HASP2010 UND-UNF Payload Monthly Status Report for May 2011

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UND-UNF team did the following work during May 2011:

(1) Our team is in a waiting period for information on the HASP 2010 launch. No work has been or needs to be performed at this time.

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UND-UNF team did the following work during May 2011:

- (1) Body work of payload is completed.
- (2) Fabrication, testing and calibration of one series of sensors are completed. Fabrication of another series of sensor will be initiated during this month. The best one will be installed in the payload.
- (3) Two printed wiring boards have been populated and hardware tested. Jonathan Snarr possesses one and Tasbirun Nahian Upal located at UND possesses the other. A minor change from 2K Ohms to 499 Ohms to the voltage reference series resistor has implemented to allow for a more stable ADC reference.
- (4) Functional firmware and hardware testing of each module of the embedded system is ongoing. We are able to communicate with our embedded GPS receiver module as well as communicate to the outside world via RS232 interface. Our switching power supply is performing well and stable. We will be testing our onboard data logging capability in the next two weeks as well as our onboard pressure sensor.
- (5) U-Blox, the company that produces the GPS receiver module embedded in our system, has expressed interest in having our system log a small amount of data for their company during flight. We desire approval from LSU to do so and will provide more information once we have received it from U-Blox. This logged data will not affect communication between our payload and ground control and will be stored in our payload's flash memory for retrieval once flight has terminated.
- (6) Work on our Visual Basic compilation application continues.
- (7) Arrangements have been made to test our embedded system in an environmental chamber as well as a vacuum chamber. This testing will take place next month.
- (8) Travel arrangements have been made for integration in Palestine TX.
- (9) We are looking for feedback on our preliminary PSIP before finalization of the PSIP can take place and be submitted.