

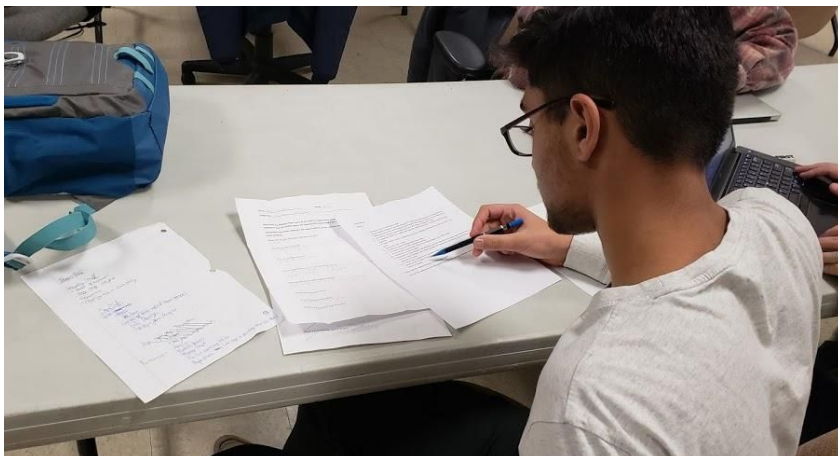


We continue our mission during our fourth week of build season; working on the final robot and programming for the electro-aquarium.

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## Web

Web has been working on updates for the website including: updating new team members' information and our game countdown. They continued to update information for the parent resources page. You can now find information on this years game as well. Our community service page has been updated to reflect work we have done from the beginning of our year.





# Build

To start off the new week, the Engineering team continued working on the final robot. The roller intake for the cargo (ball) was created while making sure the arms pivot properly on the arm axle. We also added in cooling fans and custom brackets for the main drive motors. For the practice playfield, the Cargo ship components, the last game obstacle, were created and are now ready for the assembling process.

Lastly, we began working on the electro-aquarium which is what holds the electrical components of the robot. This

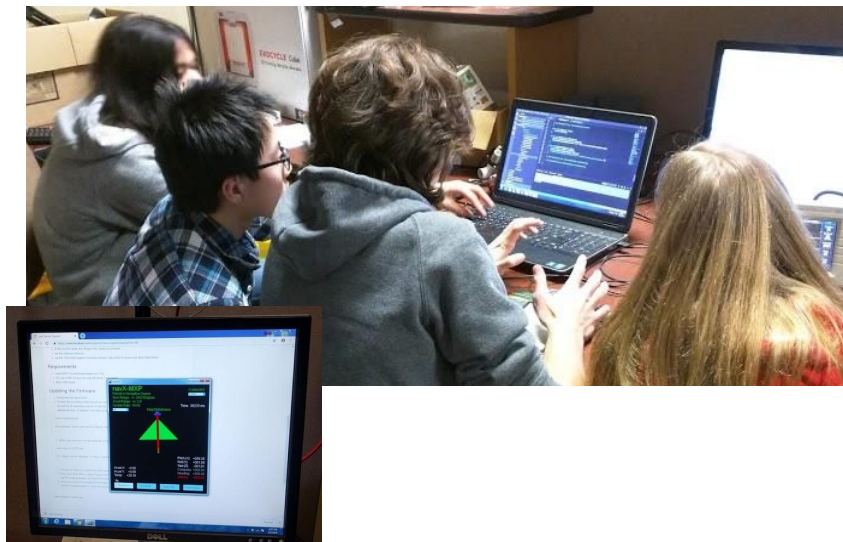
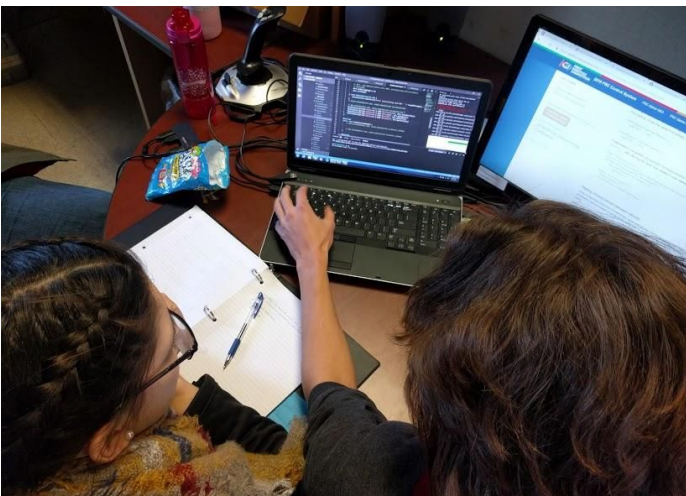
compartmentalizes the electrical assembly to allow for protection and easy removal for needed work.





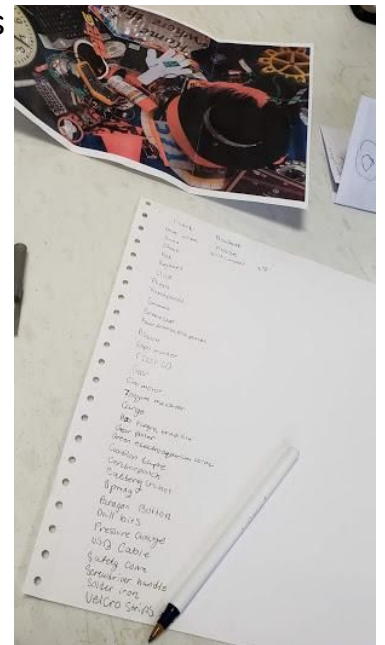
# Programming

Ground Control has finalized the coding for the drive train, arm lifting/shooting mechanism (which was displayed Monday night), and made a snack idea list (guess they ran out of cookies). They continued to work with the oscilloscope to measure speed and distance of encoder. Ground Control also drove the practice robot on Tuesday and discovered some mechanical errors. They added the camera to aid in driving accuracy. A reminder to all, and a lesson learnt, please speak up about any errors before helping in build and always bring up the problem when you have the chance so that you don't rebuild the same problems you discovered!



# Imagery

On Monday, the Imagery team helped out with the playfield construction and began working on the Cargoship. One of our mentors also brought in his own NASA posters and drawings to help out with our pit area theme (Kadri was able to live her childhood dreams). For Saturday, we began working on the I Spy activity brochure, the pitbook, awards, and the button design. We were also able to review over our first draft for T-shirts as it was back from the graphic designer. We made a few revisions and sent it in for last edits.



[Back](#)



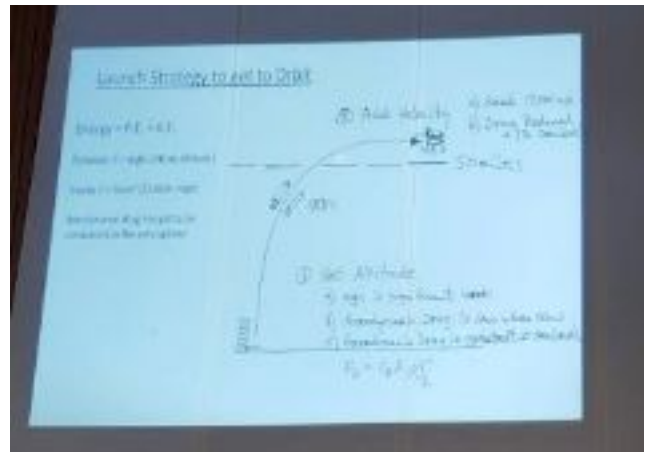
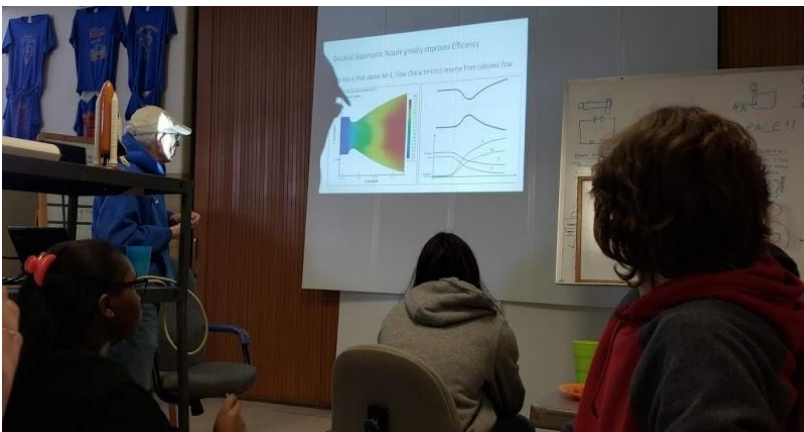
Front



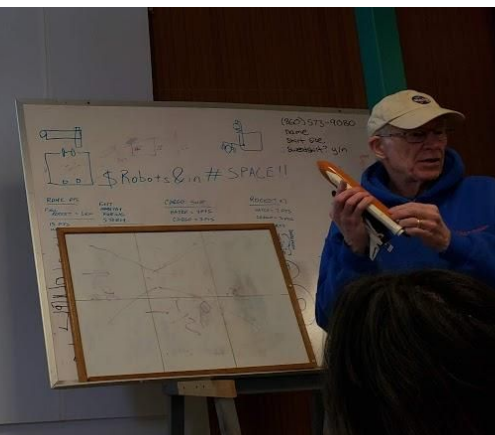


# Saturday Discussion

This Saturday we had another lunch discussion with the topic of "Rockets". Mr. Boehm discussed the making of rockets, fuel versions, and the importance of physics for a perfect launch and orbit. We learned of the different variations of fuel used for rockets and their pros/cons; as well as the math and science behind getting the rocket to launch into orbit and stay without crashing back into earth's atmosphere.

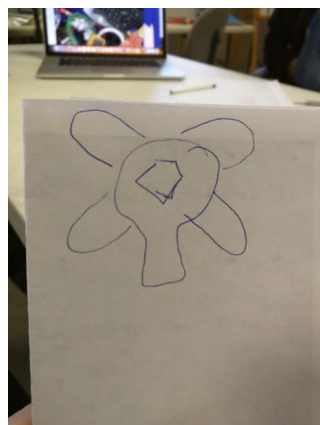


PROPELLANT	COMPARISON	
	ADVANTAGES	DISADVANTAGES
CRYOGENIC	HIGHEST THRUST CLEAN BURNS	HIGH TECH LOAD & GO
HYPERGOLIC	EARTH STORABLE SIMPLE CP	TOXIC/HANDLING POLLUTING BYPRODUCTS
SOLIDS	SIMPLE SIMPLE SIMPLE	POLLUTING SAFETY



## B.T.S.(behind the scenes)

Abbot Note: You can't Print a file from your phone by putting the phone into the printer. Also looking up and putting your hand on your chin, doesn't make you look like your working....



Snack Idea

- Smart Food - MJ
- Chocolate - MJ
- Cheese & Cracker - MS
- Chips & Dip - MS
- Cookies - Lin
- French Fries - Lin
- Cooked Chicken - Lin
- Trail Mix - Everyone
- Ice Cream - Everyone
- Veggies - MJ
- Brownies - G
- Popcorn - MS
- Cheesecake - MS
- Cereal - G
- Rice Krispies - MS
- Apples - G
- Fruit - G

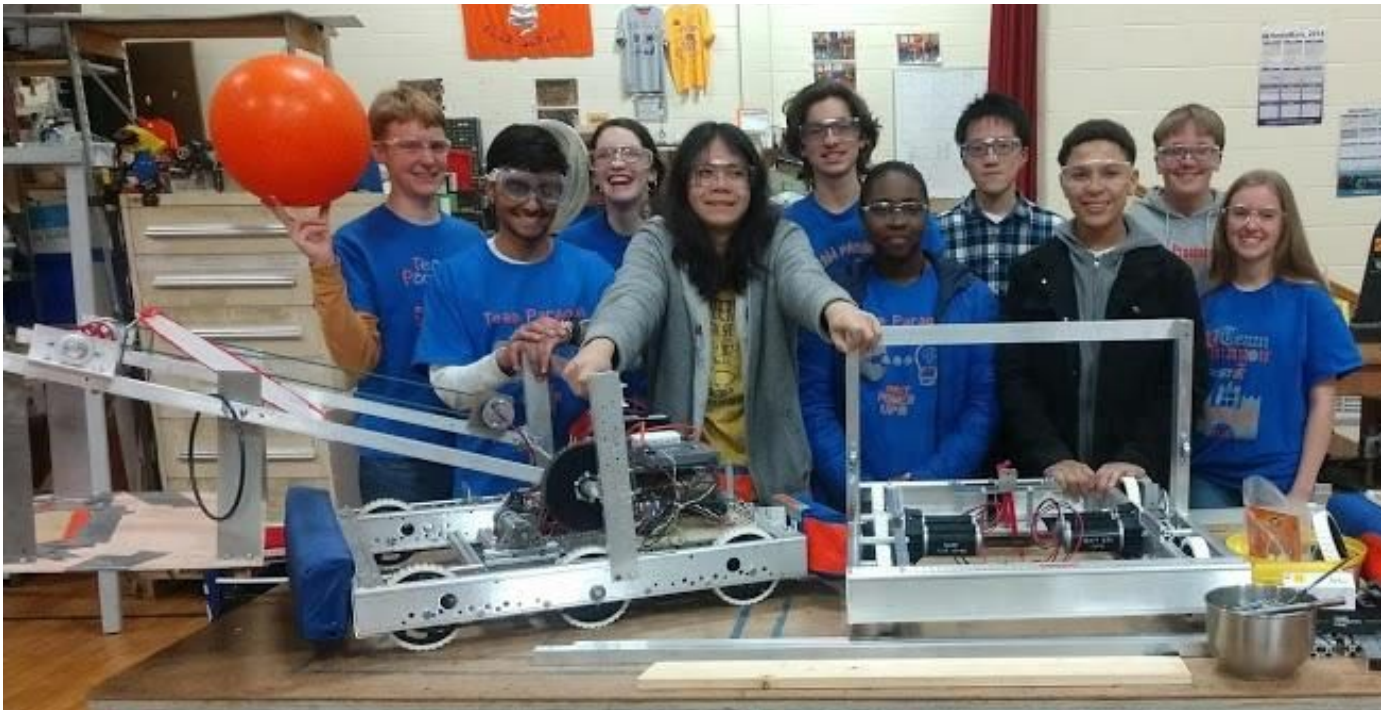




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## Upcoming Events

- **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](mailto: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:

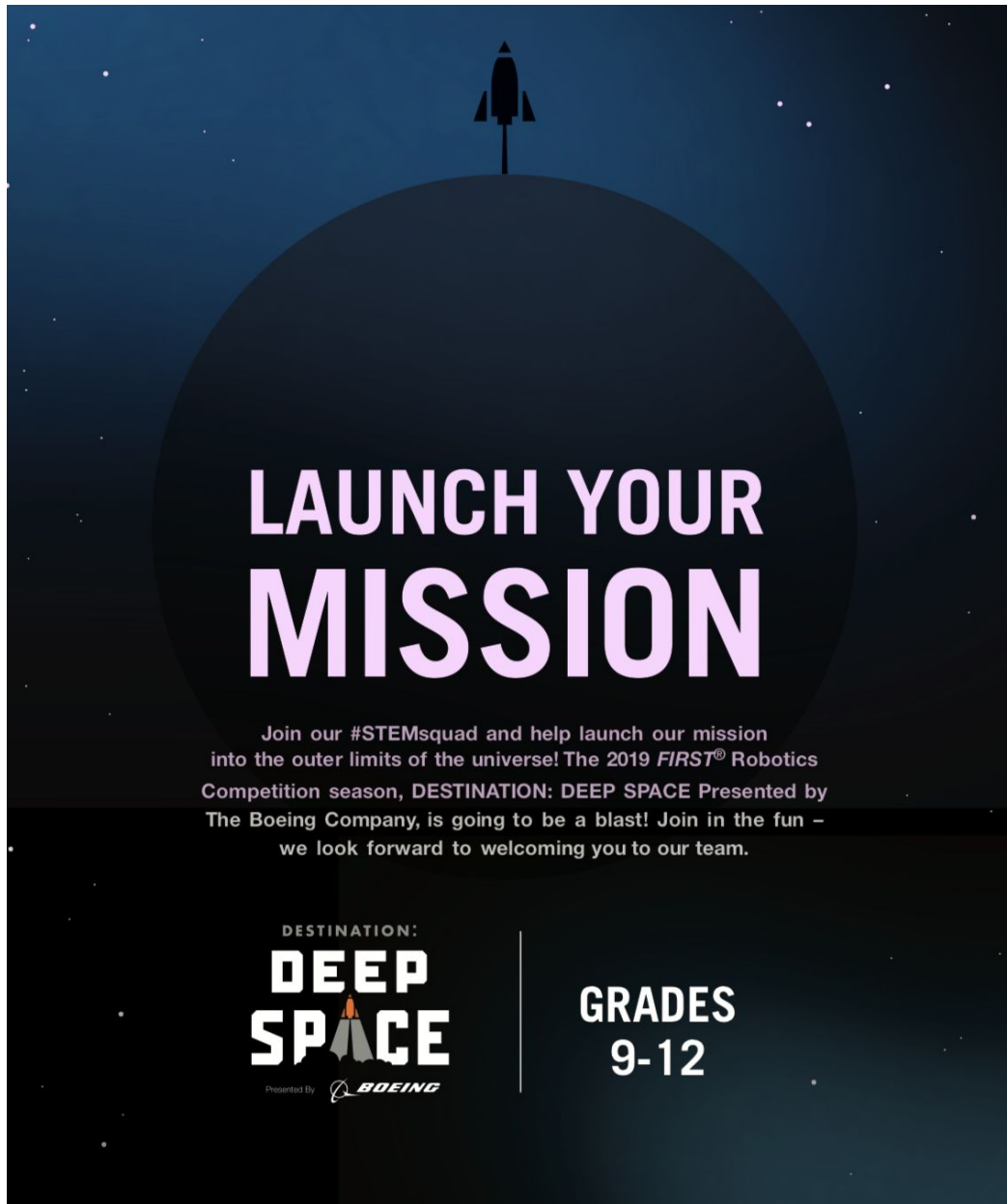
[team-paragon.org](http://team-paragon.org)

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](http://firstinspires.org/robotics/frc)

**FREE ADMISSION!!**

Please attend and support your team.