

HPRT MEETING MINUTES

Staff Meeting

Tuesday, 10 October 2017

3:00pm to

Minutes recorded by: Myla Azofeifa

Meeting called by: Alex Rustaey

Attendees: Yi Tong Zhang, Jordan Loos, William McGinn, Dr. David Trevas, Amy Swartz

Table 1 - Record of Meeting

3:00pm	Begin Meeting <ul style="list-style-type: none">● Honeywell cancelled until next week (2:59pm)	EGR 323
3:00pm	What Have We Been Up To <ul style="list-style-type: none">● Designs being considered<ul style="list-style-type: none">○ Turbo expander○ Pinch valve○ Pulse width modulation<ul style="list-style-type: none">■ Using an arduino?■ Opening/closing quickly, fatigue/limited life becomes a problem● Honeywell already has some sensors downstream	EGR 323
3:05pm	Calculations (Analytical Tasks Assignment) <ul style="list-style-type: none">● Example: How do you load a turbine? Create a function for analysis● Create equations for different closure elements● Advantages & Disadvantages● Give one example using “reasonable” values<ul style="list-style-type: none">○ Pressure drop for different geometric shapes○ Change in area gives you for a pressure drop	EGR 323
3:15pm	Individual Analysis Topics <ul style="list-style-type: none">● Alex - Turbine● Bill - Analysis paper● Myla - Pinch Valves (life of material,	

	<p>pressure drop for different geometric shapes, change in area affecting pressure drop</p> <ul style="list-style-type: none"> • Jordan - Pulse Width Modulation (PWM) • Yi Tong - Flexible metal bellows (acting like a spring) 	
3:18pm	<p>How to open the Honeywell-provided CAD-model</p> <ul style="list-style-type: none"> • File is in parasolid • 	
3:22pm	<p>To test pressure regulator Use tank in the thermal fluids lab</p>	

Table 2 - Tasks Assigned

Tasks	Person Assigned	Due Date	Date Complete
Complete Team Memo regarding individual analytical tasks assignment.		10/13/2017	
Complete individual analysis.			
<i>Complete shop safety training. Must be done on a weekday at 9:30am. Contact Kellan Rothfus for more information.</i>	<i>Jordan Loos Bill McGinn Alex Rustaey Yi Tong Zhang</i>	<i>Spring 2018</i>	
<i>Complete Advanced Shop Training (following the completion of shop safety training). Available every other weekend beginning 9/9 & 9/10. Contact Kellan Rothfus for more information.</i>	<i>Jordan Loos Bill McGinn Alex Rustaey Yi Tong Zhang</i>	<i>Spring 2018</i>	

Next formal meeting: Tuesday, 3 October 2017, Engineering Bldg. (#69), Room 323 at 3:00 PM (client meeting)