

CAPT Lake Compounce Contest 2002 Hovercraft Derby

The objective is to design a hovercraft that will slide down a ramp and continue for the greatest distance.

HOVERCRAFT

- The hovercraft must only use the potential energy given it by virtue of the launch height for forward propulsion.
- The launch direction may be determined by the judges, that is to say the hovercraft should be fore -aft symmetrical.
- The craft must fit in a 40cm long x40cm wide x 60cm high box that
- The hovercraft must carry a payload of 2 kg consisting of 2-1kg lab masses to be provided by the organizers.
- Levitation must be provided by methods completely contained on the craft. These may be battery, solar (the contest will probably be indoors), inflated balloon(the balloon may exceed the above fit dimensions), elastic wound motor etc.

COURSE

- The ramp will be 8 feet long.
- Each hovercraft will be launched with its back edge to the edge of the ramp.
- One end of the ramp will be elevated 2 feet while the other will rest on the floor.

PRIZES

- Three greatest distance winners will win \$100, \$75 and \$50

ELIGIBILITY

- Students may work in teams with 1-4 members
- Teams must have a CAPT member sponsor

SUGGESTIONS

- Take apart a hair dryer or dustbuster to get the compressor.
- Use plastic, Tyvek or an inner tube for a skirt.