

ASSOCIATION OF AUSTRALIAN RADIO CONTROLLED MODEL CAR CLUBS

1/8TH SCALE I.C. OFF-ROAD SECTION

Construction And Race Format Rules– Rev.28.0 Last Updated 01/01/2012

The following rules are supplementary rules to the Australian Association of Radio Control model Car Clubs (AARCMCC) General Rules and as such should be read in conjunction. They take precedence over AARCMCC general rules should there be an interpretation conflict.

Preamble

AARCMCC is part of the FEMCA block and FEMCA runs under IFMAR construction and race format rules. Where possible the most current IFMAR rules shall be used as a guide to form the basis of the **Australian Off-Road Construction and Race Format rules.**

Notes: a) Changes to the Australian Off-Road rules that deviate from the current IFMAR rules will be only considered when the IFMAR rules are deemed to be not workable or non applicable. The final decision on any requested change shall be made by a majority vote of the “Executive Committee” , see section 1.4 b) It is the responsibility of the Australian Off-Road Nitro Section Head and Nitro Section Secretary to ensure at all times the Australian Off-Road Construction and Race Format rules are complete, up to date and at the same time reflect the most current copy of the IFMAR rules with agreed upon deviations.

1 General Rules

1.1 There will be one (1) annual event for each combined class called the; **“Australian (insert class detail) National Championship”**. The purpose of these events is **determining the relevant Australian Champion for each class.**

Each event shall comprise of the following classes;

- 1/8th Scale Off-Road I.C Buggy combined with 1/10th Scale I.C Stadium Truck.
- 1/8th Scale I.C Truggy combined with Monster Truck Unlimited. Buggy/Stadium Sanction events to be held least six (6) months away from Truggy/MT events.

1.2 There will be one (1) annual event for each combined class in each State called the; **“State (insert class detail) Championship”**. The purpose of these events is **determining the Relevant State Champion for each class.**

Each event shall comprise the following classes;

- 1/8th Scale Off-Road I.C Buggy combined with 1/10th Scale I.C Stadium Truck.
- 1/8th Scale I.C Truggy combined with Monster Truck Unlimited. Buggy/Stadium Sanction events to be held least six (6) months away from Truggy/MT events.

1.3 The number of driver participants in any one race meeting based on section 1.1 and 1.2 shall be limited to one hundred and twenty (120).

1.4 Further to section 5.1 in AARCMCC general rules. The “Executive Committee” shall comprise of the; Section Head, Secretary and all appointed State delegates. By virtue of majority ruling, the “Executive Committee” has the responsibility to adjudicate and either accept or reject any written proposed **“Special Condition”** changes to race rules or race meeting format for a specific State or National events.

1.5 Election of the “Executive Committee” shall be as per the requirements detailed under the AARCMCC general rules.

1.6 Accepted changes shall be deemed to be **“Special Conditions”** and as such shall be submitted to AARCMCC by the section head for final approval along with a completed Sanction application form. All approved changes shall be noted as **“Special Conditions”** on driver entry form.

1.7 Should a host club wish to run a combined multi class event this application shall fall under **“Special Conditions”** and as such an application with completed sanction form will need to be submitted well in advance for approval by the Executive Committee. Under a combines class race, additional driver

- numbers and race day duration may be granted to accommodate the increased total driver count.
- 1.8 It is recommended all sanction events to take place over a maximum of four (4) days, not including any non-mandatory practice days.
 - 1.9 There is no longer a requirement for inclusion of a rain Day. At the discretion of race organiser an additional one (1) day of controlled practice or one day of free practice prior to commencement of official qualification is allowed.
 - 1.10 Where possible, at the discretion of host club with due consideration of entry numbers and schedule Racing should be restricted to eight (8) hours for any given day inclusive of drivers briefing. Should there be adequate lighting, offering no disadvantage to drivers or pit crew, the event may be partially or fully held under lights.
 - 1.11 The results of the Australian Championships and that of the State Championships, calculated using the current AARCMCC general rules concerning points allocation will give the overall AARCMCC driver ranking list.
 - 1.12 For the purpose of IFMAR Worlds Championship (IFMAR W.C) selection; Drivers points score and standing shall be calculated using the table from 6.6. In addition; prospective IFMAR W.C participants need to have entered and competed in a **minimum of four (4)**, AARCMCC sanctioned events in any given IFMAR W.C points period to be eligible for W.C. qualification. A driver's best 4 AARCMCC National Championship Series event results (ie: nominated State Championship events and National Championship) shall count.
 - 1.13 The qualifying points period for IFMAR W.C representation shall be based on a two (2) calendar year period **prior** to the nominated IFMAR W.C event, taking into consideration all National Championship Series events (refer point 6.6) from the 1st of January of the last IFMAR W.C year, to the 31st of December of the year proceeding that of the IFMAR W.C in question.
For Example: for IFMAR Worlds Y2014 representation consideration; Qualifying period would be from the 1st of January Y2012 to the 31st December Y2013.
 - 1.14 Participants in sanction events must be a current member of an affiliated AARCMCC club. Overseas participation is limited to affiliated IFMAR blocks. Proof of membership is required to be presented if requested by race organisers prior to acceptance of entry.
 - 1.15 A paper copy of entry form with proposed schedule must be submitted for distribution by AARCMCC four (4) months prior to any sanctioned event. Alternatively within the same time period an optional Online Electronic entry form or Online Registration with driver register shall be made available for participants for entry or download.
 - 1.16 A full drivers list is shall be forwarded to AARCMCC along with final results within two (2) weeks following completion of the sanctioned event events.
 - 1.17 The close date for driver entry is four (4) weeks prior to the event. Late entry may be accepted at discretion on race organisers.
 - 1.18 The current entry fee for Sanction events is **AUD\$70.00 for a National Titles and AUD\$60 for a State Titles**. The entry fee is to be paid directly to host club by method advised by host club. The Host club is in no way obliged to provide refunds or to accept late entries.
 - 1.19 During registration preferable on the first day of the event, every driver will be given an envelope which includes; A detailed schedule including starting times of each heat. Three (3) sets of numbers for the car, three (3) sets of numbers for the wing, one (1) set of numbers for the transmitter, one (1) badge each for the driver and mechanic. The size of car numbers to be 40mm black on white and in bold print. Any other necessary information.
 - 1.20 Each registered competitor shall be provided with one (1) meal and drink at any time during the course of the events proceedings. The total value of which should be no less than Au\$10.00 plus GST per person. An example would be buffet style meal or B.B.Q. The purpose of which is to foster sportsmanship and social interaction between all participants and as such should take place during a non-race session.

2. Event Rules

Time Table

- 2.1 A proposed (draft) timetable for the event with consideration of point 1.3 and 1.8 shall be made available at time of entry. Upon close of entries a firm schedule for Practice, Qualifying and Finals shall be posted and or supplied to all participants prior to commencement of event. *See appendix "A" for typical race schedule.*
- 2.2 For Practice, Qualification and Finals the format shall be in accordance with "Race Format" detailed in section 6.
- 2.3 Lower finals shall commence on 2nd last day of event with the semi and main final on the last day. All efforts shall be made to follow schedule where practically possible
- 2.4 The event **to proceed irrespective of weather conditions**, however **where there is significant danger** to drivers, pit crew, marshals or spectators such as in electrical storms or sever flooding, racing to be postponed or terminated at discretion of race organisers. *See section 2.9 in relation to dealing with interrupted events.*
- 2.5 A drivers' briefing must be held prior to commencement of the race day. The Race Director must call the meeting, all drivers, Team Managers, Pit Crew, Referees and other officials must be present. The Drivers' meeting must be held between fifteen (15) and thirty (30) minutes before the start of racing.
- 2.6 The following points should be covered in the drivers' briefing; security and safety items, the starting procedure and explanation, disciplinary questions, other items concerning the contestants, changes in the organization or procedures, presentation of the main officials and referees.
- 2.7 Immediately after the finish of the Main final and prior to the drivers leaving the drivers rostrum, the unofficial 1st place winner must be declared to the public audience. At such time a symbolic 1st place award or trophy may be presented. All results are non-official until the required protest period has elapsed and vehicles have passed through technical inspection fully compliant.
- 2.8 Once approved by race organisers, the main trophy presentation shall proceed whereby all participants are presented with relevant position trophies by race the organisers. A "Fan Fare" type acknowledgement should be made for the top three (3) drivers, including T.Q holders. The use of a "**Champagne F1**" style endorsement is suggested.

2.9 Race interruptions

- 2.9.1 In the case of a race day, which is interrupted for more than sixty (60) minutes for reasons beyond the control of event organisers, the race organisers will decide to cancel, reduce qualifications rounds or continue meeting. In each case all participants will be notified of final decision.
- 2.9.2 In the case of an interruption of a qualification round the following procedure is to be used; If possible with due consideration of event timetable, the round should be completed at suitable time following the unforeseen interruption. Alternatively the entire round may deleted from inclusion in qualification results. See section 6.1b
- 2.9.3 For the purpose of Main Finals cancelled due to unforeseen circumstances a final event result can not be determined until at **least four (4) complete** qualification rounds for all drivers have been completed. In this case the results are deemed to be based on final qualification standings.
- 2.9.4 In the case of interruption of Finals the following procedure will be used;
 - a). If less than 10 minutes of a final has been run, the results will be cancelled and the new start given for the total time of the final. Vehicles may be given the opportunity to be repaired and refuelled prior to the restart.
 - b). If more than 10 minutes of the final have been run the results at the moment of the interruption will be kept. The new start will be given for the time, which remains to complete the final. The two results will be added to give the final and definitive placing. If the second start cannot be made is further interrupted the results from the first part will be used as the final and definitive placing.
 - c). When the interruption takes place after 75% or more of the final, the results as of the time of interruption becomes the final result.

In each case at the moment of the interruption of the race, the drivers will return their cars under the direction of race control back to pit lane. Pit crew or drivers may switch off the radio and stop the engine, however there will be no repairs carried out to the vehicle or changing of tyres. Any driver or pit crew who does not observe this rule or the race control directions will be immediately disqualified from further participation.

2.10 Race Track and Facility requirements

In addition to the requirements detailed in AARCMCC general rules. The following minimum facility requirements need to be in place prior to commencement of any sanctioned event;

- Adequate and regularly serviced clean Male and Female toilets.
- Continuous Compressed Air and Water wash down station.
- Undercover pit area with suitable and sufficient tables and chairs to accommodate all participants.
- Clean Running Water.
- Generously distributed, 240VAC , RCA protected GPO power outlets.
- Secure and protected Radio impound. It is recommended the transmitter impound must be close to, or if possible, on the rostrum.
- Suitable Race Track and Pit Lighting if event is to be held at night.
- In addition to rules covered in AARCMCC section 4.2.12. All drivers stands must have fixed rain covering for driver protection.
- It is encouraged race organisers provide rain and or shade protection for Marshals for the duration of the event. Placement of any such objects should not impact driver visibility.
- Certificate of Incorporation and Current Public Liability insurance shall be in place and made available if requested.

2.10.1 The safety of the spectators is of prime importance and must be considered when laying out track and spectator areas. The safety of officials, helpers, competitors and accompanying people is of equal importance but it is assumed that they are more aware of the potential danger. Spectators, competitors and officials must be efficiently protected against the cars by adequate barriers. Track markers must be shaped and placed in a way that prevents cars from being projected into the public when hit at full speed. Technical inspection must always include the safety aspects of the cars. No sharp edges or other protruding parts of the cars that may cause serious injuries in case of an accident are permitted. First-aid supplies must be available throughout the event (including practice), in case of necessity. A First-aid Officer must be present throughout. Police and ambulance services must have access to all areas, both public and restricted

2.10.2 The Racetrack design should be such the minimum lap should not be less than thirty (30) seconds by any given driver. The track shall be technically challenging by nature and be representative of an off-road terrain course.

2.10.3 The placement and design of jumps, birms or obstacles whereby vehicles get sufficiently airborne as to present a high personal injury probability to spectators or participants should at all time be discouraged. If unavoidable, specific control measures should be put in place and all participants advised of the potential hazard.

2.10.4 The race surface should be predominantly constructed from a natural non-made surface. The track shall be maintained in accordance with AARCMCC general rules section 4.2.3, the purpose of which is to offer no single driver any significant advantage. The Race Track width shall be a minimum of **FOUR (4) meters** at any given point as per *IFMAR* rule 4.0.0

2.10.4a As per AARCMCC General Rules 4.2.3 : To ensure that a consistent and fair track is available to all entrants regardless of heat number or round run, regular maintenance is absolutely essential. This is designed to prevent extreme deterioration of the surface and a consistent and safe track throughout qualifying and finals .

2.10.5 In addition to rules covered in AARCMCC section 4.2.13 it is preferable for pit lane to be raised to allow easy access for pit crew to retrieve vehicles. Pit lane width to be a min of 700mm.

2.10.6 All marshalls shall be provided with a visual Safety Vest at nominated marshaling points prior to commencement of the race. When required to do so, failure to marshal may result in disqualification

of fastest round to date or further participation in the event.

2.10.7 It is mandatory to have the following official positions held by different persons:

- 1 x Race Director -(Non competitor)
- 1 x Assistant Race Director -(Preferable, Non competitor)
- 1 x Time-Keeper -(Non competitor)
- 1 x Technical Inspector -(Preferable, Non competitor)

All officials shall be nominated and introduced prior to commencement of the event.

3. Technical Inspection.

- 3.10.1 Technical Inspection must take place before the start of the racing. Cars must be presented for inspection after being called by the officials.
- 3.10.2 During technical inspection only the driver, one mechanic and the team manager are entitled to be present in addition to Race Officials.
- 3.10.3 Technical Inspection must include a thorough check-out of the car and also the transmitter.
- 3.10.4 Only one car will be accepted. When transmitters are checked, the spare transmitters must also be presented for inspection.
- 3.10.5 When a car or transmitter does not comply with the rules, changes may be carried out before presenting it for final approval.
- 3.10.6 It is the responsibility of the drivers to ensure that his/her car complies with the regulations at all times that it is on the track and the race organiser may check any car for compliance with the regulations at any time during the race meeting
- 3.10.7 Cars which have passed Technical Inspection must be marked with the drivers identification number, consisting of the heat number and the car number. This number must be engraved on to the chassis plate and the fuel tank will be marked. One car per driver only.
- 3.10.8 The marked part of the car, the main chassis, may only be changed with the approval of the Race Director. The original marked chassis must be left with the Race Director.
- 3.10.9 For each competitor the race has officially started after technical inspection and approval of his car.
- 3.10.10 The Technical Inspector may request inspection of any entrant's car at any time during the race, without giving reasons.
- 3.10.11 Technical inspection to be carried out by two independent race officials, nominated at commencement of event.
- 3.10.12 Following completion of qualification heats and finals, all Cars go into a 'Parc Ferme' immediately after the finish and must remain in technical inspection until the results are published and protest time is over or directed otherwise by race officials. Cars must remain with the officials and be untouched by drivers or mechanics. Any race distortion must be ignored. Inspection to be on at least; Engine, Tank Capacity, Chassis (dimensions).
- 3.10.13 If a car is found to exceed the limits of dimensions on checking immediately after a race, positive proof of race damage may prevent disqualification.
- 3.10.14 In the case of vehicles not meeting the requirements of the current construction rules the following penalties apply; loss of fastest qualification round and for finals disqualification in further participation of event.

Delete Section 4.

5. Vehicle Specifications 1/8Buggy, 1/8Truggy, 1/10Stadium Truck and M.T Unlimited

All participating vehicles shall comply with the following specifications;

Section 5.1 for 1/8Buggy, Section 5.2 for 1/8Truggy, 5.3 for M.T Unlimited and Section 5.4 for 1/10th S.T

AUSTRALIAN CONSTRUCTION RULES FOR 1/8TH Buggy. Last amended 07/01/07

5.1.1 a) Overall length -730mm maximum.

5.1.1 b) Overall width -310mm maximum. The car shall be measured for width by placing it on a flat base material equipped with two side rails of 150mm height. These shall be spaced 310mm apart and constructed in such a way that the car can roll freely between them. The base material must be constructed of high quality components suitably stiffened to prevent distortion. The car must roll freely between the side rails with any steerable wheels set in the straight ahead position irrespective of the compression, extension or roll angle of the suspension.

5.1.1 c) Wheelbase -270mm to 330mm.

5.1.1 d) Overall height -measured from the ground including roll bar at full suspension compression is 250mm maximum (this measurement does not include the receiver aerial).

The car shall be measured for length and height in a similarly constructed box of internal dimension 730mm x 310mm, which includes provision for checking the maximum height.

The measurement of the wheelbase may be made by simple measure of axle centre distances with the suspension in any position. The Race Director should be prepared to make more exact checks in cases of doubt or protest. It is then suggested that the wheels are removed and the wheel spindles are firmly placed on Vee blocks whilst accurate measurements are made.

5.1.1 e) The minimum weight limit shall be 3.2kg/7.04lbs for 4WD cars.

Engines and Fuel Tank

5.1.2 a) An Internal combustion engines of not more than 3.5 cubic centimetres/0.214 cubic inches. No tolerance allowed.

5.1.2 b) Fuel Tank capacity: 125ccm including all piping, tubes and filter up to the carburettor. The tank will be measured using an AARCMCC approved measuring cylinder.

5.1.2 c) The capacity of the fuel tank must not be adjusted by insertion of any loose objects.

5.1.2 d) All cars will be fitted with brakes and clutch in such a manner as that the car can be held stationary whilst the engine is running.

Silencer.

5.1.3 a) Only approved and homologated IFMAR silencers are allowed to be used.

5.1.3 b) The silencers used on the car have to bear their homologation number during the entire championship and their measurements have to conform with those on the homologation sheet issued by IFMAR.

5.1.3 c) Silencers may be homologated by ROAR, EFRA, FEMCA or FAMAR up to four (4) months before the event. Silencers homologated in the four (4) month period before the event will not be included on the Approved Muffler List for that event.

5.1.3 d) The Approved Muffler List must be available to each participant, if requested and should all time be present at the sanctioned event.

5.1.3 The outlet pipe may have a minus tolerance of 2mm./0.078in. (Length).

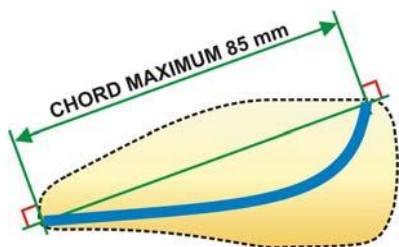
Wheels & Tyres

5.1.4 a) All tyres must be black with the exception of sidewall lettering.

5.1.4 b) No spikes, tubes or additional items intended to increase traction may be either glued to the outside of tyres or passed through tyres from the inside.

5.1.4 c) Wheel/tire overall diameter must be between 100mm and 120mm.

Wings



5.1.5 a) A wing of maximum overall size 217mm length and 85mm chord may be fitted.

Appearance

5.1.6 a) Cars shall be a reasonable representation of the style of car used for Off-Road, Desert or Trial racing.

5.1.6 b) Full body shells of saloon style are permitted but may only be trimmed to expose a maximum of 50% of the tyres at full suspension depression. If such body shells are fitted, provision for trimming shall be as in sub-section 'd'.

5.1.6 c) Where a roll-cage is fitted an open wheel style

body shell must be fitted underneath the cage so designed as to enclose R/C equipment and fuel tank with sufficient front and side areas to allow clear display of racing numbers.

5.1.6 d) Openings may be cut in the shell for the antenna and the pipe ends and allow access to fuel filler, radio switch and engine adjustments and a maximum of a third of the wind screen to assist in cooling the engine if not already opened by the fuel filler access. Clearance around such items shall be kept to a minimum.

5.1.6 e) Body shells as described in Section 2.6.c need not conform to scale but should conform to the provisions of 2.6.a.

5.1.6 f) Acceptance of a Saloon body shell by another IFMAR section shall be deemed to imply approval by the Off-Road Section for racing purposes.

5.1.6 g) Cooling openings are allowed in windows.

Fuel

5.1.7 a) the following additives are strictly prohibited; Hydrazine, Hydrogen Peroxide, Toluene, and Propylene Oxide.

5.1.7 b) Random fuel tests may be made at any time during the event. Samples and counter samples will be collected for analysis and any competitor found to be using any of the above additives will be disqualified and any race result obtained will be null and void.

DRIVER AIDS

5.1.8 a) The use of traction control devices, active suspension devices and any steering control aided by gyroscopes/'G'-force sensors is strictly forbidden. Sensors are only allowed for the purpose of passive data recording and not for adjusting the performance of the car whilst in motion. It is the object of this rule to ensure that the event be a test of driver skill.

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AUSTRALIAN CONSTRUCTION RULES FOR 1/8 Truggy. Last amended 07/01/07

5.2 DEFINITION

5.2 A Truggy is a 1\8th Buggy based Truck

5.2.1 GENERAL DIMENSIONS

5.2.1 a) Overall length -730mm maximum.

5.2.1 b) Overall width -465mm maximum.

5.2.1 c) Wheelbase -345mm to 405mm.

5.2.1 d) Overall height -measured from the ground including roll bar, at full suspension compression is 250mm maximum.

5.2.1 e) The minimum weight limit shall be 3.9kg/3900 Grams (including fuel and transponder)

5.2.1 f) The car shall be measured for width by placing it on a flat base material equipped with two side rails of 150mm in height. These shall be spaced 465mm apart. The car must roll freely between the side rails with any steerable wheels set in the straight-ahead position irrespective of the compression, extension or roll angle of the suspension.

5.2.1 g) It is the responsibility of the drivers to ensure that his\her car complies with the rules at all times.

5.2.1 f) Drive train is to consist of three buggy style differentials.

5.2.1 g) Single speed gearbox only. No multiple speed gearboxes allowed.

5.2.1 h) With tyres removed from the vehicle, chassis placed under full compression the lowest part of the engine is not to exceed 40mm in height.

5.2.2 ENGINES

5.2.2a) Internal combustion engines of not more than 4.67 cubic centimetres
0.28 cubic inches. No tolerance allowed.

5.2.2 b) delete

5.2.2 c) Fuel tank capacity: 150ccm including all piping, tubes and filters up to the carburettor. The tank will be measured using an Australian approved measuring cylinder.

5.2.2 d) Bump start engines accepted.

5.2.2 e) All cars will be fitted with brakes and clutch in such manner as that the car can be held stationary whilst the engine is running.

5.2.3 SILENCER

5.2.3 a) Only IFMAR homologated silencers are allowed.

5.2.3 b) The silencers used on the car have to bear their homologation number, as per homologation sheet issued by IFMAR.

5.2.4 WHEELS/TYRES

5.2.4 a) Minimum wheel diameter is 80mm. (This does not include glue bead).

5.2.4 b) Minimum tyre diameter is 118mm.

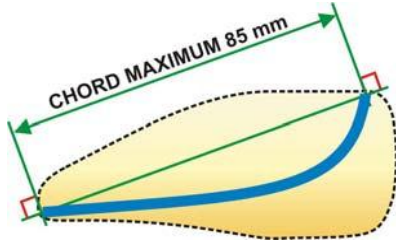
5.2.4 c) 1/8th Buggy wheels/tyres not accepted.

5.2.4 d) All tyres must be black with the exception of sidewall lettering.

5.2.4 e) No spikes, tubes or additional items intended to increase traction may be either glued to the outside of tyres or passed through tyres from the inside.

5.2.5 WINGS

5.2.5 a) A wing of maximum overall size: 217mm in length and 85mm chord may be fitted.



5.2.6 APPEARANCE

5.2.6 a) Must be a good representation of a Stadium/Arena style truck body.

5.2.6 b) No buggy or sedan bodies will be accepted.

5.2.6 c) Body mould lines will not be altered other than for the purpose of an exit hole for the silencer.

5.2.6 d) No greater than 50% of front window is to be removed.

5.2.6 e) Left and right hand side windows can be removed 100%.

5.2.6 f) Windows to remain transparent. Bodies with

windows painted out will not be accepted.

5.2.6 g) Openings may be cut in the shell for the antenna and the pipe ends and allow access to fuel filler, radio switch and engine adjustments and a maximum of a half the wind screen to assist in cooling the engine if not already opened by the fuel filler access. Clearance around such items shall be kept to a minimum.

5.2.6 h) Pre-painted ready-to-run bodies the only exception to this rule.

5.2.6 i) Aerial hole size not to be greater than 10mm in diameter.

5.2.6 j) Engine head-cooling hole to be no greater than 10mm of cooling head in diameter. Only exceptions will be holes for tuning purposes.

5.2.6 k) Front and rear bumpers not to exceed 10mm past the body unless O.E.M (Original Equipment Manufacture/or factory).

5.2.7 Fuel

5.2.7 a) The following additives are strictly prohibited; Hydrazine, Hydrogen Peroxide, Toluene, and Propylene Oxide.

5.2.7 b) Random fuel tests may be made at any time during the event. Samples and counter samples will be collected for analysis and any competitor found to be using any of the above additives will be disqualified and any race result obtained will be null and void.

5.2.8 DRIVER AIDS

5.2.8 a) The use of traction control devices, active suspension devices and any steering control aided by gyroscopes/'G'-force sensors is strictly forbidden. Sensors are only allowed for the purpose of passive data recording and not for adjusting the performance of the car whilst in motion. It is the object of this rule to ensure that the event be a test of driver skill.

AUSTRALIAN CONSTRUCTION RULES FOR M.T Unlimited. Last amended 15/08/08

All Standard MT's will run in the same class, regardless of engine size, unless there are sufficient entries to warrant splitting the class according to the engine size.

5.3 DEFINITION AND COMMON RULES

5.3.1 a) To be a Standard MT the vehicle must comply with the following points:

(i) The lowest point of the engine must sit at least 1.5" inches above the lowest point along the front-back centre line when compressed (usually the "skid plates"). To test questionable MT's, remove the wheels, place the MT on a flat surface, compress the vehicle fully and with a ruler (or 1.5" gauge) measure the vertical distance of the engine above the surface.

(ii) The engine mount must not be altered so as to raise the engine to comply with rule 5.3.1 a) (i).

(iii) Vehicles constructed using a horizontal chassis cannot have the front or rear differentials mounted above the chassis.

(iv) Vehicles, when built per the manufacturer's instructions must comply with rule 5.3.1 a) parts (i), (ii) & (iii).

5.3.1 b) No Width restrictions.

5.3.1 c) No Length restrictions.

5.3.1 d) No Weight restrictions.

5.3.1 e) It is the responsibility of the drivers to ensure that his/her car complies with the rules at all times.

5.3.1 f) Transmission: Single, two or three speed forward only automatic shifting transmissions are allowed. NOTE: reverse functions must be disabled for racing.

5.3.1 g) No converted low chassis trucks allowed.

5.3.2 ENGINES AND FUEL (SMALL BLOCK)

5.3.2 a) Internal combustion engines of unlimited capacity allowed.

5.3.2 b) Engines must be of small block configuration no medium or big block engines permitted.

5.3.2 c) Fuel Tank capacity: 150ccm including all piping, tubes and filter up to the carburettor. The tank will be measured using an AARCMCC approved measuring cylinder. Fuel tanks maybe replaced but must comply with the above ruling.

5.3.2 d) The capacity of the fuel tank must not be adjusted by insertion of any loose objects.

5.3.2 e) All cars will be fitted with brakes and clutch in such a manner as that the car can be held stationary whilst the engine is running.

5.3.2 f) Internal combustion engines of unlimited capacity permitted.

5.3.3 ENGINES AND FUEL (BIG BLOCK)

5.3.3 a) Minimum engine capacity of .21 cubic inches only permitted.

5.3.3 b) Engines must be of big block configuration no medium or small block engines permitted.

5.3.3 c) Fuel Tank capacity: 230ccm including all piping, tubes and filter up to the carburettor. The tank will be measured using an AARCMCC approved measuring cylinder. Fuel tanks maybe replaced but must comply with the above ruling.

5.3.3 d) The capacity of the fuel tank must not be adjusted by insertion of any loose objects.

5.3.3 e) All cars will be fitted with brakes and clutch in such a manner as that the car can be held stationary whilst the engine is running.

5.3.3 f) Internal combustion engines of unlimited capacity permitted.

5.3.4 SILENCER

5.3.4 a) Any chambered exhaust system is allowed no open chamber pipes to be used. (Noise restrictions may apply)

5.3.4 WHEELS/TYRES

- 5.3.4 a) Minimum wheel diameter is 81mm. (This does not include glue bead).
- 5.3.4 b) Minimum tyre diameter is 130mm.
- 5.3.4 c) All tyres must be black with the exception of sidewall lettering.
- 5.3.4 d) No spikes, tubes or additional items intended to increase traction may be either glued to the outside of tyres or passed through tyres from the inside.

5.3.5 WINGS

- 5.3.5 a) A wing of maximum overall size: 217mm in length and 85mm in chord may be fitted.

5.3.6 APPEARANCE

- 5.3.6 a) Must be a good representation of a Monster Truck body.
- 5.3.6 b) No buggy or sedan bodies will be accepted.
- 5.3.6 c) Windows to remain transparent. Bodies with windows painted out will not be accepted. Pre-painted ready-to-run bodies the only exception to this rule.
- 5.3.6 d) No greater than 50% of front window to be removed.
- 5.3.6 e) Left and right hand side windows can be removed 100%.
- 5.3.6 f) Aerial hole size not to be greater than 10mm in diameter.
- 5.3.6 g) Engine head-cooling hole to be no greater than 10mm of cooling head in diameter. Only exceptions will be holes for tuning purposes.
- 5.3.6 h) Front and rear bumpers not to exceed 20mm past the body unless O.E.M (Original Equipment Manufacture/or factory).
- 5.3.6 i) No parts of the car (*muffler*), except the muffler outlet may protrude outside of the body shell when viewed from above.

5.3.8 Fuel

- 5.3.8 a) The following additives are strictly prohibited; Hydrazine, Hydrogen Peroxide, Toluene, Propylene Oxide.
- 5.3.8 b) Random fuel tests may be made at any time during the event. Samples and counter samples will be collected for analysis and any competitor found to be using any of the above additives will be disqualified and any race result obtained will be null and void.

5.3.9 DRIVER AIDS

- 5.3.9 a) The use of traction control devices, active suspension devices and any steering control aided by gyroscopes/"G'-force sensors is strictly forbidden. Sensors are only allowed for the purpose of passive data recording and not for adjusting the performance of the car whilst in motion. It is the object of this rule to ensure that the event be a test of driver skill.

AUSTRALIAN CONSTRUCTION RULES FOR 1/10th Stadium Truck.

5.3 DEFINITION

- 5.3.3 The class run will be the "1/10th Stadium Truck" which will be 2WD only. Only one brake will be allowed, no second or individual brake system(s) will be permitted.
- 5.3.4 Single speed gearbox only, slipper drivers will be permitted.
- 5.3.5 All cars must have a clutch and have an operating brake capable of stopping the car and holding the car motionless with the engine running.
- 5.3.6 The use of .12 engines only will be permitted. They shall be air-cooled, with front rotary valve, two-stroke induction. No form of forced induction is allowed or any form of variable port timing. Only glow plug ignition is allowed. No holes in the piston and no additional holes in the liner. The carburettor size is to be a maximum of 5.50mm.
- 5.3.7 Engine capacity is to be maximum 0.12 (2.11 cc) only, side or rear exhaust.
- 5.3.8 Standard pull-start engines permitted.
- 5.3.9 Engine internal modifications are allowed.
- 5.3.10 A muffler of approved double chamber design, including silencer chamber must be fitted having the following dimension; Tail pipe maximum internal diameter* 5.20mm. Tail pipe minimum length 10.00mm.

These dimensions include a tolerance to account for manufacturing variations in commercially available tubing.

- 5.3.11 Minimum weight without fuel: 1725.00 grams (including transponder).
- 5.3.12 Fuel tank capacity to be 75.00cc including all fuel tubing, filters, etc. No loose inserts allowed inside the tank.
- 5.3.13 The body must be made from Polycarbonate (Lexan) and be painted properly. All windows must remain clear.
- 5.3.14 Only the following AIR HOLES and sizes are permitted in the body shells:
- One (1) hole, for cooling may be cut in the front windscreen, (not intruding on either the roof or bonnet), with a maximum opening of 75% of the total windscreen area.
 - Both front side windows and the rear window can be removed for ventilation.
 - Small holes can be made for the exhaust pipe, Transponder and radio antenna. No other holes are permitted.
- 5.3.15 Roll-bars (roll-over bars) must be kept under the body.
- 5.3.16 No parts of the car, except the muffler outlet may protrude outside of the body shell when viewed from above.
- 5.3.17 General Vehicle dimensions;
Minimum (mm) Maximum (mm) Height 286 135 Wheelbase 324 290 Width 50 328 Wheel Diameter. 50 54 Tyre Width. 65
- 5.3.18 Only one wing may be mounted to any car, the wing must be made from a flexible material. Wing must not be fixed to body with piano wire.
- 5.3.19 The height of the wing may be adjusted but the wing, including endplates must not extend higher than the roofline. Wings (excluding endplates) are to be of single moulded construction (no flat-packs/bend your own).
- 5.3.20 Rubber tyres only.
- 5.3.21 Fuel will only contain methanol (methyl alcohol), lubricating oil and methane.
- 5.3.22 The aerial support must be flexible. Carbon, GRP, steel, etc. are not allowed.
- 5.3.23 Only two (2) servos are allowed. Frequency must be legal as specified by Race Director. Drivers must have more than one (1) frequency available.

6. Racing Format

6.1a) Qualification heats shall contain a maximum of 10/12 drivers and shall be of 10 minutes duration. A maximum of fifteen (15) drivers may be allowed in exceptional circumstances. The order of the heats will be:

For 10 car heats:

ROUND 1: 1,2,3,4,5,6,7,8,9,10

ROUND 2: 3,4,5,6,7,8,9,10,1,2

ROUND 3: 5,6,7,8,9,10,1,2,3,4

ROUND 4: 7,8,9,10,1,2,3,4,5,6

ROUND 5: 9,10,1,2,3,4,5,6,7,8

ROUND 6: 10,9,8,7,6,5,4,3,2,1

For 15 car heats:

ROUND 1: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15

ROUND 2: 4,5,6,7,8,9,10,11,12,13,14,15,1,2,3

ROUND 3: 7,8,9,10,11,12,13,14,15,1,2,3,4,5,6

ROUND 4: 10,11,12,13,14,15,1,2,3,4,5,6,7,8,9

ROUND 5: 13,14,15,1,2,3,4,5,6,7,8,9,10,11,12

ROUND 6: 15,14,13,12,11,10,9,8,7,6,5,4,3,2,1

6.1 b) Each driver shall be entitled to a minimum four (4) and a maximum of six (6) attempts at qualification, weather and time permitting.

6.1 c) Cars will be started individually using the AMB or similar timing system offering a staggered start mode at approximately regular intervals so that the last car has left the start line before the first has completed its first lap.

6.1 d) Any car not present at the start line before the start signal is given by warning light, hooter or both must start from the pit road after the departure of the last car.

6.1 e) The start position should be arranged so that the master and individual clocks for all cars will be triggered correctly.

6.1 f) The cars will leave the starting boxes after the starting signal in the following order;

For 10 car heats:

ROUND 1: 1,2,3,4,5,6,7,8,9,10

ROUND 2: 3,4,5,6,7,8,9,10,1,2

ROUND 3: 5,6,7,8,9,10,1,2,3,4

ROUND 4: 7,8,9,10,1,2,3,4,5,6

ROUND 5: 9,10,1,2,3,4,5,6,7,8

ROUND 6: 10,9,8,7,6,5,4,3,2,1

For 15 car heats:

ROUND 1: 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15

ROUND 2: 4,5,6,7,8,9,10,11,12,13,14,15,1,2,3

ROUND 3: 7,8,9,10,11,12,13,14,15,1,2,3,4,5,6

ROUND 4: 10,11,12,13,14,15,1,2,3,4,5,6,7,8,9

ROUND 5: 13,14,15,1,2,3,4,5,6,7,8,9,10,11,12

ROUND 6: 15,14,13,12,11,10,9,8,7,6,5,4,3,2,1

6.1 g) All drivers will be entitled to participate in a final.

6.1 h) No driver is to go directly to the Main Final. **The Top Qualifier will compete in the Semi final "A" grid position "1" and will receive the Top Qualifiers Trophy at final presentation.**

The first (4 if using 10 car finals and 5 if using 12 car finals) drivers from each Semi-Final will go into the main final.

The remaining two (2) positions in the Main Final will be taken by the next two (2) fastest drivers from either of the two (2) Semi-Finals. The positions in the Main Final are determined by each drivers Semi-Final result. In the case of different weather conditions (dry/wet) during the Semi-Finals, driver five/six (5 for 10 car finals or 6 from 12 car finals) from each Semi-Final will go to the Main final.

6.1 i) The 'A' series Sub-Finals will be composed of odd placed drivers following qualification, the 'B' series sub-finals will be composed of even placed drivers after qualification.

6.1 j) All sub-finals consisting of ten/twelve (10/12) drivers are of twenty (20) minutes duration (up to 1/16th Subfinals) or at National events of thirty (30) minutes duration (from 1/8th to Semi-Finals) with the top three (3) from each sub-final progressing to the next sub-final, up to and including the quarter (1/4) finals. As per rule 6.4c all sub-finals and semi-finals at state events are to be 20 minutes duration .

6.1 k) No allowance for changing conditions from 'A' or 'B' sub-finals will be made.

6.1 L) The main Final (Buggy/Truggy) is of sixty (60) minutes duration for Nationals and forty five (45) minutes for State events . The main Final for MT and Stadium Truck is forty five (45) minutes duration for Nationals and thirty (30) minutes for state events .

6.1 m) The Race Director may authorise track repairs at his discretion in accordance with section 2.10.

6.1 n) During the heats and finals, a maximum of two (2) mechanics per driver are allowed in the pits at any

given time.

6.2 TIMED PRACTICE (non mandatory)

The following is the procedure should timed practice be included in schedule;

- 6.2.a) The practice for drivers will only be run in the way of a three (3) round race in qualification group order. 6.2.b) The first round will be a non-timed organised practice and will not count towards seeding of the heats. Results of the second and third rounds will be published (laps and times). Points will be awarded according to the results of the second and third rounds only.
- 6.2 c) The best point result scored in second and third rounds may be used to sort drivers by performance and to re-seed them before the actual qualifying rounds. This is at the discretion of race organisers.
- 6.2 d) For re-seeding drivers into their new qualification heats, the first 50 best drivers are to be spread with common sense (countries, State, performance, radio frequencies etc.) over the heats 1 to 5, the next best 50 in heats 6 to 10, and the remaining drivers in heats 11 to 15.
- 6.2 e) In organised practice, the car need not be scrutineered.

6.2.1 Free Practice (non mandatory) The following is the procedure should Free practice be include in schedule;

- 6.2.1 a) Free practice for all drivers must be allowed for at least one full day prior to start of organised practice. During free practice a frequency board must be in use. Every driver must be given equal opportunity for free practice. It is recommended a 'T' time (Ticket Time) system be utilised.
- 6.2.1 b) Practice on the day of racing may be allowed by the organisers until thirty (30) minutes before the start of the first heat. This is not a compulsory requirement.
- 6.2.1 c) Practice between the start of the first heat and the finish of the final is strictly forbidden for all competitors (i.e. Lunch-Breaks).
- 6.2.1 d) A driver, not taking part in the organised practice may not complain later to the organiser in case of radio interference etc.
- 6.2.1 e) In Free practice, the car need not be scrutineered.

6.3 QUALIFYING SYSTEM Qualification will be run in accordance with the current IFMAR ruling concerning combined points, specifically;

- 6.3 a) In each round, drivers will score points based in the laps and times achieved. The maximum number of points awarded to the best driver will be equal to the total number of participants plus 5 (five). Fastest in each round will score: number of participants, +5 points. 2nd fastest will score: points of fastest driver, -2 points. 3rd fastest will score: points of 2nd fastest driver, -1 point. Down to last position one by one.
- 6.3 b) In every round, in case of a tie, the points will be equally awarded to each driver, and the first driver not to tie, will receive one point less per tie. For example, with 120 drivers racing, maximum number of points is 125. 1st driver will score 125 points 2nd driver will score 123 points 3rd driver will score 122 points 4th driver will score 121 points 5th driver 7 laps, 10:01:00 will score 120 points TIE 6th driver 7 laps, 10:01:00 will score 120 points TIE 7th driver 7 laps, 10:01:00 will score 120 points TIE 8th driver 7 laps, 10:10:00 will score 117 points
- 6.3 c) In a case of two or more drivers having the same point score, the next best point score determines position. If still unable to resolve with the next best rounds, then the driver with the fastest laps and times in his best score will determine position.
- 6.3 d) **The drivers best four (4) rounds shall be counted when calculating classification's ranking and points score.**
- 6.3 e) One hundred and twenty drivers (120) will be entitled to a sub-final.
- 6.3 f) If a driver does not start a heat, he receives no points.

6.4 FINALS

Finals will be run in accordance with the current IFMAR ruling concerning Christmas tree type finals, specifically;

- 6.4 a) 'A' series of sub-finals will be composed of odd place drivers following qualification, 'B' series sub-finals will be composed of even place drivers after qualification.
6.4 b) Every qualifying driver must progress to the main final in accordance with the accompanying Christmas tree.

6.4 c) **Final Duration;**

Main final (Buggy and Truggy)

1 Hour for Nationals or Forty five (45) minutes for State

Main Final (MT and Stadium Truck)

45 minutes for Nationals and 30 minutes for State.

All sub finals are Twenty (20) minutes duration, up to the 1/8th finals.

For Nationals From 1/8th to Semi-finals all will be of Thirty (30) minutes duration. For State Titles all sub finals will be 20 minutes duration.

The top three/four (3 for 10 car final or 4 from 12 car finals) from each sub final progressing to the next sub final, and the first four/five (4 for 10 car finals or 5 for 12 car finals) from each semi (1/2) final progressing to the main final along with the next two (2) fastest drivers from either of the two (2) semi finals.

In the case of different weather conditions (dry/wet) during the Semi-Finals, driver five/six (5 for 10 car finals or 6 from 12 car finals) from each Semi-Final will go to the Main final.

6.4. d) Semi finalists are entitled to 10 minutes practice between A and B quarter finals.

6.4 e) No allowance for changing conditions from 'A' or 'B' sub-finals will be made.

6.4 f) DELAYED START -As long as the starter has not called the cars to the starting line, every participant of the semi-finals and the final may request a delay of ten (10) minutes for repairs on his car. The delay will be granted only once for each semi-final and final. The track shall be closed to all cars during the delay period. The driver requesting the delay for whatever reason, except an error in frequencies by Race Control, must start from the back of the grid, six (6) metres behind the last official grid position.

6.4.1 CHRISTMAS TREE FORMAT

6.4.2 The following provides details of the typical finals makeup for 10 and 12 car finals with promotion arrangements;

Ten (10) car Main FINAL 45/60 minutes.

Semis finalist progressing include positions; 1+2+3+4

+ Next two (2) fastest drivers from either Semi Final.

1/2 'A' 1,3,5,7,9,11,13.

30min

1/2 'B' 2,4,6,8,10,12,14.

1/4 'A' 15,17,19,21,23,25,27.

30min

1/4 'B' 16,18,20,22,24,26,28.

1/8 'A' 29,31,33,35,37,39,41.

30min

1/8 'B' 30,32,34,36,38,40,42.

ALL FINALS BELOW ARE 20 MINS DURATION

Sub finals finalist progressing to next final include positions 1+2+3

1/16 'A' 43,45,47,49,51,53,55.	1/16 'B' 44,46,48,50,52,54,56.
1/32 'A' 57,59,61,63,65,67,69.	1/32 'B' 58,60,62,64,66,68,70.
1/64 'A' 71,73,75,77,79,81,83.	1/64 'B' 72,74,76,78,80,82,84.
1/128 'A' 85,87,89,91,93,95,97.	1/128 'B' 86,88,90,92,94,96,98.
1/256'A' 99,101,103,105,107,109,111.	1/256'B' 100,102,104,106,108,110,112.
1/512'A+B combined 113,114,115,116,117,118,119,120.	

Twelve (12) car Main FINAL Duration = 45/60 minutes.

Semis finalist progressing include positions; 1+2+3+4+5

+ Next two (2) fastest drivers from either Semi Final.

1/2 'A' 1,3,5,7,9,11,13,15	30min	1/2 'B' 2,4,6,8,10,12,14,16
1/4 'A' 17,19,21,23,25,27,29,31	30min	1/4 'B' 18,20,22,24,26,28,32
1/8 'A' 33,35,37,39,41,43,45,47	30min	1/8 'B' 34,36,38,40,42,44,46,48

ALL FINALS BELOW ARE 20 MINS DURATION

Sub finals finalist progressing to next final include positions 1+2+3+4

1/16 'A' 49,51,53,55,57,59,61,63	1/16 'B' 50,52,54,56,58,60,62,64
1/32 'A' 65,67,69,71,73,75,77,79	1/32 'B' 66,68,70,72,74,76,78,80
1/64 'A' 81,83,85,87,89,91,93,95	1/64 'B' 82,84,86,88,90,92,94,96
1/128 'A' 97,99,101,103,105,107,109,111	
1/128 'B' 90,92,94,96,98,100,102,104,106,108,110,112	
1/256'A' 113,115,117,119,121,123,125,127	
1/256'B' 114,116,118,120,122,124,126,128	
1/512'A' 129,131,133,125,137,139,141,143	
1/512'B' 130,132,134,136,138,140,142,144	

6.5 RACING FORMAT FOR AARCMCC STATE CHAMPIONSHIP EVENTS

- 6.5 a) All AARCMCC State Championship events shall be run over a maximum of 3 days.
- 6.5 b) The track shall be closed to all practice for the four (4) days preceding the event. Major 'warm-up' events are discouraged and shall not be run on the track in the same configuration as that for any AARCMCC major event.
- 6.5 c) Controlled practice shall consist of a minimum 2 rounds, to be run with timing, in heat order.
- 6.5 d) Qualification heats shall consist of a maximum 15 drivers and shall be of 7 minutes duration.
- 6.5 e) Qualification shall consist of a minimum of 4 rounds of heats and a maximum of 6 rounds of heats. Each driver's worst 2 rounds to be dropped (ie: for 4 rounds, best 2 count; for 5 rounds, best 3 counts; for 6 rounds, best 4 count).
- 6.5 f) Finals shall be of an A, B, C, bump-up type.
- 6.5 g) Finals shall consist of 15 drivers.
- 6.5 h) The top 10 qualifiers shall be seeded into the 'A' Final, qualifiers 11-20 into the 'B' Final and so on. The top 5 finishers from each final shall progress to the next final.
- 6.5 i) The 'A' Final shall be of 45 minutes duration. 'B' Finals shall be of 30 minutes duration and all lower finals shall be of 20 minutes duration.
- 6.5 j) At the completion of the 'B' Finals, there shall be a practice session of 10 minutes for all drivers who qualified directly to the 'A' Final.
- 6.5 k) Sportsman Final: Immediately prior to the commencement of the A Finals, there shall be a demonstration race of 20 minute duration for the top 12 'Sportsman' qualifiers. 'Sportsman' entrants

must pre-nominate as such and eligibility will be judged by AARCMCC and event organisers. As a general rule, drivers will be deemed ineligible to compete as 'Sportsman' if they receive free product or substantial sponsorship from hobby shops, distributors or manufacturers.

6.6 AARCMCC NATIONAL CHAMPIONSHIP SERIES

- 6.6 a) The AARCMCC National Championship Series shall consist of 4 pre-nominated AARCMCC State Championship events and the AARCMCC Australian Championship event (5 rounds total).
- 6.6 b) The 4 State Championship events shall be nominated by AARCMCC in advance and shall be rotated amongst the states on a year-by-year basis. Each state shall host a 'nominated' State Championship event at least every second year. No provision shall be made for states forfeiting their turn.
- 6.6 c) All five events will count towards a driver's total score (ie: no rounds dropped).
- 6.6 d) Drivers shall score points for each round according to their qualifying and final finishing position, as per the following table:

Qualifying Position		Final Finishing Position	
1st	10	1st	100
2nd	9	2nd	95
3rd	8	3rd	90
4th	7	4th	85
5th	6	5th	80
6th	5	6th	75
7th	4	7th	70
8th	3	8th	65
9th	2	9th	60
10th	1	10th	55
		11th	50
		12th	49
		thru	thru
		40th	21
		41st +	20

For example, a driver qualifying in 8th position and finishing in 3rd shall receive 93 (3 + 90) points for the event.

- 6.6 e) National Championship qualifying shall no longer count for double points.

7 RACE OFFICIAL – REFEREES

- 7.1 a) The main task of referees is to observe the racing and in particular to ensure good sportsmanship during racing. They will ensure that the rules are observed by everybody.
- 7.1 b) Three referees are required for all Sanctioned events nominated prior to commencement of the event.

7.2 REFEREES' DUTIES

- 7.2 a) At all times during the qualifying heats two referees in turn will watch and observe the racing from start to finish. During all Finals all three referees must observe the racing from start to finish.
- 7.2 b) The referees always work together, they take decisions and issue warnings and instructions in consultation. The referees may take action after an initial warning, but in all cases a maximum of three (3) warnings means automatic disqualification from the event.

7.3 REFEREES' POINTS OF OBSERVATION

- 7.3 a) Bad sportsmanship during racing, i.e. impeding the progress of other participants, deliberate slowing down or waiting for another car, deliberate crashing into another car, deliberate cutting of corners or reckless driving in general.
- 7.3 b) Unsportsmanlike behaviour of drivers and mechanics involved in the racing.
- 7.3 c) Incorrect use of the entry and exit to the pits.
- 7.3 d) Repairs and refuelling outside the pit area.
- 7.3 e) Cars that do not conform to the regulations before the start is given or during the racing (i.e. loss of bodyshell, exceeding the noise rules due to loss or damage of silencer).
- 7.3 f) Cars that are in an undriveable or dangerous condition due to damage or malfunctioning for the car.
- 7.3 g) Starting procedure, i.e. writing down start line infringements and if necessary reporting these to the Time-Keeper. (The Time-Keeper and Starter are primarily responsible for issuing starting penalties eg; time-penalty).
- 7.3 h) In the event of an early start not being observed, it may be called and noted by the referees.
- 7.3 i) It is not the duty or the responsibility of the referees to check whether the cars conform to the technical rules, this is always the responsibility of the Technical Inspector. The referees check the methods used for technical inspection.
- 7.3 j) If after repairs to a car judged to be in a undriveable or dangerous state a referee or the Race Director have approved the repair, the driver may continue his race.

7.4 REFEREES' AUTHORITY

- 7.4 a) The referees issue warnings in the event of infringements of any of the points as described under section 7.3 and ultimately may even issue a black flag (disqualification) when their warnings are not responded to by a driver.
- 7.4 b) Warnings and instructions are announced by the referees themselves and they will keep a record of the warnings and instructions issued.
- 7.4 c) Three successive warnings lead to disqualification (black flag).
- 7.4 d) All announcements will be in English. Warnings will be posted on to the results sheets.
- 7.4 e) Instructions issued by the referees must be observed immediately.
- 7.4 f) Warnings for bad sportsmanship are announced with the words; "First Warning to car No ? for bad driving"; "First Warning to Car No ? for miss-use of the pit area". Instructions for repairs are announced with the words; "Car No ? Repair Body/Silencer/Car/etc".
- 7.4 g) Appeals against the decisions of the referees must be addressed in writing to race director.

7.5 TIME KEEPING

- 7.5 a) The organising club must provide experienced lap counters, reliable and AARCMCC approved lap keeping gear and a suitable well protected accommodation for the Time-Keeping Supervisor.
- 7.5 b) The Time-Keeping Supervisor is responsible for recording all the individual lap times and total laps plus finishing time of all drivers during all heats, sub-finals and finals. He is responsible for the classification of the results and the selection of drivers for sub-finals and finals. The Race Director must verify this classification and selection.
- 7.5 c) In case of protests against results, the Time-Keeping Supervisor together with the Race Director will check on the questioned result and will take the decision.
- 7.5 d) Timing Transponders including the individual drivers personal transponder or a free issue club transponders are to be considered part of the vehicle and as such any failure is at the drivers concern. Should failure be identified during the course of the race the Race director or appointed official shall inform the pit crew and or driver as soon as practical possible.
- 7.5 e) When technically supported by the host club and for the main final only the drivers shall be entitled to run a backup transponder. Both transponder should be active.
- 7.6 f) It has been determined in some circumstances manual recording by visual observation of vehicles is not practicable, therefore there is no requirement for this provision.

7.6 RACE OFFICIALS & RACE DIRECTOR

- 7.6 a) The Race Director is responsible to follow the schedule of the event. The Race Director ensures that various tasks under his responsibility are well done including; Time-Keeping, Starts, Marshalling, Display of Results, Commentary to the Public, Comments to the Drivers, Technical Inspection, Frequency Control.
- 7.6 b) The Race Director receives protests and decides if the Jury has to meet. He also has to take urgent decisions or stops a race for safety or any other unforeseen situation.
- 7.6 c) All officials, except referees and the Time-Keeping Supervisor are subordinate to the Race Director who issues detailed instructions for all jobs.
- 7.6 d) The Assistant Race Director will represent the host country or organisation and will assist the Race Director in co-ordinating all race matters with host organisation officials.

7.7 QUALIFICATION OF OFFICIALS 7.7.a) All officials must be properly trained and experienced persons, with the main positions held by persons with International experience and a good knowledge of the rules and the English Language.

- 7.7 b) Officials should be clearly distinguished from competitors and spectators by wearing a band or otherwise.

8 FREQUENCIES & FREQUENCY CHANGES

- 8.1 a) Only frequencies of the competent body of the state concerned will be used. Other frequencies may only be used with the approval of the Organiser, who then takes no responsibility. The Organiser may refuse non-authorized frequencies.
- 8.1 b) A frequency flag/clip or other usual method will be used to show the frequency of the transmitter. During practice frequency flags may not obstruct the view on the track of other drivers.
- 8.1 c) In case of more than one driver using the same frequency during practice, the time for each driver must be equally divided.
- 8.1 d) In the case of two (2) drivers using the same frequency who qualify for the same sub-final or final, the faster qualifying driver will keep his frequency and the other must change.
- 8.1 e) When a frequency change is required up to ten (10) minutes time must be allowed following notification to carry out the change.
- 8.1 f) Lower qualifying drivers, who cannot or will not change their frequency, will not take part in the sub-final or final for which they have qualified.
- 8.1 g) If a driver must change his frequency before the start of a sub-final or final due to an error of the Organiser, he will be allowed up to ten (10) minutes time to carry out the change.
- 8.1 h) If a driver finds his radio equipment defective or has made an error in the selection of his crystals, the race will not be delayed beyond the schedule.
- 8.1 i) All frequency changes must be authorised by the Race Director before the change is made.

- 8.1 j) The Organiser shall not display any drivers' transmitter frequencies on any heat sheets, result sheet or race schedule to preserve the security of the frequency control systems.
- 8.1 k) Each driver in the Main Final shall be permitted to change his frequency before the start of the race. Only the race Director is permitted to know the frequencies used by the Main Finalists.

9 TRANSMITTERS & TRANSMITTER IMPOUND

- 9.1 a) Transmitters must be constructed in such a manner that the crystal can be changed. All competitors must have at least one alternative frequency available to that registered during registration. Prior to the commencement of his heat, sub-final or final, a driver may go into the pit with his transmitter for the sole purpose of checking or repairing his radio equipment.
- 9.1 b) At the discretion of race organisers transmitters may be checked by using a frequency counter and or spectrum analyser, operated by a qualified official.
- 9.1 c) Spare transmitters in the pits will cause disqualification.
- 9.1 d) The Organiser must provide protected and secure storage for impounded transmitters, preferably adjacent to the drivers' rostrum.
- 9.1 e) Transmitters are impounded immediately after a request by the Race Director or other Official. When impounded for the first time, transmitters are marked with heat-numbers and are stored accordingly.
- 9.1 f) Transmitters must be impounded at all times whilst racing is in progress.
- 9.1 g) Transmitters are only released for the next race after all the transmitters used in the previous race are impounded by the officials. Transmitter impound must take place immediately after the driver has completed his race or has finished driving and is leaving the drivers rostrum.
- 9.1 h) Prior to the commencement of his Heat, Sub-Final or Final, a driver may go into the pit with his transmitter for the sole purpose of checking or repairing his radio equipment.
- 9.1 i) Transmitters may never be taken onto the track.
- 9.1 j) Extensions and/or additions to the antenna on a transmitter are forbidden.
- 9.1 k) Only non DSM radios need be impounded.
- 9.1 J) Synthesised multi frequency Transmitters are allowed subject to 8.1

10 FLAGS

- 10.1 a) The use of the following flags is compulsory: Starting Flag green or the National flag. Finish Flag -a chequered flag. Black Flag -all black flag.
- 10.1 b) Black Flag: The car in question must immediately stop in the pit to receive instructions. The black flag will be used by either a referee or the Race Director if a car is judged to be in an undriveable or dangerous condition. If after repairs have been carried out and after the Race Director or Referee have approved the repair, the driver may continue his race. Cars which lose their bodies or other parts must immediately stop and carry out the necessary repairs after which they may re-start.
- 10.1 c) The Black Flag is operated by the Flagman (Starter), who receives his instructions to do so from either the Race Director or the Referees. Under no circumstances may he use the black flag on his own authority. The Black Flag is always shown with the corresponding car number.
- 10.1 d) Not responding to the black flag within two (2) laps will lead to disqualification of the participant concerned.

11 CAUSES FOR PENALTY

- 11.1 Penalties in time, laps or even disqualification will be issued by the referees for the following:
 - 11.1 a) Unsportsmanlike behaviour.
 - 11.1 b) Deliberate corner cutting.
 - 11.1 c) Re-entering the race from other than the point at which the car left the track (not in the case of an engine stoppage and the car has to be re-started when the car re-enters the race from the pits).
 - 11.1 d) When repairs are made to the car other than in the pit area of the track.
 - 11.1 e) If the car is pushed over the finish line (it must finish under its own power).
 - 11.1 f) Not returning to the pits after finishing a race.
 - 11.1 g) If orders of Race Officials are not obeyed.
 - 11.1 h) If acting contrary to AARCMMCC rules.
 - 11.1 i) If a driver changes his complete car for whatever reason.
 - 11.1 j) If a driver changes his frequency without the permission of the Race Director.
 - 11.1 k) If a driver does not return his transmitter to the transmitter impound immediately after the finish of the race.

11.1 l) The bad behaviour and deportment of any competitor during the race meeting which could injure the image of the sport.

12 REFEREES' WARNINGS

12.1 a) Warnings and penalties issued by the referees must be noted on the result sheet and on the result board for the drivers (preferably in red).

12.1 b) Time penalties must be awarded as stop and go penalties, where possible. The Referees should inform the driver and announce the penalty through the sound system. Within the next three (3) laps, the driver must bring the car to a specially-indicated area. The area will be controlled by the Start Marshal who will pick up the car and watch the Referee for an indication that the car can be returned to the track. The car must return to the track through the pit lane, during which time, if the driver wishes, the car may be re-fuelled and/or repaired after the stop and go penalty has been completed. In the case where the driver does not stop, or cannot comply, a one (1) lap penalty will automatically be given.

12.2 STARTING PENALTIES

12.2 a) Fixed penalties in time or laps may be issued by the time-keeping official in case of early starts.

12.3 PROTESTS

12.3 a) Only drivers participating in the race may enter a protest.

12.3 b) Protests may concern: The organisation (acting contrary to the rules), officials (acting contrary to the rules), results (only when proof can be presented showing the result is wrong), other competitors (acting contrary to the rules to seek advantage or disadvantage for the protestor).

12.3 c) Only written protests handed over to the Race Director within ten (10) minutes of the publication of results of the heat or occasion to which it concerns, will be considered.

12.3 d) One Hundred Australian Dollars has to be paid to the Race Director, who will only then accept the protest. The time of receipt of the protest must be recorded.

12.3 e) The protest must contain relevant information for the Race Director to be able to discuss the protest and decide.

12.3 f) Protests are dealt with by the Race Director and if necessary the International Jury.

12.3 g) The decision on the protest must be made within thirty (30) minutes of it being lodged and accepted. Only for important reasons and when the Executive Committee has to meet, may the decision be delayed to sixty (60) minutes maximum. When the protest concerns sub-finals or finals, either the decision must be taken ten (10) minutes before the start of the following final or the start of the next final must be delayed until ten (10) minutes after the decision.

12.3 h) After the final race, there will be a 'protest period' of thirty (30) minutes after the provisional results have been published in writing on the score board. For this purpose the publishing time of the provisional results must be noted down on the result sheets. During these thirty (30) minutes, protests against the results may be presented to the Race Director who will then act accordingly. If no protests are presented within the thirty (30) minutes 'protest period', the provisional results become official and final and may be announced.

12.3 i) The applicant of a protest cannot appeal against the decision.

12.3 j) If the protest is upheld, the protest fee must be returned immediately.

12.3 k) The Race Director may without a protest being made, correct results or earlier decisions which he may deem necessary after consultation with his organising staff and the referees.

THE END

Appendix "A" sample race schedule. Content to be completed.....