

CWSF 2012 - Charlottetown, Prince Edward Island



Tyler Bennett

Up,Up and Away-A wind Tunnel Experiment

Challenge: Innovation

Category: Senior

Region: Toronto

City: Toronto, ON

School: Northern S.S.

Abstract: The lifting characteristics of airfoils were investigated. A working wind tunnel and airfoils were constructed for testing. Their lifting capacities and airflow were recorded. Observations showed how the shape of a wing affects its lifting capability. More camber and an angle of attack of 10° produced the most efficient lift. In this process, a new, portable, inexpensive and innovative wind tunnel was constructed and designed.

Biography

My name is Tyler, I'm in Grade 11 and I have been interested in model aviation for a couple of years now. I've always been interested in hands-on building and when I found out about this hobby I really took to it. Now I build and fly model airplanes as a hobby and that lead me to my science fair project on aerodynamics. I am well-involved in school participating in extra-curricular activities such as Students for Social Justice and Buddies, a group of Grade 10-12's who help students in Grade 9 transition into high school. In addition to competing at the CWSF, I also competed at DECA, a business competition for high school students where I qualified for the International DECA competition in Salt Lake City, Utah. This summer I will be attending the SHAD Valley program at the University of New Brunswick. After graduating high school, I hope to enter an engineering program at Waterloo or Queen's University. Until then, I will continue to work on my planes and even expand my project to explore even more properties of aerodynamics. Science fair has provided me with the opportunity to share my passion and has been an amazing experience.

Awards

Value

Excellence Award - Senior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
University of Ottawa Entrance Scholarship Senior Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Ottawa	\$1 000
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$2 300