



ASU - High Altitude Turbine Project (HATS)

Project Update : **January '12** Date: 1/27/12
Project Manager: Patrick McGarey Contact: aeropat@gmail.com // 602.300.5441

Summary:

First and foremost we would like to thank you for the opportunity to fly our experiment on this years HASP balloon. We have received your initial comments regarding deficiencies in our design as submitted. Our primary objective will be to address every concern listed, and return a revised design document no later than 2/24/12. Below you will find a list of our key accomplishments since submitting the application and a summary of upcoming tasks for February. Lastly, I would like to request that future correspondence be sent to the email listed above and not to the address you currently have on file. Thank you for your time.

Key Accomplishments:

- Project acceptance by HASP
- Creation of project website - <http://robots.asu.edu/hats/>
- Prototype support structure machined and test assembled
- 6 team members added to project to work on software/sensor integration
 - S.Cheeseman, S.Dunn, R.Edmonson, S.Minchuk, D.Sumner, A.Zakayah

Upcoming Tasks:

- Revised Design Document per HASP request due 2/24/12
 - thermal management plan including testing protocol
 - data acquisition plan
 - communications plan
 - power budget - including decent plan
 - summer/fall schedule accounting for pre/post launch activities
 - clarify primary objective - justify effective use on HASP
 - determine / justify propeller designs
 - clarify thrust generation claim
 - explain how we will account for lateral & vertical wind in our measurement
 - respond to any other outstanding concerns or questions
- Finalize parts list and order
- Programming for data storage, sensor operation, and wind alignment system
- Testing sensors
- Construction of support structure and electronics box
- Mount & re-test sensors on support structure

-Patrick McGarey // Project Manager