



BOY SCOUTS OF AMERICA®  
THE SPIRIT OF ADVENTURE COUNCIL

## Spirit of Adventure, West Wind District, Pinewood

When: Saturday, April 9<sup>nd</sup>, 2022  
Registration, Inspection and Weigh-in:  
Lions/Tiger 9:00-9:45am  
Wolves/Bears 9:45-10:45am  
Webelos/Arrow of Light 10:45-11:45am  
(Time may change due to total registration – final schedule will be sent out on April 7)  
Where: West Chelmsford United Methodist Church  
Who: Top 3 Cub Scouts from each Rank from each Pack in West Wind District.  
Cost: \$8 – registration must be completed by April 5th  
Required: Prior pack car inspection required; see complete rules below.  
How to Volunteer: email [wwdpwd2022@gmail.com](mailto:wwdpwd2022@gmail.com)  
Questions: email [wwdpwd2022@gmail.com](mailto:wwdpwd2022@gmail.com)

### **Always Read the Rules. There may have been changes since last year!**

#### **SOA WW District Pinewood Derby Philosophy:**

The District Pinewood Derby is a Scouting event; come meet other scouts that share your PWD zeal. Help make our Pinewood Derby competitive and fun. Everyone's best scouting behavior is expected. We look forward to seeing you there.

#### **Will there be trophies?**

Yes! There will be 7 trophy categories: Lion, Tiger, Wolf, Bear, Webelos, AOL, & Overall. Trophies will be given to 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place finishers in each rank, and one trophy to the Fastest Overall Pack

#### **What are the Car Inspection Rules for SOA WWD PWD 2022?**

See "Official Rules" (below). If these rules are different from those in your Pack's derby that is okay yet, all cars racing in the SOA WW District Derby must comply with the "Official Rules".

#### **Why does my car's weight seem to change from our Pack derby to the District Derby?**

Atmospheric conditions (like humidity) affect wood; also the scales used by your pack may differ from those used at the district race. To be fair to everyone, the same scale will be used to weigh all cars. No cars over 5oz on the district derby scale may compete. (Scouts may remove weight to comply). Cars 5oz and under will be accepted and impounded.

**Pack Leaders:** As always, our goal for the District Pinewood Derby is to make it an exciting scouting event. At this time, the most important information for your scouts to be aware of as they build their cars is "Official

Rules-Construction". If the rules from your Pack are different, that's okay as long as the scout's car also complies with the district's "Official Rules".

**Registration/Inspection:** Scouts participating in the District Derby must have already passed a "local" pack car inspection process. Measurements are easy, however, scales do vary and some tracks have special requirements. Scouts should bring their own tools and quick drying glue for last minute modifications (remove weight, Graphite, fixing loose objects...).

**Rules Interpretation:** Please read the rules! Officials on race day will have final say on the "legality" of any car modifications. The scout and their adult partner should decide what risk they are willing to take based on reading the rules below and the spirit of fairness to other scouts. One thing for certain is...the inspectors should be able to determine that wheels and axles are official BSA and that the slots in the wood were used for the wheelbase. All cars will race, but only cars that pass inspection can win a trophy.

## **Spirit of Adventure–West Wind District 2022 Pinewood Derby Rules**

Examine these rules during construction and before Weigh-in to determine compliance.

### **For Scouts - Rules in a Nutshell**

- Be creative and have fun building your car! This should be your work as much as possible. - The district race is a speed race. Build your car to be fast.
- You must make the car this Scouting year\* (contact [wwdpwd2022@gmail.com](mailto:wwdpwd2022@gmail.com) if your Pack has not raced this year)
- Nothing on it can fall off the car (no loose items).
- You must use only official BSA wheels, axles and body.
- Your car must fit inside a box 2.75" wide x 7" long x 5.5" tall, and have 3/8" clearance underneath. - The car and everything on it cannot weigh more than 5oz.
- Try to keep the bottom of the car flat and a flat spot at the nose.
- You must use the slots of the kit to position the wheels and hold the axels.
- You can't change the wheel shape too much (see below for details).
- The complete official rules are below.

### **SOA WW PWD Official Rules – Construction: (for Scouts, Partners, Officials)**

#### **1) General**

- a) Car and all components must have been made or worked (by the Scout as much as possible) this current year.
- b) Only an official Pinewood Derby Kit: Axles, wheels, body wood or official BSA replacements may be used.
- c) Cars will be impounded after passing inspection until the race is over.
- d) Weights and decoration must be attached in a durable fashion to prevent race debris (no tape for example).

- e) Bottom of car should be free of protrusions. Track braking systems depend on a flat undercarriage.
- f) Official B.S.A. wheels and axles must be recognizable. Axle points and BSA lettering on wheels must be visible.

## 2) **Weights and Measures**

- a) Maximum weight 5.0 oz. (based on Derby scale at inspection).
- b) Maximum width 2.75 inches.
- c) Maximum height 5.5 inches.
- d) Maximum length 7 inches.
- e) Minimum clearance of 1.75 inches between inside rims of wheels.
- f) Minimum clearance of ~3/8-inch from bottom of car to ground to allow for tracks with center rails.
- g) Stock wheelbase of distance 4.4 inches (4-13/32") between the front and rear axles.
- h) Minimum of 1/4 inch center flat spot on front of car to rest against starting pin.

*Notes: Weights attached underneath car, below the wood, can create significant friction problems on some tracks! The distance (center to center) between the slots that comes in the official kit, is also known as the "stock" wheelbase.*

## 3) **Prohibitions**

- a) Wheel bearings, washers, springs, bushings and full length axles are prohibited.
- b) Substitution of after-market axles and wheels is not allowed.
- c) The track-contact surface of wheels cannot be made rounded, pointed, or narrower.
- d) The car must be freewheeling, gravity powered, with no starting devices.
- e) The wheel base of the car cannot be different from that defined by the original official kit (slots in wood).
- f) No hub caps of any kind.
- g) No part of the car may protrude past the starting line/pin (starting pin is center of each lane).

## 4) **Allowable Modifications and Provisos**

- a) Track-contact surface of wheels may be smoothed, and must be flat. Wheels may be canted.
- b) A car can have fewer than four wheels, but must have one or more mechanisms (besides steering alignment) to ensure that it stays in its lane without the possibility of interfering with other cars.
- c) Modifications that adhere to these rules, and that can safely be done by a scout (with some help) are allowed.
- d) Lubrication (e.g. graphite) may be added to wheels and axles prior to vehicle impounding
- e) All modifications or work on the car (decorations, paint, etc...) are considered part of the car and must comply with all other "Official Rules".

# **SOA WW PWD Official Rules – Racing: (Derby Day for Scouts, Partners, Officials)\***

## 1. **Officiating**

- 1.1. The official's decisions are final. Every effort will be made to decide in favor of a fair race.
- 1.2. Referees may choose to consult others if necessary to arrive at fair and equitable decisions.
- 1.3. For each heat, Track Officials will ensure track readiness and car placement only as far as to prevent mishaps.

## 2. **Derby**

- 2.1. Every car races in each of 4 lanes
- 2.2. Only cars having passed inspection will be allowed to race.
- 2.3. A heat is one or more cars racing, ending without issues, fouls or mishaps, with recordable results.
- 2.4. Proxy racing will not be allowed for scouts unable to attend the derby.
- 2.5. For each heat, the racers and results will be announced or displayed.
- 2.6. Recorded results are final, unless the referee determines that a rerun will clear an issue or objection.
- 2.7. The racer schedule and organization is determined by the race organizers.

### 3. **Mishaps, Repairs, Fouls and Other Errors**

- 3.1. Mishap: "Sudden departure from expected course of events".
- 3.2. Non-Interfering mishaps: other car's performances were not affected, by discretion of referee(s).
  - 3.2.1. If a car fails to cross the finish line due to mishap, that heat will be rerun at the discretion of race officials.
  - 3.2.2. limit of one retry per car per heat, after a car's 2<sup>nd</sup> it will be eliminated from the heat with penalty time.
- 3.3. Interfering mishaps: other cars or heat results are affected, referee's call.
  - 3.3.1. If a car interferes with the running of other cars for any reason, that heat will be rerun.
  - 3.3.2. limit of one retry per car per heat, after a car's 2<sup>nd</sup> it will be eliminated from the heat with penalty time.
- 3.4. A car with three (3) interfering mishaps in the derby will be eliminated from further heats.
- 3.5. Repairs
  - 3.5.1. Cars involved in a mishap (interfering or non-interfering) must be examined for further race-worthiness.
  - 3.5.2. If a car is rendered unraceable, the Scout and one adult helper will be given five minutes to repair the car.
  - 3.5.3. Only repairs making the car race worthy are allowed.
  - 3.5.4. Officials will observe but are not allowed to help unless it is their scout's car.
  - 3.5.5. Graphite may be re-applied to the repaired area only.
  - 3.5.6. Repaired car must be deemed race worthy to continue.
- 3.6. Errors: Computer, Facility or Procedural
  - 3.6.1. At the referee's discretion, the heat will be rerun, or appropriate fair remedies will be applied.

### 4. **Results**

- 4.1. Cars are raced to determine rankings, 1st, 2nd and 3rd by rank, based on fastest average race time for the four heats raced.
- 4.2. Fastest Overall Pack will be determined by fastest average time for all scouts' races per Pack.

**\*Derby organizers reserve the right to make sensible modifications to the rules as required or for clarification.**