



BOSS LEVEL 2

Hartford Competition

Team Paragon April 7-8, 2018

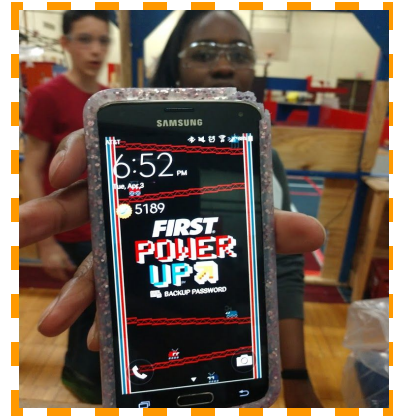
~ Hartford Recap ~

Friday: Set up + practice **Saturday:** Qualifiers **Sunday:** Playoffs!!!

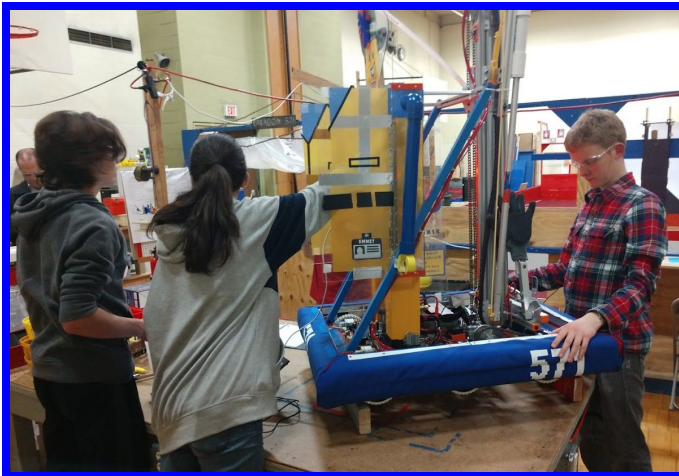
Well this is it!!! We made it a long way this year, and just had our last competition for the 2017-2018 season. We'll get to the competition, but first a quick recap of what we've been up to the last few weeks...

- Mid-March → April Competition -

Between the Waterbury and Hartford competitions, we had another six hours total to work on the robot outside the bag. We used most of these hours to focus on autonomous testing, which is much easier to work on at our site than at the busy competition (since we have a full play field to practice on). We also added some enhancements to the climber/winch system



Pre-Hartford Competition



Build

We added a couple of nifty limit switches so that the robot operator won't have to guess when the climber is at the top or bottom. The top limit switch uses magnets to detect it, and the bottom is a small switch that triggers when pushed.

→ A few students also worked on upgrading the battery charging station and added (Paragon blue) carpeting to the outside.



→ While programming was busy testing autonomous modes, the team also did some recycling, and took apart an old robot



→ During our auto testing, Mr. Schwartz's daughter got a chance to try driving the practice robot around. This was a small yet great opportunity to share the robotics experience with others, and hopefully things like this will encourage more interest in STEM and robotics.



By the way!

Our 2018 sponsors are now featured on the back of our semi-new trailer!!! It looks great, and now more people can see the companies and organizations that have been so generous to our team.

- FRIDAY -

On Friday our drive team was picked up after school to load up for Hartford!!!



After the short trip to Hartford and a pit stop at Wendy's, we unpacked, set up, and got some practice matches in!!!! It was a lot of fun!

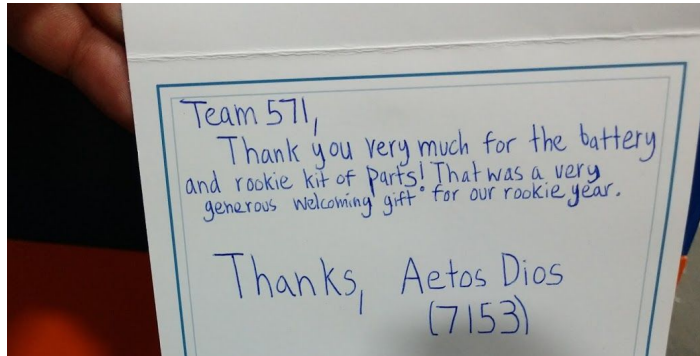
- SATURDAY -

A lot of work went into Saturday, I think best summed up by this story of pictures... Also, we managed to hook up a camera without our programming mentor!!!



We also were happily surprised by a number of gifts given by other teams

Saturday morning!



- SUNDAY -

We played a couple of tough qualifier matches in the morning. A highlight was winning against Team 176, Aces High, by working well with our alliance. We also played a tough match almost by ourselves, as the other two rookie teams were mainly focused on the vault.



Then in the afternoon, we were picked by the #3 seed alliance, the Tomahawks and Birds of Prey!!! They were a fantastic alliance, especially in terms of teamwork, and it was so much fun to work with them.



Hartford 2018				
	ALLIANCES	DISTRICT POINTS	STAT	
QF	Alliance 1	195	177	7153
QF	Alliance 2	230	176	2064
QF	Alliance 3	2170	181	571
QF	Alliance 4	558	173	1027
QF	Alliance 5	175	190	155
QF	Alliance 6	999	236	839
QF	Alliance 7	2836	2067	5686
QF	Alliance 8	3464	1991	3146

We lost 2-1 in the quarterfinals but kept having a good time with some Italian ice!

571 Awards went to...

- **Master Builder (engineering design):**
Buzz Robotics #175
- **Good Cop (gracious professionalism):**
Aetos Dios #7153
- **Emmet (imagery):**
Granby Grunts #3146



So what's next??

– it's not over, robotics never stops! –

★ **Shad Derby coming up!**

- May 19th is the annual Shad Derby festival in Windsor! We'll be marching in the parade, so we're thinking of things we can do in it

★ **Project Idea: Self-Driving follow robot**

- The programming team has been discussing building a robot that will automatically follow a person with a colored shape on their back. This would be a fun project to learn more about vision tracking.

★ **Project Idea: Two-wheeled bot**

- Another difficult but exciting idea is a robot with two wheels. This would use all the experience and knowledge the programming team has gained this year with the navX. This system has a lot of gyros and sensors that detect position and angles, so the robot can balance itself and drive around.

Other things are being discussed, including fundraising and more outreach to recruit new students. We also may be moving build sites this year!

Special thanks to all our supporters!!!



- Time to level up with FIRST Power Up! -

For more on Team Paragon visit our [website](#) and read our team

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 or visit us **Mondays 6:30pm**

COMPETITIONS ARE... FINISHED!

Waterbury Competition and Hartford Competition: you can see the entire 9 hour stream on Twitch or Visit [the blue alliance](#) for all the information on us and other FIRST ROBOTICS teams



They even had
a LEGO table for us

Team Paragon signing off ;-)

[Check out the best of Hartford here! \(photos\)](#)

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

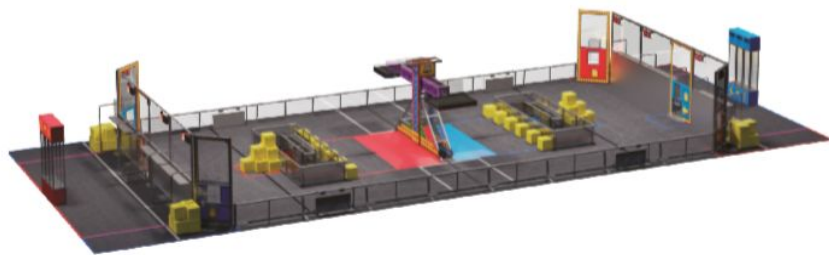
Teleoperated Period:

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.



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

goo.gl/photos/3hCD3D8p1bRMx5By8

Alanna and Cameron

And Emmet

