



Flagging and Communications

Captain's Training Manual

The Corner Captain is responsible for the performance of the corner station crew, the equipment assigned, and all people in the station's area of responsibility. The Captain is generally selected from among the most experienced marshals after demonstrating the ability to manage other marshals. The Captain coordinates the corner's total operation, making sure the course is clear and ready, providing further training to the marshals, managing operations during incidents, releasing emergency equipment when directed, and ensuring Control is informed of the corner crew operations.

The Corner Captain should also cooperate with properly credentialed photographers to assist them in getting the photos they need while not endangering themselves, disrupting the operation of the corner, or interfering with the view of the marshals. Finally, the Captain should see that spectators and animals are not allowed into restricted areas. (Hard to do at Waterford. The animals just won't listen!)

Here are some guidelines, tips and techniques to help you run a station as the Captain.

Morning Meeting

1. During the morning flag meeting note who the Captain's are at adjoining stations. Make arrangements with each Captain regarding the range for safety response. (Usually each turn would split the difference, and safety would respond halfway between each station.)
2. Note who is assigned to your turn. If you are not familiar with someone assigned to your turn station, ensure that you introduce yourself and confirm that they know how to get to the turn station.
3. Collect the phones and any other equipment (schedules, etc.) at the meeting.

Opening the Station

1. Have all turn equipment collected from edge of track or wherever it's stored.
2. Put someone on phone net ASAP as this is critical to getting the first session started. Report any missing equipment to Control.
3. **Station Briefing:**
 - Appoint an Assistant Captain who can run the turn in your absence (if you handle an incident for example).
 - Determine experience level and any physical limitations of crew (bad backs, bee sting allergies, etc.).
 - Set up a rotation. If there are more than 4 marshals, you should be out of the rotation so that you can direct incident handling and teach new marshals. If you are in the rotation, the assistant captain should be on phones or yellow when you are on safety so that they can direct the turn in the event of an incident. Ideally, as a Captain, you should go to an incident only after all other marshals have responded, with the exception of the communicator.
 - Determine where to staff point positions with fire bottles if you have sufficient marshals. Look for a safe location (behind positive barrier) near where incidents are likely. Across track is good. So is downstream. Big trees count as barriers.
 - Stress safety procedures in meeting: flagging face to face, covering back doors (such as turn 3 at Waterford), track crossing, incident handling, etc. Point out safe parking zones, along with how to call for equipment now.
 - Review hand signals with all marshals.
 - Review any procedure changes with marshals (as discussed in morning meeting).
 - Point out to any visiting or novice marshals any landmarks that may be of help when making calls.
 - Point out to any visiting or novice marshals the facilities.
 - Review with your crew any Rain Procedure or the procedure the track follows when the communications network goes down. (If you have one).
 - Review with your crew the Disaster Plan for the track!!!
 - Note if station is a call-thru for Black Flag or Start Finish. Also any special procedures for this call-thru station - some tracks and stations call the car as it approaches or passes a landmark to give the Black Flag station a better way to pick the car out of a pack.
 - Review with any visiting or novice marshal any verboten words that should not be used on your communications net.
 - Plan your escape paths and tell the crew where likely impacts will occur.
 - Develop an emergency plan of action in case of a major incident, and brief your crew on the plan. Run through several scenarios and relay to your crew how you wish the incident to be handled. Always stress in the event of an incident that the Communicator should know or request from Control the

remaining time or laps in the sessions as that might dictate what action is taken.

4. Check fire extinguishers for pins in place with a tie and a full charge on the dial. For any pressurized bottle, turn the bottle upside-down and pat the bottle. You should be able to hear the powder move if you put your ear to the bottle. Perform this several times to loosen up the powder and prevent the powder from caking. Position extinguishers at point positions or likely areas for spinouts. A welding glove or rope draped on the guardrail can mark where a bottle is hidden behind it (such as in the fenced area around turn 7 at Waterford).
5. Make sure all gear is behind the guardrail or cement barriers. Don't have anything propped on the barriers, since it will fly if the barrier is hit.
6. Check your track! Ensure that the track is clean and free of debris, oil, etc. Walking the track is the best way to determine any potential problems. Have all marshals except the communicator inspect the track before and after each session, as time permits.

Incident Handling

The corner crew implements emergency Operating Procedures during any incident that might cause injury to a driver(s), marshal(s) or spectator(s). A well-trained and well-oriented crew will not need to wait for instructions from the Corner Captain, but will perform their duties quickly and correctly. The Corner Captain will modify or direct the crew's response as the situation changes.

The Captain responds during an emergency by assessing the incident. He or she watches for signals from the safety/response marshals for information about driver condition and the need for emergency vehicles to assist with driver extrication, treatment, or transportation, and to fight fire. The Captain confirms that the communicator is requesting the necessary equipment or additional personnel to assist with managing the incident or securing a perimeter around the incident, if needed. The Captain may ask the communicator to request back-up flags at preceding stations. When circumstances dictate, the Captain should establish a runner to the incident to return with details for Race Control or to give instructions from Race Control or the Captain.

The Captain always controls the number of marshals at the incident. The area should be kept clear of those who are not helping with the incident or securing the area. If the session or race has not been stopped, marshals should return to their assigned stations as quickly as possible in order to be prepared for subsequent incidents.

Here are some additional techniques and guidelines to follow in the event of an incident.

- 1 Get marshal to incident safely (give a point from the station), and ensure that the marshal has a fire extinguisher and a rope. **Do not** send a marshal until they are

needed (i.e. for a spin and continue). Wait until the dust settles after an incident to determine if a response is required. Response to an incident should be in the following order:

- Safety or point person to respond first
 - Blue flagger responds next
 - Yellow flagger passes off the yellow flag to the communicator and responds next
 - Captain responds last
2. If the vehicle is on fire, handle the fire first! Call for fire and rescue if needed. When a vehicle is on fire, two marshals should respond in order to back each other up on the fire bottles. Teamwork is extremely important when it comes to fire safety. One marshal should sweep with the extinguisher while the other holds their extinguisher at the ready for back up purposes.
 3. Determine the condition of the driver and call for an ambulance if necessary. If driver appears to be all right but the impact was severe, request a medical at the end of session for the driver. If the steering wheel is bent or the driver's helmet is cracked or appears to have sustained damage, call for an ambulance NOW! It is always better to be safe than sorry when dealing with possible medical complications. Do not allow the driver to exit the vehicle until the ambulance arrives. If the driver has sustained any neck or back injuries due to an impact, allowing the driver to move may cause further damage.
 4. Attempt to clear the track and go green. Call for a wrecker if the car is immovable. If the car is in a safe location (away from track, not in direct line of impact, etc.), it can be left where it is until the end of the session. If the car is in a doubtful location but cannot be retrieved without blocking traffic, or there are only a few minutes left in the session, it may be best to leave the car there until the end of the session. You may request a wrecker or flat tow now from Control, but be aware that these requests are not always granted. Cover any vehicles with the appropriate yellow flag (stationary for off-track, waved for on-track).
 5. Call a "Priority" if equipment is needed now. Call an "Alert" for a rollover or severe impact. The following information is critical in case of a "Priority/Alert":
 - Station number and flag condition
 - Car number & color (for medical information)
 - Incident location (helps to determine if a shutdown will be needed)
 - What equipment is needed (wrecker now, ambulance now, etc.)

The correct way to handle a "Priority/Alert" call is as follows:

- Call to Control: "Alert, alert. Turn 7 waving yellow." Or "Priority, Turn 7, waving yellow."

- All stations should then clear the communications net. Control will respond "Go, turn 7."
- The communicator should then advise Control of the situation, so that the Stewards may decide upon the appropriate response. For example:

"We have car 69 orange rolled over drivers left into the swamp. We also have car 5 red and car 78 yellow who swerved to miss the incident, hit each other, and are now blocking the track. Request a wrecker and an ambulance now."

Or

"We have car 89 black, severe impact into the tires drivers left. Safety is responding. Request a wrecker now."

6. In the event of a "Red flag all" or "Black flag all", it is most important for the station with the incident to maintain their yellow flag. If you are unable to manage the yellow flag along with the red or black, keep the yellow flag flying to indicate to any remaining race traffic that the incident is in your turn station. Do not, under any circumstances, drop the yellow flag.
7. When the incident is under control, write notes regarding what happened. Be prepared to write an incident report (WHRI) or witness statement (SCCA), which will be submitted to the Chief of F&C at the first opportunity.

The Captain as Teacher

As an experienced marshal, the Captain is also responsible for the training of novice marshals and other experienced marshals alike. Even experienced marshals can forget things and it is up to the Captain to correct any misconceptions or offer suggestions regarding how an incident is handled, correct flagging procedures and so on.

When training a novice marshal, there are a number of things to keep in mind. Here are some guidelines for the training of novices.

1. If you have sufficient marshals, try to team the novice with an experienced marshal.
 2. Always send an experienced marshal with a novice to an incident. Novices should never respond to an incident without an experienced marshal beside them. (**Note:** Minors are not permitted, under any circumstances, to cross a “hot” track, regardless of who is with them. Minors may respond to incidents on the station side of the track, with assistance from an experienced marshal.)
 3. Ensure that they call in as a novice when they are on phones.
 4. When in a standard rotation, try to set up the rotation so that the novice has easier groups for blue flag and phones.
 5. There's a lot to cover when training a novice. Here is a rundown of the areas that will need to be addressed.
- Racing can be dangerous! Stress basic safety precautions such as standing when there is race traffic, buddy system, face-to-face flagging, etc.

~ Flagging:

- 1 Yellow flag
 - Face to face with blue flagger.
 - Yellow stationary for off-track, waving for on-track.
 - Never put down the yellow flag until all race traffic is past the station on the cool down lap.
 - Swapping positions with blue flagger when yellow is displayed.
 - Hand signals for stationary yellow, waved, and down.
 - Covering marshals responding to an incident with yellow flag.
 - Watch for passing under yellow
- 2 Blue flag
 - Blue flagger handles all flags except yellow, black, red
 - Explain that blue flag is advisory, not a command.
 - Check your mirrors, faster race traffic imminent
 - Blue held stationary if following close behind, shaken, rocked or waving (depending on track) for actual passing attempt
 - Where is best to show flag at each turn, when drivers will see it

- Blue flag for racing- for lapping, not position
 - Attempt to memorize first 3-5 cars, last 3-5 cars on pace lap so that blue flagger knows when cars are starting to lap the pack
- 3 White flag
 - Advisory-slow moving vehicle or emergency vehicles on the track surface.
 - Be ready to use when victory laps are under way
 - Hand signal for flag
 4. Surface
 - Advisory- oil, coolant, gas, dirt, turtles (!), etc.
 - Hand signal for flag
 - 5 Black or Red for ending session
 - Emergency- session ending, usually done by Captain, called for by stewards
 - Go over difference in flags: black means return to pit lane, red means comes to immediate and controlled stop
 - 6 Black flag and Mechanical Black at Start/Black Flag Station
 - What they each mean: black at Start and black flag station, return to pit lane. Stewards want to talk to you. Mechanical black-mechanical problem with car. Return to pit lane. Warning black (closed black) at Start- clean up your act!
 - If you are training a novice at the black flag station, stress importance of listening for black flag, mechanical black calls from Control. Stress proper procedure for acknowledging calls at black flag station. Talk about the number board and how it's used.
 - If training novices at call-through stations, stress proper communication procedures for acknowledging black flag/mechanical black calls (ie. "6 Copy"). Stress importance of call through for black flag station and Start.
- **Hand Signals**
 1. Hand signals for flags
 2. Hand signals to drivers: slow down, come to this side, go to other side, slippery, stop, give a point
 3. Hand signals for wrecker, flat tow, fire, ambulance, help, driver OK, oil
 - **Communications**
 1. Call in as a novice
 2. All calls: Turn number, flag condition. Wait for Control to respond before continuing with call.
 3. When Control acknowledges call, give car number (single digits), color, incident description, car location, percentage of track blockage, driver condition (if impact), and necessary equipment. Stress using concise statements. Cover upstream, downstream, driver's right and left, impact, flip, roll, etc.

4. If requested information unknown, respond with "checking". Check information with Captain.
5. Log incidents (write it down!).
6. Keep Captain informed of incidents on track, cars to watch for (smoking, leaking fluid, etc.)
7. Calling "Priority/Alert" for serious incidents requiring equipment now. (Always check with Captain before calling "Priority/Alert")
8. Black flag procedures: Hold all calls during black flag, mechanical black unless it's a Priority/Alert call

- **Safety**

1. Always wear gloves- cars are hot and have many sharp objects
2. Always take a fire extinguisher and rope to an incident, and why.
3. Demonstrate proper use of rope (where possible) for pulling formula cars
4. Get point from station for crossing track. (Again, novices should never cross the track to go to an incident unless they are with an experienced marshal, and minors are not permitted to cross a "hot" track.) Demonstrate point and how point is used to point drivers back onto the track after an incident or off-track excursion.
5. Stress spending minimum amount of time on track or trackside with a vehicle.
6. Stress keeping vehicle between marshal and oncoming traffic.
7. Stress never turning your back to traffic.
8. Fire: If car is on fire, handle this first. Must have back up. Should be upwind, if possible. Don't open hood and add oxygen to fire. Call for fire truck where necessary.
9. Driver condition: Get ambulance if necessary. If car has rolled, do not release belts or attempt to turn car upright while driver is still in the vehicle. Wait for assistance.
10. Move car to safe location. If not moveable, call for a wrecker. If the car is not in a safe location, call for wrecker now.
11. If the driver is attempting to restart the car, give him/her about 1 minute, then get the driver out of the car. Turn off the kill switch. Make sure car is in gear.
12. Flat tow can be used if car has steering, brakes, and all tires are OK. Otherwise, get a wrecker. Report any possible fluid leaks to Control.
13. If marshal has responded to an incident, return to station with driver (get a point from the station). If session is almost complete, stay with driver at a safe location until after the checkered flag. Point out safe locations.
14. Keep driver standing during session.
15. Return to incident with extinguisher when flat tow or wrecker arrives. Put driver back in the car for a flat tow, with helmet, gloves, and seat belts fastened (lap belt is a minimum).

- **End of Day**

1. Talk to novice about how they did
2. Give encouragement
3. Recommend items they should bring with them next time
4. Ensure that they get an SCCA flag manual from the Chief of F&C

Closing the Station

1. All equipment (except for phones) at track edge, unless otherwise requested.
2. Stay on phones until released
3. Lay down any used extinguishers trackside
4. Empty all water jugs
5. Clean up station using garbage bags supplied in station kit
6. Advise marshals of any special doings planned for the evening
7. Incident reports/witness statements to Chief of F&C
8. Advise Control of low oil dry, fire bottles etc.
9. License, log book signing by Chief of F&C at base of tower
10. Thank your crew for a job well done!