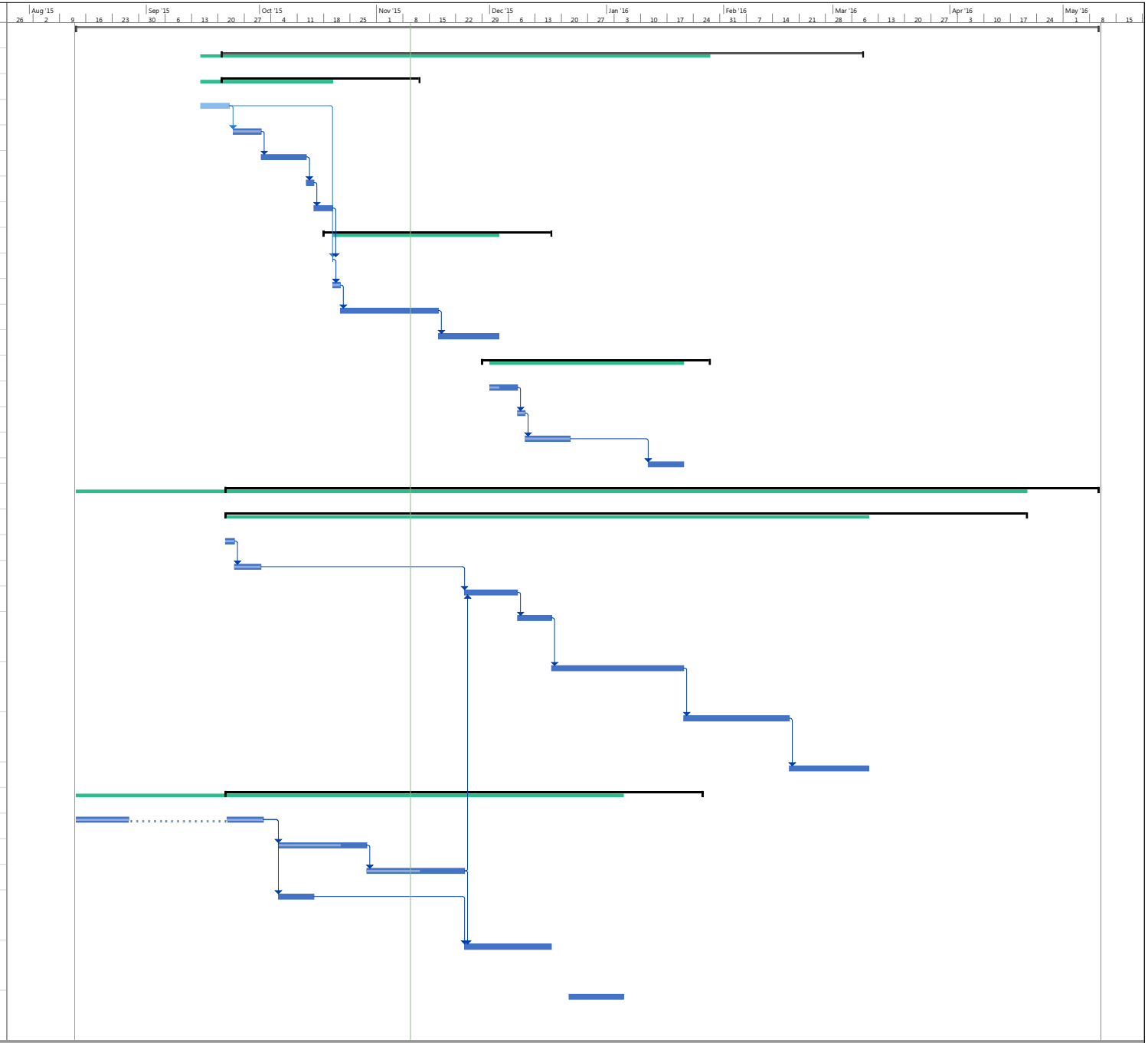
**Michael S. Barnes:** The past week was spent analyzing the designed H bridge circuit. This analysis allowed me to understand how switching the load using the MOSFET circuit will control the brushless direct current motor using the predriver. The next week will be spent analyzing the full H bridge circuit with more depth and begin diving into the predriver datasheet to understand what will be required to build the final design circuit. At this point my work on this project is on pace to be completed on time.

**Evan J. Dinelli:** Regulator circuitry was designed and constructed for 5V and 3.3V lines. Serial troubleshooting was successful and a Baud Rate and clock frequency were chosen. Initial research on adding an external oscillator for improving serial accuracy was done. The project work is behind on schedule but will be on schedule by the end of the semester.

**Dan R. Van de Water:** Dan's Progress: I have finished design for the signals to send to the predriver. I am now creating a circuit that will allow connection to the predriver without the oscillation issues from a breadboard. This requires the construction of a perforated board circuit which is next on my list of things to do. I am on track, but barely. I will be putting additional time in on the weekend to make sure I meet the deadline so that Mike can begin development work with the predriver. I am currently on schedule.

| ID | Task Name | Duration |
|---|---|---|
| 0 | **Navigation & Thrust System** | **232 hrs** |
| 1 | **Navigation System** | **150 hrs** |
| 2 | **RC control** | **50 hrs** |
| 3 | MCU setup | 8 hrs |
| 4 | MCU Serial Output | 8.5 hrs |
| 5 | Read RC control Signals | 8 hrs |
| 6 | Make sense of signals | 3 hrs |
| 7 | Create data packets | 2.83 hrs |
| 8 | **Compass** | **55 hrs** |
| 9 | MCU Setup | 1.17 hrs |
| 10 | MCU Serial output | 2 hrs |
| 11 | I2c With Compass Unit | 21.5 hrs |
| 12 | MCU interface with compass | 15.5 hrs |
| 13 | **GPS** | **55 hrs** |
| 14 | MCU setup | 6.5 hrs |
| 15 | MCU serial transceive | 3.17 hrs |
| 16 | Connect to serial and read input | 8.5 hrs |
| 17 | Pass GPS data through MCU | 9.67 hrs |
| 18 | **Motor control system** | **200 hrs** |
| 19 | **FET system** | **185 hrs** |
| 20 | One Operating FET | 3.33 hrs |
| 21 | Two FETs [Low Side; High Side] | 6.33 hrs |
| 22 | Switch One FET w/ predriver | 12.8 hrs |
| 23 | Switch Two FETs [Low Side; High Side] w/ Predriver | 9 hrs |
| 24 | Switch t6 FET system w/ Predriver | 30.5 hrs |
| 25 | Time Switching to Run One motor | 23.5 hrs |
| 26 | Impliment Across 4 motors | 18.7 hrs |
| 27 | **Motor controller** | **110 hrs** |
| 28 | MCU serial transceiving | 23 hrs |
| 29 | MCU Predriver connection | 23 hrs |
| 30 | Pre-driver operation | 19.5 hrs |
| 31 | MCU Slave conection with Master motor controller | 10.33 hrs |
| 32 | Control algorithm implimentation | 20.67 hrs |
| 33 | Interface with navigation system | 13.17 hrs |




Project: Navigation & Thrust Sy
Date: Tue 11/10/15

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress