CREVO CHRONICLE VOLUME VII Issue II



# Crevo Chronicle February

IN THIS ISSUE

### Salutations!

Once again we have exciting news to tell you. In this issue you will read on how far we have come in the past two weeks. Without you we would not be able to achieve our goals, and the season would not be able to run smoothly. We will continue to send out these bi-weekly newsletters in order to keep you informed on our progress. Your support has gotten us very far and we are appreciative of your patronage. On page 3 you can find the dates of our competitions. We would love for you to attend!

#### **Build Season**

Build season is six weeks of the hardest fun you'll ever have. The team comes in over twelve hours per week in order to complete the tasks we have. In order to stay on task we have a Gantt chart that keeps us aware of the schedule we have to keep in order for our six weeks to be productive and for our product—our robot—to perform successfully.



## Electrical updates

Update on events weeks 3-4 Page 2

# **Button Making**

A handy-dandy way to produce buttons
Page 2

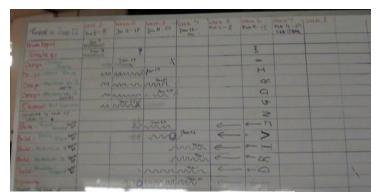
# **Build Progress**

The moment you've all been waiting for!

Page 3

### Save the date

Locations and days of our future competitions
Page 3



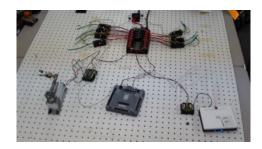
The team Gantt chart

# **Electrical Updates**

The new electrical layout board is quite amazing this vear. Cross The Road Electronics has supplied FRC teams this year with a new Power Distribution Panel, a Voltage Regulator Module, a Pneumatic Control Module, and the new Talon SRX. Along working with Cross the Road Electronics, National Instruments developed the new control system, the roboRIO. Compared to its older sister the CRio, the roboRIO is 4x more powerful in processing and storage. The deploying speed is unthinkable with only 13 seconds for programs to deploy to the roboRIO. With the CRio back then, it took FOREVER to compile and deploy the code to the robot.

So during that time, we programmers would bring out pool noodles to play sword fights with them till the deploying process finished. Along the new features of the roboRIO, Cross the Road Electronics also made changes with its modules. These modules now use CAN (control area network) which is more reliable than using PWM.

-Marty Smoger Head of Programming



# Introducing the 2015 Robot: **Pricus**



Since Crevolution's start, all of its robots have been named based off of Greek mythology. Crevolution students have decided to name the robot this year Pricus: the immortal father of sea goats. This decision was made due to a FIRST joke, "totes ma goats," a play on words to one of the 2015 game field pieces.

# **Button Machine**

Crevolution recently purchased a button machine and thousands of button templates. The team has designed and created buttons to wear and pass out at competitions!

"I have been working on buttons for a couple weeks now, and I'm having so much fun with it. I am able to create artistic designs using my computer and tablet that are made into logos and worn by my teammates. I've always loved doing art, but until now, it's always been separate from robotics. That's why these past couple of weeks have been so awesome. It's so enjoyable when I hear a comment on my artwork—good or bad—because hearing my friends' opinions makes me feel like I'm helping the team in an important way. This project has allowed me to do what I enjoy with a purpose and importance, giving me a feeling of accomplishment."

-Tori M. Public Relations



Our official American Button Machine

### **COMPETITION DATES**

#### March 5-7

Waterford Mott High School

March 26-28

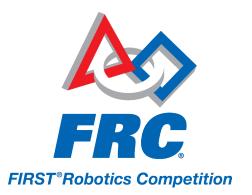
Centerline High School

April 8-11

Michigan District Championship at DeltaPlex Arena- Grand Rapids

**April 22-25** 

Championship- St. Louis



## **Build Team**

In the last few weeks we have finished the drive modules, boasting a Crevolution 'C' on them. They look quite marvelous. As of January 30<sup>th</sup> the frame has been completed, and as soon as we are able to put the electronic board in we will have a robot rolling around on its own power. This year we have faced many challenges one of which was getting the robot chassis to fit together. With our new 3D printers we should be able to print off parts, hastening the build process.

- Benjamin Hume Chief Executive Engineer





Marty S. and Andy K. work on putting the electronics in the robot frame.

Marty Smoger and Ben Hume work on Pricus, the name of our robot, under the supervision of Andy Kirkum.

## 3D Printer

Crevolution was selected to receive a 3D printer from Ekocycle, who donated them to over hundreds of FRC and FTC teams.



# Thank You Partners!































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