

# BUILD SEASON WEEK 1 NEWSLETTER



## **KICKOFF**

Kickoff was a blast! Excited members, mentors, alumni, coaches, and parents gathered in the theatre to watch the live stream of the unveil of FIRST Steamworks. After watching the live stream together, members ran through important parts of the game manual to get everyone familiar with the rules and the specifics. They then broke into groups to strategize, and discussed possible game plans. Lastly, they finished off the day by coming back together as a team and sharing their thoughts on what they discussed, and went home feeling excited for what the next six weeks would bring!



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## **ENGINEERING**

Members began constructing the practice field, completing the human player loading station and the lift peg. They also began testing the shooter mechanism. It did not work as well as they expected, so the prototype was taken back to the drawing board and will continue to be worked on. The blender mechanism for the feeder was completed and tested. It worked well, but more testing still needs to be done to optimize the mechanism. The electronics department worked on educating newbies, and made battery connectors to power pole adapters with light switches on them to aid testing for motors and pneumatics. In addition, the hinged winch mechanism was tested, using velcro to capture the rope. Lastly, the framework for the Wilson, an all-in-one device for manipulating the gears, was completed, and different mechanisms were tested.





### SOFTWARE ENGINEERING

A lot of progress was made on CV. Members installed OpenCV on their laptops, and a cardboard target for the lift was constructed. Detection on the boiler and lift targets were worked on, as well as the lift and boiler vision targets. Members also installed the 2017 NI tools on all laptops, including old laptops that haven't been used in years, and both roboRios were flashed. Radios were also configured, and one is currently on the practice drivetrain. Lastly, newbies were taught more about previous years' codes, and learned more about git and GitHub. They went on to writing and testing commands for controlling the drivetrain and the acquirer by a controller.







### **MARKETING**

Members started the award submissions for this year and continued to work on them, such as the Woodie Flower's Award, Chairman's Award, and the Entrepreneurship Award. In addition, members worked on the logistics of the P.S. 124 Afterschool Robotics Program. The curriculum was finished, and a PowerPoint and time breakdown were made for the Family Workshop. They are still in the process of recruiting student teachers for the classes. As well, StudyBuddies has been launched! This is a partnership with the Battery Park City Library, where members from our team will tutor elementary to middle school kids in school subjects. Outreach to the nearby elementary schools was completed for this program, as well as the logistics. Please look out for more information about these two exciting programs!

#### **CONTACT US!**

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#### **IMPORTANT DATES!**

Last Day of Build Season 2/21 South Florida Regional 3/1 - 3/5 New York Regional 4/6 - 4/9 St. Louis World Championship 4/26 - 4/30

