

Robodox

ENGINEERING A BRIGHTER FUTURE
TEAM NEWSLETTER



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SECOND ISSUE!

Welcome to our second issue for this year's round of Robodox Newsletters!

After a big leap into the fall semester, both our FRC and VEX teams came home strong. The lessons learned and achievements accumulated from off-season competitions sets us up nicely for this upcoming season!



FRC TIDAL TUMBLE

FIRST FRC OFF-SEASON COMPETITION!



How was Tidal Tumble?

"It was a wonderful opportunity to see how the team's work inside the classroom paid off. It was a completely new experience to see how the competition worked, like the rules, and the game. It was nice to get an understanding of FRC competitions in general."

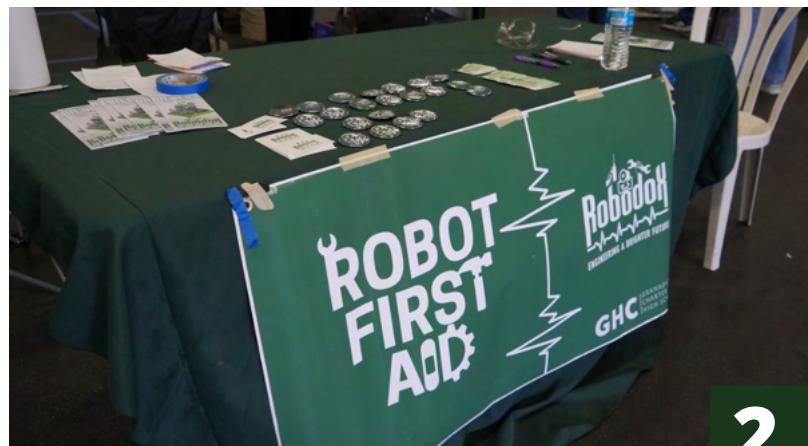
- Rookie

RECAP

Tidal Tumble was FRC's first off-season competition of the year and the first competition for many of our rookies. It was a great opportunity for us to showcase our new robot that we named Bilbert the Biologist. It was the very first time our team ever built a robot using a swerve drivebase, which allowed Bilbert to move more smoothly across the competition field.

PLUS/DELTAS

During this competition, we practiced gathering detailed scouting data for the drive team to utilize. The stand scouts were consistently on task and maintained their team spirit. However, we could make more improvements with our Robot First Aid Station since very few people knew about it. We plan to advertise RFAS with flyers and ask the pit admin to make an announcement. Lastly, we aimed to improve Bilbert's shooter and intake in time for Beach Blitz.



FRC TIDAL TUMBLE

FIRST FRC OFF-SEASON COMPETITION!

TAKEAWAYS

Overall, Tidal Tumble was a great learning experience and a great start to this year's off-season competitions. We took helpful notes on the build of other teams' robots through pit scouting and stand scouting (subsystem CADs, machining, grant/sponsorship opportunities, etc). By talking to other teams, we were able to build connections as well as promote team recognition. This competition gave us the ability to test our newly built swerve robot and pinpoint flaws that needed to be fixed (swerve, shooter, and intake code).



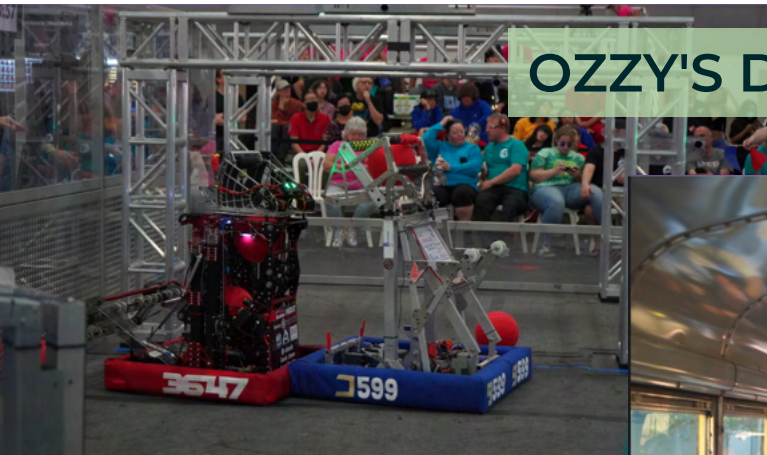
What do you think of FRC after Tidal Tumble?

"It was pretty fun and it was off-season so it was pretty chill. I feel like we could have done better if we finished Bilbert earlier and we were on top of charging batteries. Aside from those things, I think Tidal Tumble was helpful for testing our swerve robot."

- Ozzy Driver

FRC TIDAL TUMBLE

QUICK PHOTO RECAPS!



OZZY'S DEFENSE



BUS RIDE



ROBOT FIRST AID



TEAM BROCHURES

FRC BEACH BLITZ

SECOND FRC OFF-SEASON COMPETITION!



How was Beach Blitz?

"The time in between Tidal Tumble and Beach Blitz allowed us to adjust the programming of the hood and flywheel of the turret. Seeing Bilbert compete in the finals made me excited because I got to see the effects of our improvements. The event was so suspenseful that no one had time to feel tired.

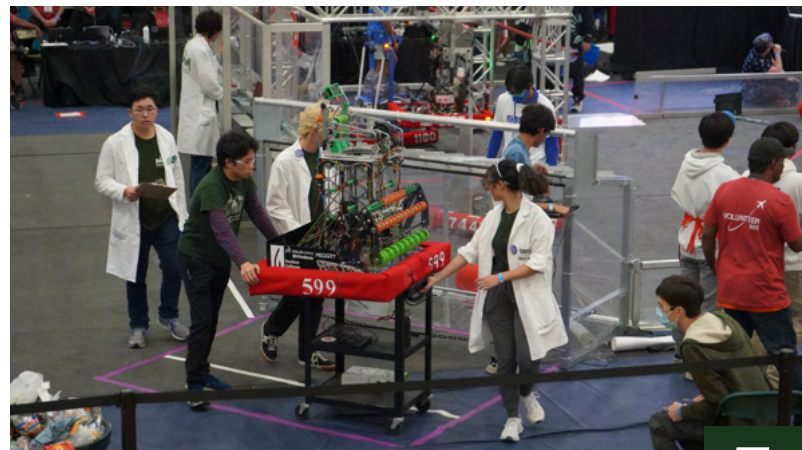
- Veteran

RECAP

Beach Blitz was our last FRC off-season competition this year. Our swerve bot, Bilbert, won Finalist. Being recognized for our profound efforts in creating Bilbert from being a half-rookie team, we took home the \$1000 *Team Grant Award*. Building off of Tidal Tumble, it polished our strategies and mindset for the eagerly anticipated 2023 season.

PLUS/DELTAS

During the competition, our pits were organized and efficient which made it easier for team members to make adjustments to Bilbert. However, we realized that our battery box needed to be redesigned, so we made it an off-season project. Nonetheless, the time we took troubleshooting Bilbert's shooter and intake paid off, as it became more consistent than before.



FRC BEACH BLITZ

SECOND FRC OFF-SEASON COMPETITION!

TAKEAWAYS

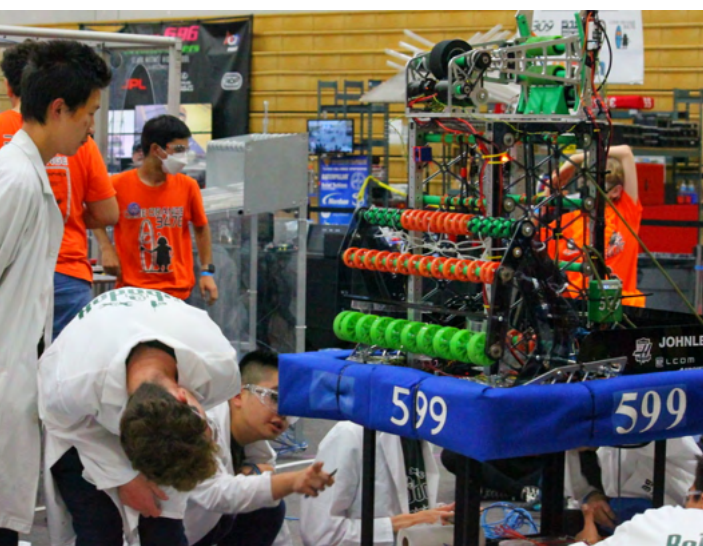


Beach Blitz was an emotional roller coaster for veterans and rookies alike. We have found new factors in our competition preparation to improve from scouting data to pit setup. Furthermore, this off-season competition demonstrated that our ambitious goals are attainable. Receiving the *Team Grant Award* and making it to the finals was exhilarating. The turnout of the finals certainly fueled our motivation to strive for greater heights in the 2023 season and proved that our team has the potential to come out in first place for our next competition.

What do you think of FRC after Beach Blitz?

"It made me happy to help other teams with DoxSpot, I enjoyed talking to kids from other teams who shared a passion for robotics. Making it to the finals reflected the strong motivation of our team and the hard work of its members. I look forward to improvement within the team when it comes to meeting deadlines in the upcoming build season."

- Veteran

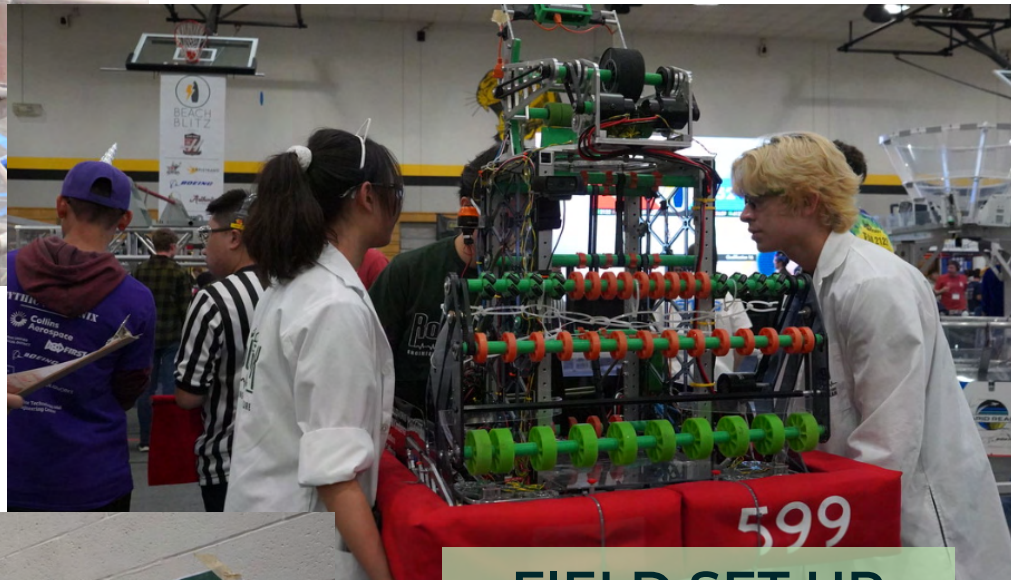


FRC BEACH BLITZ

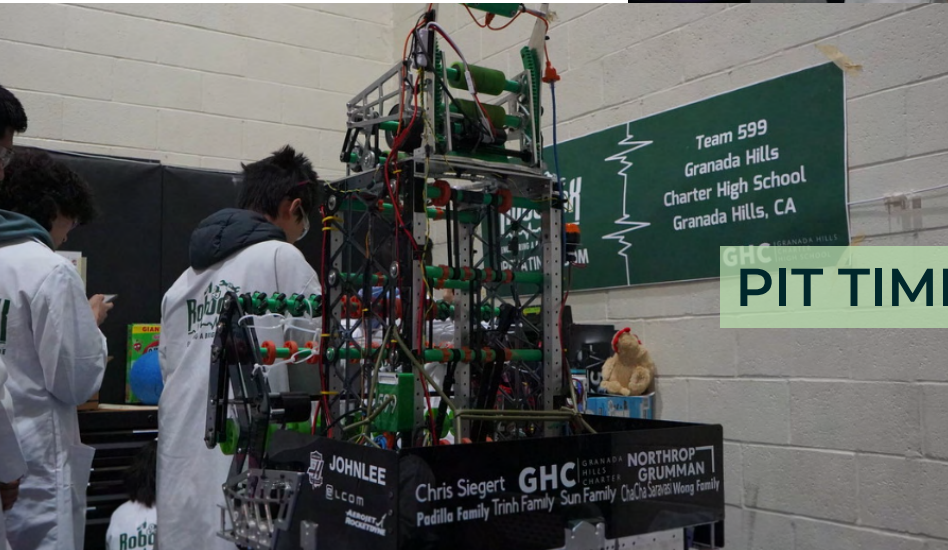
QUICK PHOTO RECAPS!



GAME TIME



FIELD SET UP



PIT TIME



599 BUTTONS

VRC VICTORY IN THE VALLEY

SECOND VRC COMPETITION!



How was Victory In the Valley

"The competition, in general, was very exciting and we had a lot of problems but persevered through it by making of list what needed to be fixed and how we should fix it, and also just alliancing with teams was very good for us"

RECAP

VEX teams 599A and 599B attended the competition held at Reseda High School. Both teams said they had a great time competing and showing their team spirit. It was a great learning tool and both teams used this competition to further design their robots in the future. It gave both teams examples of how the best robots operate and what components create a great robot.

PLUS/DELTAS

As a whole, both teams excelled in keeping their pits organized and having their members consistently networking with other teams on their design strategy. The biggest accomplishment was both VEX teams made it and were able to compete in Quarterfinals. For next time, we plan for more time on driving the robot and have dedicated people to form alliances.

W-L-T	Match Schedule and Results			
0-0-0	Q2	462X	1138V	77
		1437Z	334Z	130
0-0-0	Q3	20R	3324A	43
		847X	462A	154
0-0-0		20Z	1138S	130
0-0-0	Q4	10515K	884A	12
0-1-0	Q5	1437A	599B	89
		21B	65696B	100
	Q6	404E	20Y	Field 2
		15442C	65696A	On Field
	Q7	15442A	404Z	Field 1
		1138D	1437V	9:51 AM
1-0-0	Q8	8052B	8052A	Field 2
		3759X	21A	9:56 AM

VRC VICTORY IN THE VALLEY

SECOND VRC COMPETITION!

TAKEAWAYS

Victory in the Valley helped teams 599A and 599B see other examples of winning robots and how they create their intake and shooter. After this competition, both teams designed their robot, with 599B completely redoing their robot and 599A continuing to build and finish their robot. This competition was a moment for both teams to step up and get a strong working robot to dominate completion in the future.

What do you think of VEX after Victory In the Valley

"It was a very good learning experienced since we had no Captain in the first few hours and we had to figure it out on our own we also met many meetings and became friends with some of the people. We learned a lot, like the designs of teams that performed really well and why they were able to perform so well."

- 599A.

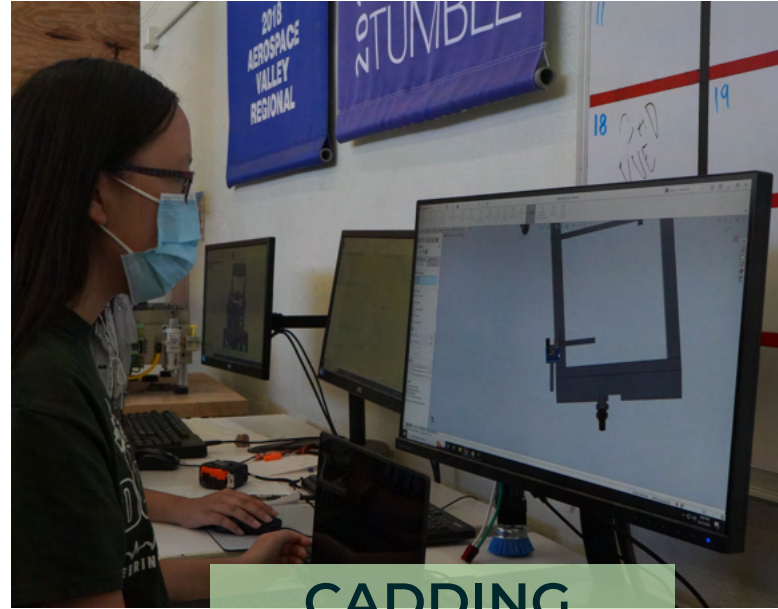
Rank	Team	WP
1	Eagle Engineering V	2.00
2	334Z Supernova ZZZZZZZZZZ.....	2.00
3	21C SPUR-FLYS	2.00
4	334F Supernova Robotics	2.00
5	462A Wolverines	2.00
6	3324A Supernova A	2.00
7	10515K FireStreak	2.00
8	20Z Reseda Regents Robotics	2.00
9	65696B TVT VEX Robotics B	2.00
10	599B The Robodex B	2.00
11	1437A Patriot Robotics	0.00

OFF-SEASON PROJECTS

PREPARING FOR THE FRC SEASON!

PROJECTS

Towards the end of last year, the team wanted to make improvements from our last build season. We noted down any areas that we could improve and decided to create projects to help with these improvements. One improvement we wanted to make, was to the design of our old battery box. We also wanted to make a swerve bot for the new year and redesign the robot cart. With all of these goals in mind, we assigned groups of people to work collaboratively to complete these goals. We had people from each technical subteam work in each of these groups to redo or fix any areas that needed to be improved.



CADDING



PROGRAMMING



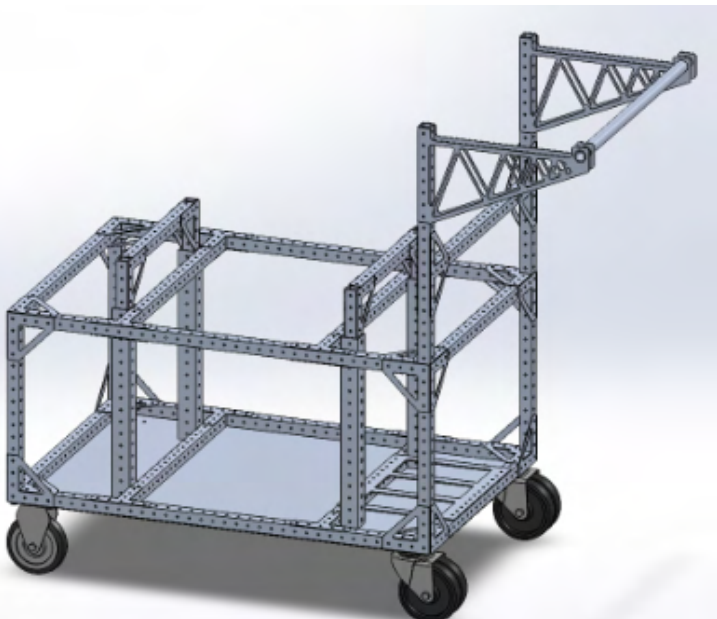
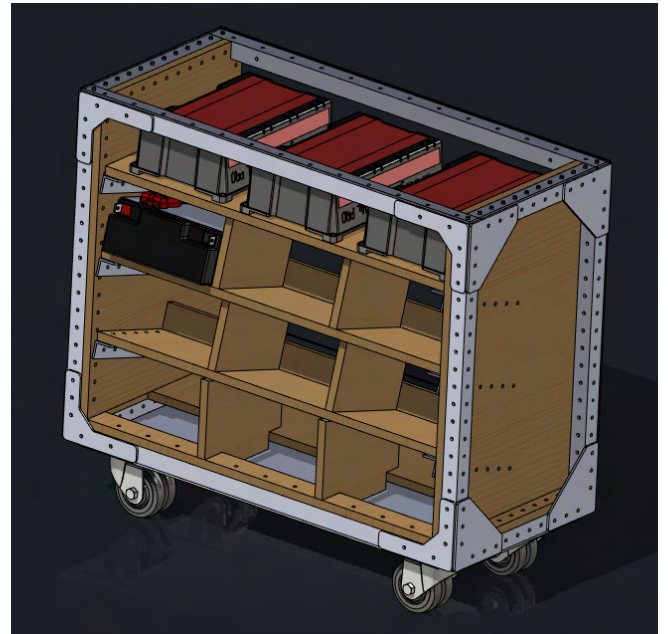
MATERIAL CHECK

OFF-SEASON PROJECTS

PREPARING FOR THE FRC SEASON!

BATTERY BOX

The purpose of the battery box is to easily charge and transport 9 batteries. Our previous battery box had stability issues and weak material, ultimately making it difficult to utilize during competitions. We wanted to completely redesign the battery box to make it more durable and efficient. So, CAD designed an inward incline to keep the batteries from sliding out of the box. By now, the design has been sent off to be machined and assembled for the season.



ROBOT CART

The robot cart is used to carry the robot from the pits to the game field during competitions. We wanted to build a new robot cart for FRC competitions to make transportation of the robot smooth and safe. By this, our CAD Team took inspiration from Team 4414's Robot Cart design. The robot will sit on top of the cart with the underside used to hold batteries, tools, other items, etc. Our new design has 2 swivel wheels and 2 fixed wheels, this will allow more stability as having 4 swivel wheels would make moving the cart difficult as the wheels will try to rotate instead of steering.

ROBODOX THANKSGIVING

FALL SEMESTER WRAP-UP



RECAP

The Robodox Thanksgiving potluck was an event filled with good fun and food. The different dishes and drinks were brought reflected the cultural background of many team members, and the team all enjoyed the food provided. Among the dishes was curry, shrimp fried rice, pasta, and even sushi.

How was the Thanksgiving Event?

"It was a fun way to spend the last day before winter break with the team. I really enjoyed trying the different dishes that people brought in and bringing in my own food to share with the team. It was nice to relax with the team after completing Bilbert."

- Veteran



ROBODOX THANKSGIVING

QUICK PHOTO RECAPS!



FOOD!



TEAM PHOTO!



MENTORS & DOX!



599 GALLERY!

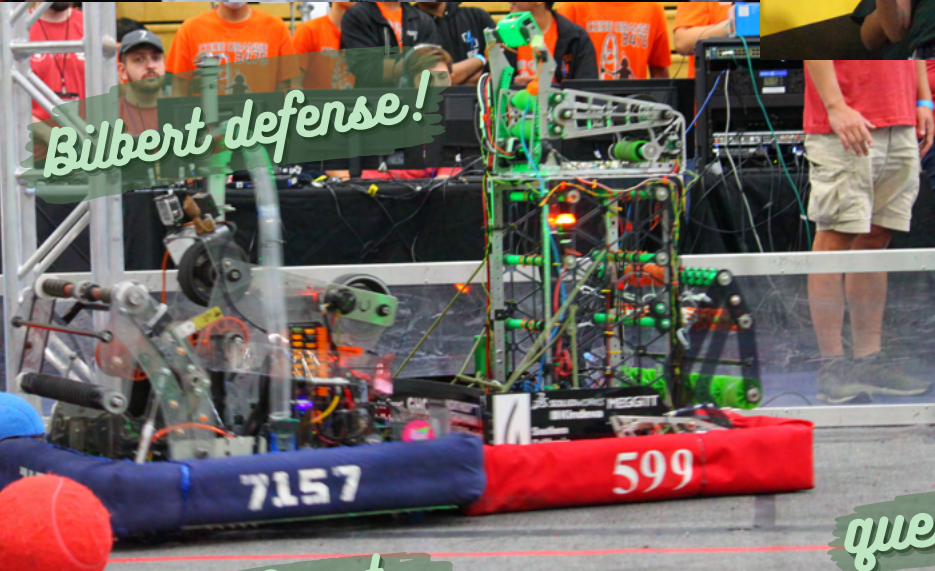
pit scouting!



DOX ROX!



Bilbert defense!



queueing!



Team Grant Award!



robot first aid!



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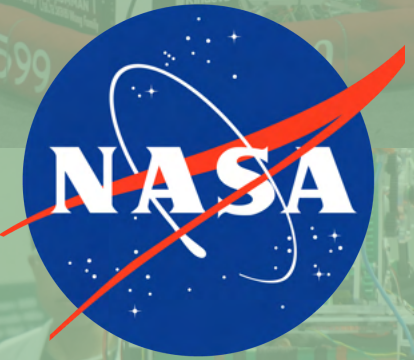
JOHN LEE

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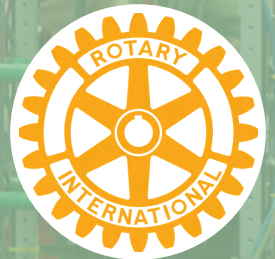
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