

CWSF 2008 - Ottawa, Ontario



Jaye Mangione

Tempest in a Tin Can

Division: Health Sciences / None

Category: Junior

Region: Ottawa

City: Ottawa, ON

School: Turnbull School

Abstract: This experiment determined how four different nozzle sizes affect pulse jet performance. A pulse jet was built using a tin can and methanol for the fuel. The smaller nozzle sizes produced a greater initial thrust than the larger nozzle sizes. Pulse jets are difficult to control but this experiment shows performance can be controlled through nozzle size.

Biography

I am in grade 7 at Turnbull School, in Ottawa. I play trumpet in both the concert and jazz school bands. My twin brother and I are really interested in model rocketry. We launch everything from 15 centimetre long rockets to rockets that are 2.5 meters tall. That's taller than I am! I also enjoy building model airplanes and writing stories. One of my main interests is aviation, and I plan to be a fighter pilot when I grow up. I am interested in engineering and physics, which will help me achieve my goal.

Awards

Value

Honourable Mention - Engineering - Junior Sponsor: Youth Science Foundation Canada	\$100
Total	\$100