Waterbury Update

Team Paragon

Introducing Our Robot:

Sprocket and Sprocket Jr.

The first day of competition has finally come. We arrived with Sprocket (shown on the right) ready to be inspected. Right off the bat, there were some issues with our bot that had to be dealt with before we could participate on the field. Read on below for information on how we progressed past these obstacles in order to take on the challenge of Waterbury!

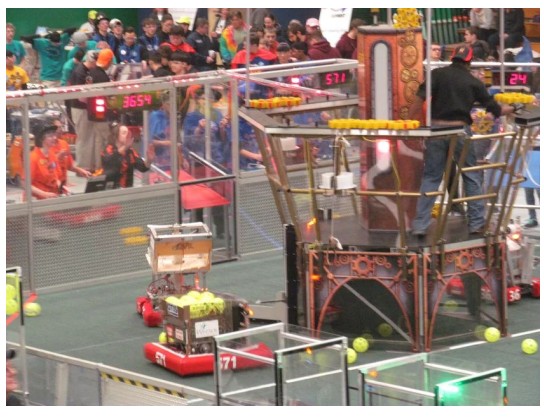
Friday:

A few members of drive team and other students drove out to Waterbury right after school on Friday to unload and set up our pit(we did NOT get lost.) When the team went to get the robot inspected, it turned out our robot was a half inch too wide on all sides and could not fit into the required dimensions of a “tall” robot! In order to pass inspection and compete, the team tried to reign in the bumpers a lot to horizontally shrink the robot, but to no avail. Although it was painful, the team decided the only course of action was to horizontally chop the robot in half the next day; thus the birth of Sprocket Jr. This way, the robot would be short enough to fit the dimensions of a “short” bo; which allowed for a wider chassis. Members left Waterbury around 9:00 and returned home to relax a little bit (or plan) before the first actual competition day.

Saturday:

On Saturday morning, the official *FIRST* play field was still not fully complete. Because of this, we were significantly delayed, and all teams were unable to participate in practise matches. Luckily, this extra time allowed the team to adjust as we removed the top half of our roller and hopper on the robot. The new hopper would not hold nearly as many balls, but hey, FIRST is all about solving problems! Pit crew decided to start fresh and build the robot back up one mechanism at a time, first trying to file everything down to pass inspection and make sure the height was good. After we finally passed inspection (yay!), we decided to compete as a mostly defensive robot. The roller was not working for the first match, but even though we had mecanum wheels (typically not good for defense), Sprocket Jr. was good at darting back and forth in the neutral zone to increase the cycle time of opposing robots. After returning back to the pits, the programming team and build worked together to get the roller working so we could focus on balls in the next few matches. During matches however, balls continued to get jammed in the roller and not pass fully upwards to the hopper, which was a problem we struggled with all weekend.

Practice matches were cancelled, and teams were thrown right into qualification matches without a planned lunch break. During one of the first few matches, the drive team accidently walked onto the field while the lights were still purple after the match, resulting in a yellow card. This was a good reminder of the technical rules of this game, and prevented the team from ever making this mistake again in the future.



Team members also walked around the pits to do some serious scouting- and made a detailed spreadsheet about who was chosen for alliances and the abilities of every robot. This was incredibly useful to look at and help us plan for changes to make before next competition. Paragonians loved being able to talk to other teams in person and make new friends!

In order to finish a good number of matches before the next day, Paragon had to stay and compete until 8:30 before being able to leave. Like last year, we stopped for pizza and pasta for a well deserved dinner. After an intense and stressful day, Paragonians got back to the build site around 11:00 before rushing home to get a good night’s sleep.

Sunday:

Sunday started up bright and early once more, jumping right into the final qualification matches before alliance selection. Early on Sunday, we began to have some unknown problems with the code. Our autonomous didn't work one match, and after trying to move the joysticks in teleop, it was discovered only the dumping mechanism remotely worked. The drive train was not responding at all. There was a quick turnover before the next match, so our programming team did all they could to try and fix the problem. Although it was unknown what part of the code was turning important variables to “false”, we still had to go on for the next match. The autonomous didn't work, but teleop thankfully did! Before our next match, some miracles were at work and we were able to get our autonomous and teleop functioning with no problem. And the most important part- our pit crew got to meet the famous co-founder of FIRST: Woodie Flowers! In fact many members of the team were able to spend time talking with Woodie Flowers. A highlight for all.

By the end of the qualification matches, Paragon made it to rank 15! Although we did not get picked for an alliance, the team still had loads of fun dancing and watching the final rounds in the stands. It was especially good for the drive team to look and see how other teams operated to get pointers for next competition. Since we were not competing in the final rounds we took advantage for the time to work on the robot, especially the code aspect which gave us a few problems. While this was going on, a select number of students browsed the pits to decide teams for our three awards we give out at every competition. This year, Team #6675, a Rookie team Genius Innovators, won the gracious professionalism award, for taking a picture of a few team members with Woodie Flowers Team without being asked. They even approached us afterwards to make sure they sent the team the picture! Paragon really appreciated their generous gesture, especially at their first-ever competition! #1099, the Disco Techs won the engineering award for their spectacular design. They could manipulate virtually any component of the field, and were completely focused in the pits on always improving the robot and getting it ready for their next competition. Team #3654 won the spirit award, due to their incredible energy in the stands and their incorporation of “steampunk” images with their cheering and in the pits which was designed like an old fashioned train station. The day closed out at the award ceremony with the presentation of the Safety Award to Team Paragon! Special shoutout to our new safety captain Kadri for working so hard and helping us receive this award! We ended out the night celebrating at Wendy’s and returned to the build site to unpack at around 9:00.

Thanks to all who came out to support us at this competition!

Paragon is ready for their 6 hours out-of-bag time to prepare for next competition and make our robot better than ever!

Upcoming events:

Hartford Competition - March 31st - April 2nd

Our second regional event will be back at Hartford Public High School (55 Forest Street). This is our “local” regional competition, just down the street in Hartford, CT. Come out and support on any of our competition days to see our spirit!

-Amanda and Justin