

GEARHEADS GAZETTE



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HIGHLIGHTS OF THE WEEK:

- > website up and running
- > both linear and circular shooter working

Mentor Steve Beckett finishes the barrel loader with Gearheads Will Cornillie and Sean McNeil

WEEK 3 AND STILL ON TOP

By: Daniel Blohm

Already three weeks into the season and the Gearheads have a robot up and running two shooter prototypes shooting Frisbees across the gym. The team leaders, mentors and sponsors should be proud because all of the hard work and time is paying off. Having a working robot chassis give the team members immense amounts of time to drive it and practice. Although this seems like it's just another thing, it is very important that the students get to drive early because more training will help us decide who will drive during the competitions.

This week the team decided to go with the linear shooter for the competition robot. Since then they have designed and built a pneumatic loader (pictured at the right) that'll feed the shooter.

The question of how to get



the robot to hang is still up in the air but we have some good minds working on it as we speak.

The Gearheads have definitely made this year their best so far, and they've had very good years before. Aside from the robots progress the team has become closer as teammates and as friends despite being from different schools and cliques. A good

quote to describe the Gearheads is "united we stand." The team spirit is phenomenal, not only are students excited and pumped but so are the mentors. Needless to say that the team's very own Mr. Pata is geeked with every single aspect of the team.



THE SIBLINGS OF THE GEARHEADS

By: Alanna Sparks

Many high school students will join clubs in the attempt to escape their family, but here at the Gearheads we really don't mind a little family time. There are four sets of siblings on the team; Pearce and Aiden Reickert, Ruth and Anna Karcher, Connor and Prescott Becket, and Ryan and Alanna (me) Sparks. Two out of the four work close together on the team. The Becketts are on the build team and the Sparks' work on this very newsletter and the website.

Having multiple pairs of siblings on the team really adds to the family aspect of the team. "It's easier to converse between two different aspects of the team because Anna is on the other," says Ruth. It really does help when you have minds that think alike; it makes it easier to collaborate on the project as a whole. Pearce runs the controls group and Aidan is an up and comer in the machine shop. The Beckett brothers continues to do every job that the build team can think of and picking up the slack eve-

rywhere in the whole place. Junior Neal Troscinski has always had his brother by his side on the team, but since he graduated last year, things have changed. Now Neal is in charge of the design team, taking his brother's place. "It's kind of nerve-racking not having him as a back up when things go wrong," says Neal. Siblings current and past contribute to the team greatly and we hope that the family aspect stays in the friendly manner, and not the typical sibling rivalries.



THE BEAUTY BEHIND THE DESIGN.

By: Easton Washburn

For the last three years, I've been a part of the Design portion of the robotics team. This year I'm trying a new position as liaison between the designers and the builders. In my time on the design team where I drew up a sketches in Solidworks, I noticed how integral of a part the design team really plays in the grand scheme of the Gearheads' mission.

The job of the design team is to create a digital image of the entire ro-

bot. This is time-consuming work, and it isn't easy, but it's extremely important to the team and to the robot as a whole. The computer design sets a standard set of dimensions for the components, and allows us to make quick, easy changes to our ideas and see whether or not things work. Though stressful, the work done by the design team is very rewarding. We have a large hand in the aesthetic and function of the robot, and it's our job to make sure it all

works. Though we are technically a separate group, we consult back-and-forth with build to make sure our concepts are the best they can be.

Having a digital image of the robot helps everyone on the team. When it is time to assemble the robot we can see how all of the pieces fit together. It is cool to see your digital work come together in the physical world.

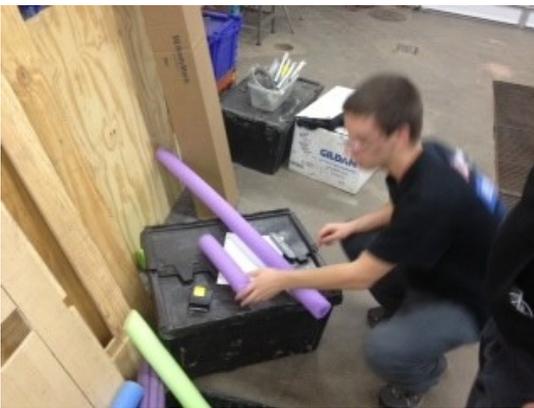
Robo-trinity: A Progress Report

Controls:



The controls group is making headway in their endeavor to get the robot code completed and debugged. Already we have a fully-functional drive code, and preliminary coding for the shooters. Now, as build and design work on the shooters themselves, controls is working on the code for in-game target tracking. The robot will have a camera mounted for better aim, and this code is what will allow the bot to line itself up with the reflective tape around the target areas.

Design:



Design, as a whole, has dispersed among other groups of the team, working with build, website, and the journalism department. The website continues to run smoothly, daily updates being made to it. The designers working with the journalists are clacking away at the keys, but most importantly are the designers collaborating with build. Now that we have decided to use the linear shooter design on our robot, it's up the build-designers to help conceptualize and create the Frisbee loader. Ideas are being tossed, and all of the concepts are being stewed and juggled to finalize a design, so as to have a fully-functional robot before the end of the season.

Build:



Build is still pounding away at their endeavors, improving the shooters and working with design to get the overall outline for the robot finalized. Both the linear and quarter circle shooters are built and running well. They also decided on a shooter that we will use in the competition. They are also prototyping a feeding mechanism so that we can store and fire Frisbee.

PHOTO PAGE

