

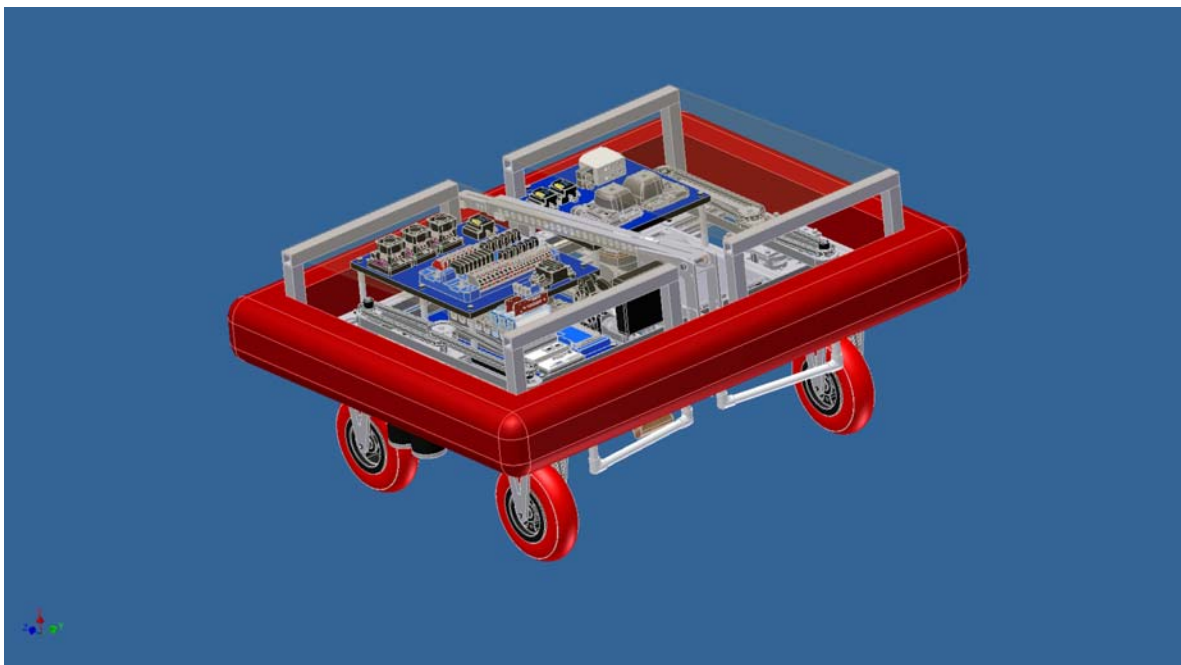


Week 4 - 2/2/10

Team 501 News



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



Programming Update by Zachary Wagner GHS, Senior

This year Team 501 is programming the robot in a programming language called Java. Java is different from what we used last year, C++, because it is an object orientated language. Our hope is that programming the robot this year will be easier than last year. This year we have many different things to program for the robot. We have to program the front rollers, the kicker, the arm, the camera, and the drive system. The front rollers are in the lower front of the robot and are angled slightly to allow the ball to come three inches into the robot's dimensions.

CAD Drawing of Robot - Jefferson Hall

The rollers are essentially the same as last year's robot, except this year they will be used to keep the ball directly in front of the robot. The kicker is a hockey stick and a piece of wood held back by elastic bands. The kicker is aligned directly in the middle of the robot and will be able to kick in between the two rollers. The arm is designed to launch itself upward in a telescopic manner and latch a hanger-shaped grabbing apparatus onto the tower. A winch will then retract the arm so that it lifts the entire robot off the floor. Finally, the camera will be used to locate the target positioned above the goals to make aiming and shooting easier.

Team Mentor: Ed Forcier elf305@yahoo.com Team Parent: Kathy Thibaudeau antiquemama@comcast.net

The turnout for the number of team members showing up to the meetings is great! We usually have at least five students and two mentors. During the meetings we discuss what we need to do and how we can approach programming it. To do this we made flowcharts to guide us through the process of programming. A flowchart is a step by step explanation of what needs to be done to make sure that the part of the robot we are programming works properly. After we finish the flowcharts for whatever we are preparing to program, we begin the actual programming process. Our mentors, Kathy Provencher and Isaac Onigman, and team captain, Mike Drolette, help the other students understand what to do and how to do it with the proper syntax that Java requires. It is clear that some students are already excelling in programming and will be able to lead the team next year in the same process.

SPONSOR UPDATE

by Mrs T

HAPPY ANNIVERSARY TO BURNDY AND TEAM 501!

This year marks the **10th anniversary** of our partnership with Burndy. Jefferson Hall, our lead engineering mentor, is excited to be working with team members on building our **10th robot** under Burndy's sponsorship. Other Burndy mentors include Jen Hosker, Pete Wason and Chuck Ackerman.

You may have noticed the new BURNDY logo in our newsletter header. Here is the press release from HUBBELL giving details on their acquisition of FCI Burndy Products, now known as Burndy.

HUBBELL COMPLETES PURCHASE OF BURNDY® ORANGE, CT. (October 5, 2009) -- Hubbell Incorporated today announced that it completed the purchase of FCI Americas, Inc. (the business known as "Burndy®") for consideration of approximately \$360 million in cash subject to certain standard adjustments.

Burndy, founded in 1924 and headquartered in Manchester, New Hampshire, is a leading manufacturer of connectors, cable accessories and tooling. Burndy

serves commercial and industrial markets and utility customers primarily in the United States (with roughly 25% of sales in Canada, Mexico and Brazil).

Burndy will continue to operate as a stand alone business unit as part of Hubbell's electrical systems products for the foreseeable future.

Timothy H. Powers, Chairman, President, and Chief Executive Officer of Hubbell Incorporated said "I am excited that we have been able to complete the purchase of Burndy. Since we signed the definitive agreement in July, our management team has been coordinating with Burndy and FCI to ensure a smooth integration. Our extensive interactions over that period of time have served to reinforce the outstanding fit we see between Hubbell and Burndy and the business opportunities that can be realized over time. Burndy's product quality, relationships with distributors, and emphasis on people are a natural complement to Hubbell. Hubbell welcomes the Burndy employees to our family and we look forward to serving our customers with a broader and deeper product line."

Hubbell Incorporated is an international manufacturer of quality electrical and electronic products for a broad range of non-residential and residential construction, industrial and utility applications. With 2008 revenues of \$2.7 billion, Hubbell Incorporated operates manufacturing facilities in the United States, Canada, Puerto Rico, Mexico, the People's Republic of China, Italy, Switzerland, Brazil, Australia and the United Kingdom. Hubbell also participates in joint ventures in Taiwan and Hong Kong, and maintains sales offices in Singapore, Hong Kong, South Korea, the People's Republic of China, Mexico, and the Middle East. The corporate headquarters is located in Orange, CT.

DYNAMIC NETWORK SERVICES, INC.

Dynamic Network Services has been a Team 501 sponsor since 2005. Dyn Inc., a world leader in networking, specializes in Domain Network Services, which includes global traffic management for clients such as Zappos, Subway, Warner Brothers, Yum! Brands, Dickies, Mozilla, Ty, and Twitter. The company, founded in 1998, recently acquired DNS service provider EveryDNS. Dyn Inc. CEO Jeremy



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

Hitchcock said, "We aim to be the only authoritative DNS service provider with a DNS solution for everyone, from the home user to the enterprise." The company's headquarters on Elm Street in Manchester has 35 employees and 12 facilities around the world. Today they have several hundred corporate customers around the globe with over 3 million customers. And to think it all started as a free service, based out of a college apartment!

Back in November, Dyn Inc. hosted a **Career Day** for Team 501 students. The purpose was to learn more about the jobs of some of the company employees. We heard from co-owner Tom Daly, President and CIO; co-owner Jeremy Hitchcock, CEO and CFO; Lisa Hagemann, VP of Development; Graham Chynoweth, Lawyer; Kyle York, VP Sales and Marketing; Cory von Wallenstein, VP Project Management and Alan Ellis, Support Technician.

It was a great opportunity for the students, and very interesting to hear how some of the employees did not originally go to college for a particular subject and/or didn't think they would be interested in working for this type of company, but somewhere along the way, they changed their interests, opportunities came up, and here they are. They all said they were very happy to be where they are now.

For several years now, Alan Ellis (aka "The Alan") has been holding weekly after school classes from October through December with West High students, teaching the VEX Robotics Design System. VEX offers students an exciting platform for learning about areas rich with career opportunities spanning science, technology, engineering and math (STEM). This year, we were very happy to have Charles Phillips offer to help Alan teach the same class for the Goffstown High students. The kids really learn a lot from these classes, all while having lots of fun.

Alan has also been working with the students on the construction of our new team website. This year's website committee has been hard at work creating a new website with enhanced features to be rolled out very soon. We look forward to seeing their efforts revealed.

To learn more about Dynamic Network Services, Inc., please visit www.dyn.com.

Thanks again to **Burndy and Dynamic Network Services, Inc.** for their continued generous support of Team 501!

LONG DAYS OF BUILD = HUNGRY KIDS!

It has been a longstanding tradition of Team 501 to try and provide meals during the final "build" weekends for our **hungry students** and **dedicated mentors** so they can keep up their energy and stay healthy! Here is a photo of Sunday's crew eating burritos generously provided by Mrs Lynn Cote.



Photo by Jefferson Hall

L to R: Mentor Jen Hosker, Matthew Young, Dale Keith, Mentor Kathy Provencher, Mike Drolette, Connor McLeod, Jacob Murphy, and Dani Ithier (back of head).



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