HALDIA INSTITUTE OF TECHNOLOGY

PRAYUKTI 2023

ANNUAL TECHNO-MANAGEMENT EXTRAVAGANZA

APRIL 3rd – 6th 2023

UDAAN

Build your RC Plane which is aerodynamically sound and within the specified dimensions to achieve a successful flight. The RC plane should be able to take off, land, and can-do maneuvers. Performance of the RC Plane in all the Rounds/Arena will be evaluated individually.

TEAM MEMBERS

- A maximum of four members is allowed in each participating team.
- Members can be from the same college/school or different (school/institute).
- Professionals are not allowed. Only students can participate.

PROBLEM STATEMENT

Build your RC Plane which is aerodynamically sound and within the specified dimensions to achieve a successful flight. The RC plane should be able to take off, land, and can-do maneuvers. The competition has 2 Rounds i.e., one preliminary round and the final round. Performance of the RC Plane in all the Rounds/Arena will be evaluated individually. Team Scoring the maximum points in the final round will be nominated as the Winner of the competition.

RC PLANE DIMENSIONS

- The RC Plane dimensions should not exceed the following: **Wingspan 150 cm, Max. weight should be less than or equal to 2kgs (including battery and other onboard components).**
- Competitors are free to use any RC Plane material and any BLDC Motors, Electronic Speed Controllers, Propellers, Batteries, etc.
- Ready-made toy RC plane kits are strictly prohibited.
- Construction: Design and construction of the RC plane should be primarily the original work of the team and must justify the dimension's parameters for the competition.

PRE-GAME SETUP:

Knowledge City, ICARE Complex, HIT Campus, Dist. Purba Medinipur, HALDIA-721657, West Bengal

- Competitors are supposed to report 5 minutes prior to the commencement of the game failing to which will risk disqualification.
- The RC Plane will be evaluated on various parameters such as design, construction, and innovation.
- Every aspect of the RC plane will be observed for scoring, which includes the connection of various parts, fixing of components, materials used, aeromodelling etc.
- Participants are required to register their planes a day prior to the event and will have to use the same plane for the entire event.

FINAL GAME SETUP:

FIRST ROUND (PRELIMINARY ROUND)

The first round is a no-elimination round and comprises 2 segments.

- **Segment one:** Participants are required to glide the plane in the air as long as possible. A window of 30 seconds will be given, after which the participant will not be allowed to give any further throttle. Scoring for this segment will be done based on the duration of the glide after switching off the throttle.
- **Segment two:** Segment two will be a quiz round to determine and assess the working knowledge of the participants.
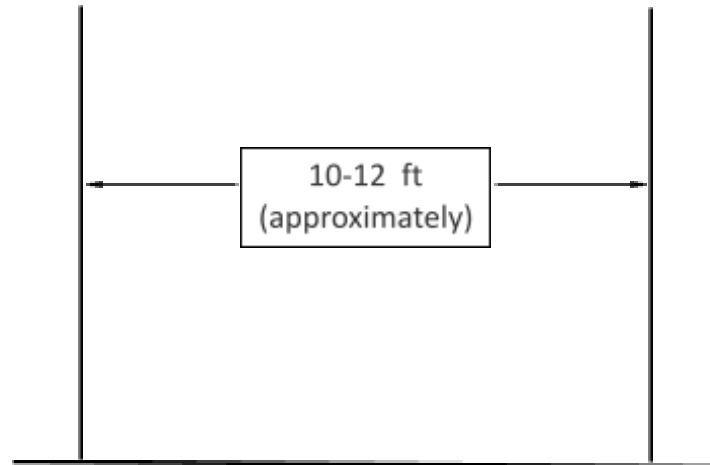
SECOND ROUND (SCORING ROUND)

In this round you have to do maneuvers in a limited time (5 Minutes) and collect points

- Complete round across the course   [1 point] Move through obstacles [2 point]
- Immelmann turn   [5 point]
- Inside loop   [7 point]

FAIR PLAY AND BEHAVIOUR

- A RC plane that causes deliberate interference with other planes or damage to the field will be disqualified.
- Team members who cause deliberate interference with RC planes or damage to the field will be disqualified.
- It is expected that the aim of all teams is to play a fair and clean game.
- Participants who misbehave may be asked to leave the competition area and risk being disqualified from the contest.
- The rules will be enforced at the discretion of the referees, officials, and local law enforcement authorities.

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10-12 ft
(approximately)

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