

# Fast, Compact, High Strength Magnetic Pulse Generator

EE 492 Weekly Report

May 15-30

Week 9

Advisors: Mani Mina, John Pritchard, Robert Bouda  
Client: High Speed Systems Engineering Lab  
Members: Team Leader – Adam Kaas  
Team Webmaster – Gregory Fontana, Meiyong Himmtann  
Team Communication Leader – Brittany Duffy  
Team Key Concept Holder – Megan Sharp, Brandon Dixon  
Team Commissioner – Alain Ndoutoume  
Website: <http://may1530.ece.iastate.edu>

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## Weekly Summary

This week, our team began our final document and PowerPoint presentation. It is important that our coils be created to the best of our ability; therefore, we created 10 new coils of good quality and measured their inductances. We were also able to speak with our advisor and client this week in order to get a better understanding of the interferometer setup. We were able to obtain Vs graphs to see if we are hitting the appropriate current to reach 500 gauss.

## Meeting Notes

### 3/9 Brittany & Adam Meeting

**Duration:** 1 hour      **Members Present:** Brittany, Adam

**Purpose and Goals:** To figure out who is responsible for what in the Final Document and create the outline.

**Achievements:** All purposes and goals were met.

### 3/13 Coil Making with John and Testing

**Duration:** 3 hours      **Members Present:** Adam, Greg, Meiyong + Advisor

**Purpose and Goals:** Make 10 coils, measure their inductance to get an average and make sure we are making coils correctly. Test interferometer setup.

**Achievements:** Gained understanding of how interferometer setup is used. Obtained statistically relevant data regarding our coil making process.

## Pending Issues

N/A

## Plans for Next Week

**Adam:** Spring Break

**Greg:** Spring Break

**Meiyong:** Spring Break

**Brittany:** Spring Break

**Megan:** Spring Break

**Brandon:** Spring Break

**Alain:** Work on final document

### **Individual Contributions This Week**

**Adam:** 3/9 Meeting to Delegate Final Document (1hr), 3/13 Coil Making with John and Testing (3 hrs), Team Meeting (1 hr)

**Greg:** 3/13 Coil Making with John and Testing (2.25 hrs)

**Meiyong:** Met with Alain to call Advanced Circuit (0.5hr), 3/13 Coil Making with John and Testing (2 hrs), Team Meeting (1 hr)

**Brittany:** 3/9 Meeting to Delegate Final Document (1hr)

**Megan:** 3/13 Coil Making with John and Testing (1/2 hrs), Team Meeting (1 hr)

**Brandon:** Team Meeting (1 hr), Work on User Guide (2 hours), Update Parts List (.5 hr)

**Alain:** Meeting with Meiyong on PCB, called Advanced Circuit (0.5hr), weekly meeting (1hr), Researched on PCB fabrication and assembly and step to build a pcb, updated research results on senior design folder in google drive (1.5hrs)

### **Total Contributions for Project (This Week / Total for Semester)**

**Adam:** 5 hrs / 23.75 hrs

**Greg:** 2.25hrs /17.5 hrs

**Meiyong:** 3.5 hrs/ 23.25 hrs

**Brittany:** 1 hr / 18.5 hrs

**Megan:** 1.5 hrs / 18.75 hrs

**Brandon:** 3.5 hrs / 34 hrs

**Alain:** 3 hrs/ 19.25 hrs