

# MEETING MINUTES 19

## Topic: Meeting 19 – Team Leads Meeting

Thursday, March 15, 2018

02:30pm - 03:30pm

Chair: Leo Segura De Niz

Attendees: David Willy, Alana B, Alex D, Anthony C, Devon H, Tristan S

Location: Room 323 @ EGR Building

**Table 1.** Tentative Schedule

### Introduction

1. Announcements
  - a. Institutional excuse forms – will go out at the end of this week
    - i. Thanks for filling out the list on the Google Drive.
    - ii. STUDENTS: have an initial talk with instructor. Send email.
  - b. Let's get team polo shirts and t-shirts - it would be cool if they all had them at the 3/28 fundraiser!
    - i. Any tshirt company. Breast patch size. Polo and tshirt for each student traveling, Willy, Business Team, Karin.
    - ii. Business formal for presentation.
  - c. Funding update.
    - i. Travel Funding obtained for Willy's travel.
    - ii. Ask Oman for tshirt purchases.
  - d. DOE Call Update
    - i. Thanks to those who attended.
    - ii. If you did not attend, make an effort to read the emailed slides from the call.
  - e. First draft of the DOE report March 18th (This Sunday!)
    - i. I AM LOOKING FOR ALL SECTIONS TO BE COMPLETE.
    - ii. Final draft for Willy and Karin to provide feedback due April 9th.

### Discussion Topics

**Test Team A** - Blades, Shaft, DC-DC Converter, Wind Tunnel Testing, Generator

**Test Team B** - Hub, Rectifier, Nacelle, Brakes, Yawing, Load, Tower, Energy Storage

**Market Team** - Turbine Design, Siting Challenge within 100mi, Siting Challenge at the competition, Car Charging Station, Support test teams

1. Market Team Update
  - a. V2G
    - i. Have a base understanding of the sample.
    - ii. More work needed.
    - iii. Apply it to an actual site with an actual turbine. Get a simulation going for the business plan.
    - iv. Replace the vehicle with a Tesla and turbine with designed turbine in the model.
  - b. Siting
    - i. Working on the tutorials.
    - ii. Meet with Willy weekly. Alana or Anthony to set up some time.
      1. Friday 10-1pm, noon?
      2. Wednesday 9-11am
  - c. Business Plan

- d. Plans for printed materials, 3-d printed scale system model, and other promotional items at competition?
  - i. Manuals
  - ii. brochure
  - iii. 3D printed model
  - iv. Turbine Spec Sheet for Market Turbine
- 2. Test Team Update
  - a. Yousef to talk about testing code.
    - i. BENCH TEST WEEK AFTER SPRING BREAK
  - b. PITCHING - Approved
  - c. BRAKES - Approved
  - d. PCB BOARD - Iterating
  - e. LATE ORDERS (generator)
    - i. Generator in Netherlands to ship
    - ii. AMMO 28-56-1530KV generator
    - iii. Tomorrow or Saturday update on the generator from Alex. Order a new one?
  - f. What was manufactured this week?
  - g. What was approved?
  - h. What has been ordered? What parts/material are we lagging?
    - i. Mechanical parts being picked up this weekend.
    - ii. 2nd orders in mind.
  - i. What can we manufacture/ work on next week? Machine shop is open over Spring Break!
    - i. Whatever we have material for next week.

**ME:**

Baseplate - done  
 Bearing Spacer - done  
 Tower Sleeve - done  
 Lower Nacelle - 3/15  
 Nacelle Spacer - waiting. not a concern  
 Top Nacelle - material picked up this weekend  
 Tower Weld - 3/27?  
 Tower Sleeve Weld - week of 3/19  
 Hub - approved today. material on monday  
 Yaw-approved today. material on monday  
 Brakes - approved today. material on monday  
 Shaft - iterating. We have material for it.  
 Shaft Bearing - in hand.  
 Blades - one more test print next week. ready to go  
 Generator Mount - picking up material on monday  
 Yaw Mount - picking up material on monday

**EE:**

PCB Schematic (3/6/18)  
 PCB Layout (3/8/18) - iterating. will be approved today??  
 Component Purchasing (3/6)  
 Braking Code (3/25)  
 Pitching Code (3/25)  
 Dump Load Code (3/25)  
 Boost Converter Code (3/25)  
 H-Bridge Code (3/25)  
 Soldering PCB (3/25?)

Testing Procedures - Aaron updating the drafts and showing them to Willy.

Dakota - Wind Tunnel Testing

MANUFACTURING:

Schedule to be sent out by Devon Hardy before next week.

**Plan for next meeting**

1. Review deliverables/ tasks/ to-do's to be completed by the next meeting.

**Action Items:**

1. MFG Schedule to be sent out by Devon Hardy before next week.
2. Dakota - Will let the team know when meeting with David Willy at the Wind tunnel.
3. Aaron - Updating the testing procedures and showing them to Willy.
4. Alex - Will be ordering a new generator ASAP (3/16?).
5. Yousef - Come to leads meeting 3/29 to do a bench test.
6. Leo - Ask Professor Oman about using CWC fund to purchase T-shirts (3/30).
7. Leo - Will look at T-shirt manufacturers to identify cost (3/30).
8. Market Team - Create Manual, brochure, spec sheet, 3D model for Market Turbine.