



**CALIFORNIA STATE SCIENCE FAIR  
2004 PROJECT SUMMARY**

<b>Name(s)</b> <b>Brandon A. Smith</b>	<b>Project Number</b> <b>J0123</b>
<b>Project Title</b> <b>Can the Design of a Paper Airplane Make It Fly Faster and Farther?</b>	
<b>Abstract</b> <b>Objectives/Goals</b> To find out which design of a paper airplane determines how fast or how far it can fly. Can the design also determine the flight accuracy and the airplane's ability to perform stunts? <b>Methods/Materials</b> paper airplane book, sturdy white paper 8 1/2" x 11", tape measure, stop watch, log book, paper clips, bull's eye target, and launcher <b>Results</b> The larger wing area of both the Stealth and the Slice performed better in distance. In the speed test, the Stealth was the fastest. The Slice and the Blue Angel were equally as fast, and the Aerobat was the slowest. For accuracy, the Slice and the Blue Angel hit the target the most. The Aerobat and the Stealth hit the target half the time. For stunt performance, the Aerobat was able to complete all four stunts attempted. The Blue Angel also performed well, but the Stealth and the Slice were more awkward during the stunts. <b>Conclusions/Discussion</b> I conclude that the design of the paper airplane determines its ability for speed, distance, accuracy, and stunt performance. The airplane models with the larger wing area flew greater distances. The longer based and larger wing designs flew fastest. The Aerobat was able to perform all of the stunts perfectly. Finally, the two larger based models were the most accurate at hitting targets.	
<b>Summary Statement</b> My project is about which paper airplane model is best for distance, speed, accuracy, and stunt performance.	
<b>Help Received</b> My parents helped with the test trials and assembly of the display. My sister helped me type and proofread my report.	