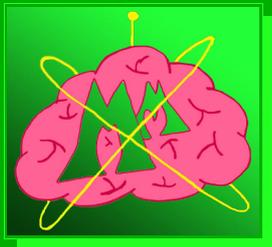




Taken from the Buzo Basement, where most of our work gets accomplished.

Martian Minds

Issue #4



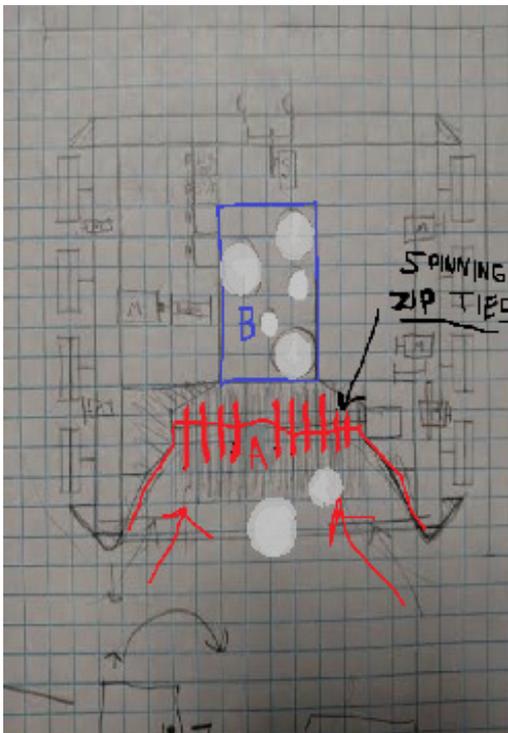
January

2015

Preparing Marvin for State!

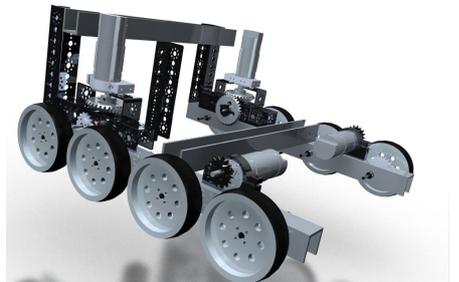
Even though our team has advanced from a regional qualifier, the challenge has not ceased. We have a lot of work to do to get ready to compete at State. We as a team have agreed that if we are to succeed at State level then we need to have a more offensive robot/strategy.

We had to rethink our whole situation and come up with a nearly brand new design for Marvin 3.0 (our robot), aside from the drive-train which we'll essentially be keeping the same as our old design. All the specifics of the new design have yet to be worked out, but we have a basic outline. **The picture on the bottom left is a diagram displaying an overhead view of the new design.** The balls are swept into the box/dispenser mechanism (B) by spinning zip ties (A). The box is then lifted up and the balls are dispensed into a rolling goal.



Rolling Goals

The new chassis is finished in CAD, along with the rolling goal manipulator.



Chassis



Rolling Goal Manipulator

John & Jon have built an intake mechanism prototype (A). They are currently working on a box/dispenser mechanism (B). We have acquired a practice field, and plan to use it as soon as we get parts of our robot rebuilt and programmed. Lupe has been programming and giving general

assistance along with Molly. We'll be competing at Prior Lake Highschool in Minnesota on Saturday, February 21st. The competition will be hosted by team #2169 King Tec and sponsored by Stratasys. The day is sure to hold lots of excitement and will definitely be a learning experience for our team.

Fundraising

Derek has been working hard at putting together a team fundraising video – writing the script, recording, etc. All of us got a chance to talk a little about FIRST and our FTC team. It's almost ready and will be available for viewing on our social media outlets.



Also our team is selling tamales for \$15 a dozen. Tamales are a traditional food from Latin America that usually consist of cornmeal steamed or boiled in a corn husk or leaf wrap. They can be filled with any variety of extras/seasonings. We prepare three main kinds of tamales: Chicken, pork, and jalapeño with cheese. We've sold them every year, and it's sort of become tradition. This year we've already sold 4 dozen. If you happen to live around our local area (Sandstone, MN or Askov, MN) and are interested in enjoying some top notch tamales, feel free to contact us (contact information can be found in the bottom left corner).



Sponsor Spotlight!



PTC provides its technological support, products and services to a wide variety of customers. They are a great sponsor to us and all FIRST teams. They have recently donated PTC Thingworx® to every FIRST team, and before that had freely given PTC Mathcad®, Windchill® and Creo®. These programs have helped teams immensely. Specifically Creo (a CAD software) has helped Ramon with designing and re-designing Marvin. Our team applied to the PTC grant and recieved a gracious \$500 donation this past fall. It has helped us pay for registration costs and parts for Marvin. For more information about PTC take a look at their website: www.ptc.com

**Written and edited by:
Phillip Jansen**

If you would like to be added to this list of fine sponsors, or if you would like to find out more about Martian Minds, please refer to the Contact Information in the bottom left corner.



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Notes from the River
St. Croix River



In Forest Lake