





# FIRST Team Paragon Week 1 Update

Team Paragon has been hard at work since the release of this years' game, Ultimate Ascent. All of our subgroups have been working hard towards designing our competition robot, as well as constructing field components that will help us prepare for the competition.



# **Mechanical**

The day after kickoff, the mechanical subgroup quickly began working on a prototype to shoot the Frisbees. The working prototype consists of a wheel and axle encompassed by a semi arc. In the initial testing of the shooter, the Frisbee shot over thirty feet, a distance more than enough for the competition, but we were not satisfied! By the end of week one, the shooter had given the Frisbees enough spin and power to make it across the length of the build site, (approximately 100ft) let alone the length of the field. The subgroup will perfect the accuracy of the shooter in the upcoming weeks.



Part of game this year consists of robots climbing up a pyramid. Based on the cad drawings supplied by F.I.R.S.T, the mechanical subgroup has been working diligently in cutting 1 <sup>1</sup>/<sub>2</sub> steel pipes and assembling them into pyramid a form.

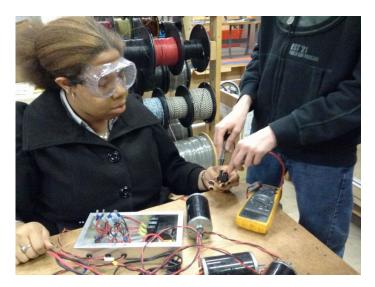
Lon Pelton, an artist and contractor from Windsor, came in this week and agreed to lend his services to the team by manufacturing metal brackets to replace the wooden ones to add stability to the pyramid.





**Construction of the Pyramid** 

## **Electrical**



Over the first week of build our electrical team has been taking inventory of all the new and old electronics. The group has also assembled new connectors onto the batteries so that they may be connected to the motor on our prototype shooter.

### **Programming**

Programming has spent the week updating this year's software for the competition. The classmate laptop also needed to be updated with the 2013 Driver Station so we could use it to communicate with the robot. In addition, the subgroup used the week to setup a framework of the C++ code for this year's robot.







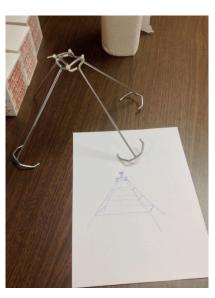
The CADD team has been using Autodesk AutoCAD, supplied by Autodesk in conjunction with FIRST, to mock up different robot designs. Moving forward the team will be using the drawing to make a 3d assembly of the robot.

## **Imagery**

The imagery subgroup started designing this years T-shirt. Paul Ojala from J & B Sportswear and Lettering came out to the site to provide information to the



group as to programs to use to create the shirt. They have also initiated prototyping the 3d sculptures for



the awards to be given to other teams during the competition.

#### <u>Web</u>

Web has been taking pictures of the new students and mentors for this year's team roster, as well as updating the website with photos of the build which you can check at <u>http://team-paragon.org/photos</u>. They have also been busy revising Team's social media sites such as Twitter and YouTube in preparation to the new Digital Media Award (replacing the Website Award).



#### **Home Energy Audits**

Although we are currently in the process of build season, we would still like to fundraise through CT FIRST and Victory Energy Solutions, by offering an energy audit service. Victory Energy will evaluate your home and replace any standard light bulbs with energy conserving CFL bulbs, as well as sealing and weather stripping the doors and windows of your home. They will test your home for air leaks and any inefficiency. For every household that the team refers, Victory Energy Solutions will donate \$50 of the \$75 total fee to the team. If you have any further



questions regarding this program, do not hesitate to contact a member of the team, or through <u>teamparagon571@att.net</u>. You can learn more about the project at :

http://www.firstct.org/wp-content/uploads/2012/04/VES-CTFIRST-Flyer-RevA.pdf

# **Upcoming Events**

February 16<sup>th</sup> - Suffield Shakedown February 19<sup>th</sup> - Ship Date/End of Build March 7-9 - WPI Regional March 28-30 - Connecticut Regional

Week one of the FIRST Robotics Competition build season has been productive and enjoyable! If you would like to visit our build site to see the progress of our robot, please e-mail the team at <u>teamparagon571@att.net</u> to coordinate a time. Otherwise, stay tuned for more weekly updates of our build process!

