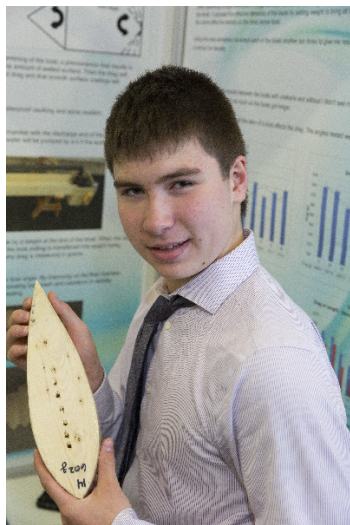


CWSF 2018 - Ottawa, Ontario



Finley Nakatsu

Dragging on ? The Effect of Length, Surface Coating and Stern Angle on Drag

Challenge: Energy

Category: Junior

Region: Halifax

City: Hammonds Plains, NS

School: Madeline Symonds Middle School

Abstract: The purpose of this project was to examine the relationship between length of boat, stern angle, hull coating and drag To test these hypotheses, I used a flow chamber, wooden boats and a scale and weight system to measure drag. I also used dye to see disturbances in the streaming of the hull, resulting in higher drag due to vortex shedding.

Biography

My name is Finley Nakatsu. I'm in grade eight, and I go to Madeline Symonds Middle School in Hammonds Plains, Nova Scotia. My project is called "Dragging On". It builds on my project from last year, called "What a Drag" which arose from an argument between me and my brother. "Dragging On" examines the effect of length, stern angle, and surface coating on the drag of the hull of a boat. To continue my project next year, I'd like to build a full scale model of a hydrofoil shaped boat (come see my project) modified using the results of this project and last years. I enjoy sailing, playing guitar (rock and Metal) and doing tae-kwon-do. My advice to people making a project is this: Good projects are made when you anticipate the outcome, great projects are made when you can't. Finally a quote from Augustus Hare: Thought is the wind, knowledge is the sail, and mankind is the vessel.

Awards

Value

Excellence Award - Junior - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
Total	\$1 000