

GENERAL RULES

- Contestants will have to register online. On spot registrations can also be done.
- The students must carry valid student ID cards of their college which they will be required to produce at the time of registration.
- A team may comprise a maximum of **FIVE** participants.
- Readymade kits are NOT allowed. Usage of Ready-to-Fly (RTF) and Almost-Ready-to-Fly (ARF) kits is strictly prohibited.
- Teams should note that the place where flight testing is done is an open area; hence changes in wind direction may occur. The organizing committee will not be responsible for any change in weather at the time of testing.
- The glider has to be as per the specification mentioned below.
- A team is permitted to compete **with more than one glider of same/different design** and that design can be registered only once.
- Any team that is not ready at the time specified will be disqualified from the competition automatically.
- The glider will be checked for its safety before the event and would be discarded if found unsafe for other participants and spectators.
- The organizing committee won't be responsible for any damage done to the glider during the course of the event.
- The teams must adhere to the spirit of healthy competition. Judges reserve the right to disqualify any team indulging in misbehavior.
- Judges' decision will be final and binding.

EVENT FORMAT

- In this event, contesting teams must **build a Glider**- an aerial reconnaissance vehicle.
- The glider must be unpowered. **The glider can be either chucked by hand or a suitable mechanism can be built by the competing team for providing the initial thrust.**
- **A Hard copy of the report** spanning one page has to be submitted by the teams on the day of the event regarding their glider construction procedure , materials used, design aspects etc , which will be the judging criteria of your glider in case of a **tie**.
- The event shall consist of **2 rounds** - one preliminary and a final round.
- In the **preliminary round**, the participants are required to chuck the glider by hand to a maximum horizontal range and glide for the longest time period (Fig 1).
- The teams clearing the preliminary round qualify to the final round.
- In the **final round**, the teams are supposed to chuck their glider again by hand but here it is tested for maneuverability. The glider is required to go through a pre designated path and then maneuver across the given arena and crossing each checkpoint (Fig 2).
- Each team will be given **THREE** trials in each round and the best score from the three trials will be considered for the final scoring.
- The teams will have to bring their own radio control equipments (if using any) and the organizing committee **won't** be providing any.

GLIDER SPECIFICATIONS

- Maximum wingspan of the glider must be **1.5 m**.
- Maximum weight of the glider should be less than **1kg**.
- Any material may be used for fabrication of glider.
- Use of IC-engines in any form is not permitted.
- The initial thrust to the glider is provided by means of **chucking by hand/a mechanism built by the team itself** only.
- Participants can use a maximum of 3 servo motors only for control surfaces.

ARENA SPECIFICATIONS

The height of the building from which the participants will be launching their glider is 9 meters in and flight area of 35 m X 25 m.

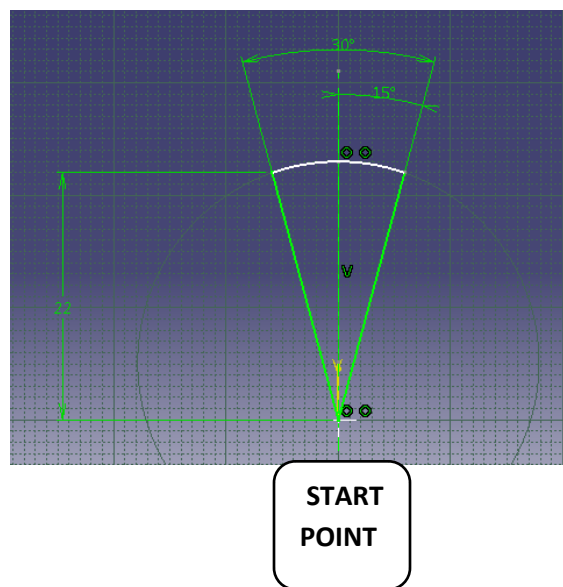


FIG 1 (dimensions in meters)

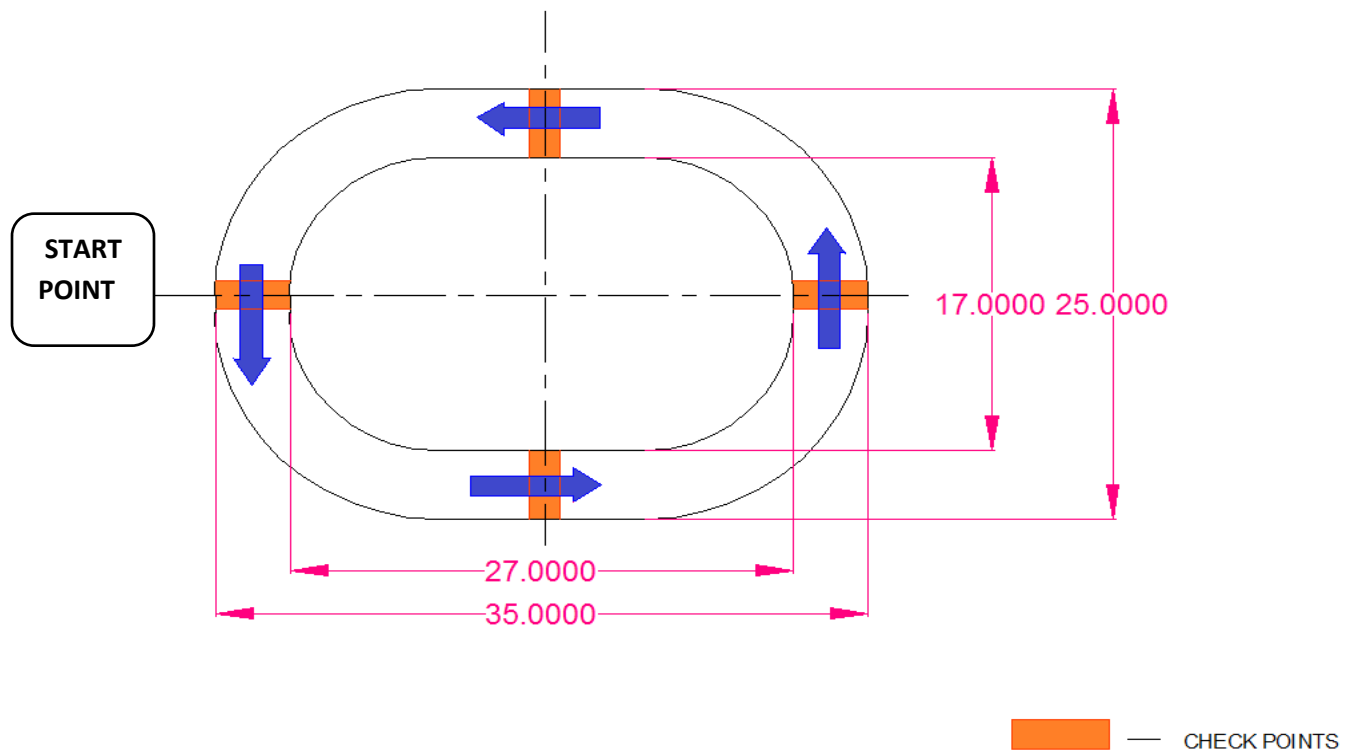


Fig 2 (dimensions in meters)
 Arrows indicate designated flying zone
 (NEEDS TO BE CHANGED TO SOME CIRCULAR STRUCTURE)

JUDGING CRITERIA & SCORING

The following will be considered while judging the glider:

Preliminary Round	- 40 %	(Gliding TEST)
<i>Horizontal range achieved</i>		15
<i>Good gliding (maximum time in air)</i>		20
<i>Safe landing</i>		5
Final Round	- 50 %	(Maneuverability TEST)
<i>Good gliding (maximum time in air)</i>		20
<i>Number of checkpoints reached</i>		20
<i>Safe landing</i>		10
Report	- 10%	

Design & construction	7
Material used	2
Other details	1

Design & construction: More weightage for the glider with less weight to wingspan ratio.
Minimum distance of 7 meters has to be covered by the glider in Preliminary round.

**Safe landing for gliders with control surfaces is defined as landing under complete control of the plane and for uncontrolled planes it is decided based on the impact due to landing.*

**Glider is defined completely unpowered flying machine. (For more details check <http://science.howstuffworks.com/transport/flight/modern/glider1.htm>)*

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