HZN: ROV Horizons Alternative H.S.

- Team members: Zack DesRosier, Alexander Rose, James Lampela
- Coach: Luke Theisen
- Project: Design & Build a highly-functional Submersible Remotely Operated Vehicle.
Project: Design & Build a Submersible R.O.V.

- Purpose: Improve the R.O.V. design from the 2011-2012 HSE project.
  - Learn from mistakes in design and building process.
  - Improve overall design.
  - Improve testing and evaluation process.
  - Use new knowledge and resources (tools, materials) to create a better R.O.V.
- If possible, create additional R.O.V. designs to complete specific tasks.
- Continue to learn more about S.T.E.M.
Work hard, Play hard.

Putting it together, one piece at a time.
Accomplishments Thus Far:

• We have a wide range of new tools and materials to help design, build, and test our R.O.V., which we are learning to use and implement.

• We have a rough R.O.V. frame design that we're in the process of refining.

• After we have a refined model, we will test its neutral buoyancy using our water tank. Testing for neutral buoyancy w/out the tank was difficult because we struggled to find appropriate resources for testing last year.
Student Input:

• Zack: "I've learned a lot from my mistakes last year and use my better knowledge of S.T.E.M. to help improve our R.O.V. this year. One of the best experiences I had last year was the expo at the RenCen and look forward to the Undergrad Expo at MTU this spring."

• Alex: "I've learned a lot about the engineering design process and S.T.E.M. and I look forward to using my new knowledge to create the BEST R.O.V."

• James: "I've learned that it takes a good team effort to have a successful project."
Year End Goals

• Have a finely functioning submersible R.O.V.

• Have an even greater understanding of S.T.E.M.

• To continue to develop Horizons' HSE team for future students.

• Develop ideas for other R.O.V.s