

MEETING MINUTES 13

Topic: Meeting 13 – Team Leads Meeting

Thursday, February 1, 2018

02:30pm - 03:30pm

Chair: Leo Segura De Niz

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

Location: Room 323 @ EGR Building

Table 1. Tentative Schedule

<p>02:30pm-02:40pm</p>	<p>Introduction</p> <ol style="list-style-type: none"> 1. Announcements <ol style="list-style-type: none"> a. Storage and workspace available in 98C. Devon has the locker info. b. Funding Update. <ol style="list-style-type: none"> i. Cap teams at \$3000. ii. \$1100 from student travel award. iii. Business team has their travel paid for. iv. Looking for opportunities for funding. <ol style="list-style-type: none"> 1. Restaurant partner for funding (Need a lead for this). 2. Fundraising. c. Recap on Market Team meeting with Willy.
<p>02:40pm-03:20pm</p>	<p>Discussion Topics</p> <p>Test Team A - Blades, Shaft, DC-DC Converter, Wind Tunnel Testing, Generator</p> <p>Test Team B - Hub, Rectifier, Nacelle, Brakes, Yawing, Load, Tower, Energy Storage</p> <p>Market Team - Turbine Design, Siting Challenge within 100mi, Siting Challenge at the competition, Car Charging Station, Support test teams</p> <ol style="list-style-type: none"> 1. Market Team strategy to complete market team stuff and help out the test teams. <ol style="list-style-type: none"> a. Looking into softwares available to see what we could use for this competition. <ol style="list-style-type: none"> i. Become an expert on the software. b. Car charging station <ol style="list-style-type: none"> i. Design a car charging station if that will part of the business model. ii. Top level design. The V2G is a good software to use. c. Trying to complete the conceptual design to move onto other things. d. Moving on to Siting Challenge. e. Working with the business team towards market development. <ol style="list-style-type: none"> i. Maybe business model separated from the market team engineering design. 2. Any update on shop training? <ol style="list-style-type: none"> a. Probably not happening until 5 or 6 more weeks. b. Test team strategy is to use the resources that we have for manufacturing (Devon and Anthony). 3. How are ME shop meetings going? <ol style="list-style-type: none"> a. One this week. Recurring on tuesdays. b. Double amount of components. 4. ME parts list was completed Monday? <ol style="list-style-type: none"> a. Approval by Willy required before manufacturing and purchasing. 5. How are blades going? <ol style="list-style-type: none"> a. meeting with Dr. Tester next week. b. Material properties, resolution for 3D print.

	<ul style="list-style-type: none"> 6. Electrical System <ul style="list-style-type: none"> a. Alex will look into lead times for electrical components. b. Soldering our own PCB board. c. Extra components will be purchased. Willy strongly recommends this. 7. Last week we left off with some required redesign for ME parts. Was this communicated to part owners? <ul style="list-style-type: none"> a. TEST TEAM DESIGN NOTES <ul style="list-style-type: none"> i. Mainframe <ul style="list-style-type: none"> 1. Thickness of the mainframe base plate. ii. Baseplate <ul style="list-style-type: none"> 1. Clearance on the slots of the baseplate that attach to the wind tunnel plate. Clearance for an M10 bolt. Look up the ID of an M10 washer for the clearance. iii. Tower <ul style="list-style-type: none"> 1. Snap ring groove 2. Use parting tool 3. Bearings and tower do not match in diameter 4. 2.5 cm need to fit bearing 1, spacer 1, bearing 2, spacer and clearance 5. Do full system assembly to ensure final sizes fit within the required specificfication in the R&R. 6. Chanfer the top of the tower! 7. Clearance between the tower and the mainframe needs to be correct so that there is no rubbing between the tower and mainframe. iv. Everything needs to be in cm! v. Need the slip ring assembly vi. Metric fasteners all the way around. 8. Need dimensioned drawings for mechanical parts for communication purposes and required for manufacturing. 9. Test turbine design decomposition with Willy.
<p>03:20pm-03:30pm</p>	<p>Plan for next meeting</p> <ul style="list-style-type: none"> 1. Review deliverables/ tasks/ to-do's to be completed by the next meeting. 2. 2 weeks before April 23rd the final draft of the report is due. The report will be turned in on 22nd of April. 3. April 8th.