Description of Request for Special Temporary Authority

Planet Labs Inc. ("Planet Labs") hereby requests special temporary authority ("STA") to operate a proposed "UHF" earth station located in Half Moon Bay, CA for 30 days, beginning February 25, 2014. The proposed earth station will transmit at 450.0 MHz, and receive at 401.3 MHz. Testing will involve communications with Flock 1, a constellation of non-geostationary orbit ("NGSO") Earth Exploration Satellite Service ("EESS") imaging satellites[1].

As detailed in the Flock 1 application, during initial commissioning and emergency situations, the Flock 1 ground segment is designed to send telecommand signals to the Flock 1 satellites using the 450.0 MHz channel, and will receive telemetry signals from the satellites using the 401.3 MHz channel. The proposed site in Half Moon Bay, CA has been identified as a potential location for such an earth station site.

Launch of the Flock 1 satellites to the International Space Station (ISS) occurred in January 2014. Throughout the months of February and March 2014, all 28 satellites will gradually be deployed from the ISS into low earth orbit and activated. Planet Labs has an immediate need to operationally test the validity of the proposed earth station located in Half Moon Bay, CA by communicating with the Flock 1 satellites. Pending testing results during the requested 30 days, Planet Labs intends to file a follow-on application for regular authority for this earth station with identical technical parameters. Grant of this STA request will serve the public interest by allowing Planet Labs to begin immediate testing of the proposed earth station site to support operations of Flock 1.

In summary and on the basis of the information provided herein, Planet Labs requests, for a period of 30 days commencing on February 25, 2014, special temporary authority to operate its proposed earth station for testing purposes.

[1] *See* File No. SAT-LOA-20130626-00087

Technical Parameters

The following describes the technical parameters and operational constraints Planet Labs proposes to operate under.

Operation	**Frequency**
Receive (space-to-Earth)	
Digital/Telemetry Downlink	401.270 – 401.33 MHz
Transmit (Earth-to-space)	
Digital/Command Uplink	449.970 – 450.03 MHz

Polarization: horizontal and vertical

Emissions:

Freq (MHz)	**Emissions**	**Max. EIRP (dBW)**	**Max. EIRP Density (dBW/4kHz)**	**Modulation & Service**
449.970 - 450.03 MHz	60K0F1D	25.48	13.72	Digital/TC (GFSK)

Satellites: Flock 1

Conditions:

1. Operations on a non-interference basis only.
2. Operations on a non-protected basis only.
3. Planet Labs shall take extraordinary measures to ensure that the antenna does not create the potential for exposure of persons who may be within the immediate vicinity of radiofrequency radiation in excess of FCC safety guideline to prevent human exposure in excess of the FCC-specified safety limits. Warning signs, such as those discussed in the FCC's OET Bulletin 65, shall be posted informing members of the public to keep outside the exposure area that exceeds limit.