

January 27, 2012

## ***Student Payload First Flight (SPIFF) Payload Team Monthly Status Report***

### **1. Activities of SPIFF team members**

Initial response and comments from the HASP program and reviewers are currently being addressed in a revised application to be submitted February 1, 2012. Major changes to the application include reduction of total payload footprint to a single small payload seat.

### **2. Issues encountered during payload design / development**

Overall height of the payload may exceed the physical envelope provided by the HASP launch vehicle and a waiver may be requested. Another issue raised by reviewers is the need to provide a more appropriate thermal management plan that appropriate to the near-space environment where convection cannot be used to cool components. Two solutions to this problem have been suggested: a simple heat routing scheme using copper braid and a more complex method for constructing low-cost "heat pipe" cooling chambers.

### **3. Milestones achieved**

- a. Initial proposal submitted and returned with approval pending revisions
- b. Weekly internal status report teleconferences between BU, NMT, GATech completed

### **4. Current team members and leaders**

- a. BU: Nate Darling, Chris Hoffman, Nima Badizadegan, Pantelis Thomadis
- b. GaTech: Josh Mendez, John Trostel
- c. New Mexico Tech: Jordan Klepper, Matt Landavazzo