

Info about the 26th Litec Invitational

Date:

Dec 12, 2005

Place:

Armory, RPI

Prizes:

iPod Mini 4GB (first prize)

iPod Shuffle 1GB (second prize)

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Rules for Blimp Version of Invitational:

(The following rules are subject to change.)

The challenge is to cross the Armory floor while maintaining altitude. Teams are timed, so if more than one team succeeds, the best time wins. If the blimp rises too high or drops too low, the run is stopped and traveled distance is recorded. In the event that no team crosses the entire floor, then the winner will be the team that traveled the furthest before violating the height requirements.

- 1) Limit the sign up to 10 teams.
 - a. If more than 10 apply then Lab 6 response curves will be used to determine the 10 “best” teams. Plots for altitude control on a blimp are rated first. Teams without altitude response plots may submit heading response plots with the understanding that these will only be considered if fewer than 10 teams supply altitude plots.
 - b. So all teams should email their response curves to their grading TA.
- 2) Runs
 - a. Each team will have two ½ hour run times. The team can attempt as many runs as they desire within the time slots.

- b. We will determine which blimp each team will use for their runs.
- c. We will provide charged batteries at the beginning of each run, as best we can.
- d. The team must request that a run be timed. Otherwise runs are assumed to be practice and don't count.
- e. The team will indicate when they are ready and the timer will initiate the start of the run. Up to that point, a team member may hold the blimp up. The team member must just release the blimp and may not push it forward.
- f. The blimp must stay within the stated altitude range, yet to be determined. If it exceeds the range by either going too high or low, the run stops. The TA will mark the forward progress. If no teams make it completely across the floor, then the team that came the closest wins. It is the distance to the end line that matters not the total distance traveled. (Blimps that wander don't receive credit for sideways motion.)
- g. Difficulties due to air currents and stray magnetic fields are to be expected and are part of the challenge. So luck is a factor.