



Emergency Vehicle Operations Manual

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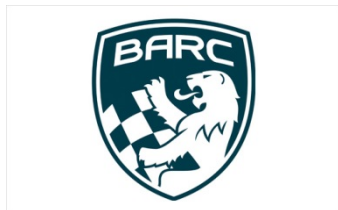


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INTRODUCTION

The British Automobile Racing Club-Ontario Centre (BARC-OC) and the Ontario Race Physicians (ORP) are integral parts of the team which organizes and presents the Honda Indy Toronto each year. They work hand in hand (along with other organizations such as Toronto EMS, Toronto Fire Services, Metropolitan Toronto Police) in supplying services and qualified staff for the Honda Indy Toronto for;

- The NASCAR Pinty’s Championship event in accordance with the 2016 NASCAR Regulations
- The Porsche GT3 Cup Challenge event in accordance with the 2016 IMSA Racing Regulations
- The Stadium Truck Series event in accordance with their series regulations

For purposes of brevity, for the balance of this document these series will be referred to as follows;

Verizon IndyCar Series	IndyCar
Indy Lights Presented by Cooper Tires	IndyLights
Pro Mazda Presented by Cooper Tires	Mazda
Cooper Tires USF2000 Powered By Mazda	F2000
NASCAR Pinty’s Series	NASCAR
Porsche GT3 Cup Challenge Canada	GT3
Stadium Truck Series	SST

PURPOSE OF THIS MANUAL

Rapid response to a racing incident by the appropriate emergency vehicles with trained personnel and specialized equipment can be critical in the treatment of injured participants (competitors and workers).

However, an unmanaged, uncontrolled response can place other participants at great risk while failing to deliver the required intervention.

The goal of this document is to clearly communicate the procedures which will be followed at the Honda Indy Toronto to provide the appropriate response to an incident in the optimal amount of time without further endangering any participants.

This document provides information about the track emergency vehicles in use during the Honda Indy Toronto event. It describes

- vehicles present on the circuit
- equipment carried on the vehicles
- communication systems and protocols
- procedures for deployment of the vehicles to incidents

Copies of the Plan are issued to the Medical Officer, the Medical Director, IndyCar, ASN Canada FIA, Honda Indy Toronto and to BARC-OC Department Heads for use in informing and directing their staff as required.

The plan is subject to amendment by the BARC-OC Clerk of the Course, the ORP Medical Director, and IndyCar as required during the event.

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KEY STAFF LIST

ORP Staff

Medical Director	Hugh Scully MD
Assistants To The Medical Director	Bill Liang MD, Rob Seal MD
Rescue Coordinator	Ken Smith
Deputy Rescue Coordinator	Stewart Morris

BARC Staff

Clerk of the Course	Scott Ellsworth
Deputy Clerk Rescue	Bob Page
Track Services	Mike McDiarmid
Secretary of the Event	David Bayley

Each of these individuals are licensed as required for their respective functions.

LIST OF TRACKSIDE VEHICLES

Please note that in order to avoid confusion, rescue vehicles and personnel provided by Rapid Intervention Team will be referred to as "Rescue" on all radio networks. These vehicles and personnel are identified throughout this document as "RIT Rescue".

Vehicle	Quantity
IndyCar Safety	3
IndyCar Medical Car	1
RIT Rescue	3
Track Ambulance	2
Standby Ambulance	1
Sweep/Fire Truck	4
Boom Wrecker	5
Flatbed Wrecker	2
IndyCar Pace Car	1
BARC Pace Car	1
Medical Car	1

Other emergency vehicles may be used on track as determined by the individual race series.

RADIO COMMUNICATION

PROCEDURES

Owing to the different requirements for vehicles and procedures between the IndyCar operated events (IndyCar, IndyLights, Mazda, F2000) and the BARC operated event (NASCAR, GT3, SST) there will be different radio networks used during the event.

Each vehicle that could potentially be used on the track in an emergency situation will be supplied with one radio (with headsets) for each network.

The IndyCar radio/channel will be used for IndyCar, IndyLights, Mazda, and F2000 sessions.

The BARC radio/operations channel will be used for GT3, NASCAR, and SST sessions.

The dispatchers in Race Control will tell you when to switch from one network to the other. Do not switch until instructed. When instructed, switch immediately and check in with Race Control so as not to lose contact with the tower.

Prior to EVERY session on track, a check will be made by the communicator in race control to ensure that all necessary vehicles are on the correct frequency.

One team member from each vehicle must be assigned to the correct radio and monitoring the channel at all times during the event. At no time should either the IndyCar or BARC radio network be audible to anyone other than the vehicle crews themselves.

Communication between vehicle teams over the radio network may only be done with the permission of Race Control.

Radio silence is required prior to and for the first two laps of any session on track, during any incident by those vehicles not directly involved in the incident and during the final lap of each race.

EMERGENCY VEHICLE PROCEDURES

ORIENTATION LAPS

Each morning an opportunity will be provided for all vehicles to make orientation laps to familiarize themselves with the layout of the track. These laps will take place approximately 30 minutes prior to hot track but shall not commence until directed by Race Control.

Vehicles are to make these laps at moderate speed, always in race direction. When it is necessary to cross from one side of the track to another, this should be done at a location where the emergency vehicle is clearly visible and easily passed by approaching traffic.

FAMILIARIZATION

Each morning all emergency vehicle teams at a station should introduce themselves to one another and to the marshals working at their station.

Emergency vehicle drivers are to meet with the Corner Captain and marshals to agree on the signalling system that the marshals will use to help guide vehicles safely onto the track when dispatched.

READY FOR SESSION

Vehicles are to be parked at station in the probable order of dispatch:

- Rescue Vehicles
- Ambulances
- Sweep/Fire
- Wreckers

When meeting this priority, vehicles should be positioned if possible to afford each vehicle an independent path to the point of entry so any one of them could proceed onto the track and with sufficient space between them for the opening/closing of all doors.

When Race Control has advised a session is about to commence, all vehicle teams should be ready to respond to dispatch (with crew on or near the vehicle) at all times until told they may stand down.

At any time during the session an incident can occur on track or in the pit area. Race Control will alert all vehicles if an incident has taken place. When this alert is received all vehicles should have engines started and be ready to roll.

Air conditioners on the vehicles should not be running when they are on the circuit since condensation can cause water to run on to the track!!

TRAVELLING ON THE RACE TRACK

When travelling on the race track to respond to an incident;

- Travel on the correct side of the track for that location as reviewed in the driver training sessions
- Travel at reasonable speed without overdriving the vehicle
- When it is necessary to cross from one side of the track to another, this must be done at a location where the emergency vehicle is clearly visible to and easily passed by approaching race traffic - do NOT cross from one side of the track to another in a corner
- Always travel in race direction unless explicitly directed to go counter race by Race Control

ARRIVAL AT INCIDENT

When arriving at an incident, follow the direction of incident commanders and marshals for the positioning of your vehicle. Generally speaking, if you are not the first vehicle dispatched to an incident, pause or stop before the incident scene and wait to be directed.

Do NOT position your vehicle in such a way as to block the track unless all race traffic has been halted.

Prior to leaving your vehicle;

- Plan where you are going to go and what you are going to do
- Wait for your vehicle safety or crew chief to give the all clear
- Make sure you are clear before opening a door and/or leaving the vehicle
- Close doors after leaving the vehicle
- Never move in any direction before looking around you

DISPATCH PROCEDURE

This procedure describes the method of responding to a corner-initiated emergency call for assistance.

Once dispatched by Race Control, all vehicles are to advise Race Control when they:

- Arrive at station
- Respond to a dispatch
- Arrive at the scene of the incident
- Leave an incident
- Have returned to station as directed

The procedure starts when Control receives and confirms a corner request for emergency help.

Emergency vehicles are NOT to leave their assigned station until and unless dispatched by Race Control. Vehicles will not be dispatched until the appropriate yellow flags are shown at the station(s).

Ambulances will not be dispatched unless a session has been shut down or a full course yellow has been displayed and the pace car is controlling the field.

Do not depend on a marshals signal to enter the track safely – you are responsible for your own vehicle. Use simple words such as “stop” and “go” to indicate whether it is safe or unsafe to enter the track.

PROCEDURAL DIFFERENCES BETWEEN DIFFERENT SESSIONS

The response differs in some details depending upon whether cars on the track are IndyCar, IndyLights, Mazda, F2000, NASCAR, GT3, or SST.

These differences must be carefully noted.

IndyCar, IndyLights, Mazda, F2000

There are two means by which an IndyCar safety vehicle will be dispatched to an incident during IndyCar controlled sessions;

- IndyCar Safety Communicator dispatches IndyCar Safety Truck by radio
- *IndyCar Safety Truck rolls automatically on line of sight authority and reports this to Control*

At request of either the IndyCar Safety Truck personnel or corner captain, any or all of backup emergency vehicles will be dispatched by radio by the IndyCar Safety Communicator

- Track Ambulance
- IndyCar Safety/RIT Rescue
- Sweep/Fire Truck
- Wrecker/Flatbed
- Other

Note that the dispatch instruction for any additional vehicles must come from the IndyCar Safety Communicator.

During the emergency, communication from the emergency site to control will be by IndyCar Radio Network or corner landline. Medical communication will be by the Medical radio network from the Medical Director to the physician on board the track ambulance/RIT Rescue and by the IndyCar medical network.

NASCAR, GT3, SST

The Deputy Clerk of the Course Rescue will dispatch the closest vehicle of the appropriate type by radio for all incidents where the corner captain requests assistance. If a driver requires medical attention, that vehicle will be a Rescue vehicle, otherwise it will be a Sweep/Fire vehicle. If there is any concern for the drivers condition a rescue vehicle should be dispatched as a precautionary measure (i.e. hard impact).

At the request of the Incident Commander on the Rescue vehicle, the captain on the Sweep/Fire vehicle, or the corner captain, any or all other emergency vehicles will be dispatched by radio by Race Control.

Note that the dispatch instruction must come from Race Control. Vehicles may not self-dispatch.

IndyCar Safety vehicles will be available only as backup for these sessions and will NOT be trackside.

During the emergency, operating communication from the scene to Control will be via BARC Radio BARC OPS channel or corner landline. Medical communication will be by the Medical radio network between the Medical Director, the physician on board the rescue vehicle or track ambulance and Support Race Medical.

The Captain on the first vehicle on the scene will become the Incident Commander, and will direct activities on the scene. This will be the Captain in the RIT Rescue Vehicle or the Captain on the Sweep/Fire vehicle.

In the event the incident is further escalated by the Incident Commander, the ORP Safety Director will be called in and become the Site Incident Commander. The Site Incident Commander will then assume responsibility for directing all activities on the scene.

Sweep/Fire Vehicles and Wreckers arriving at the incident will operate as directed by the Incident Commander or the Site Incident Commander (if they have been called to the incident). The Incident Commander/Site Incident Commander will keep the Assistant Clerk Rescue apprised of the status at the incident via the BARC Radio BARC OPS channel. When the incident has been dealt with and the Incident Site Commander has released them, vehicles will be directed back to a position by the Assistant Clerk Rescue.

If a track ambulance is called onto the circuit to transport injured participants, the decision on whether to take them to the Medical Centre at the circuit or local hospitals will be made by the attending physician(s) at the scene. The Medical Director will advise the Assistant Clerk Rescue of the destination for the track ambulance before it leaves the scene.

The Assistant Clerk Rescue will direct movement of the track ambulance to the egress from the circuit. The Assistant Clerk Rescue will then direct the movement of the standby ambulance into ready position.

ROUTES TO MEDICAL CENTRES

Track ambulances will proceed from the incident as follows;

Direct To Local Hospital - If the decision is made to transport directly to a local hospital, the ambulance will leave the circuit by travelling on the racetrack to Turn 1. The ambulance will NOT proceed through the pit lane. When the ambulance reaches Turn 1 it will exit through the Princes' Gates and follow the runoff to exit the circuit via the gate behind turn 2.

An alternate route may be used where the ambulance leaves the circuit at Turn 6.

Medical Centre - Ambulance will proceed into the pit lane and make a left turn onto Nunavut Drive. Ambulance will proceed to the Medical Centre located in the southwest corner of the Enecare Centre.

Once the injured have been delivered to the medical centre, track ambulances will await orders from Race Control on relocation. The tow trucks/flatbed carrying wrecks will drive to drop off points as ordered by Race Control. Once vehicles have been dropped, trucks should check in with Race Control for orders from Race Control on relocation.

All other vehicles will return to their bases unless otherwise ordered by Race Control.

AMBULANCE LEAVING CIRCUIT

The nature of the circuit means that if the ambulance is required to leave and return to the circuit it may have to proceed a short distance on the racetrack.

THE AMBULANCE WILL ONLY BE ON THE CIRCUIT WHEN IT IS COLD OR THE FIELD IS UNDER THE CONTROL OF A PACE CAR!

The procedure starts with the ambulance advising Control that they must leave the circuit.

Procedure for the movement of the ambulance is as follows;

FROM MEDICAL CENTRE

The medical officer advises the IndyCar Chief Steward and/or the Clerk of the Course that it will be necessary to transport a patient from the medical centre to a hospital outside the circuit.

The medical director must also confirm that the ambulance will leave the circuit through the Enercare Centre, leaving via the door at the north east corner of the building onto Manitoba Drive.

This transport will not necessitate any interruption in racetrack activity.

If for some reason it is deemed necessary to transport via the track, the ambulance will leave the medical centre, entering the circuit at Turn 10 and proceeding around the circuit to either Turn 1 or Turn 6.

A complete shutdown of the track is desirable to move the ambulance out of the circuit. If a complete shutdown is not practicable, the following steps must be taken;

Marshals on the landline and personnel on the pass control radios will be advised that an ambulance will be leaving the circuit and at which turn in order that they may control and secure the area which will be used by the ambulance to exit the circuit.

A full course yellow must be displayed and the field must be brought under the control of the pace car. The pit lane should be closed as well to avoid having race cars exiting the pit lane as the ambulance passes.

Once the field is under control of the pace car, the marshals will advise control of the number of the last car in the pack.

As the last car in the pack passes Turn 5, Race Control will advise the ambulance by radio to proceed onto the circuit.

The vehicle will follow the back of the pack of cars, exiting the circuit via the gate at Turn 1 or Turn 6.

Marshals and pass control personnel at Turn 1 or Turn 6 will allow egress from the circuit for the ambulance through the runoff area.

The circuit may now be returned to racing conditions.

RELOCATION OF STANDBY AMBULANCES

If it should be necessary to transfer an injured participant to a hospital outside the circuit, and an ambulance that had been stationed on the track is used for that purpose, the standby ambulance located at the Medical Centre will be relocated to the track. This will be done under the direction of Race Control during a shutdown or full course yellow.

AMBULANCES RETURNING TO THE CIRCUIT

When an ambulance (or replacement) returns to the circuit, it will proceed to the position drivers left at Turn 2, report to the Medical Director via the medical radio and wait for the end of the session currently in progress. The Medical Director will advise the ambulance to check in on either the IndyCar radio network or the BARC radio network as appropriate. Marshals at the station will advise Race Control that they have an ambulance ready to cross. At the end of the session when racing activity has stopped the ambulance crew will be given instructions on where to position themselves.

BARC PACE CARS

There will be one pace car used by BARC.

Use of that pace car for each individual series will be determined prior to the beginning of the event.

Use of the pace car during pace laps for each race will be as described in the series regulations or bulletins for the respective series.

The pace car will take up position on track ahead of the grid, lead the pace lap exiting at Pit In and will park in the pit lane, drivers' left at the end of the wall near Pit Out. ***Note that with the changes to the circuit and pits that the pace car location may be revised as necessary during the event.***

If a full course yellow is needed the pace car will be dispatched as described in "Procedure To Dispatch A Pace Car And Resume Racing" contained within this plan.

A second pace car may be used as a VIP car and in these cases will precede the pace car on the pace lap exiting at Pit In, turning left out of the pit lane and exiting or parking on Nunavut Drive. It too will be manned by a driver and a radio operator/spotter.

During IndyCar sessions the BARC pace cars will park as directed.

PROCEDURES FOR USE OF PACE CAR

This procedure describes the procedures to be used to dispatch the pace car during a race to control the field, and procedures for resumption of racing.

The BARC pace car will be stationed in the pit lane at Pit Out, drivers' RIGHT. A driver and observer will be on board. The pace car driver and the Pace Car Communicator will be on the BARC private radio channel while racing is underway, and they shall be the only people on that channel.

- Control alerts pace car by radio with command "Stand up"
- Start and all stations display steady yellow
- Control informs pace car of numbers of the 3 lead cars
- Pace car turns on flashers
- Control requests ALL Stations to report progress of leader
- Control informs pace car of leaders' progress and dispatches pace car ahead of leader with command "Roll"

NOTE! It is preferable to send the pace car out immediately in front of the leader but in an extreme emergency it is acceptable to send the pace car out several cars AHEAD of the leader to control the field as quickly as possible - ensure the pace car is not sent out BEHIND the leader!

- Incident is dealt with and track is cleared
- When required by series regulations Pit Out assistant starter controls cars allowing them to enter the track only immediately behind the last car of the pack following the pace car
- When necessary after the incident has been cleared and only when directed to do so by Control pace car waves cars past until the correct car is behind the pace car
- Control directs pace car to turn off flashers before the agreed upon point and complete lap, exiting to Pit In
- Pace car turns off flashers
- Pace car enters Pits
- All stations NO FLAGS
- Starter restarts race with green flag
- Pace car returns to Pit Out

Pit Out must be advised to close and reopen the pit exit when the pace car is passing the pit area if required by individual series regulations. This should be confirmed by clerk of the course and chief course marshal with series race director before any race!

Individual series may have differing locations for turning off the lights on the pace car. The location on track to extinguish the pace car lights must be confirmed by the pace car driver and communicator with series chief steward before each race!

VEHICLE LOCATIONS & NAMING

Vehicle locations will be as indicated on the map attached at the end of this document. With the changes to the circuit for 2016, there is every likelihood that these locations may be revised during the course of the event.

Vehicles will be assigned to these locations at the start of each day. Each vehicle will take a radio name based on its function and its location (i.e. a wrecker at station 9 will answer to "Wrecker 9").

IndyCar vehicles may not be located exactly as described below.

Note that attending to incidents and track conditions may mean that a vehicle ends up in a different location from its original assignment.

A vehicle may have its radio name changed if it switches locations or rotates with another vehicle (i.e. Medical Centre Ambulance replaces Ambulance 2). Such a change will be directed by and confirmed with Race Control.

As an example, if an ambulance positioned at Station 2 and called "Ambulance 2" should be moved and repositioned at Station 3, it may become "Ambulance 3" at the direction of Race Control.

VEHICLE STAFF AND EQUIPMENT LISTS

SWEEP/FIRE TRUCKS (4)

Sweep/fire trucks are staffed by professional firefighters from Toronto and vicinity fire departments trained in race-related vehicle rescue and having experience gained from the Honda Indy Toronto, Canadian Tire Motorsport Park and other international race tracks.

- Brooms (4)
- Spreader (1)
- Oil Dry Fine (4 X 5 Gal Pail)
- Oil Dry Coarse (4 X 5 Gal Pail)
- 30' Tow Rope
- 2.5gal Pressurized Water Extinguishers (2)
- 20 # Dry Chemical Extinguishers (4)
- Diapers (2)
- Tirewall Wrap

RESCUE [RIT] (3)

RIT Rescue vehicles are staffed by professional firefighters and paramedics trained in race-related vehicle rescue. Experience gained from Circuit Gilles Villeneuve, Mont Tremblant, Calabogie, and other international race tracks.

Extrication and medical equipment carried on these vehicles is as specified in the Ontario Race Physicians Race Medical/Rescue Operations Manual.

In addition to extrication and medical equipment, they have firefighting capability and will be used for intervention in case of a significant vehicle fire.

TRACK AMBULANCES (2) AND STANDBY AMBULANCES (1)

Ambulances are staffed by Level 3 Toronto EMS paramedics and ORP paramedics (Ontario licenced) from Toronto and vicinity ambulance services who are race-trained rescue specialists. Experience gained from the Honda Indy Toronto, Canadian Tire Motorsport Park and other international race tracks.

Equipment carried on these vehicles is as specified in the Ontario Race Physicians Race Medical/Rescue Operations Manual.

MEDICAL CAR

Equipment carried on this vehicle is as specified in the Ontario Race Physicians Race Medical/Rescue Operations Manual.

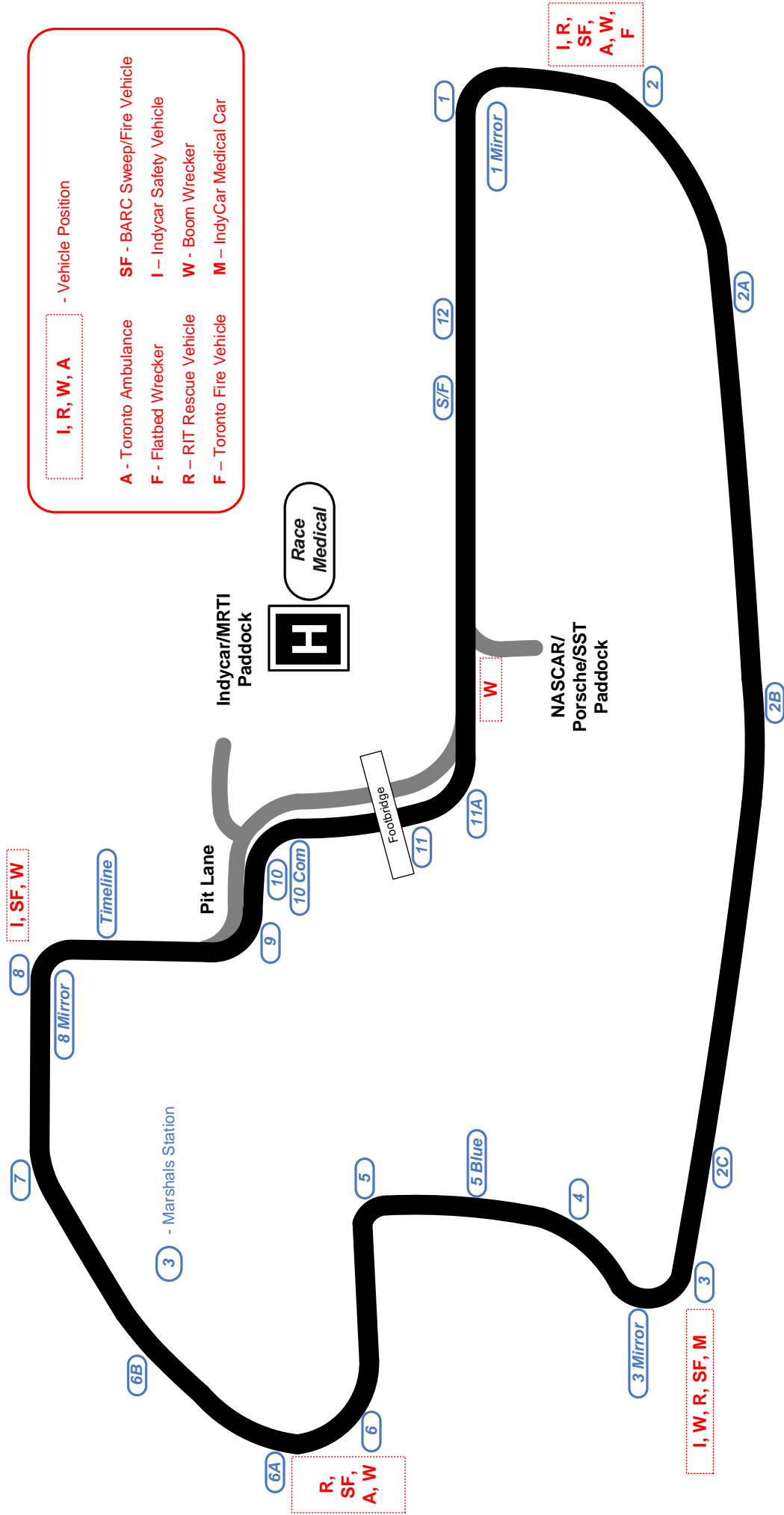
REFERENCES

BARC Honda Indy Toronto Operations Plan
Ontario Race Physicians Race Medical/Rescue Operations Manual
Honda Indy Toronto Minute by Minute Schedule
Honda Indy Toronto Emergency Safety Plan



I, R, W, A - Vehicle Position

A - Toronto Ambulance **SF** - BARC Sweep/Fire Vehicle
F - Flatbed Wrecker **I** - IndyCar Safety Vehicle
R - RIT Rescue Vehicle **W** - Boom Wrecker
F - Toronto Fire Vehicle **M** - IndyCar Medical Car



NOTE: Emergency vehicles may be added, relocated or removed based on the requirements of individual series