

WEEKLY MEETING AGENDA

Topic:

Attendees: Jessie, Brittney, Noah, Wesley, Randall

Please bring: Schedules, phones, and laptops

Metting 1: Monday, January 25 2:30pm-3:45pm	Plan out the rest of the week and how to build the heat exchanger.	Zoom/Teams
Meeting 2: Wednesday, January 27 2:15pm-2:50pm	Update Terry on the Project	FreeBridge
Meeting 3: Wednesday, January 27 2:50pm-3:40pm	Make Future Plans with Team	Microsoft Teams
Meeting 4: Saturday, January 30 11:00am-2:30pm	Building Session #1: Bend copper piping, start building heat exchanger	Home Depot, Jessie's apartment
Meeting 5: Saturday, January 30 11:00am-2:30pm	Online Session during building session: Organizing and starting work on future assignments (memos, powerpoints)	Microsoft Teams

Tasks to be completed prior to meeting:

Group Member	Task	Start Date	End Date
All Members	Website Bios	1/18/21	1/25/21

MEETING MINUTES

Meeting 1 Topic: Plan for the Rest of the Week/How to build the heat exchanger

Date: Monday, January 25, 2021

Time: 2:30pm- 3:00pm

Location: Zoom/Teams

Minutes recorded by Jessie

Meeting called by Dr. Oman/Jessie

Attendees: Jessie, Noah, Brittney, Wesley, Randall, Dr. Oman

Table 1. Record of meeting.

2:30pm-2:40pm	Discuss Future Schedule and what to do this week <ul style="list-style-type: none">• Discussion led by Dr. Oman• Jessie and Dr. Oman discussed ideas for work this week without having assignments due. Dr. Oman said to organize and start filling in future assignments, so we can edit them later without having to start from scratch.
2:40pm to 2:55 pm	Discuss Action Items Last Week <ul style="list-style-type: none">• Discussion led by everyone• Randall worked on Arduino and ordered parts• Noah worked on CAD and the website• Wesley worked on learning HVAC and seeing the viability of the team's design. He also coordinated emails with the clients, Terry and Chuck• Brittney worked on ANSYS and the compatibility of solar panels.• Jessie worked on GD&T and improvements of the CAD drawing and created a Gantt chart and possible action items for this week.
2:55pm to 3:10pm	Team switched to Teams and discussed future building dates/times <ul style="list-style-type: none">• Plan for Saturday morning at Randall's apartment
3:10pm to 3:15pm	Team planned what Noah will do remotely <ul style="list-style-type: none">• He will work on organizing future assignments as Dr. Oman suggested

3:15pm to 3:40pm	Team discussed how to build the heat exchanger <ul style="list-style-type: none"> 1" diameter pipe is difficult to bend. The machine shop requires a die to do so. A proper bending tool is expensive. We would like to do bending of pipe instead of a spiral, so we can add fins on it. Machine shop has basic training on Fridays.
3:40pm to 3:45pm	Wesley discussed emailing Terry and Chuck every week on updates <ul style="list-style-type: none"> The team agreed Mondays/Sundays would be best to do so.

Table 2. Tasks Assigned.

Task	Person Assigned	Due Date	Date Complete
Work on ideas for building a heat exchanger	All team members	1/27/21	
Complete basic shop training	Randall, Brittney, Wesley	2/6/21	

Next formal meeting: 1/27/2021, Teams, at 2:30pm.

Meeting 2 Topic:

Date: Wednesday, January 27, 2021

Time: 2:15pm- 2:50pm

Location: Teams

Minutes recorded by Jessie

Meeting called by Terry Baxter

Attendees: All Group Members and Terry Baxter, Red Feather Group Client

Table 1. Record of meeting.

2:15pm-2:50pm	Project Update <ul style="list-style-type: none">• Discussion led by Terry• He understands the function of the design• He asked how much the PV panels weigh. Approximately 33 lbs for the 3 panels. He was pleased with that number.• He asked what time we would be testing the design. We answered in March. Specific dates were 3/19 and 3/26. He is excited to see actual data.• He offered to look for materials the team might need, such as scrap parts and piping from remodeling.• Team will begin giving weekly updates to Terry on the project's progress.
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Meeting 3 Topic: Future Plans

Date: Wednesday, January 27, 2021

Time: 2:50pm-3:45pm

Location: Teams

Minutes recorded by Jessie

Meeting called by Jessie

Attendees: Randall Holgate, Jessie Russell, Brittney Rogers, Wesley Garcia, Noah Kincheloe

Table 1. Record of meeting.

2:50pm-3:00pm	Discuss Meeting with Terry <ul style="list-style-type: none">• Meeting went well• Create a list for Terry of materials the team could use for the project:<ul style="list-style-type: none">• Copper piping 1/2" diameter• Used HDPE storage tank• 1/2" Conduit benders or any pipe benders• Pipe insulation• Propylene Glycol Email Terry the list
3:30pm to 3:45 pm	Discuss Scheduling <ul style="list-style-type: none">• Jessie and Randall will meet up to build the heat exchanger in the machine shop on Saturday. They will first purchase copper piping from Home Depot at 10:00am• The rest of the team, Noah, Brittney, and Wesley, will work on future assignments over Zoom at 11:00am• We will travel to Leupp for the final building session and the 2nd set of testing procedures to assemble the project and run tests on the project as a whole. The other sessions will work on the project in separate pieces.
3:45pm to end	Plan heat exchanger build <ul style="list-style-type: none">• We will use 1/2" diameter copper piping instead of 1" because 1" is harder to find a bender for the piping and 1" is harder to find parts for in general.• We will use the machine shop pipe bender for the first building session and find out a financial solution for getting our own pipe bender in the future (approx. \$32-\$38)

Next formal meeting: 1/30/21, two split team sessions, one in person at Home Depot at 11:00 am and one over Teams at 11:00 am

Meeting 4 Topic: Building Session #1

Date: Saturday, January 30, 2021

Time: 11:00am- 2:30pm

Location: Home Depot, Jessie's apartment

Minutes recorded by Jessie

Meeting called by Jessie

Attendees: Randall Holgate, Jessie Russell

Table 1. Record of meeting.

11:00 am-12:00 am	Meet at Home Depot <ul style="list-style-type: none">• Purchase 1/2" diameter copper tubing• Pick up Heat exchanger clamps• Purchase conduit bender
12:00 pm to 2:00 pm	Bend pipe for heat exchanger <ul style="list-style-type: none">• Randall and Jessie attempted to bend the copper piping. There were some issues, including kinks in the pipe and the pipe not bending at a steep enough angle. The copper tubing is too hard to bend even with the conduit bender.
2:00 pm to 3:00 pm	New plan for heat exchangers <ul style="list-style-type: none">• Ask for more budget.• Purchase soft copper tubing for refrigeration, which costs \$70/50ft. Use that as the tubing.

Next formal meeting: 2/1/21, Zoom, at 2:30pm.

Meeting 5 Topic: Online Session during building session

Date: Saturday, January 30, 2021

Time: 11:00am- 2:30pm

Location: Teams

Minutes recorded by Jessie

Meeting called by Noah Kincheloe

Attendees: Noah Kincheloe, Brittney Rogers, Wesley Garcia

Table 1. Record of meeting.

11:00am-12:30pm	<ul style="list-style-type: none">• Brittney, Noah, and Wesley worked on the implementation memo together
12:30pm to 2:30 pm	Discuss the in-building project Jessie and Randall <ul style="list-style-type: none">• The team helped brainstorm to put salt into the tubing when we bend it and to purchase soft copper tubing

Next formal meeting: 2/1/2021, Zoom, at 2:30pm.