



January 12, 2010



**POWER
KNIGHTS**
Team 501



Team 501 News

E-mail comments, suggestions, etc. to: Anna Turgeon at bobtheredsoxgirl@comcast.net

KICKOFF 2010!

2010 First Robotics Competition

by Connor McLeod
(WHS Junior)

This year's competition is a game called **Breakaway**. In it, two alliances, one red and one blue, each comprised of 3 robots, are trying to score balls into their team's goals. The balls are standard size 5 soccer balls, much like you'd see on a professional field. Robots are tasked with rolling these balls along the ground and kicking, hitting, or otherwise sending the ball into their goal. Each goal counts for one point apiece. Much like real soccer, balls cannot be picked up by the robots, or there will be a penalty. The field is 54 feet by 27 feet and has two bumps running through midpoints on the field, one red and one blue. There is a 15 second "Autonomous Mode"

where the robots run off of pre-programmed commands. After this period is over, drivers step up and begin the teleoperated period, which is 120 seconds long. This is the time where the drivers control their robot and try to score goals themselves. Of course, teams may not necessarily make it a priority to score, but rather to play defense and prevent the other teams from scoring.

During the last 20 seconds of the teleoperated period, the "Finale" starts. This is when robots are encouraged to get on the tower located at the center of each bump. Robots can latch onto the bars at the top of the tower, and suspend themselves for two bonus points. Additionally, another robot can suspend themselves from a hanging robot for 3 additional points, for a total of 5 potential bonus points.

Part of the challenge this year is being able to traverse the bumps to get into the other zones and the fact that there can only be one of each

alliance's robots in their opponent's zone at a time--meaning robots cannot come to "back each other up." To get Team 501's opinion on this year's game, I interviewed Anna Turgeon, one of this year's team captains.

Connor: How do you feel about this year's game?

Anna: I like how it's easier for spectators to understand, since the scoring system is simpler as opposed to other years.

Connor: What sort of strategies do you think we need to have?

Anna: We'll probably want to be able to cross bumps quickly, and score from far distances, as well as being able to hang during the finale.

Connor: There are a lot of penalties that can be given this year. Do you think this will make the game more difficult than past years?

Anna: Every game has its

challenges, but I think we'll need to be a lot more conscious of the rules this year.

Connor: What do you think is the ideal robot design for this year's competition, and which strategy will be most important?

Anna: Since hanging scores a lot of points, it's going to be a big priority, as well as potentially having the ability to flip other team's robots that have turned over in the match.

Connor: Finally, what do you think will be the most fun part of build this year?

Anna: To me, the most fun part of build, no matter what year, is always the forming of a tight community around the building of the robot, almost like a second family.

This year's competition is being held from March 4th through March 6th at the Verizon Wireless Arena, and Team 501 hopes to see you there!



Dani Ithier, Anna Turgeon, Mike Drolette, Zach Wagner, Sammi Ainsworth, Greg Dusseault and Dale Keith discussing game strategy and robot design during Sunday's brainstorming session.

To watch the Game Animation, please go to this link:

2010 FRC Game Animation:

<http://www.youtube.com/watch?v=IEHAj3EmpMw>

TEAM 501 FUNDRAISER

SAVE those **BARNES & NOBLES** Gift Certificates you received for the holidays. Team 501 is having a Book Fair to raise money for our team.



Isaiah Cote and Alex Alterisio-Gagnon looking at one of the mock playing fields.

Photo credit: Zachary Glennon

FIRST Robotics Team 501, The PowerKnights, from Manchester High School West, Manchester, NH will be bringing their 2009 competition robot to Barnes & Nobles Booksellers,

located at 1741 S. Willow St., in Manchester, NH on January 18, 2010, Martin Luther King Day. Customers may view the robot, chat with team members, and drive a VEX miniature robot from 11 am to 3 pm.

A bookfair voucher may be printed from the team website www.powerknights.com, or stop by when the team is at the store to pick one up at their table. Customers need to present the voucher with their purchases in order to get credit - the team will receive 10% of the sales.

These vouchers are good at **ANY Barnes & Nobles in the United States on January 18, 2010** when making a purchase anytime during the day from 9:00 a.m. until 10:00 p.m.

If you have any questions, please feel free to contact **Andrew Flood** at aflood2010@gmail.com.

This year's team is comprised of 39 students from Manchester, Hooksett and Goffstown and will be competing at the Verizon Wireless Arena in Manchester, NH on March 4-6. The team will also be competing at the St Louis Regional in St Louis, MO on March 16-21.



Please see www.usfirst.org and www.powerknights.com for more information.

Team 501 at PSNH for the 2010 Kickoff Event on Saturday, January 9



1st Row: Zachary Glennon, Trixie Vazquez, Anna Turgeon (co-captain), Alex Alterisio-Gagnon, Connor McLellan
2nd Row: Catherine Lacey, Erin Morrison, Katie Thibaudeau, Carolyn Przekaza, Danielle Stanton-Turcotte, Dale Keith
3rd Row: Matthew Young, Elizabeth Lacey, Greg Dusseault, Samantha Ainsworth, Nicole Lyle, Dani Ithier, David Boudreau, Tony Ricciardi, Nish Gurung, Colin Fletcher, Matthew O'Rourke
Back Row: Mike Drolette (co-captain), Connor McLeod, Mike Morin, Matthew Snyder, Zachary Wagner, Jacob Perry, Andrew Flood, Jacob Murphy, Neal Burlington, Brian Raymond, Sean Morrison

Photo credit: Kevin O'Rourke

More team photos on the following page.



Please see www.usfirst.org and www.powerknights.com for more information.



Team 501 Hooksett Students

1st Row: Anna Turgeon (co-captain), Mike Morin and Dani Ithier.

2nd Row: Matthew O'Rourke, Jacob Murphy, Andrew Flood and Nish Gurung

Missing: Isaiah Cote, Nicole Jache,



Team 501 Goffstown High School Students

1st Row: Danielle Stanton- Turcotte, Carolyn Przekaza, Samantha Ainsworth, and Nicole Lyle.

2nd Row: Matthew Young, Zachary Wagner, Mike Drolette (co-captain), Matthew Snyder, Connor McLellan and Dale Keith

Missing: Michael Laplante, Carolann Turgeon

Photo credit: Kevin O'Rourke



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