

Rocket Sports

2008

Sporting and Technical Rules

Administered by
RocketSports

A category of the
Independent Race Series

Rocket
Sports

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INDEPENDENT
RACE
SERIES

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Introduction

RocketSports is a drivers category, with the emphasis on close, clean racing, where the driver's skill is more important than his or her budget. The cars feature a motorcycle engine, mounted at the front, and fully enclosed bodywork, including a windscreen.

With a number of different sub-categories combining within the RocketSports ranks, it is important that approximate parity between the different types of cars be realised. Each different type of car uses a slightly different design philosophy, and individual strengths and weaknesses will vary, but outright laptime for each type of car should be similar or the same.

The main factors to be considered in achieving parity will be:

- Weight
- Power (capacity, rpm, inlet restrictor)
- Grip (tyre width, suspension configuration)

1. Sporting Rules - General

1.1 Title

1.1.1 The 2008 RocketSports Championship is a National Championship. The Championship will be run as part of the 2008 Independent Race Series (iRace).

1.2 Officials

1.2.1 Category Director	:	Mr Rod Dale
1.2.2 Competitor Liaison	:	Mr Rod Dale
1.2.3 Category Administrator	:	Mr Rod Dale
1.2.3 Series Public Relations	:	Mr Sam Dale

1.3 Other Relevant Documents

1.3.1 The RocketSports Championship will be run as part of the 2008 Independent Race Series. Meeting Rules, and Further Rules, promulgated for each round of the Championship will contain information relevant to RocketSports competitors and personnel.

1.3.2 The RocketSports Championship will be run as part of the Independent Race Series. The 2008 iRace competition rules will be in force at all events.

1.3.3 Race meeting, and race procedures will be in accordance with the procedures and regulations outlined here, as modified by the documents listed at paragraphs 1.3.1 and 1.3.2

1.3.4 It is the responsibility of the competitor to obtain and be familiar with all relevant documents as described here, and promulgated from time to time.

1.3.5 Special bulletins may be issued throughout the year. Bulletins will either be delivered to competitors at race meetings, or promulgated via the official iRace website: www.iRace.net.au

1.4 Registration

1.4.1 There is no stand-alone registration fee. To be considered registered for the RocketSports Championship and eligible for points, competitor giveaways available from time to time, and trophies and other awards, competitors must complete a 2008 iRace Driver Profile form, available from the Admin section of the iRace.

1.4.2 Competitors must be registered to accumulate points in the RocketSports Championship. Provided the competitor holds a suitable circuit racing licence, vehicle logbook and has registered with the Category, membership of any other group, association or club is not compulsory.

1.4.3 The Category Director reserves the right to refuse entry to any competitor and/or vehicle without explanation.

1.5 Calendar

1.5.1 The 2008 RocketSports Championship Calendar is as follows:

ROUND 1	Oran Park, NSW	11 October 2008
ROUND 2	Morgan Park, QLD	15-16 November 2008

1.6 Pointscore

1.6.1 Points will be awarded for each race as follows:

1st place	: 20 points
2nd place	: 18 points
3rd place	: 16 points
4th place	: 14 points
5th place	: 12 points
6th place	: 11 points
7th place	: 10 points
8th place	: 9 points
9th place	: 8 points
10th place	: 7 points
11th place	: 6 points
12th place	: 5 points
13th place	: 4 points
14th place	: 3 points
15th place	: 2 points
16th place	: 1 point

1.6.2 The same points scale will be awarded to placegetters in each sub-category (Future Racers, Zedtec, Star Cars, Baby Grand, etc).

1.7 Awards

1.7.1 Awards will be at the discretion of the Category Director.

1.7.2 Unless otherwise determined by the Category Director, awards will be given for the top three outright placings. Where the number of competitors in a particular sub-category is three or greater, a separate award for the round winner of that sub-category will be presented. Where the number of competitors in a sub-category is six or greater, awards will be presented for first, second and third placings for the round for that sub-category.

1.7.3 Awards for the season outright and sub-category pointscores will be given to the championship placegetters in accordance with paragraph 1.7.2.

1.8 Championship

1.8.1 The pointscore for the RocketSports Championship will be determined by adding the points for each round. The competitor with the highest number of points will be awarded first

place in the Championship. In the event of a tie, the higher position will be awarded to the competitor with the greater number of wins (or if number of wins is the same, to the competitor with the greater number of second places, or third places and so on). If the positions are still tied, the higher position will be awarded to the competitor with the better finishing position in the last event.

1.8.2 Sub-category pointscores will be determined in accordance with the procedure outlined at para 1.8.1

1.9 Financial

1.9.1 Each manufacturer intending to supply vehicles to make up a sub-category within the RocketSports Championship is required to pay an equal share of the category Television costs. Information on the total cost, and the share due is available from the Category Director. The distribution of the cost is equal to all manufacturers regardless of the number of vehicles competing that are attributed to each manufacturer.

1.9.2 Private entrants that are not associated with a particular vehicle manufacturer (ie; the vehicle is not manufactured by, and will not compete in, any manufacturer's sub-category) will be required to pay a Television levy at a nominal fee (available from the Category Director).

2. Sporting Rules – Race meetings and Race procedures

2.1 Scrutineering

2.1.1 Scrutineering paperwork must be completed before the vehicle is scrutineered. An approved circuit racing licence and iRace Vehicle Logbook must be provided for inspection.

2.1.2 Scrutineering of vehicles will take place on Saturday and Sunday mornings. The exact timing and location of vehicle scrutineering will be advised in meeting rules.

2.1.3 All vehicles must be fitted with a functioning Dorian transmitter for all on track activities.

2.2 Driver's Briefing

2.2.1 The Clerk of Course will conduct a driver's briefing at each round of the Championship. Attendance at the briefing is compulsory, and non-attendance may attract a fine or other penalty.

2.3 Practice Starts

2.3.1 Practice starts may only be conducted at the exit of pit lane.

2.4 Unofficial Practice

2.4.1 On the Friday immediately preceding each round of the Championship, the circuit will normally be available for unofficial practice (or in the case of a three day meeting, official practice – refer section 2.5.). A minimum of 2 x 20 minute unofficial practice sessions will normally be scheduled.

2.5 Official Practice

2.5.1 Official practice will normally be scheduled during Saturday morning of each round of the Championship. Official practice will normally consist of a minimum of 1 x 15 minute (or greater) session.

2.6 Official Qualifying

2.6.1 Official qualifying will normally be scheduled during Saturday afternoon of each round of the Championship. Official qualifying will normally consist of a minimum of 1 x 15 minute (or greater) session.

2.6.2 Tyres will be marked before the commencement of official qualifying, and these tyres must then be used throughout the qualifying session and during all races. Cars must comply with, and may be randomly checked for, minimum weight limits at all times during official qualifying.

2.7 Grid Allocation

2.7.1 Grid positions for the first race will be determined by times set during the official qualifying session. The driver with the fastest qualifying time will start from grid position one, next fastest from position two and so on.

2.7.2 Grid positions for subsequent races will be determined by the lap times from the preceding race.

2.7.3 Any competitor failing to either set a time in the official qualifying session, or record a finishing position in the preceding race, must obtain permission from the Clerk of Course to start from the rear of the grid.

2.8 Safety Car

2.8.1 A safety car may be used during all races in accordance with the 2008 iRace rules. Where possible and safe to do so, the safety car will maintain not less than 80km/h on the straights.

2.9 Race Format

2.9.1 A normal race weekend will consist of the following:

- 2.9.1.1 Race One – Rolling start, 8 minute duration race.
- 2.9.1.2 Race Two – Standing start, 12 minute duration race.
- 2.9.1.3 Race Three – Standing start, 15 minute duration race.

2.9.2 An alternate race format may be used at up to 2 selected rounds at the discretion of the Category Director. The alternate race weekend will consist of the following:

- 2.9.2.1 Endurance Format:
 - a. Race One – Standing start, 35 – 40 minute duration race.
- 2.9.2.2 Double feature Format:
 - a. Race One – Standing start, 18 minute duration race.
 - b. Race Two – Standing start, 22 minute duration race.

2.10 Start Procedures

2.10.1 Rolling starts will be conducted as follows:

- 2.10.1.1 2 minute, 1 minute and 30 second boards displayed in the marshalling area or pitlane.
- 2.10.1.2 Vehicles proceed onto circuit and conduct one warmup lap. On completion of the lap, vehicles stop on their designated grid spots.
- 2.10.1.3 Once the grid is set, vehicles proceed behind the safety car for the race rolling start. The safety car will leave the circuit before arriving at the start/finish line, and vehicles are under control of the starter.
- 2.10.1.4 Once the starter is satisfied that cars are in the correct formation the green flag will be waved and racing is to commence.
- 2.10.1.5 Correct formation is defined as cars 2 by 2, with no overlap, and not greater than 5 car lengths between rows.

2.10.1.6 After the green flag is waved, it is not permitted for a competitor to pass cars from any rows ahead of his or her own row until after crossing the start/finish line.

2.10.1.7 In the event of an aborted start, the car in grid position one will take control, leading the field around again to the start/finish line to attempt another start. Laps after an aborted start will count towards race distance.

2.10.2 Standing starts will be conducted as follows:

2.10.2.1 2 minute, 1 minute and 30 second boards displayed in the marshalling area or pitlane.

2.10.2.2 Vehicles proceed onto circuit and conduct one warmup lap. On completion of the lap, vehicles stop on their designated grid spots.

2.10.2.3 Once the grid is set the starter will give the 5 seconds signal. The red starting light will illuminate shortly afterwards, and when the light extinguishes racing is to commence.

2.11 Oversubscribed Grid

2.11.1 In the event of entries exceeding approved track density, registered competitors will receive priority. Order of preference will then be determined by qualifying positions, with excess cars held as reserves.

2.12 Parc Ferme

2.12.1 At the completion of any official qualifying session or race, at the direction of the Chief Scrutineer and/or Technical Commissioner, vehicles may be required to attend Parc Ferme. When directed, all vehicles must attend the Parc Ferme area, and not be accessed by any pitcrew, and must not be removed from the area unless authorised by the Chief Scrutineer. Failure to comply with Parc Ferme procedures may result in exclusion from the event or other penalty.

3. Technical Rules

3.1 Introduction

3.1.1 Any modification or change not expressly permitted by these rules should not be carried out before consulting the Category Director.

3.1.2 Eligibility of vehicles not specifically mentioned in the following rules will be determined by, and is at the sole discretion of, the Category Director. Due regard will be given to the history of the car and its compatibility with other competing cars.

3.2 General Description

3.2.1 RocketSports is for competitors driving rear-wheel drive, motorcycle engine, single seater, full bodied racing cars of the following types:

Future Racers,
Zedtec,
Star Cars,
Baby Grand,
Other comparable cars as recognised by the Category Director.

3.2.2 The freedoms granted in paragraphs 3.5 through 3.13 apply only to vehicles competing for outright RocketSports points. In order to qualify for sub-category points and awards, vehicles must comply with the technical rules of the particular sub-category. A master copy of the sub-category technical rules must be kept by the sub-category manufacturer/importer and lodged with the Category Director.

3.2.3 The sub-category technical rules may be amended from time to time via technical bulletin.

3.3 Safety Requirements

3.3.1 All cars must comply with the safety requirements of the relevant sections of FIA Appendix J (Article 277 - Category II cars). Particular attention should be paid to Appendix J Article 259 Section 14.2.1 regarding seat belts which must be to FIA standard No. 8853 / 98.

3.4 Chassis

3.4.1 It is a **mandatory** requirement that **all cars** have all major components crack tested and certified in accordance with the provisions of FIA Annexe K (Appendix IV & V). Such certification will remain valid for a maximum of 2 years from the date of the test. These documents should be available to be shown upon request at any time.

3.5 Bodywork

3.5.1 Fully enclosed, with a windscreen fitted. Bodywork may be constructed of Glass Reinforced Plastic or Carbon Fibre. The shape of the body should approximately resemble a 5/8 scale sedan, but does not necessarily need to be based on an existing vehicle.

3.5.2 The windscreen must be constructed of Lexan, of a thickness not less than 5mm. Side and rear windows are not mandatory, but if fitted must not impede the egress or extraction of the driver.

3.5.3 Rear deck and front lip spoilers may be used. The front splitter shall be a maximum of 400mm deep, and must not protrude more than 60mm beyond the front of the body. The rear wing must be not wider than 1345mm \pm 10mm when measured in the lateral axis, it must not be longer than 165mm \pm 5mm when measured in the longitudinal axis, and the endplates must have a surface area of not greater than 300sqcm.

3.6 Engine

3.6.1 The engine must be an inline four (4) cylinder production engine, originally sourced from a motorcycle, with a maximum capacity limit of 1200cc. The engine must have been in production for a minimum of two years.

3.6.2 Forced induction is prohibited. All air into the inlet manifold must pass through the air filter. Supercharging, turbocharging and nitrous oxide are prohibited.

3.6.3 Exhaust system is free, provided maximum sound level is not exceeded.

3.6.4 Starting and electrical charging systems must remain fitted and operable.

3.6.5 Engines must be cooled by the original method (ie; air-cooled vs water-cooled). Radiators are free, but must be mounted ahead of the engine. Additional fans and coolers are free.

3.6.6 Air box and filter is free.

3.6.7 To be eligible for sub-category points and championship, vehicles must be fitted with an engine complying with the rules of that sub-category.

3.7 Suspensions

3.7.1 Suspension shall be by one (1) adjustable coil-over shock absorber at each wheel.

3.7.2 No aspect of the suspension may be adjusted from the cockpit.

3.7.3 Shock absorbers are free, with the exception that remote canister shock absorbers are not permitted.

3.7.4 A front anti-roll bar may be used.

3.7.5 The rear axle assembly shall be a 'live' axle.

3.8 Transmissions:

3.8.1 The gearbox shall be integral with the engine, and may have 5 or 6 forward gears. The ratios must be as the gearbox was originally constructed.

3.8.2 All cars must have an operational reverse gear.

3.8.3 A 'quickchange' differential assembly may be used, using steel axle tubes only.

3.8.4 Final-drive ratio is free, as is the action of the differential.

3.8.5 Drive must be transmitted from the gearbox to the differential via a steel drive shaft. The tunnel incorporated to allow passage of the driveshaft must incorporate two (2) steel hoops to retain the driveshaft in the event of failure.

3.9 Electrics: Free, subject to restrictions indicated elsewhere. Traction control, launch control prohibited.

3.10 Brakes:

3.10.1 Anti-lock braking systems are prohibited.

3.10.2 All cars must use dual-circuit braking systems, with the front and rear systems each actuated by a separate master cylinder. A bias adjustment device may be incorporated.

3.10.3 Disc rotors are to be constructed of ferrous material, and no greater than 300mm in diameter.

3.10.4 Only one (1) brake calliper is permitted per wheel, and each calliper must have not greater than four (4) pistons.

3.10.3 The following additional restrictions apply to brakes for each sub-category:

3.11 Wheels/Steering

3.11.1 Steering – free.

3.11.2 Wheels shall be 15 inches diameter, and not greater than 7 inches width.

3.12 Weight

3.12.1 Minimum weight 590kg including driver.

3.12.2 To qualify for subcategory points and awards, competitors must comply with the minimum weight promulgated by the relevant subcategory regulations.

3.13 Silencing: Free, subject to EPA requirements.

3.14 Fuel Tank/Fuel

3.14.1 Fuel tank type and location - as original.

3.14.2 FUEL: Commercially available Unleaded Pump Fuel (Gasoline), Avgas or ET102 fuel may be used. In the event the Category receives support from a fuel supplier, there may be a requirement for this to be used by all competitors and may be a control premium unleaded fuel.

3.15 Tyres

3.15.1 Four new tyres per car or six used tyres per car may be marked at the commencement of qualifying, and only those tyres are permitted to be used for the remainder of the event. Should one of the marked tyres be damaged, it may be substituted for an equivalent tyre and the substitute re-marked. The Category Director or Technical Commissioner will be the authority on assessment of damage, and equivalency of the new tyre.

3.15.2 The control tyre for all cars is the Kumho Ecsta V700 205/50ZR15, unless otherwise notified via bulletin.

3.16 Parity Adjustment

3.16.1 The Category Director reserves the right to make a parity adjustment in the event of a car enjoying a performance advantage deemed excessive. The groups concerned will be consulted, and asked to give advice on the best method for adjustment. Possible methods include: RPM limit, ballast, inlet restrictor, or other method deemed appropriate. The final parity adjustment will be promulgated via special bulletin.

3.17 Numbers, Series Decals and Promotional Material:

3.17.1 Competition Numbers will be allocated by the Category Director. The top three 2008 specification competitors from the 2007 RocketSports series (ie; those competitors who are not now in the ProtoSports category) will be eligible for the numbers one (1) to three (3).

3.17.2 To be eligible to compete in a Championship Race and to obtain Championship points and / or prize and bonus money, competitors must comply with the following:

- a) **All race numbers must be of the correct size, on a clearly contrasting background.**
- b) **Tobacco advertising is completely prohibited on all cars, transporters and clothing.**
- c) Each car will be required to carry series stickers as supplied by the Series Director. Positioning of series stickers will be promulgated via bulletin.

3.18 In Car Cameras

3.18.1 In car camera installations must be approved by the Scrutineer of the meeting.