**Wind-Powered Sailboat**

**The Boat:**

must fit into a 50 cm sizing cube at all times during the event. The base of the boat must be hand-made using common hobby materials. For the remainder of the boat, it is legitimate to buy components from a hobby or toy store. It is also acceptable to modify a ready-made toy for this challenge. The use however of a pre-assembled project or a kit is not allowed. The judges reserve the right to veto any design that they deem counter to the spirit of the rules. Check in advance if you are unsure.

**The course....**

is in an artificial pond 14 ft long by 4 ft wide by 4 in deep (measurements accurate to within +/- 1 inch). Box fans will be placed along the left edge of the pond, blowing across the course to the right as shown below. Timing beams will be placed 3 ft from each end to make a 8 ft long course (measurements accurate to within +/- 1 inch). The boat must have a flag (suggestion: at least 5cm by 5 cm - stiff opaque plastic) that extends above the water to break the timing laser beams (which are located 10 +/- 2 cm above the water’s surface).

**The race....**

The entire boat is to be released entirely behind the start line. It may not be touched after this, and must travel the course "on its own". Boats are allowed to touch the side of the course but not the bottom. Timing will begin and end when the flag breaks the timing laser beams. It is the responsibility of the team to ensure that the flag breaks the timing beam before any other part of the boat. The score for this event will be based on the time to complete the course. Boats that do not complete the course will be given a certain minimum participation score. Teams will be allowed two trials, the better time will count. If a boat becomes stuck, that counts as a trial. Teams will have 5 minutes between trials to make modifications. The teams will be allowed to operate only in an area behind the start line.

**The fine print....**

The judges reserve the right to veto any design that they deem counter to the spirit of the rules and their decisions will be final. Please ask them in advance for clarification or adjudication in order to avoid disappointment on event day.