



Week 3 - 1/26/10 Team 501 News



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

## Build Week 2

by Isaiah Cote WHS Sophomore

Our first meeting of Build Week 2 was held on January 20th, 2010. At this meeting, we tested prototypes for a system to control and retain balls that could be placed on the robot to work in chorus with the kicker system. This would be used to hold the balls in position where they could be shot or held onto while maneuvering into a better shooting position. After removing, remounting, and rebuilding the system several times, we got it in place so it wouldn't impede the kicker system.

At our second meeting of the week, we began to discuss the orientation of the control board and the coding. Though at first this meeting was to be the start of the robot's assembly, it was postponed because some of the necessary parts didn't arrive as scheduled. Instead we decided that we were going to use two drives and see how different parts of the design would affect what would be needed on the control board. At the same time, we began to discuss what kinds of feedback would benefit the drive team during competition.

At our last meeting, we worked on various aspects of the controls and programming. We began to throw around ideas of how to program the robot, starting with the default robot status, robot initialization, and feedback. A lot of time was also spent talking about how to keep the kicker from dry-firing and getting it to release stored energy safely at the end of matches. It has been decided that the code for the robot will be in Java.

## SPONSOR UPDATE

by Mrs T

Thank you to **ZETA Electronic Design**, **Inc.**, who have returned as a Silver Donor again this year.

ZETA Electronic Design, Inc. offers complete, comprehensive electronics development. Clients need only supply a functional specification. From initial hardware/software system design, to final unit build and test, ZETA has the resources, experience, and processes in place to assure swift, accurate realization.

ZETA is much more than just an electronics consulting house. Entire product lifespan is handled: design, development, manufacturing and verification - including component purchasing and inventory warehousing.

**Team 501 Members - Check this out:** ZETA developed the original electronic hardware and software for the design of the Foster-Miller Talon Robot.

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



TALON is a powerful, lightweight, versatile robot designed for missions ranging from reconnaissance to weapons delivery. Its large, quick-release cargo bay accommodates a variety of sensor payloads, making TALON a one-robot solution to a variety of mission requirements.

Built with all-weather, day/night and amphibious capabilities standard, TALON can operate under the most adverse conditions to overcome almost any terrain. The portable robot is controlled through either a two-way RF or F/O line from a portable or wearable Operator Control Unit (OCU) that provides continuous data and video feedback for precise vehicle positioning.

TALON's payload and sensor options include: multiple cameras (color, black and white, infrared, thermal, zerolight), a two-stage arm, gripper manipulators, pan/tilt, two-way communications, NBA (nuclear, biological, chemical) sensors, radiation sensors, UXO/countermine detector sensors, grenade and smoke placing modules, breaching tools, communications equipment, distracters and disrupters.

For more information, please visit <u>www.zetainc.com</u>

Thanks again to ZETA for their continued support!

## NEIGHBORHOOD NEWS UPDATE by Mrs T

Did you see the January 21 issue of the Hooksett Banner with Nicole Lyle's write-up? And in the Goffstown News, there was an article about the FIRST FRC kickoff in which Team 501 was quoted and a photo of all the Goffstown High School team members was featured.



Michael Nesmith Photography

Thanks to Mike Nesmith for working with team member Carolyn Przekaza over the summer to take this great photograph of all of our team trophies for our website. Mike's son, Zachary, graduated last year and he has another son who is on Bedford's Team 509, Red Storm.

## FRESHMAN OPEN HOUSE

by Trixie Vazquez

Team members were available on January 21 to talk to incoming West High students about joining our team. There were about 10-15 students who said they will definitely be joining Team 501 next year.



L to R: Cat and Anna Turgeon, Zachary Glennon, Mike Morin, Trixie Vazquez and Elizabeth Lacey Photo Credit - Mrs T

