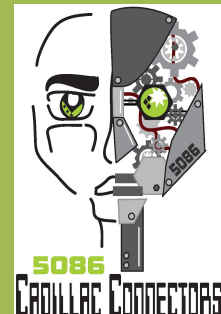


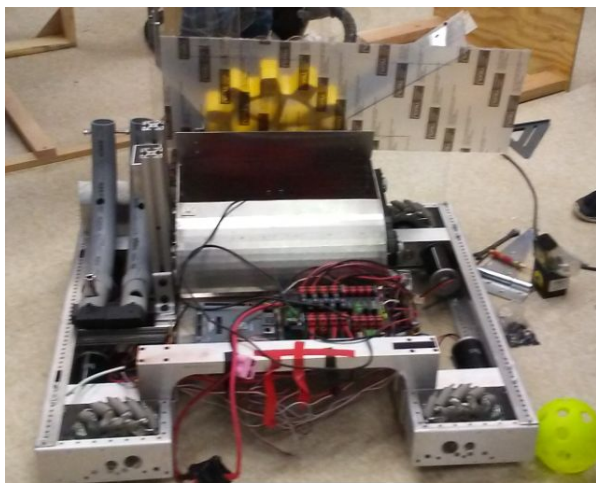
Cadillac Connectors Robotics 5086 | February 25, 2017

ROBO TIMES



Meet Sidewinder

"I think an education is not only important, it is the most important thing you can do with your life."



CADILLAC- After 6 challenging, stressful, and intensely *pressurized* weeks of build, she is finally done. Named **Sidewinder**, our robot is equipped with a state-of-the-art chassis, new mecanum wheels (that are put on the *right* way this time), a vacuum-like sweeper, and a newly installed gear holder. She can shoot high goal, climb ropes, and obtain gears to completely demolish (and help) the competition and our allies. The Cadillac Connectors are ready to rock and roll, mostly.

Decisions on the Field

Now that the robot is built, the challenge becomes WHO will be driving it during competition. A Drive Team composed of a drive coach, two drivers, and two human players will be working together to make Sidewinder perform her best.. Drivers are the

ones who operate and control the robot; the chassis driver will be responsible for maneuvering Sidewinder around the field of play and into position with speed and accuracy, while the function controller will manage all of the other functions which include sweeping up fuel, stirring the fuel in the hopper, shooting fuel into the high goal, and climbing the rope. One Human Player will load airship fuel and gears into the playing field, while the other human player (known as a pilot) will be in the airship to transfer gears from the robot to the airship propellers as well as deploy ropes so the robot can climb aboard at the end of the match. The more gears collected, the greater the pressure and the more points earned. Our drive team will be determined in the upcoming drive tryouts. Stay tuned for our next issue to uncover their identities.

There Are Other Teams?

Yes. During Competition there are 5 different teams: Spirit, Scouting, Drive, Media, and Pit. The Spirit Team includes our mascot (Albert), our signs, dancing, starting the wave, and face paint? Basically, this team is in charge of making sure we have fun and contribute to the overall atmosphere of these highly charged events. Additionally, the team with the most spirit receives the Spirit Award, which could earn us additional points toward qualifying for states. The Scouting Team is in charge of watching other teams and recording their attributes/statistics. During each new match teams get paired with different teams that work together on an alliance. After the first bracket of matches, which are pre-assigned, "winning" teams, (those with the most points), may choose their alliance members. The Scouting team is composed of 6 members who record notes on each robot on the field. These notes will be analyzed later to help decide which robot would be the most beneficial in helping us. The Media team is in charge of capturing our glory (or goofiness) on camera for our various social media. Finally, the Pit Team. This team is small, (no larger than 3 members), and is in charge of safety, Judge Interviewers, Repair/Maintenance members, and Battery Management. During competition, judges come around to pit areas and ask members questions about their team, including robot function, team operation, etc. Judge Interviewers are people who are in the know about the team, and can field the judge's questions with confidence (or at least direct them to someone who can). Repair/Maintenance members are just like a Pit Crew: they will be the go-to team when the robot needs a quick repair. Lastly, our robot runs on a 12 volt battery. A battery dying in the middle of a match is definitely not good. Pit crew will be in charge of equipping our robot with the needed fuel, or charge, to last it through the next round. With our new battery cart (courtesy of Kyle Leesch), this job will be a lot easier to manage.



What can you say when you have twins on the team? :)

Calendar:

Daily build From 3-6pm Every Weekday

"Stop Build Day: Tuesday February 22, 12am

Saturday February 25th: Week Zero Event at Kettering.

Preseason competition to practice before the driving season kicks off

March 2nd-4th: Competition: Kettering University, 1700 W. Third Ave / University Ave Flint, MI, United States (map)

April 6-8th: TC Competition, Traverse City Central High School



Alex Whipple, Victor Sawicki, and Max Stange work on Sidewinder.

A Shining Behind-The-Scenes Star

While creating a robot IS a big deal, some HUGE behind-the-scenes action has been happening due to our Marketing captain: McKinsey Crozier. She has contacted XX% of our sponsors, allowing us to have all our needed funds to build the robot. With her creation of a sponsorship brochure, grant application, and document outline all of the team has benefited from this easy access of sponsor resources. Additionally, she has written and sent thank-yous to each of our sponsors in recognition for all that they have given us. McKinsey has written our Entrepreneurship Award, and created our Business Plan that we will be taking to competition. These documents outline our team on a more financial level than on the Chairman's Award application. It deals with our budget, how we will use/manage that money, what we have done extensively throughout the year, and outlines our strengths and weaknesses as a team. The Entrepreneurship Award was submitted online pre-event and outlined, or was a rough copy, of the Business plan. This plan will be shown at competition to judges as additional submission for the Business Award. As with Chairman's, the winning of this award can lead to our gateway to the State Competition. McKinsey has spent countless hours creating these wonderful, professional documents and submitting them on time. They will be used by each future Connectors team member as a foundation to build on! She has also participated in our polar dip for OASIS. Koodos to you girl!



Kettering Scrimmage Update



By Josh Jacobson

FLINT- Robots were everywhere. A seething mass of people flowed from pits to field and back. As you walked around, you could hear the sound of progress - gears turning, or rather, being put onto pegs and lifted into an airship.

Amidst the chaos, the Cadillac Connectors took two hours to unbag their robot and compete in small "scrimmage" matches against multiple other teams. Throughout the course of three matches, we found many things that worked - or didn't.

WHERE WE DID WELL:

The winch worked flawlessly and gripped onto our rope in all three matches. Not only were we able to climb aboard our airship, we were also able to hang there for minutes after the end of the match.

The intake system worked flawlessly. In round two, we dumped a hopper onto the ground and picked up all the balls that rolled about.

WHERE WE NEED TO IMPROVE:

The vision processing didn't end up working. The computer ended up working but because of unanticipated network issues, we couldn't actually see the camera feed. However, we have found a solution that seems to be working and we plan on testing it during our four hours of unbag time this week. We could also use some of the remaining unbag time just to practice driving; with only 2 minutes and 15 seconds each round and so much to accomplish, the more speed and efficiency we can get from our drivers, the better.

Wait, I thought you were done?

Don't worry - We did bag our robot Tuesday night. We're no rulebreakers - we just take advantage of FIRST's unbag time. We get 6 hours before each competition to fine tune our robot and prepare for the matches ahead of us. We've got four hours left before Kettering and we plan on using most of it to practice with our robot so our drivers can have the most amount of practice possible before putting their skills to the test.

Visit our website:

connectors5086.org

And social media to see all our wacky pictures and progress on the current season!



@Team5086



Team members Anna-Marie Seitter, Seth and Leif Olson, Tucker Bachman, Kyle Pike, and mentor Mr. Jacobson work on shooting high goals.

Our team would like to thank Rexair for the printing of our number and Albert signs, the Cadillac News for doing a fantastic article and youtube video: <https://www.youtube.com/watch?v=3YMX0F8Ya3Y>, and to the multiple organizations who have agreed to sponsor us:

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

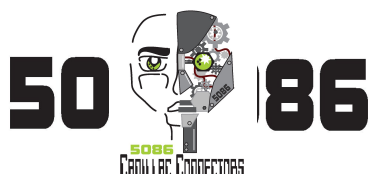
Advocates (\$200-500): Cadillac Computer, Family Eye Care Associates

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 Castings, Avon Automotive

Visionary Partners (\$2500+): Cadillac Area Industrial Group

Thank You !



What's a robot's favorite children's song?
-Row, Row, Row Your Bot



