2020 Western Trails District Cubmobile

Cubmobile Competition for Cub Scout and Webelos Dens

Saturday, May 30th, 2020
Riverside Park
850 Labaree Street; Watertown, WI
Potawatomi Area Council  
Western Trails District

Please Note:  
Copy this and give to each Den/Team Leader and read it completely!  
Cars must pass inspection. Be sure to follow ALL SPECS.  
Registration/Inspection begins at 8:00 am!

Registrations that arrive between May 15th and May 21st, 2020 will cost an extra $5.00/Scout.  
Please make Checks payable to “PAC BSA”

Each Scout will require a helmet, gloves, knee pads, and elbow pads for safety.

Please note the operation of the Long Push event. EVERY TEAM MEMBER PARTICIPATES!

Please wear your uniform!

All teams must PRACTICE, PRACTICE, PRACTICE before this event. This will build teamwork, confidence, and insure the best possible times in the event. It will also reduce steering related accidents in the downhill and push events.
Potawatomi Area Council  
CUBMOBILE SPECIFICATIONS AND RULES

1. All cars must meet these specifications and pass inspection. Any changes/modifications to these specifications may result in disqualification. Items added for comfort (i.e. padding) or decoration may be added if: Car specifications are not altered, and items don't pose a safety hazard to operators or spectators.

2. Car frame is made of 2 X 4 pine construction lumber.

3. The overall length of the car is a maximum of 5 feet; the wheel base is a maximum of 45 inches (measured from the rear axle) and the width is not to exceed 3 feet.

4. The front axle must be set back at least 3 inches from the front of the frame, so the safety blocks will make solid contact on both sides at once. The rear axle must be flush with the back of the main frame.

5. 2" X 4" safety blocks must be attached to the front axle ¼" from the centerboard on either side to limit the turning radius. Please see the diagram.

6. Use roundhead ¼" bolts to hold frame. Screws are a second choice. Nails are not suitable because they may work loose.

7. A support brace (axle stabilizer) made of 2" X 4" pine construction lumber may be added to the rear of the car. It must be securely fastened from the main frame to the rear axle, flush with the rear axle.

8. All cars must be equipped with solid rubber/plastic wheels and must be between 7 – 10 inches in diameter (measured from the outside edges). Pneumatic tires are not allowed.

9. If threaded axles are used the nuts must be secured with cotter pins or wire.

10. All cars must have a seat with a braced backrest so the driver can comfortably steer with his feet. Extend the backrest into a push bar (as shown in the diagram) to a height that is comfortable for the average pusher but not to exceed three feet above the ground.

11. Cars must be equipped with an adequate safety belt that is secured to the main frame.

12. The maximum weight of the Cubmobile may not exceed 45 lbs.

13. Steering is done with the feet (which are placed on the front axle, near the wheels, and the hands holding a rope fastened to the front axle near the wheels. A knot, half hitch, should be tied near the knees to keep the rope from slipping through the hands giving less control. No other steering mechanism is acceptable.

14. Drivers and pushers of the car must wear protective headgear, shoes that cover the whole foot, pads, and gloves.

15. Each Scout will get 1 competitive run. If more runs are taken than registered team members, THE FASTEST RUN WILL BE DISCARDED.

16. If a Cubmobile stops for any reason before the finish line it is considered an incomplete race and the participant is not given a timed score (DNF).

17. A Cubmobile may not be pushed by any means during a downhill race. When the driver touches the ground for any reason their run is ended at that point and is not given a timed score.

18. Cubmobiles that are damaged during the race may be repaired in the “pit,” however major modifications will not be allowed after registration.
19. Cubmobiles will be judged for creative design. You must change your design from the previous year to participate in this event!

20. The ruling of the judges is final on all matters concerning the event.

21. If a brake is installed a system for preventing use in downhill course must be used. (i.e. Bungee strap)

22. Have a great time.

23. Dens/Teams of boys/girls currently in the 1st, 2nd, and 3rd grades will compete in the Cub Scout Division. Cub Scout teams can be grade mixed 1st-3rd grades. Dens/Teams of boys/girls who are currently in the 4th and 5th grade will compete in the Webelos Scout Division. Webelos who have graduated into a Scouts BSA Troop may still compete provided he is in the 5th grade or just recently ended the school year. Teams with both Cub Scouts and Webelos Scouts will compete in the Webelos Division. 4th and 5th grade Webelos can be on mixed teams.

24. All participants must be currently registered as a Cub Scout or a Scouts BSA.

25. The cars should be built by Dens/Teams. That is all part of the experience. The Den/Team size is a minimum of 3 boys/girls and a maximum of 5 boys/girls. Teams of 3 can compete with permission from a Chairperson.

26. A Pack may enter as many cars as they wish in either division. However, a boy or girl can only belong to one den/team and each den/team must have its own car.

27. Each car must clearly display the Pack Number. Packs entering multiple cars must also display the den number.

28. Drivers must keep their feet on the axle/steering bar at all times and are not allowed to pump or push with their hand or feet.

29. Pushers must keep their hands on the push bar or driver at all times.

30. Race officials may disqualify any car or den/team for failure to conform to the rules and specifications, unsafe construction, or un-sportsman like conduct (including leaders, parents). Additional time may be assessed for other infractions. THE RACE OFFICIALS’ DECISIONS ARE FINAL

31. REGISTRATION FORMS MUST BE COMPLETED AND IN THE PAC SERVICE CENTER FOR EACH TEAM BY MAY 21st, 2020. TEAMS THAT REGISTER AFTER May 15th WILL BE CHARGED AN ADDITIONAL $5/SCOUT – NO EXCEPTIONS!!!

We will need the following information:
- Cub Scout or Webelos Division
- Name of each boy/girl on team
- One car (team) per registration form

If you have questions, please contact:
Charles Dickenson – Email – CharlesDickenson3@outlook.com; Phone – 414-699-5582
Cubmobile Rules Clarifications:

I. Contestants are REQUIRED to bring their own Bicycle helmets. They must be a legal and commonly recognized bicycle helmet with the clip chinstrap. Helmets are required (We do have helmets available in case yours is disqualified).

II. Contestants are REQUIRED to bring gloves, knee pads and elbow pads for protection. These are also required for safety. (Kneepads are available in case you do not have them).

III. Clarification to the driver change for push race - drivers and pushers will gas up as indicated in the rules page. That is basically stopping to drink water. All members of the 4-man team must participate in each part of the event.

IV. The car specs: The specifications are clearly outlined in the booklet. That means length and width must fit in the box at the event.

IV. All decorations are encouraged to be removable. If the judges feel they are dangerous, your car may be disqualified from the downhill (safety first). **This is a large event, spectators will be asked to help during the event.**

Keep your Scouts safe and be sure they have a proper fitting safety helmet for the Cubmobile and for at home!
Potawatomi Area Council
Race Day Event Guide

The Cubmobile Competition will take place at Riverside Park in Watertown, Wisconsin on Saturday, May 30th, 2020. Registration will start at 8:00 am, judging at 9:30 am, opening ceremony and parade at 9:45 am and racing at 10:00 am.

This is intended to be a FUN activity for Cub Scouts and Webelos Scouts. It is NOT intended to evolve into a "win at all cost / cutthroat competition". We ask that all leaders and parents involved encourage the boys/girls by projecting a sportsman-like attitude at all times. The race officials’ decisions are final!

**Competition will be in two divisions:**

**CUB SCOUT DIVISION** - will be composed of dens/teams of 1st, 2nd, and 3rd grade Cub Scouts for that grade they were in during the 2018-2019 school year. Teams can be mixed grades.

**Webelos SCOUT DIVISION** - will be composed of Webelos Scouts in 4th and 5th grades during the 2018-2019 school year including boys/girls that have crossed into Scouts BSA. Any team that has at least one Webelos Scout on it will compete in the Webelos Scout Division.

- All participants should wear their Class “A” uniform for all events. Each Pack should bring their Pack flag for the parade during the opening ceremony.

- Each den/team is to provide their own helmet(s) for the Downhill Dash. Knee, elbow pads race gloves are required.

- Please note the operation of the Long Push event. Every team member must participate. We strongly recommend that you practice with your boys/girls before race day.

Each team must compete in the following three events:

1. **The Big Show** – will feature judging for each car. Points will be awarded on craftsmanship, decoration/paint, creativity, and meeting specifications. A prize will be awarded for 1st, 2nd, and 3rd places in each division. The score from this event will count as 10% of the overall competition.

2. **The Downhill Dash** – will feature a downhill race where two cars will be propelled solely by gravity to the finish line. Each car will be timed. Each den/team member will be allowed to race their own car once. The top three times will be averaged to determine the den’s team score on this event. A prize will be awarded for 1st, 2nd, and 3rd places in each division. The score from this event will count as 40% of the overall competition.

3. **The Long Push** – will feature a four-lap circular course where up to four cars will race at the same time. Each den/team will be assigned a “pit” area where their team will be required to “pit” their car at the end of each lap. During the pit stop, the car must come to a complete stop; the Pit crew will pass
a cup of water to both the driver and pusher. The driver and pusher must drink the entire cup of water ("refuel") before the race can continue for the den/team.

- **LAP 1**: Refuel and change pusher and driver;
- **LAP 2**: Refuel and change pusher and driver;
- **LAP 3**: Refuel and change pusher and driver;
- **LAP 4**: Refuel ending the course for that team.

This event will be scored on time. Deductions will be assessed for failing to come to a complete stop prior to refueling and leaving the "pit" without a green flag signal from the race official. All team members will either drive or push or both and act as the "pit crew". Other infractions may result in disqualification. A prize will be awarded to 1st, 2nd, and 3rd place den/teams in each division. The score for this event will be counted as 50% of the overall competition. Trophies will be awarded to the 1st, 2nd, and 3rd place dens/teams in each division based on the lowest combined score for all three events.

The Cubmobile trophies will be awarded to 1st, 2nd, and 3rd place teams in each division on the lowest combined score of all three events.

**GUIDELINES FOR JUDGING THE BIG SHOW**

All of the Cubmobiles will be inspected for the minimum requirements at the time of registration. This will include safety equipment, such as seat belt and helmet and also the checking of the overall dimensions, correct-sized wheels and the secure attachment of all the parts of the vehicle.

The "Big Show" will feature judging of each car by 3 – 5 neutral judges. Points will be awarded based on the criteria mentioned later. The score from this event will count as 10% of the overall competition.

Judges will score each category with a point value of 1 – 5, with 1 being the best. More emphasis should be put on work done by the Cub Scouts, as compared to work done by adults.

While reviewing the Cubmobiles, judges should give attention to the age of the boys/girls. The 100 series numbers are assigned to cars in the Cub Scout Division, 1st, 2nd, and 3rd graders (about 7 – 9 year olds). And the 200 series numbers are assigned to the Webelos Division, 4th and 5th graders (about 9 – 11 year olds).

1) **Craftsmanship** – is it clean, sanded, rounded corners and limited sharp edges
2) **Decoration** – paint (application), added items (flags, banners, personal touches)
3) **Creativity** – has the basic idea and specifications been improved on with individual ideas
4) **Functional** – are necessary items included in the design
5) **Safety** – certain safety items are required; are there any extra items to enhance safety
6) **Tolerances** – when all else fails and certain Cubmobiles are rated equal to others; look to see how well the vehicles meet the tolerances as spelled out on the specification sheets available to each participant.
Remember the Sportsmanship Cup...

What Is Sportsmanship?

Sportsmanship is defined as:
• playing fair
• following the rules of the game
• respecting the judgment of referees and officials
• treating opponents with respect

Some people define good sportsmanship as the "golden rule" of sports — in other words, treating the people you play with and against as you’d like to be treated yourself. You demonstrate good sportsmanship when you show respect for yourself, your teammates, and your opponents, for the coaches on both sides, and for the referees, judges, and other officials.

But sportsmanship isn't just reserved for the people on the field. Cheerleaders, fans, and parents also need to be aware of how they behave during competition. Sportsmanship is a style and an attitude, and it can have a positive influence on everyone around you.
Cub Mobile Specs and Parts

Use these type fasteners—nails will not hold.

Frame - 2 x 4
52" Long

Steering Bridge - 1/4" Nylon Rope

7-1/8" Dia. wheels from lawn mower, wagon, tricycle, barbecue, etc.

Seat - 1/5 x 20" 3/8" 3/4 plywood

Seat Back - 8 3/4 x 20" % plywood

Sheet Metal - Square prevents turning

Carriage Bolt

Lag Screw

Machine Bolt

Wheels

Flat Washer

Flat Washer

Axle

Lag Screw

Drill Holes

Frame - 2 flat washers

Front Axle

Washer, Nut

Second nut tightened against first to lock

Brake - 1/4"

Nail strip of old tire to brake.

48" Wheelbase

Frame - 2 x 4
52" Long

Safety blocks to limit steering angle

No More Than

3'

Plywood Bracke - one each side

Helmets for 'long push' provided by race officials
Race Day Track Guide

Highland Avenue - Closed

Start

Parking Area

Grassy Area & Hill

Big Show Area

Registration & Scoring

Well House

Finish

Basketball Courts

Labaree Street

Pool Area

Baseball Diamonds

Push Race Area
# Cubmobile

**Den/Team Registration Form**

This form must be turned in at registration. It should be completed prior to race day. Remember we need to know you are planning to attend so please pre-register with the Council!!!

Pack #: _____ Location: ______________ Den #: ___ Leader: ______________

Please Circle One: Cub Scout Division Webelos Division

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1. The Big Show

   Total Score

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2. Downhill Dash (Times)

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3. The Long Push

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Total Score: _____________ Ranking: _____________

10/28/2019