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"Rolling Thunder" Team 1511 Newsletter

VISIT OUR BUILD SEASON BLOG AT penfieldrobotics.com/blog

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See the animated video of the "Breakaway" game at:

usfirst.org/roboticsprograms/frc/content.aspx?id=16209



Build Season Begins for "Breakaway"!

The 2010 game for the *FIRST* Robotics Competition, "Breakaway," was revealed worldwide on Saturday, January 9th. This year's game uses soccer balls as playing pieces, with a field divided into thirds by two foot-high bumps (think giant speed bumps across the width of the field!). Robots can score by getting soccer balls into their own goals. In the last few seconds of play, robots can also score extra points by pulling themselves up at least 21 inches above the floor on one of two large towers.

Robot design work has kept Team 1511 very busy since Kickoff. After two days of brainstorming, the team decided on a robot that uses a swinging "kicker" to propel the soccer balls, a mechanism for lifting the robot during the final seconds, and a top surface that will help keep the robot from tipping over and will also deflect soccer balls.

The team has also been constructing a playing field, because in February we'll be hosting the pre-ship Rochester Rally event where local area teams can bring their robots to practice on a full-size field. The wood shop has been a noisy, sawdust-filled place! Many



Students Mike M. and Alex W. with mentors Dave Vadas and Mike Wolf use a soccer ball to test the robot's "kicker" mechanism.

pieces of the "bumps" have been assembled, tunnels have been created, and towers have been constructed. There's still a lot of work to do, but the field crew is making great progress!

Over the next four weeks, the various parts of the robot will be prototyped, designed in CAD, assembled, and tested. Watch our newsletter for updates on our progress during build season, and check out our build season blog at penfieldrobotics.com/blog!

Upcoming Events

- Rochester Rally (pre-ship event), Penfield High School gym, February 21st
- Finger Lakes Regional at RIT (Gordon Field House), March 4th-6th
- Boston Regional at Agannis Arena, March 25th-27th
- FRC Championship in the Georgia Dome (Atlanta, GA), April 15th-17th

Team 1511 Newsletter

Events Everywhere!

Team 1511 loves a great robotics competition! We love them so much that we help run them even when it isn't the official *FIRST* Robotics competition season!

Rolling Thunder ran the 5th annual Rah Cha Cha Ruckus on October 24th, and 20 teams from the area and as far away as Girard, Ohio were in attendance. Halloween costumes, great fun and entertainment abounded as *FIRST* Robotics Competition teams took their robots for another spin at this off-season event. Team 1511 set up *FIRST* Lego League tables for the local FLL teams to show off the robots they were preparing for their season. Another highlight was a demonstration of the new control system for the 2010 FRC season, which Team 1511 had been working with as an official Beta Test team. And for the first time ever, Rolling Thunder won the Rah Cha Cha Ruckus event, teamed with the X-Cats of Wilson Magnet High School and NazareX of Nazareth Academy! The team also won the "Deadheads" award for exemplifying *FIRST*, and our own Jeff Downs won the Igor Award as Ruckus Volunteer of the Year!

And Team 1511 showed they still hadn't had enough of the FRC competitions when they headed down to the Ramp Riot Competition in Ambler, PA in November to compete with 36



Eric Eckhardt is all dressed up for Hallowe'en... and for MC'ing the Rah Cha Cha Ruckus!

teams from the FRC community. Several members of the team even jumped in to volunteer when the event was short on referees and scorers!

Following the off-season FRC competitions, November and December was the time for local *FIRST* Lego League teams to compete. The qualifier tournaments were held on November 21st, and the

"Team 1511 loves a great robotics competition!"



Team members Mike H., Jacob K., and Tony B. drive Rolling Thunder's robot at the Rah Cha Cha Ruckus.

Team 1511 Newsletter

Events Everywhere! (cont'd)

championship tournament was held on December 6th. Team 1511 provided over 20 volunteers for the Edison Tech and Webster HS qualifier tournaments, including head referees at both events and the MC at Edison. At the championship tournament Team 1511 supplied even more support, with six judges, eight referees, and nine additional Tournament volunteers!



Head mentor Larry Lewis (right) and students Theo M., Andy M., and Paul J. at Ramp Riot. (Relax, Theo!)

MARK YOUR CALENDAR!

The Rochester Rally is Sunday, February 21st at Penfield High School. Free and open to the public! Family-friendly!



Team 1511 members provide referee staff for the FLL championships. Funny hats are a tradition!

Reaching out beyond Rochester, two Team 1511 distance-mentors helped run and support the Northern New York Robotics Institute FLL and FTC Tournaments as the head referee and MC at the event hosted by FRC Team 229. You can bet the team is excited for more events to come!



Distance-mentor Kim O'Toole Eckhardt assists at the Northern NY Robotics Institute tournament.

Preseason Demo at Simcona's 40th Electronics Trade Show!

Team 1511 is busy all year round! One of Rolling Thunder's goals is to spread the word of *FIRST* by demonstrating our robots to the public. Team 1511 had a great opportunity to do this at Simcona's 40th Annual Electronics Trade Show in October. Over 25 companies were present at this demo, all of them interested in what Team 1511 had to show – a robot in action! When asked about the trade show, company representatives replied that having a robot present made the show more exciting. All the companies attending were invited to the Rah Cha Cha Ruckus the following weekend, thanks to the diligence of students Mike H. and Liz M., who handed out flyers and

explained the goals of *FIRST*.

Team 1511 had two booths at the show, one for controlling the 2008 robot "Mach 1511" and demonstrating the team's awards, the other dedicated to informing interested companies about *FIRST* and the team. Rolling Thunder also helped the representatives of the company in the next booth load their equipment into their cars – another example of *FIRST*'s "gracious professionalism" at work!

Team 1511 thanks Simcona Electronics for their sponsorship and for this great demo opportunity!



Team members Justin B. and Crystal V. man the booth at Simcona's 40th Electronics Trade Show.

To all our sponsors—THANKS for keeping the Thunder rolling!

**Penfield High School / Harris RF Robotics Team
"Rolling Thunder" Team 1511**

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Penfield, NY 14526

"The thunder just keeps getting louder."

CHECK OUT OUR BLOG!
penfieldrobotics.com/blog

Useful links:

Team 1511 build season blog: penfieldrobotics.com/blog

Team 1511 website: penfieldrobotics.com

Team 1511 photos: rollingthunder.smugmug.com

FIRST website: usfirst.org

"Breakaway" video:
usfirst.org/roboticsprograms/frc/content.aspx?id=16209

FIRST in the Rochester area: firstrochester.org

