



CWSF 2017 - Regina, Saskatchewan



Madighan Ryan

Hydrofoils: An Uplifting Experience

Challenge: Innovation
Category: Junior
Region: Ottawa
City: Chelsea, QC

School: Elmwood School

Abstract: The objective of my experiment was to draw conclusions about how the

angle of attack and camber affect what hydrofoils are best suited to different functions. I created three differently cambered hydrofoils and placed them in a situation that simulated a boat rising out of the water to determine what combination of camber and angle is best suited for the initial phase of lift.

Biography

Travis Meadows once said "Peace is not found in a calmer storm, it is found in a better boat." So, when you are sailing slowly through the ocean, do not wish for higher winds, wish for a hydrofoil boat. As both a sailor and a pilot-in-training, I, Madighan Ryan, age 12, was intrigued by this sailing phenomenon which combines the principles of lift with my love of the water. Aside from sailing and flying, I am also very active in the Ottawa music community. I play both the bassoon and the piano, as well as sing as a head chorister at the St. Matthews' girls' choir. Both my jazz band and concert band received triple gold ratings and were invited to the national music festival this year. I am very passionate about my project. My advice to all aspiring scientists would be to be passionate as well. Be excited and curious about your research topic and as a result, you will want to experiment more, to learn more, and to dive deeper into the world of science.





