

**SOUTHERN CALIFORNIA TIMING ASSOCIATION  
Presents 2011 Speed Trials RULES**

**SECTION 7 MOTORCYCLE COMPETITION SPECIFICATIONS**

Following are the rules governing motorcycles participating in the Bonneville Nationals Speed Trials.

**7.B MOTORCYCLE TECHNICAL SPECIFICATIONS & REQUIREMENTS:**

**7.B.1 Number/Classes:**

All entries shall have the number and class on each side of the motorcycle, and the number and class shall be clearly visible with the rider in the riding position and shall contrast with the background on which they are applied. All entry numbers shall be a minimum of 3 in. high and 1 in. wide. All class designation characters shall be at least 1 in. high. The number/class shall be located within a flat, smooth vertical surface with a minimum dimension of 6 in by 8 in **and a maximum of 10 in by 12 in**. The surface may be part of the motorcycle or number plates may be used. Plates, if used, shall be securely mounted; meet the dimensions and any corners shall have a 1 in. radius, and shall be located ahead of a vertical line through the rear axle.

**7.B.10 Wheels:**

Wheels shall have a minimum nominal diameter of 15 in. except in the Sidecar and Streamliner classes. It is highly recommended that strict attention be paid to wheel alignment, wheel balance, spoke tension and tire run-out. Non-cross ventilated front wheels are not allowed except in the sidecar and streamliner classes if the wheel is fully enclosed by the body work. It is **REQUIRED** that front wheels be cross ventilated by an area equal to at least 25% of nominal rim circle area. Non-cross ventilated wheels rear wheels are allowed. No **front** wheel discs are permitted. **Wheel disc may be installed on the rear wheel only, and must be installed in a secure , workmanship like manner. Installation methods will be closely scrutinized.**

**7.B.13 RESERVED**

**7.C RIDING APPAREL:**

**7.C.1 Rider's Helmet:**

All riders shall wear a full-face helmet with face shield, which shall meet **Snell Foundation M2005** or later specifications. Helmets shall be visually inspected at least once each year. Helmets shall be undamaged, unmodified and in serviceable condition. Eyeglasses worn under the helmet shall be shatterproof. Riders shall demonstrate proper helmet fit and "roll-off" resistance. **Helmets for motorcycle streamliners shall comply with section 3.A.2.**

**7.D CLASSIFICATION of DISPLACEMENTS, FRAMES, ENGINES, and ENGINE TYPES:**

**7.D.3 Engine Displacement Classes:**

Engine Classes are shown in cubic centimeters: 50, 100, 125, 175, 250, 350, 500, 650, 750, 1000, 1350, 1650, 2000 and 3000 where permitted and 3001 and above where permitted.

Displacement shall be greater than the maximum allowable for the next lower class. To permit minor reconditioning of worn cylinder blocks in classes other than Production, it is permitted to increase cylinder bore diameter .020 in. (.508 mm) beyond that which provides maximum displacement for the class. In all cases, the resulting displacement shall be exceeded to qualify for the next higher class. The .020 in. (.508 mm) will be discounted for record certification and will be noted on the certification card and in the logbook.

**Vintage engines are allowed +.050 in overbore, see 7.J.10.**

<b>7.D.4</b>	<b>Frame Class</b>	<b>Engine Classes Available</b>	<b>Max Displ.</b>	<b>Max No. of Engines:</b>
	P	P, PP, PB, PPB, PV	3000	1
	M	All except UG, UF, <b>P &amp; PP</b>	3000	1
	MPS	All except UG, UF, <b>P &amp; PP</b>	3000	1
	A	All except UG, UF, P, PP & omega	3001 & above	2
	APS	All except UG & UF, P, PP	3001 & above	2
	S	All except P, PP	3001 & above	2
	SC	All except P, PP & omega	3001 & above	2
	SCS	All except P, PP	3001 & above	2

Classes defined and not restricted under items 7.D.1, 7.D.2, 7.D.3 and 7.D.4 are open for competition.

**7.E EQUIPMENT**

**7.E.1.4 Air Cleaner Element, Toolbox, and License Plate Bracket:**

**Air cleaner element and toolbox may be removed. The license plate bracket must remain.**

**7.E.1.5 Number/Class:**

See Section 7.B.1. **Number plates may not cover any part of the rear wheel when viewed from the side.**

## 7.G SPECIAL CONSTRUCTION

The Special Construction class is intended for purpose-built race bikes, not production bikes with minor modifications. A special construction frame is unlimited in design, except for the class requirements of this section. This class includes factory produced road racing or any other racing "works" models.

Bikes in this class must have either a full APS fairing or two of the following:

- **Two engines**
- Unlimited engine displacement
- Seat base lower than top of rear tire with the rider seated on the bike
- A fuel tank of any size
- Design items not permitted in the Modified Production class
- **Center hub steering**

All components shall have sufficient strength to ensure stability and safety. Weld integrity and fabrication methods will be closely scrutinized during the inspection process. The technical committee may require Non-Destructive Test Certification of components and/or stress analysis of the design.

A bike entered in the Special Construction Class cannot be entered as a Modified Production Class entry within the same racing season.

### 7.G.3 Number/Class Designation Plates:

If used, a separate number plate shall be located ahead of a vertical line thru the centerline of the rear axle.

#### 7.G.11 Partial Streamlining:

If a streamlined seat/tail section is used, it can not extend further to the rear than 10 in. beyond the rear edge of the rear tire. No part of the seat/tail section may be closer than 4 in. from the ground, or over 40 in. from the ground with the rider seated. It shall be possible to see all of the rider: completely from either side, except the hands and forearms. As viewed from directly above it shall be possible to see all of the rider except the hands, forearms, legs and feet. It is forbidden to use any transparent material to avoid the application of these rules. Fairings or bodywork shall have a minimum of three (3) separate mounting points. No part of the fairing ahead of the front axle may be lower than the top of the front rim at the axle vertical centerline or be forward of the front edge of the rim. There shall be no streamlining forward of the front edge of the front rim. Front fender is optional, and if used shall comply with the following: front wheel and tire shall be visible from either side for a continuous 180 deg. of their circumference. The front of the fender may not extend lower than a horizontal line drawn through the front axle. The perimeter of the fender may not be further than 1.750 in. from the tire tread. **No part of the seat/tail section behind the rear axle may be closer than 4 in from the ground with the rider seated.**

## 7.H STREAMLINER

### 7.H.4 Roll Cage:

Shall completely surround the rider and shall be fitted in the rider's compartment. Minimum diameter is 1-1/4 in. with .090 in. nominal wall thickness, mechanical steel tubing. No galvanized pipe, black water pipe or threaded fittings are permitted. The design of the roll cage shall incorporate the following features as a minimum: Two (2) roll bars, (one forward and one after the rider's head), which shall be tied together and capped with a steel plate .090 in. thick. The cap shall cover the upper 140 deg. of the rider's head. The roll bar shall be braced with a tube of the same dimensions on each side. Rider head movement shall be limited to no more than 2 in. to each side, top, or rear, with rider's head in the normal position. Roll cage padding meeting SFI specification 45.1 for round tube roll cage padding and SFI specification 45.3 for flat roll cage padding is required in the vicinity of the driver's helmet.

**Forward movement:** All NEW motorcycle streamliners presented for inspection shall have an engineered and tested SFI spec 38.1 type head and neck restraint system. **All motorcycle streamliners shall have an engineered and tested SFI spec 38.1 type head and neck restraint system.**

**Lateral movement:** Shall be constructed such that the helmet can not exit the outer plane of the roll cage, see Section 3.A.3. The seat or roll cage structure shall provide restriction to lateral head movement of less than 2" per side inclusive of structure deflection.

## 7.I SIDECAR

A sidecar is a three-wheel vehicle leaving two tracks with only the rear-most wheel driving. **The front and rear tires shall leave one track no wider than the wider of the two tracks.**

## 7.J ENGINE CLASSES

### 7.J.13 Class Omega (Omega):

An engine using a thermodynamic cycle other than Otto, **Two Cycle or Diesel. Although electric motors are not a Thermodynamic cycle they are allowed in this class.** This class includes electric, steam and turbine engines. Entry shall comply with all applicable frame class requirements. Entrant shall submit complete power plant details to the technical committee for safety evaluation at least 45 days prior to the meet.