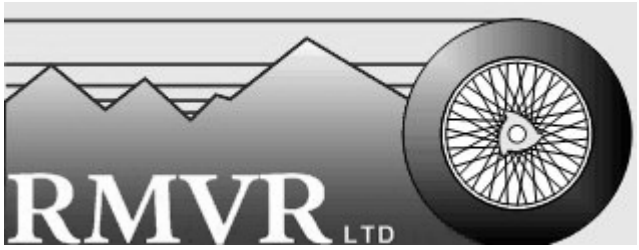

Flagging and Communications Manual

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Introduction

The Flagging and Communications (F&C) Manual defines standard procedures for all Rocky Mountain Vintage Racing (RMVR) events. While this manual is designed as a standard set of guidelines, it does not address every situation you may encounter.

RMVR F&C puts you trackside at some of the best vintage races anywhere in the country. You will find that participating in this exciting sport and making new friendships are your best rewards for the work you will do. If, after learning about F&C, you feel it is not for you, don't worry; RMVR has many ways for you to participate.

Chapter

1

The Purpose and Importance of the F&C Team

☞ *What We Do and Why*

The purpose of the Flagging and Communications organization is to provide safe course control by:

- Informing the drivers, through flags, lights, or other signals, of the condition of the course, the condition of their cars, or of any unusual conditions affecting the running of the event.
- Informing the steward and other officials, through the communication network, of the condition of the course and the competing cars and of any situation requiring decision and/or actions by the race officials.
- Relaying information and instructions from the steward to the persons operating various emergency vehicles and equipment around the course (which may also be tied into Race Control via radio) as well as to the drivers and various personnel located at or near corner stations.
- Undertaking emergency action needed to protect the lives and property of the workers, drivers, or spectators in the event of an incident.
- Maintaining a clear course.

Chapter

2

Race Organization

☞ *Who's Who and Doing What*

At all events, there is a structured race organization with functional levels of responsibility and accountability. F&C is one of the many specialties in that structure.

The F&C Hierarchy

1. The Steward is the person in control of the operation of the event. This person directs the function of the event and is the ultimate operational decision maker. There may be one or more assistant stewards who are responsible to the steward and who assist in the operation of the event.
2. The Chief of Flagging and Communications is responsible for the operation of the F&C team. There may be one or more assistant chiefs as well. At an event, the F&C chief reports directly to the steward. The F&C chief is accountable for the performance and smooth operation of the F&C team. The chief is also responsible for the F&C organization, recruiting, and training of the workers throughout the year.
3. Corner captains direct the worker activities at each corner. The F&C chief selects the most experienced and knowledgeable workers to be corner captains. These individuals direct worker activities at each corner.
4. Each corner station is staffed by corner workers assigned to display flags, to respond to incidents, and to communicate on the race network.

Other Groups in the Race Organization

Individuals or teams who normally work closely with F&C are:

- The Race Chairperson(s), who handles the overall event organization.
- Starters, who operate the Start/Finish station.
- Equipment personnel, who maintain, distribute, and collect all course and corner equipment.
- The Emergency Services Team, including drivers and crews of ambulances, wreckers, and fire trucks.
- Timing and Scoring, which maintains lap times and positions.
- Technical Inspection, which inspects (or scrutinizes) each race car for adherence to RMVR rules. As part of this duty, Tech also inspects cars during a race if a car is suspected of having mechanical difficulty.

- Pit & Grid marshals, who control movement of vehicles in the pit area and line up (grid) cars for entrance to the race course.
- Sound Control, which monitors the sound level emitted by race cars.

How the F&C Specialty is Organized

Race Control

The Chief of F&C has the responsibility for Race Control where all communications affecting the control of the event are centralized. Control maintains an immediate liaison with the steward(s), all corner stations, and other groups in the racing organization. Because of the amount of activity at Control during an event, access to this area is generally restricted.

Corner Stations

Number

At every event there are a sufficient number of corner stations to ensure the entire course is under direct visual observation at all times.

Location and Jurisdiction of Corner Stations

Each corner station is located with these considerations in mind:

- The corner station crew has the maximum amount of protection from out of control race vehicles.
- F&C staff must work behind some sort of positive protection. For this reason, barriers, guardrails—or, in the case of the starters, observation towers—are installed to ensure the safety of the workers.
- The flag signaling jurisdiction of each corner station extends from the flag position of that station to the flag position of the next station. Although flag and incident communication have defined boundaries, the responsibility of a corner station and its crew for course observation and incident management response overlaps that of the preceding and the following stations.

Personnel

Each corner station is staffed by a minimum of two and preferably at least four people in the following positions:

- Blue flagger (who may also work safety)
- Yellow flagger (who may also work communications)
- Communicator
- Corner captain (who, under reduced staffing, assumes one of the above roles in addition to his/her captain's duties)

Black Flag Station

- One of the corners is designated as the Black Flag station. This station, in addition to its regular corner station functions, also may be requested by race control to display two special flags and a number board.

Chapter

3

Equipment

☞ *What You Have and What You Need*

Personal Equipment

- White shirt and pants or coveralls – "Whites" are the standard protective uniform of most race organizations worldwide. They provide ready identification, a neutral background for flags, and help reflect summertime heat. New corner workers may wear neutral color clothes (jeans and a long-sleeved shirt or the equivalent). They are strongly encouraged, however, to pick up a set of whites. Red, yellow, bright blue, and black are flag colors and are not acceptable. Shirts/coveralls must be long-sleeved for burn protection. Cotton is a good choice of material since it will not burn as readily as artificial fabrics nor melt to burned skin. It also has the benefit of breathing on hot days and is generally warmer on cold ones.
- Rainsuit/poncho – Any white, clear, or neutral color rainwear is acceptable.
- Leather/Nomex® gloves – Race cars have hot, rough, sharp, and dirty parts that may injure an unprotected worker. Leather gloves are good; Nomex® gloves with leather palms are the best.
- Hat – Shade at a corner station, if it even exists, is at a premium. A good baseball-type hat will protect your head and shield your eyes from the sun.
- Sunglasses – Be sure your sunglasses allow for the true color of cars to be seen. Some sunglasses block blue light wavelengths and will turn a blue car into a green car..
- Sturdy boots or sneakers – A good leather work boot is often the choice of workers as it provides support, traction, and protection from hot car parts and local vegetation. No sandals or light-weight "street" shoes are permitted.
- Warm coat – Neutral colored, and no nylon. We predominately race in Colorado where the weather changes by the minute.
- Ear plugs or other hearing protection – Race cars are noisy! Ear plugs normally can be found on the equipment van.
- High SPF sunscreen and lip balm
- Small notepad and pencil – Very useful for writing down car numbers and colors.

- Whistle with lanyard and break-away clip – The louder the whistle the better so it attracts the attention of other workers and spectators. Some sort of clip should be attached to the lanyard and to a part of your whites. This allows the whistle to break free if caught while you are attending a race vehicle.
- Cooler with drinks – Water is provided at each station but additional liquids, including electrolyte-replacement sport drinks such as Gatorade®, are recommended. Dilute them with water 1:1. Sugared drinks are not recommended because consuming sugar when your body needs water will cause the water already in your body to be used to metabolize the sugar causing further dehydration. Alcoholic beverages are forbidden until all official racing activities are ended each day. Remember, race day starts at 12:01 AM!
- Track bag – A reasonably waterproof bag or backpack to hold your items while at the corner.
- Toilet paper – Portable toilets can run out of toilet paper.
- Surgical scissors (optional) – For cutting seat belts and other miscellaneous items.
- Small first aid kit – Include non-narcotic pain-killers, Band-Aids®, etc.
- Camera and film (optional)
- Bug repellent
- Spare socks (optional) – If your feet get wet…

Corner Equipment

Each corner station is usually equipped with the following:

- Radio and clipboard
- Flags – Yellow, Debris (yellow with red stripes), White, Passing (blue with yellow stripe), and Black.
- One large fire extinguisher and two small "boogie bottles"
- Pry bar (optional)
- Two brooms
- Bucket of "oil dry"
- First aid kit and spare gloves
- Water jug

Black Flag stations will have two additional items: Mechanical Black flag ("meatball") and a signboard for displaying car numbers.

Chapter

4

General Operating Procedures

☞ *What Happens Before and After You Arrive at the Track*

Registration

The F&C Chief(s) writes a newsletter every month with detailed information about upcoming events. It can be found on our website rmvr.com or it may be mailed to you. It contains phone numbers and e-mail addresses for all the chiefs so that you may contact them to sign up for events. There is also a link for the "Volunteer Sign-Up Form" on our website (rmvr.com) you can use to sign up. Please sign up at least 2 weeks before an event.

Upon arriving at the track, each F&C worker must sign in at Registration. You need only register once at each event. It is absolutely essential that everyone signs the insurance waiver at each and every event.

> ***Benefits:*** Sign up in advance and receive accommodations, lunch, drinks, patches, prizes, and more. And don't forget the worker rides!

F&C Meeting

Each morning of the event, usually concurrent with and separate from the driver's meeting, the Chief of F&C conducts a worker's meeting. All F&C personnel are required to attend. During the meeting, the chief will review the procedures unique to that event as well as announce corner assignments, distribute patches and lunch tickets, address policy or procedural changes, and remind everyone of *Rule Number 1: Be Careful.* Occasionally the steward, if in attendance, will make a very short speech.

> ***Corner Captain's Note:*** This is also when you pick up your radio(s), headset(s), and clipboard. You must sign for your radio and you are responsible for it until you return it to the designated person at the end of the race day. Please keep it with you during the lunch break. Your clipboard should have a race schedule, list of entrants, incident reports, and scratch paper for notes.

Worker Assignments

The chief makes corner assignments before arriving at the track based on the sign-up sheet. This is done giving full consideration for the experience of the workers and the requirements of each corner. Experienced workers will be distributed to help train less experienced or new personnel at each station. Consideration is also given to personnel and corner preferences if so indicated on the sign-up sheet (or the mail-in portion). Workers who were not listed on the sign-up sheet who show up will be assigned during the morning F&C meeting.

> ***Corner Captain's Note:*** Work your staff through a full rotation frequently to ensure the development of knowledge and experience and the exchange of ideas.

Chapter

5

Corner Station Procedures

☞ *What Happens At the Corner Station*

Workers and Their Functions

Important: Safety is our most important concern on the corners. So, in this order…

#1 First and foremost, you are responsible for *your own safety.* Always keep an eye on oncoming traffic unless you are the yellow flagger.
#2 Make sure your fellow workers are safe.
#3 Look out for the safety of spectators, photographers and others in your coverage area.
#4 Keep drivers safe.
#5 Your last concern is for the cars. They can be repaired or replaced.

Corner Captains

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

The corner captain cooperates with photographers, visiting driving instructors, and local authorities (if present) to assist them in their duty while not endangering themselves, disrupting the operation of the corner or interfering with the view of the corner workers. The corner captain is also responsible to see that spectators and animals are not allowed into restricted areas.

Flaggers

Flaggers work in pairs, one facing oncoming traffic signaling with the blue and other flags and one facing the traffic departing the corner station signaling with the yellow flag. Since the yellow flagger cannot see oncoming traffic, the blue flagger must act as the eyes of the yellow flagger and warn of any impending danger.

The flaggers should place themselves in a prominent position where they are clearly and easily seen by oncoming drivers and where they have an unobstructed view of the course. This position should afford the flaggers a clear view of the track between them and the station before and the station after them. If this line

of sight is impossible, they must be positioned to be able to see the worker who has that view and can indicate what flags are needed.

The flagging position must protect the flaggers with some kind of barrier that will divert a race vehicle traveling at race speed. At no time should the flaggers work in front or on top of this protection.

The blue and yellow flags should be held so as to hide the colors from the drivers when they are not used for signaling. The other flags need to be kept close at hand to the blue flagger to be displayed as quickly as needed.

Communicator

The communicator must be in a location where all of the area within the jurisdiction of the station can be seen. The communicator wears the radio and never leaves it for any reason until relieved by another worker. The communicator reports all pertinent information about corner conditions to Control and relays incoming information to the captain and other workers.

Safety

Safety workers respond to incidents complete with full whites, gloves, whistle, and boogie bottle. When responding to an incident, do not run, but rather walk quickly, constantly looking at oncoming traffic. A yellow flag should be displayed for any worker responding to an incident.

Driving Instructor

A driving instructor may be in attendance at a corner station to evaluate drivers. While not part of the F&C team they are part of the race organization. Both observers and corner workers should cooperate in helping each other complete their respective tasks.

Photographers

Occasionally a photographer will be in attendance at a corner station to take pictures. Photographers should be wearing an orange safety vest. The corner captain should assist photographers in finding safe areas in which to work.

Flags and Their Meanings

Flags are used to provide information for the drivers regarding the course conditions in a particular sector or to summon them into the pits because of potential mechanical problems or rule infractions. Drivers will obey all flags immediately and without question.

- Green – Displayed only by the starter
  - Waved – The race is under way.
  - Standing – The course is clear.
- Yellow
  - Waved – Great danger; be prepared to stop. The track is partly or fully blocked. No passing until past emergency area.

- Standing – Danger ahead; be prepared to stop. No passing until past emergency area. *Note:* A "backup yellow" may be display one station before a waving yellow. Standing yellow flags may be used around the course for pace laps or early laps of practice sessions. An off-track danger, such as a worker or race vehicle, would require a standing yellow. At the discretion of the corner captain, it may be displayed for two laps and then pulled even though the off-track danger still exists. This is done to prevent a later event being confused with the present danger.

Remember:
On-track and will damage race vehicle = waving yellow flag
On-track and will not damage race vehicle = debris flag
Off-track = standing yellow flag

- Red – The race has been stopped. Drivers stop at edge of track in sight of corner station & await direction. Displayed only upon steward request. Simultaneously, each corner station will display a waving red flag.
- Blue with diagonal yellow stripe (passing flag) – Displayed standing. Another competitor is following you closely.
- Yellow with vertical red stripes (debris flag) – Displayed standing. Take care. Oil and/or debris has been spilled and/or slippery conditions exist somewhere on the track ahead. *Note:* At the discretion of the corner captain, this flag may be displayed for two laps and then pulled even though the danger still exists. This is done to prevent a later event being confused with the present danger.
- White – An emergency or slow-moving vehicle is on the course ahead. Take care. Displayed standing and for two stations before vehicle.
- Black
  - Waving – The race has been stopped. Proceed to the pits using extreme caution. Used only upon direction from the steward.
  - Standing – Displayed at the Black Flag Station or by the starter upon request from steward. Complete the lap you are on and enter the pits for consultation with the steward. Used for rule infractions. *Note:* Black Flag Station will display the vehicle number on their sign board. When the word "ALL" is displayed it means the same as a red flag.
  - Furled – Displayed by the starter upon request from steward. Warns driver that steward is aware of possible rule infraction; exercise care.
- Black with orange ball ("meatball") – Displayed standing by the Black Flag Station or the starter. Your car has a mechanical problem. Reduce speed and proceed to Tech.
- Checkered – Displayed waving by the starter to indicate the end of the race or practice session. Complete one more lap cautiously before returning to the pits.

Multiple flags are often displayed at the same time in order to fully inform drivers of complex course conditions and situations. All standing flags are generally held with one hand on the flag staff and the other holding the free edge of the flag in order to maximize the area shown to the driver and minimize the interference from the wind. When two flags are held at the same time they should be held handles together, flags pointing in opposite directions. The most important flag should be closest to the track. The white flag is the only exception as it would not be visible against a worker's clothing.

Normal Corner Operations

General

Always stay alert, never turn your back to the racing vehicles (without proper backup) or sit or lie down while cars are on the course. Never use a camera while on duty without permission from the corner captain. Never lean on or place equipment on or against guardrails, bunkers or other positive protection devices as they will move if struck by a race vehicle. Use your ears as well as your eyes. You often will hear a car out of control before you see it. Never leave any corner or personal equipment where it may be tripped over. Always check that equipment is situated so you can get to it quickly and avoid running over it. Never gesture needlessly to drivers as they look to workers for information and should not be given confusing signals.

Corner Meeting

A corner meeting is held by each corner captain at the beginning of each race day at the stations. The captain checks the experience level of any non-familiar workers and makes sure all workers are introduced to each other and made welcome. The captain will review standard signals and whistle procedures with the entire crew and answer questions about any procedures of which the workers are unsure (*Example:* What is considered four wheels off at this corner?). The captain will explain any problems presented by the corner where the crew is working and will also direct placement of the equipment. The captain will assign workers to each position on the corner and should set up a system for rotating workers from one position to another.

Worker Rotation

Everyone on the corner, including the captain, should be encouraged to work every position. The corner team's efficiency is increased if everyone is familiar with every job on the corner. Workers remain alert when they change positions regularly. If, however, any worker feels unable (through lack of strength, disability, or lack of confidence) to fulfill the responsibility of a particular position, the corner captain will make adjustments as necessary.

End of Day

At the end of each day, the corner captain will remind everyone about special events and the next day's starting time, direct the workers in collecting the equipment, ask someone to remain with the equipment until the van picks it up, and inform the equipment manager of anything that needs to be replaced.

> ***Corner Captain's Note:*** Don't forget to return your radio and headset to the designated person so that the battery can be recharged. You are solely responsible for these expensive items. The clipboard may be left with the rest of the equipment.

Track and Equipment Observation

Before any session can begin, each corner must be sure its portion of the track is clear of oil, debris, or vehicles; that all necessary corner equipment is present and in good operating condition; and that all assigned corner personnel are present and in position. Special consideration is given to the fire extinguishers as they must be inverted and shaken to ensure that the powder is loose and the pressure gauge is in the green.

The track should be checked continuously by eye to see that it is free of oil and debris. A definite and substantial spill of oil or coolant or an accumulation of small debris requires the display of the debris flag until the condition improves or for a maximum of two laps.

Competition Vehicle Observation

When cars are on the track, check closely for poor handling or definite hazards such as loose exhaust, loose hood (bonnet), trunk (boot), or body panels, rubbing or flat tires, spilling liquids, roll bar height, and smoke in the cockpit. Often a worker can hear or smell something wrong with a car before it is seen.

> **Note:** An **X** on the back of a car indicates a new driver.

Check the drivers to see that they are completely covered by their driving suits with no exposed hair or skin. They must wear gloves, face shields (open car) or some eye protection (closed car), and their seat belts must be fastened. Occasionally, drivers will observe problems with other vehicles or the track and signal them to corner workers. There are three basic hand signals a driver may give:

1. Point: Mechanical problem. A driver will point at another vehicle to indicate a possible mechanical problem. This should be reported by the communicator, along with the indicated car's color and number, to Control.
2. Point and wipe visor: Leaking. A driver will point, often vigorously, to another vehicle and then wipe his own visor to indicate a leaking car. This should be reported by the communicator, along with the indicated car's color and number, to Control. Additionally, a quick check should be made of the track's surface as soon as possible.
3. Point down: Debris on track. A driver will point down at the track to indicate debris on track. A quick check should be made of the track's surface as soon as possible. Most often this debris will be in a location not seen by the corner workers.

Observations of aggressive or unsafe driving made by corner captains or driving instructors should be reported by the communicator at the captain's request. These include blocking, intentional contact ("metal-to-metal" or "tire-to-tire"), poor cornering, improper pit entrance, or repeated departures from the track. Blocking comes in three varieties:

1. Consistently cutting-off cars at the entrance to a corner.
2. Consistently running down the middle of the straight-away in front of other cars.
3. Consistently blocking a car trying to pass in a corner.

By nature, racing is aggressive, but the acts listed above are also potentially unsafe. Aggressive or unsafe driving requires a judgment call, usually made by corner captains or visiting driving instructors. Report any possible transgressions immediately to your corner captain. The first offense may result in a warning to the driver. The second offense is a "black flag offense," in which the driver will be reeducated by the steward.

Yellow Flag Incidents

Cars may spin and continue. Cars may partly spin or spin completely around and may or may not stop on or off the track surface In either case, a yellow flag would be shown to warn approaching drivers of a car that has spun. These cars are reported to Control as having spun and continued after the car has returned safely to the track.

Cars stopping at the station either after spinning or driving off the course require a response from the corner crew. The flagger at once displays the yellow flag, and the communicator reports the situation to Control while the safety worker(s) assist the driver and the car.

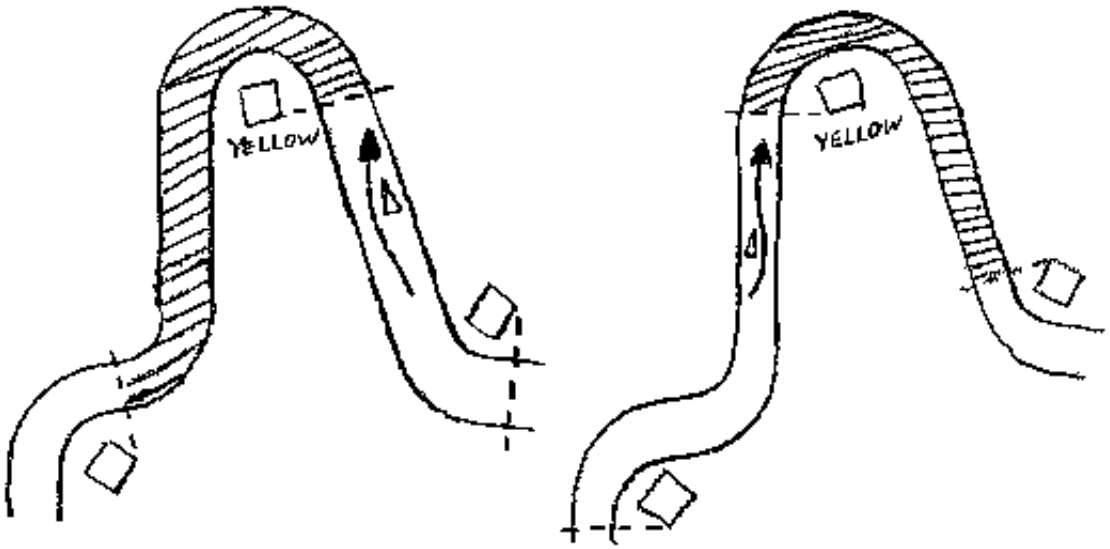
The corner captain directs the operation of the crew and controls the situation. A well trained, experienced corner crew should not wait to be told what to do by the corner captain. During normal operations, each person should know and perform each job correctly and quickly as part of a team. New workers should work closely with the captain and the experienced workers and look to them for direction.

Displaying the yellow flag requires a set procedure from both flaggers. The yellow flagger, looking beyond the turn, sees and assesses the incident as it occurs, then at once turns to face oncoming traffic and displays the yellow flag, either standing or waving. The blue flagger moves to the side of the yellow flagger away from the course, faces the course downstream and observes the resolution of the incident, keeping the yellow flagger informed. If another flag must be displayed (debris or white), the blue flagger moves slightly ahead of the yellow flagger and displays the appropriate standing flag. It is the yellow flagger's responsibility during this procedure to watch and warn the blue flagger of a car approaching the flag position. Remember, the blue flagger is looking at the incident, not at the traffic.

During a yellow flag situation all corner personnel should watch oncoming competitors very closely and report to the corner captain (who will relay to Control) any driver who passes another competitor between the point where the yellow flag is being displayed and the point of the incident. Passing under the yellow reports must include the colors and numbers of both vehicles, and assessment of whether the pass was avoidable or not, and whether the passing car was waved by. Please note that passing near a corner displaying a yellow flag, waving or standing is permitted in only two circumstances:

1. Before reaching the flag: A driver may pass but only if the pass is 100% complete before reaching the flag. If the pass in not 100% complete then the driver passed under yellow.
2. After reaching the flag: A driver may resume passing under two circumstances:
    a. The driver has reached the next manned corner station and that station is not displaying a yellow flag. If the next corner station is displaying yellow and the driver attempts a pass then the driver passed under yellow.
    b. The driver has passed the incident(s), can see the next manned corner station, and that station is not displaying a yellow flag. If the next corner station is displaying yellow and the driver attempts a pass then the driver passed under yellow. If there are additional incidents in your corner and the driver attempts a pass before passing the last incident (regardless of whether the driver saw the additional incidents or not) then the driver passed under yellow.

Re-entry is the process of signaling the driver of a stopped car when there is a break in traffic so that he/she can safely return to the course. A worker signals the driver to re-enter. The car is held where it is by holding up both hands, palms out, then the worker points to the last car before the break in traffic with one hand and finally waves the driver back on course with both hands. All signals and motions must be forceful and exaggerated in order to be clearly understood by a driver at a distance.



Incident Response

Working on the track surface during racing requires teamwork. Unless a safety worker can see clearly a considerable distance before the station, the worker must signal the captain for permission to go out on the track and must wait for a signal from the captain before approaching the track surface to check for oil, remove debris, or move a stopped car to a safe position. A waving motion signals the worker to go out to the track and one or more whistle blasts plus return motions signal the worker to exit the track immediately. Remember, always wear gloves and make sure your whites are "zipped-up" when working safety. Cars and car parts are often sharp and hot. Always kick pieces that have fallen off a car rather than picking them up. Not only is kicking a faster way to clear the course, but car pieces can cut or burn through gloves.

The first safety worker responding to any stopped car must take along a "boogie bottle." Always approach the stopped vehicle so it is between you and any oncoming traffic. Assuming the driver pulled off because of a mechanical problem, the car will probably move and can be pushed at once to a safe location. A safe location is a place clear of the course and not in a target area (vulnerable to being hit by other cars going off the track) so the yellow flag does not need to be shown to cover the car, driver, or workers. Once the car is in a safe location, the driver should be allowed a reasonable amount of time to restart before being required to leave the car and join the safety worker in a safe position. Normally the driver would return to the corner station, but in some instances where you are across the track it may be safer to wait out the session there. If the car cannot move under its own power, the safety worker should use hand signals to communicate to the corner captain what equipment (flat tow/flat bed) will be needed to remove the car from the corner.

Generally, after the driver has moved to a safe location, a station covers the abandoned car for two laps with a yellow flag and then drops the flag, even though the car has not moved.

Flat tows are vehicles (usually wreckers) equipped with tow ropes or straps for pulling race cars back to the pits. The driver must remain with the car to steer and operate the breaks as it is towed. Drivers must wear a helmet, eye protection, lap belt, and gloves while in the car. A full harness is strongly recommended. Drivers have been injured when tows upturned a towed race car or when the tow ropes broke and snapped back into the eyes of the driver.

Spectator Control

Interactions with spectators are part of both normal and emergency operating procedures. Always be friendly and helpful to spectators. Emergencies requiring medical or police attention in the spectator area should be reported to Control. On-duty corner workers may not leave the corner to help in such an emergency unless released by the steward. You should know where a spectator can find a restroom, concession stand, telephone, medical attention, crossover bridges, and the best observation areas. Do not talk with spectators while cars are near your portion of the course. Normally the F&C team does not handle parking, gates, traffic or crowd control, etc., but if these factors adversely affect the safety on the course then corner workers may have to assist.

Special Flags

Black flagging a competitor is done at the Black Flag Station (and sometimes Start) only upon orders from the steward. The flagger holds out an open black or mechanical ("meatball") flag while another worker holds a number board displaying the number of the vehicle being black flagged. Normally the driver will acknowledge the flag with a nod or wave, and this acknowledgment (or lack thereof) should be reported to Control. If no acknowledgment was received, the starter may also be asked to display the black flag. In both cases, the stations before the Black Flag Station and Start should "walk-through" the car using both hand signals and the radio: "Car one two three, purple, through 4."

Emergency Corner Operations

Emergency operating procedures are implemented by the corner crew during any incident that indicates probable injury may occur to a driver(s), corner worker(s), or spectator(s).

Corner Captain's Role

A well trained and well oriented corner 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/she watches for signals from the safety workers 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 may also ask the communicator to request back up flags at preceding stations.

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

Flags

The flagger(s) respond by immediately displaying the appropriate flag(s). Remember that it is the location of the incident, rather than its perceived severity, that dictates the appropriateness of initial flag display. In other words, a car upside down is a severe incident, but if it lands well off the course the situation warrants only a standing yellow. Flag selection and display will change as the incident evolves, vehicles and personnel move, and emergency vehicles arrive at the scene. Flaggers must also keep in mind the need to move the flag position should the incident occur slightly before the station.

Communication

The communicator responds by quickly and calmly reporting the incident by using the code phrase "Emergency! Emergency! Corner *X*". The condition of the driver(s) or other potentially injured individuals will be foremost in the mind of the steward. It is essential that the communicator keep the corner captain advised of any inquiries or directions given by Control, and that the communicator relay every question from the captain to Control. Keep in mind that any emergency incident will require a write-up. The communicator may wish to make a list of vehicle colors and numbers and a quick sketch of what has happened for later reference.

Safety Worker Response

The safety workers who make up the incident management team become the central figures in an emergency situation and are generally at greatest risk. While a worker does accept a certain element of risk with the responsibility of working on the course, this risk can be minimized if workers remain alert. This means looking and listening and using common sense. Incidents happen quickly and it is not difficult for even an experienced worker to become confused. If this happens, the worker should look to the captain or other experienced workers for guidance. Secondary response workers should always monitor the safety of primary responders, who are focused on the incident, and suggest or take action to ensure the safety of all involved.

> **Note:** Some open wheeled cars have a fire system integrated with the kill switch; ask the driver before turning it off.

The first worker to any incident must take a "boogie bottle" fire extinguisher. Workers should approach the incident keeping the disabled vehicle(s) between them and oncoming traffic whenever possible. Avoid becoming trapped between the disabled vehicle and another stationary object should a second vehicle come off course. If it is apparent that the car will not continue, the master or kill switch should be used to shut down the electrical system. These switches are generally located in front of the windshield on most closed wheel cars or on the right side roll bar upright on most open wheel cars. The switch should be marked by the international signal of a lighting bolt/electric bolt on a blue triangle. The driver and other workers should be told when the switch has been turned off to avoid having the system inadvertently reactivated.

Occasionally, safety workers must fight fires. Every worker should be trained in the correct and safe operation of fire extinguishers and should be aware of the proper precautions regarding dry chemical fire fighting agents.

> ***Important:*** If you are caught in a vapor fire and you are on fire, **STOP, DROP,** AND **ROLL**.

If you have a fire, notify race control immediately so that fire crews are alerted and ready if needed. Always protect the driver who remains in his vehicle in a fire by directing the dry chemical extinguisher at the base of the fire and sweeping back and forth. Whenever possible, attack the fire from upwind to increase visibility and the amount of chemical reaching the flames. If flames are observed as the hood (bonnet, engine compartment, cover) is being opened, apply a quick sweep of dry chemical under the car, then open slowly. The first shot of dry chemical may extinguish the fire or slow or prevent a flare up. With larger fires, call for the fire crew at once. Make an effort to put out the fire but do not put yourself in danger.

> ***Important:*** Alcohol-based fuels have no flame. If you see a driver of a car that uses this type of fuel, pull over, rapidly exit, and start rolling, ***the driver is on fire***. Douse the driver with plenty of water. Fire extinguishers will have no effect.

A worker should never turn his/her back on a recently extinguished fire. There is always the danger of reignition or flashback, and with it, the possibility of becoming trapped. Ideally, a backup safety worker will be watching the procedure, but this cannot be expected in all incidents.

When opening the hood of a smoking car, always have a fire extinguisher standing by, with the pin pulled and ready to use. Always stay as low as you can when opening the hood. When you open the hood, this increases the oxygen supply to the fire and you may cause the fire to flare up and jump out at workers. Finally, if a car stops at the side of the track in the grass, be sure to check for hay or dried grass under the car that may come in contact with a hot manifold or exhaust pipe and start burning.

If there is no fire or if the fire is out, check the driver's condition. Let the driver get out of the car under his/her own power. A driver will seldom self inflict further injury while helpful safety workers may aggravate slight injuries by attempting to assist. You should, of course, stand by to assist a driver who suddenly loses balance or needs to be eased back into a sitting position for some reason. Drivers have been known to crawl out of cars with broken ankles and then collapse; others who appear fine at first may suffer delayed adverse reactions, go into shock or become disoriented and wander into unsafe areas. The key is to keep a close eye on the driver from the time you arrive at the incident until he or she is handed over to the ambulance crew. Tell the ambulance crew if the driver has lost consciousness and if the helmet has any dents or scratches. Make sure that any apparently uninjured driver who has experienced a severe incident goes to a safe location. Keep a worker with that driver in case their condition changes. Generally, a driver involved in a serious incident should be seen by the ambulance crew as a precaution.

A conscious but injured driver should be left in the car unless the car is in a very, very dangerous position or the car is on fire. A worker who reaches an injured driver should signal the corner station immediately for an ambulance. If the driver is trapped in the car and will require extrication, and the car is in a dangerous position or there is a danger of fire, the worker should signal immediately for a wrecker, fire truck (if available), and the ambulance.

If the driver is conscious but injured, leave him or her in the car if this can be done safely. Immobilize the head and neck if needed, leave the helmet on, and wait for the ambulance. Keep the driver informed, in a calm voice, of what is happening. Remember to keep the car between you and oncoming traffic. It is important to remember that ambulances, once summoned, will be at your location very, very quickly.

An ambulance call is assumed to be a request for immediate assistance. If the situation is life threatening the communicator will use the phrase "Ambulance now." When medical personnel arrive, they are responsible for the management of the incident. The role of the safety worker is to aid the medical team and to operate under their control and direction. If a safety worker is not needed, he/she should make sure the course is clear of debris, there is no fire hazard, the other workers are safe, and the captain is regularly updated.

Unless the car is ablaze, do not attempt to extricate a driver unless you are trained, and unless you have adequate help. Call for assistance, check for breathing, open the neck band, immobilize the head, and wait.

It is usually rare that workers will be involved with the actives described below.

> ***Important:*** Never remove a driver's helmet except if the driver is having an airway problem and is not breathing.

Always assume that an unconscious driver has head and/or neck injuries. Always immobilize the head and neck of an unconscious driver immediately and check for breathing and/or heartbeat. It is generally good to carefully loosen the neck band of the driver's suit to permit easier breathing.

If there is no heartbeat, the driver must be removed from the car at once to begin CPR. It is essential that the driver's head and neck remain immobilized during this procedure. Even if a backboard is not available, it is very important that care be taken to minimize movement of the driver's spine. CPR should begin as soon as possible.

An upside down vehicle requires special precautions and planning. Attempt to establish contact with the driver and determine which side of the car he/she is on. Asses the driver's condition. If the driver does not crawl out on his/her own, request assistance. Do not turn the car over completely while the driver is inside and not stabilized. While the driver is in an upside down car, do not release their belts.

When race vehicles go upside down, fluid spills frequently occur. Gasoline and battery acid are caustic (corrosive) substances and care should be taken to guard workers and the driver from contact with these and other fluids. Gasoline is also extremely flammable and a fire extinguisher should be kept manned and ready on the scene until the rescue is complete. This should be done whether the danger of fire is apparent or not.

Immobilization and extrication procedures can only be learned through experience or at Crash & Burn School.

Incident response is not complete until the course is cleared as well as possible, not only of vehicles and drivers, but also of oil and other debris. Expended fire extinguishers must be replaced and oil dry must be restocked. Advise Control of equipment requests.

Finally, the corner captain must see to it that an Incident Report form is completed and must, after any severe incident, make certain that each member of his/her crew is ready and able to continue staffing the station.

Chapter

6

Communications Procedures

☞ *What, When, and How to Say It on the Radio*

Normal Protocols

The communication of information to and from Control is an integral part of the operation of a corner station. All reports from the communicator to Control must be clear, concise, and complete. The communicator must speak slowly, distinctly, and calmly. Basic facts and needs should be reported briefly but completely and elaborated on later as requested by Control. Jargon and codes should be avoided unless they are part of the communications procedure outlined in this manual.

Only authorized personnel may use the communications network. This includes the F&C team, Tech, stewards, Start, Pit & Grid, wreckers, ambulances, and Timing & Scoring. No personal messages may be transmitted over the system without permission from Control. There should be no chatter or socializing on the net at any time. A communicator should not be on the network during a session where personal distractions might occur. The network will be activated when workers arrive at the corner at the start of the event and will be staffed at all times until the day's actives have concluded.

General Call Procedures

A communicator calls Control by waiting for a break in conversation, pushing the talk button on their radio, and saying:

"Control, this is corner X [give your corner number and flag condition]"

Example: "Control, this is corner 9, green."

Control will acknowledge: "Go ahead corner X/(flag) or Go ahead X"

Example: "Go ahead corner 9 green," or "Go ahead 9."

Never call Control by saying "X to Control." The corner number is often lost before Control realizes that someone is calling. Never break in on another corner's report unless it is a call through for the Black Flag Station or for an emergency incident.

Remember that when using radio communications equipment, only one person may transmit at a time. Any additional attempts to transmit will prevent both the original and the additional transmissions from being understood.

After Control acknowledges the corner station's call, the communicator delivers the message. Always use single digit numbers when calling in car numbers for clarity. When calling station numbers use the actual number.

Example: "car number four five blue" and "corner sixteen"

Course Checks

A clear course means that the corner is clear of vehicles, debris, and oil, and that all necessary corner and emergency equipment is in place. It also lets Control know that all personnel are in place and that they can start a session at any time. Control will call for a course clearance before each session starts.

Control checks the condition of the course by calling for a course clearance and saying: "OK all corners, let's do a course clearance beginning with corner one." Corner one responds by saying: "Corner one, clear and ready." Then each corner follows numerically without being called by Control with Start being the last corner station. The course clearance accomplishes two things: It let's Control know that the corner's radio is working and that the course is ready to accept race traffic.

If a corner is not ready for a session, the communicator must inform Control of problems keeping the corner from being green. Control will attempt to help the corner get ready to race. If a corner is not green during a course clearance the communicator says, "Corner one, sweeping," or something similar to reflect actual events. The next corner station will pick up with the check and Control will come back to the not-ready station at the end of the course clearance for an update. Often corner crews may be cleaning up oil, replacing water barrels, etc., when Control calls for a course check. The communicator should never report the corner green if it is not.

If the course is still slick from oil, etc., as a session starts, the captain may elect to display a debris flag for one or two laps. In this situation, a communicator usually answers a course check by saying:

"Corner one, debris and ready," or "Corner one, debris for two laps and ready."

Technical or Mechanical Problem Reports

The communicator reports observations concerning hazardous conditions of the racing vehicles and usually checks the diagnosis of the problem with the corner captain before making a report. Always include the car number and color in the report. If the hazard has changed the condition of the corner so a flag must be displayed (such as an oil leak requiring the debris flag) then this condition change must also be reported.

Example 1:

"Control, this is corner 9, debris."

"Go ahead 9, debris."

"Car one five two yellow is leaking fluid from the right rear."

"Thank you 9."

Example 2:

"Control, this is corner 9, waving yellow."

"Go ahead 9."

"Car one five two yellow lost his exhaust pipe. We're waving yellow while a worker retrieves it."

"OK 9, let me know when you go back to green."

When Control receives a call indicating a possible problem with a car on the course, they will acknowledge the report and ask for confirmation.

Example:

"Control to all corners. Please observe car one five two yellow for leaking fluids from the right rear. Try to identify what it is."

Note: Only two confirmations of a problem should be called into Control.

Other corner workers on other stations must be alerted by this communication to check for the problem as reported. Another corner station will often have a better view of the problem. If other workers now observe the problem, the communicator should call Control to confirm. A communicator reports incidents or conditions as they occur; the steward decides what to do about these incidents or conditions.

Incident Reporting

Remember: Let the incident finish before reporting.

Incidents happening at the corner must also be reported to Control. Two vehicles touching each other is reported as "metal-to-metal" or "body contact". A vehicle spinning and stopping at the corner or on the straight-away are reported by the closest corner to the incident. Along with the number(s) and color(s) of the vehicle(s) involved, the communicator must report the location of any vehicle(s) stopped on the corner as well as any change in the course and flag conditions.

The location of stopped vehicles must be reported. If there is an on track incident, it is imperative to tell Control how much, in terms of percentage of track blockage, you have in the first portion of the report. When reporting vehicles stopped on course advise whether they are before or after the station and on the left or right side of the track (as the driver sees it). Advise Control if the vehicle goes four wheels off-track because that vehicle will need to be inspected.

Example:

"Control, Corner 9, waving yellow."

"Go ahead 9."

"Control, 75% of my track is blocked. Car one three blue spun driver's right on track at my station and car two nine yellow spun off-track driver's left to avoid."

"Do you need a backup standing yellow at 8a?"

"Yes please!"

"Corner 8a, go standing yellow. Corner 9, keep us advised of your progress and let us know what you need." (*Note:* Because 29 yellow spun to avoid it is presumed to be at the same place 13 blue spun. Control will often repeat the vehicle color and number to be sure they got it right. Correct Control if the read-back is incorrect.)

The communicator also provides a detailed report if a driver passed another car while under a yellow flag. Remember to include the numbers and colors of both vehicles, an assessment of whether the pass was avoidable or not, or whether the passing car was waved by.

Example:

"Control, this is corner 9, standing yellow."

"Go ahead 9 yellow."

"Control, we observed car one two purple pass car eight four orange under yellow. The pass was avoidable."

"Thank you corner 9."

Finally, the communicator must get reports from the safety worker to indicate the condition of the stopped vehicle(s) and what assistance will be needed to clear the station at the end of the session.

Example:

"Control, this is corner 9, standing yellow."

"Go ahead 9."

"The driver and worker are returning to the bunker and we'll need a flat tow at the end of the session."

"Thank you 9. Let me know when you're back to green."

The communicator may request that the preceding station display a backup yellow flag or request special assistance to help cover a situation. This request should be made through control unless it is an emergency situation (see next section).

The communicator always keeps the captain and workers informed of condition and incidents at other locations around the course. The level of information an individual captain wants to hear varies, so check in the morning meeting.

The communicator also calls in a slow moving vehicle. Control will usually instruct use of the white flag.

Example:

"Control, this is 9, white."

"Go ahead 9 white."

"Car seven five green going slowly through my corner."

"Copy. Control to all stations, please observe car seven five green going slow. Follow with a white flag for two stations if necessary."

If the communication equipment on the corner fails, the captain signals to the next station to report the situation to Control. Because of this possibility, blue flaggers should include the previous corner station in their visual scanning and yellow flaggers should include the following corner station in their visual scanning.

Black Flag, Mechanical Black Flag, and Furled Black Flag

A driver who seriously violates the rules may be warned by Start via the Furled Black flag or brought off the course for "consultation" while the session is in progress. Likewise, a car with mechanical problems may be called in to the pits to be checked.

> **Remember:** *Never* request a black flag.

While Tech can request a Mechanical Black flag ("meatball"), the steward is the only person who may request solid Black or Furled flags. This request may come as the result of a hazardous condition report and confirmation from the corner stations or as a result of passing under yellow, aggressive driving, or for some other reason. A communicator or a captain never request a car be black flagged; they only report the condition, but should indicate if it is a hazard. The steward asks Control to black flag a vehicle. Control contacts the black flag station (and possibly Start) by saying "Control to corner 5, black flag car two nine mustard. Black flag two nine mustard." Corner five would acknowledge by saying "Corner 5 copies, black flag two nine mustard." The same communications procedure is used for a meatball.

The corner station before the black flag station (and Start) will advise via hand signals and/or radio communication which is the target car. When using the radio, the communicator gives the car number and color and the words "through X". This call should be quick and crisp and may be called out during any break in radio traffic.

Example:

"Car two nine mustard through four."

After the target vehicle has passed the black flag station, the communicator must report on any acknowledgment from the driver.

Example:

"Control, this is corner 5, green."

"Go ahead 5."

"Car two nine mustard did not acknowledge."

"Thank you 5. Try him again."

If the Black Flag Station was unsuccessful, Control will usually ask Start to join in the fun. The station before Start should follow the car through as described above.

Emergency Communications Procedures

Declaring an Emergency

An emergency is an incident involving a driver, worker, or spectator injury such as a vehicle that is fully engulfed in flames with a driver still inside, a vehicle flipping or impacting so hard it disintegrates, a car that jumps into the spectator area, or an incident where the driver is not moving after a few seconds.

The communicator on a station where a serious incident has occurred clears the net of other non-emergency reporting by breaking in and using the word "Emergency!" This simply clears the net for the report and is not

an automatic call for any help. The communicator never leaves the net and stays calm during an emergency situation. When an emergency occurs, the communicator takes a deep breath, assesses the situation, and reports to Control by saying: "Emergency! Emergency! Corner X." Control will acknowledge, saying "All stations we have an emergency. Go ahead corner X." This notification of all stations is done to alert all communicators that may not have heard the original call.

Reporting an Emergency

At this time all other stations stop reporting routine situations and hold all non-essential reports until the emergency is cleared up. The communicator clearly and slowly reports the number(s) and color(s) of the vehicle(s) involved in the incident and what emergency equipment is needed, and then pauses briefly to allow Control to acknowledge and dispatch emergency vehicles. The communicator next reports what happened to the vehicle(s) and the situation on the course. If the course is blocked, this should be reported in the beginning of the first call, as in normal incident reporting. Remember that all the information is vital to the steward's decision-making process. It must be clear, concise, and as complete as possible.

The communicator also reports to Control any information on the condition of the driver(s) that has been relayed by safety workers on the incident scene. Report the arrival and departure of the ambulance and other emergency equipment as it occurs.

Even after the emergency equipment has left the corner, the communicator continues to report on the situation and condition of the course until the workers have completed all possible clean up efforts and have returned to their positions. The corner should then be reported as green unless a yellow flag must be left out to cover a car that cannot be moved or an debris flag is displayed for oil, dirt, debris, or water on the track. The communicator should inform Control if the corner will need any replacement equipment (fire extinguishers oil dry, etc.) and what tow vehicle will be needed to move the damaged vehicle(s) at the end of the session.

Often when an emergency is called, the steward will "red flag" the race.

Chapter

7

Race Control

☞ *The Nerve Center*

Purpose

Race Control is the nerve center of the racing operation at the track and, in addition to steward(s), is staffed at all times in two to three positions by individuals from the F&C team: control communicator, logger, and possibly a trainee.

Control receives all incoming calls from the corner stations and others on the network, coordinates all normal communications procedures, advises the steward of situations and incidents on the race course, and informs the corners of decisions made by the steward, along with other information needed by the corners.

The Chief

While the Chief of Communications usually rotates through all control positions, the chief's primary administrative duties are the organization of Control and the assignment of a rotation schedule for all persons working in Control. A Control communicator must be thoroughly familiar with the layout and peculiarities of all the corner stations at the circuit, is usually a worker who has worked most of the corners at the circuit, and has considerable experience in all positions of corner work.

The Logger

The logger wears a headset and records all incoming calls from the corner stations that deal in any way with racing activities on pre-printed logging forms. The logger records time, corner calling, vehicle(s) involved, flag condition, situation, and other pertinent information. The log is a complete written record of all incidents and situations reported to Control. Often seemingly minor incidents become important to the steward's decision making process and must be available for later review by the steward, competitors, or others.

Trainee

Occasionally there will be a trainee working in Control. To request a trainee assignment, see the Chief of F&C.

Normal Activity

Control determines that the course is clear and ready for racing by requesting a course clearance before each session. Control also attempts to keep the corners as completely informed as possible on all racing situations. This information includes opening the course for a session, when cars are on the course at the start of the session, any late starters, when and if the green flag is given at the start of a race, when the checkered flag is given at the end of a session, what the last vehicle is, and more. Control keeps the corners informed as to changes in the schedule for the event, special flag conditions, and if there is a pace car. Control also notifies the corners that requested equipment is on its way and how it will get to the station. Any time vehicles are on the course between sessions, Control should inform the corners what they are and where they are going.

During normal operation, Control acknowledges reports on changing conditions or mechanical hazards on the race vehicles. Control also acknowledges reports of changes in course conditions and the flag(s) being displayed to cover these situations. Reports of vehicles four off and on, vehicles that spin and continue, and vehicles stopping at or between corners are also acknowledged by Control. Control must make sure the corners always reports vehicle numbers and colors, the location of a stopped vehicle, and what is needed to move it. Control must acknowledge a metal-to-metal report indicating that two or more vehicles have collided on the race course. Control must be sure the vehicle numbers and colors and a brief description of the incident is reported and passed on to the steward.

During an Incident

When an incident occurs, Control remains calm, helping keep an excited corner communicator calm, and seeing that all pertinent information is reported from the corner to the steward. If a communicator fails to supply an important piece of information, Control asks for it. Control needs the vehicle number(s) and color(s) at once, along with the flag being displayed, the emergency vehicles required, the condition of the driver(s), and a brief account of the incident. If an ambulance or wrecker is dispatched during a session then all corners must be advised that the vehicle is entering the course and to follow with a white flag. Finally, Control follows up on the incident by asking for a brief account, getting a list of any equipment to be replaced, and requesting that an incident report be filled out.

End of Day

At the end of the day, Control reminds all stations about the starting time for the next day's worker meetings, indicates how equipment will be picked up and the corner stations secured, and thanks all the workers for attending and helping at the event.

Training

Those assigned to Control also have a training function. They help F&C workers improve their communications skills. Control Communicators repeat transmissions from corners to verify the content, to ensure that all stations (including the steward and Logger) have understood the message, and by using the correct format and language, to show how the call could have been made clearer or more concise.

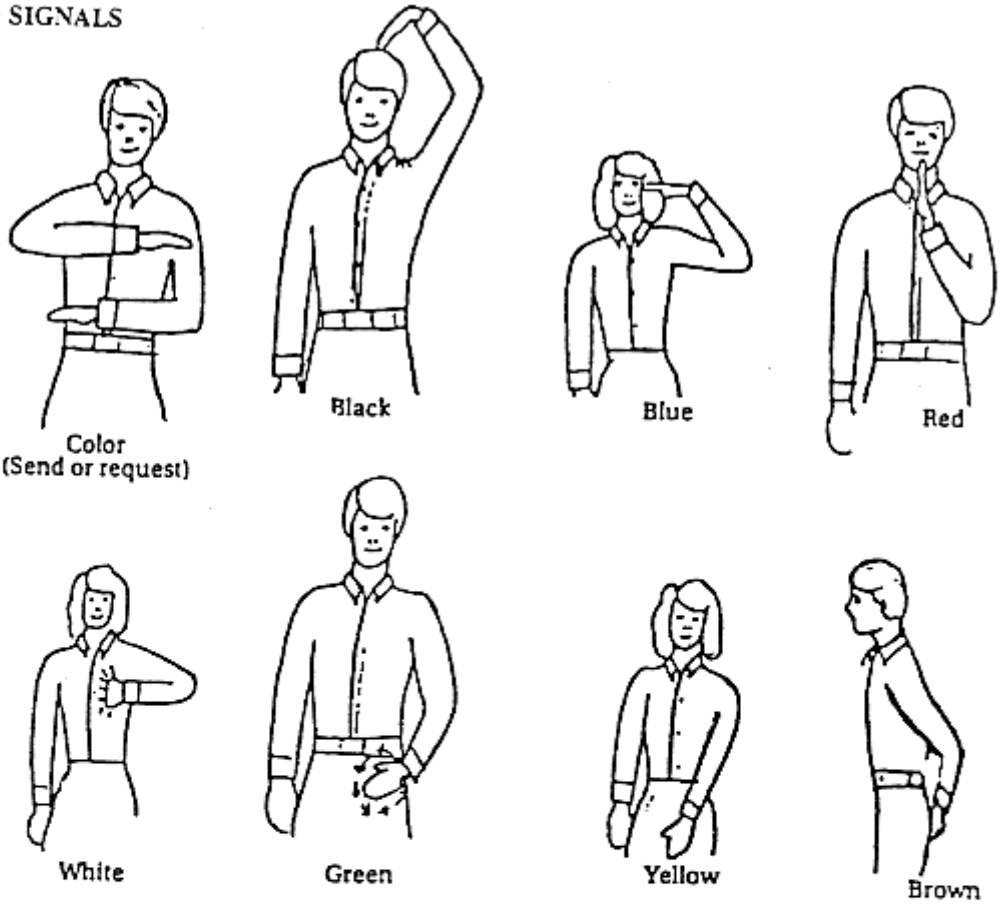
Appendix

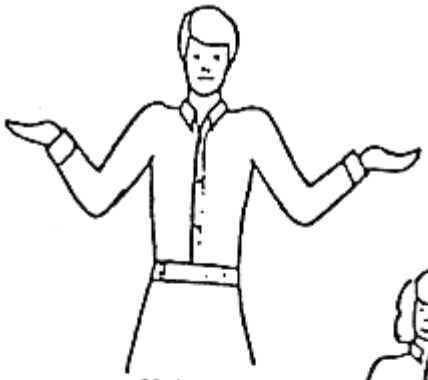
A

Hand Signals

The following pages describe the standard hand signals used in RMVR. Pay special attention to memorizing these. During races the noise level is usually high enough to significantly restrict verbal communications between workers. Hand signals then become the primary means of communications.

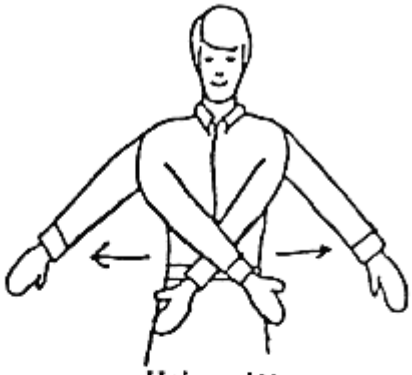
HAND SIGNALS





Universal
Question
Who, what, where,
when, how, etc.

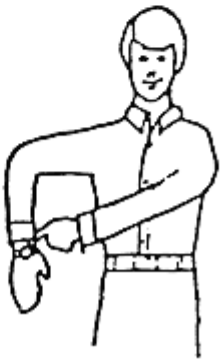
Universal Yes
or Okay



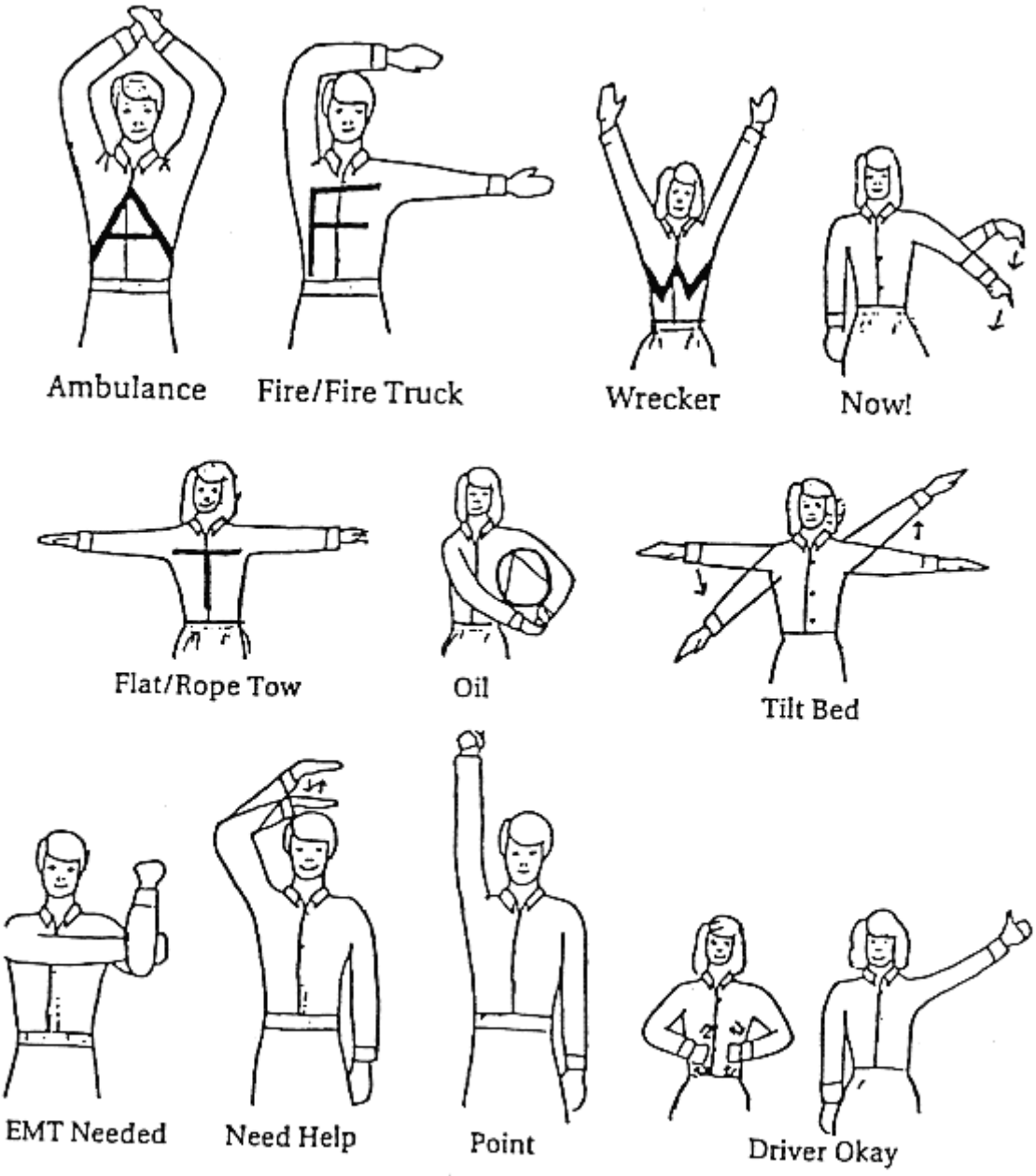
Universal No
or cancel

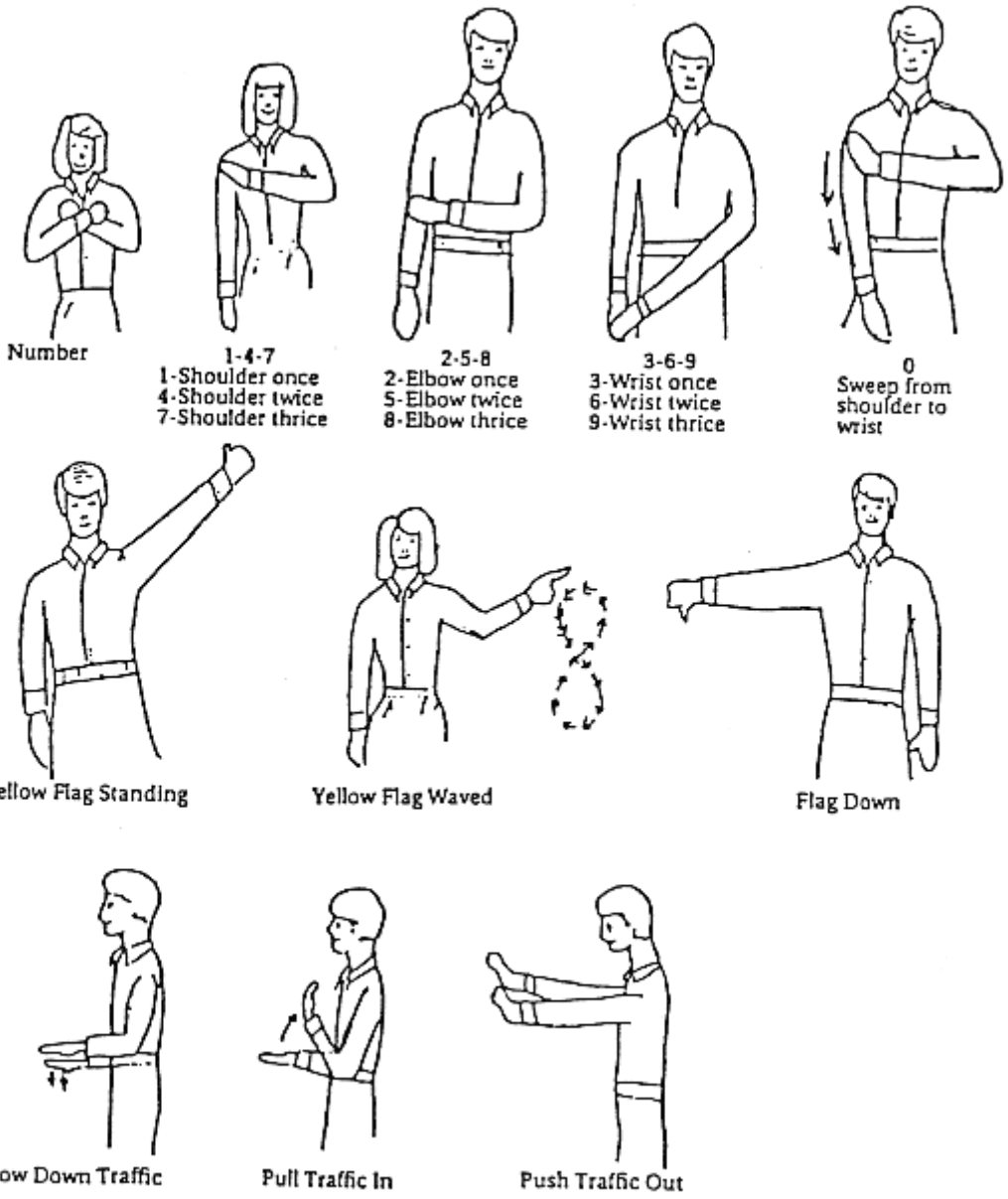
Check

Stand-by



Time


Ambulance
Fire/Fire Truck
Wrecker
Now!
Flat/Rope Tow
Oil
Tilt Bed
EMT Needed
Need Help
Point
Driver Okay


Number
1-4-7
1-Shoulder once
4-Shoulder twice
7-Shoulder thrice
2-5-8
2-Elbow once
5-Elbow twice
8-Elbow thrice
3-6-9
3-Wrist once
6-Wrist twice
9-Wrist thrice
0
Sweep from shoulder to wrist
Yellow Flag Standing
Yellow Flag Waved
Flag Down
Slow Down Traffic
Pull Traffic In
Push Traffic Out

Appendix

B

Crash and Burn School

Purpose of Incident Response Training

Incident response training encompasses emergency service workers, flaggers, corner workers, pit & grid marshals, stewards, tech inspectors, timers and scorers, and any RMVR members interested in learning or expanding their skills and abilities to respond in an emergency situation. It should be remembered that it is a team effort that saves lives and prevents further injury. We are all part of the team, regardless of our level of training. This comprehensive training program is designed to:

1. Familiarize workers with emergency situations and procedures in a non-emergency setting.
2. Familiarize workers with emergency equipment that they are expected to know how to use.
3. Establish minimum comfort levels for first responders (workers/flaggers) in assisting in emergency situations, organizing/coordinating a station response, requesting additional equipment and support personnel, and managing an emergency scene.
4. Establish a minimum comfort level for interaction between all personnel: workers, wreckers, ambulance, etc.

School Topics

1. Fire Science
2. Operation of fire fighting equipment
3. Fire fighting techniques including alternative fuel mixtures
4. CPR & helmet removal
5. Incident response
6. On-board fire systems and kill switches
7. Driver extrication including upside down removal
8. Tow truck operators and tow techniques
9. Emergency scene management
10. Safety gear for both workers and drivers including what to wear when.
11. Race car construction and design

12. Purpose of F&C
13. Race organization
14. Corner equipment and its proper use
15. Corner procedures
16. Communications procedures

Appendix

C

Sample Forms

On the following pages are copies of the Incident Report, Race Control Log Sheet, and radio check-off list.

INCIDENT REPORT

EVENT_____ **DATE & TIME**_____

REPORT WRITTEN BY:_____ **CORNER**_____

LOCATION & TYPE OF INCIDENT:

Before Corner___ In Corner___ After Corner___

Driver's Right___ Driver's Left___

Single Car___ Multi Car___ Metal to Metal___

Driver's Names:

_____

_____

_____

Car Color, Number & Type (ex: Blue multi 114 Formula Ford):

_____

_____

_____

Description of Incident:

_____

_____

_____

Diagram:

Rocky Mountain Vintage Racing, Ltd.

Flagging & Communications

Event: **Pueblo Enduro** Date: 10/01/05 10/02/05 Page:

		Flag Condition					Car Action																		Corner Action							Steward			
Corner	Car Number & Color	W/Y	S/Y	Debris	White	Green	Collision	Spun	Slid	Pulled	Stopped	Off	On	4 Off & On	Right	Left	Before	After	At	Continued	Mech Prob	Visor/Eyes	Leaking Fluid	Smoking	Observe	OK	Flat Tow	Wrecker	Flatbed	Ambulance	Fire Truck	Meatball	Black Flag	Red Flag	Time/Notes
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	
		W Y	S Y	D	W H	G R	C O	S P	S L	P U	S T	O F	O N	4 O	R	L	B	A	@	C	M P	V E	L F	S M	O B	O K	F T	W	F B	A M	F I	M B	B F	R F	

RMVR Radio Check-off List – Pueblo
Sat. June

X		Print Name	Radio	Headset	Scanner
	Corner 1		1	1	
	Corner 2		2	2	
	Corner 3		3	3	
	Corner 4		4	4	
	Corner 6		6	6	
	Corner 7		7	7	
	Corner 8		8	8	X
	Corner 9		9	9	
	Corner 10		5	5	
	Control 1		10	C-1	
	Control 2		11	C-2	
	Control 3		12	C-3	
	Start 1		14	14	
	Start 2		15	15	
	Grid		16	16	X X X
	Pit Out		17	17	
	Timing & Scoring		13		
	Ambulance		22		
	Flat Bed		23		
	Wrecker		24		
	Steward		26		
	Asst. Steward		27		
	Chief Steward		25		
	Tech 1		18		X
	Tech 2		21	19	
	Gate		19		
	Van		20	20	
	Spare		28		
	Spare		29		
	Spare		30		
	Spare		31		
	Spare		32		