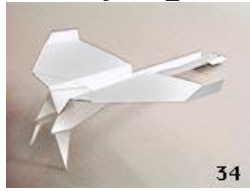# Paper Airplane Olympics – Spring 2014

The Paper Airplane Olympics is a series of five events involving paper airplanes. You will participate in this project in pairs.

Airplanes:
- All airplanes will be built outside of class time or during the test day.
- Any type of paper and glue can be used to construct the planes.
- Each group of contestants can bring up to 5 airplanes to be used for any of the events.
- Each group will be allowed two launches in each event.

Timeline:
- Introduction to project will be one week prior to testing.
- You will be given 2 days of class time for testing.
- The Olympics will last 2 days and will commence with Event #1 and finish with Event #5.

Scoring
- Each event has a top score of 20 points.
- Scoring will depend upon the event.
- Your teams total score will be determined by the 4 highest event point totals.

Event #1

The Amelia Earhart: The plane shall be launched from an elevated spot in the corner of the gym.
- The horizontal distance from the launch position to the first location the plane touches anything is the distance recorded.
- The greatest distance achieved will receive 20 points. Others will = 20-[(Max-Score)/10]

Event #2

The Chuck Yeager: Planes must first touch the floor as close to a predetermined "X" as possible.
- The launches will be conducted as in Event #1.
- The plane that touches the floor closest to the "X" will be awarded 20 pts.
- Other scores will be determined by the following method: If the closest plane touches 2m away from the "X" and your plane touches 4m away from the "X" then your score will be (X-4)/(X-2)*20 = 15 points. Scores will be rounded to the nearest .5.

Event #3

The Wright Flight: **Planes will be launched from the mezzanine in the gym. The goal is the longest flight time.**
- The time from the launch until the plane strikes any surface will be measured.
- The plane with the longest flight time will be the winner and will be awarded 20 pts. Others will lose 1 point for every 0.5 sec less than the winner.

Event #4

The Harriet Quimby: **The idea is to get your plane to execute a series of bobs.**
- The launches will be conducted in the center of the gym floor.
- The plane with the highest numbers of bobs will be awarded 20 pts. Others will lose 2 points for every bob less than the winner.

Event #5

The Jim Marshall: **Planes must cross a line 5 m from the launch position, turn and return to the launch point.**
- A plane that does not cross the 5m line on the outbound flight will be disqualified and earn 0 pts.
- The location is determined by where the plane comes to rest not where it hits the ground.
- The plane that lands closest to the launch point is the winner and will receive 20 points.
- Other scores will lose 1 point for each 0.5m from the launch point.