San Jacinto Section Pinewood Derby Rules/Regulations

I. Ground Rules

- A. The Pinewood Derby is open to all Royal Rangers from outposts that are registered/chartered in the San Jacinto Section.
- B. Only **ONE** car can be entered per contestant (boy/parent/sibling/commander).
- C. Cars must have been made for this race. Cars that have been raced in a previous Royal Ranger Section, District, or Regional Pinewood Derby are not permitted.
- D. Registrar of car **MUST** be present at entry.
- E. The Pinewood Derby will be ran according to the Grand Prix Race Manager using the Perfect N- Type Chart. Each car will run on each lane for the first round, 4 races per car. The Race Manager will keep track of times, and the top 3 race times will be averaged. The lowest score will be automatically be ignored. NO DOUBLE ELIMINATION!!
- F. Top finishers will advance to the second round, with the number of cars to advance dependent on number of registrations in each group. This is a complete new race to determine who advances to the Grand Finales Round. Each advancing car will again run IAW Item E above.
- G. Top 4 finishers from the second round will advance to the Grand Finales Round for a final race, following the guidelines in Item E Above. Awards for First, Second and Third place finishers in the Grand Finales Round.
- H. Races will be conducted according to age classification, including a Commander/Parent/Sibling class, all subject to the same rules. There will also be judging for Best Design, with attention given to hand carved details and other indications of the amount of time spent on the design. Other trophies and awards will also be presented.
- I. If a car leaves its lane, it will be registered as a "Did Not Finish" or "DNF" by the Race Management Software. The lowest score gets automatically ignored.
- J. If a derby car knocks off another car in the heat, the heat will be re-ran for the other cars. The the car that left the track initially will not run the heat and will be timed as "DNF".
- K. If a car loses an axle, brakes a wheel, or encounters any other mechanical difficulty, the car will automatically lose that heat (DNF). If the car's owner can advise a Race Official as to the proper method to be used to repair the car, and such repairs can be completed before the car's next heat, the car will be allowed to race again. If repairs have not been completed by that time, the car will again forfeit the heat. (DNF)
- L. Only Race Officials will be permitted in the barricaded track area. This rule will be strictly enforced; especially after cars have been registered and taken into the track area.

II. Inspection and question

- A. Each car must pass inspection and be properly weighed by Race Officials before it may be registered. Car owners will be informed of violations and given an opportunity to modify the car to meet the requirements. All modifications are to be done outside in the designated area.
- B. Once a car has **PASSED** the weigh in, the car **CAN NOT** be altered. Authorized repairs can be made but not weight changes. If weights come off, they **CAN NOT** be replaced/repaired.

- C. Any participant (including the parent of the participant) has the right of appeal to the Race Arbitration Committee for an interpretation of these rules. The Arbitration Committee, consisting of pre-selected Race Officials, shall, by majority vote, be the final judge in all cases excepting a tie vote, in which case the decision of the Arbitration Committee Chairperson shall be final.
- D. Ungentlemanly or unsportsmanlike conduct by any participant or member of the audience will be grounds for expulsion from the competition and/or race area.

III. Car inspection

- A. Cars must be built from the original Royal Ranger kit authorized by the Section and using only those parts. Additions of paint, decals (vinyl or paper) glue and metal to bring the car to weight limit are allowed. However, the car must bear evidence of having been cut from the original block of wood with **NO** metal structural parts.
- B. Maximum overall width (including wheels and axles) shall not exceed 2 3/4 inches. The center of the front of the car must be constructed such that no part of the car extends beyond it, due to the use of starting pegs.
- C. Minimum width between wheels shall be 1 3/4 inches, so car will clear the center guide strip.
- D. Minimum clearance between bottom of car and track shall be 3/8 inch, so car will clear the center guide strip.
- E. Maximum length shall not exceed 7 inches.
- F. The wheelbase (distance between front and rear axles) may be changed.
- G. Weight shall not exceed <u>FIVE</u> (5) ounces. The readings of the **Official Race Scale** (registration area) will be considered final. Weight may be removed in designated area on site if the car exceeds **FIVE** ounces, but no weight will be added if the car weighs less than **FIVE** ounces. Only functional weights may be added. Functional weights meaning: once the car is trimmed to desired design, weight (screws, BB's, fishing weights, bar, coins, washers, etc.) may be added to bring the weight to **FIVE** ounces provided it is securely built into the body. Participants are encouraged to use specifically manufactured lead weight kits. **NO METAL**, **WOODEN or PLASTIC PARTS** such as steering wheel, tailpipes, windshields, fenders, headlights, tail lights, motors, driver figures, etc. may be added for design.

Note: Mercury <u>SHALL NOT</u> be used for adding weight, for it is a potential health hazard!

- H. Additions stated in Item 3-A & G are to be considered the only additions, with attention to restriction on mercury as stated in Item 3-G.
- I. Cars with wet paint will not be accepted.
- J. Only Royal Ranger Pinewood Derby Car packaged wheels and axles shall be used. Axles may be polished. Wheels may be lightly sanded to remove the mold projection on the tread. This

light sanding is the only wheel modification allowed. **Beveling, tapering, thin sanding, wafering or lathe turning of wheels is PROHIBITED.**

- K. Wheel bearings, washers, or bushings are PROHIBITED.
- L. The car shall not ride on any type of springs.
- M. The car must be freewheeling with no starting device or other propulsion.
- N. Black powdered graphite is to be the only lubrication used. Regular oils and silicone sprays may soften the plastic wheels.
- O. Cars may be lubricated **before** inspection and only at outside worktable. **No** further lubrication will be permitted.