



**CALIFORNIA STATE SCIENCE FAIR  
2003 PROJECT SUMMARY**

<b>Name(s)</b> <b>Jarred Alan Goff</b>	<b>Project Number</b> <b>J0109</b>
<b>Project Title</b> <b>How Fast Will a Homemade Hovercraft Powered by Two Leaf Blowers Travel over Different Surfaces?</b>	
<b>Objectives/Goals</b> My objective was to learn what surface a homemade hovercraft would travel over fastest.	
<b>Abstract</b> <b>Methods/Materials</b> My project required wood, visquine, two 195mph leaf blowers, 12 volt jet-ski battery, screws, drill, jigsaw, 2 servos, 1 receiver, 1 transmitter, rubber handled plyers, adult supervisor. After I got all of the materials, I built the hovercraft. Once I built my air distribution box that distributes the air to certain places, the design put itself together. By this I mean that after I put the box in place, I knew where all of the pipes and leaf blowers went. Then I did all of the electrical work, with the supervision of my father, Alan Dale Goff, Sr.	
<b>Results</b> The results of my experiment are that the hovercraft traveled fastest over the concrete, which was the hardest, smoothest, and most polished surface of the rest. The order from there on was following the same pattern of the hovercraft traveling fastest over the hardest, smoothest, and most polished surfaces. By doing this experiment I was planning to learn what surface my homemade hovercraft traveled over fastest, and I did.	
<b>Conclusions/Discussion</b> My hypothesis was that the homemade hovercraft would travel fastest over the concrete, and the hovercraft did. This also enabled me to attain my objective because I wanted to learn what surface the hovercraft traveled over fastest. The information from this project expands our knowledge of applied mechanics/ structures & mechanisms/ manufacturing by showing how electrical energy is converted to mechanical energy and mechanical energy is converted into an air source to lift and propell a homemade hovercraft.	
<b>Summary Statement</b> My project is about designing and building a hovercraft that is fully functional and able to be used as a basis for my hypothesis and to have fun with.	
<b>Help Received</b> Mother took pictures; Father supervised throughtout experiment.	