## The Effect of a Paper Airplane's Wing Shape on the Distance the Paper Airplane Can Fly

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The effect of wing shape on a paper airplane's flight, or rather gliding distance was tested by launching two different airplane designs fifty times each. After every flight the distance between the starting point and the landing point of the plane's nose was measured and recorded. One design consisted of wider, more rectangle like wings while the other design is narrower with sharp, triangle shaped wings. The wider winged paper airplane design, called the Hunting design had an average flight distance of 2.44 meters. While the narrower, triangle winged design, called the basic dart design had an average flight distance of 1.71 meters. The Hunting design, that consisted of a greater wing size traveled an average of 0.73 meters farther than the basic dart design. When analyzing the data, a two-tailed t-test was conducted in order to determine the collected data's significance. The results were significantly less than 0.0001; thus, supporting the hypothesis. So, it can be assumed that the wider and bigger the wings of a paper aircraft are the further travel distance possible.

Awards Won: Embark China: Second Award