

# HASP Monthly Status Report - June 2016

Arizona State University - HIDRA

June 24, 2016

Student Leader: John McCulloch

Faculty Advisor: Chris Groppi

## 1. Milestones

- Integrated current sensors with system
- Successfully triggered FLIR camera at defined intervals using autonomous commanding through Raspberry Pi and Labjack
- Continued camera calibration
- Passed full power systems bench test

## 2. Summary of Activities

The team spent the majority of the month integrating subsystems into the overall system and testing them as each was integrated. Of primary focus was the command and control subsystem which has a preliminary program for testing which will be bench tested within a week. The integrated power system was tested with all components and functioned as prescribed within the HASP limitations. Additionally, a few minor components such as external Ethernet port and reset switch for the Raspberry Pi were added. Finally, the updated version of the PSIP was completed.

## 3. Issues Encountered

- GPIO-Serial converter died and a new one was ordered.
- Delay in getting the reset switch from supplier.
- Temperature sensors do not appear to be outputting 1 mV : 1°C. Will do calibration testing to determine relationship/offset.

#### 4. Team Structure and Demographics:

Name	Role	Status	Education	Gender	Ethnicity	Email
John McCulloch	Project Manager/Systems Engineer	Active	Graduate Student	Male	Caucasian	jpmccull@asu.edu
Bradley Karas	Mechanical Engineer/Systems Engineer	Active	Graduate Student	Male	Caucasian	bkaras1@asu.edu
Alex Mastrea	Testing/Quality Engineer	Active	Undergraduate	Male	Caucasian	amastrea@asu.edu
Jacob Trahan	Software Engineer	Active	Undergraduate	Male	Caucasian	jrtrahan@asu.edu
Srinidhi Ravi	Science Lead	Active	Undergraduate	Female	Asian Indian	sravi13@asu.edu
Nijiel Rocha	Support Engineer	Active	Undergraduate	Male	Hispanic	nerocha@asu.edu
Akshay Vijay	Support Engineer	Active	Undergraduate	Male	Asian Indian	avijay4@asu.edu
Christopher Groppi	Faculty Advisor	Active	Professor	Male	Caucasian	cgroppi@asu.edu
Andrew Thoeson	Graduate TA	Active	Graduate Student	Male	Caucasian	athoesen@asu.edu
<i>Cheyenne Howard</i>	<i>Science Team</i>	<i>Inactive</i>	<i>Undergraduate</i>	<i>Female</i>	<i>Caucasian</i>	--
<i>Jia Zhuang</i>	<i>Communications Engineer</i>	<i>Inactive</i>	<i>Undergraduate</i>	<i>Female</i>	<i>Asian</i>	--
<i>John Stone</i>	<i>Support Engineer</i>	<i>Inactive</i>	<i>Undergraduate</i>	<i>Male</i>	<i>Caucasian</i>	--
<i>Kelly Johnson</i>	<i>Thermal Engineer</i>	<i>Inactive</i>	<i>Undergraduate</i>	<i>Female</i>	<i>Caucasian</i>	--
<i>Nathan Wilson</i>	<i>Support Engineer</i>	<i>Inactive</i>	<i>Undergraduate</i>	<i>Male</i>	<i>Caucasian</i>	--
<i>Stone Hanlon</i>	<i>Power Engineer</i>	<i>Inactive</i>	<i>Undergraduate</i>	<i>Male</i>	<i>Caucasian</i>	--
<i>James Cornelison</i>	<i>Graduate TA</i>	<i>Inactive</i>	<i>Graduate Student</i>	<i>Male</i>	<i>Caucasian</i>	--
<i>Candace Ashley</i>	<i>Science Team</i>	<i>Inactive</i>	<i>Undergraduate Student</i>	<i>Female</i>	<i>Caucasian</i>	--
<i>Jekan Thangavelautham</i>	<i>Faculty Advisor</i>	<i>Inactive</i>	<i>Professor</i>	<i>Male</i>	<i>Asian Indian</i>	--
<i>Erik Asphaug</i>	<i>Faculty Advisor</i>	<i>Inactive</i>	<i>Professor</i>	<i>Male</i>	<i>Caucasian</i>	--