

# MEETING MINUTES

## Topic: Meeting with Summer Thermo Team

Friday, September 5, 2013

5:15 pm to 5:40 pm

Minutes recorded by \_\_Jacob Barker\_\_

Meeting called by \_\_Jacob Barker\_\_

Attendees: \_\_Jacob Barker, Gavin Geiger, Erich Gemballa, Samm Metcalfe, Ashley Shumaker\_\_

Please bring: \_\_Questions for summer thermo team\_\_

Table 1. Record of meeting.

<b>5:15 pm to end</b>	<b>Overview of Design</b> <ul style="list-style-type: none"><li>• Total cost ~\$597</li><li>• Blades have very minimal amount of twist<ul style="list-style-type: none"><li>◦ Coated with nail polish for stm length</li></ul></li><li>• System rotates between ~80-150 psi</li><li>• Runs for ~20 sec</li><li>• Generates ~1.55 mA</li><li>• Band heater works, can heat to ~115 °C</li><li>• Measurements taken at two points: before and after combustion chamber</li><li>• Data collected through LabView</li><li>• Starting procedure:<ul style="list-style-type: none"><li>◦ Charge air tank</li><li>◦ Direct air from tank into compressor<ul style="list-style-type: none"><li>• Can direct air into combustion chamber if one compressor section is removed</li></ul></li></ul></li></ul> <b>Issues/Areas for improvement</b> <ul style="list-style-type: none"><li>• Pressure transducer ports leak</li><li>• Air line between tank and nozzle leaks from fittings</li><li>• Look into way to diffuse air as it is injected into combustion chamber rather than use concentrated nozzle</li><li>• Use lighter shaft</li><li>• Try to use thicker blades for printing issues and increased strength</li><li>• Look into other materials for outer casing</li></ul>	Capstone Room
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