**Business Meetings:**

1. **Downingtown Engineering Consultants - 01/26/15**
2. **The Burns Group - 03/25/15**
3. **Downingtown Engineering Consultants - 03/26/15**
4. **Communications Test Design Inc. - 03/30/15**
5. **Communications Test Design Inc. - 04/02/15**
6. **Communications Test Design Inc. - 05/06/15**
7. **Communications Test Design Inc. - 05/15/15**

**1 - Downingtown Engineering Consultants\***

**Wednesday, January 26, 2015, 3:15**

**Attended:** Angela Herb, Matt Horger, Andrew Johnson, Conor Waldt

**Location:** 315 E. Lancaster Ave. Downingtown, PA 19335

**Contact:** Mr. David Weightman

**Information Discussed:**

* Tour of Office:
  + Met Mr. David Weightman, P.E. (President)
  + Met Mrs. Mary Anne Weightman (Receptionist)
  + Met Mr. Joe Plaza (Engineer-in-Training)
  + Met Mr. Steve Mousley (Director of Technical Services)
* Discussion of STEM in Community
  + Services DEC provides - Projects
  + Collaboration with other businesses
  + Career Opportunities
* Introduction of Our Prototype
  + Suggestion for Type of Pole

**\*Organized by:** Angela Herb

**2 - The Burns Group\***

**Wednesday, March 25, 2015, 4:15**

**Attended:** Angela Herb, Matt Horger, Andrew Johnson, Conor Waldt

**Location**: 222 Valley Creek Blvd. Exton, PA 19341

**Contact:** Mr. Dean Kaiser

**Information Discussed:**

* Met Mr. Dean Kaiser, P.E., P.T.O.E.
* Introduction to Traffic Engineering
* Stop Sign Regulations, Pennsylvania Laws:
  + Size, Lights, etc.
* Discussion of Need for Sign
* Idea: Breakaway Pole
* RC Motors
* Work Experience: Co-op Programs/Internships

**\*Organized by:** Conor Waldt

**3- Downingtown Engineering Consultants\***

**Thursday, March 26, 2015, 4:00**

**Attended:** Angela Herb, Matt Horger, Andrew Johnson, Conor Waldt

**Location:** 315 E. Lancaster Ave. Downingtown, PA 19335

**Contact:** Mr. David Weightman

**Information Discussed:**

* Explanation of Sign
* Idea: Blinds
* Reference: Keystone Engineering Group, Phil Schwartz
* Explanation of Breakaway Pole
* Installation Estimates:
  + Cost
  + Time
  + Method
* Casing:
  + Plexiglass
  + Cost Estimate
  + Shape Possibilities
* College Advice

**\*Organized By:** Angela Herb

**4- Communications Test Design Inc.\***

**Monday, March 30, 2015, 3:30**

**Attended:** Matt Horger

**Location:** 1334 Enterprise Drive West Chester, PA 19380

**Contact:** Mr. Matt Parsons

**Information Discussed:**

* Overview of STEM Competition
* Overview of Regional Project
  + Purpose of Project
  + Current Design
    - Specifications of Materials Used
* Overview of State Competition
  + Future Improvements
    - Motor
    - Wireless Connectivity - Arduino Units
    - Improved Solar Capacity / Energy Sufficiency
    - Security
* Agreement to work together on the project
  + Discussed upcoming timeline
  + Discussed contact with Onexia for assistance with motor
  + Scheduled follow-up meeting with whole team on Thursday 4/2

**\*Organized By:** Matt Horger

**5- Communications Test Design Inc.\***

**Thursday, April 02, 2015, 2:00**

**Attended:** Stephen Anderson, Angela Herb, Matt Horger, Andrew Johnson, Conor Waldt

**Location:** 1334 Enterprise Drive West Chester, PA 19380

**Contact:** Mr. Matt Parsons

**Information Discussed:**

* Tour of Facility:
  + Met Mr. Matt Parsons, Automotive Lead Engineer
  + Met Mr. Mel Hinlo, Senior Support Engineer
  + Met Mr. Gordon Lo, Engineering Manager
  + Met Mr. Matt , Programmer
  + Met Mr. Eric Schott, Electrical Engineer
* Discussion of Programming involved
  + Arduino vs. Trinket
  + Decision of using arduino
* Discussion of Electrical work involved
  + Improving Solar Panels
* Brainstormed ideas of motor and design of sign
* Possibility of involvement with Onexia at future meetings

**\*Organized By:** Matt Horger

**6- Communications Test Design Inc.\***

**Wednesday, May 06, 2015, 9:00**

**Attended:** Stephen Anderson, Angela Herb, Matt Horger, Andrew Johnson, Conor Waldt

**Location:** 1334 Enterprise Drive West Chester, PA 19380

**Contact:** Mr. Matt Parsons

**Information Discussed:**

* Began building sign
* Drilled Holes for the Sign:
  + Stephen and Conor worked with mechanical engineers
* Began to create the final program/circuit for the motor with the arduino
  + Matt worked with a programmer
* Began to create the solar panel/battery/arduino connection circuit
  + Angela and Andrew talked with electrical engineers
* Plexiglass backing was created
* Planning of mechanical arm

**\*Organized By:** Matt Horger

**7- Communications Test Design Inc.\***

**Friday, May 15, 2015, 9:00**

**Attended:** Stephen Anderson, Angela Herb, Matt Horger, Andrew Johnson, Conor Waldt

**Location:** 1334 Enterprise Drive West Chester, PA 19380

**Contact:** Mr. Matt Parsons

**Information Discussed:**

* Worked with Bill and Mr. Goldman for mechanical components
* Creation of motor arm and mounting piece
* Finished circuit for powering all the electrical components (arduino, motor, lights)
* Created the mounting post for the solar panels
* Began casing to cover lights

**\*Organized By:** Matt Horger