Zach Henney March 29, 2013 *Hatchling II* Embry-Riddle Aeronautical University

March Status Report

Activities of Team Members

March was spent preparing for construction of the *Hatchling II* structure: The integration method between the *Phoenix* and *EagleSat* structures was finalized, and progress was made towards completing the payload modules for both parts of the payload. Sensors from the *Phoenix* payload were flight tested, which provided valuable information as we progress towards completing construction and further testing.

Issues Encountered in Payload Design

Concerns about the sensitivity of the gas sensors for the *Phoenix* payload were raised once again during a flight test on the March 2013 ASCEND! flight. The sensors will be reviewed once more, and if they fail again they will be replaced. Backup sensors are already being sourced in case further issues arise.

Milestones Achieved

The design of the aluminum structures for both *Phoenix* and *EagleSat* were completed, and the design for the *Phoenix* structure is waiting to be laser cut by a local manufacturer. The sensors for *Phoenix* have been finalized as well, and will be ordered within the next week. The hardware design for the *EagleSat* payload module has been completed, and will be tested once proper testing equipment has been located.

Current Team Members

Below is an organization chart of the current team.

