



Into the Heat of Build Season

This past week has been an exciting one for the build team. Everything from shooting 7 inch foams balls over 30 feet into an 8 foot tall structure, to climbing onto a teeter-totter suspended 7 feet high, the build team has been quickly mocking up and testing every idea that students have. Each mechanism was built and tested to determine efficiency, speed, and compatibility. This week our build team has been able to divide and conquer, tackling each individual aspect that comes with this year's game.

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

Students were split into different teams to work on each subsystem:

- ▶ Ball intake - testing the variety of ways to intake multiple balls at once from different angles and speeds
- ▶ Ball indexing/storage - testing how we can store all the collected balls and aligning them up for our ball shooter
- ▶ Ball shooter - testing the various components and angles to achieve maximum shooting distance
- ▶ Spinning Color Wheel Mechanism - focused on creating a mechanism to spin the wheel in a controlled manner
- ▶ Climber - Developing a climbing mechanism that can reach 7' up and is able to lift our own 125+ pound robot into the air.

Overall the build team is excited for what is to come, from iterating the wooden mockups to starting metal mockups, the build team is happy to have the support of 1259 alumni and parents/mentors to help facilitate and create a place for our students to learn and thrive.





Subteam Updates

Programming

This week, the Programming Team made tremendous progress towards completed code:

- ▶ Tuned a color sensor to detect colors on the Spinning Color Wheel with a small margin of error
- ▶ Improving driving code which will make this year's drivetrain have state-of-the-art precision
- ▶ Integrated our Limelight Vision Camera into our robot code for auto-aiming capabilities
- ▶ Developing simple code for new students to learn about Robot Vision



Business

Paradigm Shift's business team are the heroes behind the curtain. We encourage every one of our members to participate in this subteam. Some of the activities this team pursues are:

- ▶ Organize our trips to competitions
- ▶ Obtain sponsorships from generous local organizations & corporations
- ▶ Apply for FIRST awards
- ▶ Present our application for the prestigious Chairman's Award

