





NASA CT SPACE GRANT CONSORTIUM

HASP TESTING AND EXPERIENCE

Dr. Jani Macari Pallis, Dr. Neal Lewis, Mr. Larry Reed, Mr. James Pallis, Mr. David Mestre, Bashar Alhafni, Sam Zhang, Phill Carroll, Josh Hauge, Maheshwari Kumar Rakkappan, Karan Kakanur Patel, and Rochen Krishna Thashanath Sajeevan

University of Bridgeport

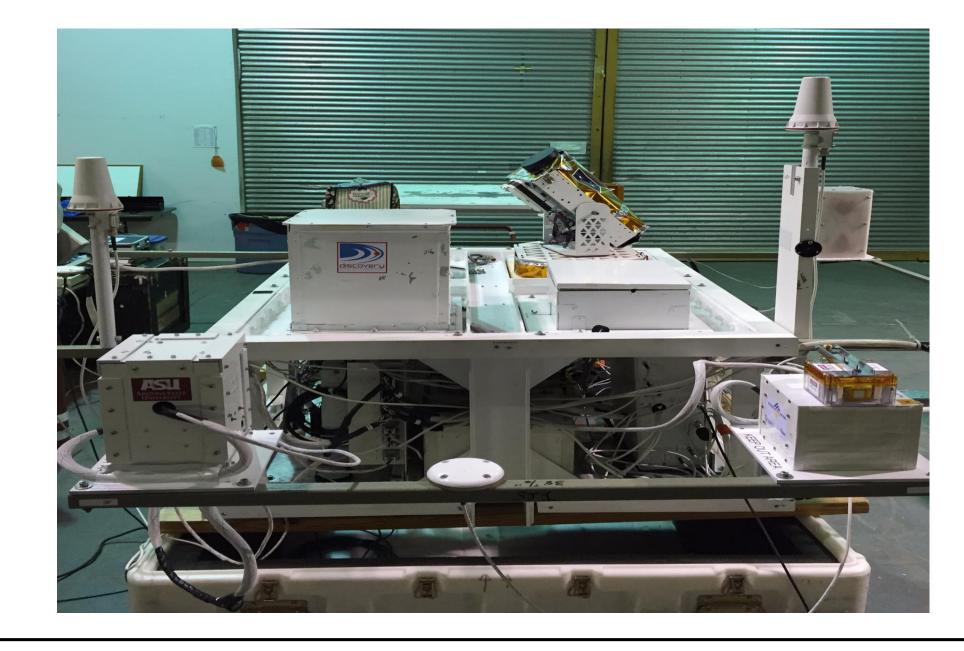
INTRODUCTION

The High Altitude Student Platform HASP) is designed to carry up to twelve student payloads to an altitude of about 36 kilometers with flight durations of 15 to 20 hours using a small volume, zero pressure balloon. The payloads carried by HASP are used to flight-test compact satellites or prototypes and to fly other small experiments.

The flight was launched on September 1, 2016 from Fort summer, New Mexico.

HASP - TESTING THE CAPSULE (NEW MEXICO)

At the end of August, Joshua Hauge and Larry Reed traveled to Fort Summer, New Mexico to the Columbia Scientific Balloon Facility to prepare HAM for flight operations and integration on HASP.



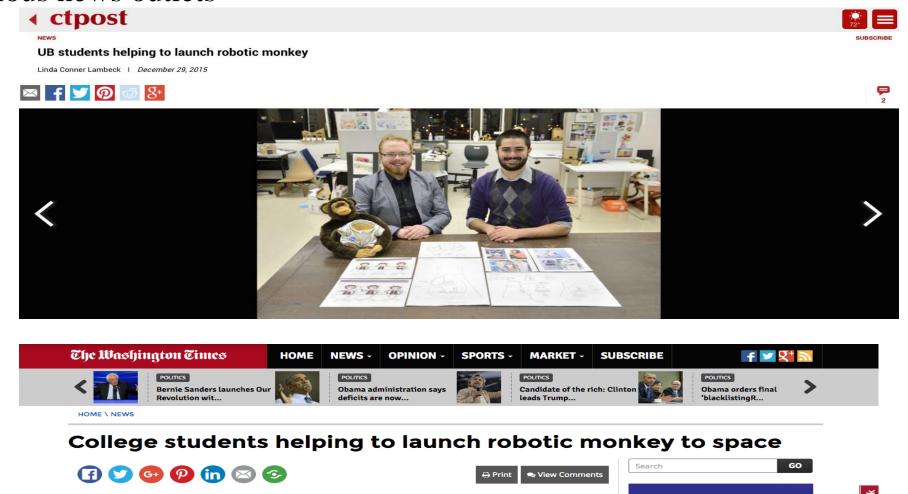


HASP - TESTING THE CAPSULE (TEXAS)

In August, Phillip Carroll, Dr. Jani Pallis, and Engineer Larry Reed traveled to NASA's Columbia Scientific Balloon Facility in Palestine, TX to test a capsule containing HAM's motors and electronics in a vacuum. The vacuum simulates space environments and tests to see if the servomotors will work in the extreme environment. The capsule was tested in a vacuum at the temperatures of -50 degree celsius to +50 degree celsius. The payload passed the thermo-vacuum test in Texas and was sent out to New Mexico for further integration into NASA's high altitude balloon gondola.

HEADLINES

With this project, Phillip Carroll and Joshua Hauge (respectively pictured in the image below) received \$5,000 Undergraduate Scholarships each from the Connecticut Space Grant and garnered some headlines from various news outlets





y LINDA CONNER LAMBECK - Associated Press - Sunday, January 10, 2016

SASEE FIRST BELL IN ATTRIBUTED IN ATTRIBUTED

TODAY'S ENGINEERING AND TECHNOLOGY NEWS PREPARED EXCLUSIVELY FOR THE ENGINEERING AND TECHNOLOGY EDUCATION COMMUNITY

Good morning Dr. Angela Colman Des Jardins

January 11, 2010

Two College Students In Connecticut Plan To Launch Robotic Monkey Into Space.

The AP **f** (1/11, Lambeck) reports Phillip Carroll and Joshua Hauge, students at the University of Bridgeport in Connecticut studying industrial design, are working to launch a robotic money, known as High Altitude Monkey ("HAM") 100,000 feet above the surface of the Earth in a balloon later this year. After being launched, HAM is designed to fly the balloon and come back to Earth in the Atlantic Ocean off the coast of Massachusetts. The students want to reignite interest in space exploration with their project.

CONCLUSION

This Project gave the hands on experience for the University of Bridgeport students. It's a nice experience to learn about thermal vacuum testing and also about the function of servo motors at very low temperatures.

This Project is the prototype for our future Robotic monkey to near space.

Our sincere thanks to NASA, CT Space Grant and Louisiana Space Grant.