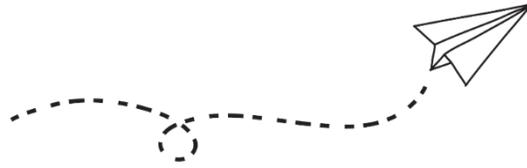


On the Glidepath



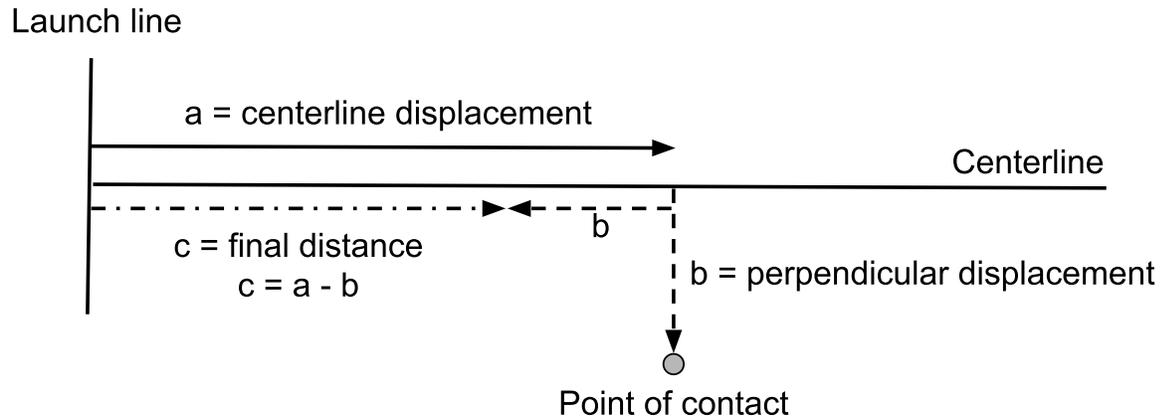
Objective:

To construct a paper airplane that team members will throw to achieve the maximum travel distance measured from a centerline marker.

Rules:

1. Each team will receive three sheets of standard 20 lb., 8.5 x 11, white copy paper; three standard smooth #1 paper clips (1 and 3/8 inches in length); and a pair of scissors. Using these materials, the team may construct up to three paper airplanes consisting of one piece of paper each. A paper sheet may be modified only by folding, cutting, or tearing. The entire sheet must be used. No gluing, taping, or stapling is allowed. The paper clips are provided for ballast, and only ONE paper clip per airplane may be attached at the team's discretion. Note, the airplane must have wings. Any attempt to merely crumple up and throw the paper will result in disqualification with zero points awarded to the team.
2. Teams will have a maximum of 10 minutes to construct their airplanes and practice with them. At the end of this time, ONE airplane will be chosen by the team for competition. Teams are advised to research construction of airplane designs and practice making and flying them before the day of competition.
3. Each team will get three trials with a different member throwing the airplane on each trial. The best trial will constitute the team's final score. Minor adjustments may be made to the airplane between trials to smooth out the surfaces, modify flight characteristics, or move the paper clip.
4. The airplane will be launched by one person standing behind the launch line marked on the floor of the hallway.
5. A centerline will be marked off in the middle of the hallway at right angles to the launch line. The flight goal is twofold: achieve the greatest distance from the launch line while coming closest to the centerline.
6. A trial ends when the plane hits the floor, a wall, or the ceiling. The distance will be measured from the point of initial contact as determined by the judges, not where the airplane comes to rest. Any trial that hits the ceiling will be considered out of bounds and will NOT be scored. There are NO "do-overs".

- The score for a trial will be determined by first measuring the displacement component from the launch line along the centerline even with the point of contact. From this location, the perpendicular displacement to the point of contact will be measured. The perpendicular displacement will be subtracted from the centerline displacement to calculate the final distance score.
- Teams will be ranked in order of decreasing final distance score for their best trial.



Tiebreakers: In the event of identical final distance scores, the team with the lower perpendicular displacement will be considered the winner. If teams are still tied, the second-best final distances will be compared with the better score being the winner.

Time limits: 10 minutes for construction and practice; 5 minutes for 3 trials.