FRC 2168 ALUMINUM FALCONS

2018.1

BUILD SEASON RECAP

Build season begins with kickoff weekend, which fell on January 6th and 7th this year. Teams around the world are introduced to the game simultaneously and work to fully understand the game and rules and begin to brainstorm their robot. Each team then gets 6 weeks to build their robot.

Our first week we started prototyping different mechanisms for subsystems, started developing strategies and our team/game scouting application to evaluate competitors. The second week, we continued iterating and redesigning multiple prototypes for lift and intake and buddy climbing systems. During week three, we finalized prototypes and locked in the final design for the drive train. We also sent out first part requests to fabrication sponsors. Later in the week, our machinists started working on cutting parts for our robot. We completed strategizing and locked in our strategies. In week four, we finalized and locked in design for rest of our subsystems and continued machining. We began assembling the drive train and continued to request parts from our sponsors. Our marketing team began work on our chairman's essay, presentation, and video. Week five began with a setback due to delayed parts. Our machining mentor, Max, and student lead, Aveline, worked hard on making essential parts on the CNC mill. Our electrical team wired the drive train. Early in week six, the robot was finished and completely wired. The rest of the week was dedicated to drive practice, testing, and re-CADing designs to be improved and worked upon on the practice robot and to be applied during our 6 hours of unbag time. The autonomous mode was programmed and tested and the scouting app was completed. The end product took about 1800 hours of hard work and the robot weighs a total of 118lbs.

UPCOMING EVENTS

NE Champs - April 11-15
Worlds - April 25 - 28

COMPETITION 1: SE MASS

The first weekend in March was filled with excitement for 2168 as we took home a win from the New England District SE Mass event for the second year in a row. We were lucky to win the first three matches as our robot fell over and struggled to work, but in between matches we were able to put our heads together to fix the robot. Once modifications were made, our drive team was able to fight its way back to the top, ranking 7th out of 40 being picked by the second seeded alliance. Eliminations went by quickly as our alliance worked very well together, winning both finals matches by a large margin. This win, like any other, meant a lot to our team. Our hard work and long hours spent in the shop was not only rewarded with a blue banner, but with a brand new experience for the new members of our team. They were able to feel the excitement of a competition, make new friends, and further their understanding of what FIRST is all about. In the end, all of the stress was worth it and it was ultimately an incredibly fun competition.

OUR NEW SHOP

This year our team was given the privilege of a second location to work out of. Previously, we were working out of a small closet-like space and the adjacent hallway at Robert E. Fitch High School. This limited the amount of work that we could get done and the amount of time we had to work on the robot. Our faculty advisor and mentor, Brian Chidley, met with our Superintendent and Principal last fall to discuss the team's situation. After describing the limitations of working out of Fitch, Mr. Chidley brought up the recently closed elementary school, Pleasant Valley, and asked if it was possible for us to work out of the gymnasium for the winter. The Superintendent, Dr. Graner, said he did not know of any reason why it would not be possible. After making a few calls and getting additional information, he was able to put together, with the great assistance of our Building and Maintenance Director, Sam Kilpatrick, an agreement by which we could use the PV space. The PV space has greatly benefitted the team. Our practice field is able to remain set up and in place and our hours are not restricted to the open hours of the school. Mentors are able to come in at hours that best suit them to help students who are also available. However, it is very likely we will be looking for another space in the near future. The Falcons are actively watching for another space and would gladly speak to anyone regarding the potential solutions. Please contact our lead mentor with any inquiries kevin@team2168.org

2168 PROMOTED IN LOCAL NEWSPAPER: THE DAY

2168 loves to promote and work alongside the small businesses in our community. The Day is the local paper that reports the news in New London county. This newspaper is a great way for our team not only to get our name out there, but to get to know a local business on a more personal level. On bag day, or the day we have to stop our six week work on the competition robot, we were able to reach out to a reporter to come and visit our shop. The reporter took pictures and interviewed our mechanical students about what they were doing on the robot and how FIRST Robotics has impacted their lives. The students were also able to apply FIRST ideals such as gracious professionalism with their communication skills they were using with the reporter. We had been trying to work with the paper for a long time, and this one opportunity built a long lasting relationship we wish to keep for as long as possible. Read the article here: www.theday.com