



1.2 Customer Needs

Interview Summary

Team 506 interviewed Mr. Michael Conroy, the project sponsor, to get a clear understanding of the customer's needs for the project. Mr. Conroy was an appropriate interviewee because he is the coordinator of the microgravity competition and has knowledge of previous designs, both successes and failures. The interview questions, interviewee's responses, and interpreted need regarding the responses can be found in Table B-1 of the appendix.

The goal of the questions was to better understand the specifics of the project requirements, but to remain open-ended enough to allow room for Mr. Conroy to speak freely of his hopes. Team 506 aimed to gain understanding of the sponsor's desires without the imposition of the members' biases to the solution. Due to the nature of the competition, specifics were asked about the conditions and requirements of the event that will be uniform amongst all competitors. On top of that, more open-ended questions were asked about the impact of a successful design as well as insight into the design itself.

Explanation of Results

The interpreted needs tabulated in Table B-1 translate Mr. Conroy's responses into concrete attributes our design should achieve. The major needs taken from the interview were that the microgravity event lasts four seconds, the design includes a way to attach to and be released from a drone, the air vehicle falls to the ground safely without damage to the vehicle, and it can support a 3U CubeSat class payload. Other specific questions helped



to clarify whether certain design ideas mentioned in previous meetings would be necessary to accomplish the task, or just recommended.