

RAGE Robotics

BUILD SEASON - WEEK 6 UPDATE (STOP BUILD DAY 2/23/16 AT 11:30 PM)

What a week! All groups were busy this week working towards having a working robot by Saturday so we could do some trial runs at the Suffield Shakedown – a preseason scrimmage hosted by Team 176 at Suffield High School. The hard work paid off and the team did a great job.



2016 Suffield Shakedown

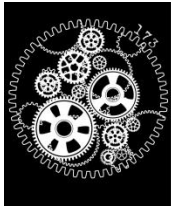
To get there, the subgroups were busy!

Mechanical Build – The build group continued with the base, the arms and getting the chains all set. They also helped the electronics and pneumatics groups with mounting their equipment.

Electronics – The electronics subgroup completed wiring the robot (just in time) and collaborated with the programming group to make sure all motors and components were wired correctly. After some trial runs, the groups were able to get the controllers operating.

Social Media/Spirit – The social media group was able to post updates during the competition on the Facebook page and will be loading some photos from the competition onto the webpage shortly.





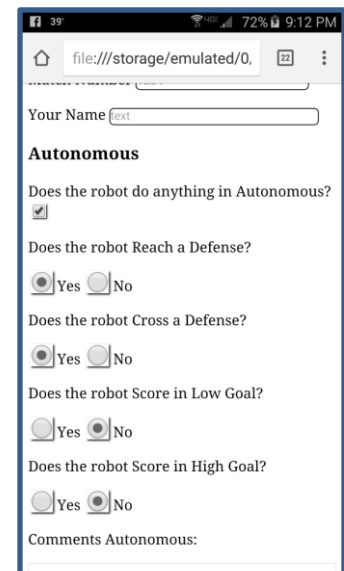
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Safety – The safety team gave a presentation on what to do if a team member sustains a minor cut when working on the robot. They were also on the lookout during the competition ensuring team members were wearing safety glasses in the pits.

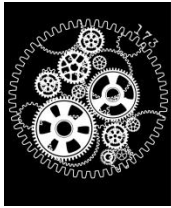
Programming – By Saturday the base, lift mechanism, drive train and joystick controllers were completed. The camera is just about ready and will be tested when it is mounted. The programmers were able to prove what they have learned in the last 6 weeks, doing some last minute troubleshooting during the competition.



Scouting – The scouting subgroup had their program ready on Saturday and the team was able to test it during the competition. Initial responses were very positive. Students were able to download an html file from the scouting group that opened a file in dropbox. For whichever team a student was scouting, they were able to answer a series of questions about that team and the abilities of that team’s robot. When the form was completed, a QR code was generated that the scouting group scanned. Once the code was scanned, they added the data to an Access database and could then give the drive team the feedback they need during the competition. With the format of this year’s competition, 2 matches before you compete, the drive teams are able to select which defenses the opposing teams will need to cross. With the data that our team gathers, the scouting group will be able to provide our drive team with which defenses the opposing teams will have the most trouble with, giving our team an advantage. Kudos to our scouting group for creating a highly streamlined and easy to follow scouting program!



Drive Team – This past week Drive Team tryouts were held. Each year 3 students are chosen, a base driver, a member to control the arms/lift mechanism and a “human” player. There were ±10 students who attended tryouts over 2 nights and again at the competition. Using last year’s robot, the students tried maneuvering around obstacles, driving while blindfolded, and driving against a stopwatch. There was even “boulder bowling” to simulate some of the actions for the human player during the competition. By next week, the official Drive Team and backup drivers should be selected.

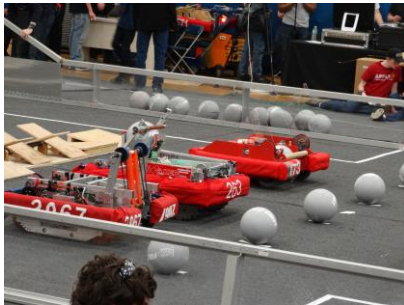


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Drive Team Tryouts 2016

Suffield Shakedown – Attending the Suffield Shakedown this year was invaluable in many ways. The preseason scrimmage is a perfect way for the team to try out the robot design in a competition environment without the stress of a “real” competition. There were a few setbacks early on but many positives – both in the robot’s performance and how the students responded to the setbacks. Between matches the team welcomed Lieutenant Governor Nancy Wyman, a resident of Tolland, who came to show her support for all of the students who have put so much work into the robots these past 6 weeks. We have until Tuesday at midnight to work out the kinks and then our next test is the Week 2 competition at Worcester Polytechnic Institute the weekend of March 11. Mark your calendars!



Robot on the field, First match drive team ready to try out the 2016 robot, a little dancing during field reset, a visit from Nancy Wyman and a post-competition picture (everyone is still smiling!)

For additional updates please check out our website (www.ragerobotics.com) or like us on Facebook (RAGE Robotics).