

GEARHEADS GAZETTE



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HIGHLIGHTS OF THE WEEK:

> Build season has officially started

>The Gearheads already have started building the robot

Mentors
Jeff
Santrock
and Scott
Tily discuss
strategy
with
Gearheads
Ruth
Karcher and
Ryan Sparks

SEASON STARTS: FULL SPEED AHEAD

It's only the first week of build season and Team 1189 is already on a roll. The game this year is called [Ultimate Ascent](#), where the objective is to shoot Frisbees into goals on the cut into the walls. Apart from shooting Frisbees robots can also climb one of two jungle-gym style pyramids. Robots that do successfully climb earn bonus points! So far the team has developed a strategy, built two Frisbee launching systems and constructed a drivable chassis. The Gearheads are using different approach to build season this year, organizing themselves into specified groups as opposed to the more freeform tactics of past years. Not all the changes are robot cen-



tered either. Team morale at an all time high and everyone is excited by the quick start to the season and successes in the weeks to come. The season holds many surprises ahead, but one thing is certain: the Gearheads are ready.

There is an outstanding amount of optimism emanating throughout the shop.

“Being able to make our own parts is a real advantage for our team.”

HOPES RUN HIGH, ASPIRATIONS FLY

By: Easton Washburn

This season has a lot of energy that it's surfing on. Our pre-formed designs and ideas for chassis forms have given us a relative head start on our bot, and having the chassis essentially done gives us more time to worry about game-specific designs.

Business aside, there is an outstanding amount of optimism emanating throughout the shop. The mentors, the students, and even Mr. Pata are all incredibly excited for this season. Everyone is prepared and eager

for the season, and nigh all of the workers are busy with the robot in some way. The progress being made is honestly impressive to me. Two years ago our team was essentially a kerfuffle of students struggling to communicate, and last year our time management was poor. This year, though, we're using what we've learned to advance our tactics.

When I use the word tactics, I use it twofold. I use it to refer to our actual game tactics, and what we've learned from our past successes. I also

use it to refer to our build season tactics. We're managing time better, our shop and workforce are both far more organized, and our communication is strengthening by the day.

My diagnosis? We are making headway, and we have what it takes to really succeed this year.

WORKING IN THE BACK SHOP

By: Alanna Sparks

There are many jobs to be filled throughout the team, and some of those lie in the back shop. Some include working the lathe, either one of the mills, the vertical band saw, the horizontal band saw, both of the drill presses, and the welder. Sophomores Nick Santrock and Matt Price work the mill in the back shop. “The mill can be used to clean up the metal and can also be used

to size metal down. “Being able to make our own parts is a real advantage for our team” says Santrock. Freshman Christian Preston works on the vertical band saw, and according to him it's very easy. “You take it easy on the band saw and it will cut in no time. It took me about a half hour to learn and now it's really easy.” . Even though you can't see all the work that is going on, there's a substantial amount. According to Preston, they're the

backbone of the organization. Working in the back shop is one of the many contributing jobs to making this team a success.

Robo-trinity: A Progress Report

Controls:

Writing the code that runs the robot.

Constructing the controls board and wiring the robot.

The controls group, in the past week, has taken some great steps toward the progress of the bot. They have fit a control board onto the prototype chassis, and the code overall has been updated. Last year's code has been edited for use on this year's bot, and software updates have been put in for all the new gadgets on the control board itself. Everything, now, is very well-organized and up-to-date.

Design:

Creating the robot with Solid Works our CAD program.

Ensuring compatible functionality between all aspects of the build.

The design group has been toiling over their computers for the last week now, CADding up the prototype designs for the chassis, linear shooter, and quarter-circle shooter. The designs, as of now, are mere prototypes, but they're a great basis for our final design, and it's wonderful to have them done so early in the season.

Build:

Prototyping and building the robot!

The build group is the behemoth so far. Not only have they come up with a basic strategy for this year's game, but they have nearly all of the prototypes built. The quarter-circle shooter is built and functional. We shot Frisbees 30 feet with great precision the other night. Same goes for the prototype chassis. The team drove it through the halls of North high school for about an hour on Saturday. After seven days of the season, the build group, with the help of the many students involved, has successfully kickstarted our team's season and with it our morale.

PHOTO PAGE

