



Week 6 - 2/16/10  
Team 501  
News



**POWER  
KNIGHTS**  
Team 501



E-mail comments, suggestions, etc. to: Anna Turgeon at [bobtheredsoxgirl@comcast.net](mailto:bobtheredsoxgirl@comcast.net)

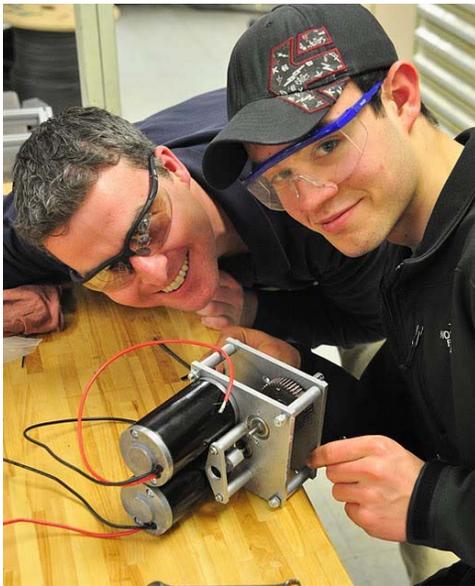


Photo: Isaac Onigman  
BURNDY mentor and engineer Jefferson Hall  
and Mike Drolette during a build session.

The crab drive is almost complete. We just need to attach the wheels to the motors and we have the motors working. The arm to help us hang is almost done, we just need to make some minor adjustments and make and attach the hook. The arm is powered mostly by springs, and it can now go from a down position, to a straight up position and it can reach the desired height. The wiring is complete and the kicker is still being constructed.

### AND THE BUILD GOES ON

By Nicole Lyle  
GHS, Freshman

Team 501's robot has progressed from simple ideas, to CAD designs, to an actual robot. Problems have been encountered, as well as sweet success. We currently have an almost complete robot. Shipping day isn't far away either, on February 23.



Photo: Isaac Onigman  
Nicole Lyle and Colin Fletcher at a build session  
at BURNDY.

## THE THREE MENTORS

by Matt Young  
GHS Senior

Recently I had the privilege of interviewing three Team 501 mentors: Tom Provencher, Ray Provencher (Tom's father), and Mr. Ed Forcier.

Tom has done a lot of designing for this year's robot using Computer Assisted Drafting (CAD) software. Tom gave a conservative estimate of eighty hours that he has spent designing the robot using CAD. This may seem very tedious because it is time consuming, but Tom enjoys using CAD very much. It has been a few years since the last time I have used CAD software, but I agree with Tom's statement that CAD is indeed fun to use.

CAD consists of many different tools to use. Even though he was designing a robot, only the basics were used for the design. Tom compares using CAD software to using a calculator. The buttons are there, but if you don't know what the buttons do the tool is useless.

Mr. Provencher and Mr. Forcier implemented Tom's designs into tangible components. Mr. Provencher worked on the wood pieces that were needed, while Mr. Forcier worked on the metal parts. Mr. Provencher received the designs from his son with the dimensions, then went to Home Depot to buy the plywood needed and constructed the parts at his house. The plywood is used to mount devices on. He is currently working on the bumpers, which are made up of some plywood and padding.

Mr. Forcier worked on a new drive design, the crab drive, which Tom designed. Mr. Forcier said that it took around forty hours to machine the crab drive. This year the parts are very complicated and include very precise measurements. This is why even though some students have been taught

machining, they were not able to machine parts themselves this year. So Mr. Forcier had to work on it himself in the machine shop that he has at home. He calls it "The little company that thinks big."

## DRIVE TEAM SELECTION

The Drive Team Selection tryouts will take place on Thursday, February 18 from 630-800pm in the Training Room at BURNDY. The Drive Team members are the ones who operate the robot at the competitions, along with the human player who, in this year's game, puts the balls back into play onto the playing field, and BURNDY mentor Jefferson Hall is the coach. If you are interested in trying out to be on the team, please make sure you fill out the exam and know the guidelines for being part of the team.

## WORKING HARD ON THE WEBSITE

by Zach Glennon  
WHS Freshman

The Website Committee is made up of Dale Keith, Carolyn Przekaza, Isaiah Cote, Greg Dusseault, myself, and mentors Alan Ellis from Dynamic Network Services, Inc. and Cathy Przekaza. The committee heads are Dale and Carolyn. We have been working really hard to update the old website by creating a completely new one. The new website has our team handbook and forms, and a team calendar that will become very useful in the coming months. The site also has an entire page devoted to team pictures and videos, so please send any photos you may have to Dale or myself. The new site is easier to get from page to page and looks really great. The Website Committee will continue to work very hard to finish the site in time to submit it for a FIRST Website Award at the upcoming competition.



Please see [www.usfirst.org](http://www.usfirst.org) and [www.powerknights.com](http://www.powerknights.com) for more information.

## TEAM VIDEO FOR THE COMPETITION

The BAE Systems Video Department is gearing up to produce this year's FIRST Robotics Competition opening video. Team 501 wants to be part of the fun and see ourselves on the big screen at the Verizon Wireless Arena in March. In order for that to happen, **Matt O'Rourke** has been hard at work capturing footage of team members building our robot to submit in time for the deadline. Matt also sent in some still photos. Hope we make it into the final cut!

## EATING GOOD IN THE NEIGHBORHOOD

By Mrs T

The students and mentors have been enjoying some wonderful lunches and dinners during the weekend build sessions provided by team moms, most notably Debbie Ithier and Kathy Provencher. This past weekend, Debbie brought in meatballs with pasta and salad. She even brought in her toaster oven so they could make freshly toasted garlic bread. You could smell the wonderful aroma as soon as you walked in the door! The leftover meatballs can be used to make subs. She has also provided clam chowder and chicken tenders. Kathy is famous for her legendary homemade bread sandwiches and homemade shortbread for dessert. Elena Drolette has provided the cold cuts for the sandwiches, Jacob Murphy's mom has brought in brownies and Karen Ricciardi brought in homemade whoopie pies. Lynn Cote has brought in macaroni and cheese and burritos, along with homemade oatmeal cookies. And there are always plenty of snacks and desserts to keep everyone satisfied. Thanks to all the moms who have been so generous!

Speaking of **Kathy Provencher**, aka Tom's mom, she has continued to be a team mentor even though Tom graduated two years ago. She has really helped the team enormously with programming the

robot. We would not have had functioning robots without her help. Mentor Isaac Onigman is also helping this year with programming. He has attended several classes to learn more about what is required and is helping teach the info to the Controls Committee.

## TEAM SPIRIT

By Katie Thibaudeau  
WHS, Senior

So the competition is now within sight and we need everyone to get involved with team spirit! For our team giveaway this year, the Spirit Committee decided to have a pen with the saying "BREAKAWAY 2010, Stolen from Team 501," written on the barrel of the pen. Since the competition uses soccer balls this year, we thought it would be fun for our team to wear soccer ball blinker lights and we will also have soccer maracas to make some noise! Please bring your team spirit with you to the competition! Dress up as a knight or princess/maiden, dye your hair blue and white, use face paint, do anything to show you're proud to be part of our amazing Team 501!



Photo: Kathy Thibaudeau

Here are Cat and Anna Turgeon, Zachary Glennon, Mike Morin, Trixie Vazquez and Elizabeth Lacey at the recent West High Freshman Open House.



Please see [www.usfirst.org](http://www.usfirst.org) and [www.powerknights.com](http://www.powerknights.com) for more information.