

CAPT 2001 Competition -Pencil Launcher

Thursday May 17,2001 at Lake Compounce, CT

Object

Build a vehicle that will travel a certain distance and automatically launch a pencil into a target area.

Design Specifications

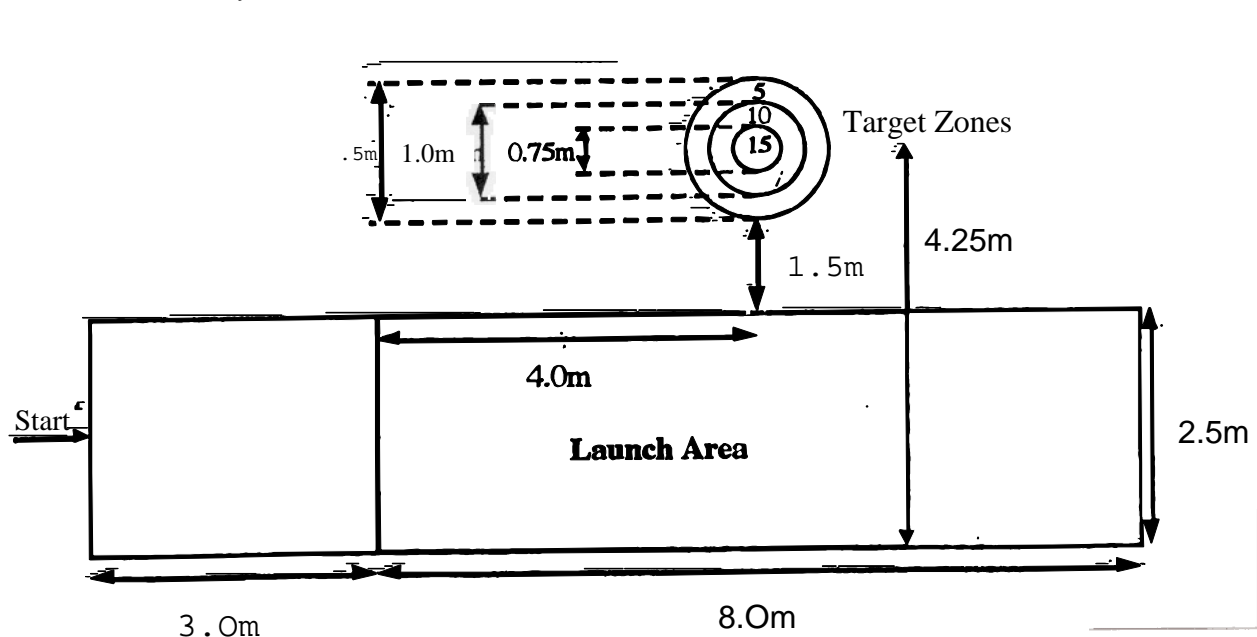
The vehicle must fit inside a box 30 cm wide by 50 cm long by 50 cm high. It may be powered by any source. The vehicle must start from rest without any supports or push off, that is, it must start under its own power. The pencil missile must be mounted on its launcher at an angle of 45' or greater to the ground and fired automatically. An additional source of power may be used to launch the missile.

Materials

There are no material construction limitations for the launch vehicle. Any source of power may be employed (batteries, rubber bands, mouse trap, springs, compressed gas etc.). No chemical or explosive devices or radio control systems may be used. No AC power source will be allowed. Compressed gas must fit on the vehicle (CO2 cartridges) The missile must be a new, standard size, unsharpened wooden pencil. It may not be modified in length or width, but fins may be used if desired. The eraser must be intact since a substance will be placed on it to mark the impact point in the target area.

Contest Conditions

The vehicles will compete on a level area at the park whose boundaries will be as shown in the diagram below. The vehicle must start from rest, move to the launch area, and fire its pencil while in the launch area. The vehicle must stay within the boundaries of the launch area at all times until after the launch. Each contestant will have two official runs. Points will be awarded as shown in the diagram. The scores from each run will be added and the vehicle with the highest total will be the winner. Ties will be resolved by an additional runoff.



Teams are eligible from any Connecticut High School with a CAPT member coach.
First Prize \$100, Second Prize \$75, Third Prize \$50.

Team registrations must be received by May 7, 2001. To register, send: school name, team members' names, coach's name and phone number, and brief vehicle description to Hans Drenkard, 68 York St. Stratford, CT 06615 or THSPHYS@AOL.com