

Team PLEASE

March Status Report

HASP

Activities of the Team:

We have created a more detailed task list for better time management and organization. The list started from the objective statement and broke the scope of the project down into every minor task. Each task was divided further and further all the way to testing plans.

We have redone the system design to reflect the new design without the star camera subsystem. The system design is now comprised of 3 three levels. The first is a simple overall component placement within the housing. The second level is a power diagram and data communication diagram between all subsystems. This shows a summary of how all the components interface with one another. The third level is a more detailed diagram for each subsystem.

We have started preliminary testing for the sun camera. The test set up consists of an 8 MP camera mounted inside a 1/2 inch foam box with a large window of baader film. The window curves around the box in an arc to maximize the field of view of the camera. The box was designed to be large enough to accommodate a variety of sizes of camera. This testing will serve as a proof on concept and using these pictures, we can begin working on data analysis.

Data analysis has been started by fitting sample pictures to a 2D gaussian in IDL.

Problems Encountered:

We have still not selected our final camera we plan to use on flight. Data analysis of the preliminary test will indicate minimum specs needed for the flight camera.

We have not decided yet how to sync the GPS time stamp with the camera picture.

The electronics shop has decided that making a new GPS shield with SD card slot is the best option, but this process has taken longer than expected.

Milestones Achieved:

Updated task list and system design completed.

Current Team Members and Demographics:

Members: Josh Frick and Joel Taylor

Faculty Advisor: Michael Cherry

With Guidance From: Michael Stewart, Gregory Guzik