

## Appendix 'A'

### Education and Training Curricula



**CANADIAN AUTOMOBILE SPORT CLUBS**

**ONTARIO REGION**

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Toronto, ON M9L 2X3

CANADA

<http://www.casc.on.ca>

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**AMENDED 2012**

ONTARIO'S GOVERNING BODY OF AUTOMOBILE SPORT. AFFILIATED THROUGH ASN CANADA FIA TO THE  
FEDERATION INTERNATIONALE DE L'AUTOMOBILE

## Introduction

The following curricula have been created to ensure that the licensing and training programs sanctioned by CASC-OR shall proceed in a manner in keeping with the high standard of education of Officials required in the sport.

The curricula for licensed Officials, namely those for Clerks of the Course, Stewards, Scrutineers, Pit Officials, Chief Marshals and Marshals provide a complete outline of the course required for potential license holders in these areas. CASC-OR or the Accredited Marshalling Clubs present these courses. This group of curricula shall be automatically reviewed each time the course is presented.

The curricula for unlicensed Officials are meant for areas in which CASC-OR does not teach the student directly but relies on member clubs to present these courses. These curricula should be reviewed at least every three years so that they remain up to date with current practices in the sport.

From time to time a CASC representative shall attend the courses to ensure that the curricula and standard of presentation are acceptable to CASC-OR.

All of the curricula are meant as a minimum requirement for the course being taught. Courses may be augmented with other material considered to be important but must not detract from the topics outlined in each curriculum.

## Curricula

### Curricula for Licensed Officials

Clerk of the Course  
Steward  
Scrutineer  
Pit Official  
Marshal/Chief Marshal

### Curricula for Unlicensed Officials

Driver Instruction  
Grid Marshal  
Judge of Fact  
Paddock Marshal  
Pacecar Driver  
Registrar  
Secretary of the Meet  
Service Vehicle Driver  
Starter  
Timekeeper



## INSTRUCTOR'S CURRICULUM FOR CLERK OF THE COURSE

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility of the Clerk of the Course and the coherent understanding necessary to insure the smooth operation of an event. The objective is also to provide a progressive evaluated development from basic through advanced standing and to develop consistency of attitude and operation

#### Reference

CASC Ontario Region General Competition Rules and Race Regulations.

#### Process

This training will commence with a school for qualified people with endorsement and evaluation required at each level. Satisfactory completion of a written test is required.

#### Description

The Clerk of the Course takes over the operation of the race event from the "secretary of the meet" on the day of the event. The Clerk is solely responsible for the operation of the. The Clerk does not do each function, but is responsible to see each is done properly. The Clerk must provide strong leadership, must have keen attention to detail, ability to anticipate requirements in a constantly changing environment, sound judgment, initiative, strategic thinking, and the capacity to master new situations. Clerks of The Course are required to be licensed by CASC-OR.

#### Reference knowledge

Knowledge of all regulations for all classes running and awareness of where all regulations can be found in Race Regulations, GCR, Bulletins and Supplementary Regulations.

#### Functional knowledge (know where to find specific rules)

- Role of Clerk of the Course. ('RR' .4.3)
- Normal club operational procedure.
- Emergency procedures - Appendix 'A', Appendix 'H' 2 and club emergency plan
- Proper function of each official.
- Flag operation and meaning. Appendix 'J'
- Course car operation and procedure. Appendix 'A'

#### Preparation for the event

- Attend club race committee meetings prior to event as these meetings can bring to light problems in areas not directly related to on-track activities
- Assist the secretary of the meet in any way necessary
- Work to ensure that all areas are manned and discussed at the race committee meeting(s)
- Have input into the preparation of the schedule as the clerk is the one who has to make it work
- Assign responsibilities to assistant clerks
- Review Stewards' reports from previous races to see where problems might arise and be prepared to avoid them

### Other officials

- Be aware of the experience and capabilities of all officials and assistants.
- Ensure proper interaction and function between officials.
- Ensure that involved people are aware of routine procedures that will be used on race day.
- Know the duties of each official.

### Start Up

Arrive at the track early and attend the Marshals' meeting before heading to Race Control.

#### INSPECTION OF THE TRACK

1. Circuit condition -  
(RR 4.3.3.H)
2. Personnel placement  
(RR 4.3.3.C)

Are officials in place and ready to go?  
Good idea to have a checklist available.

- Safety
- Obligatory, cannot start until fixed
- Nice to have, would improve safety but...
- Request change if not happy
- Marshals
- Medical
- Cleanup
- Rescue, etc.
- Scrutineering
- Medical
- Ambulances
- Doctor
- Race Rescue
- Tow trucks
- Start
- Mock grid
- Paddock
- Communication
- Pit lane
- Timing and scoring
- Marshals and Chief Marshal
- Cleanup
- Pace car and medical car
- Secretary of Meet - results and postings  
GCR 3.2.6.7., R R4.3.3 L., RR 4.4.2.,  
RR 4.4.4., RR 4.4.5

### Routine Operation

Chief Marshal is responsible for most of trackside routine operation. Clerk of the Course becomes coordinator for all other functions.

Assistant Clerks do the work and the Clerk supervises.

All routine procedures must be established ahead of time with people involved:

#### Chief Marshal

- Roll over
- Incident report, etc.
- Routine shut down

#### Start

- Start procedure
- Re- start procedure
- Black, meatball and unsportsmanlike conduct flags procedure

- Last lap and checker

#### Mock grid

- Countdown and dispatch of cars

#### Judges of fact

- Blend line procedure
- Speed in pits

#### Scrutineer

- Damaged cars
- Pit Lane Scrutineer

#### Towing and track repair

- Moving to pit out on checkered flag to save time
- Establish exits from track other than Pit-in.
- Ensure that when a tow truck is sent that the correct type of truck is dispatched, e.g. a flat bed may not be able to pick up a formula car without damaging it and on a safety car cleanup this will cost precious time.
- Despatch on-track flat tow vehicles on cool-down laps as soon as leader passes their location.
- Know where to find track manager or his deputy if track repairs are necessary

### What to Record? (RR .4.3.1. G.J.M.)

- Some of this function can be delegated to Marshal, assistant clerk monitoring the Marshals' communications net
- Car number and corner of off track excursions, spins, contact, etc.,
- Time of ambulance dispatch, return and car numbers involved in incident.
- Time of red flag incident, action taken and vehicles involved.
- Any infractions: time, session, car numbers involved, witnesses, etc.,
- Clerk deals with, and keeps a log of:
  - Driver inquiries
  - Any penalty assessed with full notation.
  - Any official report with time indicated.
- Responsibility of Clerk of the Course is to monitor driver action and performance on track. (RR 4.3.3 .M.)
- Reason for recording off track excursions, etc., can monitor personally or by Chief Marshal.
- Talk to driver if too frequent, etc.
- Ensure that all regulations are being enforced in a fair and equitable manner.

### Emergencies

When a corner declares an emergency the Clerk of the Course must become involved. If a red is requested, he is the only one who can grant it. This can be a critical call and should be evaluated carefully with as much information as possible. **If in doubt shut it down!** To reduce red flags it would be smart to let your Chief Marshal know what you feel would constitute a car in an unsafe position and what you feel is a tolerable situation and have this information relayed to the corners.

#### Alternatives

- Early in the race, Red flag shutdown and a complete restart if serious enough and time available.
- Remember that you have at least 1 minute before the cars will come round again so wait to make decision to allow for situation to clear on its own.
- Go to a full course yellow and send out pace car as well as assistance and/or tow vehicle.
- In practice/qualifying Black Flag ALL to pits for quick return to track. Can work on cars in pits.
- Discuss rules governing shut down, restart, and cancellation of remainder of race.  
RR 2.3.7,RR 2.3.8, RR 2.3.9

## Emergency red procedure

It is a good idea to have a prepared procedure with a priority of dispatch of which the Chief Marshal is aware, e.g. in a track blocking multi-vehicle incident after the red is out, immediately dispatch the closest fire, medical, and tow vehicle in that considered order. Do not strip the track of response vehicles immediately as you may have a secondary incident while you are closing down. Assess additional fire then additional medical response, rescue response, and finally vehicle removal and clean up.

If you have a major incident, you may wish to evaluate the scene personally. Leave someone in charge and do so once things are stable. Having a car for this purpose close to Race control is a very good idea.

Ambulance and fire emergencies should be handled by the routine procedures outlined in the club's emergency plan with a Clerk providing dispatch authorization. Always evaluate the need for a secondary response particularly in the case of fire. If the driver is still in the vehicle, a second vehicle dispatched early may make the difference. Always dispatch and then shut down, not the other way around, as you are trying to buy response time to the trapped driver - not overall track safety.

Laborious notes of all actions taken with times, etc. will be most useful if such incidents end up in investigation: so, make them. Don't rely on reconstruction. Make live notes.

Ensure regriding is understood and underway during cleanup period.

Have reports written by all who saw the incident.

Send out track repair crew quickly.

An overall emergency plan is required by CASC-OR before an event permit is issued. All officials should have a copy and should be prepared to put it into action when necessary.

## Drivers' Meetings

To have them is an option, but it is easier to schedule them and cancel later than to do it the other way round. Is legally an extension of the rulebook if a rule change or new rule is necessary. Keep it brief and meaningful. Don't keep everyone if only a small group is being addressed. Try to be aware of what has gone on at drivers' meetings at previous other races. Can be a good opportunity to present your personality and the club's involvement.

## Driver Inquiries

Every driver or entrant has the right to make an "inquiry" of the Clerk of the Course. This is a request for information from, or action by, the Clerk of the Course. This may be done verbally or in writing. It is an official request and should be dealt with in a documented manner, i.e., noted in the Clerk's log, so that if it goes to protest or appeal, it can form an organized part of the legal process.

Do not let the fact that if the competitor does not like the way you handle the inquiry affect your decision. The driver has the right to lodge a protest. Do what you know is right, fair and within the rules.

## Protests - GCR 7

It is the Stewards' responsibility to deal with protests from entrants or drivers. If the Clerk receives a protest it should be immediately passed on to the Chair of the Stewards.

The Clerk will assist the Stewards by: -

- Gathering all pertinent reports together - Marshals corner reports, scrutineers report, and Judge of Fact report, as appropriate.
- Summon drivers and witnesses,
- Post results of protest as and when requested.

## Appeals – GCR 8

Go directly to Stewards or CASC-OR Office.

### **Breaches of Regulations - 4.3.3 .m**

If an infraction is suspected it should be investigated thoroughly by the Clerk of the Course to the point, if necessary, of interviewing witnesses and if sufficient evidence of an infraction is found, it should be passed on in the form of a complete written summary on a 'Request For Action' (RFA) form to the Stewards. Be sure to include the driver(s) name(s), car class, car number, session, and what rule has been broken. Findings of the scrutineer or Judge of Fact are handled by RFAs.

### **Penalties**

- No penalty can be assessed without a hearing (GCR 6.2.1)
- Can only be imposed by Steward or judicial board except for those outlined in RR Appendix C, 2.4, 2.5 and 2.6
- The black flag is not to be used as a penalty because it does not comply with GCR 6.2.1. It should be used to remove a driver who is creating an unsafe condition but usually only after the unsportsmanlike conduct flag has been used. This is a very tricky situation and must be dealt with very carefully.  
The black flag may also be used to bring a driver into the pits to serve a time penalty.

### **Flags**

- Be familiar with all flags but particularly with: -

Red	Appendix J 3.3
Black	Appendix J 3.4
Black with orange disc	Appendix J 3.6
Black and white	Appendix J 3.5
- Be cautious in countermanding the flagging on corners, etc., as this undermines the confidence and effectiveness of the Marshals. If a problem occurs talk to the Chief Marshal about it.

### **Some effective flag 'tricks'**

- Non-start but cars start to race
- Yellow all round.
- If cars re-form have yellow taken in behind last car and start.
- If cars do not re-form, use red to stop cars at grid and start again.
- If black and orange disc is ignored, go to black.

### **Close downs**

- Feed back to all officials and workers about work done
- Instructions for next day, if appropriate
- Collection of reports, etc., - corner reports
- Results (RR 4.3.3. K)
- Penalties (RR 4.3.3 M)
- Medical and accident reports
- Submission of reports to appropriate people. (RR 4.3.3. L, RR 4.3.3. N, RR 4.3.3 .G)
- Stewards meeting if one is held
- Preparation of thoughts for feedback to club's race organizer/race committee

### **Summary**

A good Clerk of the Course operating within an effective race organizing committee will do very few of the tasks for which the Clerk is responsible but will delegate to assistants and other head officials. Only a few items require the Clerk's direct intervention.



## CLERK OF THE COURSE TEST

### REVISION 2 2012

#### Instructions

Answer each of the questions carefully and fully.  
You may use point form or essay style answers.  
Please make frequent reference to the GCR and Race Regulations and explain your reasons for an action whenever you feel it is significant.  
The test is open book and we therefore expect a very high grade to be a successful candidate. GOOD LUCK!

1. Explain the role of the Clerk of the Course and how he/she interacts with:
  - (a) Secretary of the Meet
  - (b) Starter
  - (c) Corner Senior Marshal
  - (d) Scrutineer

2. Chose a track and a corner on that track which is most likely to present the greatest difficulty when presented with the following scenario. Indicate the track and corner you have chosen.

The track is equipped with sufficient rescue vehicles to meet the 60 sec. intervention rule, a course/safety car, and a clean up crew. A corner staffed by a total of 4 marshals reports an incident involving three formula cars - one of which is upside down, drivers left, on the paved portion of the track, opposite the flagging station. You have no report on where the other two vehicles are but they are not on the paved portion of the track. It is the third lap of a 22-minute race and you would like to avoid shutting down.

- (a) Outline, step by step, how you would handle the incident.
- (b) If there were 8 minutes remaining in the race, how would you handle the incident?

3. Outline the routine involved in the following situations:
  - (a) complete red flag cycle. i.e. red through to restart.
  - (b) running one complete race cycle from chequer flag on one race through to chequer flag of the next race.
  - (c) "Request for Action" cycle as it applies to the Clerk of the Course.
4. Outline how the following flags are used:
  - (a) Black.
  - (b) Black with orange disc.
  - (c) Black with white diagonal.





## INSTRUCTOR'S CURRICULUM FOR RACE STEWARD

### 2012 Revision 1

#### **Aim**

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility of the Steward. To develop consistency of attitude and operation within the Stewarding body.

#### **Reference**

GCR 3.1.3, 5.0, 6.0, 7.0 AND 8.0  
Race Regulations 4.1 and 4.2  
Current Stewards' Guide

#### **Process**

This training will commence with a school for qualified people with endorsement and evaluation required at each level. Satisfactory completion of a written test is required.

#### **Description**

Stewards are the representatives of CASC-OR at an event and fulfill a variety of functions although the emphasis is on the judicial. It is their function to see that rules are followed and the Competition carried out in a fair and equitable manner. Stewards are required to be licensed by CASC-OR.

#### **Operational role**

Stewards should not become involved in the operation of an event. Whenever possible, decisions are made as "Stewards of the Event" not as individual Stewards. The Chair of the Stewards may be an exception but should not do it habitually.

#### Safety

- ensure that CASC-OR safety standards are enforced – GCR 5.1.2 c) d) and f).
- remove unsafe driver, car, or person – see reference above
- chair of Stewards should do track inspection with the Clerk of the Course

#### Changes

- changes to supplementary regulations and schedule require the Stewards' approval – GCR 3.2.3
- Stewards should be kept informed of any other changes.

#### Black Flag

See Race Regulations, Appendix J, 3.4

- Stewards should be informed when this flag is being used and the reason behind its use.

#### **Judicial role**

### Hearings

See GCR 7.5 and 7.6 and also Stewards' Guide

- always act as a committee
- can be the result of a Clerk's RFA or a Protest
- use standard forms
- witnesses, reports, etc., organized by Clerk
- a definitive time for the hearing should be given to all involved
- acceptance of video evidence outlined in GCR 7.2.1 c) and d)

### Protests

See GCR 7.0 and Race Regulations Appendix F

- May come directly to the Stewards or may be given to the Clerk
- Check for compliance with GCR 7.1 to 7.4

### Penalties

Penalties are listed in GCR 6.2.3

- penalties are assessed by Stewards with exception of penalties specified to be assessed by Clerk.
- minimum penalties for some infractions are listed in Race Regulations Appendix C
- have a hearing before issuing penalty. Some hearings may be short, e.g. when dealing with a Scrutineer's report of an underweight car
- give decision in writing stating reasons and which rules were broken
- should show date and time and be signed by penalized individual. If competitor will not sign a note should be made of this fact and the time noted.
- remind those involved that they have the right to appeal the decision
- list Penalties in the Stewards' report and enter in the Penalty Records file on the Stewards' computer.

### Appeals

- appeal process outlined in GCR 8.0
- time of every stage should be recorded as this can be crucial
- decision to hear an appeal is made by the Appeal Board

## **3. Supervisory role**

Ensure that all competitors are being dealt with fairly and point out to the Clerk where this is not happening

All shortcomings in operation or safety should be recorded in the Stewards' Report

The contents of a Stewards' Report are outlined in the GCR 5.2 and a standard form for the report is on the Stewards' computer

#### **4. Series stewards**

CASC-OR does not have series stewards but visiting groups, e.g. ASN, SCCA, do

Series stewards have jurisdiction over their series only. If requested, CASC-OR Stewards should co-operate with a series steward.

#### **5. Driver observation and upgrades**

- at drivers meeting, make a list of requests for observation and upgrades
- sign drivers' logs at day's end indicating upgrades as applicable
- enter information in Driver Observation file in Stewards' computer.

#### **6. Stewards' guide**

Review this document in detail.



## RACE STEWARD TEST

### 2012 revision 1

#### Instructions

Answer each of the questions carefully and fully in your own words. You may use point form or essay style answers. Please make frequent reference to the GCR, Race Regulations and The Stewards Guide. Explain your reasons for an action whenever you feel it is significant. The test is open book and we therefore expect a very high grade to be a successful candidate.

1. What is the role and responsibility of the Stewards of the Event?
2. Describe how a Clerk's Request for Action (RFA) or Protest hearing should be conducted.
3. Other than the rule infraction which resulted in the hearing, what rules in the Race Regulations or the GCR apply to hearings and penalties?
3. What, in your opinion, are the important points to remember when a penalty is to be assessed?
4. (a) After completion of the final qualifying session, the scrutineer reports that a competitor's car has an illegal ignition component. How should this be handled?  
  
(b) The competitor indicates, upon receipt of the penalty for (a) that he/she wishes to appeal the decision and start from the original qualifying position. How should this be handled?
5. You see an official or marshal not following rules or procedures. What should you do?



## INSTRUCTOR'S CURRICULUM FOR SCRUTINEER

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the Scrutineer and to ensure an understanding of the scope and meticulous nature of the job of the Scrutineer. The objective is also to provide a progressive evaluated development from basic through advanced standing and to develop consistency of attitude and operation.

#### Reference

CASC Ontario Region General Competition Rules and Race Regulations

#### Process

Training will commence with a school for qualified people.

The training will provide an overview and a base from which the qualified candidate can develop the necessary skills with the supervision and tutelage of an experienced scrutineer. Satisfactory completion of a written test is required.

#### Description

The Scrutineer is responsible, under the direction of the Clerk of the Course, to see that all cars and equipment conform to the rules and regulations.

Scrutineers are required to be licensed by CASC-OR.

#### Annual Technical Inspection

The annual tech is a thorough and hopefully more leisurely inspection of the vehicle to see that it meets all safety regulations. Follow the inspection sheet carefully and thoroughly, and check mark if OK - N/A if not applicable.

Tech is for all season; therefore, if an item is marginal, point it out and record it in the logbook. The annual tech may still be granted but the items should be followed up at a later event. Set a time limit for the repair.

What constitutes a breach of the rules?

- Roll cages – The presentation of homologation documentation is not an alternative to a good inspection of a roll cage, Check seemingly minor accident damage, modifications made after installation, position of additional devices on/through the cage, additional holes drilled, or any other factors that may lead to a weakening of the cage.
- Loose items, esp. wheels, steering, suspension components, wheel tethers etc.
- Catch tanks: full, leaky, too small, or poorly located
- Gas tank one way valves: improper, not fitted, or poorly located
- Ignition and electrical insulation and proper identification stickers (lightening bolt). Test electrical shut-off switches (e.g. using rain/running lights).
- Battery location and adequate protection/insulation e.g. leak proof container if in passenger compartment, live terminal insulated, battery secured to frame/bodywork.
- Worn lines for brake, oil, fuel, coolant, throttle cable and return springs.
- Rod ends: worn, not properly secured. Control arms/uprights – bent or other weaknesses.
- Car numbers - (Appendix 'P' 5)
- Seat belt condition and location. Check for wear near pass-through joints. Check distance from seat pass through to securing point is not unnecessarily long.
- Windscreen and windows – cracks, chips, reduction in visibility or field of view due to window films or advertising logos.
- Review the following:

- Bolt grade marking and their use (especially seat securing bolts).
- Locking devices
- Tie wires
- Jam nuts, locknuts, castellated nuts, etc.
- Lights – brake, running/daytime, rain lights, front lights (if applicable). In the case of LED lights (usually rain lights on open wheel cars), check that an adequate number of LEDs are still working properly.
- Fire extinguishers – identification stickers (E), properly secured. If cable operated, check cable is not rusted. If electronic, perform battery test and continuity check. Check suitability of nozzle locations.

### **Event and spot checks**

When checking equipment, look for the following:

- Helmets: Snell Stickers, cracks and scrapes, visor condition, dents in liner. Learn how to identify counterfeits.
- Suit standard, cleanliness, wear.
- Glove wear (particularly inside) cleanliness.

### **Pit lane function**

There should always a scrutineer in the pit lane. At the request of the Clerk of the Course the scrutineer rules on:

- Roll bar height
- Spilling fluid
- Dangling, lost, damaged pieces
- Safety of cars on the track
- Also observes and lists damaged cars as they come off the track, either by tow truck or under their own power, to ensure the car is checked and if necessary repaired and re- approved.
- A scrutineer should not wait to be asked or told to report a problem. If something does not seem right or safe, a scrutineer should feel comfortable initiating an action to remedy the situation. The report or explanation to the Clerk of the Course can follow as soon as reasonably possible.

### **Impound/Parc Ferme**

This is the term used to describe a secure area of the paddock where competing cars can be parked for a short time (usually 20/30 minutes) after leaving the track. Cars may be routinely impounded at the end of any race or at the discretion of the Clerk of the Course. For some events, all cars will be required to proceed to the area after any competitive session (qualifying or race). Only authorized personnel should be in the impound area, i.e. officials and driver or crew involved. There may be safety inspections, eligibility inspections or both. Drivers may protest other vehicles and this is another reason for keeping the area secure. If required, disassembly should be by driver and crew only and always under the guidance of a scrutineer.

The car must be under supervision from the time it pulls into the pits until it is released from impound. Any lapse of supervision could invalidate the impound. Unauthorized changes must not be made to any vehicles while in the area (no matter how minor the change may seem). Scrutineers must be vigilant. Fire extinguishers are required to be available for use in the area. (Appendix "I" 3.7)

### **Protests**

If an eligibility protest takes place the car must be immediately impounded. Before any disassembly takes place ensure that any tear down fee has been secured. A scrutineer must constantly observe crewmember disassembly. If there is any doubt about the ability of the available people to complete the inspection properly, seal and secure the pieces for inspection at a later date. Check the calibration of the test equipment used and note in the report that this was done.

### **Equipment and tools**

Show and describe the use of the equipment and tools normally used by a Scrutineer:

- Ride height gauge
- Track gauge
- Scales
- Verniers
- Feeler gauges
- Micrometer
- 'Go/No Go "gauges
- Dial gauges
- Degree wheel
- Graduated pipette or cylinder

It is expected that as a scrutineer develops, he/she will learn to properly use these tools. Outline briefly the prescribed routines for checking components: valve lift, compression ratio, swept volume, etc.

### **Logbooks**

It is important to enter a detailed, accurate description of damage and/or regulation breaches from time to time in the logbook. This is the only way of providing a continuum from event to event. (Appendix 'L' 1.)



## SCRUTINEER TEST

### 2012 revision 1

#### Instructions

Answer each of the questions carefully and fully. You may use point form or essay style answers. Please make frequent reference to the GCR and Race Regulations and explain your reasons for an action whenever you feel it is significant. The test is open book and we therefore expect a very high grade to be a successful candidate. GOOD LUCK!

1. Outline the process you would go through when a formula car comes to the morning scrutineering and wants an annual tech.
2. What is expected of a Scrutineer in the pit lane?
3. How should an impound area be operated?
4. If a Scrutineer suspects that a car has an illegal carburetor, how should this be handled?
5. When a car is towed in with major damage, how should the Scrutineer be involved in this situation?





## INSTRUCTOR'S CURRICULUM FOR PIT OFFICIAL

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the Pit Official and to insure the smooth operation of the Pit lane. The objective is also to provide a progressive evaluated development from basic through advanced standing and to develop consistency of attitude and operation.

#### Reference

CASC Ontario Region Race Regulations  
RR 4.7.1 Duties of Pit Official, Appendix "I" Rules of the Pits, Appendix "U" Endurance race Rules.

#### Process

This training will commence with a school for qualified people with endorsement and evaluation required at each level. Satisfactory completion of a written test is required.

#### Description

- control and enforce rules in the pits
- communicate instructions to competitors as instructed by Control
- communicate infractions to an Chief Pit Official or Control
- report infractions; they do not reprimand competitors
- extinguish fires
- provide a communication link between crews and Control re: location of disabled cars

Pit Officials are required to be licensed by CASC-OR.

#### PIT GEOGRAPHY

- Describe the pit wall, pit lane, pit counter, pit in, pit out, mock grid, etc.
- Pit officials work in different areas within pit lane. Pit in is where cars enter pit lane and the pit official located there receives and takes down instructions from Race Control and pulls over cars as they come into pit lane to relay the instructions received from Control. Mid pits is the area between pit in and pit out. Primary focus for pit officials located in this area is to monitor speeding infractions, pull cars over not stopped at pit in, regulations concerning actions and eligibility of people in pit lane, general safety rule infractions and monitoring of racing cars stopped in pit lane. Pit out primarily monitors speeding violations, reporting of car numbers to Control which exit pit lane to the Paddock area during a race, holding cars as directed by Control from exiting pit lane, holding cars in a reverse grid situation less than a minute prior to the cars being released onto the track, display impound sign for the last races on Sunday and displaying flags as directed by Control.
- "Hot" areas – race track, pit lane, track side -wristbands needed by all
- Spread out along the Pits. Don't stand in groups.

#### JUDGE OF FACT ROLE

- The 'A' licensed Pit Official is a Judge of Fact
- The primary Judge of Fact role for Pits is Pit Lane speed violations. The speed limit is 60 KPH. This role also adjudicates and reports to Control on noise levels, pit lane speeds, overtaking emergency vehicles in pits. This role deals only with facts – it is or it is not
- Decisions not appealable or protestable
- The Judge must be clear and unequivocal in their judgements
- Pit Out Official frequently reports Pit Lane speed violations

### **FIRE PREVENTION**

- Establish club radio protocol for emergency Pit fires
- Refuelling rules now in Race Regulations
- Fire Departments teach fire extinguisher use according to the **PASS** word –
  - Pull the pin
  - Aim the nozzle (at the fire base)
  - Squeeze the trigger
  - Sweep the firebase from side to side
- Aim extinguisher spray at fire base
- Spray only when flames present
- Hood pin / cowl fastener familiarity
- Other pit staff relay fresh extinguishers to fire site
- Extinguisher placement 15 metres apart or closer, if available every 2<sup>nd</sup> Pit stall
- 4.5 kg ABC extinguishers
- Clean up any oil spill using cement and brooms as provide by Track Services
- Water for alcohol fuelled cars – (F4s) and identify to driver extinguisher location in Pits. Note: Read procedure on water extinguishers, and teach how to refill
- No smoking in Pit area

### **PERSONAL SAFETY**

- Racing is dangerous, fire is dangerous
- Wear hearing protection, sunscreen, hat and lip balm
- Face pit entrance
- Walk backwards, minimize your back to the cars, or stay close to the Pit Counter Wall
- Whistle acknowledgement of incoming cars
- Use gloves – fire retardant driving gloves preferred
- No sitting when track is hot
- Wearing of safety helmets and vests is mandatory
- Do not stand behind formula cars, especially Mazdas, due to potential flames emitting from the exhaust pipes.

### **DRIVER INTERACTION**

- Report infractions don't reprimand
- Be polite but firm
- Identify with hand motions where to stop for drivers called in
- May be asked to apply time penalties
- Cars over-shooting their pit stall – push back by hand not by power or do another lap
- Scan for driver gloves and window nets up, seat belts on– contact "A" licensed official or Control for infractions
- Signal drivers to impound location
- Pocket pad and pen – describing incident immediately after, with car numbers, and colour

- Don't stop a car for discussion on timing beam area
- Report verbal abuse by driver to Control
- Confirm back to Control when requested duties have been completed i.e. contacting drivers

### **PIT SAFETY**

- Demonstrate radar read outs-assembly, operation, placement, and batteries. Demonstrate set-up of Pit-In Horn
- No sandals or exposed feet in hot areas and legs to be covered
- No smoking
- No pets or people under 16 years of age are allowed with the exception of 15 year old Junior Regional Race Licensed drivers.
- No passing moving emergency vehicles in Pits
- Explain radar read out and use of hand held
- Where work is occurring underneath a car, jack stands are required
- Pit Officials check Pit Lane periodically for debris
- All cars stopping in Pits are attended by Pit Officials carrying a fire extinguisher.
- All cars stopping in Pits are signalled to leave by Pit Officials with the exception of GT Challenge pit stops.
- Pit Officials erect "hot area" signage available in CASC trailer in appropriate Pit/Mock Grid locations

### **EQUIPMENT**

- Fire retardant pit suits
- Fire retardant gloves
- Helmets and vests
- Extinguisher use
- Brooms / quick dry –spread evenly throughout pit lane
- Stop signs used at Pit Out
- Radar Detector / batteries
- Step stools to assist in getting over and back from pit wall to track
- Face shields for refuelling
- Whistle
- Watch or stop watch with second hand
- Paper and pen for notes, car numbers, etc.
- Provide grids and scrutineering with fire extinguisher
- Do not collect pit equipment until the final grid exits Pit Lane into the paddock at the end of the day
- Signs which need to be posted coming into the pit area identifying that it is a restricted area
- Pit Horn. The pit horn box is to be set up outside the Castrol tower close to pit lane. An electrical extension cord will be used to supply power from the Castrol Tower to the pit horn box. Turn the switch on at the pit horn box. A cable, which is on a reel, is connected to the pit horn box and the reel with cable extended along the inside of the pit lane wall to the pit lane entrance. One eye beam electrical unit is to be located on pit lane against the inside pit lane wall and a wire leading from the eye beam unit will be attached to the threaded connector located on the cable reel. This eye beam unit is then to be aligned with a second eye beam electrical unit which is to be located directly across the pit lane entrance at the racetrack wall. This second eye beam unit is battery operated so no cables or wired connections required. Test that the system is working by walking between the electrical units so that the eye beam is broken and you can hear the pit horn activate .At the end of each race day all equipment relating to the pit horn operation is to be packed up and returned to the CASC trailer. CASC personnel will charge the battery operated eye beam electrical unit overnight.
- Radar Units. There are three battery operated radar type units that must be set up on pit lane, tested and operational before the start of each race day. The large white radar readout board is to be located at "pit in" next to the wall. It must be visible for drivers as they are entering pit lane. The unit is

to be turned on and the readout setting is to be in kilometres. The unit can be turned off during lunch breaks to conserve power. The unit is to be turned off at the end of the race day and returned to the CASC trailer. CASC personnel will be responsible for re-charging the batteries. There is one portable radar unit, which is packed in a case. It is used primarily in mid pit lane and again is to be tested and operational before the start of the race. It is to be set to read out in kilometres, as the maximum allowable speed in pit lane is 60 KPH. Turn off unit at lunch breaks or when not in use to conserve power. The unit is to be returned to the CASC trailer at the end of the race day. There is medium size radar read out board unit, which is to be set up at pit out. There is also more assembly required for this unit as there is a tripod stand, radar horn shaped unit, battery pack and cables which run from the radar horn unit and radar board to the battery pack. The unit is to be located on pit lane, at the wall and at the exit to pit out. The radar horn to is to be aligned with pit lane so as to pick up speed readings from the cars in pit lane. This is to be tested as well to ensure proper operation and readouts. Follow the same procedures as the other units in terms of timing, set up, operation and return process to the CASC trailer at the end of each race day. Remember to set read out in kilometres.

- Scrutineering Staff have been requested to recharge Radar batteries when they arrive Fridays. Any Pit Officials arriving at the Track on Fridays should check at the CASC trailer, to ensure this is done.

### **REFUELING SESSIONS**

- Refuelling rules in Race Regulations
- Supplementary Regulations available from registration – get copy when signing waiver
- Face protection – crew and Pit Official
- Driver out of car
- Spillage penalties
- Refuelling times or lap limits to be observed where they exist

### **PIT WALL PIT COUNTER & PIT LANE**

- 2 crew allowed on pit wall during races per car after all cars have passed green
- No open shoes, under 16, animals and legs to be covered
- 5 crew allowed on pit stops excluding extinguisher person and those signal persons remaining on Pit Wall and driver or second driver preparing to get in the car
- Sitting on the Pit Counter when the pits are Hot is forbidden.

### **CARS EXITING PITS**

- Check fluid leaks, anti freeze
- 60 KPH speed limit
- Check for window net up, helmet on, seat belts, gloves on when exiting
- On full course Yellow Pit Out controls cars re-entering the track as directed by Control.

### **ENFORCEMENT**

- Infractions reported to an 'A' licensed pit official or if unavailable, to Control
- No one on wall at race start
- Check for wristbands – crew only on pit wall, be reasonable
- Direct those wanting wristbands to Castrol Tower or Registration

### **RADIO USAGE**

- Access to radio net important during apprenticeship
- Club Radio protocols should exist – please focus on them
- Trainees – listen and learn protocols only. No speaking over radios when in training

- Only emergency communication during 3 minute countdown and 1<sup>st</sup> lap
- Open switches – describe and check your Buddy
- Establish Club Radio protocol for a Pit emergency. Fire or otherwise-close Pit In
- Sign on/off net procedures

### **INSTRUCTIONS FROM CONTROL**

- Control may instruct Pit Officials to advise drivers flagged into the pit to report to the Clerk, serve a timed penalty before they are released or to advise of mechanical or clothing problems. The Pit In Official will write down the car numbers and instructions provided by Control to pass onto the drivers. Pit in is usually where cars are pulled over, by the official working at pit in, so that the instructions received from Control can be relayed to the driver. Sometimes penalty boxes are set up in some designated area in pit lane and drivers will be directed to go there to be held for a period of time as communicated and directed by Control.
- Cars late arriving at mock grid or when instructed by Control due to a penalty violation such as two blend line infractions in the same weekend will start from the pit lane and it is essential these cars start from a point before the timing hole in the pit wall and are not released until all cars have passed the start line
- Pit out may be told to hold cars from re-entering race track
- Control may direct Pit Out to display yellow or red flags to warn any cars attempting to re-enter the track of conditions

### **OTHER PIT RULES**

- Advise Control from Pit Out if a car goes into the paddock
- Photography is not permitted in the pit lane except by permission from the Clerk
- Only cars equipped with externally mounted receptacles may use auxiliary power (battery assist) during competition
- On Pit stops, one person may go over the pit counter to Pit Lane to signal their car where to stop. All other crew shall remain behind the pit wall until the car comes to a complete stop
- Smoking is forbidden behind the Pit counter and in Pit lane
- Be aware that emergency vehicles may be directed from pit in to proceed down the pit lane and wait at pit out to be dispatched. This may be frequent during the last lap of sessions. Emergency Vehicles must observe the Pit Lane Speed Limit
- Cameras or timing apparatus shall not be placed on top of the Pit Wall
- Prevent/report crew riding outside cars e.g. on window ledge.
- Don't allow cars to park on timing line. Block off the area of the pit lane near the timing line and pit counter with cones.

### **HAND OUTS AFTER TEST**

- Current Race Regulations
- Current General Competition Rules
- Combustion Handout
- Curriculum outline
- Refuelling Rules



## PIT OFFICIAL TEST

### 2012 revision 1

NAME:

DATE:

### Describe your answers in a few words

1. Describe the responsibilities of a Pit Official?
2. Where will you find refuelling rules?
3. What is the Pit Lane Speed limit during Regional races?
4. What is the minimum age for anyone who is allowed in Pit Lane with the exception of junior licensed drivers who are not less than 15 years of age?
5. What is the proper procedure for a car that overshoots its pit?
6. How many people per team can be over the Pit Counter to signal their car for a pit stop?
7. How many team members can be on the Pit Wall during the start of a race?
8. When should you use a fire extinguisher?





## INSTRUCTOR'S CURRICULUM FOR MARSHAL/CHIEF MARSHAL

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the Marshal/Chief Marshal.

#### Reference

CASC Ontario Region Race Regulations

#### Process and Description

Marshals and Chief Marshals are required to be licensed by CASC-OR.

#### MARSHAL

The new marshal training program shall consist of a classroom and a trackside session. The instruction should be conducted by experienced personnel and should be restricted to the information necessary to get the candidate started in a safe and effective manner. There is a great deal of learning to be done to become a top grade effective marshal, but it cannot be learned all at one time and is better learned by supervised experience.

The classroom session should include the following:

- A discussion of personal safety and how it can be maintained;
- A discussion of the equipment necessary for the effective execution of the marshal's duties;
- A discussion of the team concept of the corner crew and how it functions;
- The presentation of appendix "J" (flag signals and rules of the road) and the techniques used to carry out these regulations. The flagging, communication, and safety marshalling section of the RR's, appendix "R" should be pointed out and the parts which are appropriate to the new marshal discussed;
- A presentation of the hand signals used by marshals which are necessary for the operation of the corner. These convenient signals can be presented at a later date or picked up as the marshal gains experience;
- The marshal's Training Manual should be handed out to each candidate.
- Other information may of course be presented but its value to a new marshal should be very carefully weighed.

For the trackside session the marshals should be divided into small groups under the tutelage of an experienced marshal. The aim of the trackside is to introduce them to marshalling first as an observer and then as a participant. Each group should be introduced to a few corners and the differences and similarities in the operation of the corners pointed out to them. Time permitting each new marshal should have the opportunity to "flag a race" under the direction of the flag marshal. The same opportunity should



be provided to monitor the telephone operator. In addition, if it is at all possible, a listening station should be provided so that the candidates can get a feel for what the race operation sounds like.

Each and every candidate should be provided with the opportunity to experience the use of a fire extinguisher on a gasoline fire. If this cannot be done as a part of the trackside, then the marshal should be made aware of when such an opportunity will be available.

An effective method should be put in place to monitor and if necessary to correct the performance of the new marshal for a number of events and further training should be made available at intervals as his/her skills develop.

## **CHIEF MARSHAL**

The chief marshal candidate should be chosen from among the experienced senior marshals and should be selected for his/her leadership, organizational ability, and calmness under pressure. The training of this individual will be conducted entirely by an apprenticeship type of program

This candidate must be fully aware of the role of the chief marshal as outlined in the RR's, section 4.14 but must also know the role of the clerk of the course, Race Regulations, section 4.3 and of any other official with which the marshals will have direct contact. He/she must also be totally familiar with the appendices that govern the following:

- Use of a pace car (Race Regs. Appx. 'A')
- Medical and fire rescue (Race Regs. Appx. 'H')
- Rules of the pits (Race Regs. Appx. 'I')
- Flag & Light signals and rules of the road (Race Regs. Appx. 'J')

In addition to this he/she must be proficient in the procedures used by the marshals and the Clerks of the Course in the execution of their duties.

A discussion of the manner in which the chief corner marshal should conduct his/herself so as not to undermine the independence and operation of the corner crew while still insuring the proper operation of the race and its inherent procedures conducted throughout the training will help to keep the responsibilities and processes in perspective



## **INSTRUCTOR'S CURRICULUM AND ORGANIZATION FOR RACING DRIVER SCHOOL**

### **2012 Revision 1**

#### **Aim**

To provide theory and practice that will ensure successful candidates have gained the necessary proficiency for granting of a Novice Competition Licence.

#### **Reference**

CASC-OR Race Regulations, Appendix "B"

CASC-OR Racing Driver Instruction Curriculum

#### **Process**

Any CASC-OR member club wishing to organize a Racing Driver School shall request accreditation from the Region Chief Instructor to do so. In order for their program to be considered for accreditation it shall, as a minimum, adhere to the following basic requirements and deliver the elements of the standard curriculum.

### **Requirements**

#### **Duration:**

To provide sufficient time for students to learn and become proficient in the various skills required for driving a racecar the school shall take place over a period of not less than two (2) days.

#### **Venue:**

The venue at which the school will be conducted should make provision for access to the following infrastructure:

- An enclosed classroom
- Toilet facilities
- An area that can be set up for use as a skid pad
- A 'track' that includes all types of 'corners' necessary for the successful development of driver skills: sweeping corners of constant or near-constant radius, corners with increasing radii, corners with decreasing radii and compound corners
- An assessment as to site suitability shall be requested from the Region Chief Instructor for venues failing to meet these basic requirements.

#### **Entrants:**

- Maximum number of entrant is thirty-two (32)
- Minimum age of entrants is fifteen (15), special conditions apply per Appendix G, 1.6
- Entrant's car shall have manual transmission if wishing to apply for a race licence

**Documentation:**

- CASC-OR race school permit (application form with prescribed fee shall be submitted to CASC-OR Office)
- CASC-OR Event insurance (per ASN Canada FIA Inc)
- Curriculum as approved by CASC-OR Region Chief Instructor
- Schedule
- Standard waiver shall be signed by all workers, instructors, participants
- Parental and Minor Participant waivers shall be signed for/by any entrant under age of 18
- One copy of the Race Regulations for each entrant

**Personnel:**

- A CASC-OR steward shall be present throughout the event (arrange through CASC-OR Region Executive Steward)
- A Chief Instructor, approved by the Region Chief Instructor
- One in-car CASC-OR licensed instructor with competition experience and demonstrated ability to teach, assigned to no more than two students for all exercises and on-track sessions. Instructor trainees should participate in all theory sessions and ride along with a licensed instructor during in-car sessions to gain necessary expertise.
- Sufficient track workers to staff the necessary exercises and perform flag marshalling duties during lapping sessions

**Medical, Fire and Safety Services:**

- An ambulance able to provide Medical First Responder (MFR) level of service as a minimum is a mandatory requirement.

**Curriculum**

All elements of the course, which have direct on-track applications are to be taught in short (15-20 minute) sessions, followed by exercises on the track that apply the theory. Instruction of a generalized nature may be taught in longer sessions, of ideally not more than 40 minutes.

The instruction should progress from theory, through mandatory exercises and lapping on the track—during which students receive constant feedback, both positive and negative, from the instructor in the car—and finally, to students lapping independently with the instructor observing from outside.

Every effort should be made to simulate an exercise that will provide experience on how to complete a pass properly, while adhering to the restrictions in Appendix "B", Section 2.4.

The course shall set a performance standard compatible with safe entry into racing. Instructors are encouraged

to provide the student with a realistic evaluation of performance and a clear indication of any area in which the student should apply particular caution or effort.

**Classroom theory sessions shall cover:**

- Importance of vision
- Control Inputs
- Seating position
- Vehicle dynamics—managing weight transfer
- Cornering dynamics
- Structure of Motorsport in Ontario
- Race Organization, Race Officials & Their Functions
- Flags and their meanings
- Racing in Traffic/Passing

Successful completion of the mandatory exercises is essential before any student begins lapping on the track. This is particularly important for newly licensed (G1–G2) drivers and for those whose previous driving experience has been in Karting! Mastery of these skills prepares students should they encounter a control situation on the track.

**Mandatory Exercises include:**

- Seating position
- Emergency collision avoidance—brake and avoid
- Slalom- Managing weight transfer
- Vision—Skipping gates via flag signal in a slalom
- Simultaneous Braking/Downshifting
- Dynamics of Cornering

The final elements of the school allow students to master and demonstrate proficiency in the skills and knowledge necessary to successfully begin racing.

**Track Sessions**

- Cornering/Lapping Exercises
- Lapping with controlled passing
- Written exam
- Practice Race Starts



## INSTRUCTOR'S CURRICULUM FOR GRID MARSHAL

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the Grid Marshal and to insure the smooth operation of the Mock Grid. Also to provide a progressive evaluated development from basic through advanced standing and to develop consistency of attitude and operation.

#### Reference

CASC Ontario Region General Competition Rules and Race Regulations

#### Process

Most if not all of this training is best done at the track during a Race Event.

Review RR 4.12 Duties

Review RR 2.3.1 Gridding

#### Description

Grid Marshals shall: -

- have racecars called to the mock grid on the PA system
- ensure their personal safety and that of their fellow grid marshals.
- avoid standing in front of racecars.
- remove any persons who have not signed a waiver from the mock grid.
- grid racecars on the mock grid in the grid positions shown on the grid sheets.
- grid racecars arriving after 3-minute countdown at back of the grid.
- inform control promptly of any racecars not on the grid sheet.
- check scrutineering stickers.
- check helmets, suits, gloves and seatbelts.
- check window nets.
- check rain lights are on if required.
- check for and report leaking liquids prior to release of grid and if after release try to identify the guilty racecar's number.
- display "lights on", abnormal track condition, and other signs as requested.
- communicate countdowns (usually 5 minutes), holds, and aborted starts by signs and hand signals. Report minute by minute to control.
- inform drivers of any abnormal track conditions e.g. excessive oil cleanup. Do this by word of mouth if possible.
- report any crewmember riding outside racecars.
- control racecars from mock grid to pit lane or to the real grid splitting into two lines as required.
- direct any late race starters into the pit lane and report this to control.
- inform control when the last racecar leaves the mock grid.
- inform control how many racecars have left the mock grid.
- display "pits closed" sign as requested.

#### Regriidding on the real grid

Before the event starts, discuss with the Clerk how this will be handled. Is it a complete restart in 2 rows or a single file restart? Where will the grid sheet be?

#### Equipment required: -

- countdown number boards
- "lights on" sign

- "pits closed" signs
- sufficient radios.
- grid sheets
- a black/white board and chalk/marker for miscellaneous messages e.g. track condition.

### **Communication**

- Ask all questions to control during the countdown promptly. The schedule is almost always tight!
- In addition to all the above, it is the job of all Mock Grid Officials should ensure that the competitors do not leave the grid for the racetrack angry or upset. They need to resolve any and all issues as fast as possible and ensure a good interaction with the crews and drivers, keeping them informed and up to date. After registration and scrutineering Mock Grid Officials are for the most part the only interaction competitors have with the club unless something goes wrong. If they are having a good time before arriving at Mock Grid, try and insure that it continues and if they have problems, try and solve them if possible.

Lots of smiling faces makes for a better weekend even when weather or other factors come into to play.



## INSTRUCTOR'S CURRICULUM FOR JUDGE OF FACT

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the Judge of Fact.

#### Reference

CASC Ontario Region Race Regulations  
Paragraph 4.10

#### Process

Most if not all of this training is best done at the track during a Race Event.

#### Description

- adjudicate on blend line infractions, false starts, finishing positions, noise level of cars, pit lane rules etc, and any other facts which are specified in the rules and the supplementary regulations.
- deal only in facts. i.e. it is or it isn't.
- know what rule infractions are being judged
- be very certain that an infraction has indeed occurred
- be open to review a decision if requested to do so, but be firm and resist any pressure to make an unjust change.
- decision is not protestable or appealable



## INSTRUCTOR'S CURRICULUM FOR PADDOCK MARSHAL

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the Paddock Marshal and to insure the smooth and safe operation of the Paddock.

#### Reference

CASC Ontario Region Race Regulations  
Paragraph 4.0 Paddock

#### Process

Most if not all of this training is best done at the track during a Race Event.

#### Description

Paddock marshals shall:-

- enforce a 10KPH speed limit
- keep all paddock roads clear
- 
- ensure pets are leashed
- deliver messages from the Clerk to competitors
- report burnouts, donuts and other extreme forms of driving.
- Report anyone who does not possess a road licence riding a paddock vehicle e.g. scooter, motorcycle. Watch out for children doing this.





## INSTRUCTOR'S CURRICULUM FOR PACE CAR DRIVER AND COMMUNICATOR

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the pacecar driver and communicator and to insure the smooth operation of the pacecar.

#### Reference

CASC Ontario Region Race Regulations Appendix "A" Use of a Pace Car

#### Process

Most if not all of this training is best done at the track during a Race Event.

#### Description

##### General

- manned by driver and communicator.
- both have radios
- agree with Control where the pace car will be parked during sessions.
- Move into position ahead of the mock grid, or at start finish, as agreed with Clerk, before racecars leave mock grid

##### Parade Laps

- review RR Appendix "A": Use of a Pacecar Paragraph 3.00 "Guidelines for pace car Starts"
- do nothing unexpected. All braking and acceleration should be done gradually so as not to set up a chain reaction with the competitors.

##### Full Course Yellow Laps

- review RR Appendix "A": Use of a Pacecar Paragraph 3.00 "Restart procedure.
- control orders pace car to "stand by".
- turn on flashing lights
- control will inform the location and description of incident requiring full course yellow
- control will despatch the pace car
- enter the track as quickly as possible following the despatch order from control.
- if the race leader is not immediately behind the pace car, await instructions from control as to when and which racecars to wave by
- use fluorescent glove for wave-bys only otherwise keep hand inside the car.
- drive as slowly as possible to allow racecars to catch up but fast enough that they will not overheat.
- keep pacecar lap times be relatively consistent so that it is equal for all competitors.
- extinguish flashing lights when ordered by control and enter pits.



## INSTRUCTOR'S CURRICULUM FOR REGISTRAR

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that shall ensure a complete understanding of the role and responsibility the Registrar and to ensure an understanding of the scope of the job of the Registrar. The objective is also to develop consistency of attitude and operation.

#### Reference

CASC Ontario Region General Competition Rules and Race Regulations.

#### Process

The training shall provide an overview and a base from which the candidate can develop the necessary skills with the supervision and tutelage of an experienced registrar.

#### Description

The registration function has been divided into two sections: Region registrar and the Event registrar.

#### CASC Ontario Region Registrar:

The Region Registrar is responsible to: -

- receive, review and organize all entries received prior to a CASC-OR Race Ontario event. The entry forms shall be reviewed for any errors or omissions and the competitor shall be contacted if possible. The entry forms shall be arranged according to the wishes of the Event Registrar.
- update the computer information prior to each Race Ontario event.
- ensure that the rental transponders are charged.
- make arrangements with the organizing club that the entry forms, CASC-OR registration computer and transponders are available at each CASC-OR Race Ontario event.

#### Event Registrar:

The Event Registrar is in charge of participant registration, and shall have an organized manner of handling all entries and signing in of all participants.

The general supplies needed are:

- sufficient "float" to be able to provide change to the competitors for entry fees received
- copies of both the Annual Parental Waiver and Minor Waiver
- a current list of competition license holders of both CASC-OR and ASN FIA Canada
- a current list of the registered car number lists from CASC-OR (and VARAC if Vintage/Historic, G70+ or Formula Classic are entered)
- a supply of the blank entry forms
- a supply of Driver Session Declaration sheets
- a method of identification for proof of signing the event waiver for all participants
- a supply of the event tech stickers
- a supply of the event supplementary rules and event schedule to be handed out to each competitor (GCR 3.2.2)
- general office supplies such as pens, paper clips, staplers, etc
- a copy of the current rulebooks and series rules on hand.

Registration shall: -

- have sufficient staff on hand to handle the rush of participants first thing in the morning, and make adequate arrangements to handle worker and other registration as necessary.
- organise and sign post the registration area so that registrants can find the proper area in an expeditious manner.
- ensure that all participants sign the insurance waiver for the event. (GCR 3.2.10) – including all drivers, crew, staff and guests (ensure that the minor waiver is signed for anyone under 18 years of age)
- check all competitors' licences (GCR 3.2) and collect the appropriate fee. If a competitor has forgotten the "hard card" license, check the appropriate license list.
- make a note on the entry form of any driver who presents a letter of probation and instruct this driver to report to the Clerk of the Course and give the Clerk the letter
- issue the event "tech" sticker only if the logbook indicates the following :-
  - the vehicle logbook has a current CASC-OR stamp
  - the vehicle has not had damage report written at the previous event entered
  - NOTE: if the registrar does not feel they are able to issue the tech sticker send the competitor to Scrutineering to decide whether or not to issue a tech sticker.
- 
- issue rental transponders to those competitors who do not have one. The fee collected is stated by CASC-OR and a list of transponders available is usually included with the transponders. The fee should be returned to CASC-OR.
- ensure that transponders rented during the weekend are returned at the end of the event to a central location so that they may be returned to the Event registrar.
- arrange for the rental transponders to be returned to the Region Registrar.
- provide timing with the competitor information that is to appear on the results sheets. This is done on the computer provided by CASC-OR which has the timing program installed. The current event competitors are updated. It is timing's responsibility to come to registration to retrieve the information. This usually occurs a couple of times on Saturday morning. The timing representative should inform the Event Registrar if they shall return again that day. If timing shall not be returning, registration shall provide the information needed to timing regarding any new competitors. This should be done in writing (either by hand or fax).
- provide, if possible, the Region Registrar with copies of entry forms received at the event that either have had changes made to them or were not included in the files provided prior to the event.
- send copies of driver declaration forms to the Clerk.
- maintain radio contact with the Clerk, timing and results at all times during the event.

At the close of entries (usually Saturday at noon and Sunday at the close of registration), provide the Clerk of the Course and the Stewards a list of entries (GCR 3.2.6). The Clerk of the Course may request provisional lists prior to these times.



## INSTRUCTOR'S CURRICULUM FOR SECRETARY OF THE MEET

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that shall ensure a complete understanding of the role and responsibility the Secretary of the Meet and to ensure an understanding of the scope of the job. The objective is also to develop consistency of attitude and operation.

#### Reference

CASC Ontario Region General Competition Rules and Race Regulations.

#### Process

The training shall provide an overview and a base from which the candidate can develop the necessary skills with the supervision and tutelage of an experienced Secretary of the Meet.

#### Description

The Club Race Organiser usually performs this function.

The Secretary is responsible for the overall organization of the event with particular emphasis on the pre and post-race activities.

- apply for permit and insurance (RR.2.1.1, GCR .3.2.10).
- ensure supplementary regulations are properly prepared and submitted (RR 2.1.2)
- ensure the necessary arrangements for the support services and equipment (RR 2.1.6)
- ensure that licensed officials are available to perform all the necessary duties at the event (RR 4.)
- assist the Clerk of the Course and other officials
- maintain the official notice board. i.e. posting schedule changes, results, penalties, and any other official document which needs to be posted.
- provide the stewards of the event with the appropriate documents prior to the start of the event (RR 4.4.5)
- provide the stewards with the documentation necessary for the completion of their report (GCR 5.2.)
- send results to CASC in compliance with GCR 3.2.7
- send any necessary medical forms or incident forms to ASN Canada FIA and CASC.



## INSTRUCTOR'S CURRICULUM FOR SERVICE VEHICLE DRIVER

### 2010 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the Service vehicle Driver and to insure the smooth operation of Service vehicles.

Review RR. Service vehicles include Rescue, Fire Intervention Vehicles, Wreckers and Flatbeds.

#### Reference

CASC Ontario Region Race Regulations 2.0 Service Vehicle Operating Rules

#### Process

Most if not all of this training is best done at the track during a Race Event.

#### Description

- agree dispatching protocol with Control.
- run engines at beginning of all sessions for 2 laps.
- check to see that everyone is on board, that they are properly seated or secured, and that all doors are closed before putting a vehicle in motion
- do not drive the vehicle on the track faster that one would drive a similar style of vehicle on the highway. DRIVE TO ARRIVE. You can't fight a fire if you don't get to it.
- ensure that a wide enough margin of safety is maintained that the vehicle will be kept under control at all times.
- stay to the drivers' right on a hot track. If it is necessary to move from one side of the track to the other to reach an incident, this should be done on a straight so that competitors may see what is happening. Use a spotter in the vehicle to insure that the cross is done safely
- when a vehicle is stopped on the track place it as far off the paved surface as is feasible but if practical between the incident being serviced and the oncoming race traffic.
- when the driver leaves the vehicle he/she should become the safety spotter for those working at the incident if not required to fulfill other responsibilities
- close all doors when the driver and crew leave a vehicle parked at the track edge, except those which may be actively used in the process of servicing the incident. An open door is an unnecessary hazard to a competitor.
- re-entering the track after servicing an incident should be done carefully and in such a way as to minimize the amount of debris that may be carried onto the track.
- when vehicles are being driven on a cold track, (i.e. no race cars on the track), be aware that the track is open for everyone and that there therefore may be workers and other vehicles on the track some possibly moving counter-race direction. At these times there is no excuse for excessive speed.
- Provide drivers with radio equipment such that using the radio does not interfere with driving the vehicle.
- Don't run an air conditioner when on the track.
- No Ambulance on track until all racecars have left the track



## INSTRUCTOR'S CURRICULUM FOR STARTER

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the Starter and to insure the smooth operation of the Pit lane.

#### Reference

CASC Ontario Region General Competition Rules and Race Regulations

#### Process

Most if not all of this training is best done at the track during a Race Event.

#### Description

Review RR 4.8 Duties

- meaning of flags.
- size of flags.
- number board.
- last-lap sign.
- "lights on" sign.
- "all" sign for "black flag all".
- "pits closed" sign.
- "pit window open" sign for enduros.

Review RR 2.3 Gridding and Starting:-

- starting the pace lap.
- flagging a start.
- a non-start.
- there is a point by which the starter must make the decision to start or not start the race. This point is a reasonable distance before the lead cars lose sight of the starter.
- what standard should the starter use as being in good order for a green? If the first six cars are in the proper position and the field is not too strung out the cars are in good order.
- starter is a judge of fact for a false start. Report any competitor who is out of position at the start.
- remind Marshals at the last two corners to report the condition of the field prior to lap one.
- discuss with the Clerk what procedure which will be followed in the event that cars start racing before the Starter has thrown the green.
- black, unsportsmanlike conduct, meatball flags.
- split starts.
- restarts.
- full course yellows.
- show last lap sign when instructed by Control. Never withdraw this sign even it is displayed in error.
- show checkered flag when instructed by Control.
- not a flagging station.
- crew should consist of 2 persons minimum.



## INSTRUCTOR'S CURRICULUM FOR TIMEKEEPER

### 2012 Revision 1

#### Aim

To provide a comprehensive overview that will insure a complete understanding of the role and responsibility the timekeeper and to ensure an understanding of the scope and meticulous nature of the job.

#### Reference

CASC Ontario Region Race Regulations.  
RR 4.5 Duties of Timekeeper.  
Relevant sub-paras. of RR 2.3 Gridding and Starting

#### Process

The tasks involved in timekeeping and scoring are such that the instruction can be broken into small enough units so that it can be done at the track.  
The learning process, involves a lengthy apprenticeship period with the learning-taking place under the supervision of experienced timekeepers.  
Because of the close relationship between the various timekeeping functions and their interdependency on each other a timekeepers should be trained in all functions of a timekeeper, even though they may wish to do only one of the functions.  
It is not necessary that all students start with the same task and rotate through the functions in the same order. The diversity of tasks allows for students to start at different jobs and proceed through that sequence of tasks.

#### Description

The timekeeper is responsible, under the direction of the Clerk of the Course, for all timekeeping and lap scoring for the competition.  
Present and explain all basic rules that govern the behavior of timekeepers in the timing room  
Define and explain the duties of all of the personnel interacting with the timekeeper, their role and function and the chain of command within the race organization

#### Taping

Explain clearly the function of a taper including the methods and tools used. The problems encountered by tapers should be discussed and the solutions to these problems presented. The student should then be allowed to tape until he/she becomes proficient at the task. The procedure for checking tapes and the methods for correction should be outlined.

#### Charting

The student should be taken from taping to preparing a remote chart so that he/she will see the relationship between taping and charting. Again the presentation of some of the common problems and their solutions is necessary. At some point the student may be introduced to the tick chart and the live chart but it need not be at this time particularly in the case of the live chart.

#### Computer operation

Once a student has shown sufficient dedication and interest he/she should be trained in the operation of the computer and ORBITS software. While not every student will want to actually operate the computer they should have a basic knowledge of what is done on the computer and how it is done.

#### Documentation

Review all of the documents used in the timing area, both internally and for presentation to others, outlining the requirements for the preparation of each document.

- Receipt of entries from registration
- Provisional Results
- Information required in Results. Review RR 2.3.15 Results
- Results distribution
- Who is a finisher?
- Handling DNF's
- Handling DNS's
- Handling breakouts
- Disqualified cars
- Withdrawals
- Results required 30 minutes after checker
- Providing results to Clerk and Stewards
- Provision of grid sheets. Agree with Clerk how this will be done.
- Other documents e.g. lap charts, individual car lap times etc as requested.
- Timekeeper is Judge of fact for timing matters.

### **Setup**

Information should be provided at the appropriate time on the set-up of the timing room and of the various pieces of equipment used by timekeepers. This should also include the proper disassembly and storage of equipment.