

# A Human Powered what now?

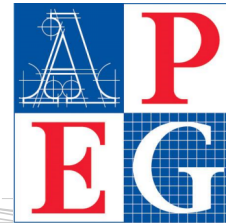
## Thanks to our sponsors



That's right, a *Human Powered Submarine*. The submarine is pedal powered - much like a bicycle - with all of the propulsive power provided by the occupant. This provides many unique challenges including ergonomics, efficient power use, and operator safety. Since the project is entirely student run, members are responsible for all aspects of design and construction. Everything from front to back (or fore to aft as it may be) is designed and built by the students. This results in an unparalleled and valuable opportunity for students gain practical engineering (or other) experience and to really learn by doing.

Additionally, since the submarine is flooded, the pilot breaths using SCUBA diving equipment. This means that the pilot must be able to combine the techniques and procedures of SCUBA diving, with the athleticism of cycling.

a place of mind



Professional Engineers  
and Geoscientists of BC  
[www.apeg.bc.ca](http://www.apeg.bc.ca)



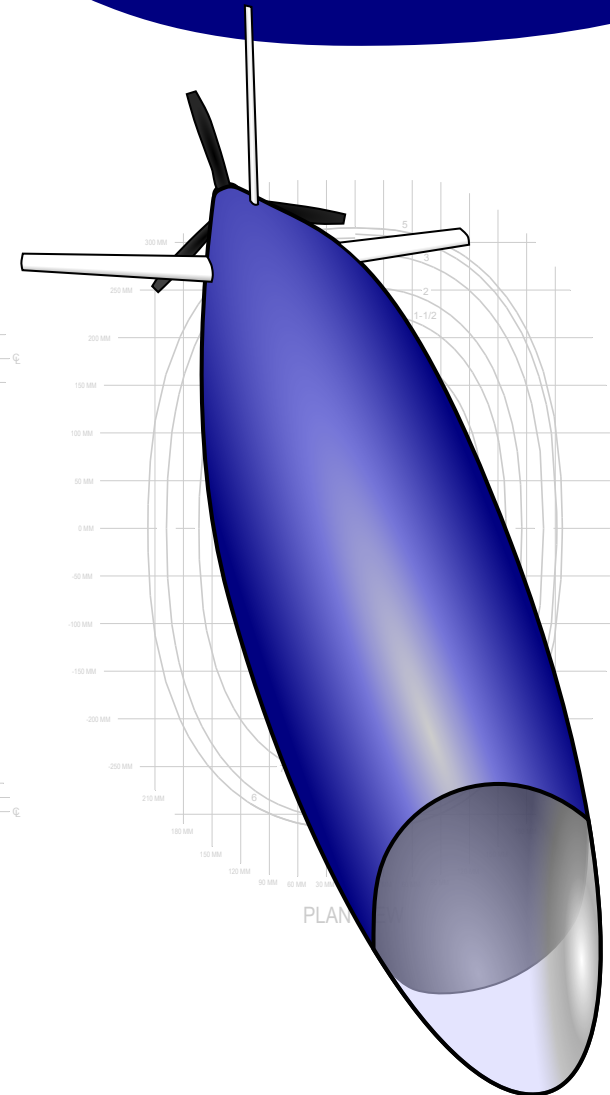
**mechanical  
engineering**

SHEER VIEW



(Pacific Northwest Section)

HALF BREADTH VIEW



# What does SUBC do?

SUBC is an engineering student design team at the University of British Columbia. As a team, SUBC's goal is to design, build, and race a human powered submarine.

The team currently competes in the *International Submarine Races* (ISR) in Bethesda, MD and the *European International Submarine Races* (eISR) in Gosport England.

## Team History:

The Human Powered Submarine Team was formed in 1989, and has competed in competitions in Fort Lauderdale, San Diego, and Maryland. The team placed in the 2002 and 2004 competitions and placed for innovative design at ISR#3 in 1993.



# How can I be a part of it?

## University Students:

The team is primarily comprised of Mechanical Engineering students, however **any** student enrolled at the University of British Columbia, with an interest in the project is welcome to join. The team is open to students from all faculties. The only requirement to join is interest!

It is also worth keeping in mind that, although the team is rather technical in nature, it isn't all technical. The team also requires members interested in finance, management, marketing, social media, website design, and much more.

## Potential Sponsors:

Like most student teams, SUBC is always in need of support from both industry and individuals. The project would not be possible without the generous monetary and in-kind support from our sponsors. If you would like to support the team, or have any questions about the project, please feel free to contact us.

# Where can I Learn more?

If you would like to learn more about the team, visit our website or facebook page, or visit us at events such as APEGBC's *E-Fest* or *Imagine UBC*. Check our website for information on upcoming events.

For current UBC students, feel free to drop by our work area (in the southeast corner of the *ChBE* building across from the *Life Sciences Centre*) during our weekly meetings.

## Team Contact Information:

Email:	<a href="mailto:subc_abc@hotmail.ca">subc_abc@hotmail.ca</a>
Website:	<a href="http://blogs.ubc.ca/subc/">blogs.ubc.ca/subc/</a>
Facebook:	<a href="http://www.facebook.com/ubc.submarine">www.facebook.com/ubc.submarine</a>



Above, team members sand the plug for the most recent competition hull. The plug was CNC cut from foam and coated in a durable plastic compound. This was used to make a fiberglass mold for the hull.