

Rules for 2009

When reading rules below it is a good thing to realize that chances are if it is not mentioned here, it is not legal.

Do not plan a defense of your latest concoction by saying "it doesn't say I can't do it".

Save yourself and everyone else a lot of time by being realistic in what is expected and in the spirit of the rules.

Classes

OVAL

- **RTR Entry-level class!** Motor- 21 brushed or 21.5 brushless, lipo 2400mha (ORI14007 by Team Orion)
 - Any 1/10 scale oval chassis. Chassis MUST keep the stock front ends suspension i.e. NO HOP UPS. Any king pins and front springs will be allowed.
 - "Trinity Street Spec" 21 turn Motor or 21.5 brushless.
 - Motors may use battery plugs or direct solder connections.
 - Lipo Orion 2400MHA 7.4 will be allowed in this class with a 5 flat gear set on the car. (ORI14007 by Team Orion ONLY)
 - Any style of battery plugs may be used on battery to speed control connection.
 - Speed control shall cost no more than \$140.00 (retail price) All out of date speedos will be allowed
 - Open gear ratio for 4 cell spec bats only
 - Wings are recommended! Max spoiler height is 2" from trunk lid.
 - Tires: BSR or Race Tread SPEC radials only
 - No receiver packs allowed.
 - Min weight with transponder 2 lbs. 8 oz. (40 oz.)
 - Any 1/10 scale center shock. NO side shocks. Only tweak system allowed will be screws in the T-plate.
 - One dumper (swizzle-stick, slider-shaft) on rear pod may be used.
 - Body must be NASCAR style only. No cut outs on body except wing wire. (Rear bumper will remain.) Body Height 4 ½"
- **13.5-Single cell Truck**
 - Truck body only. Novak 13.5 motor, Any 1S lipo (single cell) that is roar approved.
 - Any 1/10 scale oval chassis.
 - Motor - Novak 13.5 Brushless Motor.
 - Motors may use battery plugs or direct solder connections.
 - LiPo batteries- Any 1S lipo (single cell) that is roar approved.
 - Any battery plugs/connections
 - Open gear ratio.
 - Spoilers are recommended. Height max 2"
 - BSR "Spec Tires" only.
 - Min. weight with transponder 2 lbs 6oz. (38 oz.)
 - Body Height 4 ¾"
 - Receiver pack allowed
 - **No Sponsored Drivers**

- **21.5 - Sportsman** Same rules as PRO but 2400 lipo only (ORI14007 by Team Orion) **No Sponsored Drivers**
 - Min. Weight with transponder 2 lbs 8oz. (40 oz)
 - Body Height 4 ½"
- **10.5 - Single cell lipo**
 - Any 1/10 scale oval chassis. Body must be NASCAR style only.
 - Motor – Roar legal 10.5 Brushless.
 - Motors may use battery plugs or direct solder connections.
 - Any roar legal 1S (single cell) lipo
 - Any battery plugs/connections
 - Open gear ratio.
 - Rear window holes permitted for wing wire penetration.
 - Rear of body may be cut out.
 - Wings are recommended.
 - Open cap tires
 - Min. weight with transponder 2 lbs 6oz. (38 oz.)
 - Body Height 4 ½"
- **21.5 - PRO**
 - Any 1/10 scale oval chassis. Body must be NASCAR style only.
 - Motor - Novak 21.5 Brushless only.
 - Motors may use battery plugs or direct solder connections.
 - ROAR Legal 2-S (**3200mah Only**) LiPo batteries
 - Any battery plugs/connections
 - Open gear ratio.
 - Rear window holes permitted for wing wire penetration.
 - Rear of body may be cut out.
 - Wings are recommended.
 - BSR "Spec Tires" only.
 - Min. weight with transponder 2 lbs 9oz. (41 oz.)
 - Body Height 4 ½"
- **17.5 - OPEN**
 - Any 1/10 scale oval chassis. Body must be NASCAR style only.
 - Motor – Roar legal 17.5 BL motors
 - Motors may use battery plugs or direct solder connections.
 - ROAR Legal 2-cell LiPo batteries. Max 5400mha
 - Any battery plugs/connections
 - Open gear ratio.
 - Rear window holes permitted for wing wire penetration.
 - Rear of body may be cut out.
 - Wings are recommended.
 - Tires: open cap
 - Min. weight with transponder 2 lbs 10oz. (42 oz.)
 - Body Height 4 ½"

- 10.5 - MOD
 - Min. weight with transponder 2 lbs 10oz. (42 oz.)
 - Roar Legal 10.5 Brushless
 - ROAR Legal 2-cell LiPo batteries.
 - Body Height 4 ½"
 - Open Tire

TOURING

- 17.5 Touring
 1. Any 1/10th scale Touring Chassis. Usually 4WD, open Modifications/Hop-ups.
 2. Roar legal 17.5 BL motors.
 3. Motors may use battery plugs or direct solder connections.
 4. Batteries are limited to 4600mah NiMh, six-cell or ROAR Legal 2-cell LiPo batteries.
 5. Any style of battery plugs may be used on battery to speed control connection.
 6. Open ESC (Speed Control); Open Touring Tire/Wheel combo; Open gear ratio.
 7. Open Touring body.
 8. Min weight with transponder 1500 Grams w/transponder.
- 13.5 Touring
 1. Any 1/10th scale Touring Chassis. Usually 4WD, open Modifications/Hop-ups.
 2. Roar legal 13.5 BL motors.
 3. Motors may use battery plugs or direct solder connections.
 4. Batteries are limited to 4600mah NiMh, six-cell or ROAR Legal 2-cell LiPo batteries.
 5. Any style of battery plugs may be used on battery to speed control connection.
 6. Open ESC (Speed Control); Open Touring Tire/Wheel combo; Open gear ratio.
 7. Open Touring body.
 8. Min weight with transponder 1500 Grams w/transponder.
- Open MOD

THE TRACK

Carolina is dedicated to controlling the cost of racing and making it affordable for entry-level drivers to become involved in the sport.

In offering cost controlled classes, Carolina R/C Complex may specify the batteries, bodies, chassis, gear ratios, motors, tires, etc that may be used. Care should be taken not to restrict usage of any of these items to a single manufacturer.

- The track reserves the right to test/inspect any motor / engine for tampering or modifications.

The Track Technical Inspectors, and the Race Director have the right to subject any vehicle to mechanical or visual inspection or impound at any time.

It is the driver's responsibility to tear down a vehicle for inspection if required to do so.

The Race Director has the right to limit admission to any area used for tech

Inspections during post race inspection, the effects of normal wear and race distortion or damage should be taken into consideration. For post-race inspections, a "cooling-off" period of no more than 10 minutes may be allowed to eliminate any temperature effects on sizes, capacities, etc.

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DRIVERS

All drivers must attend the drivers' meeting. Racing rules, approved deviations and event- specific rule interpretations or procedures will be covered during this meeting.

Temporary necessary rule changes must be made public during Driver's Meetings. The Race Director may give a one-lap penalty on the best qualifier or best a main of drivers that do not attend or field corner marshal their turn.

RADIO EQUIPMENT

Radio control systems used in ROAR competition are limited to the following channels:

- **27 MHz:** Only frequencies 26.995, 27.045, 27.095, 27.145, 27.195, and 27.255 MHz.
- **75 MHz:** All Channels 61 through 90
- **50 MHz:** Channels 00, 02, 06, and 08
- **53 MHz:** Frequencies 53.100 through 53.800 MHz.
- **2.4GHz** DSM/DSS systems

GENERAL VEHICLE RULES

- All vehicles entered for event must comply with the dimensional requirements contained in this rulebook for the relevant class.
- Vehicle batteries must be securely mounted. Receiver packs are not allowed in any Lithium technology 7.4VDC. Single cell may use receiver pack.
- The use of traction control sensing devices, active suspension devices, and steering control devices aided by gyroscopes or accelerometers (G-force sensors) of any kind are strictly prohibited. Sensors may be used for the purpose of passive data recording but not for adjusting the performance of the vehicle while in motion.
- No rollover antennas are allowed unless noted in the class rules. Rollover antennas are defined as any vertical antenna strong or stiff enough to support the weight of the vehicle when resting on the tip of the antenna and one side of the vehicle.
- Multiple speed transmissions are not allowed unless noted in the class rules.
- Any material used to add weight to a vehicle in order to comply with the minimum weight requirements for the class must be securely attached to the vehicle chassis. If such ballast falls off the vehicle during a race for any reason, and the vehicle is under weight at the post race technical inspection, the vehicle will be disqualified for that run. For all fuel classes, chassis weights must be securely mounted with solid mechanical fasteners such as bolts or screws.
- No hazardous bumpers, nerf bars, chassis extensions, or other objects protruding from the vehicle are allowed.
- Racers running more than one class with the same chassis are recommended to run one chassis for each class, no time consideration will be allowed for multiple classes same chassis.
- All rules must be strictly adhered to. No vehicle will be allowed to race until it has been cleared to do so by the Technical Director. Any violation must be corrected before the vehicle is raced. All vehicles must pass technical inspection prior to or after every race, or both. For A Mains both pre and post race inspections may be required. Any vehicle found to be illegal during a **pre-race**

inspection will not be allowed to race in that condition. Vehicles found to be illegal during a **post-race** inspection will be disqualified from that race.

*Technical inspections include but are not limited to checking the vehicles height, length, width, and minimum weight (with personal transponder installed).
When the ride height is checked it will be do so from the centerline of the car.*

- Bodies must remain as originally approved. Flaring front fenders or making any other aerodynamic modification is not permitted.
- The minimum vehicle weights listed in the Class specifications include transponders. For all fuel classes' vehicle weights are measured without fuel in the tanks.
- Vehicles may not be pushed across the finish line. Vehicles must cross the line under their own power. Non-operating vehicles will be removed from the track. In fuel classes' cars are not allowed to be restarted once the master clock has expired. For purposes of qualifying and racing, the driver is scored, and not the vehicle. A driver must race the vehicle that he/she presents for technical inspection. Unless supplemented by event rules, a driver or a vehicle may not be changed during a qualifying run or during a main event. Qualifiers and Mains are deemed to start with the starting signal or green flag

BODY, BUMPER AND WING RULES

- Bodies used must resemble vehicles used in full scale racing for the type of event being conducted. Stock Cars, such as those used in NASCAR
- Sharp or otherwise dangerous parts or features on a body are not permitted.
- All molded-in windows must be clearly identified.
- Refueling holes: A refueling hole is permitted in any body type for fuel-powered cars.
- ***The following restrictions apply:***

The hole must be centered directly above the fuel tank filler neck.

- Touring Cars: Two- or four-door sedans that have competed in a full-size Touring Car series

SPOILER RULES

Many R/C racing bodies have molded spoilers. In some classes, additional material may be added to increase the height of the spoiler. Where this is permitted by the class rules or specifications, the dimension specified includes the molded spoiler.

- Spoilers may not extend beyond the width of the body.
- Where permitted, add-on spoiler material must be securely fastened to the body.
- Spoiler side plates when used must conform to the class specific rules.
- Spoilers may be clear or painted, and may carry stickers.

WINGS

- Definition: Wings are aerodynamic devices attached to vehicles to increase down force and traction when a vehicle is traveling at speed. The dimensions of wings vary depending on the class of racing, and are described in class rules or specifications.
- Only single element or two-element wings may be used, and then only when allowed by the class rules.

STARTING – Electric/Gas Races

- The purpose of a starting procedure is to give each vehicle a fair start from its assigned grid position. Two methods are authorized for electric racing. These are the full-field start and the IFMAR, or staggered start. All mains will use a full-field start. Qualifying heats may use either method.
- A grace period before the start of a race may be allowed at the discretion of the Race Director but this must be announced before the start of the race. Only one grace period per race is allowed and it may not exceed one minute.
- Gas Vehicles will be called to the track three minutes prior to the start of a race. They will be given a minimum of 2-1/2 minutes for warm up and practice. Thirty seconds before the start, they will be called to the starting line for refueling, final preparation, and lineup. At the call of the race director, mechanics will place their vehicles on the ground and release them. Within the next rolling lap the start tone will sound the start of the race.

The Race Director will make every effort not to delay the start of a race. Vehicles will not be allowed on the track before the three (3) minute warm up period. After the three-minute period is announced, the start will be as close to three minutes as possible.

- A grace period during the warm-up before the start of the A-Main event may be allowed at the discretion of the Race Director. Only one grace period is allowed and it may not exceed one minute.

BLACK FLAG

- A black flag will be given to a driver whose driving, vehicle operation, or performance constitutes a hazard to the other vehicles in the race. This includes insufficient skills to compete in the class, unsportsmanlike driving, and intentional hitting of other vehicles, intentional short coursing, intentional corner cutting, intentional blocking when being overtaken, illegal or improper vehicle numbers and other such acts.
- When a driver is given the Black Flag, it means that driver must pull his/her vehicle off the track immediately. The driver will remain on the drivers stand until that heat or race is over.
- A black flag ruling may be used at any time for unsportsmanlike conduct or abusive language to other drivers or race officials.
- A driver who receives three warnings in an event from a referee or race official will be black-flagged. Any vehicle that loses its body or that cannot be controlled properly due to radio problems, race damage, or missing parts will be black-flagged.

DISQUALIFICATION

- Failure to comply with any of these rules, not limited to items covered in this section, may result in disqualification by the Race Director. Disqualification may be for a single class or for the entire event.
- Disqualification means that the driver will not be allowed to race or continue racing. Any driver who is disqualified for the entire event may be required to leave the racing facility. There will be no refund of entry fees to a disqualified driver.
- Any of the following actions on the part of a driver or member of his crew **will** result in mandatory disqualification from an event:
 - Not having a current ROAR membership, failing to complete or sign required registration forms, or submitting an application, registration, or other ROAR form with a falsified signature.
 - Using other than an authorized FCC frequency.
 - Not taking a vehicle or radio to the inspection area when directed to do so.

- Operating a vehicle near the track that could endanger others in the area.
- Drinking intoxicating beverages, using illegal substances, or showing evidence of being under the influence of an intoxicating beverage or illegal substance in the pits or the race area.
- Taking part in a protest demonstration in the pits, on the track, or in the surrounding area before, during, or after a race.
- Entering restricted areas or event scoring areas without proper authorization.
- Assaulting another individual. This will also result in suspension of ROAR membership for a minimum of 90 days.
- Turning on a radio during a race to affect another driver's vehicle.
- The following offenses by a driver or member of his crew **may** result in disqualification if deemed appropriate by the Race Director. If not deemed appropriate, the minimum penalty will be no score for the race in question. A second offense of the same type may result in immediate disqualification:
 - Using an engine, motor, or part that does not comply with the rules.
 - Subjecting a Race Official to improper language or other demeaning actions.
 - Ignoring a black flag.
 - Deliberate abusive nerfing, bumping, or blocking.
 - Not submitting his vehicle for technical inspection prior to racing (when pre-race inspection is in force).
 - Loss of ballast used to make the vehicle meet legal weight.
 - Failure to abide by maximum charge voltage for lithium battery technology.

PROTESTS

Protests may be submitted against:

- Vehicles or parts of vehicle, Technical issues, Results, Race procedures, policies or decisions.

Protests considered by the Race Director to be frivolous or unsportsmanlike will not be accepted.

Drivers properly entered in the event or class may only submit protests, which is the subject of the protest.

- Another driver in the same vehicle class being protested may only submit vehicle or technical protests involving the qualifying heats of an event.
- Another driver in the same Main may only submit vehicle or technical protests involving a particular Main event.
- A driver, who has a protest lodged against his vehicle, or any part thereof, is required to make the vehicle available for inspection. Failure to do so will result in disqualification.

BUY OUT RULES

Only two classes will have this rule.

(1) 21.5 Sportsman

(2) 21.5 PRO

This will be at the replacement cost in the hobby shop.