

2011

MONOPOSTO CHAMPIONSHIP

Draft Version #1

Sporting and Technical Regulations



**An MSA Recognised Racing Championship Organised By:
The Monoposto Racing Club Ltd**

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2011 MONOPOSTO CHAMPIONSHIP

1 SPORTING REGULATIONS - GENERAL

1.1 Title & Jurisdiction:

The **2011 Monoposto Championship** is organised and administered by the Monoposto Racing Club (MRC) in accordance with the General Regulations of the Royal Automobile Club Motor Sports Association (incorporating the provisions of the International Sporting Code of the FIA) and these Championship Regulations.

MSA Championship Permit No. **TBN**, Race Status: Nat B, MSA Championship Grade: C

1.2 Officials:

1.2.1 Championship Co-ordinator: Simon Davey, 1 The Applegarth, Long Buckby, Northampton NN6 7EQ Tel: 01327 843056 email: admin@monoposto.co.uk

1.2.2 Licenced Eligibility Scrutineer: John Atkinson, **Alistair Poulter**

1.2.3 Championship Stewards: **John Dawe**, Jock Gardner, Julian Pratt.

1.3 Competitor Eligibility:

1.3.1 Entrants must be fully paid up valid membership card holding members of the MRC and in possession of a valid **2011** MSA Entrants Licences.

1.3.2 Drivers and Entrant/Drivers must be fully paid up valid membership card holding members of the MRC, be Registered for the Championship and be in possession of a valid Competition (Racing) minimum National B status Licence.

1.3.3 All necessary documentation must be presented for checking at all rounds when signing-on.

1.4 Registration:

1.4.1 All drivers must register as competitors for the Championship by returning the Registration Form with the Registration Fee to the Co-ordinator prior to the Final Closing date for the first round being entered.

1.4.2 The Registration Fee is £125 inclusive of **MRC** Membership made payable to Monoposto Racing Club; or £30 for one round or £60 for a maximum of two rounds **within a 3 month period**; or £30 inclusive for drivers in their first season of racing.

1.4.3 Registrations will be accepted from **1st January 2011 until 30th November 2011**.

1.4.4 Registration numbers will be the permanent numbers for the Championship.

1.5 Championship Rounds:

The **2011 Monoposto Championship** will be contested over a maximum of **14** rounds as follows:

19 March	Sat	MSVR	Snetterton 300	SH	1
2/3 April	Sat/Sun	MSVR	Donington Park	DH	2&3
30 April/1/2 May	Sat/Sun/Mon	MSVR	Brands Hatch Indy	DH	4&5
21/22 May	Sat/Sun	MSVR	Cadwell Park	DH	6&7
2 July	Sat	MSVR	Oulton Park International	SH	8
20/21 August	Sat/Sun	MSVR	Brands Hatch GP	DH	9&10
10/11 Sept	Sat/Sun	MSVR	Anglesey International	DH	11&12
15/16 October	Sat/Sun	MSVR	Snetterton 300	DH	13&14

DH = Double Header

SH = Single Header

1.6 Scoring:

1.6.1 Points will be awarded in each class to Competitors listed as classified finishers in the Final Results as follows:

Where there are 6 or more starters in a Class:

1st = 15, 2nd = 12, 3rd = 10, 4th = 9, 5th = 8, 6th = 7, 7th = 6, 8th = 5, 9th = 4, 10th = 3, 11th = 2 points. Every other place = 1 point.

Where there are 5 or fewer starters in a Class:

1st = 10, 2nd = 7, 3rd = 5, 4th = 3, 5th = 1

Fastest lap in each Class = 1 point which will be awarded whether or not the competitor is classified as a finisher. Should more than one competitor get equal fastest lap 1 point will be awarded to each.

1.6.2 The totals from 12 qualifying rounds will determine final Championship points and positions. If the Total number of Championship rounds is reduced to 12 or less, the number of rounds to count will be the total rounds less 1.

1.6.3 Ties shall be resolved using the formula in Q3.4 of the 2010 MSA Yearbook.

1.7 Awards:

1.7.1 All awards are to be provided by the MRC or race organising club.

1.7.2 Per Round: As provided by race organising club or MRC.

1.7.3 Championship:

In each Class a trophy to the Champion, Runner-up and Third.

The Monoposto Nova Awards will be presented to the drivers from any Class who have scored the highest and second highest overall points total after dropped scores, provided they were not eligible for a Nat A Racing Licence when they started their first 2011 Monoposto Championship Race.

1.7.4 Bonuses: Per Round: Nil. Championship: Nil.

1.7.5 Presentations: Garlands and Trophies are to be provided for presentation at the end of each race or at an end of the meeting presentation ceremony. Championship Trophies will be presented at the Annual Awards Function.

1.7.6 Entertainment Tax Liability: Not applicable when prize money is not paid.

1.7.7 Title to all Trophies: In the event of any Provisional Results or Championship Tables being revised after any provisional presentations and such revisions affect the distribution of any awards the Competitors concerned must return such awards to the MRC in good condition within 7 days.

2 SPORTING REGULATIONS - JUDICIAL PROCEDURES

2.1 Rounds:

In accordance with Section C of the 2011 MSA Yearbook and the Rules of the MRC.

2.2 Championship:

In accordance with Section C of the 2011 MSA Yearbook and the Rules of the MRC.

3 SPORTING REGULATIONS - CHAMPIONSHIP RACE MEETINGS & RACE PROCEDURES

3.1 Entries:

- 3.1.1 Competitors are responsible for sending in correct and complete entries with the correct entry fees prior to the entry closing dates which shall be 20 days before each round, unless the Supplementary Regulations for the round specify a shorter period, which will not be less than 3 days before each round.
- 3.1.2 Incorrect or incomplete entries (Including Driver to be Nominated Entries) are to be held in abeyance until they are complete and correct and the date of receipt for acceptance of entry purposes shall be the date on which the Secretary of the Meeting receives the missing or corrected information or fee.
- 3.1.3 Any withdrawal of Entry or Driver/Car changes made after acceptance of any entry must be notified to the Secretary of the Meeting in writing. If Driver/Vehicle changes are made after publication of Entry Lists with Final Instructions the Competitor concerned must apply for approval of acceptance by the Stewards of the Meeting BEFORE Signing-On.
- 3.1.4 The Maximum Entry Fee for each round shall be as specified in the Entry Form.
- 3.1.5 For each Championship round the organisers may arrange entries by class into more than one race/grid. In the event of any races being oversubscribed the organisers, in liaison with the MRC, may at their discretion run Qualification Races. For Qualification Race Procedures see 3.13 of these Regulations.
- 3.1.6 Reserves are to be nominated on the Final List of Entries published with Final Instructions or Amendment Sheet Bulletins. All Reserves will practice and replace withdrawn or retired entries in Reserve Number order irrespective of class. If Reserves are given Grid Places prior to issue of the first Grid Sheets for any round the times set in Practice shall determine their grid positions. If reserves are given places after publication of the Grid Sheet and prior to cars being collected in the Official "Assembly Areas" they will be placed at the rear of the Grid and be started without any time delay. Otherwise, they will be held in the Pitlane and be released to start the race after the last car to start the GREEN FLAG LAP or last car to take the start has passed the Startline or Pitlane exit, whichever is the later. Such approval to start MUST be obtained from the Clerk of the Course.

3.2 Briefings:

Organisers should notify Competitors of the times and locations for all briefings in the Final Instructions for the meetings. Competitors must attend all briefings.

3.3 Practice:

The minimum period of practice to be 15 minutes. Practice will be arranged as follows.

Single header: entry arranged by class into one or more races/grids. One practice session for each race/grid.

Double header: entry arranged by class into one or two races/grids. Two practice sessions (each at least of the minimum period) for each race/grid: first practice session qualifies drivers for first round in the double header, second practice session qualifies drivers for second round.

For Double Headers where the entry is arranged by classes into three or more races/grids, the following may apply. One practice session (at least of the minimum period) for each race/grid qualifies drivers for both rounds of the double header. A driver's fastest lap during the practice session will establish order of precedence for the first round of the double header, and the second fastest lap will establish order of precedence for the second round. See 3.4 of these Regulations.

The arrangement of practice for Double Headers will be specified in the Supplementary Regulations for the event.

Should any Practice Session be disrupted the Clerk of the Course shall not be obliged to resume the session or re-run sessions to achieve the Championship criteria and the decision of the Clerk of the Course shall be final.

3.4 Qualification:

Each driver should complete a minimum of 3 laps practice in the car to be raced and in the correct session in order to qualify for selection and order of precedence as set out in the MSA Regulations Q4.5 and 3.3 of these Regulations. The Clerk of the Course and/or Stewards of the Meeting shall have the right to exclude any driver whose practice times or driving are considered to be unsatisfactory - as per MSA Regulation Q4.5.

3.5 Races:

The standard minimum scheduled distance shall be 15 minutes whenever practicable but should any race distance be reduced at the discretion of the Clerk of the Course or Stewards of the Meeting it shall still count as a full points scoring round.

[The procedure for qualification races is specified in 3.13.].

3.6 Starts:

- 3.6.1 All race start countdowns are to have a minimum elapsed period of 3 minutes from the time all cars are released to form up on the grid to the start of the Green flag lap(s) in the formation as specified on the Track Licence for each circuit.
- 3.6.2 The minimum Countdown procedures/audible warnings sequence shall be:
Standing Starts:-
 - 1 minute to start of Green Flag Lap - Start Engines/Clear grid.
 - 30 seconds - Visible and audible warning for start of Green Flag/Pace Lap.
- 3.6.3 The use of tyre heating/heat retention devices, tyre treatments and compounds is prohibited.
- 3.6.4 Any cars removed from the grid after the 1 minute stage or driven into the pits on the Green Flag Lap shall be held in the pitlane and may start the race after the last car to take the start from the grid has passed the startline or pitlane exit, whichever is the later.
- 3.6.5 Any drivers unable to start the Green Flag Lap or start are required to indicate their situation as per MSA Regulation Q12.13.2 and any drivers unable to maintain grid positions on the Green Flag Lap to the extent that ALL other cars are ahead of them, may complete the Green Flag Lap but MUST remain at the rear of the last row of the grid but ahead of any cars to be started with a time delay.
- 3.6.6 Excessive weaving to warm-up tyres - using more than 50% of the track width and falling back in order to accelerate and practice starts, is prohibited.
- 3.6.7 A five second board will be used to indicate that the grid is complete. The red lights will be switched on five seconds after the board is withdrawn.

In the event of any starting lights failure the Starter will revert to use of the National Flag.

3.7 Race Stops:

- 3.7.1 Should the need arise to stop any race or practice, RED LIGHTS will be switched on at the Startline and RED FLAGS will be displayed at the Startline and at all Marshals Signalling Points around the Circuit.

This is the signal for all drivers to cease circulating at racing speeds, to slow to a safe and reasonable pace and to return to the starting grid area which will automatically become a Parc Ferme area.

Cars may not enter the Pits unless directed to do so. Work on cars already in the Pits must cease when a race is stopped.

3.7.2 Case A - Less than two laps completed by Race leader.

The Race will be null and void. The race will restart from the original grid positions. Competitors unable to take the restart may be replaced by reserves who will start from the back of the grid in reserve order. Gaps on the grid should not be closed up. The length of the restarted race will be determined by the Clerk of the Course.

3.7.3 Case B - More than two laps completed by Race Leader but less than 75%

The Race will restart from a grid set out by the finishing order of part one, (as per Q5.4.2). The result of the race will be the finishing order at the end of part 2. The length of the restarted race will be determined by the Clerk of the Course.

3.7.4 If the leader has completed more than 75% of the race distance or duration it shall not be re-started and the results will be declared in accordance with MSA Regulation Q5.4.3, unless the Clerk of the Course, in consultation with the Stewards deem it appropriate to restart the race.

3.8 Re-Scrutiny:

All vehicles reported involved in contact incidents during races must be re-presented to the Scrutineers before continuing in the races or practice.

3.9 Pits & Pitlane Safety:

3.9.1 Pits - Entrants must ensure that the MSA, Circuit Management and Organising Club Safety Regulations are complied with at all times.

3.9.2 Pitlane - The outer lane or lanes are to be kept unobstructed to allow safe passage of cars at all times. The onus shall be on all drivers to take all due care and drive at minimum speeds in pitlanes.

3.9.3 Refueling. May only be carried out in accordance with the MSA Q13 Regulations, Circuit Management Regulations and the SRs or Final Instructions issued for each Circuit/Meeting.

3.9.4 Speed Limit – Pit Lane Speed Limit will be as specified by each Organising Club.

3.10 **Race Finishes:** After taking the Chequered Flag drivers are required to: Progressively and safely slow down, remain behind any competitors ahead of them, return to the Pit Lane Entrance/Paddock Entrance as instructed, comply with any directions given by Marshals or Officials and to keep the helmets on and harnesses done up while on the circuit or in the pitlane.

3.11 **Results:** All Practice Timesheets, Grids, Race Results are to be deemed PROVISIONAL until all vehicles are released by Scrutineers after Post Practice/Race Scrutineering and/or after completion of any Judicial or Technical Procedures.

3.12 **Timing Modules:** These are required as advised by MST Sports Timing Ltd.

3.13 **Qualification Races:** These are not applicable.

3.14 Operation of Safety Car

3.14.1 The Safety Car will be brought into operation and run in accordance with Section Q, Appendix 2 of the MSA General Regulations.

4. CHAMPIONSHIP RACE PENALTIES

4.1 Infringements of Technical Regulations:

4.1.1 Arising from post practice Scrutineering or Judicial Action: Minimum Penalty: The provisions of MSA Regulations [C3.3].

4.1.2 Arising from post race Scrutineering or Judicial Action:
Minimum Penalty: The provisions of MSA Regulations [C3.5.1(a) & (b)]
For infringements deemed to be of a more serious nature the Clerk of the Course and/or Stewards of the Meeting may invoke the provisions of Regulation [C3.5.1(c)].

4.1.3 Additional specific Championship penalties: None.

4.2 **Infringements of Non-Technical MSA Regulations and the Sporting Regulations** issued for the Championship: As per 2011 MSA Judicial Procedure Regulations.

5. TECHNICAL REGULATIONS

5.1 Introduction:

The following Technical Regulations are set out in accordance with the MSA specified format and it should be clearly understood that if the following texts do not clearly specify that you can do it, you should work on the principle that you cannot.

Where a Modification Permitted is shown as "Free" or a Modification Prohibited is shown as "None" this means that the only restrictions are those imposed by the current MSA. Motor Sport Year Book.

5.2 General Description:

The Mono Championship is for Competitors participating in Single Seater Racing cars, constructed or adapted to the Monoposto Formula, a formula, in six classes – Mono 2000; Mono Classic 2000; Mono 1800; Mono 1600, Mono 1000 and Mono 1400; devised for the enthusiast not the professional.

5.3 Safety Requirements:

MSA Section K Safety Criteria Regulations will apply.

5.4 General Technical Requirements & Exceptions:

The general technical regulations are those as set out in the MSA Motor Sport Year Book 2011, together with the specific regulations set out as below. The Management Board of the MRC reserves the right of modification to regulations, also to exclude any car considered to be constituting a deliberate violation and reserves the right to impound any car for examination.

5.5 Chassis:

5.5.1 MONO 2000

a) Commercially built chassis structure designated by the manufacturer as the model for the 2004 season or earlier, replacement parts must be to original specification. All chassis structures from models for the 1987 season onwards must be so constructed that the soles of the feet of the driver, seated in the normal driving position and with his/her feet on the pedals in the operative position, shall not be situated to the fore of the vertical plane passing through the centre line of the front wheels.

b) Home built "one off" main chassis structure of any age; any proprietary parts must be for a car designated by the manufacturer as the model for the 2004 season or earlier. Home built "one off" chassis structure built from 1/1/94 must be so constructed that the soles of the feet of the driver, seated in the normal driving position and with his/her feet on the pedals in the operative position, shall not be situated to the fore of the vertical plane passing through the centre line of the front wheels.

c) Chassis complying with the 2009 (or earlier) Formula Renault BARC Technical Regulations including bodywork and conforming to 5.6 as below. This chassis can only be used with an engine conforming to 5.7 (c).

Note. It is permitted to replace components and fasteners to original dimension and material, from alternative sources and Renault Sport homologation is not required.

5.5.2 MONO CLASSIC 2000

a) Chassis complying with 5.5.1 a) of aluminium alloy and / or steel construction where the manufacturers designated model year is 1998 or earlier; or 1999 or earlier in the case of chassis built to comply with the Renault Sport Manual; or 2001 or earlier when fitted with a Ford Zetec engine conforming to 5.7(d).

b) Chassis complying with 5.5.1 a) of carbon fibre composite or aluminium alloy construction originally complying, or derived from those originally complying, with FIA Formula 3 and identified by the manufacturer as for the model year 1992 or earlier.

5.5.3 MONO 1800 and MONO 1600

a) Commercially built chassis structure designated by the manufacturer as the model for the 2007 season or earlier, replacement parts must be to original specification. All chassis structures from models for the 1987 season onwards must be so constructed that the soles of the feet of the driver, seated in the normal driving position and with his/her feet on the pedals in the operative position, shall not be situated to the fore of the vertical plane passing through the centre line of the front wheels.

b) Home built "one off" main chassis structure of any age; any proprietary parts must be for a car designated by the manufacturer as the model for the 2007 season or earlier. Home built "one off" chassis structure built from 1/1/94 must be so constructed that the soles of the feet of the driver, seated in the normal driving position and with his/her feet on the pedals in the operative position, shall not be situated to the fore of the vertical plane passing through the centre line of the front wheels.

5.5.4 MONO 1000 and MONO 1400

a) Commercially built chassis structure designated by the manufacturer as the model for the 2007 season or earlier, replacement parts must be to original specification.

b) Post 2007 chassis of specified make and model may be permitted by the MRC Management Board. This is intended to permit some limited production, new chassis which are considered to meet the club's objectives. Approved chassis are listed in the MRC Year Book 2011 and subsequent Championship Bulletins and notices in 'Startline on Line', the MRC on line magazine.

c) Home built "one off" main chassis structure of any age, any proprietary parts must be for a car designated by the manufacturer as the model for the 2007 season or earlier or from the approved chassis list.

5.6 Bodywork:

5.6.1 Modifications Permitted:

- | | | |
|-----|-------------------|---|
| I | General. | Free, except as constrained by MSA regulations Section J and Q 2011. |
| ii | Interior. | Free, except as constrained by MSA regulations Section J and Q 2011. |
| iii | Exterior. | Free, except as constrained by MSA regulations Section J and Q 2011. e.g.
a) Maximum rear wing height above ground 90cms;
b) Maximum rear projection beyond rear axle centre line 100cms;
c) Maximum rear wing width 95cms |
| iv | Silhouette. | Free, except as constrained by MSA regulations Section J and Q 2011. |
| v | Ground Clearance. | Minimum 4 cms., as MSA regulations Section J and Q 2011. |

5.6.2 Modifications Prohibited:

- | | | |
|-----|-------------------|--|
| i | General. | None, subject to MSA regulations Section J and Q 2011. |
| ii | Interior. | None, subject to MSA regulations Section J and Q 2011. |
| iii | Exterior. | None, Except 5.6.1 iii) a)-c) above and subject to MSA regulations Section J and Q 2011. |
| iv | Silhouette. | None, subject to MSA regulations Section J and Q 2011. |
| v | Ground Clearance. | None, except 5.6.1 v) above and as MSA regulations Section J and Q 2011. |

5.7 Engine:

The engine must be a normally aspirated reciprocating piston engine to one of three specifications in **MONO 2000**, of two specifications in **MONO CLASSIC 2000**, of three specifications in **MONO 1800**, of three specifications in **MONO 1600**, of one specification in **MONO 1000** or of one specification in **MONO 1400**. In the interests of equalising performance the Monoposto Racing Club reserves the right after every three Championship rounds during the season and giving not less than 14 days' notice, to specify, review and adjust maximum choke sizes or restrictor plate aperture size for any category or derivative of car within classes in order to equalise performance. Categories or derivatives is taken to mean engines of different manufacturer or model; chassis of different construction / materials; chassis of different original formulae; or chassis of different age range.

5.7 (a) MONO 2000: STANDARD PRODUCTION ENGINES UP TO 2000cc WITH NON VARIABLE CAMSHAFT TIMING PRODUCED TO A MINIMUM NUMBER OF 1000 UNITS IN ANY ONE YEAR FOR ANY ONE EU MEMBER STATE. Only engines for which the manufacturer's detailed specifications are available to the MRC are permitted. Registered competitors must ensure that the manufacturer's specification, to the satisfaction of the eligibility scrutineer, can be provided for the engine that is entered in the championship.

Engines with variable camshaft timing as original specification are not eligible even if timing is subsequently fixed permanently.

Standard specification does not mean a collection of standard components. It means an engine which matches the original specification for the make and model indicated by the manufacturer's engine number. This includes compression ratio and valve timing except as in 5.7.1 (a) ix. Valve timing should be capable of being checked in the paddock by following manufacturer's specified timing procedure, including the use of any special keys or tools.

Engines which comply with the specification contained in the Formula Renault Sport Manual up to and including 1999 are deemed to be eligible.

5.7.1 (a) Modifications Permitted:

- i Fuel injection systems including ECU, to the specification for Formula Vauxhall/Opel (up to 1999), Formula Renault Sport (up to 1999), Formula 2000 or Formula Asia, is deemed to comply. Original specification fuel injection may be replaced by carburettors. Throttle body fuel injection with a maximum choke diameter of 40.10 mm within each individual throttle body may be used. Restrictor plates, with specified apertures to effectively reduce performance, may be required following notice.
- ii Dry sump lubrication system permitted, together with modifications to engine castings necessarily required to enable fitment.
- iii Standard flywheel may be replaced. Flywheel is free.
- iv Ignition system is free.
- v Big end bolts free.
- vi A re-bore allowance in accordance with manufacturers specification up to 0.5mm; together with manufacturers specification replacement pistons. No additional machining to recover original compression ratio is required or permitted as a result of this modification only.
- vi Cylinder head gasket plane may be machined in order to recover a warped head. Original specification compression ratio must be recovered by local machining to the combustion chamber in the head. All such work must be reported to the Eligibility Scrutineer who may specify a combustion chamber volume and request to examine the head before use.
- viii Where fuel injection is used, ECU and wiring loom are free.
- ix For Ford Zetec engines valve timing is free: camshaft and crankshaft valve timing pulleys must remain standard.

5.7.2 (a) Modifications Prohibited: Modifications other than those specified in 5.7(a). and 5.7.1.(a) i to ix above.

5.7 (b) MONO 2000: ENGINES OF MANUFACTURE AND MODEL AS USED IN FIA INTERNATIONAL FORMULA 3 DURING 2004 OR EARLIER HAVING A 25 MILLIMETER MAXIMUM DIAMETER AIR RESTRICTOR THROUGH WHICH ALL AIR SERVING THE INDUCTION IS PASSED.

5.7.1 (b) Modifications Permitted; Free

5.7.2 (b) Modifications Prohibited: None.

5.7 (c) MONO 2000: Engines complying with the 2009 Formula Renault BARC Technical Regulations when used in chassis complying with 5.5.1(c) only

5.7.1 (c) Modifications Permitted; None

5.7.2 (c) Modifications Prohibited: Modifications other than in 5.7.1 (c) above.

5.7 (d) MONO CLASSIC 2000: STANDARD PRODUCTION IRON BLOCK ENGINES UP TO 2000cc WITH NON VARIABLE CAMSHAFT TIMING PRODUCED TO A MINIMUM NUMBER OF 1000 UNITS IN ANY ONE YEAR FOR ANY ONE EU MEMBER STATE. Only engines for which the manufacturer's detailed specifications are available to the MRC are permitted. Registered competitors must ensure that the manufacturer's specification, to the satisfaction of the eligibility scrutineer, can be provided for the engine that is entered in the championship.

Engines with variable camshaft timing as original specification are not eligible even if timing is subsequently fixed permanently.

Standard specification does not mean a collection of standard components. It means an engine which matches the original specification for the make and model indicated by the manufacturer's engine number. This includes compression ratio and valve timing. Valve timing should be capable of being checked in the paddock by following manufacturers specified timing procedure, including the use of any special keys or tools.

Engines which comply with the specification contained in the Formula Renault Sport Manual up to and including 1999 are deemed to be eligible.

5.7.1 (d) Modifications Permitted:

- i Original specification fuel injection may be replaced by carburettors. Fuel injection systems including ECU, to the specification for Formula Vauxhall/Opel (up to 1999), Formula Renault Sport (up to 1999), Formula 2000 or Formula Asia, is deemed to comply.
- ii Dry sump lubrication system permitted, together with modifications to engine castings necessarily required to enable fitment.
- iii Standard flywheel may be replaced by a steel flywheel weighing not less than 3.6kg including ring-gear.
- iv Ignition system is free.
- v Big end bolts free.
- vi A re-bore allowance in accordance with manufacturers specification up to 0.5mm; together with manufacturers specification replacement pistons. No additional machining to recover original compression ratio is required or permitted as a result of this modification only.
- vii Cylinder head gasket plane may be machined in order to recover a warped head. Original specification compression ratio must be recovered by local machining to the combustion chamber in the head. All such work must be reported to the Eligibility Scrutineer who may specify a combustion chamber volume and request to examine the head before use.
- viii Where original manufacturer's fuel injection is retained, ECU and wiring loom are free.

5.7.2 (d) Modifications Prohibited: Modifications other than those specified in 5.7(d). and 5.7.1.(d) i to viii above.

5.7 (e) MONO CLASSIC 2000: ENGINES OF MANUFACTURE AND MODEL AS USED IN FIA INTERNATIONAL FORMULA 3 DURING 1992 OR EARLIER HAVING A 25 MILLIMETER MAXIMUM DIAMETER AIR RESTRICTOR THROUGH WHICH ALL AIR SERVING THE INDUCTION IS PASSED.

5.7.1 (e) Modifications Permitted; Free

5.7.2 (e) Modifications Prohibited: None.

- 5.7 (f) MONO 1800:** ENGINES CONFORMING TO FF ZETEC 1800 REGULATIONS (UP TO 2005) AS DEFINED IN THE TECHNICAL REGULATIONS PUBLISHED BY FORD MOTOR COMPANY.
Specified injection / ignition management unit must be retained and connected to and influenced by all specified sensors.
- 5.7.1 (f) Modifications Permitted; None
- 5.7.2 (f) Modifications Prohibited: Modifications other than in 5.7.1 (f) above.
- 5.7 (g) MONO 1800:** ENGINES CONFORMING TO THE FORMULA VAUXHALL 2000 (Junior 1600 CC 16 Valve) REGULATIONS ORIGINALLY ISSUED BY BARC.
- 5.7.1 (g) Modifications Permitted; None
- 5.7.2 (g) Modifications Prohibited: Modifications other than in 5.7.1 (g) above.
- 5.7 (h) MONO 1800:** ENGINES CONFORMING TO FF2000 REGULATIONS AS DEFINED IN THE 1993 MSA YEARBOOK.
- 5.7.1 (h) Modifications Permitted:
- i A re-bore allowance of +0.020" is permitted.
 - ii Replacement pistons Kolbenschmitt A.G. Part No.92283613 or Hepolite Part No. 21426 are permitted.
- 5.7.2 (h) Modifications Prohibited: Modifications other than those specified in 5.7.1.(h) i - ii above.
- 5.7 (i) MONO 1600:** ENGINES CONFORMING TO FF1600 ENGINE REGULATIONS AS DEFINED IN THE TECHNICAL REGULATIONS PUBLISHED BY FORD MOTOR COMPANY.
- 5.7.1 (i) Modifications Permitted:
- i A re-bore allowance of +0.020" is permitted.
 - ii The use of Hepolite replacement pistons, Part No.20552 V1 is permitted provided they are within the tolerances shown on the Hepolite drawing No.20552/1/2.
 - iii An alternative silencer is permitted.
- and when installed in a pre 1990 or home built chassis:**
- iv Clutch and flywheel assembly may be reduced in weight, to a minimum of 10kg.
 - v Camshaft may be replaced by Kent Cams MK2 as specified by and available from the Club.
 - vi Camshaft pulley may be replaced by vernier type.
 - vii Valve springs and retainers must be of steel but otherwise free. (Dual springs permitted).
- 5.7.2 (i) Modifications Prohibited: Modifications other than those specified in 5.7.1.(i) i to vii above, when installed in a pre 1990 or home built chassis; 5.7.1.(i). i to iii when installed in a 1990 – 2007 chassis.
- 5.7 (j) MONO 1600:** STANDARD PRODUCTION IRON BLOCK ENGINES UP TO 1750cc WITH SINGLE CAMSHAFT, PRODUCED TO A MINIMUM NUMBER OF 1000 UNITS IN ANY ONE YEAR FOR THE UK MARKET. ONLY ENGINES FOR WHICH THE MANUFACTURER'S DETAILED SPECIFICATIONS ARE AVAILABLE TO THE MONOPOSTO RACING CLUB ARE PERMITTED. ENGINES WHICH COMPLY WITH THE SPECIFICATION CONTAINED IN THE FORMULA RENAULT MANUAL 1994 AND FORMULA VAUXHALL JUNIOR 1995 REGULATIONS ARE DEEMED TO BE ELIGIBLE. Registered competitors must ensure that the manufacturer's specification, to the satisfaction of the eligibility scrutineer, can be provided for the engine that is entered in the championship. Standard specification does not mean a collection of standard components. It means an engine which matches the original specification for the make and model indicated by the manufacturer's engine number. This includes compression ratio and valve timing. Valve timing should be capable of being checked in the paddock by following manufacturers specified timing procedure, including the use of any special keys or tools.
- 5.7.1 (j) Modifications Permitted: Dry sump lubrication system permitted.
- 5.7.2 (j) Modifications Prohibited: Modifications other than those specified in 5.7.1.(j) i above.

5.7 (k) MONO 1600; ENGINES CONFORMING TO FORMULA FIRST / EURO FIRST REGULATIONS AS PUBLISHED BY BRSCC.

5.7.1 (k) Modifications Permitted:

- i Existing camshaft may be replaced by Kent Cams CVH 33 together with adjustable vernier CA 18. Valve springs supplied with the cam as a kit may also be used.

5.7.2 (k) Modifications Prohibited: Modifications other than those specified in 5.7.1 (k)i above.

5.7 (l) MONO 1000 : STANDARD PRODUCTION MOTOR CYCLE ENGINES TO ORIGINAL MANUFACTURERS SPECIFICATION WITH A CAPACITY UP TO 1000cc.

A workshop manual must be supplied on demand to verify engine specifications.

Engines complying with BRSCC 'Formula Honda' 600cc regulations for any year are deemed to comply.

5.7.1 (l) Modifications permitted:

- i Engines may be rebored to give a maximum engine displacement of 1000cc, pistons are free.
- ii Compression ratio is free.
- iii Induction System is free, fuel injection or carburettors may be used.
- iv Exhaust system free.
- v Ignition coils, spark plugs and high tension leads are free.
- vi Ignition sensor wheels are free, CDI units must be standard, OR if fuel injection is used, then ECU is free but maximum rev limit to be that as per original road engine specification.
- vii Inlet and exhaust ports may be reshaped by the removal or addition of material, they may be polished.
- viii Counterbalance shafts where fitted may be removed.
- ix Camshafts and valves are free.
- x Crankshaft and connecting rods are free.
- xi Sump pan and oil feeds may be modified.

5.7.2 (l) Modifications prohibited: Modifications other than those specified in 5.7.1. (l) i to xi. above.

5.7 (m) MONO 1400: STANDARD PRODUCTION MOTOR CYCLE ENGINES TO ORIGINAL MANUFACTURERS SPECIFICATION WITH A CAPACITY UP TO 1400cc.

A workshop manual must be supplied on demand to verify engine specifications.

5.7.1 (m) Modifications permitted;

- i Air filtration system is free.
- ii Wiring loom is free.
- iii Sump pan and oil feeds may be modified.
- iv Fuel Pump is free
- v Induction and ignition systems must be to manufacturers specification, 'Power Commander' and similar devices are permitted.

5.7.2 (m) Modifications prohibited; Modifications other than those listed in 5.7.1 (m) above.

ALL ENGINES:

5.7.3 Location: Free.

5.7.4 Oil/Water cooling: Free.

5.7.5 Induction systems: Forced induction prohibited.

5.7.6 Exhaust systems: Free, including exhaust manifold

5.7.7 Ignition systems: Free, except 5.7(f); 5.7(g); CDI units as standard in 5.7 (m)

5.7.8 Fuel Delivery Systems: Fuel pump free.

5.7.9 Replacement Components: Components of alternative manufacturers may be used to reduce rebuild costs provided original specification for dimensions, weight and materials are complied with.

5.7.10 All steel fasteners (nuts, bolts, washers, studs) may be replaced by any steel fastener. (In the interests of economy and safety).

5.8 Suspensions:

a) MONO 2000

- 5.8.1 (a) Modifications Permitted: Free.
- 5.8.2 (a) Modifications Prohibited: Suspensions designated by the manufacturer for a model for the 2005 or later season in all classes.

b) MONO CLASSIC 2000;

- 5.8.1 (b) Modifications Permitted: Free.
- 5.8.2 (b) Modifications Prohibited: Suspensions designated by the manufacturer for a model for the 2002 or later season in cars complying with 5.5.2 (a) and 1993 or later for cars complying with 5.5.2 (b)

a) MONO 1800; MONO 1600

- 5.8.1 (a) Modifications Permitted: Free.
- 5.8.2 (a) Modifications Prohibited: Suspensions designated by the manufacturer for a model for the 2007 or later season in all classes.

c) MONO 1000: MONO 1400

- 5.8.1 (c) Modifications Permitted: Free.
- 5.8.2 (c) Modifications Prohibited: Suspensions designated by the manufacturer for a model for the 2008 or later season except with respect to the approved post 2007 make and models.
- 5.8.3 (a ; b & c) Wheelbase/Track: Free.

5.9 Transmissions:

a) MONO 2000 5.5.1 (a); MONO 2000 5.5.1 (b)

- 5.9.1 (a) Modifications Permitted:
 - i Clutch: free.
 - ii Transmission & Drive Ratios: free
 - iii Transmissions with sequential gearchange are permitted
- 5.9.2 (a) Modifications Prohibited: None

b) MONO 2000 5.5.1 (c)

- 5.9.1 (b) Modifications Permitted: Transmission, Gear Ratios, Final Drive and Clutch must comply with 2009 (or earlier) Formula Renault BARC Regulations. Teams may maintain and repair transmission units without reference to Renault Sport but must comply with specifications on settings and preloads.
- 5.9.2 (b) Modifications Prohibited: All except as 5.9.1.(b) above.

c) MONO CLASSIC 2000; MONO 1800; MONO 1600

- 5.9.1 (c) Modifications Permitted:
 - i Clutch: free.
 - ii Transmission & Drive Ratios: free.
- 5.9.2 (c) Modifications Prohibited: None other than transmissions with sequential gearchange are not permitted

d) MONO 1000

- 5.9.1 (d) Modifications Permitted:
 - i Clutch basket, plates and springs are free.
 - ii Gears and primary drive ratio are free, the number of forward gears not to be increased beyond the standard number.
 - iii Final drive ratio is free.
- 5.9.2 (d) Modifications Prohibited: Modifications other than those specified in 5.9.1 (d) i to iii.

e) MONO 1400

- 5.9.1 (e) Modifications Permitted:
 - i Clutch basket, plates and springs are free.
 - ii Final drive ratio is free.
- 5.9.2 (e) Modifications Prohibited: Modifications other than those specified in 5.9.1 (e) i to ii.

- 5.9.3 All vehicles in all classes must be fitted with an operational means of reversing under its own power with the driver seated in the normal driving position.

5.10 Electrics:

- 5.10.1 Exterior Lighting: Not required.
- 5.10.2 Rear Warning Lamp: An LED rear fog light to ECE Regulation 7, an FIA homologated LED rear warning light, or an LED stop light to ECE Regulation 38 is mandatory and must be mounted in accordance with K5 of the 2011 MSA Yearbook.
- 5.10.3 Batteries: To K14 of the 2011 MSA Yearbook.
- 5.10.4 Generators: Optional.
- 5.10.5 Starter Motors: Optional; push starts permitted.

5.11 Brakes:

- 5.11.1 Permitted Modifications: Free.
- 5.11.2 Prohibited Modifications: None.

5.12 Wheels/Steering:

- 5.12.1 Permitted Options: Free.
- 5.12.2 Prohibited Options: None.
- 5.12.3 Construction & Materials: Free.
- 5.12.3 Dimensions: Minimum road wheel diameter 13". Steering wheels free but must form a completely closed, unmodified 'loop'.

5.13 Tyres:

- 5.13.1 Specifications: Free.
- 5.13.2 Nominated Manufacturers: Free.

5.14 Weights: The minimum weight, as Section [J5.15.1 to J5.15.5] but including driver wearing full safety clothing and equipment, to be not less than:

- | | |
|--|---------|
| 5.14.1 Mono 2000: | 560 kgs |
| 5.14.2 Mono Classic 2000 | 560 kgs |
| 5.14.3 Mono 1800: | 535 Kgs |
| 5.14.4 Mono 1600: | |
| i) Engine option 5.7 (i) (standard FF1600) | 505 kgs |
| ii) Engine option 5.7 (i) (incorporating 5.7.1 (i) iv – vii) | 515 kgs |
| iii) Engine option 5.7 (j) (FRenault and 8V Vauxhall Junior) | 525 kgs |
| iv) Engine option 5.7 (k) (Euro First) | 505 kgs |
| 5.14.5 Mono 1000: | 400 kgs |
| i) Or when fitted with a Formula Honda 600 engine | 370 kgs |
| 5.14.6 Mono 1400: | 450 kgs |
| 5.14.7 The Championship Organisers reserve the right to review and adjust minimum weights after every three Championship rounds during the season, for any category or derivative of car within classes in order to equalise performance giving a minimum of 7 days' notice and lodging any changes with the MSA. Categories or derivatives is taken to mean engines of different manufacturer or model; chassis of different construction / materials; chassis of different original formulae; or chassis of different age range. | |

5.15 Fuel Tank/Fuel:

- 5.15.1 Types: Free.
- 5.15.2 Locations: To K14.1.2 of the 2011 MSA Yearbook.
- 5.15.3 Fuel: Pump fuel, as defined in the 2011 MSA Yearbook.

5.16 Silencing: To J5.17 of the 2011 MSA Yearbook.

5.17 Numbers & Championship Decals:

5.17.1 Positions: As directed by the MRC Management group.

5.17.2 Suppliers: As and When, by the MRC.

5.17.3 Each class will be identified by a coloured decal, positioned next to the driver number, and supplied by the MRC as follows:

- | | | |
|---|-------------------|--|
| 1 | Mono 2000 | - 150 mm diameter green circle. |
| 2 | Mono Classic 2000 | - 150 mm diameter green circle superimposed by a white "C" |
| 3 | Mono 1800 | - 150 mm equal sided pink triangle. |
| 4 | Mono 1600 | - 150 mm x 150 mm blue square. |
| 5 | Mono 1400 | - 150 mm diameter red circle. |
| 6 | Mono 1000 | - 150 mm x 120 mm yellow diamond. |

5.18 Race Timing: All vehicles are required to be fitted with a transponder as advised by MST Sports Timing Ltd or other Timing Authority.

6 APPENDICES

The following Commercial Undertakings are not subject to the Judicial Procedures of either the Championship Stewards and/or the MSA/MSA.

6.1 Race Organising Clubs & Contacts:

MotorSport Vision Limited, Brands Hatch, Fawkham, Longfield, Kent DA3 8NG
Contact: David Willey Tel: 01474 875 202

6.2 Commercial Undertakings:

Trade Support Vehicle Decals & Overall Patches, Promotional activities: details later in MRC on line magazine STARTLINE ON LINE.

7 REGISTRATION FORM

See separate attachment.

Co-ordinator: Mr Simon Davey

**1 The Applegarth,
Long Buckby,
Northampton NN6 7EQ
Tel/Fax: 01327 843056
email: admin@monoposto.co.uk**

Ref: MRC/2011 Draft Version #1