



NASA CT SPACE GRANT CONSORTIUM

HASP TESTING AND EXPERIENCE

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University of Bridgeport

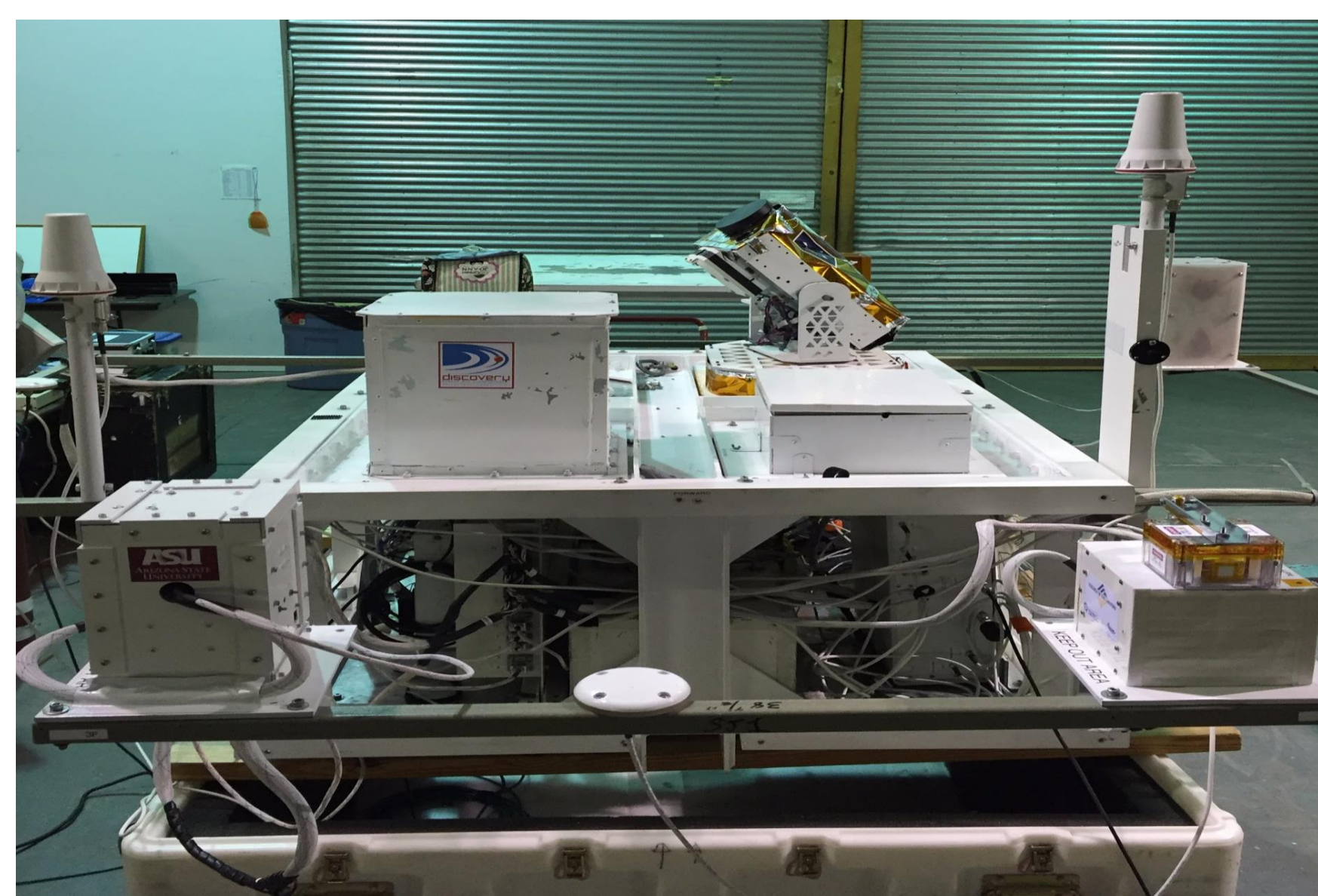
INTRODUCTION

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.

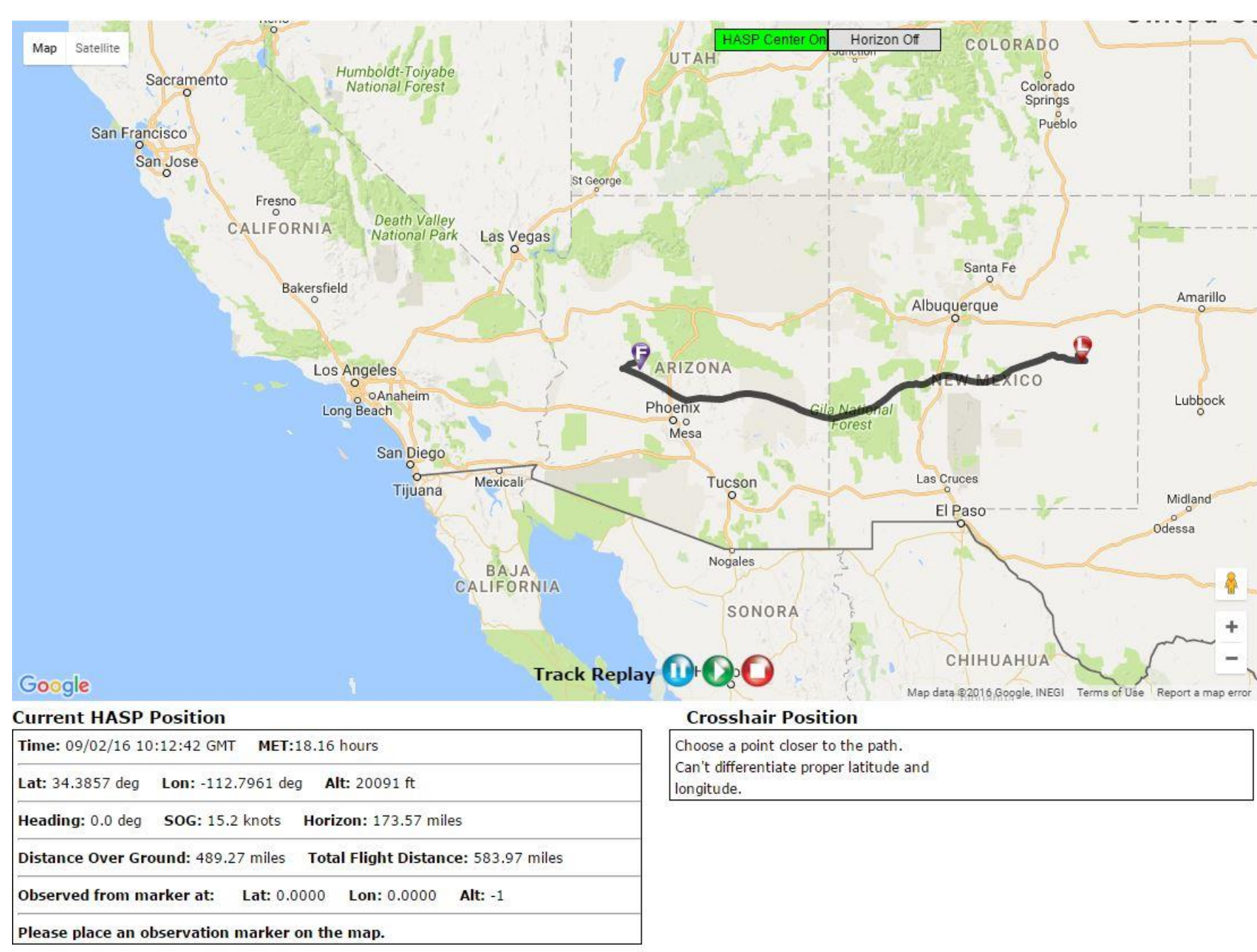
The flight was launched on September 1, 2016 from Fort summer, New Mexico.

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.

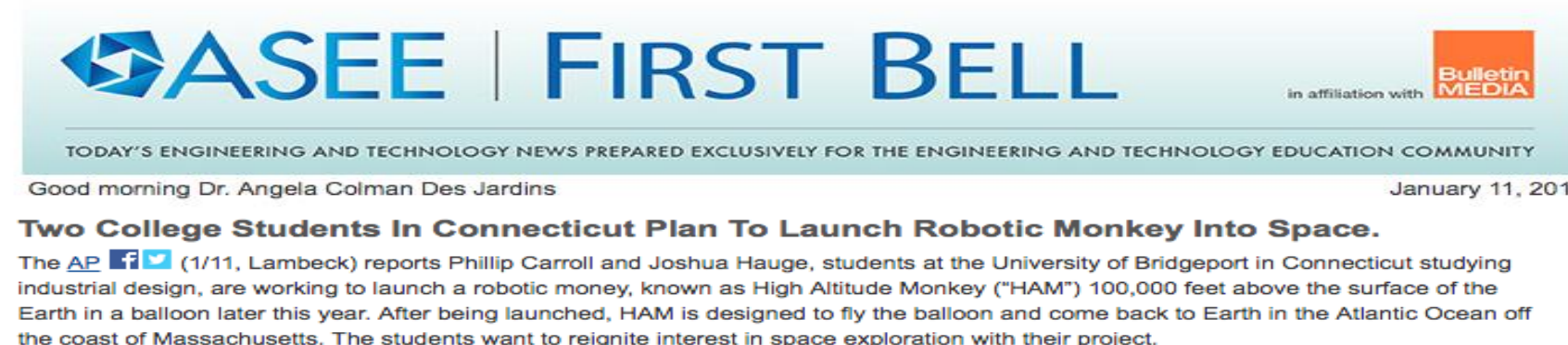
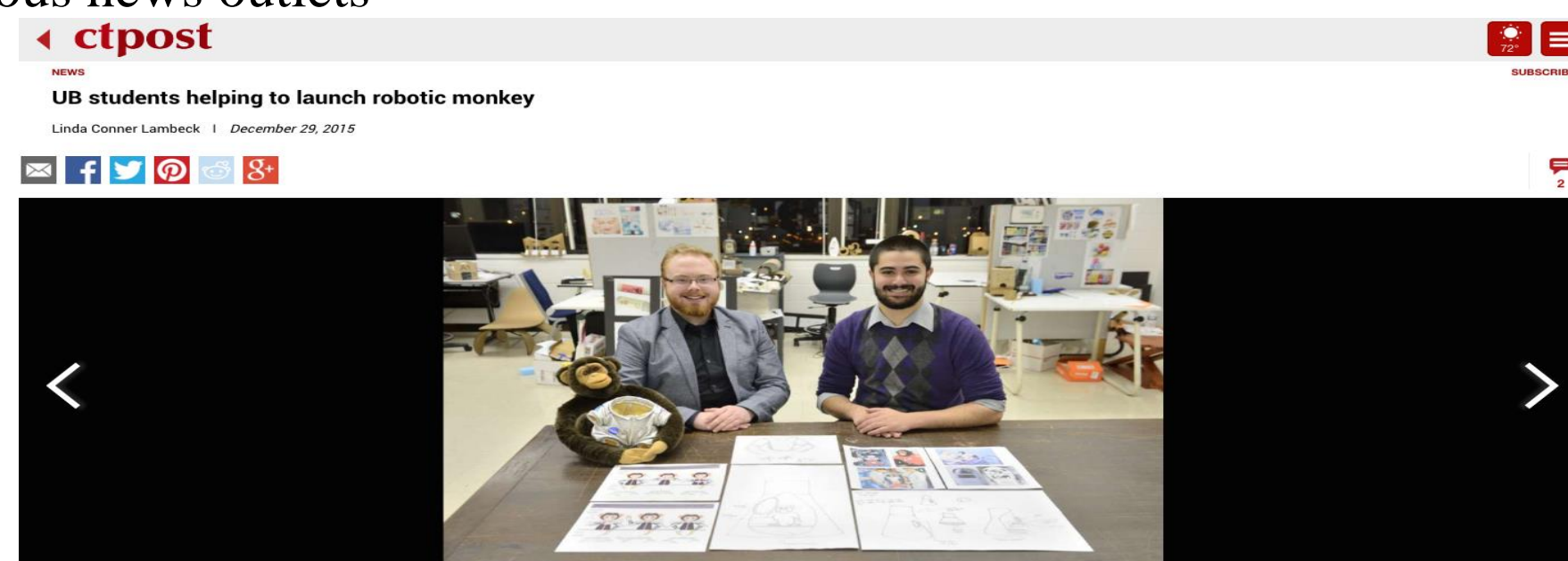


HASP FLIGHT PATH



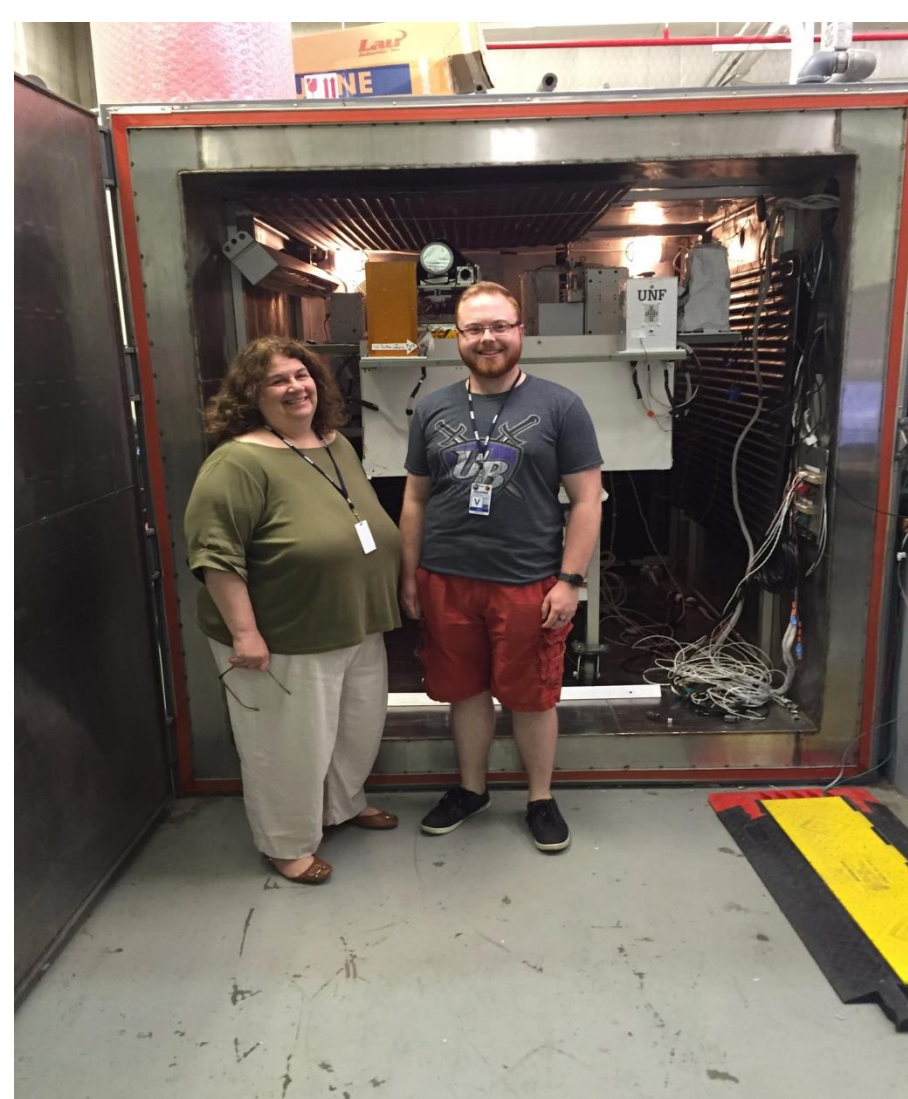
HEADLINES

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



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.



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.