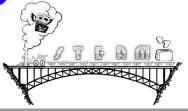


A Competitive High School Robotics Team www.theflyingtoasters.org

"Building Bridges and STEAM-ing Ahead to a Better Future"



"To inspire and intrigue, unite, and achieve greatness"

2016 Challenge : *FIRST*[®] Stronghold™

2016 Season Recap - December 2016

2016 Season Recap

In this issue, we'll review the entire 2016 season from start to finish. We'll start with an overview of the game, Stronghold, walk thru team composition, summarize each competition and cover the post-season activities. We'll end with a huge Thank You and recognition to each of our sponsors for the 2016 season. Looking forward, Team 3641 hopes that you'll continue to donate your time, materials, energies and fiscal support for 2017.

Our 2016 team consisted of 32 boys, 12 girls and 11 mentors, all led by Coach Ron Weber; our largest team ever.



Team Photo with Robot on our Practice Field



FIRST 2016 Stronghold field setup (click for YouTube game overview)



What is Stronghold? The game consists of two alliances of three robots each competing to breach the other's defenses, weaken the enemy tower, and climb it before the match ends. Each match is 150 seconds and each team will typically play 12 matches in a competition. Our robot had to navigate nine different types of defenses, scoop & shoot balls with accuracy and try to climb a tower.











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District Competitions

Our first district competition for 2016 was on Friday and Saturday, March 25th and 26th. Our overall placement was 11th out of 41 teams, and our alliance (Team 3641, Team 313, and Team 6190) made it into the quarterfinals! Since it was our first competition, it was the first time using our competition robot, and we found some things we needed to fix and some things that went really well!



The team received the Engineering Inspiration Award, an award which "celebrates outstanding success in advancing respect and appreciation for engineering within a team's school and community. This award is related to the Chairman's award, which is awarded to the team who has made the biggest impact in their community by spreading the ideals of FIRST and gracious professionalism.



Ann Arbor Skyline, our second and last district qualifying competition was held on Friday and Saturday, April 8th and 9th. We placed third during the qualifying matches and our alliance made it to the finals and placed second overall.

The Chairman's team presented to the judges and won the competition! Their work in the community and in reaching out other teams inspired the judges and their video was played on the projector for the teams at the awards ceremony to watch. It was a very emotional and well earned moment for the team.

The team also won an award for being finalists, and won the Chairman's award: "the most prestigious award at *FIRST*, [honoring] the team that best represents a model for other teams to emulate and best embodies the purpose and goals of *FIRST*." The Chairman's award and being a finalist qualified us to compete at States! In addition, one of our drive team members, Ben W., was qualified to compete at tates in the semi-finals for the Dean's List Award, an award that "celebrates outstanding student leaders whose passion for and effectiveness at attaining *FIRST* ideals is exemplary."*











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States and Worlds

The top one hundred three teams in Michigan, based on how the teams did at their district competitions, went to the State competition to battle it out for a place to go to World's. Here, The Flying Toasters were up against some of the best teams in the world, let alone the best teams in Michigan. Teams came from all over the state, from the Upper Peninsula and all over the Lower.

With the huge amount of teams competing, we did not win any awards from the competition runners, but qualified to go onto World Competitions in Saint Louis, MO. However, a member on the team, Ben W., made it through another round of interviews for the Dean's List Award and qualified to compete at World's for this award! The team ended up in 16th place out of 103 teams, and was picked by the 11th alliance to compete in the octo-final rounds.



For More Information:











The world championship in St. Louis had teams from all over the world, with many high ranking teams from countries such as The United States. Canada, Israel, China. Mexico, Australia, etc. The championship was split up into divisions, since over 800 teams attended. The winning teams from each division then competed at the Tesla division for the title of world champion. The division we competed in was Curie. Along with the competition, several expos and side activities were set up for those attending.

We made it to the semi-finals of our division, and ranked in the top 50 in the world! We did not win any official awards, but are proud of how well we placed!

2016 Award Summary:

- Engineering Inspiration Award
- Chairman's Award
- Finalists at Ann Arbor Skyline
- Semifinalists at World
- Dean's List Semifinalists and Finalist



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Post Season

The Flying Toasters, Team 3641, competed at Bloomfield Girls Competition on Saturday, November 12th to close out the 2016 season. Their goal was simple; test a newly developed scouting program, a new style pit management system, give our new team members an experience of a competition, have fun and cement this year's theme of "One Team, One Image, One Voice, We build People."



Out of the sixty students on the 2017 team, ten boys came to support the eleven girls as they competed against 31 other robotics teams at the event. Making sure that every young lady in attendance was able to be apart of the drive team, they quickly realized success. A drive team consists of a chassis driver, robot operator, a human player, and a drive coach. Bloomfield Girls Competition rules are simple, only girls are to repair and service the robots in the pits, drive, operate, and be a human player. However the drive coach could be male or female, student or adult.

"We over me". Thinking about the good of all, not putting winning at any cost above that of everyone being part of the success, the team came to a consensus; we would have fun and let the chips fall where they may.

With successful feedback on the testing of our scouting program and pit management, the only thing left was for the team to have fun. And fun they did.

We placed 9th seed out of 32 teams, a feat in spite of us changing out positions so that every girl had a chance to be a part of the competition drive team. Picked up for the playoffs by the number 3 out of 8 alliances, we knew we had a chance.

It wasn't easy as our alliance climbed through the play-off bracket. First through quarter-finals, then through a nail biting semi-finals, and then, a very intense, a very close, a very stressful, last match of the 2016 game Stronghold to be played in Michigan, winning 2 out of 3 in the finals to seal the victory. That makes both

post-season events Advanced Robotics Competition) and Bloomfield Girls as champions for The Flying Toasters.













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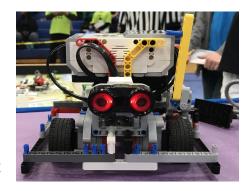


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FLL Crumble Rumble

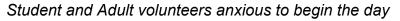
The FIRST organization has robotics leagues for all ages, one of which is the FIRST R LegoR League ("FLL"). FLL is for elementary students grades 4 thru 8 that use LEGO MINDSTORMSR based robots to perform autonomous missions on the playing field. Click here http://www.firstinspires.org/robotics/fll to see more information on the FLL leagues or to find a team in your area.

On Saturday, November 19th, Team 3641: The Flying Toasters held our first annual Crumble Rumble FLL regional competition. 75 Student and 50 Adult volunteers from The Flying Toasters and FRC Team 503 Frog Force came together to host 24 FLL teams from around Southeast Michigan.











For More Information:











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FLL Crumble Rumble

The theme for 2016 was <u>"Animal Allies"</u>, which was composed of a robot game and a project competition.

The robot game involved traversing various pathways, manipulating game pieces and pick-move-place LEGO animals and food - all autonomously. Each manipulation and delivery scored varying amounts of points, with the highest point average of all matches achieving the win. Six of the 24 teams advanced to the State competitions.

The project competition involved students selecting an animal-human interaction of their choice, identifying a problem in that interaction, and developing a solution to solve the problem. Successful teams interviewed subject matter experts and conducted research from multiple sources; combining that learning into innovative solutions with considerations towards commercialization. Each project was scored against an exhaustive rubric.







For More Information:











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The Flying Toasters would like to give our unending thanks to our sponsors. Support comes in many forms such as materials, food, mentors and time in addition to money. Without sponsors, Team 3641 would not exist. Thank You.

Several sponsors have joined mid-season, after our logo map was applied to our team banner, robot and t-shirts. We want to recognize each and every sponsor on these pages.

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See you next Season!

