

- 1) Race start times are 9:30am, 12pm and 2:30pm.
- 2) The competitors will be grouped by land vehicles and air vehicles (ground goes first).
- 3) The race is run against a clock. Best time out of 3 attempts will be kept.
- 4) Each entrant will start their run at the completion of the previous entrant's run. For that reason, it is suggested that entrants be prepared to start at the official start time (9:30, 12, 2:30). We will be bringing teams to the starting line two flights before their run. So if you are team 11, you will be expected at the starting line ('on deck') when team 9 is beginning their run. If your name is called and you're nowhere to be found, you lose your turn and we start the next team.
- 5) All vehicles must circumnavigate the SparkFun building.
  - Ground vehicles are only required to go around all four exterior walls of the building. No course will be marked. No environmental modifications allowed (competitors may not put down tape, IR beacons, or any other semi-permanent marks).
  - Non-ground vehicles must also go around all four exterior walls of the building. Weather permitting, balloons on long freaking strings will be launched from the four corners of the building. The balloons will serve as guides for the judges/competitors as to the location of the corners/walls of which the non-ground vehicles must circumnavigate. Regardless of weather/wind, the vehicles must clear the four exterior walls/corners of the building (not the balloons), verification of clearing the vertical plane will be up to the four line judges.
- 6) All vehicles must cross the starting line to begin the race, go around each corner of the building and cross the start/finish line to finish.
  - Non-ground vehicles will be awarded extra merit for lower relative altitude, autonomous take-off and autonomous landing:
    - Autonomous take off is worth a 15 second reduction in time
    - Autonomous landing within the indicated box is worth a 30 second reduction in time
    - Autonomous landing outside if the indicated box is worth a 15 second reduction in time (cartwheels are encouraged)
    - Maintaining a height below the tops of the balloons is worth a 15 second reduction in time
- 7) If a vehicle fails to complete its run, the total number of successfully navigated turns and distance will become the team's score rather than the time. Completed distance takes precedence over time. Example: a  $\frac{3}{4}$  completion in 2 minutes beats  $\frac{1}{2}$  completion in 1 minute. Ultimately, the best time for a full lap takes the cake.
- 8) All vehicles must be fully self-contained during the autonomous run (it's got to be thinking for itself, all on its own). No decision making ground stations are permitted.
- 9) Awards will be given for best time (air and ground), best ingenuity, most unique, most dangerous, people's choice, etc.