

# CWSF 2012 - Charlottetown, Prince Edward Island



## Nicholas Barrett

### On My Whistle: A Command System for Hearing Impaired Soccer Players

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Cape Breton

**City:** Sydney, NS

**School:** Riverview High School

**Abstract:** A wireless vibration and light command system for hearing impaired soccer players was designed and built. An experiment was conducted to test whether the system reduces the time it takes hearing impaired players to respond to referees' commands. Results supported the hypotheses that response times would be reduced. This system could be an innovative way to make sport more accessible to those with hearing impairments.

#### Biography

My name is Nicholas Barrett and I am a grade ten french immersion student at Riverview High School in Sydney, Nova Scotia. I have played soccer with a local club for many years. I am a member of my school cross country running team. I also love biking and down hill skiing. I play the alto saxophone and I am a member of my school orchestral band and the jazz combo. I am also involved in a regional youth development movement in my community. I volunteer in the apprenticeship program at the Fortress of Louisbourg National Historic Site. My idea for this project came from my experiences as a certified Nova Scotia soccer referee and a soccer player. I wanted to design an innovation that would make soccer and other sports more accessible for people who may have difficulty hearing referees' commands. I won first place in my division at my school science fair and a gold medal at the regional fair. I also won an engineering award. When I attend university in the future I hope to find ways to combine my interests in science, technology, engineering and math with my love of sports and music.

#### Awards

#### Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	\$700
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
<b>Total</b>	<b>\$2 700</b>