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Hatchling II

Embry-Riddle Aeronautical University

April Status Report

Activities of Team Members

April was largely focused on structural design - both teams did several redesigns of components - as well as searching for new sensors and working on the PSIP.

Issues Encountered in Payload Design

Concerns about the payload's ability to withstand intense heat from direct sunlight was raised during the month, leading to an investigation of similar problems on ERAU balloon payloads. After confirming that this would be an issue that would have to be dealt with alongside extreme overnight cooling, the structure and thermal teams set out to redesign the structure to mitigate both of these problems.

Milestones Achieved

After several redesigns and modifications to the structure, the *EagleSat* delivered to a local facility with a waterjet cutter, and is currently being manufactured. The *Phoenix* structure was redesigned over the course of the month, with a focus on increased thermal capabilities and allowing airflow through the structure for the gas sensors. It will be entering construction in early May, once the ERAU finals period has ended.

Current Team Members

Below is an organization chart of the current team.

