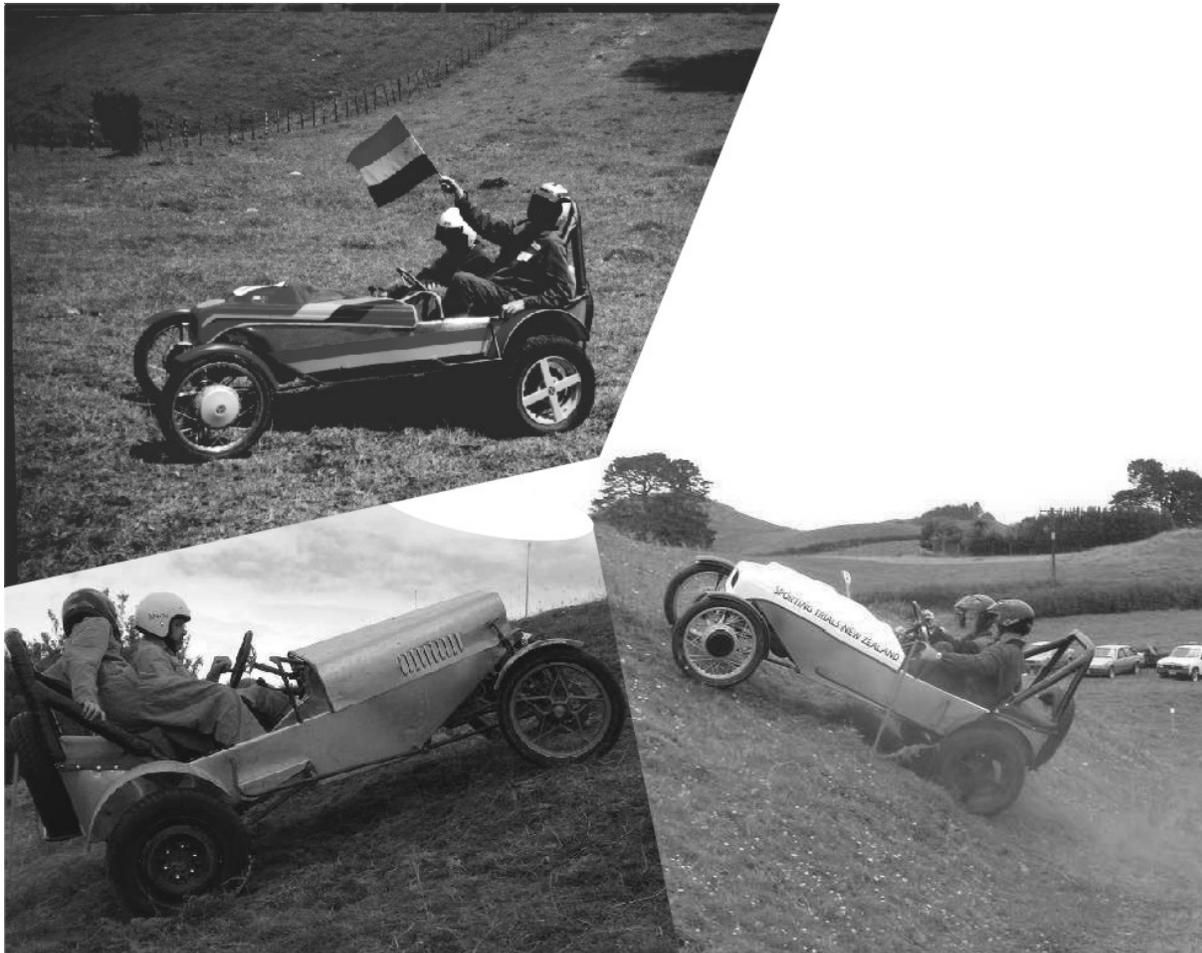


SPORTING TRIALS COMPETITION BOOKLET

Incorporating Appendix Five Schedule CK



Issued by MotorSport New Zealand Inc
revised August 2003

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PART ONE



FOREWORD

Sporting Trials originated in England in the early part of the 20th century. In the mid-1990's they finally found their way to New Zealand mainly through the efforts of enthusiasts from the Taranaki Car Club.

From their early success in Taranaki a member club with the specific purpose of encouraging the development and spread of such events was formed and as a consequence of their actions the number of competitors and special vehicles are on the increase.

Sporting trials are designed with absolute emphasis on car control in negotiating a marked course usually set on steep terrain.

This is yet another version of Motorsport where the novice driver can participate and compete in a controlled and safe environment with the emphasis on car control not speed.

For detailed information on building a sporting trials vehicle or on any aspect of this technical form of motorsport we recommend contact with Sporting Trials New Zealand Inc. whose aim as a member club is to running and promoting Sporting Trials events through out New Zealand.

ACKNOWLEDGMENTS

In the production of this Schedule MotorSport NZ gratefully acknowledges the assistance of:

- The ClubSport Advisory Commission, in particular Mr Dave Davies.
- Mr Sidney Hirst of Sidco Manufacturing.
- Mr Derek Keesing of Sporting Trials New Zealand Inc

Kerry Cooper
MOTORSPORT MANAGER

PART TWO

INTRODUCTION TO SPORTING TRIALS



1. DEFINITION OF A SPORTING TRIAL

A ClubSport Basic status event in which competitors negotiate a precise off - road obstacle course on hilly and undulating terrain defined by marker pegs, designed to test driver skill. Speed is not a factor in deciding results.

The Sporting Trial takes the basic idea of a climb from A to B to a much more imaginative challenge on totally unmade surfaces. Gradient, camber, surface and natural features are all blended to create a typical Sporting Trial event. The objective is to get as far through each section as possible without stopping, through loss of traction, stalling, or touching a marker peg.

A typical Sporting Trial will consist of several Sections run three or more times, making an event of up to thirty sections. A section will be marked with numbered pegs on the right beginning with 12 and ending with 1. Sections should get progressively more difficult (steeper and sometimes tighter) as the numbers decrease.

2. OBJECTS

The main objective of a sporting trial is the ability of the crew (Driver and Bouncer) to drive a vehicle through marked sections without stopping, hitting marker pegs or travelling outside the section boundaries. A penalty is given for stopping, hitting a marker peg or straying outside the section boundaries. The penalty mark given is taken from the numbered marker peg immediately in front of the vehicle except where the numbered markers are run over or dislodged. In this case the penalty is the number on the marker. At this point the competitor retires from that section and proceeds to the next section. The greater distance travelled in each section the lesser the penalty points. At the end of all Rounds of the competition the crew with the least points is declared the winner.

3. JURISDICTION

This Schedule CK forms the regulations for all Sporting Trials in particular Part Four of this Schedule being the Standing Regulations for all Sporting Trials.

Supplementary regulations will be those regulations issued by the individual organisers, which will contain details on:

- Event date, time and place
- Entry fee and closing date.
- Other relevant information.

4. ABBREVIATIONS AND DEFINITIONS

(1) Abbreviations

The following abbreviations, in either upper or lower case, are used in this Schedule, and may be used in Supplementary Regulations:

“ASN” means a National Sporting Organisation for motorsport recognised by the FIA, and

“FIA” means the world governing body for four-wheel motorsport the Federation Internationale de L’Automobile, and

“MotorSport NZ” means MotorSport New Zealand Inc, and

“NSC” means MotorSport NZ’s National Sporting Code, and

“SR” means the Supplementary Regulations issued by the organisers for an event.

(2) Definitions

“Bouncer” means the member of the crew not driving at the time of competition, and

“Crew” means the driver and bouncer, being the two persons who are in control of the vehicle in competition on the Event, and

“Driver” means the member of the crew who is entered for, and drives in an Event, and

“Round” means second, third or more competition runs through the Event sections.

PART THREE

ORGANISER'S REQUIREMENTS



5. ORGANISATION

The rules in this part refer specifically to requirements on organisers. These are mandatory on organisers, but organisers shall remember that competitors are not required to have knowledge of these rules in order to compete.

(1) Permit and Supplementary Regulations

A ClubSport Basic Organising Permit is required.

Supplementary Regulations shall be published for all events

(2) Officials Required

- (a) Clerk of the Course (holding as a minimum a ClubSport Organisers Warrant)
- (b) Secretary of the Meeting
- (c) Accident Investigator (can be assumed by the Clerk of the Course)
- (d) Scrutineer(s)(preferably licenced)
- (e) Section Observers
- (f) First Aid Official(s)
- (g) A Steward (if appointed by MotorSport NZ)
- (h) A Steward Safety Officer (if appointed by MotorSport NZ)

Notes:

1. *Upon the successful completion of their appropriate duties, the Secretary, First Aid Official, Scrutineer and Section Observers may take part in the competition.*
2. *The Clerk of the Course can compete provided an alternative ClubSport Organiser Warrant holder acceptable to the organisers is present to control the event during the competition of the Clerk of the Course. A clear method of responsibility hand over is required*
3. *Under no circumstances can the Steward, or the Steward Safety Officer compete in the event.*

(3) Fire Extinguisher requirement

Fire extinguishers with capacity of at least .9 kg shall be available at the start of each section whilst a vehicle is competing in the section. If 2 sections starts are located side by side then one extinguisher between the 2 is permitted.

These extinguishers shall be either ABC or ABE type extinguishant.

(4) Safety Plan

A Safety Plan is required (an example of which can be found in the Addendum).

(5) First Aid

The attendance of a qualified first aid official with a complete first aid kit is compulsory. Included with the first aid kit will be some form of mobile shelter capable of protecting a patient from the elements. The organiser shall be aware of the nearest hospital and the best route to it in case of incident.

(6) Emergency Services

Organisers shall include in the Safety Plan details of appropriate methods of communication with all the relevant emergency services such as Fire Brigade, Ambulance and Police.

6. VENUE

A suitable venue shall be available, eg. private farmland, quarries etc. Suitability of venue can be adjudged as follows:

- (a) The beginning and end of each Section shall be marked by signs. The start of Sections shall be reasonably flat and wide so that all competitors can at least enter the Section.
- (b) Every practicable precaution shall be taken to avoid depositing mud or soil on the public highway.

7. SECTIONS

- (1) The layout of Sections shall take into account possible failure points and safe exit routes. A designated free area should be left between a section and spectator areas sufficient to allow a driver to recover control of a vehicle sliding or running out of a section.

The start of the section shall not be placed immediately down hill of any Failure point or Safe exit route. Vehicles moving to and from a section shall not block a section's safe exit route.

No person may stand immediately behind, ie (down hill of), or within 3 meters horizontally of any car moving or stationary in that section. The organisers should ensure when establishing the layout of Sections that they can be marshalled with the minimum number of officials.

- (2) Sections if possible should be of sufficient width to allow a choice of route. They should be of a winding nature so as to place a premium on driving skill. The minimum driveable outside radius of corners shall be no less than 3 metres. Marker pegs should be placed in front of trees to avoid damaging the tree.
- (3) If possible, alternative routes should be planned in case of changing weather conditions.

8. SECTION MARKING

- (1) It is recommended that Sections be laid out using a minimum of 13 pairs of marker pegs of a minimum height of 1 metre and with colour coding to clearly identify each side of the route. Red or orange pegs on the left. White or grey pegs on the right, supporting a clearly visible grading number (sub-section number) on a white background, which shall have a minimum, figure height of 50mm. Metal rod markers should not be used. (Plastic or PVC electrical conduit makes excellent marker pegs).

Extra-unnumbered pegs should be placed to avoid the likelihood of Competitors putting all four wheels out between the numbered pegs.

All pegs are to be placed where they are unlikely to be moved by bushes or branches.

- (2) Sub section numbered pegs are to be placed on the right hand side with the corresponding guide markers on the left-hand side. Sub-section markers are to be closely grouped in areas of expected failure. Where pegs are to be closely grouped a smaller numbered peg can be placed beside the corresponding orange or red peg to assist observers with marking.

9. SAFETY OF SECTIONS

The Clerk of the Course shall check the sections for safety; this can be achieved by:

- (a) Driving the section, or
- (b) Visual inspection, or alternatively by
- (c) Leading a selected group of drivers through each section if the Clerk of the Course is an inexperienced Trials driver.

PART FOUR

STANDING REGULATIONS FOR ALL SPORTING TRIALS



10. ANNOUNCEMENT

All Sporting Trials are held under the MotorSport NZ National Sporting Code and its Appendices and Schedules with Appendix 5, Schedule CK Part Four being the Standing Regulations.

These are to be read in conjunction with the Event Supplementary regulations

11. COMPETITOR AND CREW REQUIREMENTS

- (1) The crew for any vehicle competing in a sporting trial will be a driver and a bouncer.
- (2) All drivers shall hold a current membership of either a Member club or Associate Member club of MotorSport NZ, except for new entrants to motorsport, who may compete in two Sporting Trials before being required to join a club.

Note: *Membership of either a member club or associate member club is not compulsory but highly recommended for the bouncer.*

- (3) Any driver or bouncer between the ages 12-15 years will only be allowed to compete at the discretion of the Clerk of the Course.
- (4) The crew shall wear safety apparel comprised of:
 - (a) Protective Helmets as specified in the current Motorsport Manual Appendix Two Schedule A. (An extract from Appendix Two Schedule A pertaining to Protective Helmets is contained in the Addendum.)
 - (b) Protective clothing
The crew shall wear clean protective one piece overalls, with close-fitting front, cuffs and ankles and manufactured only in fire retardant or self extinguishing materials

Notes:

1. *Pure cotton is deemed to be self-extinguishing for the purpose of this rule.*
2. *The performance of 'treated' apparel (eg Proban, Pyrovatex) may be reduced by incorrect laundering. The manufacturers instructions for washing or laundering should always be followed.*
3. *Safety goggles are optional.*
4. *Wet weather gear may be worn over overalls.*
- (5) Several drivers are permitted for each vehicle unless otherwise stated in the Supplementary Regulations
- (6) During all sections the bouncer shall occupy the seat alongside the driver in accordance with the following requirements:
 - (a) While competing in a section the bouncer shall be facing forward, and
 - (b) "Bouncing" will only be permitted so long as part of the driver's or bouncer's buttocks remain within a plan view (when on level ground) of the seat back and side of the driver/bouncer compartment, and

- (c) Passengers in addition to the crew, can not be carried in or on a Trials car unless they occupy a seat designed for the purpose and wear the safety apparel detailed in (4) of this article.

12. VEHICLES

All Sporting Trials cars shall conform with Part Five of Schedule CK.

13. COMPETITION RULES - BRIEFING

Prior to starting, the Clerk of the course should brief all Drivers, Bouncers, Section Observers and Officials covering the starting, finishing, emergency procedures, and any relevant event penalties and the determination of results.

14. SCRUTINEERING AUDITS

- (1) Competitors shall report with their vehicle for vehicle safety/ eligibility and for checking of logbooks, and club membership at the time and place specified in the Supplementary Regulations.
- (2) Competitors reporting late may have penalties imposed, as provided for in the National Sporting Code

15. COMPETITION NUMBERS (IF SPECIFIED IN THE S/R)

- (1) Numbers will be allocated by ballot.
- (2) Numbers shall be displayed on each car throughout the event.
- (3) Competitors will start in the designated number order, unless the SR's specify otherwise and will remain in the correct running order unless authorised by an official.

16. SECTIONS

- (1) Details of sections will be issued at the Driver Briefing.
- (2) The onus of following the correct route will rest with the driver.
- (3) There will be no time schedule to be maintained during the event unless the SR's specify otherwise.
- (4) Competitors will proceed from point to point with as little delay as possible. Any competitor suspected of loitering may be directed to proceed by an official.
- (5) No unauthorised assistance is allowed whilst competing in a section, and cars shall complete the course under their own power.
- (6) No case of force majeure will be taken into consideration, however final decisions effecting scores is at the discretion of the Clerk of the Course
- (7) Competitors will attempt to negotiate sections non-stop.

- (8) Failure of a car to maintain unassisted forward motion in the direction of the course, or move backwards will be regarded as failure to comply with the requirements to proceed non-stop and shall be marked accordingly. The point of failure will be that of the contact between the ground and the front wheel that is further from the start of the section. In forward motion the steerable wheels shall be the farther from the start line.
- (9) Before attempting a section, a car will be brought to rest with a leading front wheel hub as close as possible vertically over the start line, as indicated by Officials and the driver will not proceed until instructed to do so. It is permissible to start the car when only one hub is on the line and the car is askew providing that the other has not crossed the line.
- (10) A car will be deemed to have entered a section when the point of contact between either front wheel and the ground has passed the marker(s) indicating the beginning of the Section.
- (11) A car will be deemed to have cleaned (or cleared) an observed section when either:
 - (a) The point of contact between one of the front wheels and the ground has passed the marker(s) indicating the end of that section; and,
 - (b) Provided that no prior penalty has been incurred.
- (12) Failure to proceed whether involuntarily or otherwise from the starting position into a Section when instructed to do so will be regarded as a failure in that Section.

17. SUB SECTIONS

- (1) Sections will be divided into Sub-Sections. With the numbered pegs indicating the beginning and end of such Sub-Sections.
- (2) A car will be deemed to have entered and cleared a Sub-Section in accordance with 16 (10) and (11) above.
- (3) Failure in a lower or earlier Sub-Section will constitute failure in all succeeding Sub-Sections. The start line will indicate the greatest penalty and the finish line (the number one pegs or gate) the zero penalty.
- (4) A competitor will be deemed to have failed to negotiate a Section non-stop should:
 - (a) Forward motion cease, or
 - (b) Any part of the vehicle, driver or bouncer comes in contact with a marker peg, or

All four wheels of the competitor's car are outside the boundary of the course at the same time, the course being represented by a straight line drawn from course marker to course marker along the direction of the course unless otherwise stated by the official.

The point of failure will be deemed to be that at which a marker is struck or in the case of more than one marker, the first marker or the point at which the boundary of the course is first crossed by all wheels of the competing car.

- (5) Should the point of failure as defined by 17 (4) (b) coincide with the division between two Sections or Sub-Sections the marks lost will be those appropriate to failure in whichever of the two Section or Sub-Sections provides the greatest penalty.

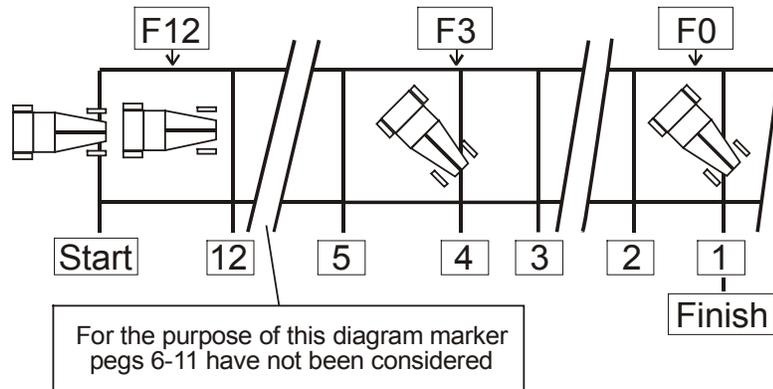


Diagram illustrating the application of 16(7) and (8). The figures preceded by F indicate the correct penalties for a car stopping in the position shown.

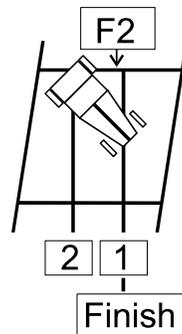


Diagram illustrating 17 (4)(c), a vehicle which has failed to complete the section by going outside the marked sub-section (ie. ran over the number 2 marker). In this instance the competitor incurs (2) two penalty points.

18. CHANGE OF TYRE PRESSURES

Competitors will be advised at “documentation time” or at the driver’s briefing of minimum tyre pressures, however the organisers may require all competitors to increase or decrease the minimum permitted tyre pressure prior to the commencement of any round. Competitors shall be advised of this by the Clerk of the Course, a section Observer or on a notice board and sufficient time for competitors to comply shall be allowed. The Clerk of the Course may perform random checks on tyre pressures.

19. RESULTS

- (1) Section Observers will be appointed to adjudicate on:
 - (a) Conforming to the correct route of the course.
 - (b) Touching markers.
 - (c) Failure to proceed non-stop when required.
 - (d) Conforming to article 11 (6).
 - (e) Noise.
 - (f) Time of arrival/departure at section.
 - (g) Unauthorised assistance or servicing.
- (2) Performances on any Section may be ignored at the Clerk of the Course discretion even though there may have been successful attempts to negotiate the section or test. If this discretion is exercised no performance on the Section in question shall be taken into account when compiling the results.

This would be the case should a section be abandoned for safety reasons or has become totally undrivable.
- (3) Competitors will start with zero marks. The competitor incurring the least penalty will be the winner and so on.
- (4) To be classed as a finisher a competitor shall have attempted at least three-quarters of the total number of Sections, and arrive at the finish within 20 minutes of the time of arrival of the preceding car or three-quarters of the field of competitors entered, whichever is first.
- (5) Competitors will be scored on cards held by observers of each section. Each competitor may be provided with a results card that they will carry and produce on demand for officials to mark at the end of each Section.
- (6) Ties will be resolved by comparing the number of penalties lost by each competitor on each section and in favour of the competitor who has the greatest number of low penalties. Should this method not resolve the tie, the Clerk of the Course will resort to the "furtherest, cleanest" principle starting from section one.

20. PENALTIES

Penalties marks will be incurred per offence as follows, unless the marks lost stated below are modified by the Supplementary regulations.

- (a) Not attempting, or being ready to attempt a Section or Sub-Section when instructed to do so – 12penalty marks.
- (b) Not complying with a reasonable instruction by an Official for which a penalty is not otherwise stipulated, and provided warning of penalty is given - 12penalty marks
- (c) Driver bouncer and /or passengers not seated in accordance with 11 (6) – 12 penalty marks.
- (d) Running with tyre pressures lower than that permitted by Technical Regulations or by an instruction conveyed by the Clerk of the Course (refer Part Four, Article 18) - 50 penalty marks.
- (e) Varying ballast during an event (per offence) – 50 penalty marks.
- (f) Unauthorised assistance (per offence), up to - 50 penalty marks.

PART FIVE

VEHICLE ELIGIBILITY



21. ELIGIBILITY OF VEHICLES

- (1) Vehicles built specifically for Sporting Trials are not intended for use on public roads and given the special purpose they are designed for would not meet a number of the requirements of Appendix Two Schedule A. Such vehicles shall comply with the requirements permitted in article 22.
- (2) All other vehicles shall comply with the provisions of Appendix Two Schedule A.

An organiser may establish separate classes for either four-wheel drive or front/ rear wheel drive vehicles and where necessary modify the sections with different routes to allow different classes to compete, classes will be scored separately for results purposes.

- (3) Notwithstanding the provisions of article 21 (2) vehicles that comply with another ASN's Regulations may be permitted to compete upon approval of MotorSport NZ.

22. SPORTING TRIAL VEHICLES PERMITTED MODIFICATIONS.

The following permitted modifications are only applicable to vehicles manufactured or modified specifically for the purpose of competition in Sporting Trial events. All other vehicles as defined in article 21 (2) shall conform to Appendix Two Schedule A.

- (1) Roll protection shall be homologated by Motorsport NZ in compliance with the following requirements and evidence of this approval shall be contained in the vehicles logbook.
 - (a) Be securely attached to the vehicle structure.
 - (b) Have a minimum height of 900 mm above the uncompressed seat cushion (refer to diagram, etc 1).
 - (c) The minimum material specifications are 35 mm x 1.6 mm steel tubing with a minimum yield strength of 190 MPa.
 - (d) Have top bends with minimal tube deformation and a radius, measured to the tube's centre-line, of at least 3x tube diameter.
 - (e) The top of the roll bar shall be no wider than 420 mm across the horizontal between the bends, and
 - (i) Have at least one brace running forward each side of the roll bar that is not less than 25 degrees from the vertical.
 - (ii) Have padding on any bars that are above the level of the uncompressed seat cushion.
- (2) Safety Harnesses (Lap Belt) are optional, however if fitted any anchorage point created on the bodyshell shall as a minimum have
 - A steel reinforcement plate with an area of at least 50mm x 50mm x 3mm with radiused corners,
 - Chamfered edges, that follows the panel surface with the attachments hole centrally located.

(3) Fire extinguishers are optional but where fitted shall be of a type approved by MotorSport NZ (An extract from Appendix Two Schedule A pertaining to Fire Extinguishers is contained in the Addendum.)

(4) Chassis construction is free. Material shall be steel RHS or steel tubing of a size calculated to accept the loadings envisaged.

Chassis mounting points should contain spacers to prevent tube wall collapse where bolts pass through the tube.

Incorporation of monocoque or semi-monocoque construction is prohibited.

The chassis shall be of adequate strength and constructed with sound engineering practices in a workmanlike manner.

(5) Body - The body shall be of adequate strength and workmanlike construction providing a compartment for driver and passenger.

(6) Seats - All cars shall be provided with fitted seats for the crew (driver and one bouncer). The height of the seat back shall not be less than 300 mm measured from the uncompressed seat cushions along the angle of the seat back. The rear of the seat back (without cushion), measured 300 mm above the uncompressed seat cushion, may not be behind a line through the vertical axis of the rear hubs.

(7) Hand holds /Handles - All hand holds /handles shall be of rigid construction, securely anchored, and be neither flexible nor adjustable. At least one handle shall be fitted, a minimum of 630 mm forward of the centre-line of the rear axle.

(8) Mudguards

(a) Rear mudguards shall be fitted, of adequate strength to protect driver and bouncer from wheels and tyres. They shall cover the full length of the tyre in plan view and extend outwards to within 50 mm of the outside tyre wall.

(b) Front mudguards shall be fitted, covering the full tyre width, and a minimum 90 degrees of circumference.

(9) Engine - Any four stroke, reciprocating piston engine may be fitted. Maximum capacity allowed is 2000 cc, or 1600 cc with forced induction.

(a) Any engine modifications are permitted.

(b) An engine cover shall be fitted and securely fastened.

(c) For cars fitted with water-cooled engines, the radiator/ radiators shall be fitted forward of the engine. No additional water-cooling radiators or reservoirs may be mounted behind the front of the engine.

(10) Suspension - Any form of suspension is allowed. Suspension components may be re-worked, modified or hand fabricated in any material, however their construction should be suitable for the use and have a good workmanship appearance.

All bolted fittings shall be secured by current accepted automotive practices. This means, but is not limited to, spring washers, locknuts, nylocks, and castellated nuts.

(11) Steering

- (a) Any form of mechanical drive from steering wheel to front wheels is allowed but a moving axle (trolley) type steering system is NOT permitted. Steering components may be re-worked, modified or hand fabricated, however their construction should be suitable for the use and have a good workmanship appearance. All bolted fittings shall be secured by current accepted automotive practices. This means, but is not limited to, spring washers, locknuts, nylocks, and castellated nuts.
- (b) Four wheel steering of any form of is prohibited.

(12) Brakes

- (a) Front and rear brakes shall be fitted, be operative and effective.
- (b) Independent rear braking is permitted.
- (c) All brake lines shall be secured and protected from possible damage.
- (d) Any automatic compensating control of rear brakes is prohibited.
- (e) Twin leading shoe type brakes are not permitted on the rear.
- (f) A handbrake is optional.

(13) Wheels and Tyres

- (a) Front and rear rim design is open. Rims may be re-worked, modified or hand fabricated, however rim construction should be suitable for the use and have a good workmanship appearance.
- (b) Maximum permitted rim width is 6 inches measured between bead flanges. 4.5 – 5 inches is recommended.
- (c) Tyre security devices are permitted and recommended on the rear rims.
- (d) Front rim diameter is free.
- (e) One spare rear wheel shall be securely mounted to the car. This wheel and tyre assembly shall be in compliance with clauses (a), (b) and (f) of this article.
- (f) Tyres cannot be hand grooved, re-grooved, cut or altered in any way. Tyres sizes and manufacture of front wheels are free however rear tyres shall be 165 x 15 size only and come from the following approved tyre list:

Michelin XZX
Hankook 884 (no longer readily available)
Hankook K702
Kumho 758

Since the tyres listed below are no longer available in New Zealand they will not be able to be used after 1st January 2009:

Hankook 884
Dunlop SP49
Dunlop SP20
Kumho 756

MotorSport NZ will update this list after favourable consideration of submissions based on any one of the following parameters;

- (i) An approved tyre becomes unavailable
- (ii) A discontinued tyre model provides a clear competitive advantage.
- (iii) A tyre subsequently proves to be unsuitable.

Note:

Amendments to the list will be by way of Manual Amendments issued as and when required by MotorSport NZ.

(g) Chains, or other non-skid attachments on wheels are prohibited.

(14) Transmission.

The rear wheels only may be driven. Front wheel drive or four-wheel drive is prohibited.

- (a) The car shall be equipped with a differential of a type that divides torque equally between the rear wheels. Locked, lockable, torque biasing or limited slip differentials are prohibited, as is any device designed to achieve the same result.
- (b) Clutch or torque converter, if non-standard, shall be mounted to the engine flywheel, which shall be connected directly to the engine crankshaft.

(15) Fuel system.

- (a) The fuel tank shall be mounted behind the driver/ bouncer compartment securely mounted by bolted straps or lugs.
- (b) Any fuel spilling from refuelling or through the cap breather or seal shall be able to drain to ground.
- (c) All fuel lines and connections shall be of a fuel-approved type, clamped where appropriate and protected from possible damage.

(16) Electrical system.

- (a) The battery shall be adequately secured and mounted behind the driver/ bouncer compartment
- (b) A clearly identified circuit breaker switch accessible from the rear of the vehicle shall be fitted.

Notes:

1. *This circuit breaker switch shall break all circuits that keep an engine running, i.e. Ignition, fuel pump, alternator.*
2. *The use of relays to break the circuits is considered acceptable.*

- (c) All battery and circuit breaker connections shall be protected and insulated.
- (d) The starter motor if not in original location shall be bolted to either the engine block or bell housing.

(17) Vehicle Weight.

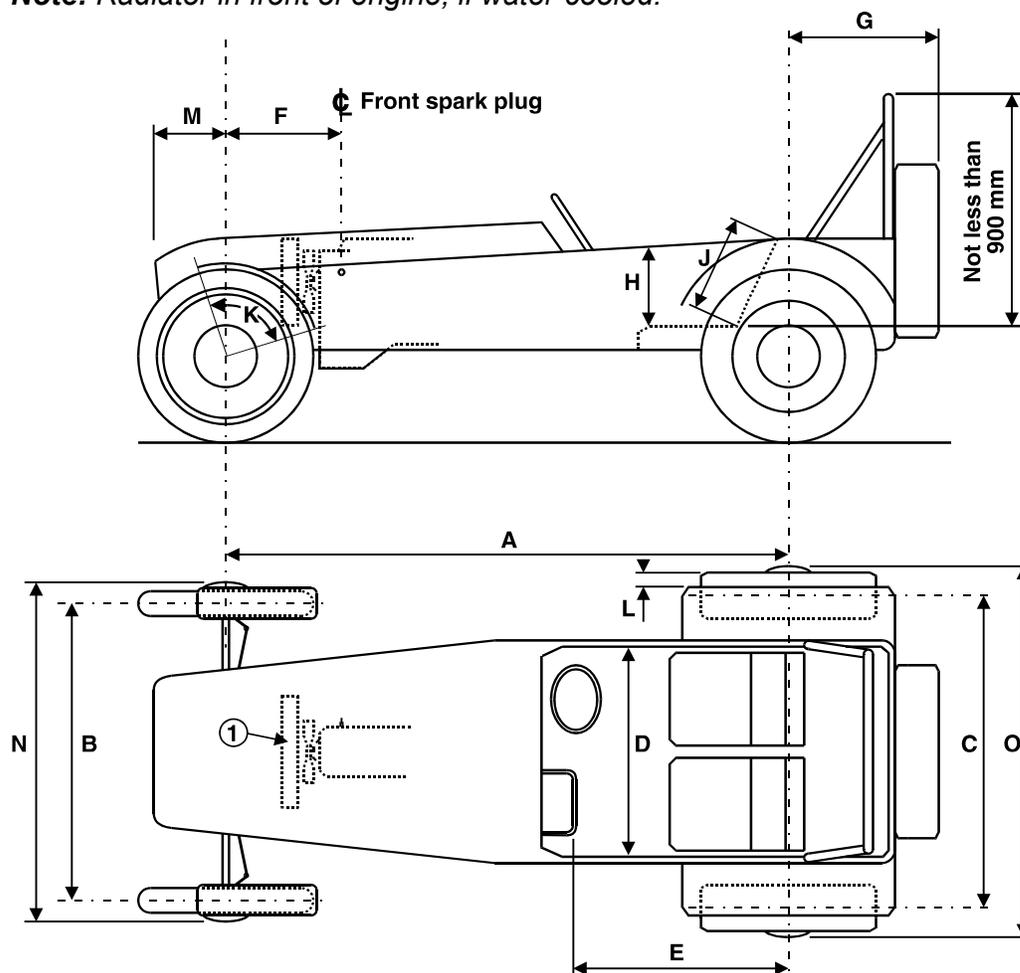
The Sporting trial car shall not weigh more than 600 kg in normal operating condition with spare wheel fitted, but without occupants.

(18) Vehicle Dimensions.

All measurements are to be made with car in normal operating condition, with no occupants, on a level horizontal surface.

A	Minimum wheelbase	1980
B	Minimum front track	1120 mm
C	Minimum rear track	1250 mm
D	Minimum cockpit width	810 mm
E	Minimum to bouncer handle	630 mm
F	Maximum front axle to no 1 plug	1/5th wheelbase, if water-cooled or 1/8th of wheelbase if air-cooled.
G	Maximum rear overhang	1/3rd of wheelbase.
H	Minimum height side to seat	150 mm
J	Minimum seat back height	300 mm
K	Minimum front mudguard arc.	90 degrees
L	Maximum rear mudguard to tyre	50 mm
M	Maximum front overhang	1/5th of wheelbase.
N	Minimum width at front hub level	1220 mm
O	Minimum width at rear hub level	1400 mm

Note: Radiator in front of engine, if water-cooled.



(19) Miscellaneous.

- (a) The fitting of Towing Hooks is optional.
- (b) The fitting of lights, horns and other accessories is optional. All accessories/ tools carried in and on the vehicle shall be firmly strapped to prevent movement.

ADDENDUM



Addendum No. 1

Example Safety Plan SAFETY PLAN AND CLEARANCE CERTIFICATE

SECTION A Event Organisers to Complete			
ORGANISING SECTION		VENUE	
DATE / /	PERMIT NO.	OWNERS NAME	
OFFICIALS OF EVENT	NAME		CONTACT PHONE
Primary Clerk of the Course			
Secondary Clerk of the Course			
First Aid Officer			
EMERGENCY PHONE NUMBERS	Fire		
	Police		
	Ambulance		
MARSHAL REQUIREMENTS	No. REQUIRED	CONTACT NAME	CONTACT PHONE
Observers			
Spectator Control			
Vehicle Recovery			
BRIEFING COMPLETED	PRIOR TO EVENT	DAY OF EVENT	BRIEFING BY (name)
DRIVER			
OBSERVER			
EVENT LAYOUT PLAN. Following items if needed, have been checked and ticked here.			
	Direction Signs to Event		Spectator, Entrant Documentation Area
	Fenced off, Signed Spectator Areas		First Aid Station
	Designated Vehicle Parking		Pits Area
	Details of Warning Signs for Spectators		Other
SCRUTINEER AUDIT SUMMARY			
Scrutineer:		Signature	
Total Vehicles Competing:	Total Vehicles Audited:	Total Vehicles Failed:	
SECTION B- Clerk of the Course or Appointed Steward Safety Officer to Complete.			
Sections Checked for Safety, Safe Exit routes and Vehicle runout zones.			
Scrutineer Audit Summary Sighted			
First Aid and Fire Equipment Satisfactory to Schedule CK and ClubSport Handbook.			
Clearance issued for meeting to start at.....(time) on...../...../.....(date)			
By.....(print name)			
Signed.....Licence Number.....(COW)			
Event Closed at.....(time) on...../...../.....(date)			

Addendum No. 2

Extracts from Appendix Two, Schedule A.

Disclaimer:

The following extracts were taken from Motorsport Manual No. 30 and were current as at 24th May 2002. MotorSport NZ plans to publish an updated edition in September of each year. Competitors and officials of Sporting Trial events are obliged to ensure that the contents of this text are still current. Event organiser should be consulted in this regard at the time of entering an event.

Appendix Two Schedule A Article 4.1 Protective Helmets:

(1) All occupants of vehicles entered in any of the following Events shall wear protective helmets;

- (a) Sporting Trials, Speed Events, or
- (b) Races, or
- (c) Rallies, and
- (d) Any practice sessions for the above.

MotorSport NZ recommends the use of full face helmets complete with visors. Should a competitor choose to use an open face helmet, then goggles or visor manufactured from shatterproof material shall be used (not required in vehicles equipped with a full size windscreen).

(2) **Requirements:** Protective helmets shall;

- (a) Comply with a current approved standard,
- (b) Be a good fit on the wearer so they are secure when worn,
- (c) Be in good condition, and
- (d) Not be modified, except as specifically permitted by the helmet manufacturer, in particular;
 - (i) ABS and Polycarbonate helmets shall not be painted,
 - (ii) Composite shell helmets may only be painted with a paint approved by the helmet manufacturer,
 - (iii) Intercom earphones and microphones should only be fitted in helmets specifically designed for their fitting. In all cases when fitting speaker(s) care must be taken to ensure that they do not create a hazard for the wearer.

(3) **Helmet Fit Test:** The helmet must not be able to be removed by lifting the back of the helmet. (*Refer drawing 4.1.1*)

(4) **Approved Standards:**

(a) **International Permit Events:** Vehicle occupants shall wear protective helmets that comply with one of the following standards:

Snell Foundation Inc:
SFI Spec 31.1 or SFI spec 31.2 (valid until 31/12/2001),
Snell SA 95 (valid until 31/12/2003),
Snell SA 2000.

British Standards Institute:
BS 6658-85 type A/FR, including all amendments.

(b) **All Other Permit Events:** Vehicle occupants shall wear protective helmets that comply with one of the above standards or one of the following standards;

New Zealand	NZS 5430
Australia	AS 1698
Britain	BS6658-85 type A (blue label)
Snell Foundation	Snell SA 90, Snell M90 or Snell M95
America	ANSIZ -90.1
Europe	'E' Mark 02, 03 or 04 series amendments (homologation number beginning '02', '03', or '04' immediately followed by production number)

(5) **Inspection:** A Scrutineer or Technical Officer may check helmets at any time during an Event. Where there is doubt about the helmet's fitness, the Chief Scrutineer or Technical Officer may impound the helmet for the duration of the Event.

(6) **Recommendations:**

- (a) Neck braces should be used. They help restrict head movement in an impact reducing the possibility of neck injuries.
- (b) In the case of a severe impact the helmet should be destroyed so it cannot be reused.
- (c) Helmets should be replaced at least every seven years.
- (d) Use a helmet bag to protect helmets.
- (e) Store helmets in a dark and dry location.
- (f) Don't share or loan helmets.

Appendix Two schedule A article 4.6 Fire extinguishers:

(1) **Requirements:** A fire extinguisher / extinguishing system shall be fitted in accordance with the Extinguisher Requirement chart contained in Part Two of this Schedule (*Refer chart A4.6.1*).

(2) **Labelling:** The following information shall be visible on each extinguisher:

- (a) Extinguishant type, and
- (b) Weight / Volume, and
- (c) Quantity / Capacity, and

- (d) Confirmation that the extinguisher meets one of the following approved standards either;
- (i) NZS – (New Zealand standard), or
 - (ii) AS – (Australian standard), or
 - (iii) BS – (British standard).
- Note: Competitors are reminded of the service inspection requirements as detailed on individual extinguishers*

- (3) **Mounting:** Extinguishers shall be installed in accordance with the following:
- (a) A retaining system incorporating quick release metal fastenings / straps, or material of equivalent strength (i.e. Kevlar), secured to the structure of the vehicle by a minimum of two 6mm bolts with panel washers and locknuts.
 - (b) Hand held extinguishers shall be positioned within easy reach of the occupant/s while normally seated (not mandatory for single seaters);
 - (c) Plumbed-in systems shall have the triggering device accessible / operable by the occupant/s whilst normally seated.

- (4) **Specific requirements for BCF type extinguishers:**
- (a) Such extinguishers shall only be used for extinguishing fires.
 - (b) When undischarged BCF (Halon 1211) extinguishers are removed for disposal purposes they must not be vented to the atmosphere. They should be returned to your nearest fire extinguisher agent, or disposal advice sought from the MotorSport office.

Note: MotorSport NZ has approval for the continuing use of BCF type extinguishers on the proviso that all competitors seeking to retain the use of such will abide by these specific requirements.

Extinguisher Requirement Chart No. A4.6.1				
HAND HELD EXTINGUISHERS				
EVENT / VEHICLE CATEGORY	APPROVED EXTINGUISHANT	MINIMUM QUANTITY	CONTENTS PRESSURE	PRESSURE GAUGE
Race and ClubSport Events, except Motorkhanas, Sporting & Navigation Trials	BCF	0.9 kg	7.0 bar	Recommended
	ABC	0.9 kg	13.5 bar	Recommended
	AFFF	1.0 litres	See note 1.	Mandatory
Rally Events Groups A & N vehicles	Refer Schedule JS			
Rally Events Including Targa All other vehicles	BCF	4.0 kg	7.0 bar	Recommended
	ABC	2.0 kg	13.5 bar	Recommended
	AFFF	2.4 litres	See note 1.	Mandatory
Motorkhana, Sporting & Navigation Trials	No mandatory requirement			
Note 1. Contents pressure dependent upon type of extinguishants (range 7.0 – 16.0 bar). See list #6 available upon request from MotorSport NZ.				