

Kicking It Into High Gear

Last Saturday, we held tryouts for an important position on the team, driving the robot! Contenders had to operate the robot and perform tasks with speed and skill in order to pick the best driver for the upcoming competition season. This is a highly coveted and competitive position on the team, so students put forth their best effort to demonstrate their skill.

Sponsor of the Week:



Upcoming Events

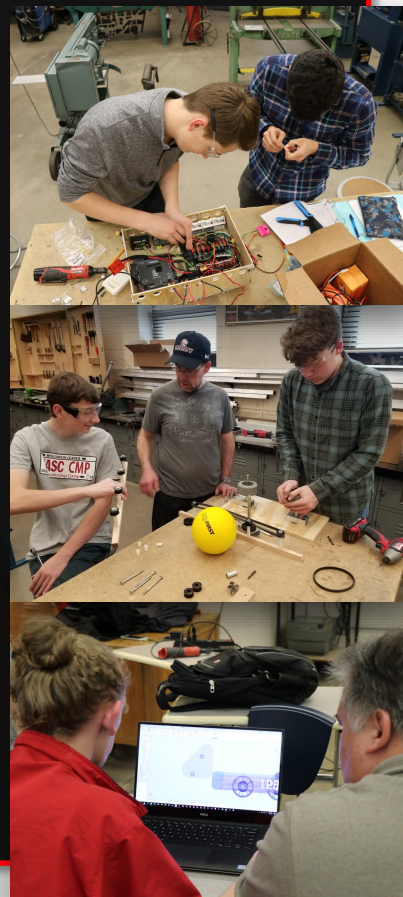
- Feb 15 FLL Jr Expo
 - Pewaukee Lake Elementary
- Feb 16 Sussex Mini Regional.
 - Sussex Hamilton High School
- March 4-8 Duluth Northern Lights
 - DECC Arena
- March 18-21 Milwaukee Regional
 - Panther Arena



Subteam Updates

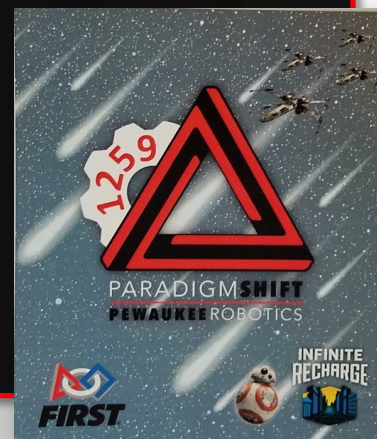
Build

- ▶ **Ball intake** - Finalizing the intake specifications in CAD, as well as creating a mechanism that will bring the intake within frame at the beginning of the match. Metal mockups are likely to start later this week.
- ▶ **Ball indexing/Storage** - Starting the process of creating a metal mockup. Wooden mockup is being used in conjunction with the ball shooter for the code team. This sub-team is starting to plasma cut sheet metal pieces for the metal mockup version.
- ▶ **Ball shooter** - Metal mockup ball shooter is complete, Currently working on the turret design in addition to the building of a metal mockup transition piece between the ball storage and ball shooter.
- ▶ **Color Wheel** – This mechanism is fully modeled in CAD and the metal mockup is complete, currently in the hands of code for testing.
- ▶ **Climber** - Currently continuing to develop the climbing mechanism in wood with plans to move onto metal sometime next week.



Locker Signs

On Saturday, locker signs were placed on all team members' school lockers! Designed by students on our business team, the logo on top of a starfield shows the sci-fi theme of the season. If you look, you might even be able to spot a certain droid! These signs show some team spirit and recognize the members of the team.



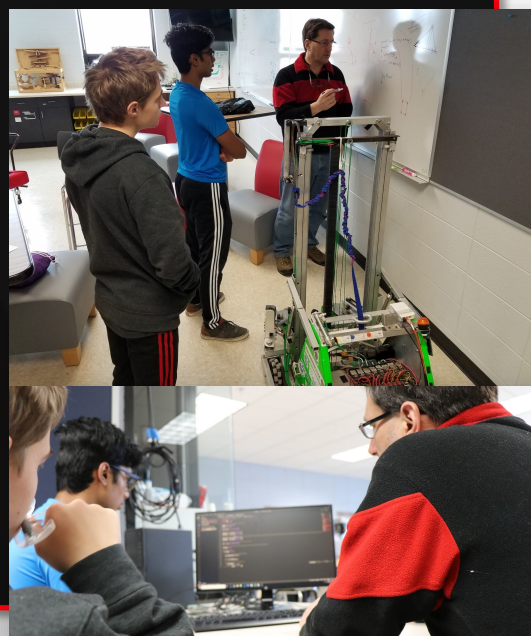


Subteam Updates

Programming

The Programming Team had another successful week as they:

- ▶ Worked on Color Sensor code to spin the color wheel with more accuracy and repeatability
- ▶ Accuracy testing and tuning for the shooter and rewriting the program so that a stronger motor can be used
- ▶ Preparation for robot vision, working on automatically tracking balls
- ▶ Revision of 2019 drivetrain code for use on new, more powerful 2020 drivetrain
- ▶ Looking into motion profiling and path finding for more advanced control of our robot



Business

As our season reaches it's halfway point the business team is still hard at work. They meet every Tuesday and Saturday to continue working on their initiatives:

- ▶ Travel planning for our competition in Duluth, Minnesota
- ▶ Obtaining sponsorships and grants
- ▶ Applying for FIRST awards
- ▶ Preparing our Chairman's Award application

