



Building Bridges and **S-T-E-A-M**-ing ahead into a Better Future



2015 Build Season Newsletter

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

2015 Challenge: Recycle Rush

Build Season Issue #1 - January 2015

Recycle Rush

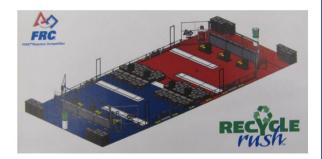
RECYCLE RUSH is a recycling-themed game played by two Alliances of three robots each.

RECYCLE RUSH is a recycling-themed game played by two Alliances of three robots each. Robots score points by stacking totes on scoring platforms, capping those stacks with recycling containers, and properly disposing of pool noodles, representing litter. In keeping with the recycling theme of the game, all game pieces used are reusable or recyclable by teams in their home locations or by FIRST® at the end of the season. Each Alliance competes on their respective 26 ft. by 27 ft. side of the playing field. Each match begins with a 15-second Autonomous Period in which robots operate independently of their drivers. During this period, robots attempt to earn points by moving themselves, their vellow totes, and their recycling containers into the area between the scoring platforms, called the Auto Zone. During the remaining two minutes and 15 seconds of the match, called the Teleop Period, robots are controlled remotely by student drivers located behind the walls at the ends of the field. Teams on an Alliance work together to place as many totes on their



white scoring platforms as possible. Alliances earn additional points for recycling containers placed on the scored totes, with containers at greater height earning more points. For more information, go to <u>usfirst.org</u>

Our Sponsors



FIRST 2015 Recycle Rush field setup.

FIRST FACTS:

There will be 73,000 students in grades 9-12th on nearly 3000 teams competing in the 2015 season. The varsity Sport for the Mind, FRC combines the excitement of sport with the rigors of science and technology.

Upcoming events!

February 17th – Bag & Tag March 12-14th – Gull Lake Competition March 26-28th-- Livonia Competition April 2-4th-- Bedford Competition April 8-11th-- Michigan State Champ. April 22-25th-- World Championships

Chairman's

The Chairman's Committee has been hard at work bringing to life this year's team slogan, "Building Bridges and S-T-E-A-Ming Ahead Into A Better Future." Our Flying Toasters robotics team has grown substantially this year, allowing us to get even more involved in community outreach and projects to spread the word of FIRST robotics. We have organized a school-wide "Crayons for a Cause" drive and created the first edition of "Fun with FIRST Activity Book." Goodie bags with our activity books and Flying Toaster crayons, pencils, and stickers are now in the waiting rooms of hospitals and area businesses to be shared with youngsters to further spread the word of FIRST and STEAM. These activity books will also be distributed at The Flying Toasters' "Moving Ahead with STEAM" library classes the team will be running at the Salem-South Lyon Library. We are making steady progress on our children's book, "The Flying Toasters Spread the Word - A FIRST Reader," and will have more news to share about that project in the next issue of our Team 3641 newsletter. Also, our newly formed safety team has been invested in keeping our team safe! They have created a team safety manual, Power Point review sessions, interactive Kahoot guizzes, and organized safety games, like "The Safety Selfie Scavenger Hunt." This helps to ensure our team members follow correct safety procedures when working on the robot and in our machine shop. All this and still there is more! We have created Toaster buttons, banners, posters, spirit items, and team pencils. We are also involved in the important task of completing the team essay, executive summaries, and other Chairman submissions to put online for the judges before Feb. 19 - a deadline that is fast approaching! This year, the Chairman's Committee has gotten an office space in the main robotics room allowing us to be more engaged with the team and involved with the activity of the robot build. The Chairman's group is motivated, innovative, and looking forward to bringing more ideas to life as they STEAM ahead into a better future! - Ann



Outreach

Team 3641 is continually building bridges and reaching out into our community. Most recently, The Flying Toasters set up a school wide collection drive for Mott's Children's Hospital. We gathered coloring books, crayons, markers, puzzles and other art supplies for the young patients and their family members. As a team, the Toaster members created posters, a morning school announcement and a Power Point to be shared by the high school broadcasting crew to promote the "Crayons for a Cause" drive. The boxes around the school spilled over with 146 coloring books, 86 boxes of crayons, 10 boxes of colored pencils, 27 puzzles, and more. We want to give a special thanks to the NHS for their generous donations.

As our own little gift, the team also gave the hospital 50 of our own activity bags. Each bag included the first edition of the Flying Toasters' activity book, team stickers, pencils and crayons. These bags will spread the word about FIRST to the young children and their families spending time in the pediatric emergency waiting room of the Mott Hospital.

Upon giving the bags to the hospital, senior Bryce B. said, "It was a jolly experience seeing where all our hard work was going to and who it was helping." Due to our overwhelming success, we are bridging our team members even further, by holding another Mott's Hospital drive at the second high school in our community. The Flying Toasters are continuing to reach out into the community and spread the word of **S-T-E-A-M** and **FIRST robotics.** –Jennifer A.



FTC 8487 Robo-Toasters

Building Bridges to FTC: Meet the Robo-Toasters!

The Flying Toasters are proud to introduce the newest member of the South Lyon FIRST Robotics family...The Robo-Toasters! Our middle school teammates made an impressive start, participating in their first ever robotics competition and qualifying for states. "Starting a new middle school team was a challenge but seeing the students learn about robotics was really worth it," said Coach Barbarann Brodesser. Team 8487 worked hard to build a competitive robot, create a FTC presentation and embrace "gracious professionalism" as they represented South Lyon during their the first FIRST robotics season. Advancing to states as a rookie team is an awesome accomplishment! The Robo-Toasters were also recognized for far more than their innovative robot. The judges at the event presented our new team with the Connect trophy. The Connect Award is given to one team that best promotes engineering, science, and technology in their local community. It is exciting to see the Toasters!

-Jennifer A.



Mentors Corner

We are off to a fantastic start this year. Our Mentors and Parent Boosters are extremely supportive and helpful in helping the team handle its ginormous growth; we grew from around 15 students last year to nearly 40 this year!

Quite often students ask me how they can be successful. Here are a few suggestions. – Coach Weber



3.

Attend the meetings, go to the competitions, and have fun. Know the rules, learn the game, and perform research such as going to chiefdelphi.com, checking out other team's blogs, and going to FIRST to keep up with the updates.

- 2. <u>Help out the Chairman's Team.</u> If you want to get in the know, make connections, and feel the heartbeat of the Flying Toasters, working with the chairman's team is the place to be.
 - Jump in! Find someone working on a project and ask to help out. Talk to a mentor and see if can work with them. The build season is a short six weeks; its fast and furious, so roll up your sleeves, engage your persistence, and JUMP IN!

There's nothing stronger than the heart of a volunteer...Victory belongs to those who believe in it the most and believe in it the longest. We're gonna believe. We're gonna make (others) believe too.

-Lt. Col. Jimmy Doolittle:

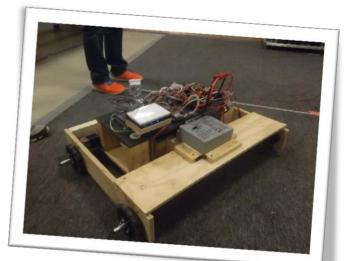


Notes on the Build season...

Nearing the end of our design phase, we are almost ready to start the final production of our robot! This year we worked hard in the early stages, prototyping many designs, and designing more than five different chassis. Early on we also put together a mock controls system to simulate the programing that will be loaded onto the robot. This year it was essential to get an early jump on development, and we did just that. As we progress to final production it's definitely going to pay off. – Ethan N.

What robotics has taught me...

Robotics has taught me how to work with a team of people. Every day I walk into class, sit in single seat desks, take my own notes, study, and turn in my own worksheets. While schools sometimes have kids do group work, it's not very common, and you only ever work with a few people. When you're in robotics, you get to experience how a true team works. I walk into a workshop and see every person working, just like a well-oiled machine. When we all have a single purpose and direction, we can do truly amazing things. – Ethan N.



State of Michigan Grant

The Fiscal Year 2014 State School Aid Act, Section 99h appropriated \$2,000,000 for the 2014-15 school year for competitive grants to districts that provide pupils in grades 7-12 with expanded opportunities to improve mathematics,



science, and technology skills by participating in events hosted FIRST, Tech Challenge (FTC-Middle School), and FIRST Robotics Competition (FRC-High School). Added to this amount is a carryover of \$1,321,500 from the previous year. The purpose of the grant is to support the State Board of Education's mission in making "All students graduate ready for careers, college, and community," the Michigan Department of Education (MDE) staff has developed a structure to award the funds appropriated to public school districts and public school academies to support students.



The Flying Toasters welcome some of our many sponsors for 2015:

The Chrysler Foundation Ferguson South Lyon Orthodontics Golden Refrigerant Hitachi Automotive TATA Technologies Lvon Area Rotary Club Henrob Corporation Snap-On Liberty Chevrolet **TFB** Plastics Spectrum Automation Jim Seghi Renovations **Richard & April Foyteck** Michael & Deborah Martin Manuel & Cristina Novilla Mary Knauer David Klein Construction, Inc Waltonen Engineering, Inc. Oakland Oral Surgery Associates Wrapped & Scent Joseph & Elaine O'Connor Ewa Kedzierski Mary Stone Brian Perion Sandra Stewart Randall & Ann Bizer Schupan Recycling Josephine Oliver Joel & Evelyn Johnson State Of Michigan Solidworks Andymark



Flower Loft, Inc. Chuck & Terri Settino Edward & Kathleen Debler Danny & Sherri Heffernan

Sponsors on our 2014 team shirt

The Flying Toasters welcome some of our many sponsors for 2015: Gateway Dental Care J. D.

Beavers **Reclaimed Assets Group** Bakman Floral Design Cournay Agency, Inc GT Contracting Thomas Groom Scott & Judith Wolak Armando & Rosario Santos Frank & Dorothy Novilla Advance Auto Parts Autozone Kenneth & Lynn Kneisel Linda Nehasil Louis & Lee Barati Bullet Distributors Brostrom Physical Therapy Lindsay's Hometown Pizza Mykin, Inc Perfect Floors II South Lyon Orthodontics State Farm Insurance Johnnie & Barbara Muse Lowe's Home Improvement James Sicoli Cybernet Leidos Artistic Permanent Makeup **Quality Homes** South Lyon Community Schools TRW Superb Fabricating Wholesale T-shirt Aleko's Resturant Bud Martin Hardware Farmers Insurance Chuck & Terri Settino