

Dear Cubmaster and Pack Committees,

The Liberty District Pinewood Derby Championship race will be held on Sunday, **April, 11th 2010** at the VFW Hall in Holliston, MA. Tigers will race at 12:00 PM. Cubs will race at 2:00 PM. Please arrive at least 45 minutes prior to race time so your scout can register in time to participate. Attached are the details of the derby location, times, and the rules that will be used in running the District Derby. Please forward this information to the parents of each boy who will be participating in the Liberty District Derby. The Liberty District contact is David McNeil (davidjmcneil@yahoo.com) 617-510-7050

1. Two derbies will be run: one for Tigers and one for Wolves, Bears and Webelos.
2. Each pack can register **up to 6 scouts**. A maximum of three Tiger Scouts and four Wolves, Bears, or Webelos.
3. Winners will be determined using an average race time method. Each car will run multiple races in various lanes, and an average race time will be calculated. Ties will be broken by a race off using the average race time method.
4. The top 5 finishers for both Tigers and Cubs will be awarded racing trophies. There will also be trophies awarded for "Most Creative Design" and "Best Workmanship".

Each pack **must** provide the name of two adult leaders who will be the pack's derby-related contacts and who will be available on site the day of the race to volunteer. We need at least 24 people from the participating packs to run the Tiger and Cub races. The District will not accept registrations for Packs that fail to provide a Derby support person.

After your pack Derby has been run, please send the registration information along with the fees listed below to the Liberty District Council office.

Yours in Scouting,

Due Dates: Pack Registration is due to Liberty District by Monday **March 22nd, 2010**.

Registration Fee: \$40. \$50 after **March 22nd, 2010**. This fee will cover all of the boys representing your pack. Registrations will not be taken after **April 5, 2010**.

.....
 Pack town and Unit number (e.g. Sudbury Pack 60): _____

Pack derby contact name and phone: _____

Race Class: Tiger or Cub		Scout Name	Scout Address	Scout Phone
Tiger 1	Tiger			
Tiger 2	Tiger			
Tiger 3	Tiger			
Scout 1	Cub			
Scout 2	Cub			
Scout 3	Cub			
Scout 4	Cub			

Please Send Checks and Registration Form To

Knox Trail Council, BSA
 490 Union Ave
 Framingham, MA 01702

Liberty District Pinewood Derby Championship
Sunday, April 11, 2010

1. Details of Derby

What: Liberty District Pinewood Derby 2010 Championships

Where: Holliston VFW Hall, 310 Woodland Street Holliston, MA 01746-1824

Phone: (508) 429-5272

When: Sunday, **April 11, 2010.**

- Tiger registration: 11:00-11:45 AM. Races begin at 12:00 PM
- Wolf, Bear, Webelos registration: 1:00 -1:45 PM. Races begin at 2:00 PM
- If a racer fails to show up on time, he will not be allowed to race
- All Scouts must be present at the time of registration and during their races.

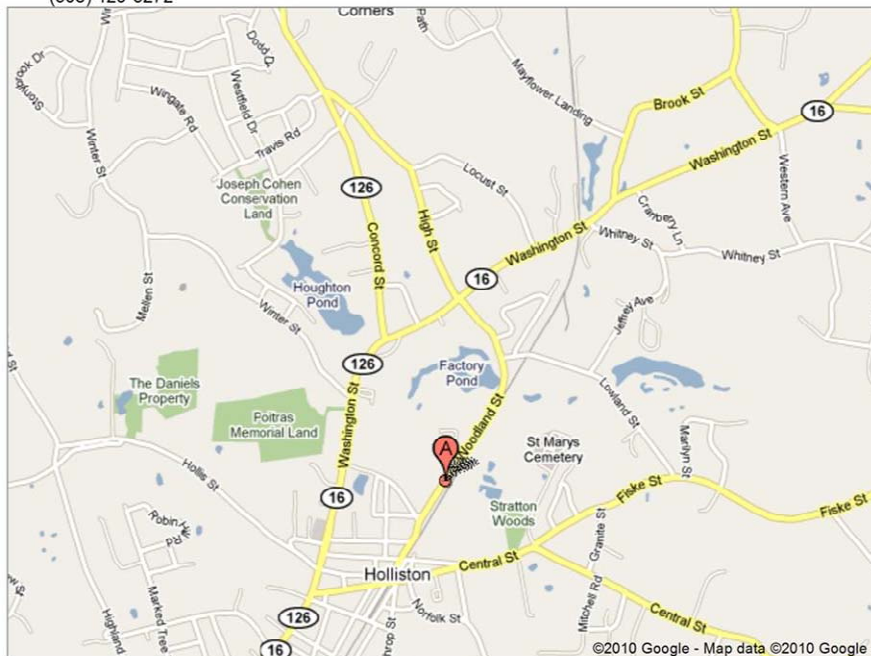
Pack Registration Key dates/information:

- A planning meeting will be held on **March 22, 2010** at 7pm in the Knox Trail Council office to review the race process, required equipment and support staff for derby. **All packs planning to attend must send a representative. This is a required meeting.**
- Registration is due to council office by Monday **March 22, 2010** with a **\$40 fee/pack.**
- After **March 22, 2010** registration is \$50.
- No pack registrations accepted after **April 5, 2010.**
- Each pack can register up to 6 scouts.
- At least 2 of the scouts racing must be Tiger cubs.
- No more than 4 scouts can be Wolves, Bears or Webelos.

District Contact: David McNeil (davidjmcneil@yahoo.com) 617-510-7050

A. **VFW Post 8507**

310 Woodland Street, Holliston, MA -
(508) 429-5272

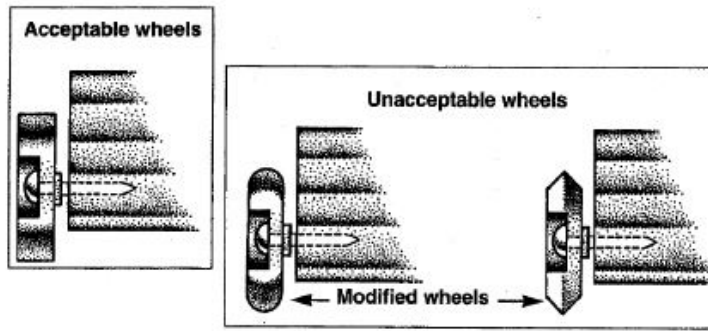


2. Trophies

- A total of 14 trophies will be awarded.
- The Tiger class will have a 1st, 2nd, 3rd, 4th, and 5th place trophies.
- The Wolf/Bear/Webelos class will have a 1st, 2nd, 3rd, 4th, and 5th place trophies.
- There will be trophies awarded for the following categories in both the Tiger and Wolf/Bear/Webelos (Cubs) classes. (A judge from the council level, who is not associated with any liberty district pack, will be appointed to select the cars for these awards.)
 - Category 1: Most Creative Design.
 - Category 2: Best Workmanship.

3. Car Specifications:

- Cars must pass a registration checklist which meets the following requirements:
 - The car must use the wood, nails and wheels as provided in an official BSA Pinewood derby kit from the current year.
 - The car must weigh 5.0 oz or less.
 - The car must be 7" or less in length.
 - The car must be 2 3/4" or less in width as measured from the outside of the wheels.
 - The car must be 2 3/4" or less in height (so it can pass beneath the finish line).
 - The car must have a minimum of 3/8" clearance on bottom for track clearance.
 - Only BSA wheels and nails are allowed. Only slight modifications to the BSA wheels are permitted. Wheel treads must not be tapered, narrowed, rounded or grooved. Wheel treads must remain flat. The below figures show examples of acceptable and un-acceptable wheels.



- Solid axels, bushings, wheel bearings, wheel springs, custom wheels or any other suspension components are **NOT allowed**. Only gravity can propel the car.
- Only graphite or white BSA certified lubricant may be used. Reservoirs (such as hubcaps) to hold graphite may mess up the track and are not allowed.

The Liberty District Pinewood Derby Committee utilizes the Cub Scout Grand Prix Pinewood Derby Guidebook as reference. The Committee reserves the right to disqualify any car entered in the derby that does not conform to the above rules. The Committee's charter is to have all registered Scouts complete the race fairly, with good sportsmanship, and with a car designed and made by the Scout.

Tips for increasing Pinewood Derby car speeds:

- Smooth all burrs from nails using a high speed drill and file/emery cloth
- Smooth all burrs from wheels especially where they touch the track or car body
- Weight should be close to 5.0 ounces and placed toward the rear of the car
- Dry lubricant (e.g. extra fine graphite) should be used on all moving part surfaces
- Parts or weights attached to the car should clear the track/starting gate

4. Registration

- a. Checklists will be provided for registration officials.
- b. The Scout must be present at the time of registration and during the race.
- c. The car will be weighed to check that it is less than or equal to 5.0 oz. If it does not pass, then the car will be returned to the cub so that modifications can be performed prior to the race.
- d. The car will be inspected to insure that the wheels and nails are official BSA. If the car does not pass, then it will be returned to the cub so that modifications can be performed. The wheels must adhere to the rules stated in Section 3, above.
- e. The car will be inspected for length, width, height, and track clearances. If the car does not pass, then it will be returned to the cub so that modifications can be performed.
- f. After passing all inspections and weigh in, a white sticker with a unique number will be placed on the car. The car is considered to be registered and can no longer be handled except by track officials. The car is then taken to the staging area to await the races.
- g. Only scouts properly registered by their packs will be allowed to race in the Liberty District Pinewood Derby races.

5. General Racing information

- a. We will be determining race winners using an average race time method. Each scout will be allowed 4 races (one in each lane), and their average time for all 4 races will be calculated by the computer software to determine the top finishers.
- b. We will use a 4 lane, 32 foot, wooden track along with race software and electronic timing to run the races. Results will be immediately determined and projected onto a screen for all to see.
- c. There will be two derbies: one for Tigers and another one for Wolves, Bears, and Webelos
 - The Tiger derby will consist of registered Tigers, and it will be run first at 12 PM
 - The Cub Scout derby will consist of Wolves, Bears and Webelos, and it will be run at 2 PM
- d. There will be a maximum 60 cars running in the Wolf, Bear, and Webelos derby. This number of cars can be run on a 4-lane track using the average-time racing method in about 2 hours. The Tiger derby will have a maximum of 44 cars, and it will take less time.
- e. Tables for holding and staging cars will be positioned behind the race starter near the start line of the track. All the cars being raced will be positioned on these tables in numerical order to facilitate locating the cars during the race.
- f. The audience is separated from the track by tables and ropes that are used to create a buffer zone all around the track. This zone is used by the runners to bring the cars from the finish area to the starting area, and it also prevents spectators from interfering with the races.

6. Racing details used to race each of the classes:

- a. A race consists of 4 or fewer cars simultaneously racing down the track. A round consists of a series of races.
- b. Cars from different derbies are not raced together. Tigers only race with Tigers, and Cubs only race with Cubs.
- c. For each race, up to 4 cars are taken from the staging area tables. (The computer program, running the race, determines which cars used for each race.) The stager hands each car to the starter who places the car in its appropriate lane.
- d. Once all cars have been placed, the announcer will begin each race by stating which car is running in which lane. Any scouts or parents who believe a car has been placed in an incorrect lane must speak up now or just after the race has completed as the software only allows the current race to be rerun. Otherwise, the race results will stand. The starter will call out "on your mark, get set, go," and the starter will race the cars.
- e. At the finish line, The Finish Line Official will place the 1st, 2nd, 3rd, and 4th place cars in a box to be returned by a runner to staging area.
- f. If parts fall off the car while racing, race officials will remove the loose parts from the track and continue racing the car. Wheels that fall off the car during a race will be repaired by the race officials, under the supervision of the Scout for a maximum of 5 minutes, so the car may continue racing. All cars undergoing repairs will be re-weighed after the repair is made.
- g. At the end of the derby, the top four finishers are displayed on the projection screen.

7. Task Assignments

Chairman (1)

- Handles task assignment and general race leadership. He is the final judge over any race related issues.

Computer Operator (1)

- Runs the computer software.

Announcer (1):

- Announces each race. At the start of each race, he reads the names of each scout and the lane in which they are racing. He announces the winners of each race.

Starter (1):

- Calls the start (on your mark, get set, go...). He places all cars at the starting gate and makes sure they are lined up properly. He starts the race by dropping the starting gate.

Stagers (2):

- They receive cars from runners during racing, and they receive cars from the registration table during registration. They give the Starter the appropriate cars for each race, and they tell the starter the appropriate lane for each car.

Finish Line Monitor (2):

- Resets car stopping mechanism, waves hand under timer for dummy cars, places cars in a box for the runners, and monitors finish line for any issues that may occur.

Registration Official (3):

- Each Registration Official performs the registration of the cars to verify the physical requirements of the cars. After a car passes inspection it is turned over to the Stagers.

Pit Official (1):

- The Pit official will maintain a table where damaged cars can be repaired. All repairs are performed at this table under the supervision of the Pit official.
- Only the Pit Official and the scout will be allowed to handle the car during repairs.
- The Pit Official must re-weigh, and measure for length, width and height of any car before allowing that car to reenter the race.

Runners (1):

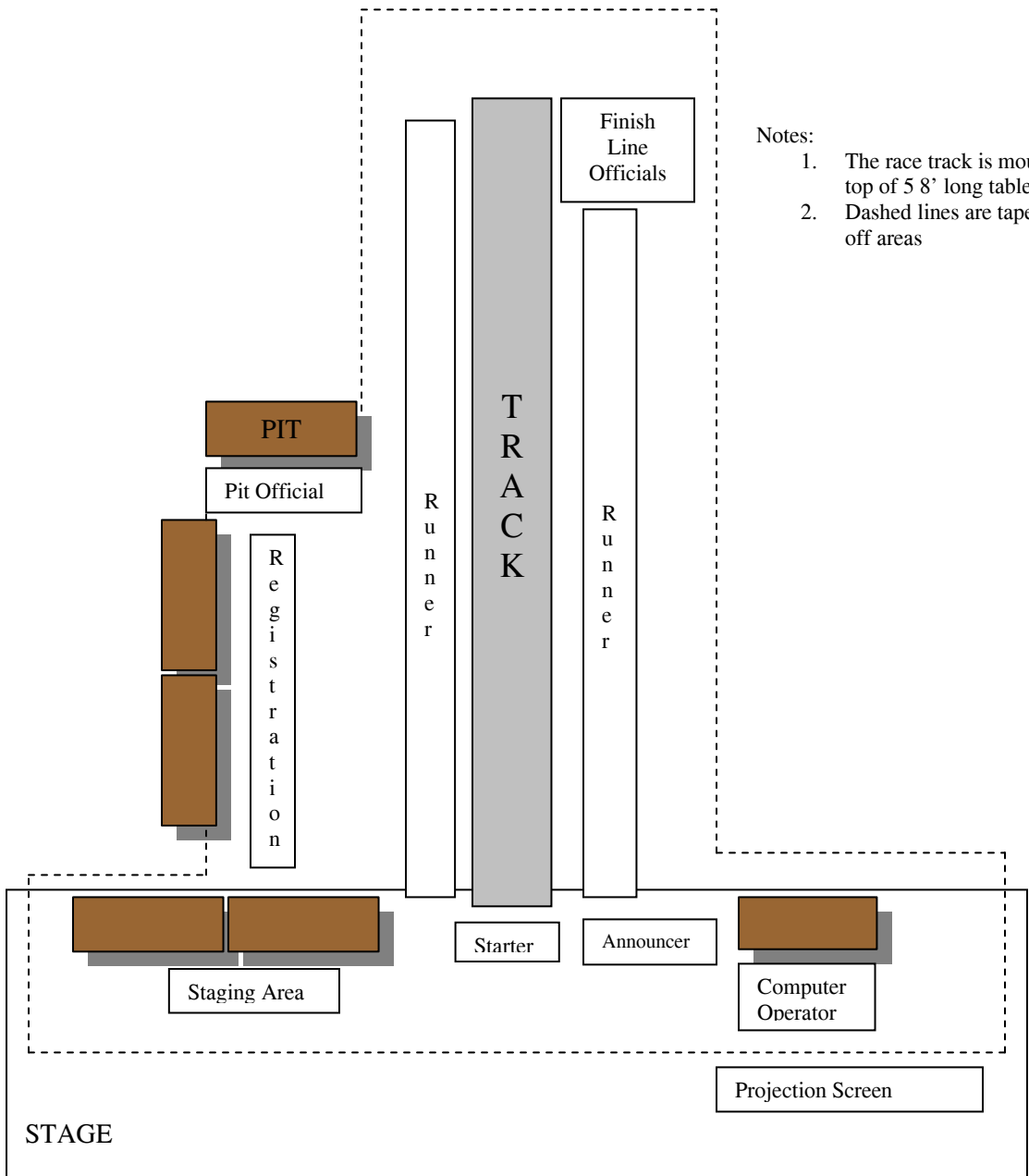
- The runners bring the cars from the finish line back to the staging area.

Setup/Breakdown (5):

- 5 people are needed to setup and take down the tables and chairs, help decorate etc before and after the races.

Concessions (2):

- 2 people are needed to manage the concession stand and clean up at end of race



Notes:

1. The race track is mounted on top of 5 8' long tables
2. Dashed lines are taped/roped off areas