

# Motorsport 4the Masses LLC (M4theM)

Robert Bolling - Owner/MSE Director

Amber Bolling - Executive Administrator

Anthony Ralston - Assistant MSE Director

Nate Wimbrow - 2nd Assistant MSE Director

Zach Gobble - Chief of Tech and Safety

Steve Williams - Race Control, Chief of Officials

Geoff Koteles - Chief of Instruction

Vacant - Chief of Timing and Scoring

## Procedural Manual and Rule Book ©

**V1.5.1** for 2020 event year

**THIS DOCUMENT IS AN OFFICIAL PUBLICATION OF  
MOTORSPORT 4THE MASSES, ALL RIGHTS RESERVED.**

This document will be perpetually exist as a work-in-progress. Rules and procedures will be verified/modified, added to and subtracted from based on data collected and other applicable factors during subsequent events. Changes may be made at any time including during events at the sole discretion of M4theM and its agents. In as much as is practicable, changes will be made available to participants in readable form prior to any event.

**Disclaimer:**

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of educational motorsport and racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have complied with these rules. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF OR COMPLIANCE WITH THESE RULES AND OR REGULATIONS. They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator, or official.

The event director shall be empowered to permit reasonable and appropriate deviation from any of the specifications herein or impose any further restrictions that in his/her opinion does not alter the minimum acceptable requirements. NO EXPRESSED OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM SUCH ALTERATION OF SPECIFICATIONS. Any interpretation or deviation of these rules is left to the discretion of the officials. Their decision is final.

## Contents

1. Mission of M4theM
2. Staff and program structure
3. M4theM license and driver classification.
4. SCDE Guidelines
5. SCDE Event Procedures
6. SCS Overview
7. SCS Event Rules

### **1. Mission of M4theM**

M4theM exists to promote safe, affordable and educational motorsports opportunities to anyone that has a suitable car and the safety gear required to participate. We strive to offer ongoing opportunities for motorsports enthusiasts to further their skills and levels of participation in educational precision driving events and eventual competition. M4theM hopes to add programs that offer a path to higher forms of motorsport in addition to precision driving including eventual precision driving and speed competitions.

M4theM strives to make any precision competition about the driver, not the car nor amount spent in preparing the car. Any future speed competitions should be designed to minimize the need to spend large amounts of money to be able to participate and contend for success in such competitions.

M4theM feels strongly about providing opportunities and empowerment to groups that are traditionally underserved in motorsports. This includes but is not limited to Females, and seniors.

M4theM also wishes to partner with agencies and sponsors to give back to the community by developing low or no cost programs to assist veterans of combat, the disabled, at risk youth and teen drivers in general. We hope to provide opportunity for each of these groups to find fulfillment, enjoyment, education and positive life change through our programs.

Most of all, M4theM strives to create platforms for building strong, mutually beneficial relationships by providing a platform to enable the teamwork, camaraderie and sense of accomplishment that arises from shared participation in motorsports.

## **2. Staff and structure**

### **2.1 The executive staff consists of the following roles and duties:**

A. Motorsport/Education Director: (MSE) Oversees the entire organization and as such, oversees vision and development of new programs along with individual events. The director will oversee all staff to assure the goals, rules and spirit of each event type as well as staff tasks are performed correctly and remain true to the nature of each individual event type. The Director is also charged with ensuring that all course designs are prepared in a proper and safe manner by coordinating officers and staff. The director will also assure that proper legal and insurance needs have been met for all events. At events, the Director may fulfill the role of any staff member as needed. MSE Director is the final arbiter of any dispute.

B. Executive Administrator: Performs all administrative tasks including on-site duties during events where they act as first contact for participant needs and concerns. They may perform or assist any function within the organization as requested by the MSE director.

C. Assistant MSE(S): An Assistant MSE acts as an extension and liaison for the director. They may serve on all teams and act as a stand-in for the Director when the director is absent. They may perform any function within the organization as directed by the director. An Assistant MSE may also be charged to act in the capacity of any vacant official duties.

D. Race Control: Race Control works with the MSE Director on developing, refining and amending on-course procedures as well as assuring the safe operation of vehicles on course during events. At an event, they communicate with course workers to assure a safe on-course environment is always maintained. They assure proper execution of the SCDE and SCS or other event procedures and any unique procedures found at a given venue. MSE Director will assure this role is staffed at all events.

E. Chief of Timing and Scoring: This person assists the executive team in discovering and implementing new innovative ways to capture timing and scoring data. During SCDE events, this role assures proper run times are allowed for each group and directs volunteers to take as many lap times as possible by

manual or electronic means to assess driver progress and run group assignment. Further timing and scoring duties will be performed during SCS competition events.

F. Chief of Officials: Chief of Officials is tasked with coordination of and communication to all officials. He is the first line of contact for officials. He works with race control and the event control team in preparing and assuring procedures are performed correctly.

G. Chief of Tech and Safety: This role assures vehicles have the proper tech sheets on file and that no vehicle enters on course with obvious safety/mechanical issues. This officer will oversee all other technical inspectors in the discharge of their tasks. This role also works with the director and course design team to ensure safety concerns are met properly. Verification of site and course safety before and during the event shall fall to this officer.

H. Lead Instructor: The Lead Instructor will be tasked with oversight of all other instructors. They will also perform the task of maintaining the curriculum as well as the standards of operation/teaching methods for all instructors. This officer will assure the needed IN1 and IN2 instructors are present for each event. If this officer cannot be present at an event, the MSE may name an acting replacement for the event.

### **3. M4theM Membership and Classifications:**

#### **3.1 Membership and Conduct:**

All persons participating in any form of driving event or acting as a staff member, sponsor, or vendor will be required to obtain an M4theM license and thereby “membership” in the organization.

A license will be issued upon completed application, meeting of all requirements and full and proper fees being received. Licenses run yearly from January 1 to January 31 of the following year. If a license is purchased after Oct 1, it is valid for the following year as well.

Membership fees do not buy a license nor membership, it avails the individual the privilege of limited revocable access to participate in M4theM activities for the time period listed.

M4theM may temporarily suspend or permanently terminate a membership at any time at M4theM's sole discretion. A terminated or suspended member shall have no right to receive, nor shall M4theM obligated to refund, any part or all the fee(s) paid for membership.

A suspended member may not participate in any M4theM events until such time as the MSE director or designee has deemed full status is reinstated.

A terminated member may not participate in any M4theM events until such time membership has been re-applied for and reinstated by the MSE Director.

MSE director holds the right to temporarily waive membership requirements for any individual or event as an incentive to allow broadened participation in any event.

### **Expectation of Conduct:**

The following are the minimum expectations of conduct.

1. Obey all guidelines and rules.
2. Treat others with respect.
3. Try to control profanity, especially if children present.
4. Seek arbitration from officials if you find yourself in an escalating situation with another participant.
5. Never be aggressive or abusive physically or verbally. Physical assault may result in suspension/expulsion and be reported to the Police.
6. NEVER drive your vehicle in a careless or reckless manner.
7. Using your vehicle in an attempt to assault persons or damage property may result in suspension/expulsion and may be reported to the Police.

**FAILURE TO FOLLOW THE ABOVE RULES OF CONDUCT MAY RESULT IN SCANTION BY M4theM UP TO LOSS OF MEMBERSHIP/LICENSE AND POSSIBLE PROSECUTION.**

### **3.2 Hardcards**

#### **Hardcards will be issued**

Novice license issue will be in the form of paper or electronic record. A driver in any class above novice will be issued an M4theM Hardcard.

The M4theM Hardcard will be issued reflecting experience, ability and safety ratings as assessed by check rides with an M4theM certified Instructor. Hard Card level assessment will be performed by M4theM safety workers/officials/instructors based on the incident level and visual assessment observed during events.

During check-in at all M4theM events the Hardcard will be presented by returning participants, any promotion based on previous events will be acknowledged at that time.

Hardcards will display the following information in the following order. Participant name, license level and date of level issue along with date of expiration. Hard card visual markings should coincide with M4theM Participant database. When possible, a "headshot" photo should also be present on the Hardcard. If no photo is available, a generic silhouette will be used in the space provided until a photo is available.

### **3.3 Driver classification**

M4theM will classify drivers into groups based on experience, safety and procedure adherence. This will be a physical card that will have a matching computer database. This will allow students to visually see their progress via the level displayed on the Hardcard and help organizers efficiently class run groups at events. It will assure the utmost safety of all participants and remove any question as to expectations of

**A. Instructed Novice (IN):** Brand new to precision driving. An Instructed Novice must always have an instructor in the car. A paper License Hardcard will be issued. New/novice drivers (including those with limited Autocross or competition experience but not specifically HPDE events) will begin as Instructed Novice.

**B. Novice Solo (NS):** Approved to drive solo in Novice approved run groups to build LPI count to a sufficient level to reach Full Solo LPI requirements. Paper License issued at promotion to Novice Solo. Any driver can be awarded "NOVICE SOLO" status at any time by an Instructor as assessed during their Instructed Novice sessions. Solo novices will drive in novice run groups but will not require an in-car instructor. When their LPI is at the proper level, they may request a check ride to move to "FULL SOLO".

**C. Procedural Student (PS):** Drivers with previous HPDE or on course experience may be considered "PROCEDURAL STUDENTS" and will require an in-car instructor until understanding and application of M4theM specific procedures are demonstrated to the instructor's satisfaction. Once this is verified by an instructor, the participant will be eligible to be issued a "FULL SOLO" Hardcard. No beginning LPI will be required but after 2 events, the recorded LPI must be high enough to retain "FULL SOLO" status. If LPI is insufficient, an NS paper license may be issued until such time the LPI is enough for a check ride for FS.

**D. Full Solo (FS):** Offered to participants when they reach an LPI of (TBD). Check ride required. Allowed to drive in all Full Solo approved run groups. Must maintain LPI of (TBD) to remain eligible. "Full Solo" Hard card issued at promotion to Full Solo. Drivers that have demonstrated the understanding and application of all M4theM procedures and an acceptable aptitude and ability in car control as assessed by M4theM instructors as well as a minimum LPI of (TBD) may be issued a "FULL SOLO" Hardcard. This status allows the driver to participate in any M4theM SCDE event in any non-novice run group.

**E. Competition (COMP):** Drivers that hold a FULL SOLO status along with qualifying LPI of (TBD) may request a check ride from a speed coach to verify their ability to drive with sufficient car control at a competitive speed to be issued a COMPETITION (COMP) Hardcard. An LPI of (TBD) must be maintained to retain a COMP license. COMP License holders will be eligible for course volunteer opportunities along with eligibility for M4theM future competitive events.

### **3.4 Special Ability Classes:**

**A. Level 1 instructor (IN1):** IN1 instructors possess skills and abilities to train novices in SCDE, HPDE and SCS procedure as well as basic car control and precision driving. They prepare students for and perform check rides to promote from "NOVICE INSTRUCTED" to "NOVICE SOLO" and from "NOVICE SOLO" and "PROCEDURAL STUDENT" to "FULL SOLO" as those students meet the advancement criteria.

**B. Speed Coach (IN2):** IN2 instructors possess advanced skills in training drivers of various levels along with the ability to assess Experience, Skill and Safety via observation of students. Speed coaches will be tasked with the same tasks as IN1 instructors but also assist FULL SOLO drivers with advanced driving techniques to increase car control and their ability to navigate the course more quickly. IN2 will also perform driver assessments and check rides for promotion from FS to COMP status.

**C. Executive (EX):** Issued to executive staff. Equivalent to COMP license.

**D.** All Instructors/Officials will be understood to have a COMP equivalent license.

driver ability. Hard cards may be issued with differing levels among different disciplines (ex. SCDE vs. HPDE)

### **3.3 SAFETY RATINGS and LPI Calculation (future implementation)**

Safety will be assessed via a laps per incident count. (LPI)

LPI will be computed as follows:

Every timed lap a NOVICE SOLO, FULL SOLO or COMP driver runs will be counted towards their official lap count. If it is a non-timing event the run group lap count will be used for this calculation.

Every time a driver is black flagged or self-polices an infraction, an incident point (or points) will be recorded. Depending upon the infraction, the prescribed number of Incident Points will be added to their Incident point total. At the end of every event an event LPI will be updated in the data base based on the total number of laps divided by the total incident point count.

Example, 40 laps ran/2 incidents = 20LPI

LPI Points will be assessed as follows:

- A. Single cone/light barrier displaced or 2 wheels off out of bounds, self-policed 0pts.
- B. Single cone/light barrier displaced or 2 wheels off out of bounds, black flagged, 1pt.
- C. 4 tires out of bounds or displacement causing yellow flag, self-policed, 1pt
- D. 4 tires out of bounds or displacement causing yellow flag, black flagged, 3pts
- E. Multi cones hit, #cones displaced=points issued.
- F. Major issue, car to car contact or property damage. Assessed by officials and appropriately applied.
- G. Blatant or malicious conduct on or off course. Loss of license and expulsion from organization and potential prosecution.

## **4. SCDE**

### **4.1 Definition of SCDE:**

Short Course Drivers Education (SCDE) is a non-competitive instructional speed event held on permanent or temporary road courses, defined by markings and/or cones.

There is no on-course passing allowed at any time unless expressly provided for in individual event rules. Procedures for yielding to faster cars off course exist and are detailed later in this rule document. SCDE IS NOT RACING.

There will be no official comparative timing. There are no awards for speed, though recognition is given for safe driving.

While SCDE is non-competitive, safety procedures and equipment are still required and are commensurate with competition requirements.

#### **4.2 Purpose:**

SCDE is designed as an introduction to performance driving in a safe, lower speed environment. The desire is to teach the procedures and etiquette involved in HPDE driving as is held on permanent racecourses but in an environment offering lower speeds and less obstacles.

It is also designed to be a cost effective and lower speed alternative to a full “HPDE” on a high-speed racecourse for those that would prefer a less speed-intensive experience as an ongoing pursuit.

SCDE is also used to amass procedural knowledge, safety and vehicle control skills via seat time and instruction for those that might desire to compete in future M4theM competitive events.

While not a “competition” or “racing” school, SCDE does serve to fulfill safety and procedure prerequisites required to enter M4theM competition events as a non-instructed solo competitor.

#### **4.3 Staffing: Event Day Staff consists of the following roles and duties:**

**A. Event Control:** Event Control will communicate with event staff to ensure the timely execution of the event schedule and any modification needed during the event. They or their designee also have control of all movement of off-course vehicles during the event as well as grid, paddock and pedestrian traffic.

**B. Event officials:** Event officials work in conjunction and under the direction of the lead officials. They will assist in safety, technical and race control roles as needed. These officials will follow the instructions of the lead officials to perform his or her duties and report any violations or issues to the proper official. They may also be tasked with other duties as needed.

**C. Registration/Admin:** Registration workers will provide driver check-in services and verify run classing and run grouping for all participants. They may prepare and issue hard cards as available.

**D. Timing and Scoring:** Assures proper run times are allowed for each group and directs volunteers to take as many lap times as possible by manual or electronic means to assess driver progress and run group assignment.

**E. Site Security:** When deployed these workers may act as security in so much that they always limit overall access to the site and direct pedestrians to remain outside the buffer zones. It will be their task to assure all entrants to event property have signed the required waiver(s) and are always given and display an identifying bracelet or other approved identifying item.

**F. Race Control:** Communicates with course workers to assure a safe on-course environment is always maintained. They assure proper execution of the SCDE procedures and any unique procedures for each venue.

**G. Corner Workers:** Corner workers are event officials that will serve as an extension of race control at various areas around the course. They will operate as flagmen to alert participants as to the “state of the course” as well as give direction via signals if action needs to be taken by a driver. There will be a minimum of 1 worker at each station to perform these tasks and control course access to assure both the current course state and safe access is maintained.

**H. Level 1 Instructors: (IN1)** These Instructors will be tasked with introductory instruction in procedure and high-performance precision driving. L1 instructors may sign off on students once they have fulfilled the criteria for solo participation. They will be chosen from the pool of drivers that have shown interest and aptitude for this position as judged by the existing instructor team. It may be required that L1 instructors obtain M4theM Level 1 certification as such exists. Instructors with experience from other HPDE organizations may be required to obtain M4theM Level 1 certification before being allowed to instruct with M4theM.

**I. Speed Coaches: (IN2)** Speed Coaches will be tasked with advanced instruction in procedure and high performance precision driving. They will be promoted from the ranks of L1 Instructors as judged by the lead instructor and existing speed coach team. They will receive further training via the M4theM Speed Coach certification program and be deemed ready to act as a Speed Coach only after an assessment by the lead Instructor or their designee. Speed Coach candidates must have completed the M4theM Speed Coach certification program as such exists.

#### **4.4 The site:**

Sites for SCDE will consist of a course area, paddock area and buffer zones between the course and participants during all on-course activities. Only course workers will be allowed inside of any buffer zones and they should be positioned in a way that makes every effort to protect them and allow them an “escape route” at all times.

A. Sites for SCDE should be chosen in a way that allows sufficient spacing for a pit/paddock, ingress/egress to driving surface and sufficient barrier space to allow runoff for vehicles as well as sufficient space between vehicle activity and any pedestrians present.

B. Sites should allow enough space for a course that allows for performing all the functions found in high performance driving; acceleration, braking, cornering, transitions between corners, course access, course departure and sharing the course with other vehicles.

C. A site should be chosen that allows for a primarily flat environment with any elevation change addressed in a manner that enhances vehicle stability and does not significantly decrease stability. (extreme off camber corners etc.) Generally large parking lots, airport taxiways or emergency services training facilities will most often be the sites used. Sites may include portions of purposed race facilities that have been modified by markings cones and/or barriers to meet M4theM SCDE criteria for speed, obstacles and insurance requirements.

D. The course area of a site surface should be smooth enough that it does not pose an undo “snag” risk to sliding tires and not be primarily of loose, potholed or broken pavement. If these things are present on site, they should remain outside the barrier or buffer areas mandated by course design.

E. The paddock area will be made available in a way that enough width exists for 1 vehicle per participant to park equal to a parking space as found in urban shopping centers at minimum. Some sites may allow more space so that support vehicles may be parked in the same paddock spot. When minimum size spaces are used, an area for support vehicles will be provided.

F. Unless a venue provides or requires, there may be no on-site EMS, Fire or Security. Events of this scale and limited speed rarely include these personnel and history has shown safety and security has not been a major issue without. As a best practice M4theM will attempt whenever possible to secure venues that allow reasonably considered response times for local emergency services if ever needed.

#### **4.5 The Course:**

**A.** The SCDE course will usually consist of semi-permanent chalk lines, cones and other light-weight barriers to define the course. Courses will be designed with safety and speed control in mind. Appropriate safety limits for corner and straightaway speeds will be determined from venue specific requirements and insurance guidelines.

**B.** An SDCE course should be designed in a way that drivers experience all the elements found in high performance driving; acceleration, braking, cornering, transitions between corners, course access, course departure and sharing the course with other vehicles.

Speeds should fall between the speeds encountered in AutoX and full-course HPDE.

One element that exists in most high-performance driving events (shifting gears) is purposefully minimized in SCDE. Courses will be designed so that the majority of vehicles should stay in a single gear for the entire course. (typically, 2nd) This is intended to foster a heightened ability to focus on car control and safe vehicle movement.

**C.** The SCDE course markings will usually consist of semi-permanent chalk lines, cones and other light-weight barriers.

**D.** Courses will be designed with safety and speed control in mind. Limits for corner and straightaway speeds will be determined from venue specific requirements and insurance guidelines.

**E.** Appropriate buffer zones will be implemented in the course design to assure safety and fulfill insurance requirements. M4theM in-house design guidelines normally seek a minimum of 25' buffer zone between the course and an obstacle that is parallel to the direction of travel or inside of a corner apex.

Buffer zones for the outside of a corner apex, or when vehicle momentum is directed towards any immovable object, will be adjusted for based on speed and proximity of the immovable object. The lead safety official will work with the course designer to assure appropriate runoff between the course and immovable objects.

Sufficient space between vehicles traveling in opposite directions should be maintained at all times based on speed, direction of travel and direction of momentum.

Mitigating danger from a stuck throttle or loss of brakes should be accounted for in the design.

#### **Significant differences between Autocross and SCDE courses are as follows:**

Multiple continuous laps will be run in a predetermined and pre-disclosed time window (10min, 15 min etc.)

Multiple cars share the course.

Courses will be designed in a manner that at least one opportunity exists for slower vehicles to move off the driving line and safely yield to faster vehicles and then rejoin the driving line with a minimum of interruption.

This will be facilitated via painted “yield lanes”. Procedures found later in this rule book in section 5.9.

SCDE courses are designed with the same markings and visual driving aids which are normally encountered on purpose-built permanent road racing courses.

SCDE courses will vary in width, usually 25 to 40 feet wide, to introduce participants to visualizing and learning a “driving line”.

Cones will not be laid out in traditional AutoX manner. Little to no directional information is provided with cones.

Painted lines along with light-weight barriers (including cones when necessary) will be used to define the courses as much as possible.

Cones or other appropriate markers may be used for demarcation of the turn in, apex and track out point of some corners as an aid for drivers to visualize the maximum radius of a given corner.

Cones may be used as a visual barrier for turn-in and track out areas to further assure that vehicles stay within the confines of the course.

Cones or other markers may be positioned in significant braking zones to aid drivers in visualizing and executing proper braking points.

Painted corner “kerbing” consisting of colored chalk paint or other appropriate visual means will sometimes be used as a visual aid to further assist drivers. Fig 4.5.1

#### **4.6 Vehicles Types Allowed and Prohibited:**

Any production or purpose-built vehicle with an appropriate center of gravity to mitigate rollover potential is eligible for consideration to compete.

A. No vans, 4x4 trucks, SUVs or other vehicles deemed to have heightened rollover potential by the M4theM Staff. Hybrid 4x4 vehicles such as “track hawk” vehicles with lower centers of gravity may be assessed on a case by case basis at the sole discretion of M4theM Staff.

B. If rollover criteria are otherwise met, vehicles will be assessed for suitability based on HP to weight ratio and HP to suspension type. As one example, cars built for or designed purposefully for drag racing would not be appropriate for an SCDE nor would they be allowed.

C. Convertibles are generally allowed with the following provisions:

C-1. A car that has a multi-point racing harness must also have either factory rollover protection or aftermarket structurally sound rollover protection.

C-2. 3-point factory harnesses or aftermarket offerings such as an SCCA legal lap belt equivalent are the only belts allowed in convertibles that lack appropriate rollover protection.

C-3. Some sites have their own rules that prohibit convertibles entirely unless they possess a minimum of at least factory rollover protection. These rules will be observed by M4theM when holding events at these sites.

D. All vehicles must have functioning OEM seat belts or vehicle-appropriate mass-produced commercially available harnesses. It is recommended any aftermarket harnesses be SFI or FIA approved. These must be properly and fully fastened whenever on course and while traveling to and from the course via pit/paddock access.

E. Purpose built vehicles including go-karts and SCCA modified class equivalent vehicles may be allowed but fall under the guidelines of the following paragraph along with all other vehicles entered in the event.

E-1 Purpose built race vehicles should retain all safety features as are present for the type of racing they were designed.

E-2 Novices are allowed in purposed race vehicles only if they have acceptable and equal racing seat and safety gear provided for an instructor.

E-3 All Kart and single seat or open wheel vehicle drivers must first possess a "Full Solo" Hardcard designation in another type of vehicle to verify their ability and understanding of M4theM SCDE procedures.

F. Go-karts will not be allowed on course with any other vehicle type and may have a specified pit-paddock area for safety.

F-1. Go karts may only participate if; A. enough register to warrant a full run group or B: Special provisions are made by the MSE director.

F-2. Go kart registrations may initially be placed on a waiting list until enough have registered to fill a run group or MSE director gives special permission.

G. Open wheel vehicles will be placed into a run group consisting of open wheel or other appropriate vehicles only.

G-1. Open wheel vehicles may only participate if; A. When an event may be sold out, enough open wheel vehicles have registered to warrant a full run group or B: Special provisions are made by the MSE director.

G-2. Open wheel vehicle registrations may initially be placed on a waiting list until enough have registered to fill a run group or MSE director gives special permission.

H. Top allowed speed limits may be placed on each individual event. These limits will be determined based upon site safety considerations as assessed by M4theM officials and may be adjusted by safety officials at their discretion. The limits cannot be raised to above any published limits of the insurance policy in place for the event should such limits exist.

I. If a vehicle is capable of or modified in a way that allows it to exceed the allowed top speed at the fastest point of the course (as checked by speed radar) the participant will be encouraged to self-govern top speed. If a second reading above max allowed speed is taken, they may be officially warned and offered the choice to use lower gearing (or electronics when applicable) to limit their speed. A third incidence after gearing or electronic means being employed may result in disqualification from the event.

J. All participating vehicles will display a clearly legible number of sufficient contrast to be seen and identified from 100' away. 8+ inches tall and proportionately wide is the preferred minimum standard. The number should be present on both sides of the car in equal presentation. Numbers should be secured in a way that they remain attached at interstate highway speeds. Any 1, 2 or 3 digit number may be used. Duplicate numbers are not allowed. A third digit or letter will be assigned to additional entries that register after their preferred number has already been taken.

K. (Assigned number procedure reserved in this space for future addition)

L. The determination of suitability for EVERY vehicle will be at the sole discretion of the MSE Directors, Chief officials and their staff. This determination may be made after watching the performance of a vehicle on the course. If initially deemed appropriate but deemed unsuitable once observed on course, that vehicle may not be allowed to continue.

## **5. SCDE Event procedures**

### **5.1 On Course Classing/Run Grouping:**

Drivers will be split into 2 classes during an event. Run groups will be assigned from within these classes.

**Novice Class:** All instructed novice and solo novice drivers will fall into this classification and will only drive in Novice run groups until promoted to full solo.

**Full Solo Class:** All FULL SOLO and COMP drivers may be placed into the Full Solo classification for group assignment. PROCEDURAL STUDENTS may also be placed within this classification and remain therein once solo status is awarded.

Run groups will be assigned from within these classifications based on car type, past lap time data and the observed skill of the driver. Further adjustments of these groupings may be made during the event should a large discrepancy in speed or lap time deem it necessary.

Each run group will be assigned a color. Novices should always have a light green, blue or purple color. Full Solo groups colors may be varied and will be used solely for identification purposes with no particular color seen as an indicator of skill or speed.

### **5.2 Course preparation/markings**

A. In as much as possible, the course will be marked in a clearly visible contrasting color of the driving surface using semi-permanent chalk. The driving surface will normally be marked in yellow. Pit

entrance and exit roads, normally in white. Yield lanes will normally be marked in light blue. Curbing will normally be marked with various contrasting colors.

B. All courses should be live tested by staff members and needed adjustments made before any paid participant is allowed on course.

### **5.3 Number of vehicles allowed on course simultaneously:**

The number of simultaneous participant vehicles should be determined by the staff after establishing the average time it takes to drive one lap around the course. The following formula should be used. 5 seconds should be allowed for each car simultaneously on course.

Example: 40 sec Avg lap. = 8 cars.

At the discretion of race control, provision may be made for instructors to be on course in addition to the regular participants the formula normally allows.

### **5.4 Race Control and Corner Stations:**

Race Control Official is responsible for all on-course activity. Race control will communicate with corner stations and officials at those corner stations will act as an extension of race control. During a session, Race Control will make all decisions as to whether a participant is performing in a manner that constitutes a danger to themselves, other competitors, spectators or course officials. The decision to remove a participant from the current session is one that may be made by Race Control alone. Other officials may request Race Control to remove a vehicle as well as deemed necessary. After session removal, safety/education officials will meet with removed participant to assess further penalty or remedial education that may be needed.

A. All courses will be designed with corner stations for Flag, signal and safety needs. The number of stations should always be as such to allow at least 1 station to be seen from any given portion of the course.

B. These stations should each be manned by at least one official.

C. All stations will be in contact with Race Control via 2-way radio.

D. Fire extinguishers should be rated 2-A 10BC with extinguishers at a minimum of 3 stations for all events. These extinguishers should be disbursed among the corner stations in a way that assures all areas of the course have reasonable access to an extinguisher.

### **5.5 Flags and Lights:**

The following flags/devices may be used at events.

A. GREEN – (At S/F line only). Session has begun/course clear/yield procedure allowed.

B. LIGHTS - Lights may be used in conjunction with yellow, red and black flags. Yielding and overtaking are not allowed until the yellow lights have been extinguished and all flags are clear.

C. YELLOW, STANDING (not waving) – Used at the beginning and end of sessions to signal no yielding and for drivers to maintain spacing. At the start of the session, lights should be used in conjunction with the standing yellow procedure and extinguished when the course is considered “green”.

D. YELLOW, WAVING – Something has happened on course that makes the course unsafe. Slow down and be prepared to take evasive action or stop. Lights should accompany the waving yellow flag. No yielding procedure allowed and spacing should be maintained until a driver reaches the next clear manned flag station and the lights have been extinguished.

E. RED – Drivers should stop as quickly and safely as possible, stay belted into his or her car and await instructions/signals from a corner worker. Upon seeing a standing yellow flag, drivers should proceed carefully around the course and await further instruction from the flag stations. Upon seeing a waving black flag, drivers should proceed carefully to the pit lane. Lights should be on during any red flag/full course black flag procedure.

F. BLUE / YELLOW STRIPE – Traffic flag. This means a faster car is behind a slower car, the leading car should follow yield procedure at the next yield zone. As drivers approach the flag station, the flagman should point to the car it is intended for. Upon seeing a blue flag displayed as approaching a station, drivers that are not following another car closely but have a car relatively close behind them, should assume it is displayed for them and initiate the yield procedure. The blue flag should be acknowledged with a gesture to the corner. This procedure prevents tailgating, mirror driving, and promotes safety.

G. BLACK TO SINGLE CAR – This flag will be displayed at designated turn stations always including the S/F line. If this flag is displayed outstretched then waved and pointed at a car, that car should enter the pits at the next opportunity to consult with the officials on pit lane. If this flag is ignored a penalty may be assessed, including but not limited to loss of course time. If a vehicle fails to acknowledge the black flag entirely during the run session, the session may be stopped for all and that driver WILL forfeit the next run session entirely and may be disqualified from participation for the remainder of the day.

H. BLACK FLAG ALL – The black flag may be waved at all stations accompanied by the safety lights. All vehicles must enter the pit lane at the first opportunity.

I. CHECKERED - The session is over. Vehicles should begin a cool-down by gradually slowing to approximately 60-70% speed, using higher than normal gears/lower revs. and using the brakes as little as is safe. This time is to cool down both car and driver. Drivers should then proceed carefully to the pits the next time they approach them. (this procedure may be modified based on site layout but should be clearly communicated in the drivers meeting and event rules packet.)

J. TRACK ACCESS SIGNAL - A course official will be stationed clearly in the sightlines of the entry to the course. A red light or red flag will be displayed static. When the course is available to be entered the red light or flag will be extinguished or obstructed and be replaced with a green light or hand signal to enter course.

## **5.6 Paddock, Grid and Course Access:**

A. Paddock procedures. All movement in the paddock should be performed in the safest manner possible. Paddock/Pit speeds should never be higher than a brisk walk and slower when in congested areas. Once a session has begun, unless attention is needed for a driver’s car or person, they should

return to grid after each session so they are prepared to return to the course with their run group without delay.

**B. Grid:** Based on assigned run group and published schedule, drivers should arrive at grid at the designated time and place. At that time, they will be under the control of the Grid official. At the appropriate time when directed by event control, the Grid official will motion cars to the Course Access official.

**C. Course Access:** Upon arrival at the entrance to the course and clearance from Race Control, the Course Access official will individually motion cars onto the course at the prescribed interval for the current event. **After receiving the proper track access signal**, drivers should smoothly accelerate to the “out lap” pace while looking towards the direction of oncoming traffic to assure safe blending.

### **5.7 On Course Procedures**

Race control is in control of all on-course activity and will communicate to course officials to maintain safety and timely execution of procedures.

**A. Out lap:** Once on course drivers should proceed at a 75% pace, test their brakes, steering and gearbox. Little to no shifting should be required while driving the course but drivers should shift to a gear higher than they would normally be in on course at speed. Drivers should maintain consistent pace so they do not run up on the car ahead of them, nor fall back to the car behind. During this time, drivers should purposefully look for each corner station and make eye contact and acknowledge the corner worker with a wave, or other gesture that signifies they have seen the corner worker.

Once approaching the S/F line, drivers should shift into the appropriate gear for the course at that time and prepare to receive a green flag at the S/F line. If for any reason the GF is delayed when the first car arrives, corner stations may continue to display the yellow flag and yellow flag procedures will be followed.

**B. On course at speed:**

When driving at speed on the course during a session, drivers should concentrate on driving safely. Part of driving safely is to maintain a scan to always be aware of their proximity to the car ahead and the car behind. This scan should also include a glance at each corner/flag station each time driver approaches and passes. If a flag is displayed to instruct the driver (yellow, blue, black etc.) They should make a gesture of acknowledgement as they pass and follow the instruction given.

### **5.8 Checkered Flag/In lap procedure:**

Once drivers receive the checkered flag, they should begin a cool-down procedure by gradually slowing to approximately 60-70% speed.

**Drivers SHOULD NOT BRAKE HARD.**

Rather, drivers should coast to the cool down speed which should be roughly the same speed as the out lap.

Drivers should finish the cool down period using higher than normal gears/lower revs and using the brakes as little as is safe to do. Drivers should allow the car to cool down and the driver should begin to relax and proceed carefully to the paddock.

If more runs remain for their run group in the current session, they should continue back to grid.

(These procedures may be modified based on site layout but should be clearly communicated in the drivers meeting and event rules packet.)

## **5.9 Yielding:**

In order to facilitate multiple consecutive laps for all participants, allowance must be made for safe rearranging of the order of cars on the course. This is done via the "Yielding" procedure.

### **Yield Zone Design:**

All yield zones should be of proper design to allow access, slowing, acceleration and blending space for the yielding vehicle.

Yield zones and pit entrance/exit should offer enough visibility and distance from corners to allow for clear visual understanding of the intentions of the driver entering the pits or yield lane.

Some facilities may provide enough space to allow cars to yield within the normal confines of the course surface proper, in these cases, indication should be provided to identify the yield lane as well as the start and end of the yield zone.

**YIELDING MUST BE DONE IN YIELD ZONES ONLY USING THE PROVIDED YIELD LANES. NO ON-LINE YIELDING IS ALLOWED AT ANY TIME UNLESS EXPRESSLY PROVIDED FOR IN INDIVIDUAL EVENT RULES.**

### **YIELDING PROCEDURES:**

**To announce yield:** A yielding vehicle should enter the yield lane at the start of the lane. When entering the yield lane, the yielding driver should quickly but clearly point in the direction the overtaking car should travel as they go by. If safe to do so, the overtaking car should acknowledge the point-by with a return gesture of their own. (teaching the procedure of a "point-by" as employed at an on-driving line overtaking HPDE event)

**Point by direction:** If a yield lane is placed to the right of the driving line, the yielding driver would point LEFT. If the yield lane is to the left of the driving line, the yielding driver would point RIGHT.

**In the yield lane:** The yielding driver should maintain full pace until they have fully entered the yield lane. Once fully in the Yield lane, the yielding driver should immediately begin to slow sufficiently to allow the following car to quickly overtake. As soon as the overtaking car has cleared, the yielding driver should begin to merge back towards the driving line.

**Number of point bys per yield zone:** As a best practice, under most circumstances only one vehicle may receive a point by per yield zone entrance. If the track design allows, more may be allowed at the

discretion of the officials.

**Additional following vehicles:** If there is a third car closely following behind the yielding and overtaking vehicle, they should assure proper space is allowed for the yielding car to re-join the driving line. They do not need to slow dramatically but rather moderate speed in a way that allows a gap providing space for the yielding car to rejoin the driving line.

**Re-entering the driving line safely:** This is the responsibility of both the yielding, overtaking and any following drivers approaching from behind. All should have visual contact with the others and modulate their speeds so they may remain separated by enough space to assure safety.

**It is the final responsibility of all drivers to yield, overtake and reenter the driving line safely.**

## **Scenarios**

If a leading car is slower than the car behind:

The driver of the leading car should initiate the yield procedure at the first available opportunity once they notice a car that had been gaining consistently closes to within 2-3 car lengths or has been consistently following at 2-3 car lengths for a full lap.

If a following car is faster than the car ahead:

If a driver is faster than the car ahead, they **should not encroach closer than 2 car lengths**. The driver ahead should initiate the yield procedure at the first available opportunity if a car that had been gaining consistently closes to within 2-3 car lengths or has been consistently following at 2-3 car lengths for a full lap.

If the car ahead does not yield within a lap, the flag station before a yield zone SHOULD give the Blue flag to the leading car. If they fail to do so, the trailing driver should signal to each following corner station that they are being held up by displaying 5 outstretched fingers followed rapidly by closing them to a fist and then re-stretching them. This should be done in a repeated fashion while in sight of a corner station.

Corner stations should then ascertain if the speed difference between the 2 vehicles warrants displaying the "move over" flag to the leading car.

At any time, any car may enter the pit road to allow space to be created on course and have the course access marshal return them to the course at an appropriate time.

If a particularly slow car has caused multiple cars to be "trapped" in a line, rather than take multiple laps for the slow driver individual time to point bys, or for Officials to issue blue flags approaching each yield zone, officials should black flag the slow vehicle, have them enter the pits and be returned to the driving

surface by the track access official when sufficient space has been created between them and the faster cars.

**Novices demonstrating, they can safely and consistently follow these procedures will be the largest factor in determining suitability to drive solo.**

#### **5.91 Timing:**

Processes may be in place to time participants on course. The resulting timing information may be used to properly group cars by similar on course performance for safety reasons. These times will also be used to assess the consistency and procedural progress of drivers

No times for speed comparison will be given out nor displayed publicly during the event while cars are allowed to yield and overtake. The only display of times made public will be those that encourage safety and consistency as defined in the SCS Precision Driving Element. Instructors may use the timing information collected and discuss the information with their students for educational purposes.

Students timing themselves or obtaining timing information through other means will be up to the individual driver's discretion.

## **6. Short Course Scramble (SCS)**

### **Overview**

SCS is a competition that values precision driving above speed. While speed will be recognized as a small portion of the overall competition, precision, consistency and safety will be recognized and weighed much heavier in the overall competition. Any awards presented as a part of the competition will be greater for the precision elements than speed. This is done as an effort to emphasize the educational value of the competition.

SCS will consist of 5 distinct elements.

- (1) Practice sessions
- (2) Precision Driving
- (3) Safest Average Speed
- (4) Qualifying for Tournament
- (5) Knockout Tournament

SCS elements 1-3 will operate using standard SCDE procedures. SCS Elements 4 & 5 are considered "speed" elements and as such will be restricted to fewer on-course vehicles than SCDE procedures normally allow. This is done to assure no yielding or overtaking is needed during those elements. Speed elements will use timings and spacings of like kind those used in solo events such as autocross.

Competition Rules/Procedures.

**6.2 Practice Element:**

Practice should last 15-20 minutes total per competitor. This time may be split into 2 or 3 sessions.

SCS Practice sessions will operate the same as SCDE sessions with the addition of timing provided after each session for competitor and event control assessment purposes.

Practice sessions will be used by event control to arrange cars into run groups of like lap time to maximize safety and minimize the need for the yield procedure.

Run groups will be reassigned 2/3 of the way through practice time and final practice will be with like timed competitors. A final assessment will take place after final practice and any needed adjustments will be made before competition begins.

**6.3 Precision Driving Element.** During Precision Driving sessions, the fastest 50% of non-yielding/overtaking laps ran will be averaged over 3 driving sessions. (time length of sessions varying per venue requirements)

During those sessions, all non-yielding/overtaking laps will be recorded and the fastest 50% will be compared to the fastest individual lap recorded by the competitor during all precision driving sessions.

Assessment of precision will be based on comparing fastest lap against average to the 100<sup>th</sup> of one second.

The less the deviation between the two, the higher the driver is scored.

Example:

Competitor	Average Lap	Fastest Lap	Difference	Finish Pos
Andy Able	45.00	43.45	1.55	2
Billy Breakneck	44.90	43.17	1.73	3
Charlie Cautious	46.45	45.55	0.90	1

Driver A has an average lap time 45.00 seconds and records a fastest lap of 43.45 seconds and the difference remaining is 1.55 seconds. Driver B has an average lap time of 44.9 seconds and a fastest lap of 43.17 seconds with the difference remaining of 1.73. Driver C records an average of 46.45 and a fastest lap of 45.55 leaving a difference of .90 seconds.

Driver C, though the slowest, would be the winner. Driver B, though the fastest finishes last with a difference of 1.73 seconds.

Results and competition outcomes will be assessed within each individual run group as well as all competitors in the event overall. A token of recognition in tangible form will be given to those participants that have earned such.

**6.4 Safest Average Time:** While not the main goal of the precision driving sessions, the lowest average time that is turned in without any penalties being assessed will be recognized to acknowledge the consistent high concentration level required to maintain a penalty free higher speed throughout the event. Should all competitors receive at least one penalty during the event, the highest average speed will go unrecognized at that event. This recognition will be given on both the run group level and overall for all run groups in which drivers are eligible. A token of recognition in tangible form will be given to those participants that have earned such at the end of the day's events.

Example:

Competitor	Average Lap	Penalty	Finish Pos
Andy Able	45.00	1	DQ
Billy Breakneck	44.90	2	DQ
Charlie Cautious	46.45	0	1

**6.5 Qualifying sessions:** A 2 lap session will be ran, the faster of which will be considered the lap of record.

The lap of record will be used as the target time for Knockout sessions.

The fastest lap of record in qualifying will recognized on both the run group level and overall. A token of recognition in tangible form will be given to those participants that have earned such.

***There will be no overtaking or yielding during Qualifying rounds. Sufficient time and space will be provided between each car to allow participants to perform this element using timings and spacings similar to those used in solo events such as autocross.***

**6.6 Knockout Competition:** After qualifying, the run groupings will in which 2 cars drive head to head with the goal being to match their qualifying time without bettering it.

Closest time to their qualifying time without recording less total time than their qualifying time will move to the next round.

A driver that takes less time than their qualifying time will be considered to have "broken out" and disqualified. The competing driver will move to the next round.

If both drivers take less time than their qualifying time, the driver who exceeds their qualifying time the least will move to the next round.

This process will continue via a tournament bracket until one final driver remains.

A token of recognition in tangible form will be given to those participants that have earned such at the end of the day's events.

***There will be no overtaking or yielding during Knockout rounds. Sufficient time and space will be provided between each car to allow participants to perform this element as a solo competitor in the same manner as is found in a traditional autocross.***

The following sections and procedures are off course and administrative in function only, as they have no bearing on physical operation or safety, they will be completed at a later date before competitions commence.

**6.7 Penalties**

**6.8 Scoring Formulas/Tournament brackets**

**6.9 Awards**