

SECTION 3.11

LAND SPEED RACING

The Rules of Competition is a guide for the conduct of the sport pursuant to uniform rules. Rules directed or related to safety, are intended to make all individuals concerned with safety, but the AMA warrants neither safety nor compliance with an enforcement of the rules. In addition, the AMA does not endorse or certify any manufacturers or products. Moreover, each competition participant has the responsibility to assess the safety aspects of the facilities and conditions and shall assume the risk of competition.

These Supplemental Regulations are an appendix to the appropriate AMA rules governing all activities under their sanction. The appropriate Fédération Internationale de Motocyclisme (FIM) regulations govern all entrants seeking to establish FIM world records.

The AMA rules will apply to any disciplinary action, protest or appeal related to all AMA participants.

Responsibility for compliance with all competition provisions rests with each participant. Each will have the obligation to learn and understand all appropriate rules and regulations. By participating in meets governed by these rules, you are agreeing to comply with all rules stated within this document.

The AMA, the promoter, sponsors and officials do not set engineering and design standards for the meet racecourse. **AT NO TIME ARE THERE ANY WARRANTIES, EXPRESSED OR IMPLIED, THAT COVER SAFETY THAT RESULTS FROM COMPLIANCE WITH RULES WITHIN THE DOCUMENT. THESE RULES IN NO WAY PROVIDE A GUARANTEE TO ANY ENTRANT, RIDER, SPECTATOR OR MEET OFFICIAL AGAINST INJURY OR DEATH.**

Participants are solely responsible for their safety and should assess their own ability to negotiate the racecourse. Participants who doubt the competence of track officials, have concerns about safety of the racecourse or their own ability to negotiate the course, or who are uncertain about the condition of their motorcycle or uncertain or doubt the competence of fellow competitors, shall not participate and should request the return of their entry fee before competitive activity begins.

The promoters and their assigned officials are empowered to interpret and, as necessary, to enact minor adjustments to any of these supplemental regulations. Any such adjustments are subject to compliance with the governing rules of the AMA.

These Supplementary Regulations, subject to change without notice, shall uniformly apply to all participants. Should any changes occur, those changes will supersede all previous rules. Subject to the protest and appeal provisions of the AMA rules, all decisions made by the promoters and assigned officials are final. A completed event registration form is mandatory for all entrants.

NOTE:

The concept of word use and intended meaning adhered to in preparing this supplemental document is as follows:

“Shall” has been used only when application of a procedure/process is mandatory.

“Should” has been used only when application of a procedure/process is recommended.

“May” and **“need not”** have been used only when application of a procedure/process is optional.

“Will” has been used only to indicate a future requirement, never to indicate any degree of requirement for application of a procedure/process.

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3.11A -- COMPETITION PROCEDURES

Special Note: Participants are solely responsible for their safety.

1. CLASSIFICATION

- a. The participant is responsible for the entry of the motorcycle into its correct class.
- b. **All motorcycles shall be entered in the lowest fundamental class in which they are legal. (i.e. you shall NOT enter 'A' if you are legal in 'M').** The promoters and/or scrutineer(s) **will not** reclassify any motorcycle that was entered in the incorrect class. Any motorcycle entered into the meet incorrectly must be re-entered at registration and may be subject to a fee for the change.
- c. Should an entered motorcycle fail to meet the class requirements, but the motorcycle meets the *Minimum Standard Equipment* requirements ([3.11B](#)), time-only runs may be taken. Failure to meet the *Minimum Standard Equipment* requires a change to 'Run Watcha Brung' (RWB) entry (RWB rules apply). Time-only passes will not be eligible for records or to receive awards. A participant cannot change the name, number, or classification after the motorcycle has been officially entered and scrutinized and has left the starting line.

2. ADDITIONAL CLASS

- a. An additional class is defined as a motorcycle change including, but not limited to: engine displacement change; change from gas to fuel; or a body change (open to partially streamlined). An additional class shall retain the same rider as the original entry, require an *Additional Class Form*, appropriate fees submitted to registration, a new motorcycle number and re-inspection. No participant shall enter an additional class on the final day of racing (pre-entered check-in excluded). A change in both class and rider is considered a full new entry.

3. ADDITIONAL RIDER

- a. An additional rider is when the same motorcycle and class has a second rider. The additional rider shall comply with all entry requirements. The additional rider also shall have his/her riding apparel inspected in Scrutineering. An additional rider requires an *Additional Rider Form*, appropriate fees submitted to Registration and a new motorcycle number. A change in both class and rider is considered a full new entry.

4. SCRUTINEERING (TECHNICAL INSPECTION)

- a. Regardless of class or entry type, all motorcycles/streamliners and riders shall successfully pass Scrutineering.
- b. All participants shall present their motorcycle/streamliner in a ready-to-race condition. Riders shall present their helmet and protective outerwear at the initial scrutineering. Scrutineering shall inspect removable panels, shrouds, saddlebags and personal electronic devices (such as cameras, recorders, GPS, etc). Additional weight/ballast must be declared and subject to

additional scrutineering. All motorcycles, helmets and personal electronics shall display official scrutinized decals/tags prior to being permitted on the racecourse. Riders may be required to demonstrate ability to reach all controls when in ready-race condition. In Streamliner classes, it is required that all riders of that motorcycle demonstrate seat belt and limb restraints.

- c. A minimum of two scrutineers must scrutinize all motorcycles/streamliners that enter a class in which a record(s) exists in excess of 200 mph. Motorcycles/streamliners entered in a class in which the record is 250 mph or more will have a minimum of three scrutineers.
- d. **Any change to body, streamlining, chassis or power plant shall be re-scrutinized prior to any qualifying participation.** Any speed times recorded with such change prior to being re-scrutinized will be forfeited. **The meet officials and starter(s) shall have full discretion to restrict or bar from competition any motorcycle/streamliner that, in their sole discretion, is determined to have exhibited handling problems, fire hazards or unworthiness to compete at any time.** Participants barred from competition must be re-scrutinized prior to competing. Scrutineering will occur only at area(s) designated by the event organizers. All participants' motorcycles may be re-scrutinized at any time throughout the meet for any reason.
- e. The resolution of any disparity between the stated year, make and model of the motorcycle and the actual year, make and model falls on the participant and must be resolved prior to any competition.
- f. Promoters and/or sanctioning bodies will provide measuring devices required for scrutineering.
- g. Scrutineering is to help assure the smooth and fair conduct of the meet, but the event organizers, AMA and event officials neither warrant safety because a motorcycle/streamliner was scrutineered nor compliance with and enforcement of the rules and regulations.

5. STARTER

- a. The promoters shall appoint an official starter(s). Supervision of the rider and contestants is the responsibility of the official starter(s) at the starting line. The authority of the official starter and assistant starter shall extend past the scrutineer and the official starter has the ability and authority to prohibit any motorcycle from the course and/or the meet.
- b. With respect to machines attempting AMA record runs, the authority of the AMA official(s) supersedes that of the starters(s).

6. COURSES

- a. Multiple courses may be available
- b. All courses are open to any class.
- c. The event promoters have total discretion as to the number of courses, course locations and course length. The determining factor for course number(s) and design(s) will be weather and course conditions.
- d. **Basic Course(s):** The "Basic Course(s)" may consist of 3-mile total run (a 1 mile approach, 1 mile timed, and 1 mile shut down).

- i. All competitors who have passed scrutineering are eligible for the basic course.
- e. **Intermediate Course(s):** The "Intermediate Course(s)" may consist of a 5-mile total run (2-mile approach, 1 mile timed, and 2-mile shut down).
 - i. To compete on the Intermediate Course, the entrant must be capable of exceeding 100mph. Should that capability be in question, the entrant must complete a run on the basic course in excess of 100mph and present the timing ticket at registration to receive an *Intermediate Course Sticker*.
- f. **Long Course(s):** The "Long Course(s)" may consist of up to an 8-mile total run (up to 3.5-mile approach, 1 mile timed and up to 3.5 mile shut down).
 - i. To compete on the long course, all motorcycles shall run on the intermediate course in excess of 175 mph and present the timing ticket at registration or scrutineering to receive a Long Course sticker
 - ii. Motorcycles running on the Long Course that have not met the qualification requirements may be subject to disciplinary action.
- g. **Streamliner Course(s):** On request and entry, any streamliner, or participant in excess of 275mph, may discuss with the promoters their desired course length (to be extended from the long course, subject to conditions).
 - i. Streamliners are exempt from pre-qualification on the Standard or Intermediate course.
- h. All motorcycles shall begin their runs at the designated "Start" mile/return and shall be the maximum permitted lead up to the timed area. Where a short course overlays a long course, the "Start" for the short course shall be designated a mile/location for its start point.
 - i. At all times, all runs shall be flying start.
 - j. Motorcycles and riders who have a recorded pass in excess of 100mph or 175 mph at a previous Speed Trials meet should receive the applicable course sticker and wristband in registration and are exempt from qualifying each year (same rider and motorcycle combination required).
 - k. Specialized vehicles (such as streamliners, electric etc.) may be authorized to begin at an alternate starting location to accommodate course conditions. Permission may only be granted by the AMA steward.
 - l. Participants will not have to re-qualify for their applicable course if a change in class has taken place, as long as the same motorcycle has exceeded 100mph or 175 mph.

7. QUALIFYING

- a. The promoters, scrutineer(s), starter(s) and AMA stewards have the final discretion to prohibit any motorcycle participant from the course at any time for any reason. At no time will more than one machine be on the course. There is no maximum number of qualifying runs.
- b. When attempting to break an existing record, on the completion of the first of the two record runs, the motorcycle will be qualified for a record return pass if the speed is at or above the existing record for that class.

- c. Classes with no established record are available. A participant will automatically qualify for a record return pass at the completion of the first successful down pass.
- d. All riders must report to the designated impound official for clearance to make a return pass.
- e. Motorcycles shall be re-scrutinized before being permitted a return run. The record run shall have the same rider on the first (down) and second (return) record run to be official and must remain in impound between all record runs (See Section [3.11A.8](#))

8. RECORD ATTEMPTS

- a. All record runs shall be over the same course and within the same calendar day. Record attempts shall be the calculated fastest average speed over two consecutive runs in opposite directions. If a record attempt (the two-way average) does not exceed the existing record, the vehicle must return to the pre-staging line to re-qualify. Any participant/owner who removes the motorcycle from the impound area will forfeit that attempt and must re-qualify for that class record.
- b. Within the impound period, and prior to any back-up record attempt, no change of parts (with the exception of: spark plugs; wheels and tires; fluids and batteries) is permitted. The new parts must be identical.
- c. Data acquisition, fuel/air ratio and jetting changes are permitted. If required, add fuel/gas (from a sealed container in the presence of an official).
- d. Engine changes and mechanical modifications cannot be performed during the impound period.
- e. The participant/owner will be notified by the officiating staff of the back-up record attempt time when in impound.
- f. Turn out, engine power failure, or interruption after the motorcycle has left the starting line will result in termination of that record run.

9. RECORD PROCEDURES

- a. Any motorcycle/streamliner whose two-way average exceeds the class record after the second (return) run shall report at the end of the record run to the impound official to complete the record certification procedures.
- b. Scrutineering shall seal the motor should the rider wish to make more attempts after making a record run. If damage to the engine occurs after sealing that renders the engine immeasurable, it voids the previous record attempts. The decision to seal and continue is the sole discretion of the participant. All seals must remain intact and shall be broken only by scrutineering staff during impound.
- c. Participants are solely responsible for making the motorcycle accessible for measurement and scrutinizing.
- d. **Scrutinizing of the engine is required.** Do not remove cylinder heads until directed by a scrutineer. In the event that tools are required for disassembly, the participants are required to provide them. All engine components shall be available for inspection.
- e. Disqualification from the record attempt will result if engine displacement exceeds the stated class limit.

- f. All runs in gasoline classes are subject to gasoline testing at any place or time. There may be random gasoline testing for class compliance.

10. RECORD RECOGNITION

- a. All records are subject to AMA certification and may be announced only as such, until final certification. Falsification of any record documentation shall be subject to disciplinary actions under AMA rules, which may include fines, disqualification and exclusion from future meets.
- b. The promoters shall acknowledge class records with entries into an official record listing and certificate of the achieved record mailed to the rider after the certification of the records from the AMA.

11. IMPOUNDING OF PARTS OR MOTORCYCLES

- a. The participant agrees to surrender on demand any part or motorcycle that is used in the meet competition. The event promoters and officiating staff reserve the right to impound, for any period of time, any part and/or vehicle that is part of a rules-compliance or crash investigation. Inspection and testing of impounded parts or vehicles is at the sole discretion of the event promoters and/or AMA stewards.

12. MEET PARTICIPATION

- a. All participants shall provide state issued photo ID (those younger than 16 years are exempt in the presence of parent/guardian).
- b. All Riders participating in AMA sanctioned Land Speed meets must have rider medical insurance. A completed and signed medical information form shall accompany all entry forms. A complete entry form shall be submitted and processed before scrutineering and runs.
- c. A riders meeting shall be mandatory for all riders. Riders are responsible for attending the meeting and for being aware of all information provided. The meeting will be held each racing day, prior to the course(s) opening. Attendance may be taken. Failure to attend may result in a fine or disciplinary action.
- d. Meet fees and conditions are designated by the promoters and are used in conjunction with these supplemental regulations.
- e. The minimum age for a rider is 12 years.
- f. A rider must be 14 years or older to ride motorcycles above 250cc.
- g. The age of the rider is determined as of the date of the meet. **All minors shall complete the minor release form, signed by BOTH parents/guardian(s) with their medical and entry forms.** No rider under the legal age of majority may compete without the written consent (signature on the liability release and entry forms) of his/her parents or legal guardians present at the meet. An authorized adult acting on behalf of the parent or legal guardian shall provide a notarized statement indicating they have the authority by the parent or legal guardian to be responsible for the minor during the meet.

13. PERSONAL CONDUCT

Note: Refer to AMA Rules Section 3.1A

- a. Each participant is responsible for the actions of his/her family and pit crew and associated media personnel.
- b. At all times, the participant must be on or in the competition motorcycle/streamliner when the engine is running, except if the motorcycle/streamliner is on a stand in the pit area.
- c. Anyone who exhibits characteristics of intoxication shall not be allowed to participate in the meet and shall be asked to leave the meet areas.
- d. Operating any vehicle in a reckless manner may result in disciplinary action, including disqualification.
- e. Recklessness in the pit area or return roads is subject to a fine and/or disqualification.
- f. Entering any course without authorization will result in disciplinary action.
- g. No vehicles can be on the racecourse, unless assisting a competition motorcycle/streamliner to enter or exit the course.
- h. If assisting a motorcycle/streamliner, vehicles are restricted to the support roads and may not be on the track, with the exception of authorized emergency vehicles.
- i. All motorcycle/streamliner pit facilities must have a minimum of one fire extinguisher.
- j. Provided it does not interfere with the promoters' communication systems, crews and riders may use telecommunication devices.
- k. Compliance with all posted signs and designated surface markings is required at all times.
- l. The supervision of minors is required at all times.

14. DESTRUCTION OF SALT SURFACE

- a. Any participant who intentionally causes damage to the track or has the potential to damage the course shall be disqualified from competition.
- b. In the case of unintentional causes of damage, scrutineering officials will verify corrections to the motorcycle/streamliner before being cleared to compete again.
- c. All lost parts must be reported to the event promoters or officiating staff.
- d. All participants shall cover the salt surface in the pit area in circumference of 3 feet from under any part of the competition motorcycle.
- e. Failure to comply with this rule this may result in disqualification of the motorcycle/streamliner from the event.

15. WEATHER

- a. The starter(s), assistant starter(s) or timers may stop all racecourse activity any time weather conditions dictate or when wind in excess of 10 mph for solo motorcycles or 3 mph for streamliners exist. Such decisions are at the total discretion of the course controller and/or AMA steward.
- b. The event promoters, sponsors and officials shall not be responsible for delays, postponements or cancellations due to weather or course conditions or acts of God for any reason. In the event of a weather delay in excess of one hour (per day), course hours of operation may be extended beyond the advertised times

at the discretion of the promoters and officials provided light and equipment facilities are available.

16. COMPLAINT AND PROTEST PROCEDURE

- a. A participant must lodge protests in writing within 30 minutes of the posting of results to the meet officials. The promoters will make every effort to respond in a timely manner to any such objections. However, all formal protests shall be accompanied by the appropriate fee and meet all other requirements of the pertinent AMA rule, located in the current AMA rulebook (available on the AMA's website or for viewing in at registration onsite). Handling of any such protests will be in accordance with AMA rules.

17. REQUEST FOR RULE CHANGES

- a. All rule requests should be made in writing to the promoter. All rule changes are subject to approval by the AMA through the Specialized Sporting Commission.

3.11B -- MINIMUM STANDARD EQUIPMENT

NOTE: *The AMA, promoters, sponsors and affiliates do not inspect machines in AMA sanctioned competition for safety. Participants are solely responsible for the condition of their machines and their competence to operate them. Participants' machines can have equipment installed, replaced, altered or fabricated, if the rules permit it. However, it is the riders' responsibility to select components, materials and/or fabrication methods so that the machines components shall perform in competition with safety.*

1. CHAIN & BELT GUARD

- a. A chain guard is mandatory on all exposed chains and belts. Primaries shall be totally enclosed. See also [3.11D.3](#), [3.11E.4](#), or [3.11G.3](#) for P, M/MPS and A/APS class motorcycles.

2. ENGINE DISPLACEMENT

- a. Class displacement is based on actual/physical displacement.
- b. Displacement is calculated using bore and stroke using the following equation: $0.7854 \times \text{Bore}^2 \times \text{Stroke} \div 1000 = \text{Cylinder Displacement}$ (Note: $0.7854 = \pi \div 4$)

3. EXHAUST DIRECTION

- a. Exhaust direction must be away from the racing surface, rider and rear tire.

4. FOOT PEGS/ RESTS/SIDE STANDS

- a. One pair of footrests per motorcycle is required and shall be operable (streamliners excluded). Remove all additional foot pegs/rests. Secure side and center stands in the "up" position with "zip ties" or safety wire before making a run.

5. FUEL SHUTOFF AND ENGINE KILL SWITCH

- a. Motorcycles shall be equipped with a positive ignition off switch to terminate engine power. The riders shall be able to use the switch without their hands leaving the handlebars.
- b. Gasoline class motorcycles shall have a fuel shut-off located within easy reach of the rider. Fuel class motorcycles shall have a positive fuel shut-off activated without the rider's hand leaving the handlebars.
- c. In all classes, a lanyard must connect the ignition shut-off switch to the rider. Aero/quip or equipment fire sleeve shall be securely fastened using metallic clamping devices over all gas/fuel lines and connectors. No plastic gas/fuel petcocks, connectors or filters are permitted.

6. FUELS

- a. Acceptable fuels include alcohol, methanol, ethanol, nitrous oxide, nitro-methane, hydrogen, diesel, gasoline.
- b. Violation of this fuels section is grounds for disqualification.

7. GASOLINE

- a. A meet-approved vendor provides gasoline for purchase. The vendor/event official shall seal the tank after filling.
 - i. If you chose not to purchase gasoline from the meet approved vendor, you will be required to run in the fuel class.
- b. Refueling shall take place in the designated area and tank re-sealed by an event official.
- c. Refueling shall only take place under the supervision of an event official.
- d. Not allowed is the addition of power additives/altering agents. Allowed is the addition of engine lubrication to gasoline. When done, it must be in the presence of the event gasoline vendor or an event official. The vendor shall seal the tank after filling. Violation of this section will result in disqualification.
- e. If nitrous oxide bottles are installed, you must run in fuel class. To be permitted to run in gas class, bottles, lines and solenoids shall be removed. Injectors shall be removed or capped.

8. GROUND CLEARANCE

- a. All parts of the motorcycle, other than the tires, shall maintain a 1-inch minimum clearance from the ground. Measurements taken with rider seated in racing position and motorcycle not on stands.

9. HAND/FOOT CONTROLS

- a. Hand controls (clutch and brake) shall have a minimum 0,5-inch ball on the end. Flattening of the ball end is acceptable. However, all edges must be rounded. All control ends shall be an integral part of the lever.
- b. Foot-operated controls must pivot independently. Foot throttle shall have a toe clip with return throttle.
- c. Riders in the riding position must have 10 inches between their thumbs. All handlebars shall extend outside the fork tubes (streamliners excluded). Any modification of handlebars may be

subject to additional scrutineering. Repair by welding of light alloy handlebars is prohibited.

- d. Upon request, riders must be able to demonstrate their ability to navigate with the current controls.
- e. Steering stops shall limit the rider's hands from touching the fairing or tank at full right or left turns. A hydraulic dampener cannot act as a fork stop.

10. HEADLAMP ASSEMBLY

- a. Tape headlamps completely with non-transparent tape to hold broken glass.

11. LEAN ANGLE

- a. All two-wheeled vehicles, when unloaded, shall be capable of being inclined to an angle of 20 degrees from the vertical without any part, other than the tires, being in contact with the ground.

12. NITROUS OXIDE

- a. Nitrous oxide bottles and lines are part of the fuel system and shall be governed by all fuel system rules.
- b. Nitrous oxide bottles shall be securely mounted, hose clamps alone shall not be sufficient. Systems shall be visibly identified as nitrous oxide and the location of the system clearly identified.
- c. Nitrous oxide applications must comply with crash protected shut-off valve requirement. Pay special attention to heat proofing the nitrous oxide bottle.
- d. All nitrous oxide bottles, lines and solenoids shall be removed when competing in the gas class. Injectors may be removed or capped.

13. NUMBER/CLASS IDENTIFICATION

- a. Motorcycle number and class identification on each side of the motorcycle are required for each participant. Numbers shall be reserved with organizer.
- b. The number class shall be displayed within a reasonably flat, smooth, vertical surface with a minimum dimension of 7.5 inches high and 10.5 inches wide, with a maximum of 8.5 inches by 11 inches. Motorcycle numbers must be a minimum of 3 inches high and 1 inch wide.
- c. Class designation shall be a minimum of 1 inch high.
- d. Numbers/letters shall not be shaded or outlined. The numbers may be on the motorcycle, or number plates may be used. Where used, number plates shall have 1-inch radius corners, be securely mounted and meet the dimension requirements.
- e. Numbers shall be in full view and not blocked by the rider when in the riding position.
- f. A change in rider/class requires a change of numbers/class identification on the motorcycle. At all times, the number/class ID must match the rider, class and motorcycle as registered.

14. REAR VIEW MIRROR

- a. To prevent spreading broken glass, remove or completely tape rear view mirrors.
- b. Completely tape mirrors incorporated into the fairing.
- c. Transparent tape is not permitted.

15. SEAT HEIGHT

- a. Permitted in the Production class is stock seat height.
- b. Seat height on any other motorcycle, with rider seated, shall not exceed 36 inches from seat, at its highest point, to the ground.

16. RIDING ATTIRE

a. DEFINITION: RIDING ATTIRE

- i. The following rules are mandatory for all participants. Streamliner riders refer to [3.111f](#) for specific requirements in closed-cockpit motorcycles. Riders shall rely on their own judgment in the selection of any helmet and apparel for durability and safety. It is the sole responsibility of the rider to select a helmet and apparel that will provide appropriate protection.

b. BOOTS

- i. Leather boots of significant construction are required. They shall be at least 8 inches high, with lace, zipper and/or buckle, or be specially designed and constructed for leg and foot protection.

c. GLOVES

- i. Gloves of 100 percent leather exterior that cover the entire hand and fingers and have a minimum 3-inch gauntlet cuff with wrist enclosure are mandatory. Additional safety features, such as knuckle, palm and/or finger protection, with other engineered materials are acceptable.

d. HELMET

- i. It is mandatory for all participants taking part in practice and races to wear a full-face protective helmet. The helmet must be properly fastened, be of a good fit and be in good condition. The helmet must have a chin strap type retention system.
- ii. The helmet must conform to one of the following recognized standards and have a label affixed certifying its approval:

Country	Certification
USA	Snell M2010/M2015 or DOT FMVSS 218
Europe	Regulation ECE 22-05 P'
UK	BSI 6658 Type A
Japan	JIS T 8133:2007
Any of the FIM SFI approved certifications.	

Streamliner competitors must use a Snell SA2010 or newer or SFI 31.1A, 31.2A or 31.1/2010, rated helmet [\(3.111.f\)](#)



Full Face



Open Face

- iii. All helmets must be intact, and no alteration must have been made to their construction. The helmet shall be free from any added cameras or aftermarket devices.
- iv. The rider may perform the following checks before taking part in practice or the race: That the helmet fits well on the rider's head, that it is not possible to slip the retention system over the chin when fully fastened and, that it is not possible to pull the helmet over the rider's head by pulling it from the back of the helmet.
- v. All riders must utilize a shatterproof face shield. Participants with corrective eyewear shall have approved shatterproof glass if worn with helmet.
- vi. Scrutinizing of a helmet will occur after any accident that involves impact. In addition, the helmet may be impounded.

NOTE: It is recommended that all helmets used in competition be equipped with a commercially manufactured emergency helmet removal device and that all competitors display the following information on the base of the helmet: name, drug allergies and blood type. It is also advisable to carry this information on a small card and add any pertinent information such as epilepsy, diabetes, current medication and past medical problems.

e. **LEATHERS**

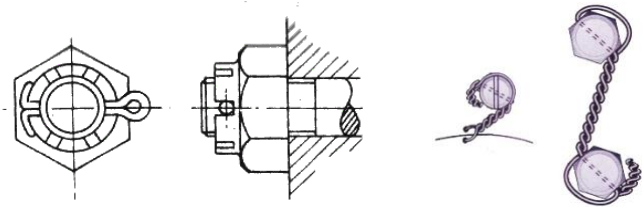
- i. Suits made of synthetic material are not permissible. The use of stretchable Kevlar and perforated materials in non-critical areas are permissible.
- ii. Leather suits shall be one-piece design or joined by a full circumference zipper at the waist. Leathers cannot be too big or loose. Critical area (knees, elbows, forearms, shoulders) armor or 2-layers of leather is highly recommended.
- iii. Due to invisible flames, riders of motorcycles burning fuels of Methanol content are recommended to wear Nomex underclothing or something of similar nature.

17. SAFETY WIRING

- a. Secure drain and fill plugs of the following with safety wire: transmission, engine, primary, coolant systems and any oil tanks.

Also, safety wire radiator caps. Secure externally mounted air-filters and clamps with safety wire. Secure axle nuts, and pinch bolts with either safety wire or a castle nut and cotter key combination. Use of locking compound is not permissible.

- b. Samples of safety wiring and castle nut and cotter key combination illustrated below.



18. STEERING DAMPER

- a. A steering damper shall not act as fork stops and are required in all classes.

19. THROTTLE

- a. Throttle shall be self-closing.

20. TOW START

- a. Tow starting is prohibited for all motorcycles with the exception of Streamliners and is limited to the first quarter (0.25) mile from the '0' start.

21. TIRES

- a. **The rider has the sole responsibility of ensuring tires are rated for the appropriate speed and for inspecting the condition of tires before and after each run.**
- b. As a result of the rapid evolution of technology and the increased speed that it brings, it is recommended that when choosing tires for the meet, the rider choose a set that is rated for speeds higher than the class record. It is also recommended that if the rider has any questions they should contact the tire manufacturer to ensure that they are using a tire that meets the speed requirement needed.

22. VALVE CAPS AND STEM

- a. All motorcycles and streamliners tires shall have metal valve caps and stems.

23. WHEELS

- a. The participant is responsible for wheel alignment, balance and tire run-out. The front wheel shall not have wheel discs. Except for streamliners, where bodywork encloses the wheel, the front wheel must have cross-ventilation at a minimum of 25 percent of total wheel surface. Permitted are rear wheels without cross-ventilation. Not allowed are spinner style wheels or any wheel

design that incorporates movable pieces while vehicle is in motion. Wheels must be as designed and produced by the manufacturer with no weight reducing methods employed by the participant. I.e., grinding or shaving.

24. RIDER CONTROL

- a. All riders must demonstrate the ability to access all vehicle controls (foot and hand). They shall also demonstrate their ability to move the motorcycle to be able to clear the course without assistance (streamliners excluded).

3.11C -- CLASS DESIGNATION

1. DEFINITION: MOTORCYCLE CLASSES

- a. Motorcycle classes are as follows:

- Displacement Class
- Frame Class
- Engine Class

Example: a production motorcycle with a production-supercharged engine of 1350cc would list as: 1350-P-PB. Not all frame and engine class combinations are permitted.

Example: Production Engine classes cannot run in M, MPS, A, APS, or S frame class.

2. DISPLACEMENT CLASSIFICATION

- a. All displacement measurements are in cubic centimeters. When cubic centimeters exceed the maximum for the class, motorcycles/streamliners will be in the next higher classification. Displacement class shall be the lowest class in which the displacement is legal (i.e., a 645cc motorcycle cannot enter the 750cc class). Rotary/Wankle engines must have manufacturer documentation to certify displacement.

Displacement Class	Maximum CC
50	50
100	100
125	125
175	175
250	250
350	350
500	500

Displacement Class	Maximum CC
650	650
750	750
1000	1000
1350	1350
1650	1650
2000	2000
3000	3000

NOTE: Diesel and Electric Classes do not follow the engine displacement classification. See [3.11L.22](#), [3.11L.23 \(diesel\)](#) and [3.11L.24 \(electric\)](#) for displacement classifications.

3. FRAME CLASSIFICATION

Frame Classification	Type	Rule Section
P	Production	3.11D
M	Modified	3.11E
MPS	Modified Partial Streamlining	3.11E

A	Special Construction	3.11G
APS	Special Const. Partial Streamlining	3.11H
S	Streamliner	3.11I
SC	Sidecar	3.11J
SCS	Sidecar Streamliner	3.11K

4. ENGINE CLASSIFICATION

Engine Classification	Type	Rule Section
P	Production	3.11L.1
PP	Production Pushrod	3.11L.2
PV	Production Vintage	3.11L.3
PC	Production Classic	3.11L.4
PB	Production Supercharged	3.11L.5
PG	Pushrod (Gasoline)	3.11L.6
PF	Pushrod (Fuel)	3.11L.7
PBG	Pushrod Supercharged (Gasoline)	3.11L.8
PBF	Pushrod Supercharged (Fuel)	3.11L.9
VG	Vintage (Gasoline)	3.11L.10
VF	Vintage (Fuel)	3.11L.11
VBG	Vintage Supercharged (Gasoline)	3.11L.12
VBF	Vintage Supercharged (Fuel)	3.11L.13
CG	Classic (Gasoline)	3.11L.14
CF	Classic (Fuel)	3.11L.15
CBG	Classic Supercharged (Gasoline)	3.11L.16
CBF	Classic Supercharged (Fuel)	3.11L.17
AG	Modified (Gasoline)	3.11L.18
AF	Modified (Fuel)	3.11L.19
BG	Supercharged (Gasoline)	3.11L.20
BF	Supercharged (Fuel)	3.11L.21
D	Diesel	3.11L.22
DB	Diesel Supercharged	3.11L.23
W	Electric & Solar	3.11L.24

3.11D -- PRODUCTION (P) CLASS

1. DEFINITION: PRODUCTION CLASS

- a. A "production motorcycle class" is as "produced by a recognized manufacturer," and the public must be able to purchase a minimum of 500 frames through retail dealers.
- b. Production class motorcycles shall not be modified from original equipment at time of manufacture e.g., frame, forks, gas and oil tanks, seat, front and rear lighting, fenders, wheels, brakes, air intake box and (unmodified) exhaust system.
 - i. They shall also contain the engine that they were originally produced with.
 - ii. Driveline method/type must remain stock (i.e. belt drive must remain belt drive).

- c. All production class motorcycles shall have manufacturer documentation specific to that entry. Production class records are subject to review and will only be certified after comparison with the manufacturer's documentation to support the production design of the motorcycle at the time of scrutineering.

The following modifications will be acceptable:

2. ACCEPTABLE REMOVALS & ADJUSTMENTS

- a. Acceptable removals are the license plate frame and bracket, air cleaner element, and toolbox.
- b. Jetting and fuel/air ratio changes are permitted.
- c. Driveline gear ratio changes are permitted.

3. CHAIN GUARD

- a. A chain guard is mandatory on all exposed chains.

4. FOOT PEGS

- a. Foot pegs must be original equipment. Remove rear foot pegs.

5. HANDLEBARS

- a. Handlebars are restricted to 15 inches above, 4 inches in front of original mount or 4 inches lower. All handlebars that mount to the original mount and meet the criteria in this section are acceptable.

6. LIGHTING AND INSTRUMENTS

- a. Headlamps, turn signal lenses, and tail lamp lenses shall be completely covered with non-transparent tape. If desired, remove non-integrated lamps and signals. See Chapter 2, paragraph 2.I.

7. WHEEL AND TIRE

- a. If necessary to meet tire speed recommendations, use optional wheels. See [3.11B.21](#), [3.11B.23](#)

8. SIDE AND CENTER STANDS

- a. Prior to making run, secure side and center stands in the "up" position with "zip ties" or safety wire.

9. WINDSHIELD, FAIRINGS, SIDE COVERS, AND SEATS

- a. Motorcycles originally factory equipped with a fairing and windshield, seat and side covers shall participate with original equipment. The fairings and windshield shall remain in original appearance (height, width and contour).

3.11E -- MODIFIED PRODUCTION (M) CLASS

1. DEFINITION: MODIFIED PRODUCTION (M) CLASS

- a. This class is designed to advance the efficiency of production motorcycles attempting records and increase their strength and stability. Construction of the modified motorcycle shall retain the original (O.E.M.) frame and not be purpose built. Modified class may include factory produced off road, limited production and road racing motorcycles with less than 500 in production available to the public. This class does **not** include factory produced road racing or any other specialized racing models unless available to the public.
- b. **Acceptable alterations include:**
 - i. Modifications of steering head angle, but must remain in original location.
 - ii. Removal or modification of miscellaneous brackets, braces, mounts, etc.
 - iii. Swing-arm length, design, type, manufacturer and attachment method.
- c. Maximum total wheelbase shall not exceed factory O.E.M. dimensions by more than +10 percent. Measurement will be taken at the most rearward axle setting. It shall be the participant's responsibility to provide proper documentation listing specifications.
- d. The main frame engine/transmission mounts and tubes must remain unmodified. The main frame is defined as the connection from the steering neck to the engine mounts and swing arm pivots.
- e. The engine and frame must be from the same manufacturer.
- f. The lowest part of seat and handlebar grips shall not exceed an imaginary line drawn between the tops of the rims.
- g. Modified frame class may be subject to special scrutineering of structure welds.
- h. It shall be the participant's responsibility to provide proper documentation listing all O.E.M. specifications for any modifications at the time of scrutineering.
- i. Bikes that meet the requirements for the Modified Class by definition shall not also run in the 'A' Special Construction class during the same meet.

2. AXLES AND WHEELS

- a. The minimum, non-stock wheel replacement size is 15 inches. Front and rear axle material shall be of titanium or steel alloy.

3. BRAKES

- a. The rider shall be able to actuate the required rear brakes from the handlebars or foot peg position.
- b. Front brakes are not required in this class.
- c. Hydraulic and/or mechanical drum/ shoe and disc brakes assemblies are acceptable.

4. CHAIN/BELT GUARD

- a. A chain/belt guard is mandatory for primary drive and rear drive sprockets and/or pulleys. Guards shall be of suitable steel or alloy material and measure no less than 0.25 inches wider than the

chain/belt. This guard must also extend over the rearward edge/apex of the rear sprocket.

5. EXHAUST AND MUFFLERS

- a. Length of exhaust/muffler assembly shall not extend past the rear edge of the rear tire. It must be sufficiently anchored.

6. FOOT PEGS

- a. Foot pegs must be a minimum of 6 inches ahead of rear axle.

7. FENDERS

- a. Front fenders are required.
- b. The front and rear fenders may be O.E.M. or replaced by a generic and must meet the following:
 - i. Front fenders shall provide a continuous 210 degrees of visibility of wheel and tire and not be lower than a horizontal line through the axle.
 - ii. The perimeter of the fender shall not be more than 1.75 inches from the tire tread, and shall not flair over the fork tubes by more than 2 inches overall.
 - iii. Rear fenders shall not extend below the horizontal line of the rear axle.
 - iv. An elongated seat may act as rear fender.
 - v. Rear fender/seat section shall not extend beyond the rear edge of the rear tire, and shall not be lower than the top rim of the rear wheel.

8. FRONT FORKS

- a. Center hub steering is not allowed, unless O.E.M.

9. GASOLINE TANK

- a. Allowed is an aftermarket tank, if it is mounted in the original tank's position and its fuel capacity holds a minimum of 1.32 gallons.

10. OPEN CLASS

- a. Open class motorcycles do not permit streamlining.
 - i. Streamlining is anything that has the perceptible purpose of directing or controlling the airflow around the motorcycle and/or rider, thus reducing drag.
- b. The primary seat area of the motorcycle must be covered at all times.
- c. The riders seat/tail section shall not extend past the most rearward edge of the rear tire and shall not be higher than 5 inches above the lowest section of the top of the seat cushion or seat base if no cushion is used, nor shall it be wider than the rider as viewed from the rear.
- d. The rear wheel (excluding the tire) must remain visible at all times as viewed from the side.
- e. If the seat/tail section does not meet the above standards, the Chief Technical Steward will determine its legality by observing

the motorcycle and rider in a race position to determine if the seat/tail section is an aerodynamic aid.

11. MULTIPLE ENGINES

- a. Motorcycle engines cannot exceed 3000cc. Not allowed in the modified class is the use of multiple engines. The engine and frame must be from the same manufacturer.

3.11F -- MODIFIED PRODUCTION-PARTIAL STREAMLINING (MPS) CLASS

1. DEFINITION: MODIFIED PRODUCTION-PARTIAL STREAMLINING (MPS) CLASS

- a. In addition to rules for the "Modified" class, ([See 3.11E](#)) the following rules apply to "Modified Partial Streamlining Class."
- b. Permitted are the O.E.M. and/or generic replacement fairing and bodywork and tail section. Mount all parts in their original positions and, if necessary, use additional mounting points.
- c. The O.E.M. fairing, bodywork and tail section for the specific production model that exceeds [3.11E.2](#) and/or [3.11E.3](#) will be permitted, as long as all mounting parts and fitment are original positions. Manufacturer's documentation to verify O.E.M. fairing, bodywork and tail section must be provided by participant.

2. PARTIAL STREAMLINING

- a. A minimum of 180 continuous degrees of the front and rear tire and wheel shall be showing, with no blockage by streamlining.
- b. There must be no streamlining forward of the leading edge of the front tire exceeding 2 inches.
- c. Streamlining is limited to seat/tail section and windshield/fairing.
- d. With the rider in the racing position, the rider must be able to be seen (hands and fore-arms excluded) entirely from either side and above. Windshields are the only acceptable use of transparent material.

3. SEAT/TAIL SECTION

- a. The seat/tail section streamlining shall meet the following criteria.
- b. Streamlining shall not extend beyond the rear edge of the rear tire.
- c. No streamlining behind the rear axle is permitted to be lower than the top rim of the rear wheel.

3.11G -- SPECIAL CONSTRUCTION (A) CLASS

1. DEFINITION: SPECIAL CONSTRUCTION (A) CLASS

- a. This class is for purpose built race motorcycles. Special construction class is unlimited in design with the following noted exceptions.

- b. The seat area (farthest to rear) shall not be above and/or behind a line drawn vertically upwards through the rear axle.
- c. It must be rear wheel drive only.
- d. The use of an O.E.M. frame in the Special Construction class must have a minimum of two of the following:
 - i. Two engines with a combined displacement not to exceed 3000cc.
 - ii. Seat base is lower than an imaginary line drawn between the tops of the rims.
 - iii. Engine and frame are from different manufacturers.
 - iv. Altered steering head angle.
 - v. Altered main frame engine/transmission mounts and tubes. The main frame is defined as the connection from the steering neck to the engine mounts and swing arm pivots.
 - vi. Non O.E.M. fuel tank not using the O.E.M. mounting points.
 - vii. Center hub steering.
 - viii. Wheelbase exceeding factory O.E.M. dimensions by more than +10 percent. Measurement will be taken at the most forward axle setting. It shall be the participant's responsibility to provide proper documentation listing specifications.
- e. It shall be the participant's responsibility to provide proper documentation listing all O.E.M. specifications for any modifications at the time of scrutineering.
- f. Entrants in this class may be asked to provide test certifications on components and stress examination as required.
- g. The participant is responsible for the structural integrity and fitness of the design, assembly and welding in this class.

2. BRAKE SYSTEM

- a. Rear brakes (required) shall be actuated from the handlebars or foot peg position. Front brakes are not required in this class. Hydraulic and/or mechanical drum/shoe and disc brake assemblies are accepted.

3. CHAIN/BELT GUARD

- a. A chain/belt guard is mandatory for primary drive and rear drive sprockets and/or pulleys. Guards shall be of suitable steel or alloy material and measure no less than 0.25 inch wider than the chain/belt. This guard must also extend over the rearward edge/apex of the rear sprocket.

4. ENGINE

- a. Any combination of motorcycle engines, not to exceed two is allowed. Combined engine displacement cannot exceed maximum of 3000cc.

5. EXHAUST AND MUFFLERS

- a. The length of an exhaust/muffler assembly shall not extend past the rear edge of the rear tire. It must be sufficiently anchored.

6. FOOT PEGS

- a. Mandatory equipment, location of foot pegs is discretionary.

7. FUEL TANK

- a. Fuel tanks shall be securely mounted, with attention to craftsmanship.
- b. Location of fuel tank is discretionary.

8. FENDERS

- a. Fenders are not required.
- b. The front and rear fenders may be O.E.M. or replaced by a generic and must meet the following:
 - i. Front fenders shall provide a continuous 210 degrees of visibility of wheel and tire and not be lower than a horizontal line through the axle. The perimeter of the fender shall not be more than 1.75 inches from the tire tread, and shall not flair over the fork tubes by more than 2 inches overall.
 - ii. Rear fenders shall not extend below the horizontal line of the rear axle.
 - iii. An elongated seat may act as rear fender.
 - iv. Rear fender/seat section shall not extend beyond the rear edge of the rear tire, and shall not be lower than the top rim of the rear wheel.

9. OPEN CLASS

- a. Open class motorcycles may not have streamlining. Streamlining is anything that has the perceptible purpose of directing or controlling the airflow around the motorcycle and/or rider, thus reducing drag. The primary seat area of the motorcycle must be covered at all times.
- b. The riders seat/tail section shall not extend past the most rearward edge of the rear tire and shall not be higher than 5 inches above the lowest section of the top of the seat cushion or seat base if no cushion is used, nor shall it be wider than the rider as viewed from the rear.
- c. The rear wheel (excluding the tire) must remain visible at all times as viewed from the side.
- d. If the seat/tail section does not meet the above standards, the Chief Technical Steward will determine its legality by observing the motorcycle and rider in a race position to determine if the seat/tail section is an aerodynamic aid.

3.11H -- SPECIAL CONSTRUCTION PARTIAL STREAMLINING (APS) CLASS

1. DEFINITION: SPECIAL CONSTRUCTION PARTIAL STREAMLINING (APS) CLASS

- a. In addition to rules for the "Special Construction" classes ([See 3.11E](#)) the following rules apply to "Special Construction Partial Streamlining Class".

2. PARTIAL STREAMLINING

- a. A minimum of 180 continuous degrees shall be showing of the front wheel.

- i. It shall not be blocked by streamlining.
- ii. There must be no streamlining forward of the leading edge of the front tire exceeding 2 inches.
- b. With the rider in the racing position, the rider must be able to be seen (hands and fore-arms excluded) entirely from either side and above.
- c. Windshields are the only acceptable use of transparent material.

3. SEAT/ TAIL SECTION

- a. Seat/tail section streamlining shall meet the following criteria.
 - i. Streamlining shall not extend beyond the rear edge of the rear tire more than 10-inches.
 - ii. It shall not be closer than 4-inches from the ground starting at the most forward edge of the rear wheel and extending rearward.
 - iii. All measurements will be taken without motorcycle on stands and with rider seated in racing position.

4. EXHAUST AND MUFFLERS

- a. All exhaust and mufflers must exit outward of all bodywork.

3.11I -- STREAMLINER (S) CLASS

1. DEFINITION: STREAMLINER (S) CLASS

- a. Streamliners are defined as a two-wheeled motorcycle with an unlimited wheelbase that shall leave a single track. All streamliners shall be capable of being leaned a minimum of 20 degrees from their vertical position without touching the ground.
 - i. Pay The rider shall be restrained inside a structure capable of completely containing and protecting the rider's entire body during loss of control events. Pay careful attention to restraints, which maintain the rider's normal seating position during a high-energy loss of control event.
- b. Due to the specialized nature of these machines, all participants are encouraged to address questions to the AMA and the promoters about guidelines prior to entry.
- c. Builders of any frame other than those constructed of steel shall submit frame structure information to the promoters that document the durability of the structure.
 - i. When requested, provide test certifications on components and stress examination as required.

2. BATTERIES

- a. All wet-cell batteries shall be mounted outside the rider compartment.
- b. Batteries mounted in the rider compartment shall be inside of an acid spill proof sealed box.
- c. Metal framework, substantially mounted, will secure batteries mounted in alternate areas.
- d. Battery hold down devices shall not include tie straps or bungee style cords.

- e. Two well-marked and identified battery disconnect switches; inside the cockpit and outside on the rear or top of the streamliner are mandatory.

3. BRAKES/WHEELS

- a. Rear brakes required. Wheel and tire size are unlimited.

4. CANOPY AND WINDSHIELD

- a. The canopy assembly shall be removable from the inside and the outside without the use of any tools.
- b. The outside of the machine must have clear markings with specific instruction for removal.
- c. The rider shall be able to exit the machine, upright or on its side, without assistance.
- d. Use only shatterproof plastic with 120 degrees of direct horizontal vision from the rider's position forward to construct the canopy windshield.
- e. The canopy shall be clear of any obstructions. In addition, do not attach it to the steering mechanism or any other control mechanisms.

5. CLASS AND NUMBER DISPLAY

- a. Each streamliner shall have numbers/letters in a minimum area of 10 inches by 12 inches displayed on both sides. Use a contrasting color to that of the body color and display the number and class designation. (See 3.11B.13)

6. DRIVER SUIT & HELMET

- a. An approved rider suit is mandatory.
- b. A minimum suit meets the SFI 3-2A/15 or higher rating. Accessories (boots, gloves, etc.) shall be a minimum SFI 3.3/5 rating, however it is recommended that the rating for the suit, gloves and boots are rated the same minimum (15 or higher).
- c. Helmets for streamliners shall be of the SA 2015 or newer.
- d. Nomex interior liner is required, with a Nomex skirt that shall be tucked inside the suit collar for neck protection. This skirt can be integrally woven to the helmet or externally attached around the lower edge of the shell.

7. ENGINE

- a. The Streamliner class is limited to one or two motorcycle engines with a combined displacement not to exceed 3000cc.

8. EXTERNAL CONTROLS

- a. Including all features stated in these streamliner guidelines, external operations of the following functions are required:
 - i. Ignition-Main shut off
 - ii. Riders compartment exit
- b. All external access and operation points shall be clearly marked on the exterior.

- i. It is recommended that panel removal access is marked on the exterior.
- c. It is recommended that the fire extinguisher(s) also have external operating controls.

9. FIREWALL AND TANK REQUIREMENTS

- a. The engine and fuel compartments shall be sealed off from the rider with a minimum of one firewall in a manner to prevent exploding parts, heat, and liquids from entering the rider compartment. When considering these liquid tight firewall requirements remember that these streamliners often come to rest tipped on their sides.
 - i. The minimum firewall thickness shall be 0.06" steel.
 - ii. Aluminum firewalls are not recommended, however if in place, they shall be a minimum of 0.125-inch thickness.
 - iii. Fire resistant matting is recommended for all firewalls.
 - iv. The engine and fuel compartments shall have sufficient drainage.
- b. Wiring, linkage and controls shall be sealed through the firewall to avoid leakage.
- c. A bulkhead must separate the rider from the front wheel.
- d. Fuel and oil tank(s) are not permitted inside of the rider compartment.
- e. Fuel lines shall not enter the rider compartment.
- f. Water or water wetter agents will be the only engine coolant allowed.

10. FIRE EXTINGUISHING

- a. A manually controlled fire extinguisher system shall be installed in this class.
- b. Automatic systems with a heat-sensing switch shall also have a manual control to override the extinguishing system.
- c. One manual emergency control is mandatory and it shall be within reach of the rider and stay activated once pulled.
 - i. It is recommended that the extinguishing system also be able to be activated from the exterior.
- d. Extinguishing agents shall be approved and certified for use in confined spaces.
 - i. The most recent approved extinguisher technology is recommended.
- e. All nozzles, lines, and valves shall be securely mounted, and free flowing.
 - i. Hose lines should be repeatedly checked for wear or corrosion.
- f. Hose clamps are not acceptable for mounting of extinguisher bottle.
- g. Installation of extinguisher shall be to the manufacturer's specifications for the specific size and shape of the rider's compartment.
- h. All extinguishing equipment shall have an inspection or full tag not more than twelve months old.
- i. Identified below are the minimum fire extinguisher requirements for streamliners.
 - i. 0-150 mph: 5 pounds minimum for rider area.

- ii. 151mph and above: 10 pounds. The extinguisher areas covered shall be divided between the rider and engine compartments with a minimum of 5 pounds for rider and 5 pounds for the engine compartment. Separate systems are recommended.
- iii. All tow and push vehicles in this class shall be equipped with a minimum of one 5-pound fire extinguisher.

11. FUEL SHUTOFF

- a. Streamliners shall have a positive fuel shutoff activated from the rider compartment.

12. LEAN ANGLE

- a. The vehicle, unloaded, must be capable of being leaned at an angle of 20 degrees (minimum) from the vertical without touching the ground, other than the tires.

13. PARACHUTE

- a. All streamliners are required to have a parachute.
 - i. Entrants in this class with records above 250 mph are required to have separate high speed and low speed parachute.
- b. Streamliners in this class with an open tail shall be equipped with an automatic actuator that releases the parachute at 40-degrees from upright. Streamliners with a closed tail shall automatically actuate parachute at 40-degrees from upright.
- c. Riders shall be able to activate the parachute without their hands leaving the steering mechanism.
- d. All parachutes shall be mounted to a cross frame member.
- e. Size, mounting of parachute and tether lines shall be installed according to parachute manufacturers' specifications.
- f. Heat/fire protection of all attachment points and first six feet of riser line is required.
- g. Parachutes shall be packed and active at all times while on course.
- h. Tilt switch activator shall be tested during scrutineering.

14. ROLL CAGE

- a. It is required that streamliners have a minimum of two roll bars, one forward of the rider's head, and one behind the rider's head.
- b. The protective cage shall extend past the rider's feet and shall protect the rider from all sides and directions.
- c. Roll bars shall have a minimum outside diameter of 1.25 inches, a 0.09-inch nominal wall thickness, steel cap, 0.09-inch thick covering the upper 140 degrees, riders head and braced on each side to main frame.
 - i. Gussets are required at the junction of the roll cage and chassis tubes.
- d. The rider, with helmet on, shall not have more than 2 inches of head movement within the roll bar.
- e. Foam padding, which has a minimum 0.25-inch compression and meets SFI 45.1 or Fédération Internationale de l'Automobile (FIA) specification shall be installed around the head hoop or head area, as well as all head hoop supports in the roll cage assembly.

- f. Seats are an integral part of the rider restraint and protection within the roll cage.
 - i. Seats shall be welded or securely bolted to the chassis and be constructed of 0.060 steel or 0.120 aluminum.
 - ii. Seat backs shall be supported by chassis members or equivalent strength structure.
 - iii. All non-metal seats shall maintain rider seating position and restraint belt tension during a loss of control event.
- g. The rider leg area shall be inside the chassis and the cage structure on the top, sides and bottom.
 - i. If there is removable cross member above the rider's legs, it shall be constructed of the material similar in strength to the tube requirement (3.111.14.c).
 - ii. Hinge and securing hardware shall be a minimum of 3/8-inch diameter grade eight fasteners at four points minimum.
 - iii. Any other roll cage design shall be tested for strength and have a finite element study to prove its strength by a qualified expert or a person holding qualifications of a recognized institute (engineering firm, etc).

15. STEERING

- a. All steering including links, rods, and cables shall move unbound through the body and firewall and be free without excessive play. The steering assembly shall be rigid mounted to the frame.
- b. Long steering rods must be able to collapse and have secondary stops.
- c. All steering components shall have grade 5 or better bolts.
- d. Welds on steering components may be subject to X-ray certification.
- e. Quick disconnects for handlebars are permitted.

16. RIDER RESTRAINT AND SYSTEMS

- a. Installation of shoulder and seat belts shall be to the manufacturers specifications, labeled with the date of manufacturer, and no more than five years from the date of inspection.
- b. Shoulder and seat belts shall be attached to the protective cage tubing.
 - i. Bolt in restraint belts shall use belt manufacturer supplied or similar hardware.
 - ii. Mounting plates welded to the chassis shall be a minimum 0.125-inch thickness with a minimum 1-inch radius material in the load path outside the bolt circumference.
 - iii. Belts shall be attached to the tubing in line with the direction of pull as close to the rider as is practicable.
- c. Shoulder belts passing over tubing and remotely attached to a different distant chassis member will not be allowed.
- d. **Aluminum hardware as a component of any belt system is not permitted.**
- e. Latch type belt release systems shall be resistant to and protected from arm restraints releasing the latch.
- f. Arm restraints are mandatory with anchor points to the harness assembly secured to the frame. Rider released leg restraints are

compulsory for any streamliner that does not have a welded or bolted structure over the leg area.

- g. Rider releasable leg restraints are recommended in all cockpits.
 - i. Net type leg restraints are acceptable as long as the net will allow the rider to exit the streamliner without assistance.
- h. Do not expose belt and harness mounting hardware on the outer plane of the chassis.
 - i. All streamliners require a seven-point harness to hold the rider.
- j. An SFI 38.1 type helmet restraint system is strongly recommended for closed cockpit motorcycles.

17. STREAMLINER COMPARTMENT (COCKPIT)

- a. Roll cage and interior panels shall prevent the rider's extremities from extending outside the rider compartment.
- b. All mounting tabs, brackets, and protrusions into the cockpit shall be free of sharp edges.
- c. The rider compartment shall have an outside air source.
- d. All riders shall demonstrate exiting ability from the rider compartment within 30 seconds without assistance.

18. TRIAL RUNS

- a. At the discretion of the meet officials, all streamliners and/or new riders of streamliners may be required to make a series of trial runs to exhibit stability during incremental speeds.
- b. All trial runs shall be conducted with parachute fully operational and all body and canopy panels in place.

19. SKIDS

- a. Streamliners that use skids shall have a positive up-locking and positive down-locking feature.
- b. Turn up the front edge of the skids to avoid digging into the salt surface.
- c. In addition, as soon as the vehicle becomes stable the rider must be able to raise the skids easily.
 - i. It is recommended that skid up and down indicators are installed in the cockpit.

3.11J -- SIDECARS (SC) CLASS

1. DEFINITION: SIDECAR (SC) CLASS

- a. Sidecars are two-wheeled motorcycles with a third wheel attached to a sidecar that leaves two separate and distinct tracks with the front wheel track being covered by the rear-driven wheel track. The chassis and suspension may be of traditional motorcycle design with sidecar chassis attached, utilizing body and platform panels.
- b. Attached sidecars integrated into a special construction chassis are allowed.
- c. The sidecar can be mounted on the right or left of the rider with mounting brackets, universal or rigid bar fittings for rigidity, application and sufficient depth of engagement. Any and all attaching hardware for the sidecar to the motorcycle must be safety wired and be visible. Special attention will be made to the

sidecar construction, mounting hardware and sufficient distribution of stress with the sidecar mounted. Universal brackets and hardware are prohibited.

2. ENGINE POSITION

- a. Any combination of motorcycle engines not to exceed two is allowed. Combined engine displacement of a maximum of 3000cc shall be mounted on a centerline between the front and rear wheels.

3. FRONT/ REAR WHEEL SIZE

- a. Rear-wheel-drive only is permitted. Front and rear wheel size is restricted to 10-inch minimum diameter and sidecar minimum of 5-inch diameter.

4. PASSENGER PLATFORM

- a. The sidecar platform shall be large enough to allow a passenger to ride in the sidecar. The minimum dimensions of the passenger's space on the platform are 32 inches long by 12 inches wide.
- b. If carrying a passenger:
 - i. A shield shall cover the sidecar wheel and tire on the inside of the passenger platform.
 - ii. There shall be a handhold mounted for the passenger.
 - iii. The sidecar mounting hardware and/or rigid bars shall not be used as designated handholds.
 - iv. Passenger shall ride in the kneeling or prone position.
- c. In lieu of a passenger or above 175 mph, a minimum ballast or weight of 60kg (approx. 132 pounds) must be mounted and secured to the sidecar. The ballast shall not serve any functional purpose other than weight and must be removable for weight verification.

5. RIDER LOCATION

- a. The rider shall control the motorcycle/sidecar from the seating or kneeling position on the tire tread centerline between the front and rear wheels.
- b. Standard motorcycle handlebars are required.
- c. The rider and passenger shall be able to exit the motorcycle and sidecar without restrictions or assistance.

6. STEERING

- a. A steering damper is mandatory.
- b. Steering is by front wheel only.
- c. A center hub, spindle steering/ suspension system is permitted.

7. TRACK AND WHEELBASE

- a. Track is measured from the center of the rear wheel tire to the center of the sidecar wheel tire and shall be more than 32- inches.

- b. Overall wheelbase of the motorcycle as measured between the centerline of the front and rear axles cannot be less than 50-inches or more than 110-inches.

8. WINDSHIELD/ FAIRINGS

- a. With the rider in the racing position, the riders' upper torso must be able to be seen from either side of the motorcycle (hands and fore-arms excluded).
- b. Dustbin-style fairings can be used and windshields are the only acceptable use of transparent material.

3.11K -- SIDECAR STREAMLINER (SCS) CLASS

1. DEFINITION: SIDECAR STREAMLINER (SCS) CLASS

- a. Originality of construction is encouraged. An unlimited wheelbase is permitted. This class shall meet the criteria specified in [3.11I](#) with the exclusion of "skids."
 - i. Sidecar Passenger platform minimums (section [3.11J.4](#)) in this section are required.
 - ii. Passengers are not permitted in this class.

2. TEST RUNNING

- a. All sidecar streamliners in this class may be required to make a series of trial runs to exhibit stability during incremental speeds.
- b. Sidecar ballast or wheel alignment adjustment may be compulsory.

3.11L -- ENGINE BY CLASSIFICATION

All classes, with the exception of Diesel (D, DB) Solar/Electric (W) and Other Propulsion (X) shall use motorcycle engines. A motorcycle engine is defined as any engine that was specifically designed for use in a motorcycle.

1. PRODUCTION (P)

- a. Use the same engines (gasoline only) originally installed in the specific motorcycle frame at the time of production and ensure it meets the definition set in the 'P' frame class ([See 3.11D](#)). Original equipment (OEM) shall include cylinders, cases (crankcases), heads, and carburation or throttle body (stock venturi size), kick-starter or electric starter. Displacement determines the class. OEM displacement specifications must remain stock.
- b. GASOLINE ONLY. Fuel not permitted in this class. ([See 3.11B.7](#))
- c. **P** engine class shall not run in **M**, **MPS**, **A**, **APS** or **S** frame classes

2. PRODUCTION, PUSHROD (PP)

- a. The camshaft shall be located below the cylinder to head deck, and have push rods that open valves with the use of individual lifters. Paragraph [3.11L.1](#) above is also applicable.

3. PRODUCTION, VINTAGE (PV)

- a. Same as [3.11L.1](#) but with a production date prior to 1956.
- b. Allowable overbore in this class is + .050- inches over OEM standard bore to remain in displacement class.

4. PRODUCTION, CLASSIC (PC)

- a. Same as [3.11L.1](#) but with a production date prior to 1981.
- b. Allowable overbore in this class is + .050- inches over OEM standard bore to remain in displacement class.

5. PRODUCTION, SUPERCHARGED (PB)

- a. [3.11L.1](#) is also applicable.
- b. If installed at time of manufacture, a turbocharger or supercharger will be allowed. You cannot use aftermarket equipment.

6. PUSH ROD: GASOLINE (PG)

- a. The camshaft shall be located below the cylinder to head deck, and have push rods that open valves with the use of individual lifters and must have the same number of valves in the cylinder head as produced by the original manufacturer.
- b. GASOLINE ONLY. ([See 3.11B.7](#))

7. PUSH ROD: FUEL (PF)

- a. The camshaft must be located below the cylinder to head deck, and have push rods that open valves with the use of individual lifters and shall have same number of valves in the cylinder head as produced by the original manufacturer.
- b. NO FUEL RESTRICTIONS. ([See 3.11B.6](#))

8. PUSH ROD, SUPERCHARGED GASOLINE (PBG)

- a. The camshaft shall be located below the cylinder to head deck, and have push rods that open valves with the use of individual lifters.
- b. A mechanically driven supercharger and/or exhaust driven turbocharger is mandatory.
- c. Use of water injection is acceptable.
 - i. The water container shall be sealed by race officials.
- d. GASOLINE ONLY. ([See 3.11B.7](#))

9. PUSH ROD, SUPERCHARGED FUEL (PBF)

- a. The camshaft shall be located below the cylinder to head deck, and have push rods that open valves with the use of individual lifters.
- b. A mechanically driven supercharger and/or exhaust driven turbocharger is mandatory.
- c. NO FUEL RESTRICTIONS. ([See 3.11B.6](#))

10. VINTAGE GASOLINE (VG)

- a. The engines production date shall be prior to 1956. Flathead, OHV, and two-stroke engines shall retain the O.E.M. heads,

cylinders, and crankcases originally installed at time of factory production. Above components produced after 1955 and exact reproductions may be legal in vintage class if they offer no competitive advantage.

- b. Documentation may be required to prove authenticity of vintage design.
- c. Allowable overbore in this class is + .050- inches over OEM standard bore to remain in displacement class. Further increased displacement beyond the class limit shall place the motorcycle in the correct class.
- d. GASOLINE ONLY. ([See 3.11B.7](#))

11. VINTAGE FUEL (VF)

- a. The engines production date shall be prior to 1956. Flathead, OHV, and two-stroke engines shall retain the O.E.M. heads, cylinders, and crankcases originally installed at time of factory production. Above components produced after 1955 and exact reproductions may be legal in vintage class if they offer no competitive advantage.
- b. Documentation may be required to prove authenticity of vintage design.
- c. Allowable overbore in this class is +0.050 inches over O.E.M. standard bore to remain in displacement class. Further increased displacement beyond the class limit shall place the motorcycle in the correct class.
- d. NO FUEL RESTRICTIONS. ([See 3.11B.6](#))

12. VINTAGE, SUPERCHARGED GASOLINE (VBG)

- a. The engines production date shall be prior to 1956. Flathead, OHV, and two-stroke engines shall retain the O.E.M. heads, cylinders, and crankcases originally installed at time of factory production. Above components produced after 1955 and exact reproductions may be legal in vintage class if they offer no competitive advantage.
- b. Documentation may be required to prove authenticity of vintage design.
- c. A mechanically driven supercharger and/ or exhaust driven turbocharger is mandatory.
- d. Use of water injection is acceptable.
 - i. The water container shall be sealed by race officials.
- e. Allowable overbore in this class is +0.050 inches over O.E.M. standard bore to remain in displacement class. Further increased displacement beyond the class limit shall place the motorcycle in the correct class.
- f. GASOLINE ONLY. ([See 3.11B.7](#))

13. VINTAGE, SUPERCHARGED FUEL (VBF)

- a. The engines production date shall be prior to 1956. Flathead, OHV, and two-stroke engines shall retain the O.E.M. heads, cylinders, and crankcases originally installed at time of factory production. Above components produced after 1955 and exact reproductions may be legal in vintage class if they offer no competitive advantage.

- b. Documentation may be required to prove authenticity of vintage design.
- c. A mechanically driven supercharger and/ or exhaust driven turbocharger is mandatory.
- d. Allowable overbore in this class is +0.050 inches over O.E.M. standard bore to remain in displacement class. Further increased displacement beyond the class limit shall place the motorcycle in the correct class.
- e. NO FUEL RESTRICTIONS. ([See 3.11B.6](#))

14. CLASSIC GASOLINE (CG)

- a. The engines production date shall be prior to 1981. All engines shall retain the O.E.M. heads, cylinders, and crankcases originally installed at time of factory production. Above components produced after 1980 and exact reproductions may be legal in Classic class if they offer no competitive advantage.
- b. Documentation may be required to prove authenticity of classic design.
- c. Allowable overbore in this class is +0.050 inches over O.E.M. standard bore to remain in displacement class. Further increased displacement beyond the class limit shall place the motorcycle in the correct class.
- d. GASOLINE ONLY. ([See 3.11B.7](#))

15. CLASSIC FUEL (CF)

- a. The engines production date shall be prior to 1981. All engines shall retain the O.E.M. heads, cylinders, and crankcases originally installed at time of factory production. Above components produced after 1980 and exact reproductions may be legal in Classic class if they offer no competitive advantage. Documentation may be required to prove authenticity of vintage design.
- b. Allowable overbore in this class is +0.050 inches over O.E.M. standard bore to remain in displacement class. Further increased displacement beyond the class limit shall place the motorcycle in the correct class.
- c. NO FUEL RESTRICTIONS. ([See 3.11B.6](#))

16. CLASSIC, SUPERCHARGED GASOLINE (CBG)

- a. The engines production date shall be prior to 1981. All engines shall retain the O.E.M. heads, cylinders, and crankcases originally installed at time of factory production. Above components produced after 1980 and exact reproductions may be legal in Classic class if they offer no competitive advantage.
- b. Documentation may be required to prove authenticity of vintage design.
- c. A mechanically driven supercharger and/ or exhaust driven turbocharger is mandatory.
- d. Use of water injection is acceptable.
 - i. The water container shall be sealed by race officials.
- e. Allowable overbore in this class is +0.050 inches over O.E.M. standard bore to remain in displacement class. Further increased

displacement beyond the class limit shall place the motorcycle in the correct class.

- f. GASOLINE ONLY. ([See 3.11B.7](#))

17. CLASSIC, SUPERCHARGED FUEL (CBF)

- a. The engines production date shall be prior to 1981. All engines shall retain the O.E.M. heads, cylinders, and crankcases originally installed at time of factory production. Above components produced after 1980 and exact reproductions may be legal in Classic class if they offer no competitive advantage.
- b. Documentation may be required to prove authenticity of vintage design.
- c. A mechanically driven supercharger and/ or exhaust driven turbocharger is mandatory.
- d. Allowable overbore in this class is +0.050 inches over O.E.M. standard bore to remain in displacement class. Further increased displacement beyond the class limit shall place the motorcycle in the correct class.
- e. NO FUEL RESTRICTIONS. ([See 3.11B.6](#))

18. MODIFIED GASOLINE (AG)

- a. Unlimited design. You cannot use superchargers and turbochargers. Construction shall include a majority of motorcycle engine parts. However, you can use fuel injection.
- b. GASOLINE ONLY. ([See 3.11B.7](#))

19. MODIFIED FUEL (AF)

- a. Unlimited design. You cannot use superchargers and turbochargers. Construction shall include a majority of motorcycle engine parts. However, you can use fuel injection.
- b. NO FUEL RESTRICTIONS. ([See 3.11B.6](#))

20. SUPERCHARGED GASOLINE (BG)

- a. A mechanically driven supercharger and/or exhaust-driven turbocharger is mandatory.
- b. Unlimited design. Construction shall include a majority of motorcycle engine parts. Fuel injection is allowed.
- c. Use of water injection is acceptable.
 - i. The water container shall be sealed by race officials.
- d. GASOLINE ONLY. ([See 3.11B.7](#))

21. SUPERCHARGED FUEL (BF)

- a. A mechanically driven supercharger and/or exhaust-driven turbocharger is mandatory.
- b. Unlimited design. Construction shall include a majority of motorcycle engine parts. Fuel injection is allowed.
- c. NO FUEL RESTRICTIONS. ([See 3.11B.6](#))

22. DIESEL (D) DIESEL FUEL ONLY

- a. Unlimited Design. You cannot use superchargers and turbochargers. Fuel injection permitted.

- b. DIESEL FUEL ONLY.

Displacement Class	Maximum CC
750	750
1500	1500
3000	3000

23. DIESEL, SUPERCHARGED (DB)

- a. A mechanically driven supercharger and/ or exhaust driven turbocharger is mandatory. Unlimited Design. DIESEL FUEL ONLY.
- b. Engine displacement is based on the table shown in 3.11L.22.

24. SOLAR/ELECTRIC (W)

a. ELECTRIC MOTOR

- i. Only electric motor(s) shall be used as propulsion method in this class Weight determines this engine class:

Weight Class	Maximum weight
150kg (330.7lb)	150kg
300kg (661.4lb)	300kg
Unlimited	-

- ii. NOTE: Pound weight converted from kilogram weight to match the FIM regulations for this class.

b. BATTERIES

- i. Secure batteries to motorcycle frame with metal framework, adequate to secure in case of loss of control event. Do not use tie straps and bungee style cords to secure batteries. The battery may consist of several individual battery packs.
- ii. All battery types should be equipped with Battery Management System (BMS).
- iii. A service disconnect should be between the traction battery pack and the rest of the drive system.

c. BATTERY CHARGING

- i. Batteries shall be recharged in the pits or other designated areas only. During record attempts 1.H. also applies to recharging.
- ii. Chargers shall be properly grounded to prevent shock hazard. If the charger is connected to a generator, the motorcycle chassis should be connected to the ground wire of the generator. If chargers are connected to power grid the motorcycle chassis shall be connected to earth ground.
- iii. Minimum one (1) 5-pound fire extinguisher must be available during charging. A motorcycle on charge must always be attended by a crew member.

d. INDICATORS

- i. All motorcycles shall have a clearly visible red tail lamp indicating a live/energized motorcycle. A similar light shall also

be visible to the rider seated in racing position. The light shall be off when the master shutoff/safety contactor is open.

e. **INSULATION**

- i. The traction battery pack, traction wiring, motor, motor controller, and all other parts of the high voltage traction circuit shall be securely isolated from the chassis of the motorcycle and properly insulated. All traction wiring must have insulation rated for the maximum voltage of the battery pack.
- ii. When the motorcycle is in race ready condition, voltages over 24V shall be protected from human contact.

f. **MOTOR(S)**

- i. Air cooled open frame type motors must have adequate steel or aluminum shielding between the motor and rider.

g. **Motor Master Controller Shutoff**

- i. All motorcycles, shall have a master shutoff located within reach of the rider, which shall also operate the safety contactor. The rider shall be able to operate the shutoff without taking the hands off the handlebar or the feet off the foot pegs (Production (P) class excluded).
- ii. Rider lanyard must be capable of shutting off all the power to the electric traction motor (streamliner's excluded).
- iii. All vehicles, except in the Production (P) frame class, shall have an externally operated switch or control located at the rear of the vehicle, clearly marked to indicate 'OFF' position. The switch or control shall operate the safety contactor. The switch shall be clearly identified in writing located adjacent to the switch. The switch or control shall be red on a yellow background.

h. **Over Current Protection**

- i. The traction system shall have DC over-current protection. Circuit breaker(s) or fuse(s) permitted for the over-current protection. The current rating for the breaker(s) or fuse(s) shall be lower than a short circuit current that the battery pack can produce without damage. The breaker(s) or fuse(s) shall have a DC voltage rating equal or greater to the nominal pack voltage, and a continuous current rating lower than the safety contactor.

i. **Rider Compartment (Streamliners)**

- i. The motor(s) and battery shall be located outside the rider's compartment (cockpit).
- ii. No traction wiring shall be in the rider's compartment.
- iii. High voltage instrument wiring is permitted but should be kept to a minimum.

j. **Safety Contactor**

- i. All vehicles, excluding Production (P) frame class, shall incorporate at least one electrical safety contactor that de-

energizes the traction system. The safety contactor shall have a voltage rating equal or higher than the maximum total battery voltage.

- ii. The use of solid-state switches for safety contactor is prohibited. If the contactor is controlled by an external low-voltage circuit, the default (de-energized) position of the contactor shall be 'open'. The safety contactor shall NOT routinely open or close under load. It shall be separate from any contactor used to throttle the vehicle, or to pre-charge the controller, for example.

25. OTHER PROPULSION(X)

Each case will determine the rules that will govern these classes. Meet promoters reserve the right to refuse entry for participants in this class.

3.11M -- NATIONAL RECORDS

National Records are maintained by the AMA and available by contacting AMA resources or available online at www.bonnevillefst.com.