



**CALIFORNIA STATE SCIENCE FAIR  
2015 PROJECT SUMMARY**

<b>Name(s)</b> Sergio Lopez	<b>Project Number</b>  35403
<b>Project Title</b> Wind Velocity	
<b>Objectives/Goals</b> My objective is to demonstrate that at certain level of a propeller angle and at certain level of RPM's can generate more propulsion by the wind generated by an airplane. <b>Abstract</b> <b>Methods/Materials</b> <ol style="list-style-type: none"><li>1. Speedometer.</li><li>2. Pilot.</li><li>3. Propeller airplane.</li><li>4. Airplane gasoline.</li><li>5. Paper and pen to record the answers.</li></ol> <b>Results</b> <p>Yes, it does affect the airflow while having more propeller angle and maintaining the same RPM. Every other angle that was not the flat one had more propulsion with the same RPM. So, when you have more angle and more RPM makes an airplane go faster. I tested angles 15, 20 and 25, and resulted that at 25 came out to be the one with the highest propulsion (68 mph with 1700 RPM).</p> <b>Conclusions/Discussion</b> <p>Did my conclusion support my hypothesis? Yes, based on my research on the airplane propeller angle, yes it does affect its speed while maintain the same RPM and I predict that angle 25 is the best one when it comes to speed because it has more angle which makes it go faster than the others. It goes at 68 mph when it has the angle 25 and at 1700 RPM.</p>	
<b>Summary Statement</b> This project is about learning how a propeller angle in an airplane affects the propulsion made by the wind generated at certain level of RPM's	
<b>Help Received</b> My grandfather helped me teaching basics of airplane function since he is a Pilot, using real airplane at Mexicali Valley supporting me by experimenting different levels of propeller angles.	