



As we finish week five of our mission, we are nearing the deadline. We continue to work on the final robot and programming for the electro-aquarium, along with many other things.

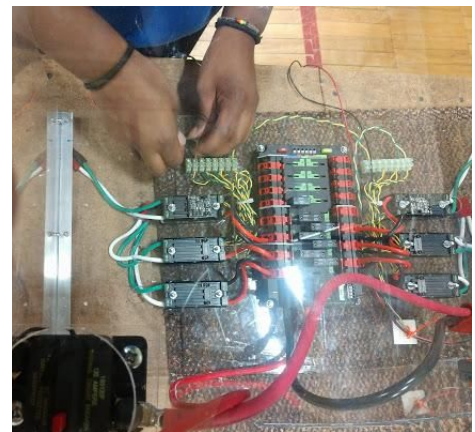
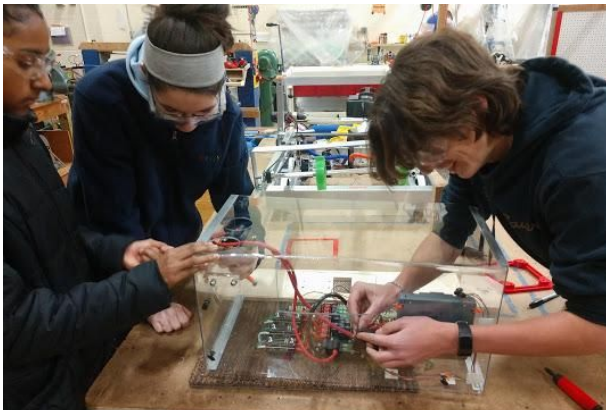
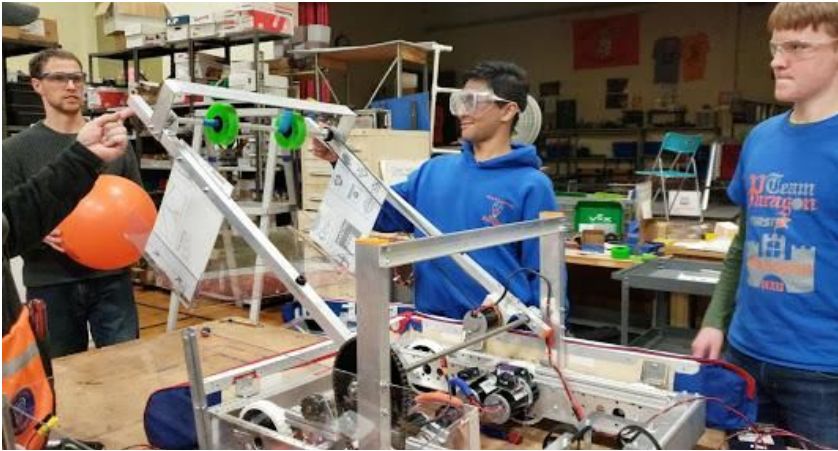
Web

This week Web continued to work on adding more content to our Website. Additionally they worked on fixing some bugs and errors on the Website to ensure all people who visit our website have a great experience.



Build

The engineering team first started the week, working on and nearly finishing our Electroquarium. This is where they keep all of our electronic components for easy access. They've also continued work on our arm lifting mechanism adding additional support, perfecting the wheels to collect the cargo, and fabricating the components to run the axle of the cargo intake mechanism. On Saturday, team members led by Mr Boehm started assembling the bumpers. They are ready to be covered in fabric, which will allow for final adjustments. For the arm intake, the bottom scoop was created allowing us to retrieve the cargo from the ground. While the arm passed the test for ball retrieval, we lost our ball in the process due to excessive speed range. (RIP Cargo). We may need to do some fine tuning.



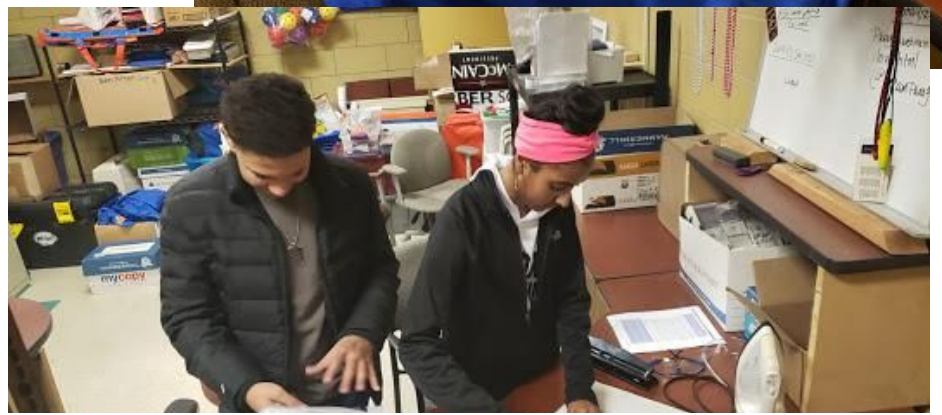
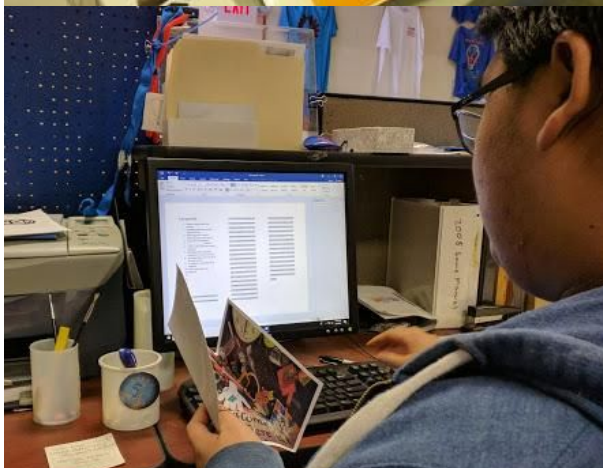
Programming

Ground Control worked on programming the camera to potentially use during the sandstorm, the period of the game where the drive team is blinded on what the robot is doing. They also worked on the autonomous mode for potential deployment during the sandstorm. This gives the drive team options during game play. They also used the NavX to see the robots orientation for automatic limits to prevent tipping over and etc. They used an oscilloscope to help measure speed and distance. Finally, after organizing the visuals and measuring components with the shuffleboard, ground control worked on driving the robot and testing the arm to make sure their programming works.



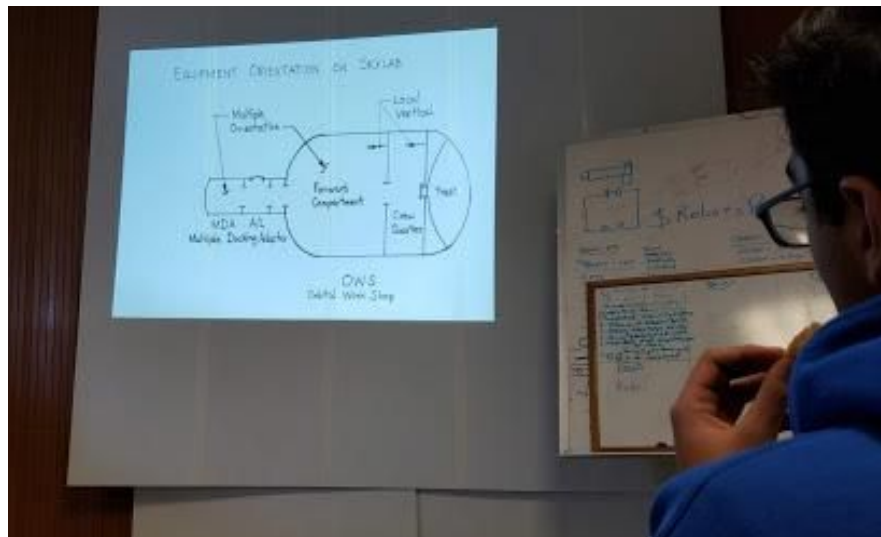
Imagery

The design team finalized the t-shirt designs and has sent in the order. They also planned out ideas to make our Pit, where we work on the robot during competition, more fitting to this year's theme. They continued to update pit book and work on the I Spy activity booklet descriptions. Finally, as a surprise one of our team members brought in a model of the Saturn V rocket which brought the Apollo 11 to the moon. Team Paragon is about more than robots. There are many life skills team members learn also. Certain team member(s) have also learned a lot of social interactions this week to better themselves including but not limited to: searching properly, being observant to open doors especially for people carrying items, and to specify subjects in sentences for clarification. Thankfully, he is surrounded by many who can help him with these experiences and skills.

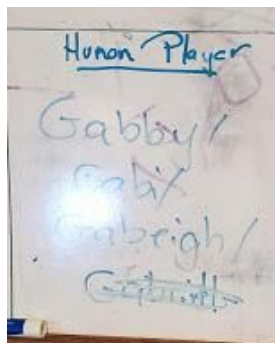
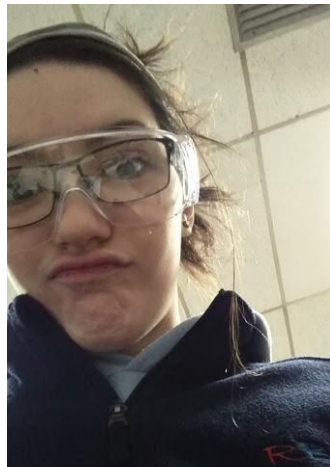
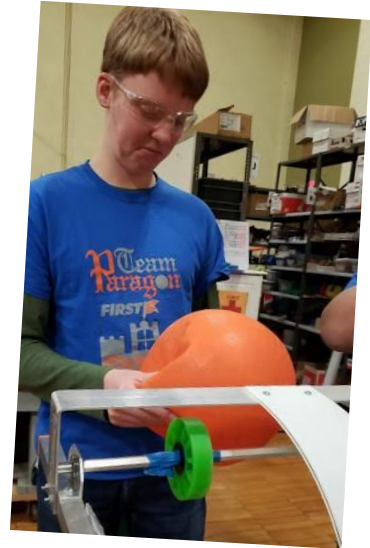
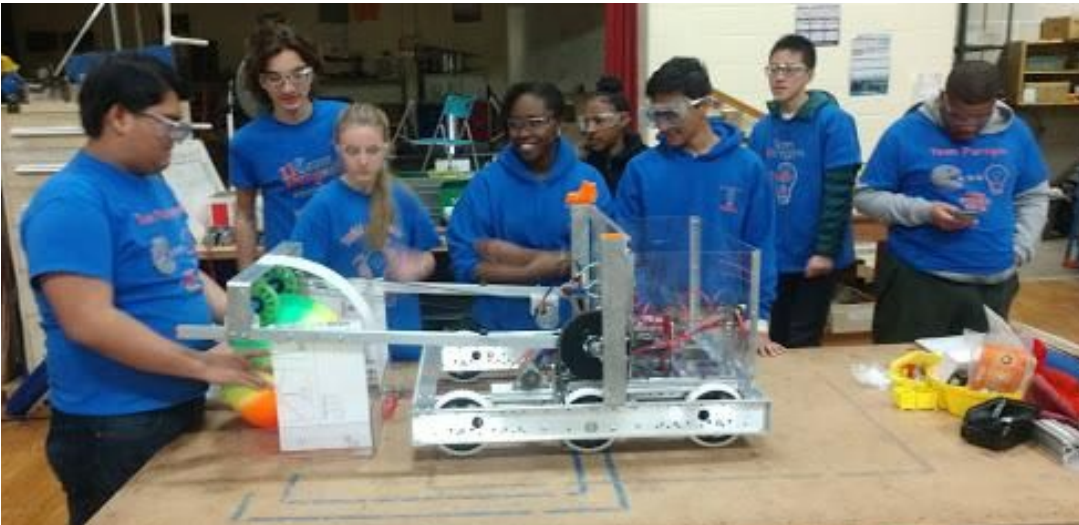


Saturday Discussion

For this week's Saturday discussion, Mr. Boehm talked about what happens to an astronaut's body in space especially the first three days. They experience a fluid shift where the blood gets pushed to their heads making it feel as if they are "getting a cold". Then there's stomach awareness that tends to affect about $\frac{1}{3}$ who get nauseous because of the imbalance in the inner ears. That has been studied for over 40 years now. Finally, he ended with the point of posture, where astronauts experiencing less gravitational pull or "zero gravity", find the center of mass to control their motions upright, learning that they can not trust their inner ear for knowing which direction they are going. An interesting fact was that temporarily the astronauts would grow 2-3 inches taller after about a week due to gravity affecting the spine causing the space suits to not fit.



B.T.S.(behind the scenes)



Upcoming Events

- **February 20th:** Bag and Tag Robot indicating the end of our six weeks of Build.
 - #40 a.k.a. Nap time
 - **Competitions:**
 - **March 9th-10th** Waterbury
 - **March 22nd-24th** Western New England, Springfield
 - **April 6th-7th** Hartford
 - #40.... Again

2019 DESTINATION: DEEP SPACE REVEAL

If you haven't already, don't forget to check out this year's game reveal! There are a few new concepts, so see it for yourself and tell us what you think!



Let's Launch this mission!

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

And follow this year's adventures here:

<https://photos.app.goo.gl/p55F3Kfyr0j6GDBW2>

Our meetings are on Monday nights from 6-9pm at 57 East Wolcott St (the former Roger Wolcott School).

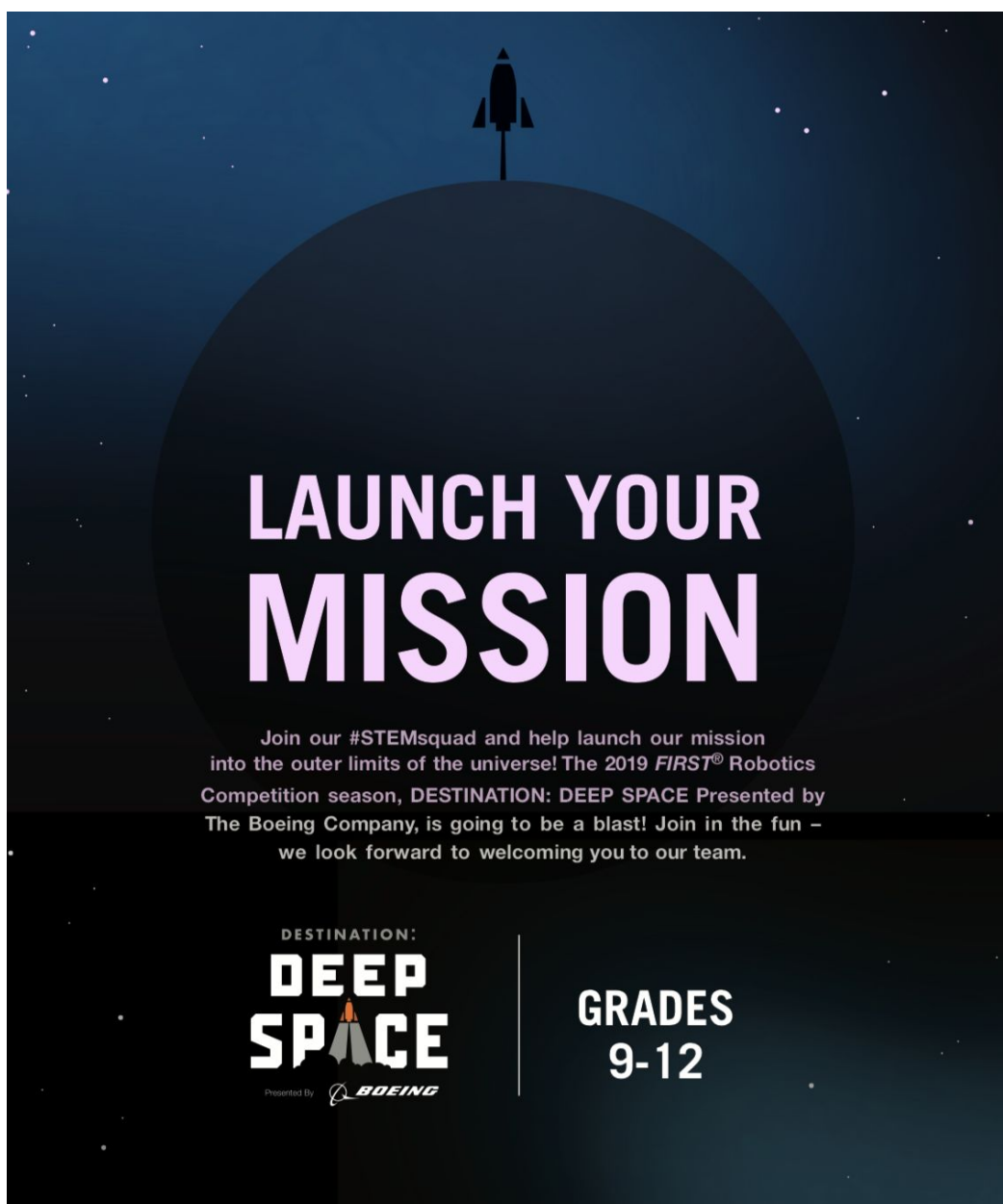
For more on Team Paragon visit our website and read our team updates:

team-paragon.org

For more information and details of the game, here's the game manual:

<https://firstfrc.blob.core.windows.net/frc2019/Manual/2019FRCGameSeasonManual.pdf>

CALEB & HADRI



NE FIRST Waterbury District Event MARCH 9-10, 2019, 8am-7pm
 Wilby High School 568 Bucks Hill Road Waterbury, CT 06704

firstinspires.org/robotics/frc

FREE ADMISSION!!

Please attend and support your team.