# University of Bridgeport HASP Status Report February 26, 2016

Submitted: Bashar Alhafni: Team Leader

### **Team Activities:**

Response to Reviewer's Comments:

The entire team has met and all of the areas of concern from the reviewers have been assigned to the various team members to complete and assure compatible integration.

*Team Meetings:* Weekly team meetings are being conducted, although until the revised application is submitted team members are meeting and working on the proposal daily. Bashar Alhafni, Jani Pallis and Neal Lewis participated on the February conference call meeting on Feb. 12, 2016.

*Drawings:* New CAD drawings have been developed which are clearer, expandable, have greater detail and conform to the HASP requirements. Additionally, block diagrams for the electronic components have been defined.

Thermal Control: Team members have specified heaters and their operation for thermal control. Preliminary Payload Specification and Integration Plan (PSIP):

All team members have been given the PSIS and while the current focus is on the application, team members have been advised to review the template, past PSIP's from

http://laspace.lsu.edu/hasp/Flightinfo.php and to keep all PSIP requirements in mind (and the April 29 due date) as they address their assigned tasks.

#### Issues:

The team and faculty leaders contacted Dr. Greg Guzik on Wed., Feb. 24, 2016 and requested a one-week extension (close of business on Friday, March 4, 2016) to respond to the request for a revised application. In review, we recognize that we were not clear in differentiating between the servo-motor tests (the purpose of the HASP test) and the future operation of the robotic puppet. The extension was approved and we thank Dr. Guzik.

#### **Milestones Achieved:**

While progress has been made, a one-week extension was requested to resubmit the team's application. All efforts are focused on that goal. Other milestone activities noted in the original proposal (such as part ordering) will not be conducted until the application is resubmitted and the team has confirmation on the proposed configuration.

## **Current Team Leaders/Members, Demographics:**

Student Project Manager: Bashar Alhafni (Undergraduate Student – Computer Science)

Leader Flight Computer, Data and Camera: Paul Alfaro (Undergraduate Student – Computer Science)

Arduino Gesture Programming: Rishi Warokar (Graduate Student – Computer Science)

Structure Lead Arjun Kumar (Graduate Student – Mechanical Engineering)

Thermal Control: Maheshwari Kumar Rakkappan - (Graduate Student - Mechanical Engineering)

 $Robot\ Gesture\ Range\ of\ Motion\ and\ Fabrication:\ Phillip\ Carroll\ (Undergraduate\ Student-Industrial$ 

Design); Team Member: Josh Hauge

Power and Communications: Xuan (Sam) Zhang (Graduate Student – Computer Science/Electrical Engineering)

Lead Faculty Advisor: Dr. Jani Macari Pallis (Mechanical and Aerospace Engineering)

Faculty Advisor Dr. Neal Lewis (Technology Management - Project Management)

Faculty Advisor Dr. Sarosh Patel (Computer Science and Engineering)

Education Partner: David Mestre (Discovery Museum and Planetarium: Director of Space Sciences,

responsible for Challenger Center Mission Control)

Education Partner: Lawrence Reed: (Discovery Museum and Planetarium: Electrical Engineering,

Communications)

Note: Mr. Venkat Srinivasmurty who was listed on the original application with the Discovery Museum has recently moved out of state. Arjun Kumar will now have these responsibilities.

Two team members will graduate at the end of spring semester and the team will seek new team members. Dr. Navarun Gupta, chairman of EE, has stated that he will seek new team members.