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2015 NZRCA AGM REMITS

Club	Capital Model Racers
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Remit 1:

Current Rule:

A22.5 No Hop-Ups allowed, apart from the following:

- a. Standard ball bearing kit (no ceramic bearings),
- b. Tamiya M03/M05 sway bar kit ,
- see. Tamiya High Torque Servo Saver and
- d. M Chassis reinforced gear set Tamiya part number 54277

Proposed Rule:

A22.5 No Hop-Ups allowed, apart from the following:

- a. Any Standard ball bearing kit (no ceramic bearings),
- b. Sway bar kits designed for M03/M05
- see. M Chassis reinforced gear set Tamiya part number 54277
- d. Any steel screw kit (excluding stainless / aluminium / titanium etc)
- e. Any wheel nut
- f. Any servo saver and steering rods and ball ends/cups that does not affect the designed geometry
- g. Any transmission lubricant designed for reducing wear. No thick silicon or putty like substance allowed which reduces the differential effect.
- h. Any non alloy uprights designed for M03/M05
- i. Any wheel hex adapters

Reason:

This proposed change is not meant for opening up mini to hop-ups for performance reasons. The listed hop-ups are meant to give more leeway for drivers to maintain their cars from parts from there toolkit or replace parts which are susceptible to damage.

Remit 2:

Current Rule:

A7.1 BRUSHED MOTORS: Only permitted motors are unopened, unmodified Johnson 540s or Mabuchi 540s closed can, sealed end bell, bushed, with non-replaceable brushes and bushes. Motors to be supplied from Trevor Brignans Ltd.:

- a. Part No. Mabuchi RS540 standard motor or
- b. Part No. 53689 Johnson RS540 motor
- c. Part No. Mabuchi RS540SH

A7.1.1 Tamiya, Mabuchi "Sport Tuned" motors are not allowed, nor any 540 variants such as 540ST, or 4 hole variants etc. A stock motor run at 8 volts unloaded must draw no more than 1.7 amps.

A7.1.2 Motor testing is to be carried out using the NZRCA motor testing equipment and the instructions associated with it. Any motor which draws close to the maximum allowable current (1.7amps) be subjected to a second test. The second test is a current test run in the reverse direction. There should not be a major difference in the result of both tests. A7.1.3 The "zapping" of a stock motor is classed as a modification and thus illegal.



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Proposed Rule:

A7.1 Brushless Motors for M Chassis Class. Only 540 size 17.5 turn brushless motors may be used as per NZRCA approved M Chassis motor list.

A7.1.1 It is the responsibility of the competitor to prove that their motor has the correct number of winds to comply with this rule.

Reason:

With the inclusion of brushless capable esc's in new Tamiya M05 kit sets now it is a good time to evolve the class to keep up to current standards.

Remit 3:

Current rule:

M Chassis esc rule.

A22.15 Only the three step mechanical speed controller, as supplied in the kit or the Tamiya ESC model TEU-101BK - P/N 45029, TEU-104BK – P/N 45041, TEU- 105BK – P/N 45055, TBLE-02S – P/N 45057, are permitted. The battery plug may be changed, however no other component/s relating to the speed controller maybe altered.

Proposed Rule:

A22.15. Any Brushless electronic Speed controller may be used as per rule A7.4.

Rule Reference

A7.4 Type and brand of ESC used is open, but must be either 'Stock Spec' (have no boost/turbo or timing advance programming) or be running in 'blinky' mode.

Reason:

With the inclusion of brushless capable esc's in new Tamiya M05 kit sets now it is a good time to evolve the class to keep up to current standards.

Remit 4:

Current rule.

A22 M-CHASSIS

A22.12 Only stock motors as per Rule A7.1 may be used.

Reference to Rule A7.1

A7.1 BRUSHED MOTORS: Only permitted motors are unopened, unmodified Johnson 540s or Mabuchi 540s closed can, sealed end bell, bushed, with non-replaceable brushes and bushes. Motors to be supplied from Trevor Brignans Ltd.:

- a. Part No. Mabuchi RS540 standard motor or
- b. Part No. 53689 Johnson RS540 motor
- c. Part No. Mabuchi RS540SH



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A7.1.2 Motor testing is to be carried out using the NZRCA motor testing equipment and the instructions associated with it. Any motor which draws close to the maximum allowable current (1.7amps) be subjected to a second test. The second test is a current test run in the reverse direction. There should not be a major difference in the result of both tests. A7.1.3 The "zapping" of a stock motor is classed as a modification and thus illegal.

Proposed Rule:

A22.12 Only stock motors as per rule A7.1 (New rule)

Remit 5:

Current Rule:

A17 TYRES

A17.1 Only rubber tyres may be used (No foam tyres), except for on carpeted surfaces where foam tyres may be used.

A17.2 Foam or moulded rubber inserts may be fitted inside the tyre.

A17.3 No tyre additives or tyre conditioners are allowed.

Proposed Rule:

A17 TYRES

A17. Controlled tyres are to be used for Stock Touring, Super Stock Touring and Modified Touring Car classes at all NZRCA sanctioned events as follows:

- a. The type of tyre or the pre-assembled combination of tyre, insert and rim are to be decided by the NZRCA Executive and stand for a term of two (2) years. The process of elected tyre combination is to be sort through a tender process through local suppliers.
- b. The elected type of tyre, and/or the pre-assembled tyres must be commercially made and made commercially available three (3) months prior to the event up until the commencement of the event.
- c. Moulded rubber tyres only are allowed, no sponge or closed-cell foam tyres allowed. No modifications or additions can be made to the controlled inserts, e.g. gluing the insert into the tyre.
- d. Any driver using any other type of tyre will immediately be disqualified from the event.
- e. Tyre restrictions during an event:
 - i) Practice – No restriction to amount of tyres used during practise.
 - ii) Qualifying and Finals – 3 full sets of tyres only may be used during the entire event.
- f. Drivers must have their wheels and tyres marked by Technical Inspection. This marking may take place at any time during the scrutineering process at the event.
- g. Wheels/tyres must be marked by the Scrutineer of the event before being presented for Technical Inspection before qualifying heats or finals. Tyres must be glued at a designated gluing area, to be arranged by event organisers.
- h. Unmarked wheels/tyres may not be used on the car during qualifying heats and finals.
- j. Event Scrutineers shall be responsible for recording the number of tyres used by each driver.

Reason:

To align New Zealand major events with the way events are run anywhere else in the world. To cut cost to the racer with regard to having to buy multiple sets of tyres to get the right combination to be competitive. This also takes the financial strain off any club wanting to run an event with a control tyre in



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place.

Club	Counties Radio Car Club
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Remit 1:

Current Rule:

B20 4WD TRUCK

B20.1 all cars must have all four wheels driven.

B20.2 Motors are to be as follows: a. Stock class – Motors to be as per Rule

B7. b. Modified class – Motors to be as per Rule B8 & B9.

Proposed Rule:

Remove 4wd truck from rule book - as this class is no longer run or popular.

Remit 2:

Current Rule:

B19 2WD TRUCK

B19.1 Trucks must have no more than 2 driven wheels. B19.2 Motors are to be as follows:

a. Stock class – Motors to be as per Rule B7.

b. Modified class – Motors to be as per Rule B8 & B9.

Proposed Rule:

B19 2WD TRUCK

B19.1 Trucks must have no more than 2 driven wheels.

B19.2 Motors are to be as follows:

a. STOCK CLASS to be removed from rule book - due to no longer being run and no longer popular.

b. Modified class – Motors to be as per Rule B8 & B9

Remit 3:

Current Rule:

B22 2WD SHORT COURSE TRUCK

B22.6 BODY: In addition to the general body rules:

a. Body Venting: - Total vented area to be no greater than 2 x 1000mm square areas - Example 2 x rectangles @ 50x20mm each or 3 x circles @30mm diameter (to calculate the area of a circle: Radius x Radius x 3.14 = total area)

b. No added wings or spoilers are permitted



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Proposed Rule:

B22.6 BODY: In addition to the general body rules:

- a. Body Venting: OPEN, but body shell must still resemble the shape of a short course truck, being sides and rear panels to be intact, and no removal of the complete rear end of the body shell.

Reason:

This will bring NZ into international rules and reduce scrutineering times

Remit 4:

Current Rule:

B14 1/10th BUGGY GENERAL RULES

B14.6 Dimensional requirements for 1/10th Buggy classes:

Overall Width 255mm

Proposed Rule:

B14.6 Dimensional requirements for 1/10th Buggy classes:

Overall Width 255mm, buggy must be able to roll out of the measuring box under its own momentum when the box is tilted to 30deg angle.

Reason:

IFMAR rules state maximum width for 1/10 buggy is 250mm

This roll out rule should also be put into effect for all other classes of rc vehicles

Remit 5:

Current Rule:

B23 4WD SHORT COURSE TRUCK

B23.4 BODY: In addition to the general body rules: a. Body Venting: - Total vented area to be no greater than 2 x 1000mm square areas - Example 2 x rectangles @ 50x20mm each or 3 x circles @30mm diameter (to calculate the area of a circle: Radius x Radius x 3.14 = total area)

Proposed Rule:

B23.4 BODY: Body Venting: OPEN, but body shell must still resemble the shape of a short course truck, being sides and rear panels to be intact, and no removal of the complete rear end of the body shell.

Reason:

This will bring NZ into international rules and reduce scrutineering times

Remit 6:

Current Rule:

B14 1/10th BUGGY GENERAL RULES

B14.1 Any type of speed controller may be used, but it must be contained within the car and not protrude through the body shell. For indoor sanctioned meetings, speed controllers must be either 'Stock Spec'



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(have no boost/turbo or timing advance programming) or be running in 'blinky' mode.

Proposed Rule:

B14 1/10th BUGGY GENERAL RULES

B14.1 any type of speed controller may be used, but it must be contained within the car and not protrude through the body shell.

Reason:

To keep the same rules for indoor racing as it is for outdoor racing.

We propose that indoor rules are the same rules that are applied to stock and modified classes for outdoor events.

Remit 7:

Current Rule:

B8 LIMITED BRUSHLESS CLASSES MOTOR SPECIFICATIONS

B8.1 Motors for 2wd Short Course Truck as follows:

- a. Brushed 550: Minimum wind – 12 turn.
- b. Brushed 540: Minimum wind – 15 turn.
- c. Brushless 540: Minimum wind – 10.5 turn.

B8.2 Motors for Indoor Off-Road Modified Classes as follows:

- a. Brushless 540: Minimum wind – 10.5 turn (Blinky ESC)

Proposed Rule:

B8 LIMITED BRUSHLESS CLASSES MOTOR SPECIFICATIONS

B8.1 Motors for 2wd Short Course Truck as follows:

- a. Brushed 550: Minimum wind – 12 turn.
- b. Brushed 540: Minimum wind – 15 turn.
- c. Brushless 540: Minimum wind – 10.5 turn.

B8.2 Motors for Indoor Off-Road Modified Classes as follows:

- a. Brushless 540: Minimum wind – 10.5 turn (OPEN ESC)

Reason:

To keep the same rules for indoor racing as it is for outdoor racing.

Remit 8:

Current Rule:

G1 GENERAL

G1.2 The Race Director will be in control of driving standards, interference decisions, protests, rule



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applications etc, and will be appointed by the club in consultation with the NZRCA.

Proposed Rule:

G1.2 The Race Director will be in control of driving standards, interference decisions, protests, rule applications, etc., and will be appointed by the NZRCA.

Reason:

We think the NZRCA should be responsible for appointing a race director for sanctioned events.

Remit 9:

Current Rule:

G4 LAP COUNTING PROCEDURE

G4.1 During NZRCA sanctioned events the lap counting is to be done, by means of an efficient and reliable lap counting system, (automatic lap counting systems with transponders fitted to the car body shell are preferred). G4.2 Where club transponders are used, transponders must be released by the organisers at least the heat before the respective heat to the competitor.

G4.3 The fitting of transponders on the cars body shells remains the responsibility of the drivers.

G4.4 If a car loses the transponder during the race, or if a transponder is not working, regardless if a club or personal transponder, the lap counting supervisor should attempt to count the laps manually.

G4.5 If a driver forgets to fit the transponder during the race, the Race Director and the lap counting supervisor will decide if the laps are counted or not. There is no appeal against their decision. The results should be marked to indicate manual lap scoring took place.

G4.6 Transponders must be moved to a better position in the car on the Race Director's instruction, if lap-counting problems occur. Failure to comply may result in lost laps.

G4.7 Questions on lap counting may be made to the Race Director without filing a protest.

G4.8 There will be no communication with the Lap Counters.

Proposed Rule:

G4.9? Lap counting and/or timing system manager to be appointed by the NZRCA

Reason:

This gives the host clubs time keeper the ability to enter their home track event without the responsibility of managing the time keeping while attending a sanctioned race event.

Remit 10:

Current Rule:

B23 4WD SHORT COURSE TRUCK

B23.1 Class open to 1/10th scale, four-wheel drive, Short Course style trucks only. Trucks converted from 1/8th scale chassis are not allowed.

B23.2 Drive train must be 4WD. Exposed gearing must be covered.

B23.3 Replacement parts: Any replacement or upgrade parts are allowed, from either the original manufacturer or third parties. No 1/8th scale parts allowed.



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Proposed Rule:

B23 4WD SHORT COURSE TRUCK

B23.1 Class open to 1/10th scale, four-wheel drive, Short Course style trucks only. Trucks converted from 1/8th scale chassis are not allowed, unless the truck is a factory produced kit.

B23.2 Drive train must be 4WD. Exposed gearing must be covered.

B23.3 Replacement parts: Any replacement or upgrade parts are allowed, from either the original manufacturer or third parties. No added 1/8th scale parts allowed, unless these parts come as part of a factory produced kit.

Reason:

4WD Short course trucks are now being produced by manufacturers based on 1/8 scale kits, these rules need to be changed to take into account new kits being released.

Club	Kairapa – Little Forest Raceway
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Remit 1:

Current Rule:

- G1.11 Major events shall be held according to the following dates:
- North Island Electric Off-Road Champs Last 2 weeks in September
 - South Island I.C Off-Road Champs First 2 weeks in October
 - South Island On-Road Champs Last 2 weeks in October
 - I.C Off-Road National Champs First 2 weeks in November
 - North Island On-Road Champs Last 2 weeks in November
 - South Island Electric Off-Roads First 2 weeks in December
 - North Island I.C Off-Road Champs Last 2 weeks in January
 - Electric On-Road Nationals First 2 weeks in February
 - I.C On-Road Nationals Last 2 weeks in February
 - Electric Off-Road National Champs Last 2 weeks in March

Proposed Rule:

- G1.11 Major events shall be held according to the following dates:
- I.C Off-Road National Champs First 2 weeks in November
 - Electric On-Road Nationals First 2 weeks in February
 - I.C On-Road Nationals Last 2 weeks in February
 - Electric Off-Road National Champs Last 2 weeks in March

Reason:

Remove set dates for all meetings outside National champs. At the moment, we (NZRCA) struggle to get applications from clubs for all events and end up chasing clubs to try and fill gaps. Instead, we should invite clubs to apply for National champs. If other clubs want to host North/South Island events, they can apply to host these just like any other sanctioned event but not on specific dates. That way, if



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no club applies to hold North/South events one year, they simply don't happen and we (NZRCA) don't go chasing to fill the gaps. Also think it should be discussed regarding changing the set dates of the remaining National events if this remit is passed.

Remit 2:

Current Rule:

B3.3 The race result is to be calculated by the amount of laps completed in the race stated time plus 1 lap, with the number of seconds taken to complete the lap after the race stated time, to a maximum of 45 seconds

Proposed Rule:

B3.3 The race result is to be calculated by the amount of laps completed in the race stated time plus 1 lap, with the number of seconds taken to complete the lap after the race stated time.

Remove the "to a maximum of 45 seconds"

Reason:

Some tracks have a longer lap time of 45 seconds so the maximum time to complete last lap should be set by the host club on a fair and reasonable time to allow all competitors to finish based on their track/lap size.

Remit 3:

Current Rule:

B3.13 Points system to be used for finals is as follows:

1st place:	1
2nd place:	2
3rd place:	3
4th place:	4
5th place:	5
6th place:	6
7th place:	7
8th place:	8
9th place:	9
10th place:	10

Proposed Rule:

B3.13 Points system to be used for finals is as follows:

1st place:	10
2nd place:	9
3rd place:	8
4th place:	7
5th place:	6
6th place:	5
7th place:	4



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8th place: 3
9th place: 2
10th place: 1

Reason:

If lap counting program is not set up correctly to count a DNF or DNS as 10 points or be dropped altogether, then those with DNF/DNS can effect overall results. If you use higher points for 1st place, its simply saying the person with the most points after 2 combined rounds is the winner and DNF/DNS is automatically getting less points. Most software programmes are set this way as default.

Remit 4:

Current Rule:

V9.3 Mod Classes - may run any commercially available brushed modified motor – brushless motors are strictly prohibited.

Proposed Rule:

V9.3 Mod Classes - may run any commercially available brushed/brushless modified motor.

Reason:

Allow racers to run brushless in vintage modified classes. As evident at the vintage nationals there would be no advantage to running brushless vs brushed, but due to technology, the older motors are increasingly difficult to obtain for 1 meeting per year.

Remit 5:

Current Rule:

V7 Classes

- V7.1 Classes offered are:
- 2wd Buggy Spec - Pre 1995 (Handout brushed motor only);
 - 4wd Buggy Spec - Pre 1995 (Handout brushed motor only);
 - 2wd Truck Spec - Pre 1995 (Handout brushed motor only);
 - Tamiya CW-01 (Lunchbox type) Chassis (Silver-can brushed motor only);
 - 2wd Plastic chassis – Pre 1989 (Silver-can brushed motor only);
 - 4wd Plastic chassis – Pre 1989 (Silver-can brushed motor only) ;
 - 2wd Plastic chassis Truck Pre 1995 (Silver-can brushed motor only);
 - 2wd Buggy Mod - Pre 1995;
 - 4wd Buggy Mod - Pre 1995;

Proposed Rule:

NZRCA to elect a Vintage Sub-Committee to go through a list of ALL cars available pre 1995 and group cars into appropriate classes.

Reason:

As evident at the Vintage Nationals, just because a car has a plastic chassis does not mean it will not be competitive against carbon version cars etc. Also, some cars are grouped with same type of cars that simply will never be competitive. By listing all available cars, those who know them can group them appropriately. If a car is missed from the list, racers can apply to the sub-committee to have it added to



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the list and grouped appropriately. The sub-committee can also review the entire Vintage rules and make appropriate adjustments to improve on the base set for the 2015 Vintage Nationals which was a first time a meeting of this type was run – therefore the rules were put in place to enable the running of the meeting with the intention that they could be improved on after what we discovered from the event.

Club	Harewood Radio Control Car Club
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Remit 1:

Current Rule:

B15.1 For all NZRCA Sanctioned Events, one control tire per Class is to be nominated by the host club.

Proposed Rule:

B15.1 For all NZRCA Sanctioned NATIONAL Events, one control tire per Class is to be nominated by the host club.

Reason:

- Allows cheaper participation for drivers who are on a budget

Remit 2:

Current Rule:

B15.2 No restriction on compound, inserts or rims.

Proposed Rule:

B15.2 No restriction on rims. Tire compound and Insert to be nominated by the host club.

Remit 3:

Current Rule:

B22.6 BODY: In addition to the general body rules:

- Body Venting: - Total vented area to be no greater than 2 x 1000mm square areas - Example 2 x rectangles @ 50x20mm each or 3 x circles @30mm diameter (to calculate the area of a circle: Radius x Radius x 3.14 = total area)
- No added wings or spoilers are permitted.

Proposed Rule:

B22.6 BODY: In addition to the general body rules:

- Body Venting: - Body Venting is open to any original vent cut lines in the body.
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Remit 4:

Current Rule:



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B25.1 Dimensional requirements for 1/8th Electric Buggy class:
Overall Dimensions & Weight Minimum Maximum
Wheelbase 270mm 330mm
Overall Width (including body) 310mm
Overall Length (including body) 730mm
Overall Height
(overall without aerial – measure with suspension fully compressed)
250mm
Weight (with battery and transponder) 3200g
Wing Overall Width 217mm
Wing Length 85mm

Proposed Rule:

B25.1 Dimensional requirements for 1/8th Electric Buggy class:
Overall Dimensions & Weight Minimum Maximum
Wheelbase 270mm 330mm
Overall Width (including body) 315mm
Overall Length (including body) 730mm
Overall Height
(overall without aerial – measure with suspension fully compressed)
250mm
Weight (with battery and transponder) 3200g
Wing Overall Width 217mm
Wing Length 85mm

-Overall width increased from 310 to 315 to allow for all factory options on factory kits, without being illegal

Club	NORTH HARBOUR
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Remit 1:

Current Rule A22.8

Only Body Shells listed in the NZRCA M Chassis body list are deemed legal.

Proposed Rule A22.8

Any Body shell suitably manufactured for Tamiya M Chassis are deemed legal

Reason:

There is no real advantage gained with the different M Chassis body shells under the current NZRCA rule, due to the limited speed of this class. There are many body shells available for these chassis that are not on the list. Opening up the ruling to incorporate all M-Chassis styled body shells that are available will allow racers more choice than what is currently listed.

Remit 2:

Current Rule:

G2 RULE CHANGES



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G2.3 Rule changes will be discussed and decided upon at the NZRCA AGM each year.

Proposed Rule:

G2.3a

Class and racing rules can be changed / added / deleted during the calendar year prior to NZRCA AGM for sanctioned events if a ballot vote is held online or by special meeting, where the associated clubs have had time to discuss with their committees and club members on how they wish to vote. New rules must be announced minimum of two months prior to voting date. Voting ballot must take place no less than two months prior to the event that is going to be effected. Standard majority voting system applies.

Reason: To stop negative comments on associated forums about how the rules are decided.

Remit 3:

Current Rule:

G6 Marshalling.

Proposed Rule:

G6.6

All clubs holding Sanctioned events must provide numbered High Visibility Vest for all Marshal Points around the track.

Reason: Safety of Marshalls During events, and for easy Identification that all marshals are on track.

Remit 4:

Current Rule:

A23.3

Any commercially available option part manufactured specifically for, or as an option part, for Formula1 / Indy Cars may be used.

Proposed Rule:

A23.3

Any available option part manufactured specifically for, or as an option part, for Formula One / Indy Cars may be used.

Reason:

This removes the ambiguity of the commercially available part of the rule. This still keeps in the spirit of the F1 rules as Rule A23.1 (Any commercially available 1/10th Formula One or Indy Car type car can be used) keeps this to only modifications to existing F1 chassis available. Since the cost of CNC equipment and 3d means it is now possible to manufacture parts, hence the commercially available rule can lead to a difference of opinion as to the status of the parts fitted.

Remit 5:

Current Rule:

A23.9

Tyres are Open



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Proposed Rule:

A23.9

Tyre Compounds are open, Rims must be designed specifically for F1 Chassis. No Pro 10 Wheels

Reason:

Due F1 being scale accurate class. To keep in the spirit and to keep the cars on a level playing field, the wheels and tyres used should be specifically for F1 Chassis

Club	Otago Radio Control Car Club
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Remit 1:

Current Rule:

G1.10 Trackside sales should be the responsibility of the Club organising race meetings, with the exception of National events, where legitimate retail sellers only should be encouraged to participate at race meetings. Definition of a "legitimate retail seller" shall be "a person or people who make available their wares to the general public during normal working hours".

Proposed Rule:

Remove or Clarify

Reason:

Out dated and somewhat muddy in information, does this really need to be a rule within the NZRCA rule book, as currently retailers are encouraged via the use of sponsorship rather than support for racers trackside????

Remit 2:

Current Rule:

- G1.11 Major events shall be held according to the following dates:
- North Island Electric Off-Road Champs Last 2 weeks in September
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 - South Island On-Road Champs Last 2 weeks in October
 - I.C Off-Road National Champs First 2 weeks in November
 - North Island On-Road Champs Last 2 weeks in November
 - South Island Electric Off-Roads First 2 weeks in December
 - North Island I.C Off-Road Champs Last 2 weeks in January
 - Electric On-Road Nationals First 2 weeks in February
 - I.C On-Road Nationals Last 2 weeks in February
 - Electric Off-Road National Champs Last 2 weeks in March

Proposed Rule:

- G1.11 Major events shall be held according to the following dates:
- North Island Electric Off-Road Champs Last 2 weeks in September
 - South Island I.C Off-Road Champs First 2 weeks in October
 - South Island On-Road Champs Last 2 weeks in October
 - I.C Off-Road National Champs First 2 weeks in November
 - North Island On-Road Champs Last 2 weeks in November
 - South Island Electric Off-Roads First 2 weeks in December



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- g. North Island I.C Off-Road Champs Last 2 weeks in January
- h. Electric On-Road Nationals First 2 weeks in February
- i. I.C On-Road Nationals Last 2 weeks in February
- j. Electric Off-Road National Champs Last 2 weeks in March

Reason:

Keep the dates that are listed, if one event has to move then another should be moved to its original place, the NZRCA need to be a little more prudent when allowing date changes, as for October we have a total of four sanctioned events for the month, this will just lead to diminishing numbers at the events as people will have to choose, as its sits you have the Nth Isl Onroads on the weekend of the 15th, followed by the Sth Isl On Roads the next weekend then finally the National Offroads the weekend after that. Do we need to maybe combine some of the evets to free up some of the dates, currently the Regional On Road champs encompass both electric and Nitro, could this maybe be achieved in the Off Road champs as well if an extra day and more stringent rules on numbers within classes were implemented?????

Remit 3:

Current Rule:

G16 LIPO GUIDELINES

G16.1 Lipo/LiFe batteries must have a hard protective case that surrounds the cell(s) in the racing application. (excludes transmitter and receiver batteries) *Keep*

G16.2 Lithium Polymer packs must be charged with chargers capable of the industry standard CC/CV (Constant Current/Constant Voltage) charge profile with a maximum charging rate of '1C'. *Remove there is no way to monitor this, as it sits most C ratings are nothing more than marketing from manufacturers, there is no recognised international standard for measuring the C rating of LiPo batteries.*

G16.3 All Lithium Polymer packs used for motor power must be charged inside a "Lipo Sack" or similar fire mitigation device proven to withstand a minimum of a 16.8v 5000mAh Lithium Polymer pack failing destructively without showing external flame. *Remove reference to 16.8V 5000mAh, should just read "Must be cahrged in protective charging enclosure"*

G16.4 ROAR Impact/Drop Test:

a. The cells of the battery pack shall experience no loss of mass, no leakage, no venting, no rapid disassembly, and no rise in temperature. The case shall not splinter or shatter in a manner that would create shrapnel and potentially puncture the cell inside. The fully charged battery pack shall be dropped from a height of 5 feet to a flat concrete floor. The battery pack shall land flat on the floor during the drop. *Remove from rule book*

G16.5 ROAR Overcharge Test:

a. The battery pack shall no display rapid disassembly resulting from Thermal Runaway. The fully charged battery pack shall be charged to a value up to 12.0 VDC at a rate of 1 times the capacity of the cells in the battery pack for a period of 30 minutes (Example: 5000 mAh charge rate is 5 amps). *Remove from rule book*

G16.6 ROAR External Short Circuit Test:

a. The battery pack shall not display rapid disassembly resulting from Thermal Runaway. A 0.1 Ohm resistance shall be applied to a fully charged battery pack at room temperature (70 deg F +/-10). The test is concluded when the temperature of the battery pack returns to within 10 deg of room temperature. *Remove from rule book*



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G16.7 General Information About Li-Poly Batteries:

a. A Lipo battery pack is damaged when any of the following rules are broken. The damage is cumulative and cannot be reversed. These rules provide the safest operation and longest pack life. Going outside these rules may result in a destructive pack failure. *Remove from rule book*

G16.8 Do not over discharge Lithium Polymer battery packs and use a Proper ESC cutoff voltage. Some newer speed controls give you the option to set a cutoff voltage, and some do not. The cutoff voltage setting is working properly when the ESC does not allow the motor to spin anymore when the pack voltage reaches this set cutoff. A Lithium Polymer battery is damaged when it goes below a set voltage whether under load or not. The lower the voltage and the longer it stays low, the more damage is occurring to the cells. If your ESC doesn't have a setting for cutoff voltage, we strongly suggest not using any Lipo pack with it unless you have a secondary device to cut off the motor at the correct voltage. By the time the pack "feels soft" at the end of the run or you notice any decrease in power, the pack has already been damaged. Consult your Lipo pack manufacturer for the proper low voltage cutoff since this value varies based on manufacturer. *Remove from rule book*

G16.9 The maximum safe temperature of a Lithium Polymer pack is 140 deg F. Generally the pack temp will INCREASE for about 5-10mins after the run is over, so measure the temperature of the pack immediately after the run and then again about 10 minutes later. The faster the car is geared, the more amps the motor is drawing and the battery is delivering. The less capable of outputting high current (amps) the pack is, the more it will heat up with the same load (think IB4200's vs. NiCad 2400's on a mod motor) Exceeding 140deg F pack temperature causes damage, and the pack is also less efficient at near critical temperatures. *Remove from rule book*

G16.10 Only charge Lithium Polymer packs with a charger that uses the industry standard CC/CV charging algorithm for Lithium based batteries. There are two settings you will need to either set or verify on your charger each and every time before you begin charging a pack. The first is the pack voltage or cell count (each charger uses different nomenclature). If your charger is asking for the voltage of the pack, the choices are 3.7v (one cell), 7.4v (two cell), and 11.1v and beyond (3+cells). NZRCA legal packs are 3.7v (one cell) or 7.4v (two cell) packs. Some chargers ask for the cell count of the pack (one cell, two cells, and etc.) so you would set it for a one cell or two cell pack. The next setting is the charging rate. Lithium Polymer battery packs not only show no performance benefit from charging at higher than recommended rates, but they can be damaged by charging rates that are too high. The standard charging rate is "1C" which means the actual capacity of the pack in Milliamp hours. We charge in Amps not Milliamps, so divide the Milliamp Hours (mAh) of your pack by 1,000 to get your proper charging rate. For a 4800mAh pack, 4800mAh divided by 1,000 = 4.8 Amp charge rate. For a 3200MAh pack = 3.2 Amps, and a 5000MAh pack = 5.0 Amps. Unless specifically recommended by the manufacturer with no loss of cycle life, a maximum of 1C charge rate should always be used. *Remove from rule book*

G16.11 Lithium Polymer packs that will not be run for more than a month or two should be stored approximately half charged. Do not store them fully charged and do not store them near fully discharged (down to 6.0v) or damage will occur. The best way to know the charge state of a Lipo is to use the mAh displayed on your charger when charging from fully discharged. For a 5000mAh pack driven all the way to cutoff, charge it until you have 2500mAh back into the pack and disconnect it from the charger for storage. Or use the discharge function on your charger, and discharge a fully charged pack to 1/2 of its capacity. So for a fully charged 5000mAh pack, Discharge 2500mAh from it before long term storage. *Remove from rule book*

G16.12 There are six main root causes for lithium ion/polymer battery fires.

a. External Thermal Damage – Lithium Polymer cells will get damaged by external heat. Most manufacturers recommend keeping the cells under 60 deg C or 176 deg F. At about 90 deg C (194 deg



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F), the cell will start to balloon up as the electrolytes starts to break down and the internal layers start to delaminate. If the temperature is extremely severe (approx 190 deg C or 375 deg F) the cell will go into thermal runaway and you will have a flaming mess. The thermal volatility is directly related to the cell chemistry used by the manufacturer.

b. Overcharge – Lithium Polymer cells are extremely non tolerant to an overcharge condition. A standard charge profile is CC/CV to 4.200V. Drastically overcharging a cell just once is a sure way to send a cell into thermal runaway. Overcharging a cell slightly but repeatedly is also extremely detrimental for a cell. For example, if you charge a cell to 4.300V, the lithium ions start plating on the electrodes forming lithium metal. Lithium ions are not flammable, but lithium metal is. Every slight overcharge cycle will plate more and more lithium metal resulting in a battery that is very prone to igniting. The best way to prevent overcharging is to charge through a balancer and to avoid chargers that do not charge with the standard 4.200V CC/CV charge profile.

c. Over discharge - over discharging by itself is not dangerous, but it will destroy the cell. Over discharging below the recommended cutoff voltage will cause the copper to start dissolving in the electrolyte. The dissolved copper will then start plating on the electrodes, which may start an internal short circuit within the cell. The safety of the cell is compromised once the plating action starts and the next charge/ discharge cycle will be of concern since there is now an internal short circuit. Don't store you cells completely discharged. All cells have a small self-discharge when left alone and if the self-discharge takes the cell down below its minimum voltage, then the cell will be destroyed. It is recommended to disconnect the battery from all electronics (remove from speed controls, disconnect lithium polymer receiver packs from regulators etc) since most electronics have a small current drain even in the "off" position.

d. External Short Circuit – Lithium Polymer batteries have extreme current capability. When these cells are shorted out, the excessive current drain will cause the battery to overheat and possibly cause the cells to go into thermal runaway resulting in a possible fire.

e. Internal Short Circuit - this is mostly caused by contaminants getting into the cell at the cell manufacturing level. Contaminants can poke through the separator over time causing an internal short where one of two things can happen. An internal short results in the cell having a high self - discharge rate. Or an internal short can cause localized heat buildup and initiate a thermal runaway condition – and thus another possible fire. Another source of internal shorts is the punching process the manufacturer uses to stamp out the anode and cathode electrodes. Some manufacturers use a low cost steel rule die and others manufacturers use a die that costs a couple orders of magnitude more. The lower cost steel die punches tend to leave burrs on the electrodes, while the higher cost dies do not. Burrs have a tendency to puncture the separator and create micro-shorts. This micro-short will create an area of localized heat. In most cases, this will cause the cell to expand (puff up). In bad cases, this localized heat may be enough to ignite the cell.

f. Every time you charge a cell, the cell will expand about 5% in the thickness dimension. This expansion/contraction may cause the burr to eventually rub through the separator. The vibrations and shock from RC use also causes the burr to rub against the separator. The infamous Sony recall was largely attributed to burr type contaminants.

g. External Mechanical Damage - A lithium polymer battery is made up of 20-30 layers of a very thin sheet copper anode, a thin plastic separator and a thin aluminium cathode. The vacuum sealed aluminium pouch keeps even pressure on the anode/cathode pairs. A dent can create a micro-short by making the stiff metal anode or cathode poke through the soft plastic separator. This micro short will create an area of localized heat. The cell will expand and then becomes a possible fire hazard. Another repercussion of a dent is that some layers of the cell will become delaminated and thus inactive. This means that the working layers will need to work harder to provide current and thus generate more heat in a localized area. Hard cases will greatly minimize the chance of external mechanical damage to the cells.

Proposed Rule:

Remove from rule book



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Reason:

The rule book should be for rules, a supplementary “Lipo Guidelines” should be created to cover most of this, the problem with the above is whether they are rules or guidelines, there should be stringent rules surrounding LiPo's such as the following

Hard Cased
Charge within safety containment device
Cell Count for classes
Condition
Fire Fighting equipment on site.

A more “up to date” set of guidelines should be introduced, many of the above guidelines are nothing more than a copy and paste from when LiPo's were first introduced, quality and technology have made rapid advancements within this industry hence a lot of these guidelines are outdated.

Remit 4:

Current Rule:

G17 Marshall Guidelines-All

Reason:

Are these rules or guidelines???

Remit 5:

Current Rule:

G18.1 The NZRCA Executive reserves the right to issue fines/suspensions to member/s for inappropriate behaviours towards any NZRCA Executive or member. Inappropriate behaviour includes on the use of public forums or social media. The NZRCA Executive can issue any or all of the below:

- (a) Reprimand which can be private or public.
- (b) Relegate finishing positions.
- (c) Exclude from the results of the event.
- (d) Fine up to \$300 (licence to be suspended until fine is paid in full)
- (e) Suspend NZRCA Licence for an infinite number of days, starting from the date of the offence.

Proposed Rule:

G18.1 The NZRCA Executive reserves the right to issue fines/suspensions to member/s for inappropriate behaviours towards any NZRCA Executive or member. Inappropriate behaviour includes on the use of public forums or social media. The NZRCA Executive can issue any or all of the below:

- (a) Reprimand which can be private or public.
- (b) Relegate finishing positions.
- (c) Exclude from the results of the event.
- (f) Suspend NZRCA Licence for an infinite number of days, starting from the date of the offence.

Reason:

The implementation of a \$300 fine is counter productive, it sets a precedence of “Money Talks”,



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suspension of a NZRCA Licence should be penalty enough and will send the correct message.

Remit 6:

Current Rule:

G18.2 When a complaint is heard, the NZRCA executive shall meet with a minimum of the President, Secretary, Treasurer and the 2 Technical Officers from either Electric or I.C.

Proposed Rule:

G18.2 When a complaint is heard, the NZRCA executive shall meet with a minimum of the President, Secretary, Treasurer, 2 Technical Officers from either Electric or I.C. And the Club Presidents of the parties concerned.

Reason:

There is not enough information passed down to local bodies when an incident has occurred, on two occasions the Executive of the Otago club were unawares of serious complaints regarding one of their members, the information was found out via "Word of Mouth" from a member of another club, any consultation regarding the reprimanding of any member should be dealt with via the relative executives from the corresponding clubs.

Remit 7:

Current Rule:

A8 LIMITED BRUSHLESS CLASSES MOTOR SPECIFICATIONS

A8.1 Motors for Stock Touring class to be 21.5 turn motors. Only motors listed in the NZRCA 21.5 Turn Motor List are legal to be raced with.

A8.2 Motors for Super Stock class to be ROAR approved brushless motors with a minimum of 13.5 turns.

A8.3 Motors for Pro10 class to be any commercially available brushless motors with a minimum of 13.5 turns

Proposed Rule:

A8 LIMITED BRUSHLESS CLASSES MOTOR SPECIFICATIONS

A8.1 Motors for Super Stock class to be ROAR approved brushless motors with a minimum of 21.5 turns.

A8.2 Motors for Super Stock class to be ROAR approved brushless motors with a minimum of 13.5 turns.

A8.3 Motors for Super Stock class to be ROAR approved brushless motors with a minimum of 13.5 turns.

Reason:

Why only have one of the "Spec" motor classes running under the ROAR rules for motors, if the ROAR list is good for one class, it should be good for the rest??????

Remit 8:



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Current Rule:

A13.1 Any wing that is no wider than the car, no higher than the roof, and does not extend 10 mm past the rear of the car may be used.

Proposed Rule:

Requires clarification, there are many different interpretations of the method used for measuring the height of the rear wing, wheels on the ground, wheels off the ground, should the wing height be checked via the horizontal plane of the lower skirt or even the side window markings???????

Remit 9:

Current Rule:

A6 RACE DURATION

A6.1 All heats and finals will be of the time duration specified for each class as listed below, plus the time to finish the last lap:

- a. Touring Stock - Five minutes.
- b. Brushless Touring Stock - Five minutes.
- c. Super Stock - Five minutes.
- d. Touring Modified - Five minutes.
- e. M-Chassis - Five minutes.
- f. Formula One - Five minutes.
- g. Pro 10 - Five minutes.
- h. Pro 12 - Eight minutes.

Proposed Rule:

A6 RACE DURATION

A6.1 All heats and finals will be of the time duration specified for each class as listed below, plus the time to finish the last lap:

- a. Touring Stock – Six minutes.
- b. Brushless Touring Stock - Six minutes.
- c. Super Stock - Six minutes.
- d. Touring Modified - Six minutes.
- e. M-Chassis - Six minutes.
- f. Formula One - Eight minutes.
- g. Pro 10 - Six minutes.
- h. Pro 12 - Eight minutes.

Reason:

The “Five Minute” rule is outdated due to battery technology, currently all 1/10 Off Road classes run Six Minutes so why shouldn't On Road follow suit, with F1 following Pro 12's lead with 8 min, any discussion regarding the extra time required for running a major event can be easily dismissed with the fact the EP Offroad run 6min, they have generally more classes and entrants and get the job done.

Remit 10:



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Current Rule:

B8.2 Motors for Indoor Off-Road Modified Classes as follows:

- a. Brushless 540: Minimum wind – 10.5 turn (Blinky ESC)

Proposed Rule:

Remove, as per Rule B9

Reason:

We don't need to dumb down the Modified class for a Sanctioned event, there is evidence that indoor venues can successfully accommodate "Open Motor" racing.

Discussion Points:

1. Sanctioned Events-Do we require a basic set of guidelines for these events, ie: the least the host club has to supply to the competitors. We have all attended events that seem to put the unnecessary before the necessary, racers require the basics shelter, ablutions, table/chairs, power, these are what are required for racing, they don't require a three course breakfasts and flashing lights, get back to basics. Several clubs last year ran great events on a shoe string budget so it can be done.
2. Sanctioned Events-Are we having too many????? Get back to basics again, to bring some notoriety back to the big events, you will always have local derbys but reduce the sanctioned events to the likes of Nth, Sth ON/Offroad champs, and then Nationals.
3. NZRCA Transparency-No one likes to be put in the firing line, but the latest fiasco regarding the indoor motors specs is an indication that "closed door" decisions may not be the best method of achieving the required goals, there ARE a lot of passionate people out there that aren't on committees but do like to have a say and add some input, do we all need to be a little more transparent when it comes to situations like this, more open discussion between the Exec and Clubs could prove to be more beneficial to all.
4. NZRCA Constitution- Where can one find it?????????????????

Club	Taranaki Radio Control Car Club Inc
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Remit 1:

Current rule:

G1.10

Trackside sales should be the responsibility of the Club organising race meetings, with the exception of National events, where legitimate retail sellers only should be encouraged to participate at race meetings. Definition of a "legitimate retail seller" shall be "a person or people who make available their wares to the general public during normal working hours"



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Proposed Rule:

General rules G1.10 "Trackside sales" rule to be removed.

Reason:

-This is not current practice, it is too hard to police and the rule serves no purpose in our current market.

Remit 2:

Current rule:

G1 11

Major events shall be held according to the following dates:

A North Island Electric Off-Road Champs Last 2 weeks in September.

B South Island I C Off-Road Champs First 2 weeks in October.

C South Island On-Road Champs Last 2 weeks in October.

D **IC Off-Road National Champs First 2 weeks in November.**

E North Island On-Road Champs Last 2 weeks in November.

F South Island Electric Off-Roads First 2 weeks in December.

G **North Island IC Off-Road Champs Last 2 weeks in January.**

H Electric On-Road Nationals First 2 weeks in February.

I IC On-Road Nationals Last 2 weeks in February.

J Electric Off-Road National Champs Last 2 weeks in March.

Proposed rule:

G1 11

A North Island Electric Off-Road Champs Last 2 weeks in September.

B South Island I C Off-Road Champs First 2 weeks in October.

C South Island On-Road Champs Last 2 weeks in October.

D **North Island IC Off-Road Champs First 2 weeks in November.**

E North Island On-Road Champs Last 2 weeks in November.

F South Island Electric Off-Roads First 2 weeks in December.

G **IC Off-Road National Champs Last 2 weeks in January.**

H Electric On-Road Nationals First 2 weeks in February.

I IC On-Road Nationals Last 2 weeks in February.

J Electric Off-Road National Champs Last 2 weeks in March.

Reason:

-The January timing is a better fit for the major National event with available leave and weather usually more settled, this has been talked about for some time but never acted on.

Remit 3:

Current rule:

G6 Marshalling

G6.1 Host clubs are to advised at the time of entry information being released which of the following options they are to use for Marshalling:

6.1.1 Drivers must marshal the heat following their own. The first heat will be marshalled by the drivers of the last heat. A driver may arrange a competent substitute and notify the Race Director of such arrangements.

Or



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6.1.2 Drivers must marshal the heat following the one after their own heat. (Race 1 Marshalls Race 3 –Race 2 Marshalls Race 4 etc) The first heat will be marshalled by the drivers of the 2nd to last heat of the round. A driver may arrange a competent substitute and notify the Race Director of such arrangements.

G6.2 Failure to marshal or provide a competent substitute may result in loss of driver's best time (up to Race Directors discretion). Substitutes must be notified to the Race Director.

G6.3 The organisation of marshalling for the finals will be the responsibility of the Race Director.

G6.4 All marshals to wear fully enclosed footwear at all times.

G6.5 Please refer to the Marshalling Guidelines at the back of rulebook.

Proposed rule:

G6 Marshalling

G6.1 Host clubs are to be advised at the time of entry information being released which of the following options they are to use for Marshalling:

6.1.1 Drivers must marshal the race following their own. The first race of a round will be marshalled by the drivers of the last race. A driver may arrange a competent substitute and notify the Race Director of such arrangements.

Or

6.1.2 Drivers must marshal the race following the one after their own race. (Race 1 Marshalls Race 3 –Race 2 Marshalls Race 4 etc) The first race will be marshalled by the drivers of the 2nd to last race of the round. A driver may arrange a competent substitute and notify the Race Director of such arrangements.

G6.2 Failure to marshal or provide a competent substitute may result in loss of driver's best time (up to Race Directors discretion). Substitutes must be notified to the Race Director.

~~G6.3 The organisation of marshalling for the finals will be the responsibility of the Race Director.~~

G6.4 All marshals to wear fully enclosed footwear at all times.

G6.5 Please refer to the Marshalling Guidelines at the back of rulebook.

Reason:

-Race Directors have enough to do rather than have to worry about finding marshals for finals.

-A lot of events were unaware of this rule and were insisting finalist marshal the race after theirs anyway.

Remit 4:

Current Rule:

A1.13 It is the responsibility of the competitor, to be able to prove the legality of his/her batteries. Cells/Packs must retain original covering and labeling in suitable condition to satisfy scrutineers as to the cells/packs eligibility.

Proposed Rule:

(remove rule)

Reason:

Rule is a repeat of rule A1.2.

Remit 5:

Current Rule:



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A1.15 Clubs hosting Outdoor Sanctioned Meetings must make their outdoor tracks available for 2 days immediately before the meeting and on the morning of each days racing for a minimum of 1 hour before program racing starts.

Proposed Rule:

A1.15 Clubs hosting Outdoor Sanctioned Meetings must make their outdoor tracks available for 2 days immediately before the meeting.

EP on road rule A1.15 "1 hour practice each race day" remove the 1 hour each day part.

Reason:

-With the numbers entering it is taking too much time at an event, this will make the schedule easier on organisers particularly if weather is threatening.
-If this rule isn't changed we better stipulate if the track needs to be dry or not for the 1 hour of practice!

Remit 6:

Current Rule:

A2.5 The car must be on the grid and the driver on the stand at the start of the race, otherwise the driver is deemed to be a late starter and must start from the pit lane or other area designated by the Race Organisers. The late starting car must not gain any advantage from starting out of pit lane, with this in mind it must not exit the until all remaining running cars (i.e. not stalled, broken or off the track) have passed the pit exit for their first time. If there is more than one car starting from pit lane at the same time then they must exit the pits in the order they qualified.

Proposed Rule:

A2.5 The car must be on the grid and the driver on the stand at least 10 seconds prior to the start of the race, otherwise the driver is deemed to be a late starter and must start from the pit lane or other area designated by the Race Organisers. The late starting car must not gain any advantage from starting out of pit lane, with this in mind it must not exit the until all remaining running cars (i.e. not stalled, broken or off the track) have passed the pit exit for their first time. If there is more than one car starting from pit lane at the same time then they must exit the pits in the order they qualified.

Reason:

-By adding a time limit it prevents late starters disturbing the start of the race by not being in the correct position.

Remit 7:

Current Rule:

A3.3 Did Not Finish (DNF) is to be calculated by the number of laps actually completed in the race stated time plus 45 seconds.

Proposed Rule:

(Use IC off road rule 2.6)

A3.3 Failure to complete the last lap after the heat or final time is completed shall mean the result will be the number of laps and time at which the car completed the previous lap (e.g. in a 10 minute race the previous completed lap might have been at 9:43).

Reasons:



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- Multiple people can end up with the same result
 - Racers should be given the result even if they do not finish their race.
 - These probably should all go into the General rules too, under G 4.
 - This rule is being ignored at National events so lets clean it up and remove it.
-

Remit 8:

Current Rule:

A3.4 Qualifying will be done via a staggered start system. Each driver will have a staggered start and be on an individual clock for the race period. The race controller or computer lap scoring programme will determine the starting order and timing between staggering of drivers.

Proposed Rule:

A3.4 Qualifying will be done via a staggered start system. Each driver will have a staggered start and be on an individual clock for the race period. The race controller or computer lap scoring programme will determine the starting order and timing between staggering of drivers, *the starting order will be shuffled for each heat.*

EP on road rule EP A3.4 Qualifying start positions to be shuffled for each heat.

Reasons:

- Adds clarity the rule.
 - Makes it fair for each competitor to get an equal start across their heats.
-

Remit 9:

Current Rule:

A3.10 There will be a minimum of 3 qualifying heats for each class.

Proposed Rules and Subsequent Additions:

A3.10 There will be a minimum of four (4), maximum six (6) rounds of heats at Sanctioned Events.

Note: The minimum number of qualifying heats at a sanctioned event can be reduced to four (4), or fewer, due to bad weather or time issues up to the discretion of the race controller.

A3.11 At the completion of qualifying the provisional qualifying order becomes the final qualifying order.

A3.12 PROVISIONAL QUALIFYING ORDER

Drivers will accumulate points over the qualifying rounds. A driver's best rounds (or round) will determine their provisional qualifying position, all other rounds will be discarded. Discarded rounds will not be used for tie breaks.

The format for counted rounds to determine a driver's provisional qualifying position will be based on their best 50% of completed heats, i.e.:

- 1 round of qualifying, 1 round counts, 0 discarded
- 2 rounds of qualifying, 1 round counts, 1 discarded
- 3 rounds of qualifying, 2 rounds count, 1 discarded
- 4 rounds of qualifying, 2 rounds count, 2 discarded
- 5 rounds of qualifying, 3 rounds count, 2 discarded
- 6 rounds of qualifying, 3 rounds count, 3 discarded

A3.13 In each round, drivers will score points based on the distance and time achieved in relation to all other drivers. Points will be distributed so the fastest driver will accumulate maximum points for the round, with the points decreasing on 1-point increments for the preceding drivers. If more than 100 entries are received for a class, the point's score will be adjusted accordingly so the lowest place driver



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will receive at least one (1) point. DNS and DQ drivers will receive zero (0) points for that particular round.

Example:

Fastest Driver in each round will score 100 Points

2nd fastest will score 99 points

3rd fastest will score 98 points

4th fastest will score 97 points

If drivers tie for time and distance in a round, they will share the points for the same position. The following drivers point score will be relative to their positions.

Example:

Fastest 10 laps 5.10.00 will score 100 point

2nd 10 laps 5.12.00 will score 99 points

3rd 10 laps 5.13.05 will score 98 points

4th 10 laps 5.13.05 will score 98 points

5th 10 laps 5.14.05 will score 96 points

A3.14 In the case of a tie in the final accumulated qualifying points, the tiebreak method will be as follows: the first tiebreak will be the fastest heat in terms of time and distance of those heats counted; the second tiebreak will be the second fastest heat in terms of time and distance of those heats counted, and so on until all counted heats have been exhausted. In the extremely unlikely event that such methods are insufficient to break a tie, the driver who set their fastest heat time first will be the higher qualifier, note that this may come down to starting order in a heat.

Reasons:

-Aligns our rules with Australia and to be similar to IFMAR who also run 6 heats.

-More racing per class is required. This move will increase the amount of racing per class. Currently each class (except pro12) only get 30 minutes of racing at a sanctioned event. This will increase it to 45 minutes.

-As a result it is better for drivers who cannot afford more than one class.

-More qualifying rounds count so that weather conditions aren't as much of a factor. e.g. if the morning conditions are better this is often the rocket round making it harder to best these times in the remaining heats.

-Adds a lot of clarity around qualifying procedures.

-If timing becomes an issue because of high entries the number of qualifiers can be reduced by the race organiser to 4.

Notes:

Rules A3.11 and A3.12 become A3.15 and A3.16 respectively as a result of the addition of these rules. Perhaps the rules under section Race procedures should be broken up into general, qualifying and finals to save confusion.

Rule A4.4 will need to be altered as a result of this passing:

A4.4 If the meeting is abandoned the following shall apply:

i) If the racing is abandoned at a point during the qualifying rounds then the following applies.

a. If no full rounds of qualifying have been completed, then qualifying is to be postponed until it can be run, the number of rounds can be reduced as per rule A3.10

b. If one or more qualifying round has been completed then qualifying can be called on the provisional qualifying order as per rule A3.11 if it seems likely that the rain will prevent any more qualifiers from being run in the time schedule.

c. (removed)

ii) If the meeting is abandoned during the running of finals, before all rounds of finals are complete, the final positions for each driver are to be determined as follows:

a. If no qualifying rounds have been completed, then the meeting is to be abandoned and no result can be declared.

b. If no full rounds of finals have been completed, then qualifying positions are to be used.



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- c. If one full round of finals has been completed, then the points from that completed round are to be used.
- d. If two full rounds of finals have been completed, then the best single points from the two completed rounds is to be used.

Remit 10:

Current Rule:

A5.6 Start area should be a minimum of 3 meters wide.

Proposed Rule:

<Remove>

EP on road rule EP 5.6 duplicated rule.

Reason:

Repeat of rule A5.3

All tracks MUST be a minimum of 2.5 meters wide, with the Start straight a minimum of 3 meters wide

Remit 11:

Current Rule:

A18.1 Dimensional requirements for all touring car classes:

Overall Dimensions & Weight	Minimum	Maximum
Wheelbase	250mm	270mm
Width	175mm	210mm
Weight (including transponder)	1380g	1700g

Proposed Rule:

Overall Dimensions & Weight	Minimum	Maximum
Wheelbase	250mm	270mm
Width (without body shell)	170mm	190mm
Width (with body shell)	175mm	195mm
Weight (including transponder)	1380g	1700g

Reason:

- Align with IFMAR rules.
- Current rules allow the use of wider touring cars (ie up to 210mm wide) which is not the intention of the class.

Remit 12:

EP on road rule regarding dry track for heats and finals, no current rule so we propose to use the I.C. on road rules.

A??.? Heats to be run on a “drying track” up to the discretion of Race Director.



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A??.? Finals to be started on a dry track -up to the discretion of Race Director.
A??.? In the event of rain during a final, the track must return to 100% dry conditions before racing can recommence. The 100% dry conditions will be determined by the Race Director.

Reasons:

- Consistency.
- Too much confusion at the moment as to what should and shouldn't be done.
- This will clarify the requirements for the Race Controller.

Remit 13:

EP on road rule, New Rule to be included in section ???

At the Nationals the only classes offered shall be as follows:

- Touring Modified
- Touring Super Stock
- Touring Stock
- Pro12
- Formula 1

Reasons:

- Australia offers only 4 classes at their nationals and they are a much larger country. We offer too many at the expense of often only having one rather than multiple finals for each class.
- These 5 classes are the same/similar as what Australia run with the addition of formula 1. The classes can be debated but we should reduce it down to 5 total for the national event at the very least.
- This move will increase the number of full heats and so reducing time constraints on the meeting.
- There are too many classes that lead to a lesser significance when you gain a 'national title'.
- Mini is an entry level class and not something that should be run at the national event. Most beginners are entering touring stock and not mini as they are easier to drive and not much more expensive, plus they are easier to upgrade when the time comes.
- Pro10 has been getting low numbers at national events for the past few years. This rule will keep their rules in the rulebook for smaller events like north and south islands.
- This rule is good as it still leaves the other classes in the rulebook for use at other events.

Remit 14:

Current rule:

C2.4 If a round of heats is started, it must be completed under the same conditions. If a round is halted due to rain or unforeseen circumstances and cannot be completed, this round will not be counted until the remaining heats in the round can be completed.

Proposed Rule:

C2.4 If a round of heats for a particular class has started, it must be completed under the same conditions. If a round is interrupted due to rain or unforeseen circumstances only the classes in the round, where all heats of that class have been completed will be recognised. If the interruption occurs before all the heats for a particular class have been completed, those heats for that particular class are required to be re-run under the same conditions.

Reasons:

- minimise disruption to the event and only re-run classes instead of a whole round.
-



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Remit 15:

Current rule:

C12.1 Weight; Minimum weight with no fuel but with transponder 1725g.

Proposed Rule:

C12.1 Weight; Minimum weight with no fuel but with transponder 1650g.

Reasons:

-to align with IFMAR.

Remit 16:

Current rule:

D13.1

Overall Dimensions & Weight	Minimum	Maximum
<i>Wheel Diameter</i>	80mm	97mm
<i>Tyre Diameter</i>	125mm	160mm
<i>Tyre Width</i>	60mm	100mm

Proposed Rule:

Remove the wheels and tyre dimensions.

Reasons:

-Currently this rule is not abided by.
-Rule not necessary.

Club	Whangarei Radio Controlled Car Club
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Remit 1:

Current Rule:

A7.2

BRUSHLESS MOTORS: 540 size 21.5 turn brushless motors as per NZRCA approved list only

Proposed Rule:

A7.2

BRUSHLESS MOTORS: 540 size 17.5 turn brushless motors as per NZRCA approved list only

Reason:

To have 17.5 as stock in both on/off road racing, Also to have racers with older chassis to get the gear ratio easier and help even the playing field.