# CALIFORNIA STATE SCIENCE FAIR
## 2003 PROJECT SUMMARY

**Name(s)**
Zachary N. Johnson

**Project Number**
**J0115**

**Project Title**
## At What Angle of Attack Will a Plane Stall?

**Abstract**

**Objectives/Goals**
My objective was to find the exact degree of angle of attack that a plane would stall.

**Methods/Materials**
i built a wind tunnel that got 30 mph in the test section (where the plane is) using a 1/4 horsepower motor (1600 rpm). I also built two small wings and used a scale to test where the wing had stalled. I would change the degree and then test and see if the plane had stalled.

**Results**
My results showed that the average degree that a plane would stall was between 30 degrees and 40 degrees. My results agreed with my hypothesis.

**Conclusions/Discussion**
I concluded that the wing stalled in various areas because of a faulty scale. They were close but the degree was not exactly the same. If I were to redo this project, Iwould use another scale.

**Summary Statement**
My project was meant to find the angle of attack that a plane would stall.

**Help Received**
Uncle helped build wind tunnel