



**SOAR**

**SOUTHERN ONTARIO ASSOCIATION OF RACING**

**2010**

**RULEBOOK**

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The rules and/or regulations set forth herein are designed to provide for the orderly conduct of racing events and to establish minimum acceptable requirements for such events. These rules shall govern the condition of all events, and by participating in these events, all participants are deemed to have agreed to comply with these rules.

**NO EXPRESS OR IMPLIED WARRANTY OF SAFETY SHALL RESULT FROM PUBLICATIONS OF, OR COMPLIANCE WITH THESE RULES AND/OR REGULATIONS.**

They are intended as a guide for the conduct of the sport and are in no way a guarantee against injury or death to a participant, spectator or official.

**MOTORCYCLE RACING IS DANGEROUS, EVERY COMPETITOR ASSUMES BY HIS/HER PARTICIPATION, RESPONSIBILITY FOR ALL RISKS OF COMPETITION INCLUDING INJURY OR DEATH. EVERY COMPETITOR ASSUMES BY HIS/HER PARTICIPATION, THE RESPONSIBILITY AND OBLIGATION TO ASSESS THE SAFETY ASPECTS OF FACILITIES AND INDIVIDUAL CONDITIONS AND MUST ASSUME ALL RISKS OF COMPETITION, INCLUDING INJURY OR DEATH.**

SOAR reserves the right to reclassify riders. SOAR reserves the right to reclassify race results and retroactively award points and/or awards should any error be found in the originally posted event race results.

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## Section 1: RIDER LICENSE AND AGE REQUIREMENTS

- a. All riders must possess a current 2010 SOAR Road Racing Competition License.
- b. Riders must be at least **12** years of age. Riders under 18 years of age must have their license application, liability waiver, and all practice and race entry forms signed by a parent or legal guardian. **SOAR reserves the right to reject license applications for those that referees deem to be a danger to themselves or others while on the track.**
- c. Fee for replacement of lost or stolen SOAR Competition License is \$15.00 Note: Upgrade of Licenses (example: rider moves from Novice to Expert) is no charge.

## Section 2: TOP ROOKIE ELIGIBILITY

- a. Competitor must have been competing in their **first six race weekends or less** to be eligible.
- b. You must possess a Novice license.
- c. The Top Rookie Championship runs May through **October**.
- d. Only points gained in the Rookie Cup count towards the Top Rookie Championship.
- e. Top Rookie program awards top 3 in season standings.
- f. **Top Rookie will have the opportunity to use the Novice #1 plate for the following season.**
- g. **Top Rookie may not compete in the following seasons Rookie Challenge races regardless of number of events tallied at that time.**

## Section 3: RIDER CLOTHING AND PROTECTIVE EQUIPMENT

The following must be worn at all times when riding on the active course and hot pit lanes:

- a. Leather 1 piece or fully zipped (360°) together two-piece riding suits in acceptable condition covering the entire body. Suits must NOT use any slider/knee puck device using metal, steel or a similar material designed to create sparks. No metal with exception of zippers are allow in any part of the suit.
- b. Leather gloves with no holes or other openings except for breathing pinholes.
- c. Leather boots extending at least six (6) inches above the ankle and overlapping the trouser leg at all times. Boots must NOT use any slider/protective device using metal, steel, titanium or a similar material that creates sparks. Standard mounting screws on nylon type sliders accepted.
- d. SNELL 05M or SNELL 2005M and/or BSI 6658 Type A or ECE 22.05 approved full face helmet in good, undamaged condition.
  - (1) Special Imports with certification stickers from another country may be considered by race officials.  
Helmets without certification are not allowed, regardless of brand or model. There will be no exceptions to the use of uncertified helmets.
  - (2) Open face helmets are not allowed.
  - (3) Helmet face shields must be of shatterproof material.
- e. Riders are encouraged to use a separate or built in back protector.
- f. Riders will be asked to present their helmet to tech for approval. Approval lies with SOAR Tech inspector solely. Rider may also be requested to present other safety gear at any time during an event for inspection.
- g. Riders who have crashed will be required to re-tech helmets along with motorcycles before resuming on track activities.

h. All approval of all protective gear rides solely on the SOAR Tech Inspector. That inspector has total discretion to override any written rule regarding rider equipment.

#### **Section 4: RIDER CRASH AND INJURY CONTINGENCIES**

- a. Riders who crash shall NOT, at any time, ride their motorcycle back into the pits, or re-enter any practice, warm-up lap, race event, or cool-off lap unless corner marshal or SOAR Official approves. The motorcycle must be re-teched prior to any further event participation.
- b. Rider may be asked to present all protective equipment including suit, boots, gloves and helmet when re-teching.
- c. If directed to do so, a crashed rider MUST report to medical and be approved by them before continuing on track.

#### **Section 5: PIT CREW, PIT AREA, and CHILDREN**

- a. Each rider shall be responsible for the conduct of his or her pit crew.
- b. Riders shall make aware all SOAR and track requirements to members of their crew.
- c. Riders whose crewmembers violate SOAR and/or track rules and policies will be subject to fine, disqualification, and/or suspension.
- d. Each rider shall be responsible for leaving his/her pit area in a clean and acceptable condition prior to leaving the track.
- e. Children 12 years of age and under shall be under immediate adult supervision at all times.
- f. Children under the age of 12 years old are not allowed in hot pit lane at any time **while an on track event is taking place**.
- g. Children cannot ride bicycles, scooters, motorcycles, skateboards or any other device in the **hot** pit area.
- h. Pets must be on a leash (with leash held or tied off) at all times. Violation of this rule will result in penalty. Pets are not allowed in hot pit lane during the race day **while an on track event is taking place**.
- i. Only licensed motor vehicle operators OR licensed SOAR road racers shall operate motor vehicles in the SOAR pit area.

#### **NO SMOKING IN HOT PIT AREA!**

#### **Section 6: RIDER CONDUCT & RESPONSIBILITIES**

Riders may be subject to fines, license suspension and/or revocation, disqualified from points, awards and/or participating in a race event for, but not limited to, the following reasons:

##### **a. TRACK RESPONSIBILITIES OF RIDER**

- (1) Participation in practice sessions or races when not properly entered, or for which his/her motorcycle has not passed Technical Inspection.
- (2) Entering a race event or participation under any name or number other than his/her own.
- (3) Allowing another person not properly entered to participate in a race or practice on a motorcycle otherwise properly entered in that event, without approval of SOAR Officials.
- (4) Excessive crashing as determined by SOAR Officials.
- (5) Riding or pushing a motorcycle on the active course against course direction.
- (6) Disregard of any flag signal, directive of any race event official.

- (7) During a race, rider may not accept any outside assistance, except from course officials.
- (8) Foul, unfair, or dangerous riding at a race event.
- (9) Purpose wheelie.
- (10) Any action that is done in a malicious manner that is intended to injure or may injure another person as determined by a SOAR Official.

#### **b. RIDER CONDUCT RESPONSIBILITIES**

- (1) Allowing another person to use his/her license.
- (2) Falsifying information regarding use of products in any contingency program.
- (3) Failing to display any series, club logo and/or sponsor/manufacture decals as required.
- (4) Failure to comply with directions of SOAR Officials.
- (5) Crossing any fence into any restricted access areas (i.e. the racetrack).
- (6) Consumption of alcoholic beverages or any other controlled substance in the pit area, or being under the influence thereof during racing hours.
- (7) Operating a motorcycle or other vehicle, or allowing someone to operate a vehicle at excessive speed or in an unsafe manner in any pit area, access road or racetrack environs. SOAR has a maximum speed of 15 km per hour in all pit areas and access roads. There is NO testing, tuning, or "checking" of equipment allowed in the pits or on any access roads around the facility at any time.
- (8) Bad conduct on or off the racecourse, at SOAR function(s).
- (9) Unfit physical or mental condition as deemed by SOAR Officials to be unsafe for all participants.
- (10) Intentional disregard of any SOAR track rule or regulation.
- (11) Repeated violation of a SOAR rule or regulation.

#### **Section 7: ROOKIE CUP RIDER REQUIREMENTS**

SOAR provides a rookie race class for riders to gain experience and improve their skills prior to upgrading from Novice and Expert license status.

- a. Rookie Cup is restricted by engine capacity.
- b. Rookie Cup riders are riders with less than six race weekend's experience. These are ANY weekend not discounting other organizations.
- c. Rookie Cup riders although racing, are encouraged to take this time as a learning tool to become accustomed to race procedures and racing itself.
- d. All Rookie Cup riders must have completed either a SOAR Race School or approved other school. Holding a Novice or Amateur license from a recognized organization is sufficient proof to apply for a SOAR Novice license.

#### **Section 8: FOR NOVICE RACER LICENSE APPLICANTS**

- a. Must have completed a SOAR Race School or equivalent, or, have been licensed with another recognized organization.
- b. Upon completing the above listed requirements and application, the rider will be granted "Provisional Novice" status for one race event. During this first race event, the rider will be required to complete the weekend with no major infractions and no more than one at fault crash. SOAR referees will determine the fault. If the rider completes the weekend, fulfilling the above requirements, they will then be granted a full Novice race license.

- c. A previously licensed Novice or Amateur from another organization is exempt from the Provisional Novice requirement.
- d. Novice riders may only enter novice races, unless invited to join the Expert race. This may happen for the top few novice riders who have demonstrated the skills and speed necessary to lap at an expert pace consistently.

### **Section 9: FOR EXPERT LICENCE APPLICANTS**

- a. SOAR Expert license holders have demonstrated the highest level of skill. They have moved through the ranks of Novice and proven the ability to lap in pace with Experts and Pros from other organizations.
- b. Expert and Pro licensed riders from other recognized organizations will be classified as Experts with SOAR.
- c. Expert licensed riders may only enter Expert class races **or classes that do not differentiate between license classes.**

### **Section 10: LICENSE CLASSIFICATION CHANGES**

- a. A Provisional Novice will automatically be promoted to Novice after successfully completing his/her first event weekend.
- b. A Novice will automatically be promoted to Expert at season end if he/she has won a race and finished top five in any Novice series. **This rule does not include classes that are mixed license riders such as BOTT or Old Boy etc.**
- c. A Novice will be promoted mid-season if he/she has shown above average skills and has consistently lapped at an Expert pace. This is solely at the discretion of SOAR Officials.
- d. An Expert will remain an Expert unless he/she has been shown to have NOT raced for a period of five consecutive years. At that time, he/she will be returned to Novice until shown to have regained the Expert level.
- e. Any rider who feels that he/she has been misclassified and wishes to have his/her license status reviewed can apply in writing to SOAR. A decision will be made within one week following receipt of same. This decision will be considered final and will not be looked at again unless rider's skill level has significantly been altered.

### **Section 11: SOAR POINTS SCHEDULE**

#### **Finish**

- 1 15**
- 2 13**
- 3 11**
- 4 9**
- 5 8**
- 6 7**
- 7 6**
- 8 5**
- 9 4**
- 10 3**
- 11 2**
- 12 1**

Riders, whether knowingly or unknowingly, entering races that their machine is clearly not allowed, are not eligible for class or overall points. This rule is applicable regardless of the normal protest guidelines. This means that any and all points rewarded for the year, even if mistakenly rewarded without protest at the time, may be revoked without notice at any time. SOAR will disallow points for any rider(s) not properly displaying any series decal as may be required.

Riders competing in sponsored classes must stop at Post Tech to show proper decals to be eligible for class sponsorship contingency.

## **Section 12: PROTESTS**

In an effort to equalize motorcycle performance and to help in the quest for fairness, SOAR prohibits certain performance modifications in various classes. Violation of these rules is expected to be detected by the racers themselves and the following protest mechanism is available to assist riders in policing their own classes. The following guidelines are intended to help enforce both the LETTER and SPIRIT of the rules, as well as determination of fair rulings.

There are three (3) types of Protests, which the following guidelines

- \* Mechanical

- \* Rider and/or Machine (i.e. Passing under a waving yellow and riding in the wrong class)

- \* Timing and Scoring (i.e. You think you were scored incorrectly in a race)

a. Protests must be made to the SOAR in writing once OFFICIAL Race Results have been posted. The protest period ends thirty (30) minutes after results are posted.

b. Thirty (30) minutes after posting time results are official. No protests will be accepted past the thirty (30) minute protest period. There is no additional protest period after revised results are posted.

c. Protests may be made only by rider(s) racing that day in the same class as the protested machine/rider. Protests will only be accepted from rider(s) properly entered and participating on legal equipment for class in question.

d. Valid (upheld) protests will result in appropriate action taken by SOAR. Such action can include disqualification of rider from event, denial of points, trophies or other awards or the specific class, either for that race day or the current year.

e. Riders repeatedly violating SOAR Rules and Regulations are subject to: suspension from participation in SOAR sanctioned events; license suspension and/or revocation; and/or monetary fines.

f. Protests that can be resolved by inspection without tools require no protest fee.

g. All other protests will cost a minimum of \$25.00 with the maximum amount to be determined by SOAR prior to any inspection or required disassembly. Fees are subject to change.

Fee examples as follows:

(1) Removal of Valve Cover \$250.00

(2) Removal of Cylinder Head \$500.00

(3) Disassembly of Bottom End \$500.00 (this is in addition to \$500.00 for removal of cyl. head)

h. Protest fees must be posted in cash or by one (1) check made payable to SOAR. The responsibility and integrity of the posted protest fee lies with the protesting rider (i.e. responsibility for NSF check and all applicable fees, etc.).

i. If the protest is upheld the protest fee will be returned to the protesting party in its original form.

- If the protest is denied, the protested party will be paid within ten (10) working days by SOAR check.
- j. SOAR Directors will determine the designation of a referee.
  - k. Once informed by the referee of the protest, the protested rider has a minimum of thirty (30) minutes to accept the protest or withdraw his/her finish. The rider may be granted additional time to make this decision at the referee's discretion; the referees schedule being the variable.
  - l. A rider withdrawing from the event will be given a "WD" on the race results, and receives no trophies, points, or any other awards. Riders may withdraw from the protest procedure only once during the season. A second withdrawal will result in exclusion from the class in question for the remainder of the competition year.
  - m. Once the rider has accepted the protest he may not withdraw at any point during the teardown, and the scope of the teardown will be at the referees' decision. If the rider being protested will be racing the machine in question for the remainder of the event it will be deemed raced under protest and all points and awards will be subject to the outcome of the teardown.
  - n. The referee may impound any and/or all items protested as well as any related items that may be included to enable impoundment. Impoundment is at the referees' discretion, and is allowed to enable adequate and fair inspection and determination of the protest. Should parts be impounded, the referee will handle the matter in a reasonable time frame.
  - o. Failure of the protested party to comply with the referees directions before and/or during the protest/teardown procedures will result in additional penalties and/or disqualification.
  - p. The teardown will be performed by an arms length contracted mechanic who has current credentials to perform such work. The rider has the right to be present or appoint a representative to be present during teardown and examination. The teardown will not take place at the track. The impounded bike will be transported at no cost to either party to the contracted shop for examination. This will take place within a reasonable time frame and all effort will be made to return the protested riders property in a timely fashion.
  - q. The protesting rider has the right to view the protested parts; and the protested parts only, as determined by the referee.
  - r. Both the protested and protesting parties have the right to have one (1) witness/expert to aid and assist in their behalf. This one (1) assistant may view any protested parts as determined by the referee.
  - s. The referee shall take into consideration the findings of the protesting party and the explanation(s) of the protested party. The referee has the right to employ any neutral help that would aid in a fair determination of the protest.
  - t. The referees findings and recommendation of penalty shall be submitted to the SOAR Directors.
  - u. SOAR shall then determine and inform the parties involved of the decision.
  - v. SOAR will allow a written appeal from the protested rider, should he/she be found in violation of SOAR rules. The written appeal must be postmarked and/or filed in the SOAR Office within five (5) working days of the date of notification by SOAR of the findings.
  - x. Should a protested rider file a written appeal, the ultimate decision will be made by SOAR within five (5) working days after receipt of the written appeal. This decision will be final.
  - y. SOAR Officials reserve the right to disqualify any entrant in any class who violates the class equipment rules, even in the event that another rider in class does not protest the rider.

### **Section 13: GENERAL MOTORCYCLE REQUIREMENTS**

The following requirements must be followed by all SOAR racing motorcycles, unless modified by specific class requirements. These rules are designed to ensure that all machines are in safe mechanical condition, and that potential failure points are guarded or will fail-safe.

- a. All motorcycles must be inspected by a SOAR Tech Inspector before being allowed to participate in any practice session or race, and must bear a Tech sticker for that day's events. Please remove "old" Tech stickers prior to event SOAR Tech. **DO NOT REMOVE YOUR ZOOMIUS RFID TAG - THIS IS A PERMANENT PIECE THAT IS RE-ASSIGNED EVERY EVENT.**
- b. The following equipment must be removed: license plate and bracket, reflectors, center and side stands, mirrors, turn signals, luggage racks, saddlebags, any protruding accessory.
- c. The following may be removed except as otherwise provided by endurance rules: rear brake light assembly, headlight assembly, and speedometer. Removing protruding side or center stand lugs is allowed.
- d. The following must be completely taped (light tight) if not removed: tail and brake light lens, headlight lens (For Track Day participants ONLY).
- e. Snap-on side covers must be securely fastened by safety wire, zip ties or modified to bolt or screw on.
- f. All plugs and fittings with oil or water behind them (this includes oil galley plugs) must be securely fastened and safety wired. A small amount of JB Weld or equivalent sealant may be used in cases where it is impractical to drill fasteners. Small diameter (1/4" or smaller) coolant hoses or block off plugs, may be double looped with thick (0.032" or thicker) safety wire, in lieu of clamps.
- g. All fuel tanks must have readily accessible, working shut-off valves or dry break quick connects. All fuel, oil, and water tanks must be leak-free and securely mounted. Damaged fuel tanks deemed unsafe by Tech Inspector are not allowed. **This rule is for normally aspirated carbureted bikes. Fuel injected motorcycles do not require manual shut offs or dry break lines.**
- h. A six 325ml capacity (minimum) catch tank or reservoir must be provided for all crankcase breather hoses that are not vented to the air box. All other vent or overflow hoses must be securely routed into the oil retaining belly pan.
- i. Liquid cooled engines must use water or water with Redline "Water Wetter"/Neo "Keep Cool" or Maxima "Cool-Aide" products and vent into a catch tank. Note that NO other products are approved for use with water in liquid cooled machines other than the above named products. **If a competitor wishes to use other products as they become available please contact Tech prior for approval.**
- j. Fuel is not restricted unless superceded by specific class regulations.
- k. Oil coolers may not be mounted in such a way that they would be unprotected in case of a crash. This is by the approval of SOAR Tech Inspectors.
- l. The rear end of the exhaust pipes may not extend beyond the rear of the rear tire, or be directed in such a way as to create dust or interfere with other riders.
- m. Frames must be free of cracks and kinks. All frame welds must be sound as approved by SOAR Tech Inspectors
- n. Machines must have both a front and rear suspension in good working condition.
- o. Wheels must be in true alignment with no broken or loose spokes.
- p. Only pavement or road racing type tires is permitted. Excessively worn or unsafe tires may not be used. Metal valve caps are required.
- q. Effective, fully operational front and rear wheel brakes are required.
- r. Drum brake anchor arm and disk brake caliper mounting fasteners must be safety wired or secured with mechanical locking devices. Split washers, star washers and self-locking washers do not count as proper locking devices.

- s. Control levers must have balled ends at least 1/ 2 inch in diameter. Hand controls must operate effectively and reliably.
- t. Footrests may fold up and rearwards. Footrests may be modified to fold if not originally folding. Footrests, if covered by rubber, must have rubber securely fastened. Only one set of footrests may be fitted. Foot controls must be free from sharp or ragged edges.
- u. Motorcycles are required to be entered only in their appropriate displacement category. SOAR will disqualify riders violating this requirement. It is the rider's responsibility to assure that his/her machine complies.
- v. Number plates must be clearly readable from front, both sides while motorcycle is in motion. Should either the original bodywork or replacement bodywork not include the required number display area, a separate number plate must be securely attached.
- (1) Number must correspond with your 2009 SOAR license number.
  - (2) White is the ONLY color of number plate background permitted.
  - (3) Black (Expert) nor Red (Novice) is the ONLY color of number permitted. Unless pre-approved by SOAR eg: VRRRA colours or Black on Yellow US Novice colours
  - (4) Illegible style and day-glow numbers are not permitted.
  - (5) Installing numbers directly over multi-colored backgrounds is not permitted.
  - (6) Numbers may wrap around onto the top of the tail section. Must be completely legible from the side, and read front to back, or side to side over the tail.
  - (7) There are no number and letter combination numbers with SOAR (Example: "10x" is not permitted).
  - (8) 8" tall x 1" width stroke numbers are *preferred* but, if the machine does not lend itself to such a number the biggest most legible is required.
- w. Unreadable or improperly numbered machines shall not be scored (i.e. disqualified from race)
- x. Supercharging or turbo charging is permitted only if part of the manufacturers' as-delivered model .Such machines must run up one displacement class (i.e. a turbocharged 550cc machine must run in the 650cc class).
- y. Drive chain master links must have their spring clip pointing in the direction of chain travel and must be safety wired or have silicone sealant product applied.
- z. All axle nuts must be safety wired. If axle nut has a C-clip, the clip must be safety wired. All axle pinch bolts must be safety wired. If front forks have 2 pinch bolts on each side, only one on each side must be safety wired, but only if it is extremely difficult to wire all of them. Final approval is at the discretion of the Tech Inspector.
- aa. The following items relate to performance modifications, and apply to all classes unless otherwise stated.
- (1) Cylinders maybe bored to a maximum of 1.0 mm over the bore size corresponding to the class displacement for a given stroke.
  - (2) Lubricating, damping, and brake fluids may be changed.
  - (3) Front and/or rear spring rates may be changed.
  - (4) Brake linings and/or pads may be changed.
  - (5) Aftermarket and/or braided steel brake lines may be used.
  - (6) Clutch lining material may be changed.
  - (7) An ATK <sup>TM</sup>device may be installed
  - (8) Addition of steering damper, if not so equipped, is allowed.
- bb. All motorcycles shall be equipped with muffling devices that limit the sound to 103dBA. The noise level will be measured when the machine is on the track during practice and racing

events. The SOAR Tech Inspector may take measurement, at any time during an event. If a machine is over the limit it may be disqualified from competition until in compliance.

cc. Removable exhaust baffles and/or cores must be safety wired.

dd. All motorcycles, without exception, must be equipped with a working engine kill switch accessible without removing hands from the handgrips.

ee. All Suzuki Katanas, all 1995 and earlier Suzuki GSXR's and 1996-98 GSXR1100s, and all Suzuki GSXR1300 Hayabusa MUST have engine case guards installed around the right and left crankcase ends. Aftermarket replacements cases may be used (example: Graves Motorsports / Yoshimura, NRC, etc.). All Suzuki GSXR's thru 2008 must have a case guard or aftermarket replacement case on the right side of the engine.

ff. All motorcycles are **required** to have an oil catch-pan capable of containing all fluids. Vintage accepted although encouraged to retrofit.

gg. Traction Control systems are legal in all classes unless that class specifically disallows same.

hh. Data acquisition systems are legal in all classes.

## **Section 14: SOAR CLASSES:**

- *Superbike*
- *600 Extreme*
- *BOTT*
- *Formula Two Stroke*
- *Lost Era*
- *Clubman*
- *Formula Femme*
- *Rookie Challenge*
- *The Old Boy Cup*
- *Vintage*
- *Open Sprint*
- *NuSpeed*

### **a. Superbike:**

1000cc Multi Cylinder Four Stroke

1200cc Twin Liquid Cooled Four Stroke

Unlimited Air Cooled Twin Four Stroke

750cc Two Stroke

#### **(1) Wheels:**

16.5 or 17 inch diameter

Front max width 3.5 inch, Rear max 6.5 inch

Un-restricted construction material

#### **(2) Front Suspension:**

Aftermarket forks permitted

Adjustable triple clamps permitted

Fork Brace permitted

Modified or aftermarket internals permitted

Slider coating treatments permitted

#### **(3) Rear Suspension:**

Unrestricted

**(4) Brakes:**

Aftermarket calipers permitted

Aftermarket rotors permitted (must be manufactured using ferrous materials)

Steel/Kevlar brake lines permitted

Aftermarket master cylinders using remote adjustment permitted

Brake pad material without restriction

**(6) Frame:**

Must be an OEM Homologated design

May be braced and gusseted

Adjustable swing arm pivot permitted

May be deluged

**(7) Electronics:**

CDI may be replaced with aftermarket or modified

Traction control may be used

EFI Custom control mapping and multiple maps accepted

Data acquisition may be used

Electronic shifting cutoff may be used

Launch control permitted

**(8) Fuel System:**

No Nitrous Oxide injection

Must remain normally aspirated

Fuel is not restricted

Fuel tank must appear stock but construction material is unrestricted

**(9) Bodywork:**

Must appear stock in style

Double Bubble style windshield permitted

Must have liquid retaining lowers or damming of stock lowers to a 4 litre capacity.

**(10) Controls:**

Unrestricted

**(11) Charging System:**

May be modified or deleted.

**(12) Exhaust:**

Must not end past rear wheel

Must not exceed 103 db

**(13) Engine:**

Must retain cases, stock crankshaft, cylinder head

Camshafts may be changed

Adjustable cam gears may be used

1mm overbore permitted

Cylinder head may be ported and oversized valves permitted

Oil and cooling systems may be upgraded

Pistons and connecting rods without restriction

Transmission gears may be undercut

Transmission gears may alter ratio

Slipper style clutch accepted

Timing advance permitted

## **b. 600 Extreme**

600cc Multi Cylinders Four Stroke  
850cc Liquid Cooled Twin Four Stroke  
1350 cc Air Cooled Twin Four Stroke  
500cc Liquid Cooled Two Stroke  
Triumph 675 Triple and Kawasaki ZX636 are legal

Same bike restriction rules as Superbike

## **c. BOTT:**

Ltwt: 500cc Liquid Cooled Multi Valve  
800cc Air Cooled OHV  
Unlimited Four Stroke Single  
Mdwt: 800cc Liquid Cooled Multi Valve  
1000cc Air Cooled OHV  
1200cc Pushrod  
Hwvt: 1200cc Liquid Cooled Multi Valve  
1350cc Air Cooled OHV  
Unlimited Pushrod

### **(1) Wheels:**

16.5 or 17 inch diameter  
Front max width 3.5 inch, Rear max 6.5 inch  
Un-restricted construction material

### **(2) Front Suspension:**

Aftermarket forks permitted  
Adjustable triple clamps permitted  
Fork Brace permitted  
Modified or aftermarket internals permitted  
Slider coating treatments permitted

### **(3) Rear Suspension:**

Must use stock linkages otherwise unrestricted

### **(4) Brakes:**

Aftermarket calipers permitted  
Aftermarket rotors permitted (must be manufactured using ferrous materials)  
Steel/Kevlar brake lines permitted  
Aftermarket master cylinders using remote adjustment permitted  
Brake pad material without restriction

### **(5) Frame:**

Must be an OEM Homologated design  
May be braced and gusseted  
Adjustable swing arm pivot permitted  
May be deluged

### **(6) Electronics:**

CDI may be replaced with aftermarket or modified  
Traction control may be used  
EFI Custom control mapping and multiple maps accepted

Data acquisition may be used  
Electronic shifting cutoff may be used  
Launch control permitted

**(7) Fuel System:**

Ram Air System may be modified or added if not stock  
No Nitrous Oxide injection  
Must remain normally aspirated  
Fuel is not restricted  
Fuel tank must appear stock but construction material is unrestricted

**(8) Bodywork:**

May use any suitable styled bodywork  
Double Bubble style windshield permitted  
Must have liquid retaining lowers or damming of stock lowers to a 4 litre capacity.

**(9) Controls:**

Unrestricted

**(10) Charging System:**

May be modified or deleted.

**(11) Exhaust:**

Must not end past rear wheel  
Must not exceed 103 db

**(12) Engine:**

Must retain cases, stock crankshaft, cylinder head  
Camshafts may be changed  
Adjustable cam gears may be used  
1mm overbore permitted  
Cylinder head may be ported and oversized valves permitted  
Oil and cooling systems may be upgraded  
Pistons and connecting rods without restriction  
Transmission gears may be undercut  
Transmission gears may alter ratio  
Slipper style clutch accepted  
Timing advance permitted

**d. Formula Two Stroke:**

Ltwt: 125cc GP Style Machines  
350cc Liquid Cooled Street Based Machines  
500cc Air Cooled Street Based Machines  
Hvwt: 250cc GP Style Machines  
500cc Liquid Cooled Street Based Machines  
Unlimited Air Cooled Street Based Machines

**(1) Wheels:**

Without Restricted diameter  
Front max width 3.5 inch, Rear max 6.5 inch  
Un-restricted construction material

**(2) Front Suspension:**

Aftermarket forks permitted  
Adjustable triple clamps permitted

Fork Brace permitted

Modified or aftermarket internals permitted

Slider coating treatments permitted

**(3) Rear Suspension:**

Must use stock linkages otherwise unrestricted

**(4) Brakes:**

Aftermarket calipers permitted

Aftermarket rotors permitted (must be manufactured using ferrous materials)

Steel/Kevlar brake lines permitted

Aftermarket master cylinders using remote adjustment permitted

Brake pad material without restriction

**(5) Frame:**

May be braced and gusseted

Adjustable swingarm pivot permitted

May be deluged

**(6) Electronics:**

Without Restrictions

**(7) Fuel System:**

No Nitrous Oxide injection

Must remain normally aspirated

Fuel is not restricted

Fuel tank construction material is unrestricted

**(8) Bodywork:**

Double Bubble style windshield permitted

Must have liquid retaining lowers or damming of stock lowers to a 2 litre capacity.

**(9) Controls:**

Unrestricted

**(10) Charging System:**

May be modified or deleted.

**(11) Exhaust:**

Must not end past rear wheel

Must not exceed 103 db

**(12) Engine:**

Cylinder Porting Permitted

Aftermarket Reed Cage Permitted

Power Valves permitted

1mm overbore permitted

Cooling systems may be upgraded

Pistons and connecting rods without restriction

Transmission gears may be undercut

Transmission gears may alter ratio

Timing advance permitted

**e. Lost Era:**

**All machines have to have a model year minimum 12 years older than the race date.**

Light: 600cc Multi Maximum  
750cc Twin Maximum  
Unlimited Single  
250 GP Two Stroke  
Hvwt: 1000cc Multi Maximum  
1200cc Twin Maximum  
Unlimited Two Stroke

**(1) Wheels:**

Diameter Unrestricted  
Front max width 3.5 inch, Rear max 6.0 inch  
Must be factory design or style/type available during period

**(2) Front Suspension:**

Forks external must be stock  
Fork Brace permitted  
Modified or aftermarket internals permitted  
Slider coating treatments not permitted unless stock

**(3) Rear Suspension:**

Must use stock linkages otherwise unrestricted

**(4) Brakes:**

Calipers must be of design available during period  
Aftermarket rotors permitted (must be manufactured using ferrous materials)  
Steel/Kevlar brake lines permitted  
Master Cylinders may be changed but must be of design used during period.  
Brake pad material without restriction

**(5) Frame:**

Must be stock and minimum 12 years old  
May be braced and gusseted  
Adjustable swing arm pivot not permitted unless stock  
May be deluged

**(6) Electronics:**

CDI may be replaced with aftermarket or modified  
Traction control may be not be used  
EFI Custom control mapping may be used however no multiple mapping  
Electronic shifting cutoff may be used

**(7) Fuel System:**

Ram Air System may be modified or added if not stock  
No Nitrous Oxide injection  
Must remain normally aspirated  
Fuel is not restricted  
Fuel tank must appear stock but construction material is unrestricted

**(8) Bodywork:**

Must appear stock in style  
Double Bubble style windshield permitted  
Must have liquid retaining lowers or damming of stock lowers to a 4 litre capacity.

**(9) Controls:**

Unrestricted

**(10) Charging System:**

May be modified or deleted.

**(11) Exhaust:**

Must not end past rear wheel

Must not exceed 103 db

**(12) Engine:**

Must retain cases, stock crankshaft, cylinder head minimum 12 years old

Camshafts may be changed

Adjustable cam gears may be used

1mm overbore permitted

Cylinder head may be ported and oversized valves permitted

Oil and cooling systems may be upgraded

Pistons and connecting rods without restriction

Transmission gears may be undercut

Transmission gears may alter ratio

Timing advance permitted

**f. Clubman Challenge:**

**All bikes must be air cooled only (Air/Oil GSXR, Katana, Bandit not permitted)**

Ltwt: 650cc 2 Valve Multi

550cc 4 Valve Multi

750cc 2 Valve Twin

650cc 4 Valve Twin

850cc Single

500cc Two Stroke

Hvwt: 1100cc 2 Valve Multi

850cc 4 Valve Multi

Unlimited 2 Valve Twin

1000cc 4 Valve Twin

Unlimited Single

750 Two Stroke

**(1) Wheels:**

Diameter Unrestricted

Front max width 3.5 inch, Rear max 6.5 inch

Un-restricted construction material

**(2) Front Suspension:**

Aftermarket forks permitted

Adjustable triple clamps permitted

Fork Brace permitted

Modified or aftermarket internals permitted

Slider coating treatments permitted

**(3) Rear Suspension:**

Must use stock linkages otherwise unrestricted

**(4) Brakes:**

Aftermarket calipers permitted

Aftermarket rotors permitted (must be manufactured using ferrous materials)

Steel/Kevlar brake lines permitted

Aftermarket master cylinders using remote adjustment permitted

Brake pad material without restriction

**(5) Frame:**

Unrestricted design

May be braced and gusseted

Adjustable swing arm pivot permitted

May be deluged

**(6) Electronics:**

CDI may be replaced with aftermarket or modified

EFI Custom control mapping and multiple maps accepted

Electronic shifting cutoff may be used

**(7) Fuel System:**

Ram Air System may be modified or added if not stock

No Nitrous Oxide injection

Must remain normally aspirated

Fuel is not restricted

Fuel tank construction material is unrestricted

**(8) Bodywork:**

Double Bubble style windshield permitted

Must have liquid retaining lowers or damming of stock lowers to a 4 litre capacity.

**(9) Controls:**

Unrestricted

**(10) Charging System:**

May be modified or deleted.

**(11) Exhaust:**

Must not end past rear wheel

Must not exceed 103 db

**(12) Engine:**

May use modified crankshaft

Camshafts may be changed

Adjustable cam gears may be used

1mm overbore permitted

Cylinder head may be ported and oversized valves permitted

Oil coolers may be added or upgraded

Pistons and connecting rods without restriction

Transmission gears may be undercut

Transmission gears may alter ratio

Slipper style clutch accepted

Timing advance permitted

**g. Rookie Cup:**

**All Rookie Cup riders are restricted to the following machines:**

600cc Multi Liquid Cooled Maximum

All BOTT bikes except Hwvt

All Formula Two Stroke bikes

All Lost Era Bikes

All Vintage

## **h. Old Boys Club:**

### **OBC rider requirements**

Riders must be over 40 years old at the time of the race in order to compete. Riders must be otherwise qualified/licensed by SOAR in order to compete.

OBC Riders are restricted to the following machines:

600cc Multi Liquid Cooled Maximum  
All BOTT eligible machines  
All Formula Two Stroke eligible machines  
All Lost Era Machines  
All Vintage

## **i. Formula Femme:**

### **Formula Femme rider requirements**

Must be female otherwise qualified/licensed by SOAR in order to compete

Formula Femme riders are restricted to the following machines:

600cc Multi Liquid Cooled Maximum (less than 12 years old)  
All BOTT eligible machines  
All Formula Two Stroke eligible machines  
All Lost Era Machines  
All Vintage

## **j. Vintage:**

**All machines have to have a model year minimum 20 years older than the race date.**

Light: 550cc Multi Air Cooled Maximum  
750cc Twin Air Cooled Maximum  
400cc Multi Liquid Cooled Maximum  
650cc Twin Liquid Cooled Maximum  
Unlimited Single  
125cc GP Two Stroke  
350cc Street Based Two Stroke Liquid Cooled  
500cc Street Based Two Stroke Air Cooled  
Mdwt: 750cc Multi Air Cooled Maximum  
900cc Twin Air Cooled Maximum  
600cc Multi Liquid Cooled Maximum  
750cc Twin Liquid Cooled Maximum  
250cc GP Two Stroke  
Unlimited Street Based Two Stroke  
Hwvt: 1100cc Multi Air Cooled Maximum  
Unlimited Twin  
900cc Multi Liquid Cooled  
750cc GP Two Stroke Maximum

**(1) Wheels:**

Must be factory design or style/type available during period

**(2) Front Suspension:**

Forks external must be stock

Fork Brace permitted

Modified or aftermarket internals permitted

Slider coating treatments not permitted

**(3) Rear Suspension:**

Must use stock linkages otherwise unrestricted

**(4) Brakes:**

Calipers must be of design available during period

Aftermarket rotors permitted (must be manufactured using ferrous materials)

Steel/Kevlar brake lines permitted

Master Cylinders may be changed but must be of design used during period.

Brake pad material without restriction

**(5) Frame:**

Must be stock and minimum 20 years old

May be braced and gusseted

Adjustable swing arm pivot not permitted

May be deluged

**(6) Electronics:**

CDI may be replaced with aftermarket or modified

**(7) Fuel System:**

No Nitrous Oxide injection

Must remain normally aspirated

Fuel is not restricted

Fuel tank must appear stock but construction material is unrestricted

**(8) Bodywork:**

Must appear stock in style

Double Bubble style windshield permitted

Must have liquid retaining lowers or damming of stock lowers to a 4 litre capacity.

**(9) Controls:**

Unrestricted

**(10) Charging System:**

May be modified or deleted.

**(11) Exhaust:**

Must not end past rear wheel

Must not exceed 103 db

**(12) Engine:**

Must retain cases, stock crankshaft, cylinder head minimum 20 years old

Camshafts may be changed

Adjustable cam gears may be used

1mm overbore permitted

Cylinder head may be ported and oversized valves permitted

Oil and cooling systems may be upgraded

Pistons and connecting rods without restriction

Transmission gears may be undercut

Transmission gears may alter ratio

Timing advance permitted

### **k. Open Sprint:**

Class open to all competition motorcycles from every class. Any bike/rider entered must be able to consistently lap at no less than 125% of the pole sitters pace. This will be determined review of timing system during practice and qualifying.

All machines competing must meet all race machine prep requirements.

### **l. NuSpeed:**

This is a class designed for the newest of the new riders to get their feet wet and compete with riders just like themselves. The class will be restricted to a max 250cc four stroke motorcycle and will have an age cap of 15 yrs of age. No rider will have competed in more than six previous race weekends.

Age exceptions will be looked at on a case by case basis. The vision of this class will be maintained as a beginning place for young racers to be to start their racing careers in a low-pressure manner.

All riders will have all requirements with regards to obtaining a novice license. All machines are subject to regular SOAR regulations.

As this is a brand new class and a new idea we are looking for suggestions and input. This may alter the perimeters until we find the balance that best serves the purpose of the class.

### **m. On-Track Requirements:**

1. Coolant must be drained and replaced with water and water wetter.
2. All lights and mirrors must be removed or taped.
3. Brakes must be in good shape.
4. Tires must be in good shape and appropriate for track use.
5. Riders must use full leathers. Either one piece or zip together (360°) two-piece.
6. Riders must have leather gloves with material covering completely to sleeve.
7. Riders must have leather boots covering ankle.
8. Riders must use full face helmet Snell 2000 or better with eye protection.
9. Motorcycle must be in overall mechanically sound condition.
10. Motorcycle may not be over 103db.
11. Rider must be comfortable riding in a mixed class.
12. Motorcycle must pass tech inspection at beginning of day and must be able to pass tech at any point throughout the event.
13. Any crashed motorcycle must be re-teched before reentering the track.
14. SOAR reserves the right to pull any rider who is deemed to be dangerous to him/herself or others.
15. No consuming alcohol or drugs (prescription or otherwise) in pit area during the event.

## **Section 15: Endurance Racing Rules and Procedures**

### **a. Riders:**

- (1) ONLY pre-registered riders may compete on machines they have registered for. No borrowing riders. No substituting riders.
- (2) All registered riders do not have to compete.
- (3) No limit to amount of riders a team may register.
- (4) Any rider involved in crash must seek medical clearance prior to re-entering course if directed by race staff
- (5) All riders must be qualified to race. Meaning they must be properly licensed and entered with SOAR
- (6) All riders must be physically fit. Should a marshall recognize a rider who appears in distress he/she will be directed to medical for a check before being allowed to continue.
- (7) Riders will not be classified as expert or novice for the purposes of endurance.

### **b. Endurance Specialty Equipment:**

- (1) Any team wishing to use quick change hardware must have that hardware pre-approved by tech prior to the event. This may be by providing actual hardware to tech or a detailed drawing and description. Any machine showing up at an event with quick change hardware not pre-approved will not be permitted to race.
- (2) Teams are encouraged to utilize pit to bike radio communications.
- (3) Although not a requirement teams are encouraged to use dry break style fuel systems with dump cans
- (4) Quick release systems for bodywork, tank, controls are permitted however must meet tech requirements for structure and safety. If in doubt check with tech before the event. If during an event a pit marshall witnesses a questionable piece of hardware. The bike will not be permitted to continue until the offending piece is repaired or replaced.

### **c. Pit Lane:**

- (1) Right of Way in pit lane goes to the entering rider. Riders exiting must give way.
- (2) Each pit must be identified by a sign displaying bike number
- (3) Absolutely no smoking in pit lane or within 15 feet of a hot pit spot. Measured off either side.
- (4) All crew operating in hot pits must be wearing full trousers (no shorts), shoes (no sandals), shirts (no cut off shirts or tank tops)
- (5) ANY and ALL crew/riders working in hot pit lane must have signed the waiver and be wearing proper issued wristband.
- (6) No non-registered crew permitted in hot pit lane during race. This includes red flag situations.
- (7) No vehicles of any kind in pit lane during race. (Including pit bikes)
- (8) All machines operating in pit lane must use ONLY 1<sup>st</sup> gear
- (9) Only minor repairs in pit lane. Any/All major repairs must be moved to cold pits.
- (10) Teams must notify pit marshal when moving bike behind pit wall
- (11) No bikes may enter course once checkered flag is displayed.
- (12) Power starter rollers in pit area are permitted

#### **d. Machines:**

- (1) All machines must be able to pass tech inspection at any time during the race
- (2) No bike substitutes after start of race
- (3) Bike involved in crash must be rechecked prior to re-entering the track
- (4) All machines eligible to race in a SOAR class are eligible to enter. Keeping in mind that the entered machine must be able to lap at 125% of the leader.

#### **e. Pit Stops:**

- (1) Each machine must stop within a marked stop box at the entrance to pit lane. The rider must come to a complete stop and place both feet on the ground. Machine may proceed only when directed by pit marshal.
- (2) Each team must supply a working fire extinguisher of minimum capacity of 10 lbs. Which must be manned and pointed at machine during ALL stops. With the safety pin pulled and ready to use.
- (3) All fuel cans must be hand held (No towers or pressurized systems)
- (4) All dump cans must be equipped with non-sparking fittings (aluminum, brass, plastic etc)
- (5) Tank changes are permitted for fueling but must use double dry break fittings.
- (6) No more than one fuel can on hot side of pit wall at once
- (7) Machines must be turned off during fueling
- (8) Bikes must stop completely within the assigned pit area
- (9) Rider must dismount **prior** to fueling
- (10) Each team must have at least one crew member to assist in fueling and rider changes. An extra rider may also act as crew.
- (11) Teams wishing to share pit areas must be pre-approved prior to race
- (12) During a two hour race there must be at least one pit stop
- (13) During a three hour race there must be at least two stops
- (14) During Red flag pits are closed.
- (15) You may line up at pit in, or start line and wait for restart
- (16) All work in pits must stop during red flag. You may gather tools, parts etc. But you must not touch the machine until a restart.
- (17) Fire extinguisher must be manned and pointed at machine during all pit stops even if not fueling
- (18) Riders in pits must start from pit lane at restart. You will be released after start flag.
- (19) Any repairs being made to a machine either on hot pit lane or behind pit wall must be completed by ONLY registered team members. Non-team members may assist in a non direct way (fetching tools, instructing etc) but must not touch the machine directly.

#### **f. Procedures:**

- (1) All teams must have a team name
- (2) Each team must name a team captain. This person will be responsible for assuring all team requirements and rules are met. This is the person that the referees, pit marshals, and race directors will talk to regarding infractions.
- (3) All teams including all riders and crew must attend mandatory endurance riders meeting before start of race

- (4) All teams may use a scorekeeper. Timing forms will be supplied to any team who wishes one. This is a secondary scoring only. The official timing system will be considered binding. However should that fail we will revert to the secondary scorekeeper.
- (5) Grid positions will be determined by pre-entry for the first round. However they may be altered by bike classification, being the larger capacity big bore bikes will start in front of smaller machines. The second race will be gridded by points.

**g. Penalties:**

- (1) Jump start penalty will be a stop and go.
- (2) On track infractions will be assessed penalties according to their severity. This could include laps, stop and go, up to and including disqualification.
- (3) Race director will apply all penalties.
- (4) Any team using a non-registered rider will lose all laps completed by that rider.
- (5) Any team allowing non registered people to work on the bike will receive a two lap penalty.
- (6) Any fuel penalties will double after each infraction.
- (7) First fuel penalty is stop and go with 1min wait. Second fuel penalty is 2 min wait. Third is 4min wait. Etc.
- (8) Any infractions in riding or dangerous behavior will be decided by race director at time of infraction. This could include any form of penalty he/she decides up to and including disqualification and is not open to appeal.