**South Australian Rally**

***Course Car Manual***

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# Welcome from the Clerk of Course

Thank you for volunteering to join the Rally Course Car team. The time and effort of each Course Car team member is appreciated and your involvement is vital to the running of the event.

The following pages set out the various details and requirements for each crew in addition to standards and practices applicable to this event and rallies generally.

In carrying out your role, please note the following:

* Course cars are readily identifiable to the public. Please be aware of this aspect and ensure your actions do not bring the event into disrepute.
* From official road closure time, no vehicle is permitted to travel on any special stage in the opposing direction **without the prior specific approval of the Clerk of Course. No exceptions.**

I trust you will enjoy your involvement in the Rally and if you are unsure of any aspect in the following pages, you are welcome to contact me on **???????????**.

Clerk of Course

# Event Program

|  |  |  |  |
| --- | --- | --- | --- |
| Monday | **Open Date 2012**0900 hrs | Entries open | Rally Office |
| Wednesday | **Early Date 2012**2000 hrs | Early Entries close | Rally Office |
| Monday | **Final Date 2012**2000 hrs | Final Entries close | Rally Office |
| Friday | **Seed Date 2012**1900 hrs | Seeded list of entries published | Official Website  |
| Thursday | **Doc Date 2012**1900-2030 hrs1900-2200 hrs1900-2200 hrs | Documentation verification(Includes distribution of Road Books, Service Guide, Door Numbers and Sponsor Advertising)Turbo Charger Scrutiny & SealingScrutineering | Scrutineering |
| Friday | **Recon Date 2012**0800-0830 hrs0900 – 1800 hrs | Rally Headquarters Opens(Distribution of Road Books, Service Guide, Door Numbers and Sponsor Advertising, for country competitors)Reconnaissance  | Rally Headquarters |
| Saturday | **Event Date 2012**0700 hrs0800 - 0930 hrs1030 hrs1000 hrs1100 hrs1945 hrs2142 hrs2000 - 2200hrs2200 hrs2300 hrs | Rally Headquarters opensRe-scrutineeringCars to Staging AreaCompetitors’ BriefingFirst Car StartsFirst Car Due to FinishLast Car Due to Finish (50 cars)Post Event ScrutineeringProvisional Results posted and Trophy Presentation Rally Headquarters Closes | Rally Headquarters |
|  | **Award Date 2012** | Award Location |  |

# Key Officials

**Clerk of Course** Name

 Mobile:

 Email:

**Deputy Clerk of Course** Name

 Mobile:

 Email:

**Secretary** Name

 Mobile:

 Email:

**Officials Coordinator** Name

 Mobile:

 Email:

**Course Car Manager** Name

 Mobile:

 Email:

**Chief Scrutineer** Name

 Mobile:

**Competitor Relations Officer** Name

 Mobile:

**Equipment Officer** Name

 Mobile:

# Scrutiny

All Course Vehicles are to be maintained as per the Course Car manual with regard to safety and general condition.

Car 0 and 999 or any other high speed cars will need to be scrutineered at the allocated Scruiteering day or on the morning of the event for overall safety and general condition.

Helmets must be worn at all times when on the competitive stages by the crews of the course cars listed above.

Whilst these vehicles are official vehicles and consequently do not have to comply with the Supplementary Regulations as they apply to the competitors, a high standard of vehicle preparation is expected.

The Zero vehicles and car 999 must be fitted with rollover protection and crews are required to wear one piece flame resistant clothing in addition to helmets being worn by the driver and co-driver.

Normal safety requirements as detailed in the General Requirements of the CAMS Manual of Motor Sport (including Schedules A, B, D, H, I, J, R) such as fire extinguisher(s) with a total capacity of 2kg, First aid kit and warning triangles must be carried.

Please ensure you leave sufficient time to have this done.

# Sign On

All Course car crews are required to sign on EVERY DAY of their participation, this can be done at the First Time Control of each day or Rally Head Quarters.

# GENERAL INFORMATION

The following Course Cars will traverse a special stage. This brief summation of the duties of each vehicle in addition to revolving lights/siren status whilst on the stage is provided for your reference. Further details of the duties of each crew are contained within this manual.

|  |  |  |
| --- | --- | --- |
| **Car Number** | **Task** | **Time Before/after Car 1** |
| 000 | 1st Stage check – Close Stage | 60 min before Car 1 |
| 00 | 2nd Stage cheek | 30 minutes before Car 1 |
| 0 | Lead - Competition | 5 minutes before Car 1 |
| Car 1 |  |  |
| Other Competition cars |  | 2 min intervals after Car 1 |
| CC | Follow - last Competition vehicle | 2 min after last car |
| Sweep | Open Stage | 5 min after CC |
| Recovery | Vehicle Recovery/clean up | after sweep |

# RADIO COMMUNICATION

All Course Cars will have radio communications with Rally Control and it is important that crews carry their personal, mobile telephones that may also be used.

When utilising radio communication:

* Keep messages short and to the point. Think about the information you wish to convey prior to transmitting.
* Speak clearly with the microphone approximately 3cm from your mouth. Speak in a normal tone of voice; there is no need to yelland please don't whisper.
* Press the transmit button for about 1 second before speaking in order that your first words are not cut out.

For radio communication purposes, the Rally headquarters is referred to as "Rally Control". A typical transmission may be:

**Message** **Reply**

Rally Control, this is double zero, over Rally Control receiving, send double zero, over

Double zero completed special stage 2 Confirmed. SS2 condition blue at 10:25, Rally

at 10:25, condition blue, over Control out

All Course Cars are required to check-in via their radio before departing to ensure that the radio is functioning. In the event that the radio is not working, talk to Rally Control to get it fixed.

**Course cars are asked to advise Rally Control of the following:**

* **Your arrival at the start of each stage**
* **Your arrival at the end of each stage and your next anticipated stop.**

# Duties: 000

Special stages are prepared for competition by the Stage Commanders and their crew prior to road closure. Work commences on the stage and should be almost completed by official road closure time. At road closure time, the various gate closing tapes and road closures that have been prepared earlier are erected or closed by stage personnel that have remained at various points on the stage in the direction of the start of the stage to finish.

The crew of 000 are to check the stage setup according to the Setup Notes, and place missing tape etc. or assist stage officials where required, this may include the correct setup of chicanes and time controls. 000 are also responsible for checking all road closures are correctly set up and required road closure officials are at the required road closure locations.

The special stage becomes “**AMBER**” behind them as they traverse the stage. Road Closer enters the stage **5 minutes after legal road closure**, to allow members of the public still on the stage to clear the stage or get to their destination before they meet 000. Official Road Closure time is approximately 1 hour prior to the first competition vehicle.

As 000 is travelling along a road on which Stage Support officials may be encountered, as well as any non-rally traffic that may have entered the stage prior to the road closure time, it is to travel the stage at posted speed limits on the correct side of the road. **000 is to travel through stages with lights flashing and sirens sounding – this signifies to officials that the road is now closed.**

**If the 000 Crew comes across any non-rally traffic the 000 crew are to stop the vehicle and take the following action:**

* If the crew is satisfied that a non-rally vehicle will be off the road within a few minutes (e.g.: house is ‘just down the road’) the vehicle can be permitted to continue, under these circumstances the vehicle make, model and colour is to be reported to Rally Control (so that other vehicles on the course can hear the message).
* If the non-rally vehicle cannot be off the road in a short time, it is to be turned around and escorted out of the stage (or, it can be released through a road closure).
* If the non-rally vehicle refuses to obey instructions from the 000 crew, and police action is unwarranted, an Unattended Vehicle Notice is to be placed on the windscreen (even though the vehicle is ‘attended’), and tape is to be tied from exterior mirror (or door handle) to exterior mirror (or door handle) passing across the windscreen. The driver is to be told that the vehicle cannot be moved until the Road Opener vehicle passes at the completion of the stages activities.

They are also to look out for any spectators massing in unsafe locations and request they move to a more appropriate vantage point. Rally control and following course cars must be notified so that this can be monitored accordingly.

The 000 crew also deliver the Radios to the Stage officials where required.

**The 000 crew is to work at an efficient pace.** The crew will be required to work in conjunction with the course checker in 00.

## 000 - Before leaving the Oval

* Ensure the vehicle is carrying sufficient supplies as set out in the list of 000 vehicle equipment.
* Check the operation of the radio. Call Rally Control with a test message.
* Prior to departure from Rally Control, check for latest instructions (if any) and check vehicle clock accuracy.

## Upon arrival at Special Stages

* Check road closure signs displayed (or ready to be displayed) before stage start. Check that the Time Control boards are correctly located and in the correct sequence. (See back pages of this manual for diagrams)
* Check Start Control boards are correctly located and in the correct sequence.
* At road closure time, check with Stage Commander and Rally Control that it is okay to proceed. If so, hand them Stage AMBER Authority form and request that the Stage Commander notify Rally Control that the stage is AMBER and that 000 has commenced the stage.

## On Stage

**STAGE SUPPORT CREW MUST WEAR THEIR SAFETY TABARDS AT ALL TIMES WHILST ON THE STAGES.**

**It is vital that the Stage Setup Notes be followed and requirements fulfilled.**

* Proceed on to special stage and traverse at a speed that will allow checking of road closures, gates secured, turn arrows correctly positioned. Check placement of driver sight tapes.
* Check the standard of road closures. An official's vehicle should be parked across the incoming roadway to prevent another vehicle from breaking through on to the stage.
* Check placement of Caution boards as required.
* If a spectator vehicle is parked on the stage, tape an Unattended Vehicle Notice to the windscreen and tie tape to the vehicle (i.e. to exterior mirror, door handles, across windscreen) in a manner that will be readily identifiable to following Course Cars.
* Check the location and safe set up of radio SOS points. Ensure that signs preceding the SOS point are in clear view of a vehicle approaching at high speed.
* If a Caution board is required for a feature not contained within the Road Book (i.e. new oil spill/rock fall/hole in road of significant dimensions), erect the board approximately 50m before the hazard and immediately notify Rally Control. Rally Control will advise 00.
* Crews should keep a log of their actions for discussion at crew debriefing. Notes to be returned to Rally Control at the conclusion of each day.
* 000 crew are not required to comment on road features such as crests or corners as the Course Checker has previously evaluated these.

## Flying Finish/Stop Control

* Check location and sequence of Flying Finish boards.
* Check location and sequence of Stop Control boards, Stop Control location and general safety of area.

**Proceed to next special stage via the road book instructions.** **000 crews are requested not to shortcut between stages** **except where authorised** **by the Clerk Of Course or when necessary due to unforeseen time constraints.**

## Equipment – 000

|  |  |  |  |
| --- | --- | --- | --- |
| Course car itinerary | 1 | Board - Beige | 2 |
| Forms - Stage Status AMBER | 15 | Board - Red Clock | 2 |
| Forms - Unattended Vehicle | 10 | Board - Red Chequered Flag | 2 |
| Road Book | 1 | Board - Red Furled Flag | 2 |
| Stage Set Up Notes | 2 | Board - Red Stop | 2 |
| Board - Hazard Double Caution !! | 2 | Board - Yellow Clock | 2 |
| Board - Hazard Triple Caution !!! | 2 | Board - Yellow Flag | 2 |
| Board - SOS Location | 2 | Race Tape ( min 2 black rolls) | 2 |
| Board - SOS Signs (200m) | 2 | Stakes - Steel | 10 |
| Cable Ties (pkt 100) | 2 | Tape - Green & White (m) | 200 |
| Hammer / Mallet | 1 | Tape - Red/White (m) | 200 |
| Gloves (pair) | 1 | Tape - Yellow/Black (m) | 500 |
| Side Cutters | 1 | Tabards - Course Crew | 4 |
| Radio | 1 |  |  |

**Please ensure equipment is returned at the end of the day.**

# Duties: 00

00 carries the official Course Checker and is the final stage safety check and ensures that all issues as defined in the stage setup notes are completed. The crew of 00 is also required to make a general evaluation as to the readiness of the stage for competition and attend to any matters deemed to be of concern.

**00 is to traverse the Special Stage at a speed no more than 80-100km/h.**

## 00 - Before leaving the Oval

* Ensure the vehicle is carrying sufficient supplies as set out in the list of 00 vehicle equipment.
* Check the operation of the Rally radio. Call Rally Control with a test message.
* Prior to departure from Rally Control, check for latest instructions (if any) and check vehicle master clock accuracy.

## 00 - Upon arrival at the Special Stage:

* Ensure road is closed. Check Time Control clocks.
* Check that the Start Control boards are correctly located and in the correct sequence. Check Stage Start clocks.
* Ensure that vehicles belonging to control officials are outside the control area.
* Ensure officials complete 00 time card.

## On Stage

* Check stage conformity in accordance with the stage setup plan including:
	+ all road closures
	+ check all gates
	+ Sight tape, run-off bunting and spectator bunting etc.
	+ Chicane setup including warning boards
	+ SOS points
	+ Caution Boards
	+ Restricted speed zone boards are in place and timing equipment is set-up
* Assist stage officials to carry out any outstanding setup duties.
* If a vehicle is parked on the stage between the start line and the stop point it is to be taped and an unattended vehicle notice is to be placed on the windscreen and tie tape to the vehicle (i.e. to exterior mirror, door handles, across windscreen) in a manner that will be readily identifiable to following course cars. Report unattended vehicles to Rally Control.
* If a caution board is required for a feature not contained within the stage setup notes (i.e. new oil spill/rock fall/hole in road of significant dimensions), erect the board at the hazard and immediately inform Rally Control and the Course Checker. Rally Control will advise other Course Cars, Stage Commander and competitors via a competitor advisory notice at the stage start.

## Flying Finish/Stop Control

* Check location and sequence of Flying Finish boards and location of Flying Finish personnel.
* Check location and sequence of Stop Control boards, Stop Control location and general safety of area.
* Upon completion of the Special Stage and satisfaction that the stage is in readiness for Competition, notify Rally Control that the stage is "BLUE". Hand Stage BLUE Authority form to Deputy Stage Commander. The Stage BLUE Checklist form should be completed whilst traversing the stage and returned to Rally Control at the conclusion of the event.
* Crew should keep a log of their actions for discussion at crew debriefing. Notes to be returned to Rally Control at the conclusion of the event.

## Equipment - 00

|  |  |  |  |
| --- | --- | --- | --- |
| Course car itinerary | 1 | Board - Beige | 2 |
| Forms - Stage Status BLUE | 15 | Board - Red Clock | 2 |
| Forms - Unattended Vehicle | 10 | Board - Red Chequered Flag | 2 |
| Road Book | 1 | Board - Red Furled Flag | 2 |
| Stage Set Up Notes | 2 | Board - Red Stop | 2 |
| Board - Double Caution !! | 2 | Board - Yellow Clock | 2 |
| Board - Triple Caution !!! | 2 | Board - Yellow Flag | 2 |
| Board - SOS Location | 2 | Race Tape ( min 2 black rolls) | 2 |
| Board - SOS Signs (200m) | 2 | Stakes - Steel | 10 |
| Cable Ties (pkt 100) | 2 | Tape - Green & White (m) | 200 |
| Hammer / Mallet | 1 | Tape - Red/White (m) | 200 |
| Gloves (pair) | 1 | Tape - Yellow/Black (m) | 500 |
| Side Cutters | 1 | Tabards - Course Crew | 4 |
| Radio | 1 |  |  |

**Please ensure equipment is returned at the end of the day.**

# Duties: O & CC

Both 0 and CC are to traverse the Special Stage at a speed approaching **but less than** full competition speed.

## Vehicle Preparation

**0** and **CC** will be scrutineered prior to the event for overall safety and general condition. Whilst these vehicles are official vehicles and consequently do not have to comply with the Supplementary Regulations as they apply to the competitors, a high standard of vehicle preparation is expected. **The vehicles must be fitted with rollover** **protection in** **addition to helmets and flame resistant clothing being worn by the driver and co-driver.** **Normal safety requirements such as fire extinguisher(s) with a total capacity of 2kg, first aid kit and warning** **triangles must be carried.**

## O

The role of 0 is to depart the special stage start between 5-10 minutes before the first Competition vehicle and provide a final assessment of that stage.

If the 0 crew discover any road condition that could present a significant danger to the Competitors (i.e. substantial oil spill), that information and the location must be relayed to Rally Control immediately. Rally Control will advise the Stage Commander who will advise the competitors.

**Note that on longer stages the first** **competitors will have already commenced the stage prior to the dangerous road condition advice being** **received by the Stage Commander.**

## CC

The role of course closer 'CC' is to act as the "buddy" to the last competition vehicle and should commence the stage 2 minutes after that last competition vehicle.

The crew of CC should be trained in first aid. CC should at the start and finish control confirm each competition vehicle is accounted for before moving off to the next stage. CC should never allow a competition vehicle, which is still in the event to fall behind them.

## Equipment - O & CC

|  |  |
| --- | --- |
| Road Book | 1 |
| Course car itinerary | 1 |
| Radio  | 1 |

# Duties: Sweep

Sweep officially reopens the road to the public. Generally, Sweep and Recovery will commence the Special Stage shortly after the CC vehicle.

Rally Control will determine the last competitor on the stage. The last competitive vehicle will be followed by CC. Any competition vehicle arriving at the stage start after CC has departed will be denied permission to commence the stage.

Where Sweep encounters a vehicle that has withdrawn from the event, brief details of the vehicle's condition (mechanical failure, accident) should be logged, and the competitor’s "Withdrawal from event” form should be taken. Sweep are to provide a **"Stage Downgraded"** notice to the crew, advise Rally Control of the vehicle location and brief description of the vehicle's condition and if necessary, request that a tow truck be dispatched for recovery. Sweep should then proceed and continue to open the stage to the public.

Sweep should collect the control sheets from each start and finish control as they are passed.

Sweep crew should log their actions for discussion at the crew debriefing.

## Equipment - Sweep

|  |  |  |  |
| --- | --- | --- | --- |
| Set Road Books | 1 | Safety vests | 3 |
| Course car Itinerary | 1 | Note book/pens | 1 |
| Competitor "Stage Opened" notices | 20 |  |  |

# Duties: Recovery

The first role of the Recovery is self-evident, extracting stuck competition vehicles. The second role is to ensure that the special stages are safe for public use by the removal/clean up of oil or broken glass etc and that damaged property is recorded and that temporary repairs are made wherever possible.

Before commencing the stage, the Recovery Cars are to enquire from the Stage Commander and Rally Control what incidents may have occurred on the stage.

As the road has been officially reopened to the public, Recovery is **required to follow all road traffic laws.**

Upon encountering a disabled competitor vehicle, Recovery should stop and establish the recovery requirements of the vehicle. Any oil or vehicle debris should be treated/removed from the roadway. Similarly, whilst traversing the stage, Clean Up should act to treat/remove any oil spills or debris from the roadway even if the competing vehicle has departed the scene. Clean Up crew should log their actions for discussion at the crew debriefing.

**AS THE ROAD IS OPEN TO THE PUBLIC, CREWS SHOULD TAKE ALL** **NECESSARY PRECAUTIONS TO PREVENT INJURY WHEN ASSISTING A COMPETITION VEHICLE** **CREW OR MAKING REPAIRS TO PRIVATE PROPERTY ADJACENT TO THE ROADWAY.**

**SAFETY VESTS MUST BE WORN AT ALL TIMES.**

## Equipment - Recovery

|  |  |  |  |
| --- | --- | --- | --- |
| Road Book | 1 | Recovery ‘Snatch’ Strap | 1 |
| Garbage Bags | 10 | Broom | 1 |
| Oil Spill Kit (Large) | 1 | Fencing Wire (Roll) | 1 |
| Metal Stakes | 10 | Wire Cutters | 1 |
| Recovery Chain | 1 | First Aid Kit | 1 |
| Tabards | 4 | Gloves | 2 |
| Radio | 1 | Slide Hammer / Mallet | 1 |

# Special Stage Status

Special Stages are classified in accordance with the following:

**Amber**

* The road is closed.
* Course car "000" is commencing the stage.
* The Stage Commander is present and there is no apparent reason why the stage cannot be run as planned.

**Blue**

* Course Car "00" has checked the stage and everything is in order to run the stage.
* Rally Control will move the stage to Green as soon as confirmation is received from the Stage Commander that officials are in place and the start is ready to commence. The FIV should be in their allocated positions (not necessarily at the start of the stage).

**Green**

* Stage clear to run. Car "O" may commence followed by the Competition field.

**Yellow**

* An incident has occurred and the stage has been stopped. This incident may be a missing competitor, spectators in an unsafe location, or a non-competitor vehicle is on the stage. Emergency vehicles may also be on the stage.

**Red**

* An incident has occurred and emergency vehicles are on the stage.
* The incident may include injuries to a competitor, official or member of the public; course is blocked; fire or other community related requirement.

**Stage Downgraded - Black**

* Competition has ceased and the stage is reopened to the public.

# RALLY CLOCKS OPERATION

The rally clocks show time in hours - minutes - seconds. They have rechargeable batteries, which last for several days, especially if the internal light is not used.

To record the time press the "Time Hold" switch. This freezes the display for a short time.

The "Light' switch operates the light for 20 seconds.

Clocks are synchronised using the Master Clock and connecting cable.

# Stage Control Board Layout

