

### **2013 Student Members**

Christian Balcom Rebecca Balcom Jacob Burch **Daniel Crain** Joshua Crain Ben Kepner Josiah Krogman Andrew McCoy Nathan Palmer Alexandra Prewett **Daniel Ratkos** Shirley Schafer **Kyle Sims Hugh Stanton** Sean Stanton Kristen Vallie Elijah Zuker

### **Mentors**

Terry Balcom
Rick Crain
Charlie Kepner
Ralph Prewett
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Rich Stanton
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### **Advisor**

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# FLAT MOUNTAIN FLYER

Newsletter from the first robotics competition team #4819

By Daniel Crain 1-20-2013

# Team Update

We have four weeks left before the competition. This past week quite a lot has been accomplished! As everyone knows our current goal for the robot is to have it make an inside climb to the third level of the pyramid. We will accomplish this by using a winch powered arm and a fixed hook.

The chassis team shortened the chassis by detaching the two back wheels and cutting the frame down smaller. Making it smaller will allow it to move more freely inside the pyramid without colliding with other robots. They also designed and made a new board for the battery and electronics components. Next they will secure the electronic components to the chassis.

The winch sub-team designed a spool with which to wrap the winch cable. The spool was being machined last Saturday. We are going to attach two window motors to either side of the spool, making it capable of lifting at least 250 lbs, even though the maximum weight of a robot is 120 lbs. This way, the arm will be able to overcome any unexpected resistance.

This week the programming team worked on getting the second joystick to operate an actuator, (like the dual window motors for the winch system.)

The fundraising team contacted a lot of businesses, in attempts of finding financial support for our team. The feedback was fairly positive and there are already several businesses that have offered donations. Next week they are going to meet in person with as many people as they can to give them information about our team.

## Next week's schedule!

Next week we will be meeting from 5:00 to 7:00 PM Monday through Thursday. On Saturday we will be meeting from 10:00 AM to 1:00 PM.

I'll look forward to seeing you all then!

# MECHANICS

### C.hampions

O.f

**U.**nderstanding

R.espect

A.bility

G.odliness and

E.ndurance

# Pictures from this past week



**Chassis team mounting battery carriage** 



**Drafting team calculating arm movement** 



Programming team activating second joystick



Contemplating bumper rules