

Review Agenda

P18463

Integrated System Build & Test

1. Housing & Turbine Design

- a. Larger blades from the Fablab
- b. Waterproofing redesign: Stuffing Box
- c. All parts still fit
- d. Assembly procedures (will need to edit)

2. Mechanical Test Results

- a. Monday's water test takeaways
 - i. Weights, blades, lubricant, and cap.
 - ii. Scrap metal

3. Generator Update

- a. Results of motor testing
 - i. Power outputs at given rpms
 - ii. Testing second motor to verify results. Maybe one is better?

4. Electrical Update

- a. Step-down converter test results and functionality
 - i. Plot of voltage increasing and leveling out
- b. Soldering results

5. Live Demo Video

- a. Hook up drill to generator, which is connected to voltage regulator, cable, and female USB.
- b. Plug into USB display and power bank.
- c. Begin drilling and show blinking light.
- d. Must be rotating the correct way

6. Rod & Anchor

- a. Assembly procedure
- b. Rotational concern

7. Bill of Materials

- a. Budget status
- b. Spare motor
- c. Rod and accessory purchases
- d. 3D print costs
- e. Anticipated final budget

8. Imagine Preparation

- a. Submitted for Imagine in time for the print program (confirmed with Karen Ester)
 - i. Standard table with an outlet. Will bring monitor with footage of it in the water as well as an interactive drill setup with the digital display showing changes in power output based on rpm.
- b. 90 second intro
- c. Poster
- d. Technical paper

9. Risk Management & Problem Tracking

- a. Risks minimized
- b. Risks added
- c. Problem tracking
 - i. Waterproofing
 - ii. Weights
 - iii. Rod Assembly

10. Project Schedule

- a. Teamweek walkthrough
- b. Upcoming machining & tests
- c. Imagine Prep