit-Out marshal may mirror the yellow flag status of that zone.
- 4.1.5 During full course yellow situations, the pit exit shall be closed each lap when the Safety Car passes the locations below. The pit exit shall remain closed until the main pack has passed the pit exit.
  - Canadian Tire Motorsports Park when safety car passes the Starters Stand.
  - Shannonville Motorsports Park when safety car exits Turn 14.
  - Calabogie Motorsports Park when safety car exits Turn 20

# 5.0 LIGHTS

1.0 Signals are given in daylight by different colored flags, possibly aided by lights. Yellow lights at each marshal's post are obligatory for Events run at night.

#### 5.1 SPECIFICATIONS

When light signals supplement flag signals, they shall comply with the following specifications:

- a) The light signals may replace the yellow, green and red flags.
- b) The installation shall present three grouped lights, two yellow and one green. The yellow lights shall be spaced so as to ensure that the presence of two lights is easily recognizable. A red light may be included, to be operated solely by Race Control simultaneously with red lights at all other posts.

# **ADDITIONAL HAND SIGNALS FOR FLAGGING CARS**



Both arms held outright and steady, forming a "T" shape.



DOUBLE WAVED YELLOW
Both arms held outright and waved vigorously up and down.



# **WHITE**

One hand pulling on the opposite sleeve (or a pant leg) as if you are showing it to them.



# PREPARE FOR FULL COURSE YELLOW

Two clenched fists held in front of you, repeatedly touching together and drawing apart.

# **SAFETY MARSHAL**

## Open Wheelers

Open wheelers use a lateral (four wheel) drift technique, are much lighter, fragile and faster than an equally powered closed wheel car. Open wheel cars can tumble violently and scatter parts such as wheels, cowling and fluids. Side to side contact in an open wheel car is hazardous. Open wheel drivers are more exposed than a closed wheeler and are more likely to be injured by other cars and debris in addition to the mechanical forces of the incident.

# **Closed Wheelers**

Closed wheelers are heavier, tend to drift less, and carry a lot of kinetic energy. Closed wheel cars tend to stay more or less intact but travel farther and hit harder when an incident occurs. Closed wheeler injuries are more due to mechanical forces of the crash than contact with other cars or debris. Injuries to closed wheel drivers are more rare and sometimes serious.

It is important to maintain an awareness of these factors, and adjust your expectations of what could happen accordingly.

# Responding to an Incident

Most times an incident will be nothing more than a car driving or spinning off track, regaining control, and re-entering the track. In these cases, look for damage particularly under the car and help to direct the car safely back on track or get them to "park it" if it is obvious they shouldn't continue. The driver is responsible to re-enter safely but they are also required to obey your signals. Drivers may look to you to direct them back on track. If so, direct them to a safe re-entry point and have them wait for a gap. Do not signal them to continue until there is an AMPLE gap. If they decide to go before your signal, they are accepting all consequences. Any unsafe re-entry should be immediately reported to control.

## Still able to move

If a car seems to be able to move but is not going to continue, stay behind barriers as much as possible and direct the car to a safe location (usually the pre-established safe spot discussed in the Senior's Briefing). If you can, get them to pull it behind a barrier or as far off track as possible.

If the car will roll but isn't running you may have to push them to safety if it can be done safely. Look to your Senior for guidance as to whether to go out in the open to do this. A car that is too close to the track, in a tight impact zone, or otherwise highly exposed should not be responded to in order to push it. If it is in a place with good visibility for oncoming competitors, not in a critical impact zone, far enough off track and close to safe place, pushing *may* be an option. For example if a car pulls up to an opening in a guard rail but needs to back up into the opening, it is generally ok to go in the open momentarily to push them in. If you think there is a need to push a car to safety, **check with Control (via your Senior) before moving to any exposed area**.

When a car is not going to move under its own power any further, if possible, **turn off the electrical switch**.

Have the driver exit the vehicle and get behind a barrier. Continue to monitor both driver and car for medical / fire issues.

Note: The GCRs (General Competition Rules of CASC-OR) require drivers to pull stopped vehicles as far off track as possible so drivers *should* be looking to do this and *should* be looking for guidance from you.

## **Disabled Vehicles**

If a car is not going to move, the driver should (drop their window net and) raise their arm to indicate they are disabled. If they do not, get as close as possible while staying behind barriers and try to make eye contact with the driver. When you get the drivers attention, try to establish if they think they will continue. Drivers will usually recognize a hand to your throat in a slicing motion or a "thumbs down" followed by a shrug as "are you able to continue?" If a driver is not moving do not call out to them as this could make a neck injury worse.

If the car is not going to move any further, and the driver is looking at you, have the driver exit the vehicle and direct them to a safe location. Report a "permanent situation" to Control.

Note: Due to position on track, time left in the session, and/or number and class of cars on track, Race Control may request the driver stay in the car, if so instruct the driver not to exit their vehicle by holding up your hands, palms forward.

## Going trackside

Responding in open trackside areas used to be a critical step in the emergency response protocol. Today in addition to the fact that drivers tend to suffer less injury than a bike rider, more sophisticated in-car safety features and the high level of medical care and rescue resources that can be placed on scene, seconds after an incident makes response in the open by marshals an unnecessary risk in most cases. If a car is not moving, the driver has not raised their arm, they have not made eye contact, and you cannot get close enough while staying behind a barrier, a medical emergency is assumed. Your Senior will inform Control of the situation and a shutdown or full course yellow, followed by medical and rescue deployment will occur.

# Responding to a Car

There may be situations where the car is in an acceptably safe location and Control would like a marshal to respond.

## Always take your fire extinguisher wherever you go.

When not behind a barrier, stay as far away from the track surface as possible and keep the car between you and oncoming traffic whenever possible. The best place is the corner of the car that protects you from oncoming traffic and is furthest from the track surface. **Do not get between walls/guardrails and the car unless necessary** and minimize time spent doing so.

As you approach the vehicle *and* while continuing to watch approaching traffic, you should be assessing the condition of the vehicle and driver. Primarily you want to know if the driver needs medical attention or if there is fire.

A driver not looking to you for direction, head bowed or not moving much if at all is a sign of probable medical emergency.

When you reach any car that will not continue, **turn the electrical switch off**. If the driver is out of the car, direct them to safety.

## Fire

The only time you should *expect* to respond in the open is if there is a fire.

When you get to the car watch out for hot parts and immediately **turn the electrical switch off**. Look for a "kill switch" on the roll bar or the hood of a sedan. (Remember your paddock walk?) Electric fuel pumps can create and continue to fuel a fire while running.

# Fire (cont'd)

The next priority is to **urge the driver to exit the vehicle**. Most drivers will understand immediately and exit their vehicle rather quickly. When they do, direct them to the nearest safe location while turning your attention to the fire, but keep an eye that the driver is doing what you asked. If they have crashed, noncompliance may be a sign injury, however as any paramedic will tell you a driver complaining over a racing incident is usually not that bad off.

If you have a fire and there is any doubt that you can extinguish it yourself, keeping a watch for oncoming race traffic, **give the fire signal** and after it has been returned to you focus your efforts back on the vehicle. If the driver cannot exit the vehicle and there is a significant fire, focus your efforts on the driver as needed to protect them while emergency crews respond.

In the extremely unlikely event a driver is in *imminent* danger of injury by fire and you've done all you can, as a final and *desperate* measure, get them out of the car immediately, regardless of the nature of their injury.

# Do not mistake the onboard fire extinguishing system (below) with the electrical shut off (previous page)



Look for a manually triggered onboard fire system and activate it **only if the driver is at risk of injury or the fire is large**. This is a worst case scenario that you will likely never experience but it *has* happened and having this information is better than not. Many onboard fire units are triggered automatically now so the manual trigger is fast becoming obsolete.

# **Mandatory Medical**

After a hard or spectacular impact a driver may get out the car then lay down or start hobbling around or clutching a part of their body and not making their way to safety. This is a sure sign of injury. If you are far away, you can still observe a driver's body language for signs of injury. If a driver shows signs of injury but says they are alright, send the mandatory medical hand signal (inverted "A" held downward) to your Senior and wait for their acknowledgment.

## Medical Aid

A slow moving, confused, or otherwise not fully aware driver or a driver that becomes combative or non-compliant should be suspected of a head injury. Drivers are instructed to lower their window net or lift their visors and make eye contact with a marshal if they are not going to continue but are OK. A stopped car with the window net still up or a visor left down is an indication of a possible injured driver.

The hand signal for medical aid (the "A" for ambulance over your head) should be immediately sent to your senior. **Hold the signal until it is repeated back to you** by them before continuing.

# **Unresponsive Drivers**

After your own safety, your job is to observe the unresponsive driver for level of consciousness and breathing until help arrives. Be prepared to quickly inform Race Medical of your observations on their arrival before moving back and letting them work.

# ADDITIONAL SAFETY MARSHAL HAND SIGNALS FOR CARS



MANDATORY MEDICAL
Both hands across lower body,
fingertips to fingertips, forming an
upside-down "A"



TOW TRUCK
Arms held out at right angles to the body forming the letter "T", followed by...



DEBRIS ON THE TRACK
The circling of the arms mocking the letter "O" at the side of the body indicates a slippery course or debris on the course.



FLATBED
Arms held out at right angles, but tilted to mimic the angle of a flat bed tow truck.



RESCUE REQUIRED
Arms extended out to the side of the body in a scissors-like fashion indicates that extrication (jaws of life) is required.



PULL TOW
Both arms straight out in front of the body and pulling in towards the chest.



ALL CLEAR
Both hands across lower body
and moved rapidly from side to
side across the front of the body

# **Other Hand Signals**

**LEAKING** 

**WATER** 

**GAS** 

**SMOKING** 

**FRONT** 

**BACK** 

LOOSE BODY WORK

YOUR CAR IS ON FIRE



FIRE TRUCK
Rotary movement of either arm above the head.

# **COMMUNICATOR (Phone-Op)**

Do not call during tracking for pursuit (intercepting the leader with the pace car on a full course yellow), last lap, checkered flag, or black-flagging unless you have an emergency.

Because cars tend not to "high side", the terminology is different with cars versus bikes.

When a car drives off the racing surface with two wheels only and maintains momentum and direction then returns to the track, there is no call to be made unless it is repeated multiple times in a row or it is done in a particularly reckless way.

When a car drives off the racing surface with all four wheels but maintains momentum and direction then re-enters the track, the terms to use are "four wheels off" and "re-entered safely" or "re-entered unsafely."

When a car exits the track in a direction not in line with the flow of race traffic and / or does not maintain momentum and direction, it is termed a drive off. The specific language is "drove off."

When a car exits the track in a non-nose first attitude (sideways, backward) it is termed a spin off. The specific language is "spun off."

For spins that remain on the racing surface, "spun on track" is used. Also the cars attitude in relation to race traffic (perpendicular, counter race, etc) should be stated when reporting "on track or off."

Last is to state whether the driver is "in the car" or "out of the car" and what the driver appears to be doing.

The checklist is as follows::

- ✓ the corner number & flag status
- ✓ car number and color
- ✓ spun or drove
- ✓ on or off track
- ✓ driver's right or driver's left
- ✓ entrance, apex or exit
- ✓ impacted, rolled over, stopped or continued
- ✓ if stopped, where and facing which direction?
- ✓ driver in or out of car

After a while proper terms will come as sentences.

"Car three-four black drove off driver's left at the exit and continued safely we are no flags."

"Car eight-three yellow spun off driver's right at the apex and is now stopped 10 feet off track and counter race, driver is exiting the car."

"Car four-seven green with blue spun off driver's left entering my corner and struck the barrier. The car is against the barrier and parallel to it. Driver is in the car."

Once the car has come to rest, your attention goes primarily to driver activity. Any driver movement is a good sign, lack of driver activity could be an emergency. An arm out the window of a stopped race car means the car will not run, but the driver is likely OK. Drivers are instructed to drop their window net or lift their visors and make eye contact with race officials to indicate they are not hurt. A window net left up or a visor left down is an indication of a need for medical help.

# A Typical Call

CORNER10: Control, Corner 10, waving yellow

CONTROL: Go ahead 10 CORNER10: Car one six, white

spun off
driver's left
exiting my corner
and hit guardrail
car is just off the race surface and perpendicular
Driver is in the car.

# Pace Laps and Race Start

During a pace or formation lap, any car that becomes disabled, stops, or pits should be covered with the appropriate flags and immediately reported to control.

Control will announce when the pace lap is underway. Under normal circumstances, all stations are "no flags." The pack will be strung out and single file at the onset, but should form up into their double-rowed starting positions on "the back half" of the track. Stations in this "back half" should report on the progress of this formation. If the field is strung out, the Race Director may instruct the pace car (on a different radio frequency) to slow in order for the stragglers to catch up.

Except for "back half tracking," radio silence is maintained until the pace car lights go out, signaling their intention to pit. The corner in which this happens must report it.

CORNER11: "Lights out in 11"

The last station before pit in reports the pace car has pitted.

CORNER13: "Pace car pits"

Control of the field by the pace car has ended and the field is now directly under starters orders. If the starter is satisfied that a start is in order they will give the field a green flag, if not they will shake their head "No!" a display a steady yellow flag.

# If there is no start all stations immediately display steady yellow

#### A typical start

CONTROL: "Pace lap is underway" CORNER10: "Pack forming in 10"

CORNER11: "Pack forming but still strung out in 11"

CORNER11: "Lights out in 11"

CORNER13: "Pace Car pits, pack well formed in 13"

CORNER14: "Two by two in 14" CONTROL: "We have a start"

## No Start

If the starter decides a start is not in order and stays steady yellow, Control will announce a "no start" and all corners go steady yellow.

CONTROL: "Pace lap is underway" CORNER10: "Pack forming in 10"

CORNER11: "Pack forming but still strung out in 11"

CORNER11: "Lights out in 11"

CORNER13: "Pace Car pits, still strung out in 13"

CORNER14: "Staggered in 14"

CONTROL: "No start, steady yellow all around"

# No Start (cont'd)

When the entire field has passed you, go "no flags" in anticipation of a start next time around. If you have cars in your sector when a start is declared, immediately drop your yellow. This tells the back markers that a green is waving at start.

"Back half" tracking occurs as usual, commenting on pack formation. All procedures are the same only the pole sitter sets the pace, not a pace car.

# Full Course Yellow

During a full course yellow all stations must display two steady yellow flags **except the station currently waving for the incident.** If you are waving yellow, keep waving yellow and do not change to double steady. Of course the station waving green would change to double steady yellow...

#### 2.6 RESTART PROCEDURE

- 2.6.1 When the Safety Car is used during Competition, the following procedure shall be followed:
- a) The Clerk shall order the display of double steady yellow flags at all marshal stations around the course (i.e., full course yellow).
- b) Appropriate flags shall be waved at the stations preceding the incident.
- c) When the yellow flags are displayed at all marshaling stations, the Safety Car may be dispatched.
- d) The Safety Car shall turn on the lights or display a yellow flag and endeavour to enter the Course directly in front of the lead Car. Should it fail to do so, and when so instructed by Race Control, the other Cars shall be waved past until the lead Car is directly behind the Safety Car. The other Cars shall carefully close up until they are running in single file behind the race leader.
- e) Unless directed to do so by Officials in the Safety Car, no Car may pass the Safety Car.
- f) When a service vehicle is dispatched while the Safety Car is in use, the white flag shall be used in the normal way in addition to the yellow flags. In normal practice the white flag will not be used to indicate the presence of the Safety Car on the Course. However, it may be waved to indicate the back of the pack as an advisory to approaching race cars.

If the safety car lights go out in your corner, announce it immediately.

# CORNER11: "Lights out in 11"

This call prompts all stations change to single steady yellow in anticipation of a restart. The restart procedure does not require "back half tracking" and the track is now "single steady yellow all around." When a start is declared, all stations immediately go "no flags." This tells the back markers that a green is waving at start.

- g) Prior to a restart, the Safety Car shall extinguish the flashing lights, or withdraw the yellow flag, at least three (3) flag stations before the Start/Finish line, and at the same time, one (1) yellow flag shall be withdrawn at all marshal stations. The Safety Car shall exit to the pits upon reaching the pit entrance and the marshals shall withdraw their remaining yellow flag when the Starter shows the green flag.
- h) The Starter will show the green flag provided the field is in good order. Racing resumes at the display of the green flag. If the starter does not show the green flag, the field will continue in single file behind the Race leader.

# During a full course yellow and restart, no course checks are done by Control, compliance is assumed.

## Lapping

If the leader gets close behind the last car and ready to pass in your sector, "Leader has the Tail" is announced. This marks the beginning of blue flagging activities.

CORNER 4: "Leader has the tail in four" CONTROL: "Leader has the tail in four"

## **Driver Behaviour**

In general, drivers must race safely and respect other competitor's right to their part of the track. Any infractions listed below will incur penalties and will likely affect the outcome of the session. All marshals while performing their specific roles as flaggers, communicators, or safeties have a collective responsibility as race officials and sometimes judges of fact to report any of these violations to control as soon as possible. Driver behaviour is addressed in Section 7 – Rules of the Road of the GCRs.

#### 7 RULES OF THE ROAD

## 7.1 ENTERING THE PITS

Before entering the pits from the Course, Drivers shall signal by raising an arm.

## 7.2 SIGNALING TO PASS

If a Driver about to be overtaken wishes to indicate the side on which an overtaking Driver should pass, they shall point to that side or operate the signal light on the side on which the pass should be carried out.

# 7.3 DIRECTION OF TOW

During a session it is forbidden to drive or tow a Car in a direction opposite to that in which the Event is being run without the specific approval of the Clerk.

# 7.4 STOPPING ON THE COURSE

If a Car stops on the Course during an Event, the Car should be parked in such a manner as to cause no obstruction to other Competitors.

## 7.5 MOVEMENT UNDER POWER OF THE VEHICLE STARTER

Cars shall not be moved under power of the starting device while on the Course, except to remove them from a hazardous position to one of greater safety.

## 7.6 ASSISTANCE

Drivers shall obtain no assistance during the Race other than from their pit Crews in the pits. This does not preclude assistance by Officials for safety reasons.

# 7.7 DRIVING OFF COURSE

The Driver is required to follow the marked Course during a Competition and shall not gain an advantage from an off-Course excursion.

# 7.8 OVERTAKING

- 7.8.1 Overtaking drivers are responsible for the decision to pass another car and to accomplish the pass safely. Overtaken drivers are responsible for being aware that they are being overtaken and shall not deliberately impede the overtaking car.
- 7.8.2 Competitors have a right to "racing room" on the racetrack. "Racing room" is defined as sufficient space on the racetrack to allow competitors to maintain control of their cars in close quarters, under racing conditions. Maneuvers liable to hinder other drivers, such as deliberate crowding of a car beyond the edge of the track, are prohibited.
- 7.8.3 'Blocking' is defined as being 'Movement in Reaction' and also includes taking an unusual or abnormal line to inhibit or prevent passing.
- 7.8.4 Competitors shall avoid physical contact with other competitors' cars.

# **Driver Behaviour (cont'd)**

## 7.9 REPETITION OF DRIVING ERRORS

Repetition of serious driving errors or a lack of control over the Car may incur penalties.

## 7.10 RIDING OUTSIDE THE COCKPIT AREA

No one shall ride outside the cockpit area or on the coachwork of any car at any time, including victory laps.

# 7.11 DRIVER SIGNAL AFTER AN ON-TRACK INCIDENT

- 7.11.1 Drivers involved in an incident that results in their vehicle coming to a complete stop who do not continue should attempt to provide one of the following signals as soon as practicable to inform track officials that they do not require emergency assistance.
- 7.11.2 Drivers of open wheeled vehicles and/or roadsters should attempt to raise their visor, keep it in the open position, and try to establish direct eye contact with the nearest official.
- 7.11.3 Drivers of closed wheel vehicles should attempt to drop their window nets and should attempt to establish eye contact with the nearest official.
- 7.11.4 Drivers are recommended to exit their vehicle and get behind protection as soon as it is safe to do so. They should watch for signals from officials who are there to assist. Until it is safe to exit, they should remain belted and not remove any safety apparel for their own safety.

# 7.12 DROPPING OIL

7.12.1 A competitor who drops oil on the racing surface, may be subject to a penalty if it is determined that the competitor obviously and knowingly continued driving in order to return to the pits, instead of pulling off track in a safe area.

# 7.13 DRIVING A DISABLED CAR

- 7.13.1 If a driver feels/knows there is a problem with their car they should indicate this to following drivers by
- a) raising a hand or pointing,
- b) putting on the rain light or hazard lights if the car is so equipped
- 7.13.2 The driver should keep to one side of the track and off the racing line and allow cars to pass safely.
- 7.13.3 This includes when under full course yellow or behind the Pace Car or Safety Car. Following drivers may pass the car signaling it is disabled.