

# BONDS Week 5 Newsletter

2.4.24-2.10.24

1

## Introduction

Welcome to the fifth week of the BONDS Status Report of the 2024 season! In this

entry, you will see what BONDS Robotics accomplished in the fifth week of our official season for this season's 2024 FRC competition, Crescendo!

This week is manufacturing and assembly week! The team focused on getting the drive train built and ready for the programming team and assembling the robot's superstructure, intake, and indexer!

# Manufacturing

This week, our primary focus was manufacturing as many pieces as possible. The CAD

for our robot was approaching its completion. Therefore, the team planned accordingly and started manufacturing the robot parts with Omio and X-Carve. One group of students focused on manufacturing pieces from Lexan using the X-Carve. The build team created a spreadsheet to assist groups with regulating what pieces get manufactured and staying on schedule. The second team focused on the Omio, using aluminum tubing. The aluminum tubing is overall for the drive base, superstructure, and a portion of the indexer. The students worked on manufacturing mainly all the pieces that were needed to be manufactured. We stayed on task and accomplished our goal for this week!

# Assembly

For the next couple of days after manufacturing all the pieces, our team started working on the robot's drive base and superstructure. Our team discussed plans and decided to finish the drive base promptly so we could return the robot to the programming team for testing. We continued to work in parallel by manufacturing the pieces and building the drive base. On Saturday, February 10th, the team focused on assembling the robot as much as feasible with the remaining







time we had. Thanks to a diligent, hard-working team, we got the drive base, ground intake, superstructure, and a portion of the indexer finished by the end of Saturday's practice. We are pleased with our progress and will continue to work towards completing the robot before hardware lock.

#### **New Leaders and Awards**

The team announced the Woodie Flower and Dean's List nominee this week. The Woodie Flower Award is an award for 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. Congratulations to Isaac Murrin for this year's Woodie Flower nomination! We also would like to congratulate two students for the Dean's List award! The Dean's List award is for students who exemplify leadership and dedication and demonstrate FIRST core values. Please congratulate Oliver Spaulding and George Sander for the Dean's List nomination. We are very proud of all of you for your hard work and dedication to the team!

#### **Sub-Teams**

**Business Team-** The business team continued to work on this year's t-shirt design. The business team is scheduled to order t-shirts next week!

**CAD Team-** The CAD team finalized the robot CAD for CAD lock (design freeze) this week

**Electrical Team-** The electrical team started the preliminary layout for the electrical components of the robot.

**Marketing team-** The marketing team updated the social media page and continued to organize the Women in STEM event happening next week!

**Programming-** The programming team helped the build team assemble the robot this week.



### **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.