Flight Opportunities

UP Aerospace SL7 Sub Orbital Flight

Launch Date: June 21, 2013
Total FOP payloads: 7

#	Title/ Payload #	PI/Organization	Description/Objective
1	**T0001-PS** **Suborbital Flight Environment Monitor (SFEM)**	Payload POC: Karolyn Ronzano (650) 604-3756, karolyn.s.ronzano@nasa.gov	The Suborbital Flight Environment Monitor (SFEM) is a compact, self-contained payload that will monitor and record on-board environmental parameters of interest during a sRLV flight. These include 3-axis accelerations and G-loads, ambient pressure, relative humidity and temperature. The SFEM uses commercially available instruments. The SFEM is completely autonomous and doesn't require any operator interface during flight
2	**T0002-S** **Automatic Dependent Surveillance-Broadcast (ADS-B)**	Payload POC: Nickolas Demidovich (575) 835-5636, Nickolas.Demidovich@faa.gov	The Automatic Dependent Surveillance - Broadcast (ADS-B) is a cooperative surveillance technique for air traffic control and related applications being developed by the FAA as part of the Next Generation Air Transportation System. Current plans will require all aircraft and other flight vehicles operating within US airspace to be equipped with ADS-B by 2020. The objective is to demonstrate functionality of the ADS-B system when applied to CRuSR flight profiles. NASA is supporting the FAA in this demonstration.
3	**T0019-S** **Diapason**	Payload POC: Orazio Chiarenza (281) 244-8561, orazio.chiarenza-1@nasa.gov	The experiment tests a simple instrument (DIAPASON) for the study of nano-particle migration and capture, achieved by very small thermal gradients. The particles range from 1 micron to 1/1000 of micron. This range allows the monitoring of combustion-generated pollution, the analysis of hostile environments, and the identification of atmospheric contaminants.
4	**T0069-S** **ORS Global Positioning Beacon (GPB)**	Payload POC: Jason Armstrong (505) 846-7746, Jason.Armstrong.ctr@kirtland.af.mil	Provides GPS raw data as position source to FAA ADS-B payload. 2 Patch Antennas (will be located at access panels on avionics section) 2 Low Noise Amplifiers 1 Signal
5	**T0071-S #1** **New Mexico Space Grant (NMSG Student Payload #1)**	Payload POC: Krisiti Burden kcoogler@ad.nmsu.edu	New Mexico Space Grant Miscellaneous High School Science Payloads. 3 experiments – 1) Algae, Triops, & yeast – spaceflight effects on algae. 2) Algae survivability-compared w/control sample. 3) Flexible form factor – survivability of 3 different form factors.
6	**T0071-S #2** **New Mexico Space Grant (NMSG Student Payload #2)**	Payload POC: Krisiti Burden kcoogler@ad.nmsu.edu	New Mexico Space Grant Miscellaneous High School Science Payloads. 4 experiments - 1) Algae survival – pre & post flight cell count. 2) Flexible form factor – Nomex & Gore-Tex to contain water. 3) Bean plant survival – growth rate effect. 4) Power & Data collection – using a common data & power bus.
7	**T0077-S** **Facility for Microgravity Research & Submicroradian Stabilization**	Payload POC: Scott Green sgreen@controlled-dynamics.com	Inertial measurement unit (IMU) and data logger. Records the linear acceleration and angular rate environment throughout flight with high quality inertial sensors . Automatically configures and starts logging 1200Hz IMU data when power is applied. Startup configuration time is 1minute. Logs 10 hours of IMU data into a circular buffer on an SD flash memory card.