

# SULLY DISTRICT

## PINEWOOD DERBY

### EVENT RULES AND PROCEDURES (Ver 2018)

*The purpose of this document is to provide a reasonable and level playing field for all contestants. Please read and heed the information and the rules! Good luck and have fun!!*

#### I. Rules

**Construction:** Cars shall be constructed using Official BSA Grand Prix Pinewood Derby parts. The use of prefabricated wheels, axles, and car bodies is prohibited. The wheels shall be mounted on the Grand Prix axle nails. The axle nails shall be firmly affixed to the wood block. The entire car must sit behind the starting line (pin) on the track. Details such as steering wheel, driver, decals, painting, and interior details are permitted and must be firmly attached. Cars generating loose debris on the track may be subject to disqualification.

Cars in this competition must have been made for this race season. Basically, this year's cars must be built from new materials (car body, wheels and axles) found in the official Pinewood Derby kit, however parts of cars, such as weights, from previous years may be reused.

**Suspension:** The car may not ride on any type of springs or suspension.

**Starting Aids:** The car must be free-wheeling with no devices which allow a faster start. **The forward most edge of the car must be wood and be at least ½" wide in order to rest against the starting gate peg (in center of its lane).** The front edge of the wheels must be behind the nose of the car (100% of the car behind the starting peg).

**Length:** Car cannot be more than 7 1/8 inches long.

**Width:** Car cannot be more than 2 3/4 inches wide.

**Height:** Car cannot be more than 3 1/8 inches tall. (This restriction is due to the finish line height.)

**Weight:** Finished car cannot weigh more **than 5.0 ounces**. The weight shown on the official scales (Blue Pinewood Derby® Scale, Scoutstuff.org item number 16989) during the pre-race inspection will be considered final. To increase the car's weight, only wood, plastic or metal may be added. Weights shall be passive (non-moveable, non-magnetic, non-electric, non-sticky, etc.). For safety reasons, use of mercury is prohibited. Bottom mounted weights must be recessed into the bottom of the car so as not to come in contact with the stop zone of the track, must meet ground clearance requirements (3/8 inch), and must be free of sharp edges that can damage the track.

**Wheel Placement:** The car body must be at least 1 3/4 inches wide at the axles. It must clear the ground by at least 3/8 inch. The wheelbase (distance between front and rear axles) may not be changed from the kit body distance of 4 3/8 inches. The official kit block has pre-cut slots which are correctly spaced. If desired, these slots may be pre-drilled before they are used. However, the use of the pre-cut slots is not required.

**Wheels and Axles:** Use only Official Grand Prix wheels and axles (including the BSA colored wheel kits). You can de-burr and polish the axles. Wheels may be lightly sanded to remove the molding seam on the tread and the hub may be trued. No other wheel changes are allowed. You may not use hubcaps, washers, inserts, sleeves, bearings or coatings. **All four wheels must touch the ground and NOT BE BENT INWARD OR OUTWARD SO AS TO RACE ON THE EDGE OF THE WHEEL.**

**Lubrication:** Only dry powdered lubricants (such as graphite) may be used. No lubricant may be applied once the car has been inspected and registered. Scouts who qualify will be allowed to re-lubricate their cars before the final championship race. **ALL Graphite re-lubrication MUST take** place outside of the building and not in the designated "Pit Area". Scouts must furnish their own lubricants.

**Race Markings:** Allowances should be made for a 1 1/2 inch by 1/2 inch name label applied to the bottom, and a 3/4 inch round number label to be applied on the top of the car by the Race Officials on race day for identification.

## II. Race Procedures

**Eligibility:** Scouts finishing 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place for their rank (Lion, Tiger, Wolf, Bear, Webelos, Arrow of Light) in a Sully District Pack race qualify for the Sully District PWD, and are encouraged to participate in this event. Arrow of Light Scouts who have already crossed over to Boy Scouts are still eligible for this event if they placed at the Pack level while still a Cub Scout. (NOTE: If any placed scouts cannot participate, please choose another scout to compete to encourage maximum participation.) Only one car may be registered by any Scout. Scouts will compete in intra-rank competition. Pre-assigned "racing numbers" will determine the races for each car, based on a racing chart which is optimized for the size of the racing field.

**Dress Code:** Competing Scouts are encouraged to be in Class A Uniform. Short sleeves are recommended. Scouts and Scout Leaders observing the competition are encouraged to be in uniform.

**Attendance Requirements:** In general, Scouts must attend to compete. Cars will not be accepted for drop off. In the case of illness or personal and family emergencies, a Scout may be represented by an authorized agent. An authorized agent is defined as a sibling or a Cub Scout who is not already competing in the same Rank competition. All requests regarding the eligibility of an authorized agent must be made prior to race day and are subject to the approval of the Scout's Den Leader. **This is known as "Proxy" racing and MUST be approved by the Sully District Pinewood Derby Chairman (we had 3 Proxy racers in 2018).**

**Classes:** Entrants will be separated into 6 groups by Rank. Lions, Tigers, Wolves, Bears, Webelos and Arrow of Light will compete with others in their rank. The top three (3) finishers from each Rank will be eligible to race in the final championship race. The District championship race will be the last race of this event.

**Registration:** Early on-line registration will be available for all entrants prior to race day. On the day of the race, the Scout must be present for check-in and inspection of his car prior to the start time of his race; race officials will assign specific check-in times for each Rank race. Early check-in arrangements can be made for entrants that are not available during the assigned rank check-in and inspection. Due to the computer entry and timing processes, acceptance of late registrations is at the sole discretion of the Race Committee.

**Car marking and Identification:** The official entry label and car number assigned by the Race Officials must remain on the car for the duration of the derby.

**Inspection:** All cars should come in 'Race Ready' condition. All adhesives and paint should be dry. Each car must pass a technical inspection by the Race Officials before it may compete.

**Re-Inspection:** If a car does not pass inspection, the Scout will be informed of the reason his car did not pass and the Scout may make modification to his car in the designated "Pit Area" to come into compliance with the rules. Submission for re-inspection must be made before the registration and inspection period has ended.

**Inspection Gauges:** The race-day 'Inspection and Registration' area will have the official scale and inspection gauges. Official weight will be determined on race day only as it can be affected by the weather. Scouts should be prepared to make adjustments to their cars, if necessary.

**Impound:** After a car is registered and passes inspection, it will be impounded by the Race Officials until all races are completed. No car may be altered after it has been placed into impound.

**The Race Area:** The race area includes the track, registration, inspection, impound and scoring tables. Only Race Officials may enter the race area. This rule will be strictly enforced.

**Race Management:** Race Officials will be responsible for the proper conduct of the races and management of the scoring software.

**Car Staging:** Race Officials will be responsible for staging the cars at the starting line as the cars for each heat are announced. It is up to the Scout Racer (or Parent) to announce that their car has been placed on the track backward BEFORE the race as some cars are hard to determine front from back (we had one car run backward in all of his races in 2018).

**Lane Assignment:** To equalize differences among track lanes, each car will be run in each lane on the track. Based on the number of race entrants.

**Scoring:** Race standings for each class will be based on the elapsed time for each car (lowest to highest). The elapsed time is the sum of the race times (the time to travel from the starting gate to the electronic finish line) minus the slowest race time (the worst time is dropped).

**Non-Finishers:** If, during a race heat, any car fails to cross the finish line on the track and has not been interfered with, that car will be judged as running 9.999 seconds for that heat.

**Car Leaves Lane:** If during a race, a car leaves its lane but proceeds down the track in a manner that does not interfere with its opponent, then the race will be called normally. If the car leaves its lane and interferes with another car, the race will be re-staged and re-run. If the same car again leaves its lane and interferes with another car, that car will be judged to have finished with a time of 9.999 seconds, and the race will be re-staged and re-run without that car.

**Car Leaves Track:** If during a race heat, a car leaves the track without interfering with its opponent, it shall be considered to have ended its heat at that point and will be assigned a time of 9.999 seconds.

**Note:** *If a car leaves its lane/track, the Race Officials at their sole discretion may inspect the track and, if a track fault is found which probably caused the initial violation, the Race Officials may order the race heat to be rerun after the track is repaired.*

**Car Repair:** If during the race, a car becomes damaged, the Scout may, to the best of his ability, perform repairs with the assistance of his adult partner or Pit Crewmember. Repairs must be completed within 5 minutes. The car must be re-inspected before being allowed to compete again.

**Car Repair (Track Fault):** If a car is damaged due to track fault, or damage caused by another car or person, then the Race Officials, at their sole discretion, may allow additional repair assistance. The car must be re-inspected before being allowed to compete again.

**Finish Line and Scoring:** Race results will be determined by an electronic finish line. In the event of an electronic timing system failure, the race will be rerun once the timing equipment has been fixed. In the event of a tie between two or more racers for first, second, or third place, those racers will compete head-to-head in alternating lanes to determine the winner of the place under a tie. Cars/lanes not involved in the tie will not be part of the re-race, and will keep their finish positions from the original heat.

**Rules Interpretation:** Any Scout, including parents or representatives of the Scout, should **PROMPTLY** take all questions of rules interpretations and procedures to the Race Officials. Decisions of the Race Officials on questions of rules interpretations and procedures may be appealed to the Race Chairman.

Interpretation of the rules is at the sole discretion of the Race Chairman, and his decisions will be final. Decisions of Race Officials on questions of fact (i.e. the result of a specific race) may not be appealed.

**Note:** *Ungentlemanly, unladylike or unsportsmanlike conduct by any participant or member of the audience will be grounds for expulsion from the competition and/or the race area. The Race Chairman must rule on any issue regarding disqualification from the race.*

### **III. Awards**

**Awards and Recognition:** The most important values in Pinewood Derby competition are participation, good sportsmanship, and learning how to follow rules. The Race Committee is responsible for recognizing and encouraging these qualities. Awards will be presented at the completion of all races.

#### **District Rank Trophies**

Lion – First, Second, Third

Tiger – First, Second, Third

Wolf – First, Second, Third

Bear – First, Second, Third

Webelos – First, Second, Third

Arrow of Light – First, Second, Third

#### **District Championship Trophies**

All District Rank Trophy winners (First, Second, Third) will compete for the District Championship. The three fastest Scout cars will be awarded District Championship Trophies (First, Second, Third).

#### **Participation**

Each Scout will receive a participation memento for competing in this District event.