# Motorsport 4the Masses LLC 

## (M4theM)

Robert Bolling - Owner/Director<br>Amber Bolling - Executive Administrator<br>Peter Bruschi - Marketing/PR<br>Joseph Wright - Logistics Coordinator<br>David Hoff - Maintenance and Technical<br>Ryan Anderson - Administration

## Procedural Manual and Rule Book ©

## V1.0 for 2023 event year

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

This document will perpetually exist as a work-in-progress. Rules and procedures will be verified/modified, added to, and subtracted 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 a readable form before any event.

## Disclaimer:

The rules and/or regulations set forth herein are designed to provide for the orderly conduct of educational motorsport and racing experience 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. M4theM expectations and driver classification.
3. SCDE
4. HPDE
5. M4theM Competition Disciplines

## 1. Mission of M4theM

M4theM exists to provide a unique, approachable, and affordable motorsports program that values building solid track procedure and awareness fundamentals over the immediate emphasis on driving faster that currently permeates nearly all forms of Amateur motorsport. We strive to provide this through affordable, educational and experiential 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 competition. M4theM will create 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. Speed competitions are 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 an 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. M4theM Expectations

## Expectations 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 carelessly or recklessly.
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 SANCTION BY M4theM UP TO LOSS OF PROGRAM ACCESS AND POSSIBLE PROSECUTION.

### 2.1 Driver classification

A. Novice ( $\mathbf{N}$ ): Brand new to precision driving. A Novice must always have an instructor in the car until an instructor has checked them off to solo.
B. Solo (S): Allowed to drive in all Solo-approved run groups. 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. This status allows the driver to participate in any M4theM SCDE event in any non-novice run group.

### 2.2 Special Ability Classes:

A. Instructor (INST): Instructors possess skills and abilities to train novices in SCDE, HPDE, and HPCC procedure as well as basic car control and precision driving. They prepare students for and perform check rides to promote from "NOVICE" to "SOLO" as those students meet the advancement criteria.
B. Staff (Staff): Must be checked off as SOLO classification before driving in sessions allowed to those with a staff position

## 3. Short Course Driver Education (SCDE)

### 3.1 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, cones and other non-affixed barriers.

SCDE Courses may be of any length but in as much as is practicable, should be designed to limit the average top speeds of stock vehicles with factory safety equipment to similar speeds as encountered on interstate highways.

There is no on-course open passing allowed at any time unless expressly provided for in individual event rules. Procedures for yielding to faster cars 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.
While SCDE is non-competitive, safety procedures and equipment are still required and are commensurate with competition requirements.

### 3.2 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 in a small er scale environment offering lower speeds and fewer 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.

### 3.3 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 participate.
A. No vans, $4 \times 4$ 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 convertible 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 an 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 "Solo" 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 pitpaddock 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 the 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 openwheel 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 the MSE director gives special permission.
H. Top allowed speed limits may be placed on certain 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.
J. All participating vehicles will display a 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 M4theM management. 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.

### 3.4 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 the driving surface, and sufficient barrier space to allow runoff for vehicles as well as sufficient space between vehicle activity and any pedestrians present.
B. A site should be chosen that allows for any elevation change to be addressed in a manner that enhances vehicle stability and does not significantly decrease stability. (extreme off-camber corners etc.) Generally, large parking lots, fairgrounds, 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 runoff where needed.
C. 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 the course design.
D. 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.
E. 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 this type of personnel and history has shown safety and security has not been an 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.

### 3.5 The Course:

A. The SCDE course will usually consist of semi-permanent chalk lines, cones, and other lightweight 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. The course will be designed in a way that allows for performing all the functions found in highperformance driving; acceleration, braking, cornering, transitions between corners, course access, course departure, and sharing the course with other vehicles with point-by passing.

Speed will normally fall between the speeds encountered in AutoX and full-course HPDE.
C Appropriate buffer zones will be implemented in the course design to assure participant M4theM inhouse design guidelines that offer slower speeds when an object or vehicle may be perpendicular to the direction of travel. Example, if heading towards a curb or light pole in a parking lot, direction change should happen far enough away and speeds should be low enough for a vehicle to stop before reaching the obstacle. Conversely, when driving parallel to obstacles or on the inside of a corner where a car's momentum is moving it away from the obstacle, much less clearance would be needed. If an obstacle is outside of a corner apex, or when vehicle momentum is directed towards any immovable object, the course design will be adjusted based on the vehicles speed and proximity to the immovable object. The course designer will 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, the direction of travel, and the direction of momentum. Barriers will be placed in places that present sufficient buffer areas between passing cars.

## On Course Procedures

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 hold a driving line and safely yield to faster vehicles.

This will be facilitated via designated "point by zones". Procedures found later in this rule book.
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".

Painted/Chalked lines along with lightweight barriers 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 "curbing" consisting of colored chalk paint or other appropriate visual means will sometimes be used as a visual aid to further assist drivers.

### 3.6 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 captures lap times by manual or electronic means to assess driver progress and ascertain proper run group assignment.
E. Waivers/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 the 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. Instructors: Instructors will be tasked with introductory instruction in procedure and highperformance precision driving.

### 3.7 SCDE Event procedures

### 3.7.1 Drive types/Run Grouping:

Drivers will be split into 2 designations during an event. Run groups will be assigned from within these designations and are not specific to experience. We find grouping cars by similar performance and speeds, minimizes the danger created by speed differential. Also, all SOLO drivers have instructed during their initial training to be alert when instructed novice drivers are on course. After over 45,000
individual laps run since 2019, without any incidents, we are convinced our approach of having novices mixed in with skilled/experienced drivers promotes a much safer environment than simply having a group full of novices.

Novice Designation: All novice drivers will fall into this classification and will be accompanied by or drive lead-follow with an instructor until promoted to full solo.

Solo Designation: SOLO drivers may be placed in any run group.
Run groups will be assigned from within these designations primarily based on car type, and the observed skill of the driver. Further adjustments to 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. This color does not denote the ability of the drivers, rather a grouping of like performing vehicle/similar speed to minimize differential on course.

### 3.7.2 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. When clear directional information may be provided using lightweight barriers, chalk may be omitted.
B. All courses should be live tested by staff members and needed adjustments made before any paid participant is allowed on course.

### 3.7.3 Number of vehicles allowed on course simultaneously SCDE \& Permanent Course Education Day (HPDE)

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 formulas should be used. For courses under .75 miles, 4 seconds should be allowed for each car simultaneously on course.

Example: 0.5 mi course, 40 sec Avg lap. $=10$ cars.

For courses longer than .75 miles the formula will be $300^{\prime}$ of track space per vehicle.

Example 1: 0.8 mi course; 4224' / 300' = 14 cars.

Example 2: 1.7 mi course; $8976^{\prime} / 300^{\prime}=29$ cars.
At the discretion of race control, provision may be made for instructors/staff to be on course in addition to the regular participants the formula normally allows.

### 3.7.4 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 participants, spectators, or course officials. The decision to
remove a participant from the current session 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 the removed participant to assess a 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 available at each station with a rating of 2-A $10 B C$.

### 3.7.5 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 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 may be used in conjunction with the standing yellow procedure and extinguished when the course is considered "green".
D. YELLOW, WAVING - Something has happened at a point on course that makes the course unsafe in that area. Slow down and be prepared to take evasive action or stop. Lights should accompany the waving yellow flag. No point by 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 $\mathrm{S} / \mathrm{F}$ 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 the 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. YELLOW AND RED STANDING - These flags may be displayed together 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 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 statically. 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 the course.

### 3.7.6 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. Drivers should be aware of the color of the group before them so they are aware when that group is on track and prepared to return to grid so they may enter the track with their group without delay.
B. Grid: Based on the assigned run group and published schedule, drivers should arrive at the 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 allow cars onto the course. When necessary, the official may space cars 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.

### 3.7.7 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 reduced and relaxed 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 a 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. A standing yellow may be observed during the out lap.

Once no flags are displayed drivers should shift into the appropriate gear for the course at that time and the course is considered to be under a green flag. The green will be displayed only at the S/F line.

## 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 the driver approaches and passes. If a flag is displayed to instruct the driver (yellow, blue, black, etc.) They should make a gesture of acknowledgment as they pass and follow the instruction given.

### 3.7.8 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 cooldown speed which should be roughly the same 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, prepared to return to grid when it is time.

### 3.7.9 Overtaking:

To facilitate multiple consecutive laps for all participants, allowance must be made for the safe rearranging of the order of cars on the course.

## Point by Zone Design:

All Point by Zones should be of a proper design to allow for a safe change of position.
Point by Zones will be clearly identified on both the track diagram, and during the drivers meeting.
Point by Zones should be in a wide enough portion of the course design to provide enough space to allow cars to pass within the normal confines of the course surface proper.

## ALL OVERTAKING MUST BE DONE IN POINT BY ZONES AND INITIATED BY THE YIELDING DRIVER.

## Point by PROCEDURES:

To announce a point by: A yielding driver should quickly but clearly, point in the direction the overtaking car should travel as they go by.

This gesture should be made clearly and steadily and no sooner than $100^{\prime}$ before the point by zone but maintained into the point by zone until the overtaking car is moving offline to overtake.

In the point by zones: The yielding driver should maintain full pace until they have fully entered the point by zone. Once the overtaking car is moving offline to overtake, 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 resume regular driving pace.

The number of point bys per point by zone: As a best practice, one vehicle may receive a point by per point by zone entrance. If the track design allows, more may be allowed at the discretion of the officials and will be announced at the drivers meeting.

Additional following vehicles: If the point by zone is designated as "one car per point by only" and there is a third car closely following behind the yielding and overtaking vehicles, 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 instead 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 point by 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. A point by should not be given if the trailing car is not within 4 car lengths.

## If the following car is faster than the car ahead:

If a driver is faster than the car ahead, they should not encroach closer than $\mathbf{2}$ car lengths. The driver ahead should initiate the point by 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 point by within a lap, the flag station before a point by zone SHOULD give the Blue flag to the leading car

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.

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

### 3.7.10 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 in any hierarchy of speed performance publicly during the event. The only display of times made public will be those that encourage safety and consistency. Instructors may use the timing information collected and discuss the information with their students for educational purposes.

## 4. High Performance Driver Education(HPDE)

### 4.1 Definition of HPDE:

High Performance Driver Education (HPDE) is a non-competitive instructional speed event held on permanent race courses. They may be modified for safety with temporary barriers but otherwise exist as they do for all other racing activity.

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

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

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

### 4.2 Purpose:

HPDE is designed as a progressive second step to performance driving in a safe, well controlled environment. The desire is to apply the skills learned at SCDE on larger higher-speed venues.

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

### 4.3 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 participate.
A. No vans, $4 \times 4$ trucks, SUVs, or other vehicles deemed to have heightened rollover potential by the M4theM Staff. Hybrid $4 \times 4$ 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 a HPDE nor would they be allowed.
C. Convertibles are generally allowed with the following provisions:

C-1. Convertibles must have either factory rollover protection or approved aftermarket roll bars. Final approval as to the suitability of a convertible is the decision of the venue and M4theM safety/tech staff.

C-2. A car that has a multi-point racing harness must also have either factory rollover protection or aftermarket structurally sound rollover protection.
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 an 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 "Solo" designation in another type of vehicle to verify their ability and understanding of M4theM HPDE procedures.
F. Go-karts will not be allowed on course with any other vehicle type and may have a specified pitpaddock 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 the 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 openwheel 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 the MSE director gives special permission.
H. All participating vehicles will display a 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.
I. (Assigned number procedure reserved in this space for future addition)
J. 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.

### 4.31 Additions to SCDE Procedures and Safety

Helmets MUST be Snell SA or SM rated and 2010 or newer. DOT only helmets are not allowed.

Drivers under 18 must be under the tutelage of an instructor.

All convertibles manufactured prior to 2006 must have a properly engineered and functioning roll bar.

Race-prepped cars must be built to the safety specs of, and, present in accordance with the safety specs of the class in which they race. (Spec Miata, Spec 86 etc.) Drivers of race-prepped cars must wear and use the safety equipment required in their racing class.

Any exocet/home-built cars must present with proper driver safety. Eligibility must also be approved in advance as SCDE rules state.

Certain tracks/classes may allow multi vehicle point bys.

### 4.4 HPDE COURSES:

HPDE will take place on purposed built racing facilities and follow all rules and regulations of the venue being visited.

Insurance and venue requirements will dictate the type and number of emergency personnel present at HPDE events.

### 4.5 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. (Security may be provided by the venue.)
F. Race Control: Communicates with course workers to assure a safe on-course environment is always maintained. They assure the proper execution of the HPDE procedures and any unique procedures for each venue. (Race control may be provided by the 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. (Corner workers may be provided by the venue)
H. Instructors: Instructors will be tasked with introductory instruction in procedure and highperformance precision driving.
I. Speed Coaches: Speed Coaches will be tasked with advanced instruction in procedure and highperformance precision driving.

### 4.7 HPDE Event procedures

Procedures are the same as SCDE procedures described in section 3.7 through 3.7.10

## 5. M4theM Competition Disciplines

All M4theM Competition Formats are "SOLO" in nature in so much that there is no overtaking of any kind during competition runs.

### 5.1 Hot Pursuit Chase Challenge (HPCC) <br> General Description and Rules

Hot Pursuit Chase Challenge (HPCC) is a multi-car competition format that allows 2 cars on the course at a time but does not involve passing or close proximity driving.

All SCDE and HPDE car prep and procedural rules apply to HPCC with the following exceptions found within these rules.

During all competition aspects of HPCC events, there will be NO OVERTAKING OF ANY KIND.

## Event Structure

An HPCC event will consist of Qualifying and Eliminations, and at some events, track familiarity/practice sessions.

## Qualifying

Based on individual event timing/logistics, Drivers will have 2 to 3 qualifying rounds where they are attempting to go as fast as possible so that they may be placed into the correct Pod, and to establish a baseline staggered start time for bracketed pods.

## PODS and Elimination Rounds

All drivers will be assigned to an individual 8 car pod based on qualifying times. The fastest 8 cars will be the first pod, then next fastest 8 the second, etc. The total number of pods will be based on the structure/time available and numbers of entries. Pods may be smaller than 8 cars, but never larger at a standard HPCC event. Example, if 32 cars are present, there will be 4 groups of 8 . If 24 cars register, we may choose 3 groups of 8 , or 4 groups of 6 or a mixture thereof. The reason for changing group sizes is to try to group similar speed cars together as much as possible.

All competition is among the competitors within their individual pod.

Single elimination brackets will determine an overall winner per pod with consolation brackets for each pod to ensure a 3 or 4 run guarantee for each competitor depending on the structure of a particular event. For example, an HPCC held after an SCDE or HPDE may only provide a 3 run guarantee in the elimination portion as time will be limited, while a standalone event could offer more guaranteed runs in both qualifying and elimination.

At the minimum, between qualifying and head-to-head runs, all drivers will be guaranteed 5 to runs per event, most drivers will experience more than the minimum depending on their mix of win/loss per round and how it affects their bracket.

## Familiarity runs/Practice

If it is a standalone event (No SCDE or HPDE beforehand) a short, track familiarity practice will be provided each competitor as well. These sessions will be "no overtaking" sessions with cars spaced evenly around the track.

If there is an SCDE or HPDE event preceding the HPCC competition, those sessions will be considered track familiarity/practice sessions.

## Car Classes/POD assignments

There is no build spec or classing rules. The fastest 8 will be in a pod together, the next fastest 8 together, etc. It is "run what you brung" as they say.

The fastest pod will normally run "heads up".

If there are large enough discrepancies in the qualifying times from fastest to slowest among the fastest pod that some competitors would have little chance within their bracket, (more than 1 to 1.5 seconds), it may be trimmed to less than 8 cars to assure fairness to all competitors. (Example, if the 5 fastest cars are within one second of each other, but the next 3 are $3-5$ seconds slower, we would run a pod of 5 fastest heads up, then begin the next pod with the cars that were 3-5 seconds back from the fastest pod.

If an event is filled to capacity where time would not allow formation of additional pods, then the fastest pod may be bracketed with staggered starts to compensate for the large discrepancy in speed.

In as much as possible, all pods will be formed to allow heads up racing for every pod. If necessary, (and as long as the timing system is playing nice), we will run any pod that has a large spread in lap times as a bracket with staggered starts in order to ensure a level playing field that allows good driving to compensate for being matched up against a simply faster car.

## Qualifying Procedure

Each driver will be given the opportunity to participate in at least two electronically timed sessions from a standing start to the completion of a lap to set a benchmark time to create equal pods and to set dial times for bracket runs. As these will be timed runs, no passing or close quarters driving allowed.

The number of qualifying sessions available will depend upon the number of registered drivers and time available. A minimum of 2 will be provided, more may be added if time and space allow.

For bracket purposes, the driver can stand on target qualifying time or request a shorter interval to guard against breakout possibilities.

Any driver may request a shorter (faster) target time than their qualifying time as their official target but must report such to the scorers before their next run. This can be chosen before each run but cannot be lengthened, only shortened.

## Car placement on course and race procedures overview.

Cars are placed on course an appropriate distance apart to ensure safety at individual start/finish lines and drivers compete from a standing start.

One lap is run around the course run with the first car returning to their individual starting line declared the winner.

For Bracket competition; cars start at a staggered intervals based on qualifying speeds and the subsequent 1 second grace buffer.

In a staggered start situation the faster qualified car is placed in the chase position and will have a delayed start.

First rounds will be decided by the winner of best 2 of 3 runs. Normally, 2 wins in a row would advance a winner without the need for a $3^{\text {rd }}$ run but if time allows, we would entertain a $3^{\text {rd }}$ run to give more track time to either driver if desired. As long as the event was on, or ahead of schedule, this would be considered.

## On track rules:

## Setup/basic premise:

2 cars on course, separated longitudinally on track by 2 distinct start/finish lines.

Each car will have a start signal that consists of a red light that is off until cars are staged.

When a car "stages" a sensor will turn the light on.

When it is time for a car to launch, its light will turn off. (like F1 starts)

The Chase car will ALWAYS stage first for both heads up and bracket races.

Once the chase car is staged and their light is illuminated, an official will signal the lead car to stage.

In heads up competition, when both car's staging lights are on, a random period of time ( 1 to 5 seconds) will elapse and both car's light will go off. At that point both car's start their run.

In bracket competition, once the lead cars staging light comes on, a random period of time (1 to 5 seconds) will elapse and the lead cars light will go off. At that point the lead car starts their run. When the lead car launches, it will start a timer for the chase car light to turn off automatically after the preset amount of delay time

Bracket races will work exactly like bracket drag racing, the slower car leaves first, the faster car is held until the difference in dial time is reached.

For bracket races, the drivers will set their dial in a target run time during qualifying. The difference between the times of the competitors of a round will be input into the automatic timer that will delay the start signal of the faster car equal to the amount of the difference is qualifying times.

Example; Driver A's dial in time is 35.5 seconds, driver B's dial in is 36.7. Driver B' would start from the front/lead line, and his start lights would go out 1.2 seconds before Driver $A$ at the back/chase line.

In both heads up and bracket races, after both cars have launched, the first car back to their Start/Finish line is the winner.

If a proximity of 2 car lengths has been established by the following car and is unbroken for a period of 10 seconds, the round is considered over and won by the chasing car.

Close finishes will be judged by a panel of M4thM staff and the final decision will be made by the race director to declare a winner or call for a re-run of the disputed race.

## Elimination Structure

The standard elimination structure will be a single elimination tournament bracket among 8 car pods, with a consolation bracket for round losers. At the end of competition, the winner is determined by the driver that won all 3 rounds. Second place is determined by a single run between the winner of the consolation bracket and the loser of the main bracket finals.

## Penalties:

Red light, early launch. If a competitor leaves their staging spot before the staging light is extinguished, the light will remain red indicating an early start. That driver forfeits the round. A red light by the lead car in a delayed staggered start will terminate the round. If the chase driver red lights, the round is forfeited to the lead driver that did not red light. The red light system is electronic and automatic. There is no appeal to a redlight.

If a course boundary cone or other object is struck (parking lot curb/plants/poles), the first car to strike a boundary is disqualified from the round.

Any evidence of tires off of the pavement on permanent racecourses, such as grass or dirt being raised by tires, will result in a forfeiture of the round.

2 officials will be posted on each side of the track with a single car assigned to them for assuring they did not strike objects or go out of bounds.

ONLY an M4theM official may call off track/object penalties. If no official saw it, it does not matter if all other spectators or competitors in attendance saw it. A competitor may request a poll of officials to
appeal a ruling, but the conclusion of the race director is final. Further dispute by a competitor or fan/crew may result in penalties to the driver lodging the complaint.

Breakout Rules:
In the fastest pod there will be no breakout rule.

In all other pods, at the race directors discretion, breakout rules may apply to prevent sandbagging.

All drivers within a pod where breakout rules are being applied will have one full second deducted from their official qualifying time and the resulting number will be their official dial/breakout time.

Example; Driver A qualifies with a 36.5 second run, Driver B with a 37.7. Driver A's breakout dial in time would be 35.5 seconds, driver $B$ 's, 36.7. Driver B would get a 1.2 second head start from the lead line.

This allows reasonable buffer for both drivers to improve on their qualifying times due to better driving/track knowledge or changing weather.

We want to promote improvement, going faster, however, not simply sandbagging.
If a driver improves on their original qualifying time, within the 1 second grace buffer, their new dial time will be the actual time ran, -1 second.

Example; Driver A's dial in time was 35.5 seconds and they did a elimination run of 35.6 , They did not breakout, but their new dial time would reduce to 34.6 seconds based on their improved performance.

If a driver improves on their original qualifying time greater than the 1 second grace buffer, they will have "broken out" and if it is their first breakout, no loss of round penalty is assessed, however, their dial time will then be reduced to actual time ran -1 second.

Example; Driver B's dial in time was 36.7 seconds and they did a elimination run of 36.4, They will be charged with a first breakout, and their new dial time would be 35.4 seconds.

Second and all subsequent breakouts will result in a loss of round plus a further deduction in all future dial times of an additional second.

Breakout 1, no penalty. Dial time adjusted to actual time ran -1 second (standard grace buffer) Breakout 2, Loss of round. Dial time adjusted to actual time ran -2 seconds for future runs Breakout 3, Loss of round. Dial time adjusted to actual time ran -3 seconds for future runs Breakout 4, Loss of round. Dial time adjusted to actual time ran -4 seconds for future runs

Due to the "best 2 of 3" and the consolation brackets, the competition is structured to where a driver could breakout up to 4 times before being eliminated completely.

Example; Driver B broke out when winning round 2 but did not lose the round because it was their first breakout.
In round 3, due to the previous breakout and updated dial time, the new dial time was 35.4 seconds and they did a round 3 elimination run of 35.3 seconds. They will be charged with second breakout, the loss of round 3 and if the loss did not eliminate them from further competition, their new dial time would then be their actual 35.3 second run -2 seconds resulting in a dial time of 33.3 for round 4 .

If Both drivers breakout in a round, the one breaking out the least wins the round, but both are charged with a breakout, and both of their dial times are adjusted according to the formula based on the total number of breakouts they have to that point.

The system is designed to make it increasingly difficult for a sandbagger to win by qualifying at a purposefully slow speed in order to easily eliminate slower competition.

Only a sandbagger would likely continue to be able to breakout by multiple seconds round after round and as such has earned the resulting penalty.

## Awards

Awards will be given to the winner and second place of each pod. An award will begiven to the fastest qualifier of each pod and the "fastest run of the day" whether it occurs in qualifying or eliminations. If it occurs in eliminations, it cannot be a run in which the driver broke out.

### 5.2 Solo Sprint

Solo Sprint is a single-vehicle timed run around a portion of an SCDE/Chase Challenge Course.
Detailed rules and scoring description will be included in this document at a later time.

### 5.3 Shake-N-Brake

Shake-N-Brake is a single-vehicle timed run around a portion of an SCDE/Chase Challenge Course that will involve an initial standing start, driving around the course to a full stop within a designated area, another standing start to continue on the course to a final stop within a designated finish area. Scoring will be a combination of total time on course and the amount of distance a driver goes past a designated optimal stop point beyond the finish line.

Detailed rules and scoring description will be included in this document at a later time.

### 5.4. Triple Threat Competition

Triple Threat Competitions will be made up of all 3 M4theM competition elements in one day. Points will be awarded in each competition discipline and champions will be given awards based on a formula yet to be determined.

Detailed rules and scoring description will be included in this document at a later time.

