



REGULATIONS AND SPECIFICATIONS FOR THE 2019 NORTHERN REGIONS HISTORIC SINGLE SEATER CLUB CHAMPIONSHIP (161677/144)

1. INTRODUCTION

- 1.1. This category of historic motorsport has a variety of periods and categories and is for single-seat and purpose built open two seat racing cars.
 - 1.1.1. Air cooled Formula Vee (pre-1989)
 - 1.1.2. Purpose-built Sports Cars up to 2000cc engine capacity (pre-1967)
 - 1.1.3. Front engine Single Seaters (pre 1975)
 - 1.1.4. All other Formulas (up to 1986)
 - 1.1.5. Formula Ford
 - 1.1.5.1. Classic (pre-1981)
 - 1.1.5.2. Historic FF (pre-1971)
 - 1.1.5.3. Locally designed and constructed FF (pre-1986)
 - 1.1.6. Wings and Slicks F1, F2, F3, Atlantic, F5000, Formula Ford 2000, Formula South Africa and Formula Sigma (all pre 1986)
- 1.2. Each category is subject to a set of technical regulations (See list of Appendices1-7) which need to be read in conjunction with these Regulations and Specifications.
- 1.3. The final decision as to the eligibility of any vehicle and its period shall rest with the HSSA Eligibility sub-committee whose decision shall be final.
- 1.4. Before commencing the construction of specialised vehicles and/or replicas, where there are no clear specifications, the concept and plans must be presented to the chairman of HSSA. A technical evaluation will be conducted and approval will be issued or not. Cars built in the spirit of a period car must substantially resemble the original after which it is built and must contain **NO** parts that will provide an unfair advantage. Modern components may not be substituted and the car must resemble the silhouette as well as the mechanical workings of the period.

2. ADMINISTRATORS

- 2.1. The controllers of Historic Single Seater Racing in South Africa shall be Motorsport South Africa (hereafter referred to as MSA) through the Historic Single Seater Association (hereafter referred to as HSSA) and the relevant MSA Regional Committee.
- 2.2. The MSA GCR's and SSR's, which shall prevail in the event of a conflict, must be read and understood in conjunction with these rules and regulations. Please see appendices applicable to HSSA's various Racing Categories.

3. ELIGIBILITY AND CLASSIFICATION

- 3.1. Only cars that have been registered with and approved by the HSSA, acting on behalf of MSA shall be eligible to compete in the Historic Single Seater Racing events.
- 3.2. Drivers must hold a current and valid, "Club Category" MSA licence which is applicable to the series.

- 3.3. The final decision as to the classification type/period of any vehicle shall rest with the HSSA Eligibility sub-committee, which shall be entitled to make that decision in its sole discretion. Aspirant competitors are strongly advised to consult with the HSSA regarding compliance with the Technical Specifications prior to starting their investment programme. The HSSA shall, upon submission of an HSSA registration form by the competitor, determine the Category and Class under which such vehicle shall race.
- 3.4. No car shall be permitted to race in any Historic Single Seater Racing Championship unless approved by and registered with the HSSA Committee.
- 3.5. Competitors will be required to complete an MSA HTP (Historic Technical Passport) for every vehicle to be raced, and on which full details of engine, gearbox, suspension, lightweight panels, wheel sizes, etc. and any other information required by the committee, shall be recorded. Once a vehicle has been accepted and approved by the HSSA, this registration form must be stamped and signed by the responsible officer of HSSA and registered with MSA.
- 3.6. Any proposed change to the specification of the vehicle must be recorded on an HSSA registration form and submitted to the HSSA for approval, once approved, it shall be included in the registration document.
- 3.7. Any competitor whose vehicle is found to differ in specification from his/her registration form and/or logbook will be requested to make the necessary changes and if such changes are not made, will be excluded from any future races.

4. NUMBERS; SPONSORS; ADVERTISING AND OTHER MARKINGS

- 4.1. Advertising material, as deemed necessary by the relevant administering club in terms of the promotion of a series sponsor/s or any other ad hoc sponsorship material, shall be displayed on each competitor's car and/or racing apparel and in a specified position.
- 4.2. Should such advertising material not be placed on a competing vehicle or in the specified position, that vehicle will not be allowed to compete until such time as the specified advertising material is placed on the vehicle and in the correct position.
- 4.3. Advertising material (other than period) may be displayed, upon approval of HSSA.

5. CODE OF CONDUCT

5.1. Spirit of Historic Racing

- 5.1.1. HSSA competitors must undertake to race within the spirit of the regulations and the HSSA will be the final judge of that fact.

6. CHAMPIONSHIP

6.1. Championship Aim

- 6.1.1. The aim of the HSSA championship is to declare a Champion. The Champion shall be the competitor who accumulates the highest number of points in the season in the Index championship.
- 6.1.2. A parallel competition is run for scratch racing and the Tyler trophy is awarded.
- 6.1.3. In the case of a tie, the competitor with the greater number of first place points will be declared the champion. If this does not resolve the tie, then the greater number of second places failing this, third places and so on until the tie is resolved.

6.2. Championship Format

- 6.2.1. The HSSA Championship will consist of six events less any cancelled events. Each event will consist of two races. At least one event will be an “away” event (Killarney and/or East London and/or Port Elizabeth).
- 6.2.2. The length of the championship races will be a minimum of 15 minutes in race time or 24 kilometres in length, whichever is the longest.
- 6.2.3. Races can be in three formats: Scratch, Index of Performance & Handicap. Notwithstanding this, and with consensus of the competitors, alternative starting and race formats may be considered to cater for circumstances at the time.

6.2.3.1. Scratch

In the case of scratch racing, the starting position on the grid for any competitor in the first race of any championship event will be determined by the fastest lap in official practice/qualifying of that competitor. Starting positions for the second race grid will be determined by the finishing order of the first race. Any competitor that does not finish the first race will start at the back of the grid for the next race. In scratch racing the result is according to the order in which the competitors cross the finishing line.

6.2.3.2. Index of Performance

- a. An index of performance race may, be held for all competitors in each race no matter the category of the car.
- b. Taking the Ideal Race Time and dividing it by the Actual Race Time (in seconds) and multiplying by 100 will calculate the index. The Ideal Race Time is calculated by taking the driver’s fastest lap in the relevant race in seconds and multiplying by the number of race laps.
- c. Point Scoring per 6.5.

6.2.3.3. Handicapping

(Not currently in use- but may well be raced in the future)

The position on the grid for each race is determined by taking the individual handicap time for that race and multiplying by the number of laps and deducting 0.3 seconds per car to be passed using the following formula:

- a. Heat One:

The handicap lap time is set for the first race based on the fastest practice lap time on the day with an option for the driver to nominate a faster time to avoid breaking the handicap lap time including the allowance (the allowance is 2.5% in the first race and 1.5% in the second). If that handicap lap time is improved upon by more than 2.5% in the first race (in any lap) then the driver is placed last in the results for that race. If more than one driver breaks handicap, then they are relegated in order of their improvement, the largest improvement starting last. The calculated handicap lap time for each competitor shall be used to determine the grid positions for each competitor in the first race. The grid will be formed in reverse order i.e. slowest to fastest.

The slowest competitors’ handicap lap time - the “scratch starter”- is used as the datum for determining the starting times for each competitor in the heat. The starting time handicap for each car is calculated in the following manner:

- i. Each competitor’s timed practice lap time or nominated lap time is subtracted from the

slowest competitor's practice lap time.

- ii. The time difference determined in (a) above is multiplied by the number of laps to be completed in the first heat to determine the un-adjusted starting time.
- iii. The un-adjusted starting time handicap determined in (b) above is reduced by 0.3 seconds for each car that is slower than the competitor. This is done to determine the time after the "scratch starter" that the competitor must start.

Example:

Slowest car does 1 min 50 sec per lap = 110 seconds,

Competitor does 1 min 40 sec per lap = 100 seconds.

If it is a 6 lap race and the competitor is 11th slowest

110 sec minus 100 sec = 10 seconds

10 sec x 6 laps = 60 seconds

There are therefore 10 slower cars

0.3 x 10 Cars = 3 seconds

60 sec minus 3 Sec = 57 seconds after the slowest competitor has started

b. Heat Two:

The start positions for the second heat will be determined from the fastest lap time from official practice, the nominated practice lap time or the first heat lap time. The fastest lap time will be used for calculations of the handicap lap time, grid positions and starting times. Calculation of starting time will be done in the same manner as set out for heat one above.

c. General:

- i. Should the competitor feel that his or her fastest lap time in official practice was not realistic; the competitor has the option - within 30 minutes after the official practice times were published - to find the handicapper and nominate an alternate time with the handicapper. This alternate time may only be quicker than the time posted in official practice.
- ii. Cars are then consolidated into groups with a minimum of 5-second intervals between groups. Cars are set off at different intervals with the slowest car or group starting first and the fastest last.
- iii. The handicap lap time is set for the first race based on the fastest official practice lap time on the day with an option for the driver to nominate a faster time to avoid breaking the handicap lap time including the allowance. (The allowance is 2.5% in the first race and 1.5% in the second). If that handicap lap time is improved upon by more than 2.5% in the first race (in any lap) then the driver is relegated to last place for that race. If more than one driver breaks handicap, then they are relegated in order of their improvement, the largest improvement starting last.
- iv. The second race handicap time uses the best lap time from the first race or official practice time or nominated practice time, whichever is fastest (no options for change). Should the lap time in any single lap in the second and subsequent races be an improvement of more than 1.5% on the handicap time, the driver is relegated to last place for that race. If more than one driver breaks handicap, then they are relegated in order of their improvement, the largest improvement starting last.
- v. The clerk of the course must be notified by the competitor should he/she be unable to compete in a race.
- vi. Should weather conditions or conditions of the circuit during the race be very different to the conditions which applied during official practice, the exclusion of competitors due to beating handicap time including the relevant allowance may be waived by the handicapper after consultation with the HSSA representative.

6.3. Point Scoring

- 6.3.1. Points are allocated according to the number of starters for each race, counting down from the winner who scores the highest number of points to the last placed car which will score one point.
- 6.3.2. At the end of the day, after the heats have been completed, the points are added for each car. The ten finishers with the highest number of (day's) points are allocated points towards the championship on the basis of 10 down to 1.
- 6.3.3. Where an event is held with more than one race, each race will be scored as a separate race. Where an event is run with only one race of longer duration, double points will be scored.
- 6.3.4. Driver points from different categories may not be accumulated.
- 6.3.5. For every event, where a driver commences official practice, an extra three points will be awarded.
- 6.3.6. For all "away" events, any competitor who resides more than 300 kms from the circuit and who participates by commencing a lap, whether in official practice or in a race, will be awarded an extra three points towards the Championship.

TECHNICAL REGULATIONS

These are general. In instances where category specifications are explicit, these will take preference.

7. DEFINITIONS

- 7.1. Single-seat (open wheel) racing car
A car built for the sole purpose of racing and conforming to those internationally or locally recognised regulations of MSA and/or FIA which governed the category, formula and competitions in which it originally raced in period in its present configuration. Cars built and raced to a national formula may be accepted.
- 7.2. Open two-seat racing cars
Cars with space for two seats and built solely for use in racing competition.

8. CHASSIS MONOCOQUE OR UNITARY CONSTRUCTION

- 8.1. The chassis must conform to the design, dimensions and construction of the original chassis.

9. FRONT AND REAR SUSPENSION

- 9.1. The points to which suspension elements are attached to the chassis frame must not differ in dimension or position from the period specification.
- 9.2. The system of suspension (spring type and location of wheels or axles) must not be altered nor must any additional location or springing medium be added unless this was a period specification.

10. ENGINE

- 10.1. The engine components and ancillaries must be of period specification, must be of the same make, model and type fitted and conform to a manufacturer's specification for which period evidence exists.

11. IGNITION

- 11.1. The use of electronic engine management systems must comply to period specification or be approved by HSSA.

12. FUEL SYSTEM

- 12.1. Carburettors from the same or an earlier period may be used, but only if the components are of the same number and general type and principle of operation as those originally fitted.
- 12.2. Cars with fuel injection may be converted to carburettors of the same period.
- 12.3. Fuel injection and/or supercharging may only be used if used in the period and only the original system may be used.
- 12.4. Mechanical fuel pumps may be replaced by electrical pumps, or vice-versa.
- 12.5. Any fuel tank must not exceed the originally specified capacity, and must be in the original location or in the rear of the car.

13. INSTRUMENTATION

- 13.1. Electronic instrumentation must be period specification, however data acquisition system which provides the following functions: engine RPM, engine oil pressure, engine oil temperature, engine water temperature and fuel pressure may be used. On- board lap timers may not be used.

14. GEARBOX

- 14.1. All cars must be fitted with their period specification "H-pattern" gearboxes. Automatic transmissions, overdrives and additional forward speeds are not permitted, unless they were a period specification.
- 14.2. When an alternative gearbox is fitted, only a gearbox of the same or an earlier period will be permitted. It must comply with the "H-pattern" and have the same number of forward speeds.

15. FINAL DRIVE

- 15.1. Limited slip differentials may only be fitted if a period specification.

16. BRAKES

- 16.1. Brake components must be entirely to period specification of the model with the exceptions described here after.
- 16.2. Disc brakes, ventilated discs and multiple pot calipers are only permitted if a period specification of the model.
- 16.3. Hydraulic braking systems may be converted to dual circuit operation which provides simultaneous operation on all four wheels via two distinct hydraulic circuits.
 - 16.3.1. Hydraulic lines may be replaced with «Aeroquip» type piping.

17. WHEELS

- 17.1. All Wheels must be period specification and of the original diameter used during the car's international and/or local life.

18. BODYWORK

- 18.1. The car must retain its original silhouette of the period in which it originally competed and show no additional air ducts, scoops or blisters. The addition of a roll-over bar is not considered to be a change to the silhouette.
- 18.2. Replacement body panels must faithfully follow the original design constructed in the period for that original chassis and be made of the original material type.
- 18.3. Tonneau covers must be flexible unless an original body part of the car (proved by a period photograph), in which case the edges must be protected. Passenger seats may be removed.

19. AERODYNAMIC AIDS

- 19.1. Aerodynamic devices may only be fitted to the car if period specification.
- 19.2. The devices used must conform in design, positioning and dimensions to those used during the car's period.

20. LIGHTING

- 20.1. Cars originally fitted with lighting systems have the option of having them in working order. A rain light (conforming to MSA specifications) for wet weather races is obligatory

21. WHEELBASE, TRACK, GROUND CLEARANCE

- 21.1. Wheelbase
The wheelbase may not vary from the period specification.
- 21.2. Track
The track must not vary from the period specification.

22. WEIGHT

- 22.1. The minimum weight for a car is that specified in the original regulations for the car's category, or a period published weight when this weight is not specified in the original regulations. Weight limits are however not enforced by HSSA.

23. TYRES

- 23.1. It is always the competitor's responsibility to ascertain with the manufacturer the suitability of the tyre for the competitor's specific use.
- 23.2. Tyre sizes are free as long as the other relevant regulations (rims, mudguards) are respected.
- 23.3. Formula Ford category must use Avon ACB9 tyres
- 23.4. No slick/semi-slick tyres may be used unless on a Wings and Slicks car

24. SAFETY

- 24.1. Car preparation must comply with standing MSA regulations as specified from time to time in the MSA White book
- 24.2. Fire extinguishers or systems as specified by MSA regulations from time to time, must be fitted.
- 24.3. Seat belts as specified by MSA from time to time must be fitted.
- 24.4. Roll hoops, if originally fitted, must comply to FIA appendix K and J or MSA regulations as specified from time to time.

- 24.5. An electrical cut-out switch, as specified by MSA must be fitted, either externally or on the dash. The cut-out switch MUST be clearly indicated by means of the relevant sticker.
- 24.6. Safety Attire (FIA approved), according to MSA White book, is to be worn by all drivers. Particular reference to helmet, fire retardant driver suits/ underwear, gloves and shoes

25. SPECIFIC CATEGORY REGULATIONS (TO BE OBTAINED FROM HSSA IF REQUIRED)

- 25.1. Formula Vee
- 25.2. Formula Ford ('71,'81,'86 Local)
- 25.3. Purpose Built Sports Cars Pre '76
- 25.4. Front Engined Racing Cars Pre '86
- 25.5. Other Formula's Pre '76
- 25.6. Wings and Slicks Up To Dec '86