

Zach Henney
February 20, 2013
Hatchling II
Embry-Riddle Aeronautical University

February Status Report

Activities of Team Members

The main goal for all members of the *Hatchling II* team during February was addressing the list of suggested changes from the HASP Application Review Committee, which required collaboration between the *EagleSat* and *Phoenix* teams. The changes meant getting more detail from all subsystems: greater detail for all schematics, a list of commands to be used by *EagleSat* through the HASP platform, operating frequencies for both the communications system and the crystal radio, a more accurate power budget for the assembled payload, and stronger thermal plans for both halves of the payload.

Issues Encountered in Payload Design

For February, the only issue encountered was in recruitment for the *Phoenix* team: currently, the team is much smaller than it could be, leading to the current members taking on more tasks than they would ideally have to. However, recruitment is continuing, with three members added this month, and more to be added soon. The added members are joining the payload team, and will be involved with the electronics of the *Phoenix* payload.

Milestones Achieved

The main achievement of the past month was the completion of the changes to the original HASP application. The structures teams for both *EagleSat* and *Phoenix* are nearing their final revisions and will begin construction within the next month. Also, work was done to finalize the attachment mechanism for securing *EagleSat* to *Phoenix* during the flight. The crystal radio team of *EagleSat* are nearing completion of their prototype, and from there they will have a flight-ready model within the next month. Also, the *EagleSat* team completed a preliminary list of command for their onboard computer, which has been attached to this report.

Current Team Members

As of the submission of this report, team structures are the same as they were last month since the additions to the *Phoenix* team have yet to formally join any subsystems. Their additions will, however, be reflected in next month's report.

