GALLOGLY
COLLEGE OF ENGINEERING
The UNIVERSITY *of* OKLAHOMA

Design, Build, Fly Glider Competition

Teams are required to purchase their own materials and build their glider prior to arrival at the competition.

Objective

The objective of the competition is to design, build, and fly a miniature glider to maximize flight performance. Teams will fly gliders from a second story terrace to a net board and fly through holes. A winner will be determined according to the judging criteria.

Judging Criteria

- Three flight attempts are given.

NET DIAGRAM

4 Pts.	4 Pts.	4 Pts.	4 Pts.	4 Pts.
4 Pts.	5 Pts.	5 Pts.	5 Pts.	4 Pts.
4 Pts.	5 Pts.	6 Pts.	5 Pts.	4 Pts.
4 Pts.	5 Pts.	5 Pts.	5 Pts.	4 Pts.
4 Pts.	4 Pts.	4 Pts.	4 Pts.	4 Pts.

- Net will be at a slight angle and holes will be approximately 80in. x 60in.
- Overall score is the combination of all three flight attempts added together.
- Originality, feasibility, and reusability is judged (in the case of a tie)

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Rules

- The glider will be gently hand launched (thrown, i.e., no assistive devices) from behind a designated line.
- Once the glider is launched, there must be NO outside influences on the glider's flight other than natural causes. (It must fly only from being launched)
- Come up with a team name and even a plane designation (This glider is your baby, be proud of it!)
- The name of the game is creativity but remember a glider design is useless if a pilot couldn't operate a full-scale one! (i.e., no Frisbees, paper wads, or javelins, etc.)
- Your aircraft needs to be able to handle a "tip test." This means that when supported only at the wingtips, your glider remains rigid and doesn't sag.
- The glider's wingspan must be greater than 12 inches but less than 30 inches.
- Any aircraft in violation of these rules may fly but will not be scored.

Material allowances

- No "all-paper" gliders. Paper components are fine, but your glider must have a rigid structure made from some other material. Remember, it must survive the tip test before flying.
- No rubber bands.
- No engines or mechanical devices (such as torsion driven propellers).
- Your glider should **not** be fully 3D printed. A 3D printer can be utilized, but you should also aim to include non-3D printed materials.