CALIFORNIA STATE SCIENCE FAIR
2010 PROJECT SUMMARY

Name(s)
Anthony J. Blair

Project Number
J0106

Project Title
Keep Your Car from Flying!

Abstract

Objectives/Goals
My project was to figure out if the underside of a high performance vehicle could be modified to decrease lift. I believe that a proper design could reduce lift and result in a safer car.

Methods/Materials
6 test cars with varying designs and one control were constructed. Each design went through 20 wind tests. Wind speed was recorded when the front of the model would lift off the test bed.

Results
The control, with a flat underside, tolerated the most wind. Only one design slightly out performed the control, but there was no significant difference. My results ended up contradicting my hypothesis.

Conclusions/Discussion
My conclusion shows that aerodynamically modifying the underside of a car would not be beneficial in racing, and it might be better to focus on the top of the car where there are stronger air forces to work with.

Summary Statement
My projects focus was on making high performance cars safer through aerodynamics.

Help Received
Dad helped with conducting the experiment; Mom helped with board assembly