

# MEETING MINUTES

## **Topic: Coupling methods, Housing design, Manufacturing, Budget, and Solenoids.**

**Thursday, January 19, 2017**

**2:00 pm – 4:00 pm**

**Minutes recorded by: Dustin Young**

**Meeting called by: Capstone Team**

**Attendees: Lance G., Cameron S., Bianka C., Geordie M., Garrett M. , Dustin Y.**

**Project and Group Number: Honeywell Ruby Ball and Sapphire Seat / Team 30.**

**Please bring: Laptops or electronic access to internet.**

**Advisor/Section Time: David Trevas / Wednesday 5:30 – 8:00 pm**

**Table 1. Record of meeting.**

|                        |   |                   |
|------------------------|---|-------------------|
| <b>2:00 to 3:00 pm</b> | <b>Client and Sponsor meetings, questions, comments, an concerns moving forward</b> <ul style="list-style-type: none"><li>• US Synthetic again has asked about budget, seemingly hinting that they are going to ask us to purchase the products made for our team. Brought the topic up to sponsor and going to run over budget during planned meeting Wed 1/25/17.</li><li>• US Synthetic has also produced drawings that we shared with Sponsor (with consent from US) but we don't know how much manufacturing they are willing to do. Concerns are housing and the connection between the solenoid and poppet. They have stated that they can thread the poppet, but then we have to figure out how to connect the solenoid.</li><li>• Arduino over the break went well, but we now are tasked with finding a solenoid by itself that can apply enough pressure for our given application.</li><li>• Things the group needs to collectively take care of: Pressure transducer, solving the manufacturing and budget questions, coupling between the poppet and solenoid, and PWM that can slow the impact before sealing.</li></ul> | Capstone Room 107 |
| <b>3:00 to End</b>     | <b>Purchase requests and individual work</b> <ul style="list-style-type: none"><li>• Pressure transducer (taken care of by Geordie)</li><li>• Solenoid that can apply required pressure for sealing (Arduino has been solved for 10 Hz, but PWM needs to be further researched, taken care of by Garrett)</li></ul>   | Capstone Room 107 |

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|--|---|--|
|  | <ul style="list-style-type: none"> <li>• Outsourcing or solving the manufacturing questions moving forward (solenoid and housing, taken care of by Dustin)</li> <li>• Coupling methods (solenoid, housing if US isn't going to be able to take care of it, and poppet. Taken care of by Cameron)</li> <li>• Individual Post Mortem Analysis discussion, due date 1/23/17.</li> <li>• Keeping in mind a plan B for materials if US Synthetic require money out of our budget (taken care of by Bianka)</li> <li>• Face to face meetings with our Client and Sponsor will get everything moving in the right direction for manufacturing and next steps forward.</li> </ul> |  |
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**Table 2. Tasks Assigned.**

| Task   | Person Assigned | Due Date | Date Complete |
|--|-----------------|----------|---------------|
| Bring laptop/internet access tool. Individual Post Mortem Analysis due 1/23/17, also research individual parts and bring questions to client/sponsor meetings. | Dustin Y.       | 1/23/17  | ~~~           |
| Bring laptop/internet access tool. Individual Post Mortem Analysis due 1/23/17, also research individual parts and bring questions to client/sponsor meetings. | Bianka C.       | 1/23/17  | ~~~           |
| Bring laptop/internet access tool. Individual Post Mortem Analysis due 1/23/17, also research individual parts and bring questions to client/sponsor meetings. | Lance G.        | 1/23/17  | ~~~           |
| Bring laptop/internet access tool. Individual Post Mortem Analysis due 1/23/17, also research individual parts and bring questions to client/sponsor meetings. | Geordie M.      | 1/23/17  | ~~~           |
| Bring laptop/internet access tool. Individual Post Mortem Analysis due 1/23/17, also research individual parts and bring questions to client/sponsor meetings. | Cameron S.      | 1/23/17  | ~~~           |
| Bring laptop/internet access tool. Individual Post Mortem Analysis due 1/23/17, also research individual parts and bring questions to client/sponsor meetings. | Garrett M.      | 1/23/17  | ~~~           |

**Next formal meeting: 1/25/17, Room 107 Engineering Building, at 11:00 AM  
Honeywell will be present for this meeting to talk about budget.**