

RULES

Team Structure

Teams are limited to a maximum of 6 students and a maximum of one RC Plane. Professional competitors, faculty, advisors or non-students are NOT permitted.

Design Constraints

- The plane must fit easily inside a box with dimensions of 1m x 1m x 1m.
- Propeller diameter should not be greater than 10 inches.
- Battery weight should not be more than 120 gm.
- Only electrical motors are allowed.
- The use of IC engines or any such other means of providing thrust is prohibited.
- Use of gyroscopes (gyros) and programming assistance in receivers is prohibited.
- Only one team member may operate the aircraft.
- Note: Failing to meet the required design constraints will result in reduction of 50% points for that round for the team.

COMPETITION FORMAT

The competition requires the participants to design and fabricate an RC Plane (no Readymade Planes or RTF's are allowed) and perform a set of manoeuvres. Propellers, Motors, ESC, Servos, Receiver, and Transmitter are allowed as off-the-shelf items.

Qualifier Rounds

The best measure of the design of an aircraft can be done by climbing and gliding time.

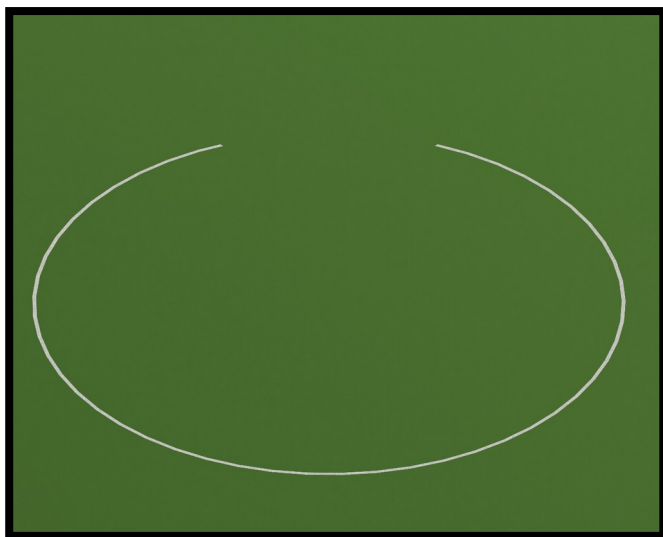
In this round, teams are required to direct their aircraft to climb for 15 seconds. Once completed, teams will need to perform a dead stick flight (throttle=0 or Gliding) and land the airplane safely in one piece (If the propeller breaks during landing, it will still be considered a safe landing otherwise the feat will not be considered). The plane will take-off from a 15m circle and is required to land in the same circle. The pilot will be standing inside the circle the entire time (from take-off till landing).

Score: Teams will be awarded points based on the glide time of the aircraft and the landing.

Note - Points for landing will be awarded on the basis of the distance between the point of first contact of landing and the centre of the designated landing zone. Less the distance, more will be the points.

The top 5 teams will be qualified for the final round.

Pictorial view of the arena:

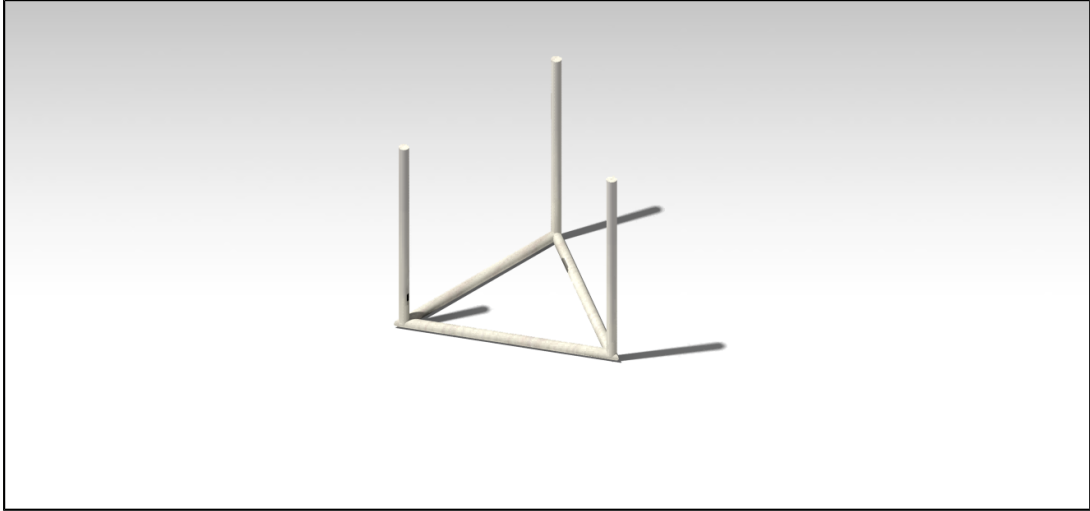


Final Round

After completing the gliding task, the pilot will be escorted to another area where he/she will complete additional take-offs, and aerial exercises (flying the plane in circular motions around poles) and landing. The time limit for this round is 50 seconds.

Score: Points will be awarded on the basis of maximum number of rounds completed.

Pictorial view of the arena:



Standings & Awards

1st Place: 20,000INR

2nd Place: 12,000INR

3rd Place: 8000INR

1st, 2nd and 3rd place award certificates will be issued (hard copy) to each team member accordingly.