To start with, the design for the rotor and packaging has been finalized and the parts have been ordered. I met with James several times over the past week in order to finish this aspect of the project. This puts us in a position that all we need to do is have the pieces cut to size and simply assemble.

Stephen and I met on Monday (Oct. 22) in order to set up the bridge rectifier and test its functionality. Attached is a picture of the oscilloscope output. While we were in the lab, we also decided to test the regulating circuit (for voltage only, not current) and the motor control. We measured the expected ~36V from the regulator as well as measured the results from using switches to control the motor supply. All of the data we collected was as we expected it to be.

I could not make out team meeting on Wednesday to begin testing the motor however, after some problems with the circuitry at that meeting, Stephen and I spoke with Dr. Mendrela on Thursday. He was not very helpful at the time but offered to meet with Stephen Friday morning to discuss and circuits and control methods. Afterwords, Diego and I spent a few hours in the capstone lab trying to assess the problem and tweak the circuits/algorithm in order to get our desired results. After melting numerous transistors we decided to stop for the day, assess our designs and order more parts.

Currently we are not 100% sure of what the problems may be, but I think going in to the lab this week and using brand new components and starting fresh will be very helpful.