

www.theflyingtoasters.org



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

2017 Challenge: FIRST® Steamworks

Issue #1 Season Kickoff - January 2017

Robotics Competition **FIRST** Game:

Steamworks On January 7th, FIRST released the 2017 Competition. Each year, the people at FIRST live stream the reveal of the year's game, explaining what the competition will look like and what the teams must build their robots to do. After kickoff, each team has a period of six weeks to build their robot before bag-and-tag. Once the six week period is over, the teams are not allowed to touch the robot until their first district competition. This year's game is steampunk themed, and focuses on robots being able to pick up balls (fuel) and shooting them into the boilers for points. The robots will also have to transport and deliver gears to the airships where the human player will place the gears onto the pegs and turn them. This action will turn the rotors, the more of which are going the more points will be allotted. At the end, the robots will have the opportunity to climb a rope and push down on a pressure plate for final points. This will be a complicated build!



Build Team's Projects With the game released, build team can now start their six-week building session and work on planning the robot. This year, there is a lot the robot has to be able to do that makes planning and building a more difficult stage than was previously expected. Once the team has gotten started on the robot, they can build a secondary robot that is not for competition, and thus can be practiced on and adjusted in order to find how to add to or fix the competition robot when they are allowed to make changes. They will also start holding auditions for drive team so that they can be practicing for competition.

Chairman's Projects Now that the season is started, Chairman's is working furiously to prepare for competitions. Chairman's is working to finalize the essay that they will turn into the judges. They are also writing their business plan, a comprehensive document that outlines the more economical side of the team. Once competitions come closer, they will be preparing their presentation for the judges and making a video that will be played to the entire audience of the competition if they win the Chairman's award. In conjunction with this, Chairman's team is hosting a few STEAM classes and Girl Scout nights in order to bridge the gap between the high school level and the younger levels; STEAM classes and Girl Scout nights are interactive experiments for grades K-5 to learn about science, technology, engineering, art, and mathematics. In order to continue engaging these younger individuals, Chairman's is also working to write another children's book after the success of their last one.

Gretchen A. and Katy E. getting in the steam punk mood for kickoff!



Upcoming Events!

Feb 9th → Chairman Submission Feb 21st → Bag & Tag Mar 9-11th → Ann Arbor Pioneer HS Mar 30th - Apr 1st → Howell HS Apr 12-15th → State Championships

J.P. Mikola Page 1 2017 Newsletter January Google Sheets





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Strategy and Planning: The Flying Toasters host a QFD each year and invite neighboring teams. This year team 3414, The Hackbots, joined the Toasters to plan how to approach the game and share ideas for building their robots. This is a real important stage, as the teams go over the game manual and learn both what the rules are and what the rules don't say. Once they have an idea of exactly what they can and cannot do, they begin planning the robot.

What is FIRST?

The Flying Toasters have been competing in FIRST robotics competitions since 2011. They have learned that the FIRST community is a very welcoming one. focuses on learning and gracious professionalism while also putting a priority on engaging girls and other aspects of worldwide diversity.

FIRST stands for For Inspiration and Recognition of Science and Technology and brings STEM fields to the younger generation. They have teams and competitions for all levels: Jr.FLL for the students in younger elementary, FLL for those in upper elementary, FTC for the middle school teams, and FRC for the high schoolers. The Flying Toasters have several of these teams in the community and love competing every year. something to look forward to!



Recent Outreach:

FLL Competition: Nov 19th, 2016 STEAM Class: Ian 31st

Upcoming Outreach:

Girl Scout Night Blessings in a Backpack Families Building Faith Easter Baskets Open House Night



For More Information:











Team 3641: The Flying Toasters

South Lyon High Schools Unified Robotics Team <u>www.theflyingtoasters.org</u>

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