

□ INNOVATEX 4.0 – Presidency University

MakerSpace Cluster | AERO GLIDERS|RULE BOOK

□ Event Overview

Field	Details
Event Name	AERO GLIDERS
Cluster	MARKERSPACE
Event Type	AERO
Mode	OFFLINE
Team Size	4 Per Team
Duration	Half Day

□ Event Task / Objective

AERO GLIDER is a creativity and aerodynamics-based competition where participants design, build, and launch gliders. This rule book provides all official guidelines to ensure fair play, safety, and smooth event execution.

□ Design / Technical Specifications

1. Materials Allowed

The following materials may be used for building the glider:

- depron sheet, balsa wood, foam, sun board .

2. Glider Measurements.

Participants must ensure their glider fits within the following measurement limits:

1. Overall Size

- Wingspan: 45 cm – 80 cm
- Length (nose to tail): 35 cm – 55 cm
- Height (with vertical fin): 10 cm – 16 cm

2. Wing Dimensions

- Main Wing Chord (width): 10 cm – 15 cm
- Wing Thickness: 4 mm – 8 mm (foam/balsa)
- Dihedral Angle: Up to 12° (optional but increases stability)

Total Wing Area:

Approx. 450 cm² – 900 cm²

3. Tail Dimensions

Horizontal Stabilizer (Tail Wing)

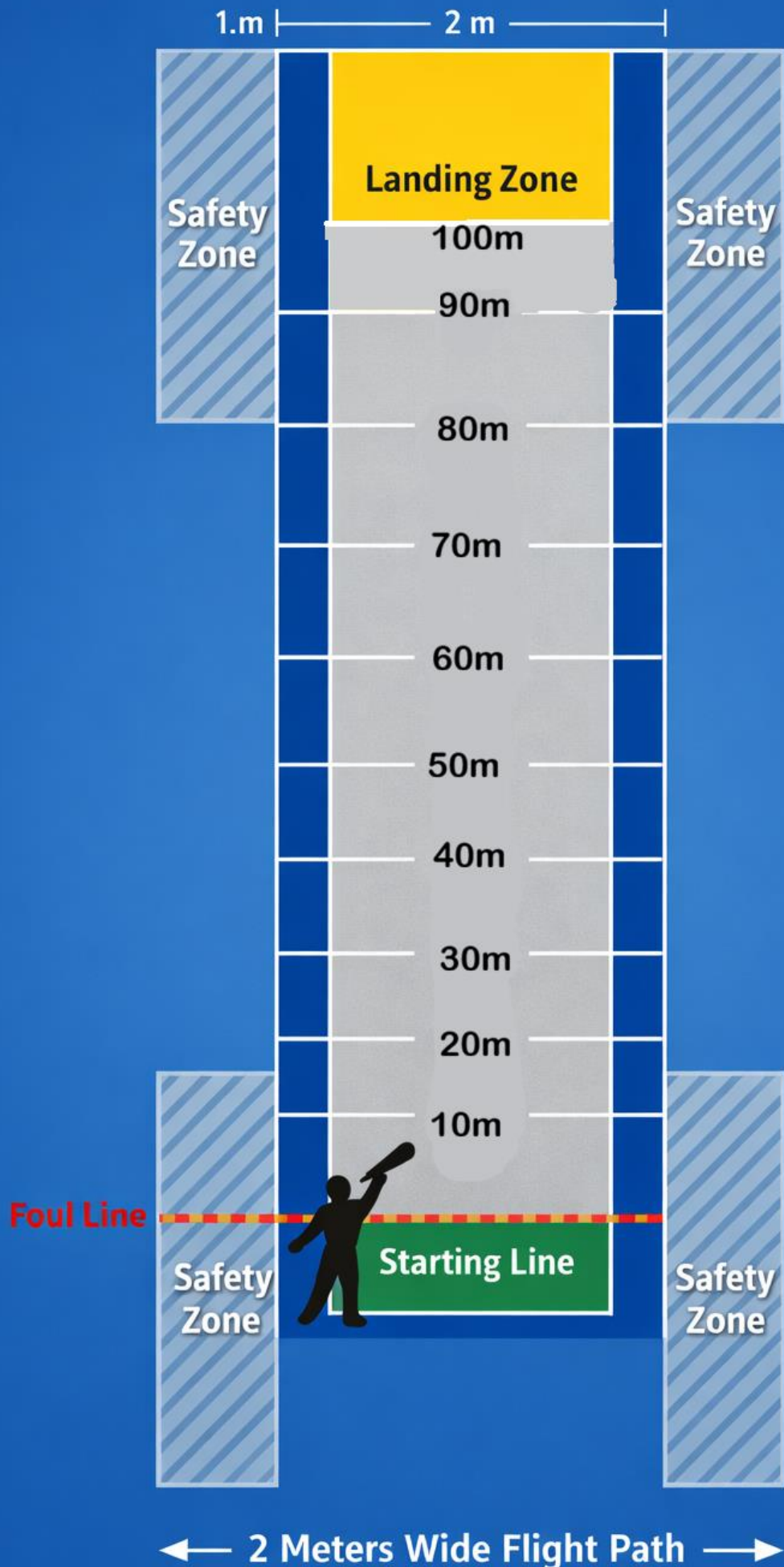
- Width: 15 cm – 25 cm
- Chord: 6 cm – 10 cm

Vertical Stabilizer

- Height: 8 cm – 14 cm
- Base Width: 5 cm – 8 cm

Arena measurements:

Model Glider Distance Competition



Arena rules:

1. The gliders should be inside the given 2m wide path.
 2. If the glider goes out of the path they will be disqualified.
 3. If the glider goes out and comes in. Negative time will be awarded according to the violation done.
 4. If many gliders cross the given limit line. Then the quickest will be considered.
 5. Crossing the given line while launching it will be considered as penalty.
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General Guidelines

1. Teams must report to the event venue at the scheduled time.
 2. Participants must follow all instructions given by the organizers.
 3. Use only materials that are allowed by the coordinators.
 4. Misconduct, cheating, or tampering with another team's glider will lead to immediate disqualification.
 5. Mobile phones are not allowed during evaluation unless permitted.
 6. Teams must maintain discipline and respect towards judges, volunteers, and other teams.
 7. The decision of the judges will be **final and binding**.
 8. misbehavior and bad attitude will not be entertained which leads to immediate disqualification.
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Safety Rules

- Only permitted tools and materials may be used.
- Participants must avoid sharp or dangerous objects.
- Running in the launch area is strictly prohibited.
- Follow all safety instructions given by the coordinators.

Event Rounds / Structure

Round	Description	Duration
Round 1	Idea Submission	1-2hr[approx]
Round 2	Final Round	5-6 hr[approx]
Final Evaluation	Judging, Demo, Results	-----

Submission Guidelines

Final submissions must include:

- ✓ A working prototype or demo video
 - ✓ A presentation or report (PDF / PPT)
 - ✓ Source code / schematic (if applicable)
 - ✓ Upload link or physical submission before deadline
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Judging Criteria

Criteria	Weightage
Innovation & Creativity	25%
Technical Implementation	25%
Functionality & Working Output	20%
Practicality / Real-World Impact	20%
Presentation & Documentation	10%

Scoring Overview

Parameter	Max Points
Flight distance and Time	30
Stability	25
Accuracy of landing	25
Design Quality Design quality	20
Total	100

Penalties & Disqualifications

Violation	Penalty
Late Submission	-10 Points
Unsafe Operation	Immediate Disqualification
Incomplete or Pre-built Work	-20 Points
Violation of Safety Zone	-15 Seconds / -10 Points
Misconduct or Unethical Practice	Permanent Ban

Awards & Recognition

Category	Prize	Remarks
1st Prize	₹10,000	Winner
2nd Prize	₹7,000	Runner-up
3rd Prize	₹5,000	Technical Merit

□ Event Team

Role	Name	Department / Club	Contact
Faculty Coordinator	[Name]	[Dept]	[Email/Phone]
Event Lead	Aryan R	PUSOCSE	7899056484
Technical Mentor	[Name]	[Club]	[—]
Logistics & Media Lead	[Name]	[—]	[—]

□ General Instructions

- Follow all university and MakerSpace cluster policies.
 - Respect judges, peers, and staff.
 - Any form of plagiarism or code reuse will lead to disqualification.
 - Decisions of the judges are final and binding.
 - Certificates will be awarded to all valid participants.
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⚡ Official Note

This Rule Book serves as the official guideline for all MakerSpace Cluster events under INNOVATEX 4.0, Presidency University.

Any updates or clarifications will be communicated officially via the MakerSpace WhatsApp community and notice board.