



**CALIFORNIA STATE SCIENCE FAIR
2008 PROJECT SUMMARY**

Name(s) Ian N. Fisher	Project Number J0108
Project Title Down Force of a Stock Car	
Objectives/Goals The purpose of my experiment was to determine which type of car design generated the most downforce C.O.T. or current. My hypothesis was that the C.O.T. would produce the most down force.	
Abstract	
Methods/Materials Methods The experiment involved building a wind tunnel. To make the tunnel, you will need a 20" window fan, any cardboard box, a clear plastic report cover, and duct tape. Cut the cardboard box into ten rectangles. Tape four of the rectangles together to make the sides of the air scoop and cut an opening in another to make an observation window for the tunnel. Tape the plastic report which is the observation window over the opening, and then join the parts with tape. When you use the tunnel, tape the scoop to the fan and the foot to the table so the tunnel does not shift while you are testing. Materials My materials were: 1 C.O.T. 1/24 Scale Stock Car 1 Current 1/24 Scale Stock Car 2 Cardboard Display Boards (Wind Tunnel) 1 Common Household Fan 1 Box of every 2" labels	
Results The experimental results proved my hypothesis, The C.O.T did produce the most down force.	
Conclusions/Discussion As stated in my hypothesis, I believed that the COT would produce the most down force. The experimental results proved my hypothesis. a question that was brought up was would the lateral angle of the car produce a different result. if I were to conduct these experiments again I would test the lateral angle and the type of car, not just the type of the car. These results could be used by NASCAR teams to create better car setups or fuel miles.	
Summary Statement The purpose of this project was to find out which car type C.O.T. or Current would produce more aerodynamic down force on the racetrack.	
Help Received I would like to thank my friends for their support and opinions, my old art teacher for introducing me to the sport of NASCAR, my new science teacher Mr. Scott, my parents, and God	