**Design, Build, Fly Glider Competition**

Sponsored by: Society of Hispanic Professional Engineers

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
- Each hole in the net board is worth a certain amount of points. Some points are awarded for gliders that do not reach the net. The graphic below details the points:

<table>
<thead>
<tr>
<th>Points</th>
<th>0 Points</th>
<th>1 Point</th>
<th>2 Points</th>
<th>3 Points</th>
<th>Net</th>
</tr>
</thead>
<tbody>
<tr>
<td>0’ to 12’</td>
<td>0 Points</td>
<td>1 Point</td>
<td>2 Points</td>
<td>3 Points</td>
<td>Net</td>
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<tr>
<td>12’ to 24’</td>
<td>4 Pts.</td>
<td>4 Pts.</td>
<td>4 Pts.</td>
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<tr>
<td>24’ to 36’</td>
<td>4 Pts.</td>
<td>4 Pts.</td>
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<tr>
<td>36’ to 48’</td>
<td>4 Pts.</td>
<td>4 Pts.</td>
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<td>48’+</td>
<td>5 Pts.</td>
<td>5 Pts.</td>
<td>5 Pts.</td>
<td>5 Pts.</td>
<td>4 Pts.</td>
</tr>
</tbody>
</table>

- 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)
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 to 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 wing-tips, 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).