

Model Solar Boat Challenge

RACE RULES & CATEGORIES

There are 2 main categories:

- A. boats with between two & four doubled PV cells
- B. boats with remote controls with between two & twelve PV cells

All categories are "open" with respect to ages and materials used.

- No more than 2-4 or 2-12 (depending on the category entered) standard Solar-active solar cells are allowed on each boat.
- The number of PV cells on a boat may be altered during the challenge to allow a boat to compete in more than one category.
- The solar cells must not be modified in any way, for example by cutting away edges to reduce weight.
- Engine choice for the boat is unlimited (i.e. size, weight, voltage, capacity etc.)
- Hull type/construction materials/weight etc is unlimited
- Propulsion method is unlimited (e.g. air propeller, screw, paddles etc.) BUT the engine must be entirely powered by solar cells with NO batteries or other form of energy storage method used for propulsion - ie. if there's no light there should no thrust/movement.
- Batteries may only be used for powering remote control equipment
- Entrants are limited to the following dimensions:
 - Length: 100cm
 - Width: 75cm
 - Height: no limit (above water)
 - Depth: 30cm (below water)
- Any advantages gained by the wind **MUST** be incidental. If the adjudicators deem the boat has been designed to gain an "UNFAIR" advantage from the wind may be disqualified.

Races

Race A

Sprint: Uncontrolled 2-4 panelled boats over a straight course (40m in length) the cordoned area is 3m wide and 40m long the number of boats in each heat will be set on the day (depending on the number of entrants) 3-5 boats being the probable number.

Race B

Remote control circuit: The boats will be raced in pairs around three buoys set in the form of an equilateral triangle (length of each side of the triangle = 10m). The start of the race will be 10m from **two** of the three buoys there is no limit as to the direction a boat must travel round the buoys but all three must be rounded and the boat returned to the start line to finish (i.e. a minimum race length of 40m).