# 2024 MOTORSPORT AUSTRALIA MANUAL 

OFF ROAD APPENDIX

OFF ROAD STANDING REGULATIONS

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A capitalised and italicised word in this document is defined in the FIA International Sporting Code (Code) or the National Competition Rules (NCR), including their Appendices.
Any HEADING is for reference only and has no regulatory effect.

## 1. DESCRIPTION

An Off Road Event is a timed Competition (not a Speed Event), conducted primarily on sand and/or defined tracks in desert or bush area. The nature of an Off Road Competition is such that the emphasis is on Automobile and Driver ability rather than outright speed.

An Off Road Event is conducted under the FIA International Sporting Code including Appendices, the National Competition Rules of Motorsport Australia, these Off Road Standing Regulations and the Supplementary Regulations for the Event.

If an Event includes a round of the AORC, the Motorsport Australia Off Road Championship Sporting Regulations will take precedence over these Off Road Standing Regulations.
2. ENTRIES

The Organiser of an AORC Event must give priority Entry to each registered AORC Competitor followed by each other Entry as specified in the Supplementary Regulations.
3. CREW

For a Short Course Event there may be 1 or 2 Crew, as specified in the Supplementary Regulations.
For a Long Course Event, except where the Automobile is fitted with only 1 seat, there will be 2 Crew.
Supplementary Regulations may permit more than 2 Crew being entered per Automobile.
Each member of a Crew must wear apparel in accordance with Technical Appendix - Schedule D in the Manual.

## 4. COMPETITION LICENCE

Each Competitor, Driver, Co-Driver and Navigator must hold a Competition Licence in accordance with the General Appendix - Competition Licences of the Manual.
5. AUTOMOBILES
5.1 ELIGIBILITY

Each Automobile must comply with the requirements of the Off Road Appendix of the Manual.
5.2 AUTOMOBILE CLASSES

Refer Off-Road Appendix - Specific Requirements.
The Australian Off-Road Commission may approve separate Competitions for other classes which will be specified in the Supplementary Regulations.

The Supplementary Regulations may further subdivide the Performance 2WD, Extreme 2WD, Production 4WD and Extreme 4WD classes based on technical specifications.

Note: The Extreme 4WD Buggy class is only permitted in State level Competitions or below.
LOG BOOK
Each Automobile must be the subject of a Log Book in accordance with Technical Appendix - Schedule L in the Manual.
5.4 NOISE

An Automobile may be subject to a noise emission test prior to starting in an Event or at any time during a Competition. Testing will be conducted in accordance with the requirements detailed in Attachment A.

## TRIENNIEL AUTOMOBILE INSPECTION

Each Automobile must undergo an inspection every 3 years where compliance with safety regulations and the Automobile structure will be examined. The inspection must be conducted by a scrutineer (minimum Silver Scrutineer Licence) utilising the Motorsport Australia Off Road Triennial Automobile Inspection Form. When the Triennial Inspection is satisfactorily completed, an entry to that effect shall be made in the Automobile Log Book by that scrutineer.

## RADIOS

Each Automobile competing in a Long Course Event (and recommended for Short Course Event) is required to carry an operational UHF radio, either hard wired or portable, of at least 5 watt power output. If the radio is equipped with 'VOX' it must be disabled. Any transmission between any Competitor and crew must be on a channel other than that used by the Organiser.
Automobile to Automobile communication is only permitted when an Automobile is seeking to pass the Automobile in front.
The use of radio communication for navigation is prohibited during Competition.

### 5.7 MOTORSPORT AUSTRALIA LOGO

In any State Championship Competition and above, a Motorsport Australia logo must be placed as high as possible and clearly visible between the main roll bar hoop and the front suspension on each side of the Coachwork.

## 6. <br> SAFETY

6.1 MEDICAL SERVICES

The medical service must comply with the requirements of the General Appendix - Medical Services/Requirements in the Manual.

### 6.2 FIRE EQUIPMENT

The Organiser must provide appropriate firefighting equipment at the Start Line, the Finish Line, the paddock, and any refuelling area.

During any Automobile refuelling/defuelling:
its engine must be switched off;
no Crew member may be onboard; and
at least one person with a fire extinguisher ready for use must be within 3 metres.
6.3 SPECTATORS

The Organiser must comply with the Off Road Appendix - Public Safety and Control Procedures in the Manual.

## PADDOCK

Unless there is a natural or purpose-built barrier, the paddock must be not less than 50 metres from the Course.
The Organiser must provide in the paddock or other designated location, an area set aside for any welding, spark generating activity or similar operation.
6.5 FLAG SIGNALS

Any flag signal to be used must comply with Circuit Race Appendix - Track Control and Flag Signalling in the Manual, be included in the Supplementary Regulations, and advised at the Driver's briefing.
7. LONG COURSE EMERGENCY PROCEDURE
7.1 SIGNS

For a Long Course Event:
Each Automobile must carry at least 1 commercially available warning triangle.
Each Automobile must carry at least 1 "OK/SOS" sign which must comply with the following: a green "OK" symbol on one side and a red "SOS" on the other side (in "landscape"); be printed on a white card (minimum 130 gsm) or plastic board of at least A4 size; may be mounted on to a rectangular or triangular self-supporting bracket/s.

### 7.2 WARNING TRIANGLE PROCEDURE

If an Automobile stops on the Course a warning triangle must be displayed in a conspicuous position approximately 50 metres behind, except where the Automobile does not present a hazard. Any following Crew sighting the warning triangle must reduce speed until the hazard has been passed. If the stopped Automobile has been cleared of the Course the warning triangle must be removed.
7.3 SOS PROCEDURE

If an injury is sustained that requires immediate medical attention, the "SOS" sign must be clearly displayed to each following Automobile.

If the "SOS" sign is displayed, or if an Automobile is stopped and no sign is displayed, the next 2 Automobiles must stop and the Crews render assistance.

Unless signalled to render further assistance by the Crews on the scene, or the Competition has been neutralised by the Clerk of the Course, each other Automobile must pass the scene at a reduced speed; it can increase speed once clear.

If medical attention is required, event command must be informed by radio or mobile telephone. If neither is operable, one of the stopped Crews must depart for the next recovery/radio point in the direction of the Course to report the location and nature of the injury.

The Clerk of the Course may allow time lost by the Crew/s required to stop at an incident.
An incident report including details of each witness must be lodged by at least 1 of the Crew involved as soon as practicable with the Clerk of the Course.
7.4 OK PROCEDURE

If an Automobile is stopped on the Course (e.g., mechanical problem, crash) and there is no injury requiring medical attention, the "OK" sign must be clearly displayed on the Automobile.
7.5 ASSISTANCE FROM AIRCRAFT

Unless otherwise specified in the Supplementary Regulations, only aircraft (e.g. helicopter, fixed wing) approved by the Organiser for the purpose of assistance in the case of an emergency are permitted.

## 8. VENUE

Each area below must be clearly delineated at the venue:

### 8.1 COMPETITOR CAMPING GROUND

The competitor camping ground must be separate from any public camping ground.
8.2 PADDOCK

The paddock must be separate from any camping ground and from the spectator area.
The paddock may be designated as "pits" at various times as specified in the Supplementary Regulations.

### 8.3 PITS

The pits are an area delineated for refuelling and running repairs during the Competition.
Only Crew, pit crew members and officials are permitted in the pits.
9. THE COURSE
9.1 SURFACE AND TERRAIN:

The Course must not include a straight section of more than 2 km without an obstacle or deviation (either natural or artificial) which requires a significant reduction in speed.

The Course must be clearly defined and arranged such to minimise an Automobile colliding with another travelling on any other part of the Course.

### 9.2 ROAD CLOSURE

The Course must be closed to the public. Any access road must include a closed gate with appropriate signage or managed by an identifiable official.
10. COURSE MARKING
10.1 MARKING

The Course must be clearly marked by the sign/s described below. An example of each type of sign must be displayed to each Crew prior to the Start.

Any unseen or blind hazard e.g., ditch, stump, drop-off, gate, post, fence on or near the Course must be identified 100 m prior by means of a marker on each side of the Course.
indicates the direction of the Course. Such signs facing inwards may also be used to indicate an Automobile must pass between them. Each sign must be red on a white background in accordance with the diagram below.

"Danger" sign: indicates a hazard ahead requiring a significant reduction in speed. Each sign must be a red square in accordance with the diagram below.

"Pre-danger" sign: indicates a "Danger" sign ahead. Each sign must be a red dot in accordance with the diagram below and placed such to provide adequate warning for an Automobile travelling at competition speed to slow and traverse the hazard.


## "Caution" Sign: indicates a hazard requiring caution but not sufficient to warrant a "Danger" sign. Each

 sign must be placed at the hazard, on red triangle with a white background in accordance with the diagram below.
"No Road" sign: indicate a road/track/etc. which is not part of the Course. Each sign must be a black " $X$ " on an orange background in accordance with the diagram below.


Braking Marker: placed towards the end of a straight to indicate a corner or obstacle which may require braking. A $100 \mathrm{~m}, 200 \mathrm{~m}$ or 300 m marker is placed in accordance with the predicted approach speed. Each sign shall be black on a white background in accordance with the diagram below.

10.3 POSITIONING OF MARKERS

Within the constraints of Article 10.2, each sign must be placed as set out in the table below:

| Direction Arrow | Left hand side of the Course, clearly visible 40 to 50 metres before the corner |
| :--- | :--- |
| Large Arrows <br> (e.g. Pines) | Head-on at the corner. Must be preceded by the direction arrow. |
| Danger | On each side of the Course at the danger |
| Pre-Danger | On each side of the Course 100 metres before the danger |
| Caution | On each side of the Course at the caution |
| No Road | On the 'no road', clearly visible. |
|  | Where the possibility exists of intersecting with another road where Competition is <br> occurring or with members of the public, another form of immovable delineation <br> must be placed on or over the road. |

## 11. EVENT OPERATIONS

11.1 SCRUTINEERING

Prior to Competition including any prologue, each Automobile must pass scrutineering.
Any Automobile involved in an incident may be the subject of scrutineering prior to taking further part in the Competition.

### 11.2 BRIEFING

The Clerk of the Course will conduct a mandatory briefing for Crews (and officials if required) to provide information relating to the Event.
11.3 PRACTICE

For a Long Course Event, practice is prohibited during the Event.
For a Short Course Event, if practice is permitted details will be included in the Supplementary Regulations.

### 11.4 RECONNAISSANCE

For a Long Course Event, the Supplementary Regulations must provide for a reconnaissance of the Course for each Driver and Co-Driver. The use of any Automobile is permitted provided it is fitted with seat belts for each person on board.

### 11.5 NUMBER OF STARTERS

Unless otherwise approved by Motorsport Australia, the number of starters must not exceed 4 per kilometre of lap distance.

### 11.6 STARTING ORDER

Each Automobile must Start in the order prescribed in the Supplementary Regulations.
For a Long Course Event, this order may be based on the result of a prologue or, the Supplementary Regulations may include a "Top 10 Shootout" or similar activity which will require a number of the fastest Automobiles to compete in a 1 -at-a-time Competition to determine the starting order at the front of the field. In this case any seeding will occur after the shootout.

With the approval of the Stewards, a Crew which fails to complete the prologue will be allocated a start position by the Clerk of the Course which is based on the Crew/s performance history.

In the case of a round of the $A O R C$, no seeded Crew which fails to complete the prologue will be positioned within the top $10 \%$ of Automobiles starting the Event.

A Crew may make only 1 attempt at the prologue; however, the Stewards may approve a request from a Crew made through the Clerk of the Course for another attempt where a Crew:
has been stopped by an official or,
has stopped to render assistance due to a possible injury or,
the Course is temporarily impassable.
The penalty for an infringement during a prologue will be 5 minutes added to the Section 1 time of that Crew. The Stewards may impose another penalty at their discretion.

### 11.7 STARTER'S ORDERS

Each Crew will be under starter's orders 10 seconds prior to the Start signal.
Any Crew which fails to Start at their designated Start time may forfeit their run or, may be deemed by the Clerk of the Course to have started at their designated Start time. Such decision is not subject to Protest.

### 11.8 INTERVALS

Each Automobile will be started singularly and at intervals of not less than 15 seconds, or as determined by the Clerk of the Course. However, having regard for the nature and length of the Course, Motorsport Australia may approve a number of Automobiles to start simultaneously.

### 11.9 DRIVING CONDUCT

A Crew having been caught by an Automobile which is sounding its horn and/or flashing its headlamps will give that Automobile right of way as soon as possible by pulling to one side or stopping if necessary.

Running into the Automobile ahead is prohibited and may be reported to the Stewards.
Driving against the direction of travel as defined by the Course marking, is prohibited.
11.10 REFUELLING

The following regulations apply to any operation that involves refuelling and/or the removal/opening of a fuel filler cap:

Refuelling is only permitted at a location specified in the Supplementary Regulations.
The fuel filler cap/s of the Automobile, and the caps/covers/plugs of all refuelling containers must remain securely in place until after all Crew have vacated the Automobile and disconnected themselves from it, and the engine has been switched off. It is prohibited either to switch on the engine, or for any person to enter the Automobile, until after the filler cap has been replaced, and the refuelling container/s has been either re-closed or moved by at least 2 metres from the Automobile. An additional crew member must stand by the crew refuelling with a minimum 0.9 kg fire extinguisher at the ready.

Each person involved in a refuelling operation, or within 2 metres of a refuelling or venting point whilst the Automobile is being refuelled, must be attired in at least shoes and socks, and non-flammable clothing from wrist to neck to ankle.

The Organiser is to establish a designated "refuelling area", specifically set aside for the purpose of refuelling during Competition. It is strongly recommended that each Competitor utilises some form of
earth spike to reduce the possibility of static build up while refuelling. Except as otherwise provided in the Rules, refuelling outside of these areas is prohibited.

If an Automobile runs out of fuel on the Course, the Clerk of the Course may give written permission which may include conditions for that Automobile to be refuelled on the Course.

### 11.11 OUTSIDE SERVICING

Work on an Automobile may be conducted in a location outside of the pits specified in the Supplementary Regulations subject to any part or equipment used being: carried onboard any Automobile competing in the same Competition; and/or brought on foot from the pits/paddock by a Crew member in the same Competition; and/or normally found in the region of the Course, e.g. water, fencing wire, string; and/or carried out by an official offering to assist and which takes the form of: the provision of tools and water, but NOT parts, and/or towing the Automobile to the next passage control, or the next recovery point.
The Clerk of the Course may permit further outside assistance provided it is for one instance only per Automobile.

## 12. FINISH

12.1 GENERAL

To be classified as a finisher, an Automobile must cross the Finish Line at the end of each lap under its own power with:
each Crew member seated in their correct position;
each wheel within the Course as it crosses the Finish Line; and
within the time specified in the Supplementary Regulations.
Any Automobile which is towed or pushed by any other Automobile (other than a vehicle provided by the Organiser) for more than 400 metres on any lap will be disqualified.

During a Competition, any Automobile which leaves the pits, other than to re-join the Course or to go to a designated refuelling area, will be deemed to have withdrawn from that Competition.

### 12.2 SHORT COURSE

Unless specified otherwise in the Supplementary Regulations, to be classified as a finisher in a Short Course Competition, an Automobile must complete all of the scheduled laps.

### 12.3 LONG COURSE

Unless specified otherwise in the Supplementary Regulations, to be classified as a finisher in a Long Course Competition, an Automobile must complete all of the scheduled laps and must pass through each passage control in the correct direction.

## 13. PENALTIES

The following penalties may be imposed:
False Start: 1 minute;
Striking (not displacing) a course marker: 30 seconds per marker;
Not following the prescribed Course, or displacing any course marker: 1 minute or a maximum of 15 minutes;

Dangerous driving: Disqualification, and
Interference with or impeding another Automobile: one minute each occurrence.

## 14. RESULTS

Unless specified otherwise in the Supplementary Regulations:
The results of a Short Course Competition will be determined by the total elapsed time of each Automobile, including any penalty regardless of whether they Start individually or otherwise.

The results of a Long Course Competition will be determined by elapsed time in increments of 1 second including any penalty.

If a Competition is stopped prior to the scheduled finish for reasons of Force Majeure, results will be determined on the basis of the order in which those Automobiles which have not retired last crossed the Control Line, and the number of laps completed by each including the imposition of any penalty.

## 15. DEFINITIONS

AORC: Motorsport Australia Off Road Championship.
Crew will be designated as:
Driver. may drive and/or navigate.
Co-Driver: may drive and/or navigate.
Navigator: may only navigate.
False Start: A False Start occurs when an Automobile under starter's orders is outside its prescribed position or is moving when the Start signal is given.

Long Course: An Off Road Competition conducted on a Course of a length greater than 15 km .
Score: The time taken to complete the Competition including any penalties.
Section: A Competition may be divided into Sections which may consist of one or more laps.
Short Course: An Off Road Competition conducted on a Course not exceeding 15 km in length.
Short-Cut: Failing to follow the Course which results in gaining an advantage.

## Attachment A - Off Road Noise Testing Procedure

### 1.1 GENERAL

Each Automobile may be subject to a noise emission test at any time during an Event. The maximum noise emission from any Automobile is 95 dBA .

The testing official is a Judge of Fact in respect of any measurement taken.
Each testing result is confidential and may only be shared with the affected Competitor and/or the Stewards and/or Motorsport Australia.
1.2 TESTING EQUIPMENT

The following equipment is required to conduct noise testing:
A noise meter compliant with the relevant Australian Standard;
A noise meter calibration device;
A current noise meter compliance and calibration certificate;
A tripod or similar device to mount the meter; and
An anemometer to measure wind speed compliant with the relevant Australian Standard.

### 1.3 PROCEDURE

Testing will be by the "drive-by" method.
Noise meter manufacturer instructions must be followed in respect to the effect of temperature and/or atmospheric conditions on any reading.

Each meter must be calibrated with a calibration tester immediately before and after each testing session.
The noise meter test position must not be less than 30 metres from the edge of the defined Course when measured at an angle of $90^{\circ}$ to the line of the Course.

The wind speed must be measured at a minimum of 15 minute intervals during any testing session and if greater than $20 \mathrm{~km} / \mathrm{h}$ no readings will be recorded.

The noise meter must be positioned on a sturdy base (e.g. tripod) and be isolated as far as is practicable from vibrations. The body of the official/s undertaking the test must be located at an arm's length or greater from the meter.

Each reading will be rounded down to the next whole number.
The background noise level must be checked and be a minimum of 10 dBA less than the Automobile being tested, otherwise an adjustment in accordance with the following will be applied:

Up to 5 dBA less: subtract 2 dBA from the measurement;
Between 6 to 9 dBA less: subtract 1 dBA from the measurement;
Over 10 dBA: no adjustment.
Each reading must be identified and recorded as emanating from a particular Automobile during any testing session.

RECORD KEEPING
A record of each noise test session must be kept and will include the following:
General test conditions:
Temperature;
Atmospheric pressure;
Wind speed;
Background noise level;
Calibration test results, both pre and post the test session; General geographical details of the testing site.

Result of each test of an Automobile, including its competition number and any variable parameters.

