

### **What were the outcomes of the prior phase?**

1. **What did I plan to do?**

To start this project there was discussion with the other teammates on the scope of this project, using the PRP as a guide to help getting an idea of what is expected of the team. Using some of the material picked up through lectures, the team was able to categorize the content from the PRP and the information gathered from the customer interviews.

2. **What did I actually do?**

For these first few weeks the individual work performed was more or less the same as each other member. This includes ‘tossing’ ideas around in conversation to help the team grasp a more definitive picture of requirements before we interviewed our customer. Planning out the tasks required for the coming weeks was something that was both individual yet a group task.

3. **What did I learn? How were plan and reality different?**

Most definitely, the planning out was difficult for the team. Something I was able to take away from these past few weeks was the amount of instability in all the variables that are at play with our project, team, and customer. For most of this phase our team was short 1 person, while at the same time our customer was very difficult to get a hold of. This was quite the surprise for myself coming into this project. The saying, “If anything could go wrong, it certainly will” definitely rang true during this time and has me looking for the next problem and how to counter react.

### **Team level goal for next phase**

Our plan for the next phase is to get done everything we need to begin thinking about our detailed design. What that entails are first completing our benchmarking and a preliminary analysis of our risks then take our list of requirements and consolidate them into various functions that our product must perform. That functional decomposition will allow us to brainstorm various design concepts from which we will choose the most feasible based on some exhaustive engineering analysis. With this work done, at the end of this phase we will be in a great place to start detailed design.

**What do I plan on doing to ensure that my team has a successful review at the end of the next phase?**

1. Each team member should estimate 5-10 specific tasks that he or she will complete.
  - a. Analyze 2D and 3D drawings provided by Customer for mechanical design advantages. i.e. Mounting methods for BTMS. (2-3 hours, Immediately)
  - b. Establish the key mechanical features which must remain generic for all aircrafts. (1.5-2 hours, immediately)
  - c. Research methods of harvesting energy from vibration. (1+ hours, TBA)
  - d. Look into typical size of vibration and what is used to measure. (i.e. unit of measure) (1+ hours, TBA)
  - e. Brain storm weather proofing methods for BTMS that incorporate heat dissipation designs. (1+ hours, TBA)

2. How do other team member tasks impact my task completion, and vice-versa?

This question isn't quite applicable to the team members, as it is more so to the customer. Most of the tasks I have listed are contingent on the customer providing our team with the requested data to properly analysis, compare, and contrast the designs of the current system with what the team is beginning to envision.