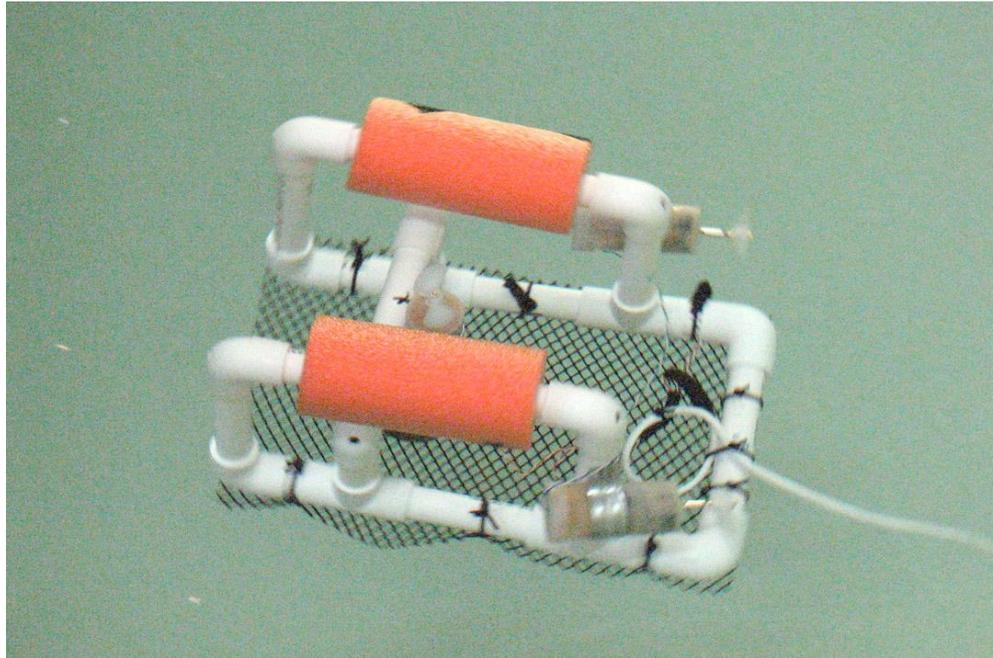


seaperch
TEACH • BUILD • BECOME



What is Seaperch?

- Underwater Remotely Operated Vehicle (ROV)

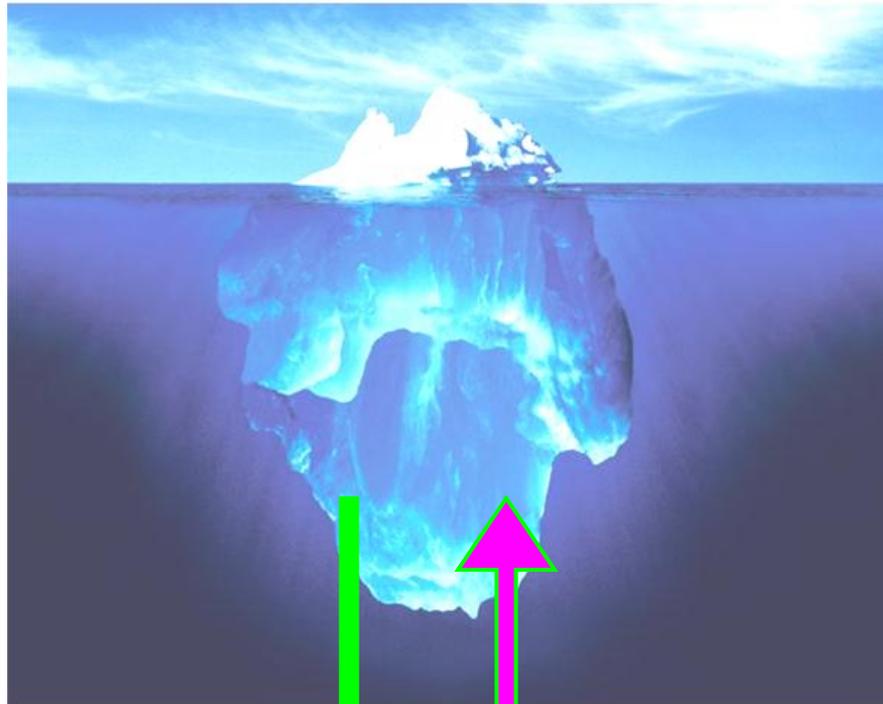


What is Naval Architecture

An engineering discipline dealing with the design, construction, maintenance and operation of marine vessels and structure



Buoyancy



Weight

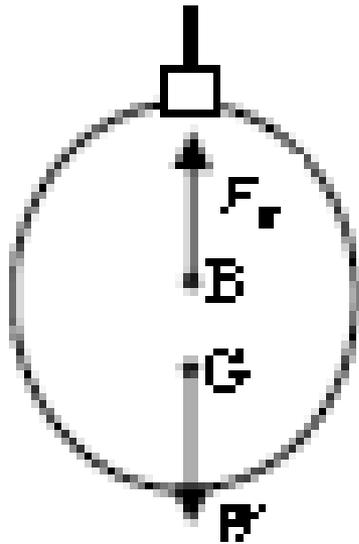
Buoyancy

$\text{Buoyancy} = (\text{Volume displaced}) \times (\text{Density of Fluid})$

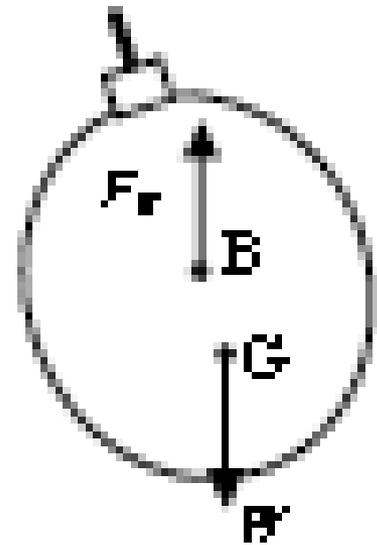
$\text{Weight} = \text{Buoyancy}$

Stability

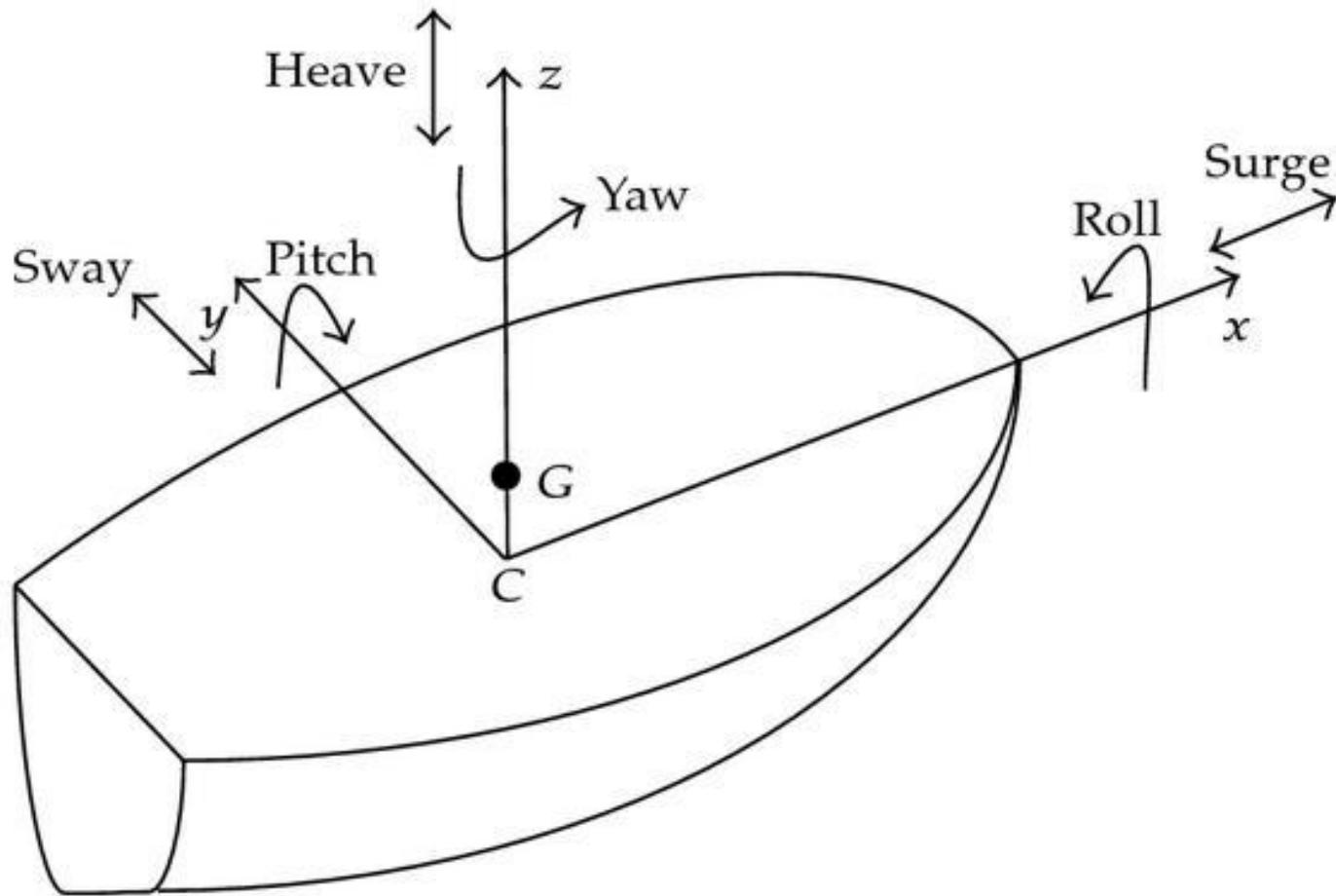
In Equilibrium



Rolled



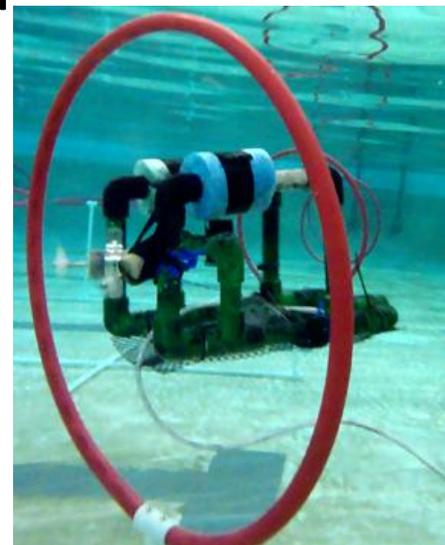
Degrees of Motion



The Challenge

Your SeaPerch must:

1. Move through a PVC obstacle course
2. Collect at least 3 diving rings
3. For each additional diving ring acquired, 30 seconds will be taken off the time
4. This will be timed; the SeaPerch that is able to accomplish these tasks will be the winner



Design Requirements

- Restricted to a maximum of 3 motors
- Neutrally buoyant
- Sketch 3 design ideas
 - May not be the same as the model