



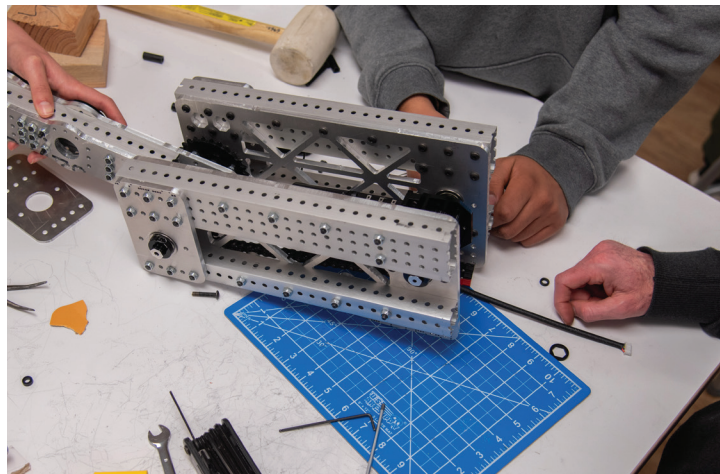
As we wrap up weeks 6 and 7, our team has made significant strides in refining our robot and competition strategy, with every subteam contributing to our readiness for upcoming events.

Programming

The programming team has been involved in refining elevator and manipulator controls. We dedicated a considerable amount of time to debugging the drivetrain, which involved solving complex issues and fine-tuning its performance. Additionally, we worked on developing autonomous commands, which are now slated for testing next week. Most notably, the team successfully implemented localization during these weeks.

Electronics

The electronics team has made substantial progress, wiring the drivetrain onto the robot and cleaning up the chassis wiring. We have installed and wired limit switches as well as conducted testing on the practice field. Additionally, we are working on integrating LEDs for both the aesthetic appeal as well as the ability to provide visual cues to the driver. Not only do these improvements enhance the visual appeal of the robot, but they also ensure smoother operation.



Vision

The Vision team successfully tested their AutoOrient feature. However, due to wiring issues with an additional Limelight for algae detection, we decided not to utilize it for the upcoming competition. The team began testing April tag detection for robot localization, adapting their strategy based on the large size of the algae intake. While the AutoOrient was deemed less useful than anticipated due to the intake size, our vision team remained focused on optimizing localization techniques for better competition performance.

Build & Design

Our Build & Design team, led by Tyler K., focused on implementing crucial adjustments to enhance the durability of the robot. We fine-tuned the elevator and made minor tweaks to other mechanisms.



Coral/Algae Manipulator

The Coral/Algae manipulator team concentrated on CNC-ing polycarbonate plates to lighten the manipulator. They also prepared spare plates, anticipating potential competition needs. The focus on weight optimization is particularly important and will ensure that the manipulator functions properly without compromising the overall robot's weight limit.

Hang

The Hang team underwent significant design changes, transitioning to a winch-based system using string instead of chain to reduce weight. A new prototype was built, with the team now working on a final design for the CCR competition.

Fabrication

During these weeks, our fabrication team celebrated the milestone of completing the assembly of the pit case. This is particularly significant as our pit case stores and organizes our tools and material for competition.

Ground Algae Intake

After thoroughly testing of the algae manipulator, our ground algae intake team decided not include their system on the robot due to weight constraints and the manipulator's effectiveness.

Elevator

The elevator team continued to enhance their system, adding ratchets to simplify tensioning. The elevator was fully wired and successfully tested at practice fields, reflecting significant progress in its development.



Marketing

Our Marketing team, led by Meghna C., began designing and writing content for a comprehensive entrepreneurship binder. We also made arrangements with our lead sponsor POWERTEC to provide branded items for our gift bags to distribute at competition and assembled these packages.



Business

The business team continued our efforts to reconnect with previous team sponsors and supporters. We are also planning on reaching out to other teams to create crucial business connections. These relationships are highly valuable for securing support and leveraging resources that will help our team excel in both technical and financial aspects.

Outreach

Outreach has remained active in enhancing our team's community engagement and presence. We worked on the Entrepreneurship Binder, created a bingo game and pamphlet focusing on an FRC 101 overview to be distributed in our competition pit, all the while collaborating with marketing to prepare gift bags for competition.



Strategy

The Strategy team began final preparations for competition. We analyzed Week 0 footage and formulated strategies based on the robot's capabilities, relying on developments during practice sessions at the field. Our team then began finalizing the scouting plan and initiated practices.

More frequent updates can be found at [instagram.com/frcteam6962](https://www.instagram.com/frcteam6962)

Team photos are on team6962.smugmug.com

YouTube Channel with robot tests is <https://www.youtube.com/@frcteam6962>