

Cadillac Connectors Robotics 5086 | March 25, 2017

ROBO TIMES



You Guys Have Been Awfully Quiet Lately....

"You have teenagers thinking they're going to make millions as NBA stars when that's not realistic for even 1 percent of them. Becoming a scientist or engineer is." ~Dean Kamen

CADILLAC- Every day we had your email blown-up with sponsorship asks, events, and pictures. Social media was swarming with news, pictures, and inspiring posts (courtesy of our awesome media team). All you could hear was "Cadillac Connectors", "States Baby!" and "We made it!" Now you haven't heard a peep from us. What happened?

No we did not get thrown off the face of the earth, or submit to any other natural disaster, (although buried in schoolwork is a common grievance to many of our students). The reason for our silence is our limited work-time with the robot. In the time gap between competitions, teams are only allowed to have their robot unbagged for 6 hours. In this restricted time slot, they may modify, showcase, and practice

driving. Teams may only use their bag time within a week preceding their next competition (for those wondering, each season consists of two base competitions, with additional being added depending on post-rankings). Our work-time may not start until this upcoming Thursday, (the 30th). Don't worry, we'll be back up spamming your social media accounts soon.

You guys are going to States. How do you know this for certain?

There are several ways to qualify for states. One way would be to win the Chairman's Award; it highlights team characteristics and a team's effort in spreading FIRST's values of Gracious Professionalism and Coopertition. FIRST defines Gracious Professionalism as a practice "that encourages high-quality work, emphasizes the value of others, and respects individuals and the community. With Gracious Professionalism, fierce competition and mutual gain are not separate notions."; while Coopertition is "unqualified kindness and respect in the face of fierce competition" where "teams can and should help and cooperate with each other even as they compete. Coopertition means competing always, but assisting and enabling others when you can." The team that most exemplifies these ideas of FIRST can continue to States.

The second way to qualify for states is to score within the top 160 teams in the region. This score is determined by how many points a team earns over the course of the entire season. Points are assigned based on by awards won and achievements during competition. We are currently ranked third in the state with 74 points based on just our 1st competition. The top 70 teams in the regional (state) competition advance to worlds. The only thing preventing us from going to states would be to NOT even go to the TC competition. (Knock on wood,) the next time you'll hear us will be from Saginaw Valley State University!



View of our pits during competition. Similar in Nascar, this is an area set up for each team so they can fix or modify their robot in between matches.

Just a Little Extra

We are pretty rock solid in going to states, but we have a little monetary issue. In our fundraising extravaganza, we have raised upwards of \$20,000, however, competing in the state (and hopefully world) competition will require a little extra funding. The registration costs of \$5,000 and \$4,000 (respectively) have been paid, but there is the costs of lodging, food, and travel. An estimation of \$10,000 would allow our team to travel to the World competition in St. Louis. We are reaching out to all, resources in the community to help meet this goal. Many of the local business have generously supported our team, but in order to meet this goal we are asking all other resources in our community. All donations are welcome. Checks please be made out to Cadillac Area Public Schools (earmarked robotics team). Any questions please contact Shannon Metzger at frcteam5086@gmail.com -Thank You!-

What do you get when you cross a robot and a tractor? ~A trans-farmer!

Community Corner

By Joshua Jacobson

Robots. Everyday, we hear about machines taking over the world. From automation in factories to Artificial Intelligence, we see plenty of ideas of the future in our culture - but what will robots actually do?

Like many people who have tried to answer that question before, we found that it wasn't really easy to answer when four members of our team - Andrew, Kendra, Josh and Elise took a trip to Lincoln Elementary School to share our thoughts. While we presented Sidewinder and all of it's flashy robot style, we focused mainly on two things - what do robots do now and what robots could do in the future.

Sidewinder is a great robot for FIRST Steamworks, but how does that translate to use in the real world? While the entire robot may not be practical for a specific use in the real world, parts of it might. Consider the winch motor - a setup we use to allow our robot to climb - and it's potential use

somewhere else. For instance, a very similar design could be used on the back of a car to allow it to pull other vehicles or trailers. Or what if we took our ball sweeper - a device we use to retrieve balls from the ground, and used it to clean debris off the ground in an area where humans couldn't work, such as sites of natural disasters? These are all places where robots are already working and will likely continue to do so.

But where will robots be in the future? I asked the kids to list off jobs that they knew humans did right now. One idea was archeology; robots could be made to scan the ground and locate fossils or artifacts faster than manually digging every area, and could be more precise about removing them intact. Another idea was driving, but robots could take care of that too. Very soon, the term "automatic vs. manual" may mean something entirely different. As we departed, we left the kids with one final saying on what robots will do -whatever they make them do. The more we can develop our knowledge and skills with robots, the more we can create them to help us.

Sidewinder climbs a rope at the end of a match during the Kettering Event.

Calendar:

April 6-8th: TC District Competition, Traverse City Central HIgh School 1150 Milliken Dr, Traverse City, MI 49686

Thursday-Saturday: Full day of competitions from 8:00 AM to 6:00 PM

April13-16th State Competition: Ryder Center, SVSU

Visit our website:
connectors5086.org
And social media to see all our
wacky pictures and progress on
the current season!
@Team5086

We would like to thank the Cadillac News for doing a fantastic article on our need for sponsorship; John Creed, and Eric and Anna-Marie Seitter for the fantastic pictures from the Kettering competition; 107.9 CDY for a radio segment; and to the multiple organizations who have agreed to sponsor us:

Supporters (\$50-200): Lifetouch, G&D Pizza, Home Depot, Bandeen, Driver's Choice Auto & Truck, Networking Butler,

BC Pizza, Canfield Automotive

Advocates (\$200-500): Cadillac Computer, Family Eye Care Associates

Sustaining Sponsor (\$500-1000):Stagg Machine Products, DK Design, Godfrey Chevrolet, Exxon Mobile, Cadillac ENT Executive Sponsors (\$1000-2500): Rexair, Kendall Electric, Baker College, BorgWarner, Cadillac Casting, Avon Automotive Visionary Partners (\$2500+) Cadillac Area Industrial Group

Members pose in front of The Pits as connector Anna-Marie receives her Safety Star of the Day.

If anyone you know would like to receive this newsletter, or any from before, email Shannon Metzger at shannon Metzger at shanetz578@gmail.com.

We hope you enjoy! :)