



Launch Date: October 9, 2013

Total payloads: 6

Campaign Manager: Paul De Leon

UP Aerospace Inc.
A Space Launch Services Company

#	Tech#	Title	PI/Organization POC	Description/Objective
1	T0021-S	Application of Controlled Vibrations to Multiphase Systems for Space Applications.	Dr. Ricard González-Cinca (34) (934) 134-153 Ricard.gonzalez@upc.edu	Test of a technology for the generation of controlled harmonic translational vibrations in multiphase systems in microgravity conditions. Multiphase flows are present in a wide variety of space systems, such as thermal control, propulsion, waste water treatment, and many other Environmental Control and Life Support Systems (ECLSS) required for the development of space exploration. https://flightopportunities.nasa.gov/technologies/21
2	T0038-S	Structural Health Monitoring for Commercial Space Vehicles	Andrei Zagrai (575) 835-5636 azagrai@nmt.edu	Investigate fundamentals of elastic wave propagation in realistic flight environment. https://flightopportunities.nasa.gov/technologies/38
3	T0061-S	UAT ADS-B Transmitter Prototype for Commercial Space Transportation	Richard Stansbury (386) 226-7923 richard.stansbury@erau.edu	To create a path through empirical analysis to mature the UBR-ERAU prototype toward a design that can be utilized by NASA, FAA, and commercial space transportation providers such as Virgin Galactic to support asset tracking and better airspace integration. https://flightopportunities.nasa.gov/technologies/61
4	T0069-S	ORS Global Positioning Beacon (GPB)	Jason Armstrong (505) 846-7746 Jason.Armstrong_ctr@kirtland.af.mil	Provides GPS raw data as position source to FAA ADS-B payload. https://flightopportunities.nasa.gov/technologies/69
5	T0084-S	Suborbital Test of a Robotics-Based Method for In-Orbit Identification of Spacecraft Inertia Properties	Dr. Ou Ma (505) 646-6534 oma@nmsu.edu	The project is aimed at developing an autonomous suborbital flight experiment to validate a recently developed robotics-based method for identifying the unknown or changed inertia property (the mass, mass center location, and moments of inertia) of a spacecraft in orbit. Such a method can be used to enhance spacecraft's state estimation and control capability for future on-orbit servicing missions such as satellite refueling, rescuing, repairing, orbit debris cleaning, etc. https://flightopportunities.nasa.gov/technologies/84
6	T0095-S	Test of Satellite Communication Systems on-board Suborbital Platforms	M. Brian Barnett (505) 255-2499, ext. 1 barnett@satwest.com	To test that the Iridium satellite network and equipment can provide data communications for research payloads and spacecraft tracking during suborbital. https://flightopportunities.nasa.gov/technologies/95