



## **RACE EVENT RULES, POLICIES AND PROCEDURES**

This document presents the rules, policies and procedures to be used for organizing and conducting an on track race competition, practice or qualification for the evGrand Prix. Honorable conduct and good sportsmanship of all participants is expected. By entering the race and signing a hold-harmless form, the participants agree to abide by all rules and regulations set forth in this document.

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## BACKGROUND

The evGrand Prix program represents an innovative, team-based approach to developing the next generation of automobile—powered by electricity. The vision of the founders is to make this a national event, with racing teams coming from across the country to showcase their expertise by competing with the best and brightest future electric vehicle designers, engineers, enthusiasts and racing teams!

The purpose of this program is to accelerate innovation through education by encouraging students to study science, technology, engineering and math, and pursue a career in the electric vehicle industry. This is applied learning in a reality-based environment. Using electric powered go-karts as the focus, the program inspires students to commit their creative energies to develop future electric vehicle technologies - technologies that will secure sustainable and environmentally responsible transportation for future generations.

To compete in evGrand Prix, students organize teams to promote the events and electric vehicle technology. Teams partner with industry, government agencies, and community outreach programs that help to fund the program.

It is important to understand that the real winners are those students who complete a kart and bring it to the track. These are the students who have the fortitude and demonstrate their ability to complete the project. Coming across the finish line is icing on the cake.

The winner of the season series is the team that best blends design review, race placement, educational outreach and optimal efficiency over the season's events. Qualification runs, solo runs and sprint races may also be run as part of the season event calendar, as college and high school teams from across the nation come together and compete for scholarships and bragging rights.

The future of transportation is changing and the Electric Vehicle Grand Prix looks to charge the innovation of automobiles with new and exciting technologies learned in the classroom and proven on the track. Join us as we develop new modes of transportation for the future fueled by clean and renewable energy. evGrand Prix is excited to break into the emerging autonomous scene with the introduction of an evGrand Prix Autonomous division starting in 2018.



## **1.0 SCOPE**

The rules contained herein will be strictly enforced at all times including, but not limited to, testing, practices, qualifications, and races sanctioned by the Association. Honorable conduct and good sportsmanship of all participants is expected. By entering the race and signing a hold-harmless form, the participants agree to abide by all rules and regulations set forth in this document.

## **2.0 GOVERNING AUTHORITY**

The information in this section is provided to clarify misunderstandings of who has responsibility, authority and jurisdiction concerning race events and teams.

Race Events are governed by the World Karting Association (WKA). An individual school is represented by a School Liaison regardless of how many teams a school fields.

The Safety Committee must approve variations to the rules. An official deviation request form will be prepared by the Event Director who will submit the form for review. Forms must be submitted no later than 30 days prior to the first technical inspection or event is run. The Safety Committee will review the forms and give a response no later than 14 days prior to the first technical inspection. The Directors decision is final.

## **3.0 EVENT MANAGEMENT TEAM**

For All Events, Danny White of Purdue University Motorsports will serve as Event / Race Director. The World Karting Association (WKA) will serve as the official sanctioning body.

## **4.0 SCHOOL TEAM(S) LAISON**

Race teams will be represented by a single School Team Liaison regardless of the number of teams fielded at a school. The Liaison must be a school recognized representative (non-student) who is responsible for the welfare of the student team(s) and authority to represent the institution. The Liaison is the primary contact for evGrandPrix.

## **5.0 JURISDICTION**

The remaining Sections contain information and procedures for conducting an evGrand Prix race event.

## **6.0 DISCIPLINARY ACTIONS**

Any unsafe or unsportsmanlike behavior or actions as determined by the Director of Race Operations or Chief Steward may result in disqualification or ejection of a driver, kart, crew member, team or school; or in the cancellation of a race or event. Any person ejected from the venue for any reason will result in a suspension for the next running day and/or loss of points in the series total. This includes being suspended for competing in the race itself.

## 7.0 POSITIONS AND RESPONSIBILITIES

Safety Team:

Danny White, Dave Reagan

	<u>2018 IMS Event</u>
Dir. Of Race Ops	WKA
Dir. of Event Ops	Danny White
Safety Director	Danny White
Technical Inspector	WKA
Chief Scorer	Barrett Robinson
Pit Steward	Dave Reagan

### 7.1 Director of Event Operations

The Director of Event Operations (DEO) manages the overall event and is intimately involved with budgeting, sponsorship, publicity and other business operations. The DEO is the responsible parties to insure that rules are followed and conduct a wholesome, safe event. The DEO must be a school recognized representative (non-student) who is responsible for the welfare of all event participants. Any off track matter not covered in these rules will be left to the discretion of the DEO. The DEO, may appoint personnel and organize subcommittees as deemed necessary to help carry out their duties. The DEO must be trained and certified at the Motorsports Safety Awareness Level as defined in NFPA 610.

### 7.2 Safety Director

The Safety Director will have authority to enforce all safety rules in regard to venue and non-vehicular safety. The Safety Director makes any rule stricter to adjust for event conditions and venue. The Safety Director must be a Certified Safety Manager/Professional and be trained at the minimum of Motorsports Safety Command/Manager per NFPA 610.

### 7.3 Technical Inspector

The Technical Inspector will supervise and conduct required vehicular and race equipment inspections. The Technical Inspector ensures that vehicles adhere to the specifications and has the authority to pronounce any vehicle illegal under these rules. Technical Inspector must be approved by the Director of Event Operations. team and be trained and certified at the Motorsports Safety Awareness Level per NFPA 610.

### 7.4 Chief Scorer

The Chief Scorer is responsible for establishing qualifying times and counting race laps to determine race finishing position. The WKA Chief Scorer must be trained and certified at the Motorsports Safety Awareness Level per NFPA 610.

### 7.5 Director of Race Operations

The Director of Race Operations (DRO) is responsible to supervise and provides, track worker training, driver's schools and practice sessions for all competitors. The DRO is responsible for all decisions during the race and is in

charge of the race from the drop of the green flag to the waving of the checkered flag. The DRO is to be trained and certified at the Motorsports Safety Command / Manager level per NFPA610.

## **8.0 EVENT SUPPORT STAFF**

Support staff is managed and selected by the Director of Event Operations to carry out specific duties as needed to run the event. The Support Staff must be trained and certified at the Motorsports Safety Awareness Level per NFPA 610.

### **8.1 Chief Pit Steward**

Reports directly to the Director of Race Operations and in case of emergency will be the one who will step up and replace the Director. This position has final authority in the Pit area. The position will have Pit Workers that report directly in to the Pit Steward. The Chief Pit Steward shall be trained and certified at the Motorsports Safety Command / Manager Level per NFPA 610.

When a driver suffers a penalty flag (black flag) the Chief Pit Steward will communicate this to a Pit Worker who will enforce the penalty with the team. All Pit Workers are responsible to enforce the safety requirements of the pit operations. All Pit Workers will be trained at the Motorsports Safety Operations Level per NFPA 610.

### **8.2 Flagman**

**8.2.1** Track Workers - All track workers must be trained at the Motorsports Safety Operations Level

**8.2.2** Entry Coordinator - This position will make sure that anyone entering the track area has the proper credentials and have signed all the appropriate liability releases and that they are wearing the appropriate PPE. They must be trained at the Motorsports Safety Awareness Level.

## **9.0 TEAM REGULATIONS**

### **9.1 Eligibility**

A race vehicle for the high school teams must be accompanied by the evGrand Prix Membership form and include all required signatures. The entry must be made through the online registration process and including the School contact information.

A race vehicle for the collegiate teams may be entered only by an individual undergraduate or graduate student at a recognized school. The entry must be made through the online registration process and including the School Liaison contact information.

## 9.2 Requirements for Participation

All students on a team shall be enrolled in good standing at the same school. A school may enter an unlimited number of teams as long as the teams and karts meet the requirements of these specifications.

## 9.3 Duration of Eligibility

Students, high school, undergraduates and graduates, are eligible to participate in the events. Participation is defined as being listed as a crew member of any race team that has entered in a race regardless of school affiliation. Graduating seniors may participate in the semester following their graduation without the necessity of course enrollment

## 9.4 Crew Size

A race crew shall consist of no less than four (4) and no more than six (6) persons, a driver, and a crew chief and up to 4 crew members. The High School Team Coach must be included as one of the additional crew members. Only four (4) pit crew members and the driver are allowed over the wall to service a kart during an on track event. One crew member **must** be designated as the team spotter/scorer but **is not** allowed over the wall for pit stops. No person may be a member of more than one crew unless circumstances dictate and is approved by the WKA. Teams with less than four members cannot participate unless authorized by the WKA.

## 9.5 Track Workers

Each team participating in an event **must** provide one track workers for an event. If no track-worker is provided by a school, a member of the race crew will fill in as the track-worker for the day. All track workers must complete an approved track workers training session. It is encouraged that non-drivers and crew chiefs of race teams receive track workers' training to the Awareness Level as defined in NFPA 610.

## 9.6 Driver Training

Test and Tune events are highly recommended for driver training. Multiple practice events of this sort will be hosted across Indiana prior to the event in May.

**9.6.1** Drivers who cannot attend on test and tune event for any reason or cannot field a safe racer at a scheduled school will be required to take training laps. Rookie orientation at the event will take place early before practice.

**9.6.2** One individual driver can qualify only one kart and must drive that kart in the race. If, for some very unusual and unforeseen reason the qualifying driver is unable to drive the kart on race day, the Chief Steward must be notified and he/she will decide if the reason is acceptable. If acceptable, the racer will be allowed to start at the back of the starting field with an acceptable back-up driver. If a driver different from the qualifying driver attempts to drive the kart

on race day without prior approval, that kart will be eliminated from the starting field.

**9.6.3** All rookie drivers will have fluorescent tape on the rear of the kart to designate rookie status for the first on track event attended. The Technical Inspector will apply the tape at technical inspection. A Driver will be considered a rookie until they finish their first test and tune event or race and get a satisfactory rating from the Competition Director for the completed event.

### **9.7 Role of Crew Chief**

The crew chief is the official spokesman for the crew. No one other than the crew chief may handle a situation with the safety officials, the Chief Steward or the WKA. He/ she is responsible for all actions which these rules may require him/her to do, including securing written approval for material substitutions, and innovative designs and signing the crew score sheet within the allotted time of one hour following the end of the race.

**9.7.1** It is mandatory that crew chiefs attend drivers school sessions to become more familiar with the operation of a race team at the track, support the driver school by preparing and servicing the kart and understand what to expect from the driver.

## **10.0 GENERAL AREAS**

### **10.1 Releases**

All race participants and support personnel shall have a signed hold harmless agreement and medical waiver agreement on file with the Race Chairman before a pit pass will be issued to them. Participants under 18 must have the agreement notarized by the signature of a parent or guardian for the IMS event. Only personnel authorized by the WKA will be admitted to the track and paddock areas with a pass. Signing of these indicates a participant understands and agrees to abide by all rules in this packet. The host institution and event sponsors may require additional hold harmless agreements.

### **10.2 Race Length**

The length of a race under normal conditions shall be determined by the sanctioning group. Under no circumstances shall a race be made longer than can be completed with the specified total kWh of battery energy available to each team.

### **10.3 Rain Contingency**

If foul weather interrupts a race before completion of 50% of the required laps, all karts will be red flagged and will stop on the track at the start-finish line in single file order to await further instructions. Unless otherwise directed by the WKA Director of Race Operations, no work is to be done on the karts. The karts may be covered if desired. The WKA Director of Race Operations and the Chief Starter will determine if the event is to be postponed. If a race is to be restarted, the karts will restart in single file, in



the order they were scored on the lap prior to when the weather forced the delay.

If 50% or more laps have been completed, the race will be deemed officially complete. Finish position will be based on position of the lap prior to when the weather forced the delay.

#### **10.4 Weigh-In Procedure**

Each kart and driver will be weighed at tech inspection. On the first day of practice the kart and driver will be able to weigh in to make sure weights are being met. 400lb minimum for high school karts.

On race day you will not be forced to be weighing in as you enter the pits but the scales will be available to check your weight. The top 4 winning karts will be weighed again for assurance of rules compliance.

#### **10.5 Race Starting Format**

The evGrand Prix will use a rolling start format. On the starter's call the karts will start and follow the pace kart for a lap. When the pace kart reaches the pits it will exit and the field will continue to the start line at which time the starter will wave the green flag to start the race.

#### **10.6 Garage Area vs. Pits**

The Pit area is defined by the Event Director. Only team members and officials will be allowed in this area. The garage area is defined as the area where team plus support group can work on the kart. Battery charging will be allowed only in the designated area.

### **11.0 QUALIFICATION PROCESS**

#### **11.1 Qualification Options**

There will be only one option for qualification. It will be based solely on speed and lap time.

#### **11.2 Warm-up Practices**

Prior to qualifications or a race, the track will be opened for a one-half hour practice session (weather permitting). If a large number of racers are entered, the Director of Race Operations / Chief Steward may break the practice time into groups if necessary. As an example the odd numbered racers will be allowed to warm-up during the first 15 minute period and the even numbered racers will be allowed to warm-up during the second 15 minute period. Any racer participating in the wrong warm-up group will be subject to penalization. When warm-up is completed, all racers will proceed to the pits to await further instructions.

#### **11.2 Lap Time Format**

The demonstration and official timing of an individual racer's time while negotiating the course will determine the race start position.

### **11.2.1 Qualifying Procedures**

Qualifying consists of 2 laps at speed. Upon entering the track, the racer will make 3/4 of a lap for warm-up prior to taking the green flag for the first timed lap. As the racer approaches the timing line for a second timed lap, the white flag will be shown indicating one more lap. As the racer approaches the timing line for the second time, the checkered flag is shown. After an official qualification run is made, the racer must proceed directly to the tech inspection area. A team **MUST** take a checkered flag to qualify for the race event. A non-qualified racer may be permitted to start at the rear of the field at the discretion of the Chief Steward.

### **11.2.2 Number of Attempts**

A racer may take up to two attempts to qualify. Once a racer has received a checkered flag, the result is the official qualification for that racer. The racer will not be permitted to make any more qualification attempts.

### **11.2.3 Official Time**

The best lap time recorded of the two laps made during qualifying will be scored as the official time for the racer.

## **12.0 DESIGN, OUTREACH, and ENERGY EFFICIENCY**

### **12.1 Design Review**

Each team is required to prepare a short presentation on the set up of the team's kart, the electronics, and safety protocols. This presentation will be scheduled upon check in at the race event. The rubric for design review is provided on the evGrand Prix website. You will have your score for this section prior to the official race and will account for 20% of the teams overall score.

### **12.2 Community Outreach**

Each team is required to prepare a short presentation on individual outreach opportunities, marketing, and community impact. This presentation will be scheduled upon check in at the race event. The rubric for community outreach is provided on the evGrand Prix website. You will have your score for this section prior to the official race and will account for 20% of the teams overall score.

### **12.3 Energy Efficiency**

Each team will have their kart monitored to determine their energy efficiency during the race event. The Power and Energy Monitor (PEM) will be install in the kart during tech inspection and will be utilized to obtain an energy efficiency score. You will have your score for this section shortly after passing tech inspection immediately following the race and will account for 20% of the teams overall score.

## **13.0 PIT AND CONDUCT PROCEDURES**

### **13.1 Pit Passes**

All Drivers, and crew members must have pit passes and a picture I.D. readily available to any *event* official. All drivers, and crew members must have pit passes visible at all times. A lost pit pass will require a Pit Pass Replacement Fee. This fee will be used to help cover event expenses. Only Six pit passes will be issued to a race team. Illegal transfer of passes is grounds for revocation of that pass and ejection from the event.

### **13.2 Non-Members in the Pits**

If any person is found working on a kart in the pits who is not an official member of a crew, and that crew is aware of his / her presence, that kart and crew will be disqualified from further participation in the event for that day. No faculty, staff, team advisors, or support personnel of participating teams will be allowed in the pit area during the race event. Team advisors and support personnel should avoid working on the kart but are allowed to verbally direct, coach, and discipline the student team members. The WKA shall have complete discretion regarding personnel in the pits.

### **13.3 Leaving Pit Area**

Once a kart has attempted a qualifying run, that kart may not leave the pits until the end of the day. Doing so makes that kart ineligible for any additional runs on that day. Once a kart enters the pits on race day it may not leave. Doing so disqualifies the kart from the day's events.

### **13.4 Pit Conduct**

**13.4.1** All karts must stay in the driving lanes except when entering or exiting their own pit; the exiting driver must yield to a moving kart.

**13.4.2** Kart crews will be penalized for reckless driving in the pits.

**13.4.3** No trailers are allowed in the pits unless authorized by the Event Director. All equipment and karts must be readily available for inspection at all times.

**13.4.4** No generators will be allowed in the pit area, but may be allowed in the garages.

### **13.5 Pit Position**

Upon entering the event, each kart will be assigned a permanent pit position by the Event Director.

### **13.6 Pit - Mechanical Related Stop**

A driver may receive a black flag when something is dragging the ground, hanging off the Kart, or a safety issue is observed that puts the driver in danger. At this time the driver is given the black flag but the Pit Official that is assigned to your Kart will tell the Teams Crew Chief to signal the driver into the his or her pit instead of going to the penalty box. The signal will be the

Crew Chief standing in their pit box waiving to the driver. Once the repair is made the Pit Official will direct you that the Kart may return to completion directly from their pit. If the repair takes longer than 15 minutes the Kart will be disqualified from competition for the remainder of the event.

### **13.7 Pit – Penalty Related Stop**

At the Pit Exit there will be a taped off area (highly visible) that will serve as the “penalty box” and any driver of a Kart that has received a black flag for rules violations will be sent to the “penalty box” where a Pit Official will explain the violation and consequences of a re-occurrence. As soon as the driver acknowledges the explanation by moving their head in acknowledgement or giving a “thumbs up” then they will be released to return to competition. In this situation of a rules violation, the Crew Chief and all team members should remain in their pit box and make no hand signals or gestures to their Kart.

## **14.0 TRACK COMMUNICATION**

### **14.1 Drivers**

**14.1.1** Any foul driving, unnecessary bumping, crowding, chopping, blocking, or unsportsmanlike conduct on the track or pits is grounds for penalization or disqualification.

**14.1.2** All drivers must constantly be aware of the traffic in his/her area and be prepared to yield to a faster competitor. A kart being passed is obliged to yield at the earliest chance. Any competitor, which does not yield, will be given the blue passing flag and must move over immediately.

**14.1.3** Any kart, which is driving extremely slow—such as tuning the drive system during practice—must place highly visible tape to the rear of the kart to warn others approaching that the kart is moving slowly. A slow kart must also stay out of the fast groove of the track.

**14.1.4** A kart may not improve its position with all four wheels off the track unless the kart(s) it passes are directly involved in an accident.

**14.1.5** All karts must enter and exit the pits at a reasonable and safe speed.

**14.1.6** No kart shall pass another kart under the yellow flag. This is defined as breaking the plane of the leading kart by the kart wanting to pass.

### **14.2 Hand Signals**

**14.2.1** Drivers must signal by raising one hand so that karts behind them can see if they are driving out of the ordinary pattern, such as exiting to the pits, yellow flag, accidents, etc.

**14.2.2** Drivers must signal by raising both hands high in the air if their kart has shut down or spun out; indicating their intention not to make any move until the field passes. If the kart shuts down and can be rolled, the driver should remain in the kart to steer and let the track workers move the kart to the pits. If the kart will not roll and must be carried to the pits, the driver should not remain in the kart, but should help the track workers carry the kart to the pits. If a kart has spun out but is still running, the driver should signal the track workers with only one hand to indicate he/she wishes to be pushed back onto the track.

**14.2.3** All hand signals should be made in such a manner so as not to confuse officials or other drivers on the track.

### **14.3** Flags

**14.3.1** GREEN FLAG – The green flag signifies the start of the session. The green flag and/or light will be displayed at the start of the race or practice session and kept visible as long as the track is clear for racing.

**14.3.2** YELLOW FLAG – The yellow flag and/or yellow light will be displayed if the track is partially blocked for any reason. Drivers should raise one hand, slow down, hold their position, and be prepared to stop. Passing under the yellow will result in a penalty. All cautions are FULL COURSE cautions.

**14.3.3** BLUE FLAG – The blue flag, with or without the diagonal yellow stripe will be given to any kart, which not yield to an overtaking karts. The kart receiving the flag must immediately signal, move over, and let the other kart pass.

**14.3.4** RED FLAG – When given to an individual kart, the red flag means to stop as quickly and safely as possible, pull inside the infield, and shut down the drive. This means there is something dangerously wrong with the kart and the driver should stop promptly. When given to the entire field, the red flag and/or red light means the track is hazardous for racing and all karts must stop immediately where they are on the course.. Karts cannot be worked on during a red flag. If and when the race is restarted, the karts will be positioned in order of the last complete lap, except for stoppage due to rain.

**14.3.5** BLACK FLAG – The black flag means the driver must enter and stop inside their own pit immediately for consultation by a race official.

**14.3.6 ROLLED BLACK FLAG** – The rolled black flag will be given to any competitor whose driving conduct is bordering on penalization. This is only a warning and does not require the kart to leave the track.

**14.3.7 WHITE FLAG** – The white flag will be given to the leading kart one (1) lap before the end of the race.

**14.3.8 CHECKERED FLAG** – The checkered flag signals the end of the race and all competitors should finish the lap at reduced speed and exit to the pits. After the checkered flag is displayed, the top five (5) placing karts are allowed to stay in the infield for post-race ceremonies.

## **15.0 TECHNICAL INSPECTION**

**15.1** All karts and supporting equipment must pass technical inspection before participation in practice, qualifications, or the race. No changes may be made to the karts or supporting equipment after passing technical inspection except: paint or decals for Race Day or repairs due to an accident. Passing technical inspection does not guarantee compliance with these rules. A kart may be protested and/or disqualified because of noncompliance with any rule in this package whether or not it has passed technical inspection. Kart and driver setup must not deviate significantly after passing technical inspection to the point that it produces noncompliance. Karts must always comply with the rules. An inspection may be performed before entering the track or after an accident to ensure compliance with the rules. Any changes made after a passing of technical inspection shall require a re-inspection. The Technical Inspection Team has the right to inspect any kart at any time for any reason. Adjustments may be made to improve the handling and drivability. Allowed adjustments include changing out sprocket sizes/gear ratios and re-programming the kart's motor controller.

**15.1.1 Power and Energy Limit Enforcement** – The power and energy limits will be enforced by the race officials using a Power and Energy Monitor (PEM) installed during Kart inspection prior to qualifying for the race. The PEM must remain visible at all times on the top of the battery boxes. If a team exceeds the maximum power limit during the race they will be blacked flagged. The team may be disqualified from the race if it continues to race over the power limit.

**15.2 PENALTIES** – Any person or organization violating these rules will be penalized. Penalties may include lap penalties, suspension from the day's activities, fines, loss of point, or disqualification. The Technical Inspection Team will have the authority to pronounce any penalty.

**15.3 INSPECTION TIME** – Tech Inspection will be conducted at the event site in the morning before the track opens.

**15.4** A pre-inspection checklist is provided on the evGrand Prix web site.

**15.5 ALL PARTS OF THE KART MUST CLEAR THE GROUND** – This clearance rule will only be enforced if parts of the kart are dragging, and if it is observed by a safety official as a hazard during practice, qualifications, or race. Penalties may consist of lap penalties, banning from practice sessions, or restricting the kart from participating in race day events.

## **16.0 SAFETY TRAINING LEVELS**

All persons involved with the evGrand Prix must have completed the required training for their respective positions they will perform during the evGrand Prix event.

**16.1.1 Motorsports Safety Awareness Level** – All personnel involved

**16.1.2 Motorsports Safety Operations Level** – Pit Workers, track clean up personnel, maintenance personnel, Off track emergency responders, track emergency personnel (non-rescue), corner marshals, vehicle recovery personnel, security, and event / venue personnel. (Purdue Police and Fire).

**16.1.3 Motorsports Safety Technician Level** – Pit area firefighters, on-track firefighters and personnel cross trained in Fire and EMS who will be assisting in extrication, rescue or emergency medical services. (This includes Purdue Fire).

**16.1.4 Motorsports Safety Specialist** – Extrication Specialist, On-track Physicians, Specialized Track Maintenance Personnel.

**16.1.5 Motorsports Safety Command / Manager Level** – EMT Emergency Safety Officer, Director of Race Operations and the Chief Pit Steward.

**16.1.6 Instructors** – Instructors must be certified by a Recognized State or Federal Agency at the level of Motorsports Safety Command / Manager Level or equivalent.

### **16.2 Trainer**

The Trainer must be at the Motorsports Safety Command / Manager Level per NFPA 610.

### **16.3 Safety Awareness Level**

This level applies to ALL personnel that are involved with the Ev Grand Prix:

- \* Recognition of hazards in their area of operation and potential incidents associated with those hazards.
- \* Recognition of a safety hazard or safety threat
- \* Identify and emergency incident.
- \* Familiar with the basic safety measures necessary to protect them while performing their assigned task.

- \* Realization of an immediate need for assistance and the ability to make notifications as identified in the Emergency Action Plan.
- \* Familiarization of reasonable and prudent initial actions that might reduce the severity of the incident.
- \* Familiarization of the existence of the Incident Command System and public relations plan.
- \* Knowledge of facilities such as the location of exits and other egress points.

#### **16.4 Safety Operations Level**

This applies to Pit Workers, Corner Workers, Track Cleanup Workers, Corner Marshals, Vehicle Recovers Drivers, Off Track Emergency Responders, Track Emergency Personnel, Security and Police working the event, as well as event or venue officials.

- \* Knowledge skill and ability to identify and recognize hazards.
- \* Knowledge skill and ability to select and properly use personal protective equipment (PPE) appropriate to the function or assignment.
- \* Knowledge skill and ability to function within an assigned role in the National Incident Management System (NIMS).
- \* Knowledge skill and ability to suppress incipient fires with a portable fire extinguisher.
- \* Knowledge skill and ability to perform hazard control operations, incident mitigation, and rescue operations within the capabilities and resources and PPE available in their areas of operation.
- \* Knowledge, skill, and ability of appropriate measures to assist or rescue victims.
- \* Knowledge, skill, and ability of procedures to return to routine operations.

#### **16.5 Other Levels of Required Training**

Other levels of training will be designed around the guidelines set forth in NFPA 610.

#### **16.6 Record of Training**

All trainings will be documented and sign in sheets will be required or any other means necessary (on-line) to assure completion.

### **17.0 PERSONAL PROTECTIVE EQUIPMENT**

**17.1 Eye and Face Protection:** Safety Glasses are required in the Pit Area and the Racing Surface (Track Workers). All Safety Glasses must be Z 87.1 approved or approved safety prescription glasses.

**17.2 Closed-toe shoes:** Anyone working in the Pit Area or Racing Surface MUST wear at a minimum closed-toe shoes. Leather shoes are preferred. (Non-ventilated)



- 17.3 Safety Vests:** Anyone working on the Racing Surface MUST wear a “Scotch lite” mesh type high-visibility vest. This is for visibility when you step on to the track surface or are moving around in the corner. This is mandatory for Corner Workers, Track Workers and Corner Marshals
- 17.4 Hand Protection:** Anyone working as a Corner Worker, Track Worker or Corner Marshal shall wear leather type or racing gloves to prevent abrasions and minor cuts when removing a damaged kart or debris.
- 17.5 Clothing:** All drivers shall wear race suits that are approved by the Tech Committee. All others shall wear long pants (long sleeve shirts are recommended). All clothing should be cotton.
- 17.6 Sun Screen:** It is recommended that all participants apply sun screen to prevent exposure to ultraviolet rays and possible sun burn. Any sun burn needs to be reported to the event Safety Officer to be recorded as an injury
- 17.7 Insulated Tools:** When servicing a “hot” kart at any time, the crew should utilize insulated tools to avoid an electrical shock hazard or unintended short circuit. It is common for teams to electrical tape the handles of their tools.
- 17.8 Driving Gloves and Shoes:** Specially designed race driving gloves and shoes are available at most race supply shops. They are both highly recommended for the driver.