



## CWSF 2011 - Toronto, Ontario



## Zorro Li

## **Studying Canard Configuration under Low Airspeed Conditions and Its Applications**

Challenge: Discovery Category: Senior

Region: Annapolis Valley
City: New Minas, NS
School: Horton High School

**Abstract:** This project studied the canard wing structure, a unique airplane wing

configuration, in order to find factors that affect the minimum stalling speed which is significant in the performance of an aircraft. An ideal design was generated based on the results of the study. Applied to a Boeing 777-200, the optimal configuration was computer tested and the aircraft's minimum

stalling speed was significantly lowered.

## **Biography**

My name is Zorro (Zhi) Li, and this is my first time attending the Canada-Wide Science Fair. I have been interested in airplanes since I was three years old and have dreamed to fly an aircraft designed by myself. I was a member of flying club in primary school, and I used to build and fly both rubber band powered and control line aircraft. I also enjoy computer flight simulators. When I'm not working with airplanes, I enjoy playing the violin, which I have been playing for fourteen years. After I graduate I will be attending Carleton University to study aerospace engineering, where I hope to fulfill my dream.

Awards	Value
Excellence Award - Senior - Bronze Medal	\$300
Sponsor: Youth Science Canada	
The University of Western Ontario Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Western Ontario	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Total	\$2 300



