

(1/9/15) Week 1:

- Discussed our tour to Seminole Electric in Richard J. Midulla
 - Would like to make design modular
 - Plot out possible locations for the design
- Jonathan
 - Reselect weather enclosure/pole/fasteners
 - Have all parts ready to order by next meeting
- Joseph
 - Talk to Oates about using his lab (B356) to assemble/store our project
 - Also talk to him about the camera and how he wants us to handle borrowing it
- Alex
 - Confirm Wireless Configuration
 - have all parts ready to order by next meeting
 - Programming: Lead
- Nixon
 - Programming: Pan Tilt
- Kenny
 - Programming Support
- Michelle
 - Restated Scope Report

Team Meeting: Mondays @ 3pm

Programming Meetings: Monday and Wednesday @ 3pm

- Notes:
 - Standardized Modular Design
 - Locations
 - blast wall
 - separated I beam connection
 - Primary Goal: Transmit IR Image
 - Secondary Goal: Alarm System

(1/23/15) Week 3:

- Staff Meeting Thursday @ 3:45-4
 - Nixon is in charge of printing Agenda
- Website Update (Alex)
- Get Tiger board booted up and loaded with initial software (Nixon/Alex)
- Camera Tutorial from Dr. Oates and talking to him about camera use (Joe)
- Test all electrical components, location? (Kenny)
 - Size wiring needed, come up with list of things to complete circuit
- Place orders for mounting components (Jonathan)

(1/29/15) Week 4:

Bi-Weekly Staff Meeting

What was accomplished the last two weeks:

We have completed our Restated Scope Report and Progress Presentation. We have received all major components and are trying to order extra microcomputer components as well as a place to locate and work on all of our components safely in the COE. We have reselected our mounting system and have decided upon our prototyping design. We have met with Dr. Oates and have received a brief tutorial on the infrared camera.

Summary of problems encountered and actions taken:

We have had issues with getting the software development kicked off. We need to proceed quickly with finding all the components needed to begin as well as with the initial stages of programming.

Work planned for the next period and the person(s) responsible:

- Software Development (Alex Hull, Nixon Lormand, Joseph Besler)
- Power System Development (Kenny Becerra)
- Mounting System Design (Jonathan Jennings)
- Report and Presentation Development (Michelle Hopkins)

(2/14/15) Week 6:

- Measurements
 - Solar panel output power
 - Load input power
- Simulations
 - 2 min- 50 W
 - 10 min-5 W
 - 120 cycles/day
 - 5 cycles/hour
- To do:
 - Splice Solar Panel Cables: Kenny
 - New MPPT Fuse: 25A 32V (Littelfuse 257)
 - Timed Load Simulation
 - Electrical tape
 - 50/5W 12V Light Bulb (have)
- Presentation: Thursday (2/20/15)
 - Michelle, Nixon, and Jonathan
- Expended: \$2,523.43
- Remaining: \$476.57

2/16/15 Week 7:

- Continue to work on subsystems:
 - Camera Software Development (Alex Hull, Kenny Becerra, Joseph Besler)
 - Pan Tilt Software Development (Nixon Lormand)
 - Power System Testing (Jonathan Jennings, Michelle Hopkins)
- Prepare for 1st Midterm Presentation:
 - Kenny, Joe, Michelle

(2/26/15) Week 8:

Bi-Weekly Staff Meeting

What was accomplished the last two weeks:

- We have successfully assembled and tested our Power System. We are now in the process of assembling it safely on a testing apparatus to prepare it for a series of long final performance tests.
- We have successfully powered the pan tilt module and established wired control.
- We have powered the microcomputer and loaded Windows Operating System.
- We have secured the FLIR SDK in order to start camera programming.

Summary of problems encountered and actions taken:

- We have had issues with getting the software development kicked off and acquiring the FLIR SDK. However we have corrected that and hopefully can now proceed quickly to make up some time.

Work planned for the next period and the person(s) responsible:

- Camera Software Development (Alex Hull, Kenny Becerra, Joseph Besler)
- Pan Tilt Software Development (Nixon Lormand)
- Power System Testing (Jonathan Jennings, Michelle Hopkins)
- Report and Presentation Development (Michelle Hopkins)

(3/6/15) Week 9:

- Tasks assigned during Spring Break:
 - Work on SDK (Alex Hull, Kenny Becerra, Joseph Besler)
 - Pan Tilt Software Development (Nixon Lormand)
 - Power System Testing (Jonathan Jennings, Michelle Hopkins)

(3/6/15) Week 11:

- Continue to work on Subsystems:
 - Work on SDK (Alex Hull, Kenny Becerra, Joseph Besler)
 - Pan Tilt Software Development (Nixon Lormand, Alex Hull)
 - Power System Testing (Jonathan Jennings, Michelle Hopkins)
- Prepare for 2nd Midterm Presentation:
 - Alex, Nixon, Jonathan

(3/26/15) Week 12:

Bi-Weekly Staff Meeting

What was accomplished the last two weeks:

- Power System fully assembled on test rig, data tested and analyzed.
- Microcomputer has been loaded with appropriate software and is up and running.
- Camera has been interfaced with microcomputer, images and temperature data captured using GUI.
- Pan Tilt has been interfaced with microcomputer, motion by command established.

- Interim Design Review Presentation completed.

Summary of problems encountered and actions taken:

- Cannot save infrared image and temperature data to external file to transmit.
- Need to initialize microcomputer port in order to enable communication.

Work planned for the next period and the person(s) responsible:

- Finish pan tilt programming (Nixon)
- Finish camera programming and procure wireless components (Joe/Alex/Kenny)
- Monitoring System full assembly and testing (Nixon/Joe/Alex/Kenny)
- Operation Manual & Design for Manufacturing Report Writing (Michelle)
- Final Report/Presentation Preparation (Jonathan)

(4/3/15) Week 13:

- Finish Operation Manual & Design for Manufacturing Report (4/3)
- Finish camera programming and procure wireless components (Joe/Alex/Kenny)
- Program pan Tilt (Nixon/Alex)
- Ask Dr Oates to use IR Camera in Walk-Through Presentation

(4/10/15) Week 14:

- Presented Final Prototype design at ECE Walk-Through Presentation
- Was unable to use camera during presentation
 - Used a computer with preloaded images to act as camera
- All members give Final Presentation on (4/16/15) @10:30

(4/10/17) Week 15:

- Presented Open House MEAC presentation to judges
- Presented Prototype design to judges during Walk-Through Presentation