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Hatchling II
Embry-Riddle Aeronautical University

January Status Report

Activities of Team Members:

Since submitting the proposal for *Hatchling II* in December, the team has been focused on addressing the comments and responses raised by the HASP program. Addressing each of these will be the focus of the team for the near future, culminating in the submission of a revised application prior to the February 15 deadline. Though all the teams will be hard at work to make the corrections, the *Phoenix* payload team will be working hard to verify that their sensors can work and produce workable data in the near-vacuum at float altitude. If they conclude otherwise, they will be working to source alternative sensors, or come up with a different objective altogether. The *EagleSat* teams are all working towards the development of their systems for the satellite, with components expected to begin construction following the completion of individual preliminary design reviews in the coming weeks.

Issues Encountered During Payload Design:

The main issue has been the possible failings of the gas sensors; if they cannot operate at float altitude, then the science objectives of the *Phoenix* module must be reevaluated. Currently, the *Phoenix* team is doing a review of the operating constraints of the gas sensors, as well as working on an alternative goal in the event the sensors will not be able to work within the environmental conditions.

Milestones Achieved:

The milestones from the past month include: the submission of the *Hatchling II* proposal and acceptance onto the 2013 flight, pending the changes made in the the revised application; work done by the *EagleSat* team to get subsystems close to their preliminary design review; and greater cooperation and work done between the *Phoenix* and *EagleSat* teams to make sure the resubmitted proposal will be far above expectations.

Current Team Members/Leaders:

Teams have largely stayed the same since the submission of the proposal, though new members joining the *EagleSat* project and are in the process of deciding which subsystem they will join.

