

The Raingutter Regatta is similar to the Pinewood Derby or the Space Derby except that the models are miniature sail boats. Although the seas are only 10-foot lengths of raingutter filled with water, and the ships a mere 6 inches long, the race is a very exciting event. Each boy builds his own boat with supervision and help from parents or other family members. He also provides the wind for the sail with his own lung power.

The regatta boat kit, available from the Scout Shop, has a pre-shaped balsa hull, metal keel and plastic sail. The hulls are sanded and shaped, and are colorfully painted. Hull and sail are then decorated with decal kits (also available at the Scout Shop). The boats race in pairs on raingutter courses propelled by the boys blowing into the sails.

## **Boat Construction**

- 1. The boat must be newly built for the current Cub Scouting year. As much as practical, the boat should be substantially built by the Scout with parental supervision. The boat should use every part from the BSA Raingutter Regatta Kit. Additional parts, decals, paint, and glue are permitted.
- 2. Hull:
  - Only the hull provided with the official BSA Raingutter Regatta kit may be used. However, it may be modified.
  - Hull may be no longer than **7 inches**, not shorter than **6** ½ **inches** and no wider than **3 inches**.
- 3. Mast:
  - Only the mast provided with the official BSA Raingutter Regatta kit may be used. However, it may be modified.
  - Mast must be upright and can be no taller than 61/2 inches from deck to top of mast.
- 4. Sail:
  - Only the sail provided with the official BSA Raingutter Regatta kit may be used.
  - o The sail may be glued to the mast or held in place in some other fashion.
- 5. Keel & Rudder:
  - Only the the keel and rudder provided with the official BSA Raingutter Regatta kit may be used and must be used <u>without</u> modification.
- 6. There is no restriction on color or design.

## **Race Rules**

- Boys, when called to race, place boat in gutter and place one hand in front of their sail holding the boat back against the end of the gutter, they hold the straw in their mouths with the other hand and get ready to blow on the word "GO" from the judges.
- When racing boys are allowed to "upright" their boats with their hands, but, cannot push
  the boats forward when doing so. We will give one warning and run the particular race
  over if one boy pushes his boat ahead AND that boat wins. We will have to eliminate a
  boy from racing if he pushes his boat on the restart of a race. We don't want to eliminate
  a boy from racing.
- THE BOY MAY NOT ADVANCE THE BOAT WITH HIS HAND AT ANY TIME.

## Tips

- The lighter the boat, the faster it will go. However it can be less stable.
- Be careful not to make your boat to heavy. A heavy boat sits lower in the water and may cause the keel to drag on the bottom of the gutter (see "Water Depth" below).
- Blowing is typically not a matter of how hard, but how straight.
- Consistent blowing is better than large puffs.
- Ensure that your sail is fastened to the mast to keep it from spinning when it is blown on.
- The gutter dimensions are as follows:
  - Length = 10 feet
  - Width = 4 ¼ inches
  - Water Depth = 2 inches