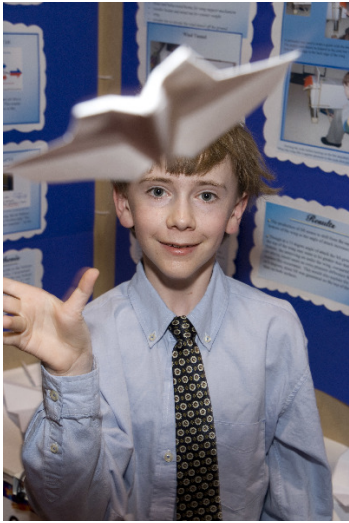


# CWSF 2008 - Ottawa, Ontario



## Erik Olson

### To Bernoulli or Not to Bernoulli? - that is the question...

**Division:** International / None

**Category:** Junior

**Region:** Saskatoon

**City:** Saskatoon, SK

**School:** Greystone Heights

**Abstract:** This project looks at the relative contributions of the Bernoulli and Newton principles to wing lift. Lift generated above and below a wing was measured both separately and together using a home-designed wind tunnel and means to measure lift. As the angle of attack increases from 0 to 25 degrees lift below the wing becomes dominant favoring Newtonian principles at normal flight angles.

#### Biography

Erik Olson is a very curious twelve year old. He lives in Saskatoon, Saskatchewan during the school year where he is currently a grade seven student in the ACTAL program at Greystone Heights School. On weekends, (during farming season) and on a full time basis once school is over, he heads for the family farm located about 105 miles southwest of the city near Plenty, Saskatchewan. There he enjoys helping out with a variety of farming tasks, as well as taking advantage of the great outdoors to pursue his many scientific interests such as entomology and engineering catapults, planes and a variety of structures. His other interests include reading, studying Norwegian, paleontology, skiing, hiking, biking and most importantly, LEGO and paper aircraft design. He also enjoys listening to music and playing the euphonium in the school band. This is the first year that he was eligible to take part in the regional science fair and he was very excited to do so. He received first place in his category, as well as first place overall in the fair.

#### Awards

#### Value

Honourable Mention - Physical & Mathematical Sciences - Junior	\$100
Sponsor: <u>Encana Corporation</u>	
Total	\$100