

The Space RAIDers Newsletter

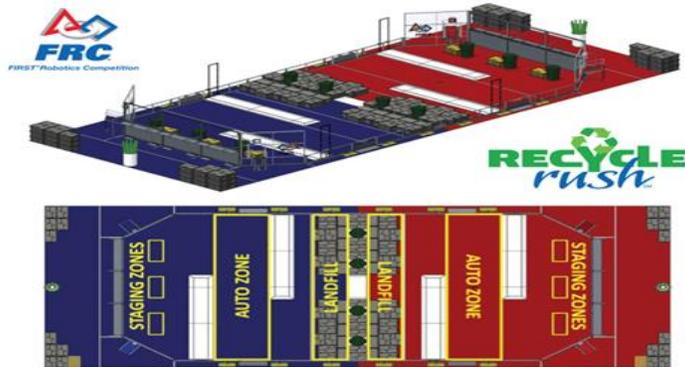
Special Interest Articles:

- 2015 Game
- 2537 News
- FLL Mentoring

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FIRST® 2015 Robotics Game Revealed: Recycle Rush



Recycle Rush is the 2015 US FIRST Robotics game played by two alliances of three robots each. Points are scored by stacking totes, and recycling bins on top of these tote stacks while disposing of litter. All pieces used can be reused in order to contribute towards the recycling theme of the game. There are two periods in the game, Autonomous and Teleop, in which robots try to score as many points as possible. A large rectangular game field is set up with two identical sides, one for each alliance.

During the fifteen seconds of the Autonomous period, the robots operate without the use of a driver, so the robot must be programmed to move independently. Points are scored by placing robots and yellow totes in the Auto Zone, the area in between the two scoring zones.

After the Autonomous period, the robots are taken over by the drivers

for the remaining two minutes and fifteen seconds in the Teleop phase. During Teleop, the three robots in an alliance work together to create stacks of totes and then crown them with recycling bins. The tote stacks are not worth much by themselves, but when topped with recycling bins, the point values are multiplied.

Recycle Rush has three types of matches, practice, qualification, and playoff. In practice matches teams test their strategies and robots without impact on their points. However in qualification matches, points impact the team's rankings.

Also during qualification matches, robots can stack yellow totes onto a step earning a large sum of points. However the points are not counted in playoff matches. During playoff matches eight alliances compete in a tournament to decide the winning alliance.



Former Space RAIDer, now mentor, Manny M is excited to help his former team

Alumnus Returns As A Mentor

A founding member of the Space RAIDers, Manny M, has returned to Team 2537 as a mentor. He talked to the Newsletter staff about how being part of the team taught him many useful skills for college and his job, like working with hardware in a tool shop, leadership, teamwork, problem solving and critical thinking. He still uses these skills in everyday life. Manny brings with him all the skills he learned from his

time on Team 2537 plus unique ideas from his perspective as a professional engineer. After returning to the team he was impressed with how much the team has grown from when he joined the team in 2007. His goal to keep everyone involved is much harder now with so many members. He also will try to inspire people to get involved with STEM and pursue technical fields. He hopes to contribute greatly to the success of 2537.

Team 2537 Participates In STEM Fairs

The Outreach division of the Space RAIDers focuses on team branding activities, and inspiring others in our community to participate in STEM. Team brochures, banners, buttons, and other artifacts now have a consistent theme and image that vibrantly portrays the Space RAIDers. Our brand is clear to children, adults, families, FRC teams, and judges; whether they glance at our robot, our uniforms, our logos, or our pit, it is clear that we are focused on innovation and future technology.

Team 2537 stays active within the community by attending events, such as Girl Power, and STEM fairs. We believe that STEM knowledge is critical in today's world, and we want to spark younger students' interest. We attended Girl Power in 2012 and 2013 to show our support for

female participation in STEM, and have been invited back in 2015. Last year, we demonstrated our robot at the Howard County Public School System STEM Fair at Long Reach High School, the Howard County STEM Fair at Howard Community College, and the Gorman Crossing Elementary School STEM Fair. By displaying our robot in action, we showed hundreds of people of all ages how much fun STEM can be.

At these fairs, we briefed Howard County leaders on our efforts to promote STEM, and lobbied for additional support for all county FIRST activities.

Showing young children how to drive the robot and watching competition videos of it excites and inspires them to become active in STEM through FIRST.



Showing off our 2012 robot at the 2014 HCPSS STEM Fair



Focus on the Future: Mentoring FLL team

FLL 2014: World Class. The season has come and gone, but teams throughout the country had fun with this year's challenge. Team 2537, the Space RAIDers, sponsored the Clarksville Comets throughout the season of the fall of 2014 and the end result was a success. The Comets won the Core Values Award and finished 11th out of the 19 teams competing at the regional competition.

The season went off without any major problems. Our team supported the Comets with six mentors: Gabriel P, Ryan B, Tommy L, Mitchell K, David W, and Kenneth X. The Comets struggled with some programming and strategy, so the mentors helped with programming, strategy techniques and even designing an auxiliary mechanism.

Lots of hard work and effort went into the robot they created, but the Comets rarely got upset and almost always had a smile on their faces. Overall both teams had fun and enjoyed the fruits of their labors. They even nominated Gabe P for the Young Adult Mentor Award, and he won! He will be competing against other regional winners at the State FLL Competition in February.

Team 2537 is looking forward to working some more with their new friends, the Clarksville Comets.



2015 Space RAIDers Sponsors

- NSA- Math Engineering Partnership Program
- Booz Allen Hamilton
- AKAYLA
- Leidos/Project Lead the Way
- The PTR Group
- Maryland Space Business Roundtable
- Ramparts LLC
- Grace
- Lockheed Martin

Space RAIDers Team 2537 2015 News

It is a new year, new team for Atholton High School's robotics team, the Space RAIDers. 2015 will be an exciting year for the Space RAIDers because it will be the first year as a fully rebranded team. Team 2537 has 72 students on the team this year. The students are divided into 12 sub teams, with mentors and student leads for each. Three mechanical teams, software, outreach, business, sensors, CAD, drivetrain, electrical, strategy, drive team, and field/ pit make up the team.

Space RAIDers has had many challenges this season. Atholton High School is undergoing renovations, the team has just moved into a brand new tech room. However, during the fall, the team met in the cafeteria, because it was the only available space. It became a challenge to train the new members because the tech lab, along with tools and materials, was not accessible. During build season, the gym, our usual practice field, will not be open due to renovation. Despite these challenges, 2537 expects to have a successful year.

Want to learn more about how you can help the Space RAIDers, or other FIRST teams?

In addition to funding, we are always in search of adult volunteers to help mentor.

THANK YOU FOR YOUR SUPPORT!

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