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*Hatchling II*

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## **July Status Report**

### **Activities of Team Members**

July was unfortunately a month of fixes: work had to be done to replace the PCB mounting brackets in the *EagleSat* module, as well as other structural modifications; while the thermal shell for *Phoenix* was delayed but completed. Testing continued to ensure performance over a range from -50 to +50 degrees celsius, and at the pressures encountered at float.

### **Issues Encountered in Payload Design**

The mounting issues between *Eaglesat* and *Phoenix* that were noted in last month's status report were addressed, however, the brackets for mounting the PCB stack were discovered to have other problems. When it became obvious that new brackets were not going to be able to be machined, a solution was remedied and the PCB stack is now mounted and able to withstand side-to-side stresses. Also, it was discovered that the CO sensor we'd lined up will not work despite its sensitivity - the pressures at float are just too low to allow for proper operation.

### **Milestones Achieved**

The antenna board for *EagleSat* arrived and was quickly completed, with the custom antennas designed, tuned, and installed. The integration board for connecting *EagleSat* to the HASP platform was completed and tested, as was the comms board. *Phoenix* had the creation of a new board to fit the new CO2 sensor as well as the 30 to 5V DC converter, all of which has been installed and tested in the payload.

### **Current Team Members**

Below is an organization chart of the current team.

