



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

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| Name(s) Jagdeep S. Basi | Project Number 28305 |
| Project Title How Much Does the Size of a Glider's Horizontal Stabilizer in Ratio to Its Fuselage Affect Its Flight Path? | |
| <p style="text-align: center;">Abstract</p> <p>Objectives/Goals To find what size of a glider horizontal stabilizer will increase a glider's flight distance the most. test each glider with the horizontal stabilizer as the variable. i believe that the 21 cm sized stabilizer will fly the farthest.</p> <p>Methods/Materials foam boards, blades, washers, u-shaped aluminum stake, measuring stick, tape, table/ graph. cut glider pieces out, attach all pieces, measure the distance between the launcher and the glider, graph/ record each distance.</p> <p>Results 21 cm size stabilizer flew the farthest. the 18 cm flew the second farthest, the 15 cm flew the second to worst, and the 12 cm flew the shortest distance.</p> <p>Conclusions/Discussion The larger the stabilizer, the better control and hang time. The larger lengths flew further because there was more stability. Many times, some of the gliders would crash or not fly as planned. his was either because of weather, unbalance of weight, or unstable launch, my hypothesis was right. i learned that without a large enough horizontal stabilizer, a plane or glider could easily loose control and fly as planned.</p> | |
| Summary Statement the importance of a glider's horizontal stabilizer. | |
| Help Received father helped cutting stake; mother helped glue paper to board. | |