









PROBLEM STATEMENT

Objective: Design and construct a glider using household items.

Constraints:

- The glider must have a wingspan less than 60 cm.
- There must not be dynamic parts mounted on the glider.
- The glider cannot be released higher than 9 feet off the ground.
- The Students are required to "launch" their Glider Planes by hand from a stationary position on the ground.

Submission:

• Prepare a video depicting the max. range of flight

The video must capture the entire flight of the Glider Plane at all times. Every individual must carefully plan their flight tests and video shots to ensure the Plane does not leave the video frame. Flight test video must be shot in **ONE CONTINUOUS VIDEO – NO EDITING!**

- Prepare a report comprising of the following topics:
 - \succ Showcase your approach towards the design of the glider.
 - ➤ List out all materials used to fabricate the glider.
 - Include three photos of the glider from three views. (front, top and either side)

- Include photos clearly showing that the glider wingspan is following constraints with the help of the ruler scale. (NOTE: If your wingspan is 60 cm, then you can show one side of the wing by using a 30 cm ruler scale)
- Also, include your contact details in the report. (Name, Roll No. (U20XXXX), Phone No.) on the front page of it.
- Name your report and video file as follows: U20XXXXX_Avion_Report and U20XXXXX_Avion_Video.
- The report should follow the listed instructions:
 - ➤ Maximum 4 pages are allowed.
 - Fonts should have the size of 12 and should be Times New Roman. (title should have a size of 16).
- Upload the video and report file on the below-provided Google form link: <u>https://forms.gle/mkW9oKfmHCg4G7196</u>
- The deadline for the submission is 11:59 PM, 6 June 2021. In case of submission after 11:59 PM, points will be deducted accordingly.
- Only First Response will be considered in case of multiple responses.

Note:

- Videos and Photos must be of good quality.
- You can refer to the provided ppt.
- Scoring will be based on design, report, and time of flight.
- Including calculation is one's discretion, but the calculation will have more leverage in case of a tie.
- In case of late submission, points will be deducted accordingly
- The jury's decision will be final.