

BONDS Week 4 Newsletter

1.29.24-2.3.24

Introduction

Welcome to the fourth week of the BONDS Status Report of the 2024 season! In this entry, you will see what BONDS Robotics accomplished in the fourth week of our official season for this season's 2024 FRC competition, Crescendo!

On week four of our competition season, our team started manufacturing pieces for the different mechanisms for our robot and prepared for our critical design review! This week's main objective was to



continue working on CAD and cut out pieces for the superstructure and drive chassis. As we prepared for our last presentation of this season, the team continued to work in parallel with manufacturing pieces and to organize the slides to present to a panel of new judges on Saturday!

Manufacturing

This week, the manufacturing team started the first bit of construction on our final robot! We are making significant progress towards our final robot, from the belly pan to aluminum tubing. With many of our team members being seniors, we are also working towards teaching younger students how to run the machines! After all, they are the future of our team! After the bottom plate of our robot was made, the students decided to sign the bottom plate before it got bolted onto the final robot to represent all the students' effort into making the robot! This week marks the start of our manufacturing season, and we will have many updates next week.



New Leaders and Awards

This week, our team chose the new build captain for the 2023-2024 season!
Congratulations to Alan Sarle for the new build captain position!
Our mentors and students are working on different awards to submit to both competitions this year. The Dean's List award is for students who exemplify leadership and dedication and demonstrate FIRST core values. This year, we will have two Dean's List nominees who will compete with other nominees to get recognized during awards at the competition. Another award we are submitting is the Woodie Flowers Award. The

Woodie Flowers Award is a coach/mentor award that recognizes one coach/mentor on the team who has dedicated their time to challenge students to be clear and concise in their communications and has demonstrated science, engineering, and technological values to the team. We will announce the nominees for each award in next week's newsletter. Stay tuned!

Critical Design Review

The critical design review is our final design review presentation of the season. This year, we presented our final design to the judges, where we got final feedback on issues mechanically and potential solutions. Three mentors and one alumni provided unique and valuable feedback to our team. It was also a chance for students to practice their public speaking and learn presentation techniques. It was a great success, and the team is excited to move forward to building our final robot!



Sub-Teams

Business Team- This week, the business team discussed competition and travel expenses with head mentors. The team has 16 students and many supportive mentors who will join the traveling regional to Cleveland. To fulfill a successful traveling regional, the mentors and business team reflected on the team budget and discussed with students who still needed to accomplish the five business rules. The five-business rule is each student will have to speak to 2 businesses and go to three businesses that other students have set up to be eligible to travel with the team for free. The mentors and business team will continue to work with students to make everyone eligible to travel with the team for free.

CAD Team- The CAD team worked on finalizing the robot for our critical design review presentation and completed the drive base design. The drive base design will now be handed off to the build team to manufacture and build the drive base.

Electrical Team- The electrical team worked on planning the electrical routing for the final robot. The CAD model will be presented at the critical design review presentation.

Marketing team- The marketing team continued to film for the documentary for this season!

Programming- The programming team continued to work on autonomous code on the practice drive base
Critical design review



Closing Words

We want to give a big thank you to all of our sponsors! Our team can compete because of your support, and none of this would be possible without our sponsor's help. BONDS team will continue improving and learning STEM skills and values this season. To see our season's progress, please follow us on Instagram, YouTube, TikTok, Twitter, and our official website for weekly newsletters.