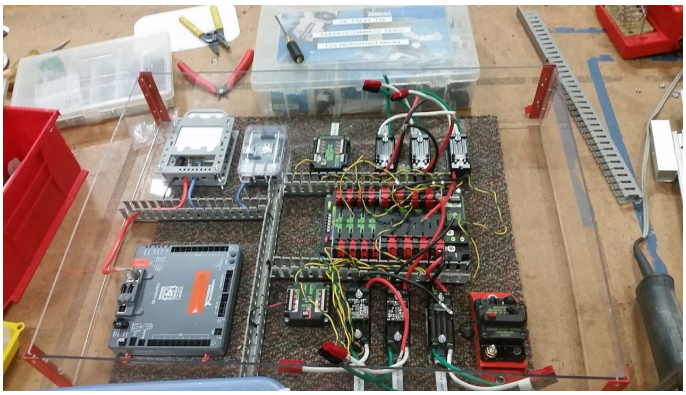
~ WEEK 5 ~

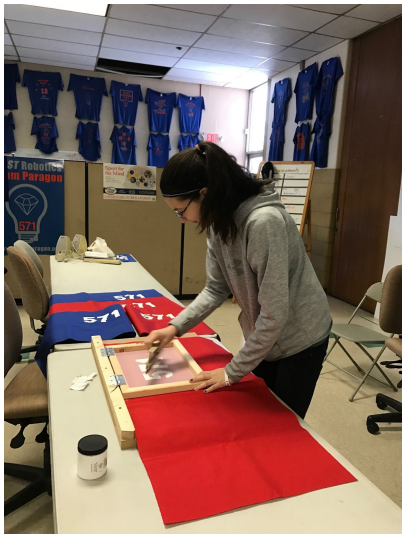
Finishing up the Final Bot, Programming the Prototype! And lots of Legos!!!

- BUILD -

This week the team worked on the battery box! To do this, we bent sheet metal to match the outer dimensions of our batteries. We also wired in all of the electronics and tested the pneumatics in the electropneumatic aquarium. Lastly started to work on the robot's imagery by adding Emmet's legs. These plastic legs will store some of the wire connections of the pneumatics to the main system.

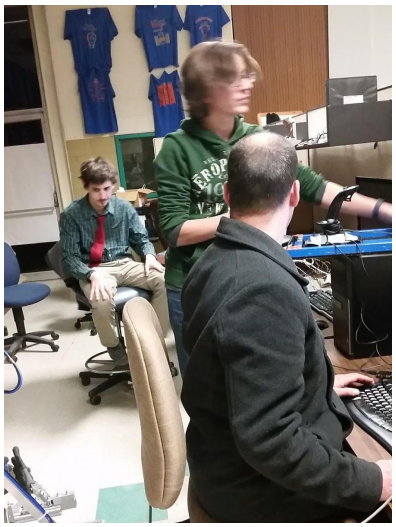


Bumpers!



We've been working on our bumpers too! We silk screened our numbers for this year, instead of the the normal ironing on like previous years. The numbers are designed in a neat 8-bit font to match this year's theme, and we've started building wood frames for the proper measurements. We decided to make 'L' bumpers to go around the corners; we had to check whether we could get the noodles on to the wood and wrapping, as well as the placement of the bumpers on the robot itself.

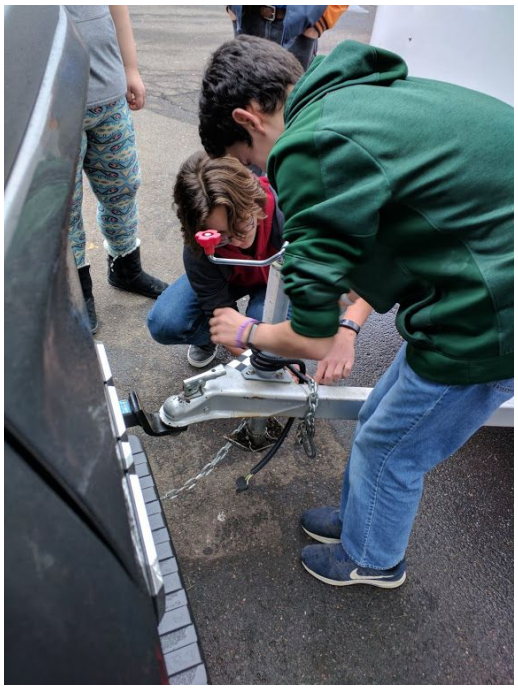
- PROGRAMMING -



This week we got a lot done with the autonomous modes. During the first 15 seconds of the match, our goal is to cross the baseline and deliver a power cube to the switch. Currently, we have three auto modes - one for each possible starting configuration. However, the tricky aspect is that we won't know which side of the switch is for our alliance. Hence, we've also been working on retrieving the data from the field management system (FMS), which we'll use to make these decisions.

- IMAGERY -

This week imagery continued with decorations for the pits and award designs! We're making them with perler beads, which give it an 8-bit illusion to go along with this year's game. The Legos in the photos above are going to be displayed in our pit to go along with our theme! We've also been continuously working on our ABC's book for safety, and as you can see from the build section, we're working on modeling the robot after Emmett!!!

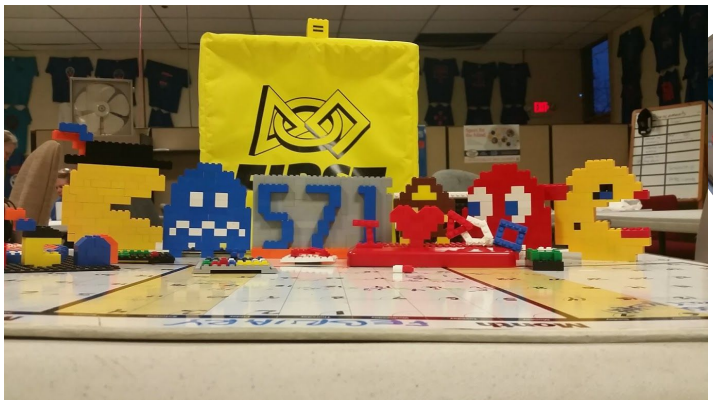


- TIME TO GET READY FOR COMPETITION -

On Saturday we brought the trailer over to the build site (normally stored at the high school) so that it will be ready for Saturday's scrimmage!

Mr. Koenig also showed us some neat tricks with his new F150 for better maneuvering it!!!!

Huge shoutout to everyone who gave us Legos! They will be put to good use... and it looks like even the adults are having fun with them :)



Special thanks to all the families that served us lunch throughout the build season!!!

Abbots – Ghetias – Hyders – Jacobsons – Thiels

-Time to level up with FIRST Power Up! -

For more on Team Paragon visit our website and read our team updates

team-paragon.org

2018 FIRST POWER UP GAME ANIMATION

If you haven't already, don't forget to check out this year's game animation!

https://youtu.be/HZbdwYiCY74

Tell your friends that might be interested in robotics, STEM or Team Paragon. We love to share our enthusiasm with new students and mentors. No experience is necessary, just a ready attitude to learn and get excited!

Contact us at teamparagon571@att.net

During the build season, we meet:

Mondays, Tuesdays, Wednesdays 6-9

Saturday 10-5 Sunday 1-6

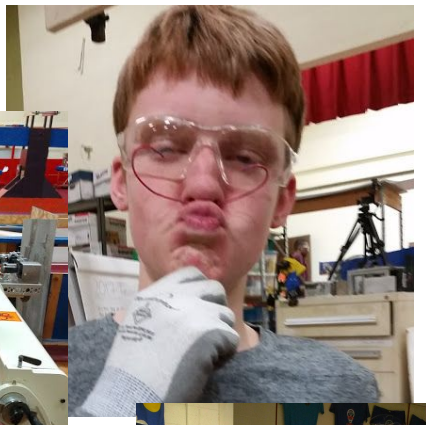
COMPETITIONS ARE AT HAND!

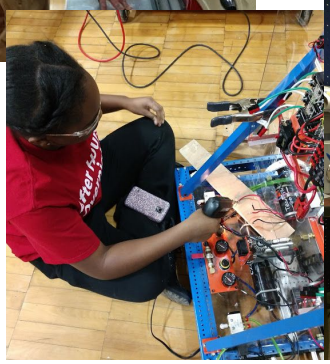
Suffield Shakedown (practice scrimmage) **February 17, 2018**

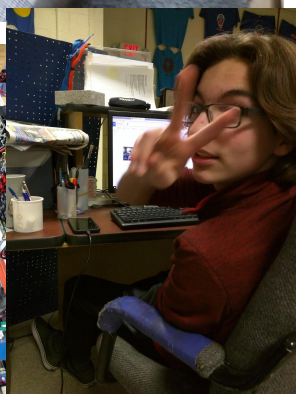
Waterbury Competition (Wilby High School) **March 9th-11th 2018**

Hartford Competition (Hartford High) **April 6th-8th**

"Quotes of the Day"







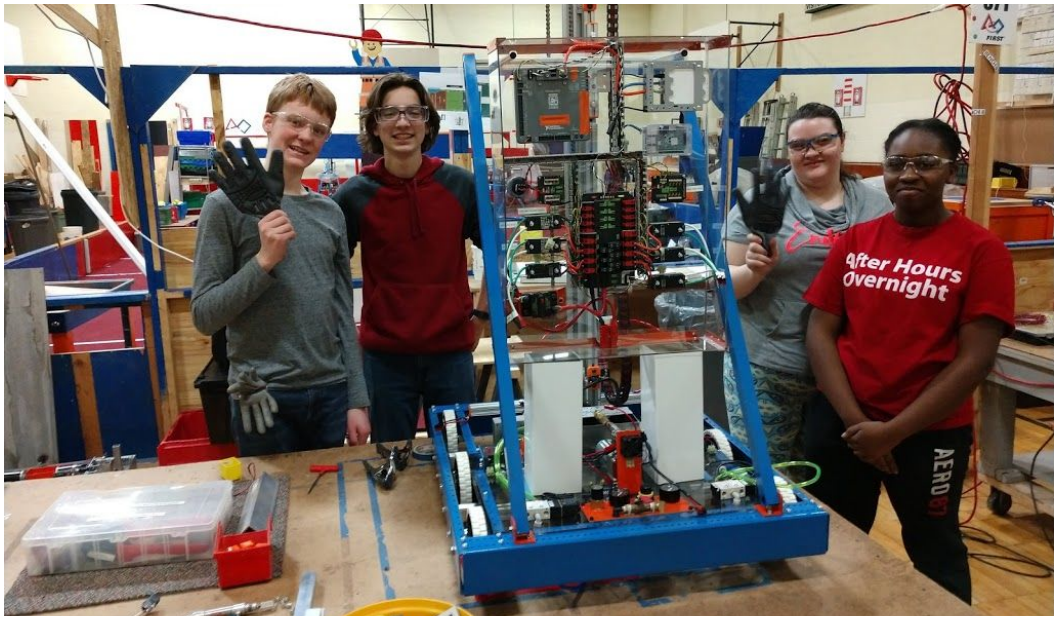
"Don't solve problems until you have them" - Mr. Schwartz

"I'm just gonna be completely honest here, I have no idea what you're doing" - Om

"If you smell smoke, go help Cameron" - Mr. Schwartz

***Deer in the headlights* - Caleb**

"Why is eclipse looking for news articles??? " - Cameron



Team Paragon signing off ;-)

FIRST® Robotics Competition Game

FIRST® POWER UP,℠ the 2018 *FIRST*® Robotics Competition game, finds our teams trapped in an 8bit video game! Teams use power cubes to defeat the boss.

Each three-team alliance has three ways to help defeat the boss:

1. **Owning the scale or their switch.** Ownership occurs when the scale or alliance's switch is tipped in their favor. Robots collect and deliver power cubes to gain ownership.
2. **Playing power ups.** Alliances exchange power cubes for power ups. Power ups provide a timed advantage during the match. There are three power ups that can be played: Force, Boost, and Levitate.
3. **Climbing the scale tower.** Robots work together to climb the scale tower to face the boss.

Autonomous Period:
Robots operate independently following preprogrammed instructions for the first fifteen seconds of the match.

Alliances score points by:

- Reaching their own autonomous line
- Gaining ownership of the scale or their switch

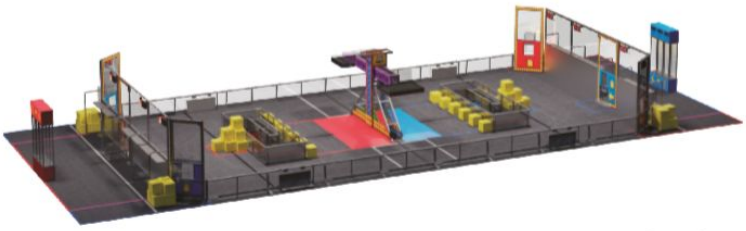
Teleoperated Period:
Operators take control for the final two minutes and fifteen seconds of the match.

Alliances continue to score points by:

- Gaining ownership of the scale or their switch
- Delivering power cubes to the alliance's vault
- Using power ups for a timed advantage
- Parking on the scale platform or climbing the scale to face the boss

The alliance with the highest score at the end of the match defeats the boss and wins.

FIRST® POWER UP℠



Join our photos album to see everything we've been up to!

goo.gl/photos/3hCD3D8p1bRMx5By8

Alanna and Cameron