



May 11, 2015

FCC Office of Engineering and Technology
445 12th Street SW
Washington, DC 20554

SUBJECT: TEMPEST-D cubesat mission (FCC application # 0265-EX-CN-2017)

Ms. Leann Nguyen,

Please find details on the TEMPEST-D cubesat mission included below.

Date license is required: **February 1st, 2018**

LV integration date: **February 1st, 2018**

Launch date: **CRS15 April 2018**

Date for initiation of on-orbit operations: **NET 1 month post launch**

Expected mission duration: **12 months**

Principle Investigator for the mission.

Point of Contact Name: Dr. Steve Reising
Organization Name: Colorado State University
Address: B113 Engineering Bldg, Fort Collins, CO 80521
E-Mail: steven.reising@colostate.edu
Telephone Number: 970-491-2228

Technical point of contact for the mission.

Point of Contact Name: Matt Pallas
Organization Name: Blue Canyon Technologies
Address: 2425 55th St. Suite A-200, Boulder, CO 80301
E-Mail: mpallas@bluecanyontech.com
Telephone Number: 720-458-0703

*please also include Steve Reising on any relevant communications.

Point of contact who can terminate ALL satellite transmissions if interference is detected.

Point of Contact Name: Scott Palo, PhD
Organization Name: Blue Canyon Technologies
Address: 2425 55th St. Suite A-200, Boulder, CO 80301
E-Mail: palo@bluecanyontech.com
Telephone Number: 720-458-0703
*please also include Matt Pallas and Steve Reising on any relevant communications.

Point of contact who can terminate ALL ground station transmissions if interference is detected.

Point of Contact Name: Thomas Johnson
Organization Name: NASA/GSFC Wallops Flight Facility



Blue Canyon Technologies

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Address: Bldg U25, Wallops Is., VA, 23337

E-Mail: thomas.e.johnson@nasa.gov

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*please also include Matt Pallas, Steve Reising and Scott Palo on any relevant communications.

Point of contact for conjunction alerts.

Point of Contact Name: Matt Pallas

Organization Name: Blue Canyon Technologies

Address: 2425 55th St. Suite A-200, Boulder, CO 80301

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Project Description

The TEMPEST-D (Temporal Experiment for Storms and Tropical Systems - Demonstrator) is a 6U CubeSat mission to provide risk mitigation for the six-satellite TEMPEST mission that will provide the first temporal observations of cloud and precipitation processes on a global scale.

These observations are important to understand the linkages in and between Earth's water and energy balance, as well as to improve our understanding of cloud model microphysical processes that are vital to climate change prediction.

TEMPEST-D consists of one of the proposed TEMPEST 6U CubeSats, to raise the technology readiness level of the system to TRL 9 and to demonstrate its measurement capabilities.

The payload consists of a radiometer developed for the failed RACE mission and a High-frequency Airborne Microwave and Millimeter-wave Radiometer (HAMMR) IIP-10 radiometer.

TEMPEST-D is a science mission lead by Dr. Steve Reising at the Colorado State University. The CubeSat bus is built by Blue Canyon Technologies.