

CALIFORNIA STATE SCIENCE FAIR 2011 PROJECT SUMMARY

Name(s)

Miranda R. Rylee

Project Number

J0126

Project Title

Does the Number of Fins on a Rocket Affect Its Altitude?

Abstract

Objectives/Goals

My project is to determine if the number of fins on a rocket affect its altitude. I believe a rocket with three fins will gain the most altitude.

Methods/Materials

Six rockets were built with identical size and weight. Each rocket had a different number of fins, zero, one, two, three, four and six fins. Each rocket was launched ten times with the same size engines. The zero and one finned rockets were not launched because it was thought to be too dangerous.

Results

The rocket with three fins acheived the highest altitude of the four rockets that were launched.

Conclusions/Discussion

My conclusion is that the number of fins on a rocket plays an important role and rockets with three fins reach the highest altitude.

Summary Statement

My project was about the stability of fins on a model rocket and the drag caused by those fins.

Help Received

My father helped with the construction and launches of the rockets. My mother helped with the board.