

S2912 SAT-STA-20170225-00022 IB2017000500
Planet Labs Inc.
Flock



File # SAT-STA-20170225-00022

Call Sign S2912 Grant Date 03/16/17
(or other identifier)

Term Dates period of
From 03/16/17 To: 30 days

Approved by OMB
3060-0678

Approved: Stephen J. Duall

Stephen J. Duall
Chief, Satellite Policy Branch

*with conditions

Date & Time Filed: Feb 25 2017 3:45:44:730PM
File Number: SAT-STA-20170225-00022
Callsign:

FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

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APPLICANT INFORMATION



Enter a description of this application to identify it on the main menu:

Inuvik Ground Station STA

1. Applicant

Name:	Planet Labs Inc.	Phone Number:	415-829-3313
DBA Name:		Fax Number:	415-534-8992
Street:	346 9th St.	E-Mail:	mike@planet.com
City:	San Francisco	State:	CA
Country:	USA	Zipcode:	94103 -
Attention:	Michael Safyan		

ATTACHMENT TO GRANT
Planet Labs Inc.
IBFS File No. SAT-STA-20170225-00022

IBFS File No(s):	SAT-STA-20170225-00022	<p>GRANTED – With Conditions</p>  <p>International Bureau Satellite Division</p>
Licensee/Grantee:	Planet Labs Inc.	
Call Sign:	S2912	
Satellite Name:	Flock	
Orbital Location: (required station-keeping tolerance)	NGSO at altitudes between 350 km and 660 km	
Administration:	United States of America	
Nature of Service:	Earth Exploration Satellite Service	
Scope of Grant:	Special temporary authority for a period of 30 days, commencing March 14, 2017, to allow all satellites in the Planet Labs constellation to operate in the 8025-8400 MHz frequency band with the Kongsberg Satellite Services (KSAT) ground station in Troll, Antarctica and the Swedish Space Corporation (SSC) ground station in Punta Arenas, Chile. ¹	
Service Area(s):	See Scope of Grant	
Frequencies:	8025-8400 (space-to-Earth) (remote sensing data)	
<p>Unless otherwise specified herein, operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission's rules not waived herein.</p> <p style="margin-left: 40px;">1. Planet Labs shall avoid interfering with existing space agency missions using the same ground stations by yielding priority to said missions when scheduling conflicts arise.</p>		
<p>Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.</p> <p>This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.</p> <p>Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).</p>		
Action Date:	March 16, 2017	
Term Dates	From: March 16, 2017	To: period of 30 days
<p>Approved:</p> <div style="text-align: center;">  Stephen J. Duall Chief, Satellite Policy Branch </div>		

¹ Condition 8 of the space station authorization for the Planet Labs constellation lists specific earth station locations to which the satellites are authorized to transmit in the 8025-8400 MHz frequency band. See File No. SAT-MOD-20150802-00053. The Troll and Punta Arenas earth stations are not included in the list of Condition 8. This grant of STA authorizes transmissions to the Troll and Punta Arenas earth stations on a temporary basis, but does not otherwise change the terms and limitations of Condition 8.

2. Contact

Name:	Tony Lin	Phone Number:	202-637-5795
Company:	Hogan Lovells US LLP	Fax Number:	
Street:	555 13th Street, NW	E-Mail:	tony.lin@hoganlovells.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20004 -
Attention:		Relationship:	Legal Counsel

(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)

3. Reference File Number or Submission ID

4a. Is a fee submitted with this application?

- If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).
- Governmental Entity Noncommercial educational licensee
- Other (please explain):

4b. Fee Classification CXW – Space Station (Non-Geostationary)

5. Type Request

- Change Station Location Extend Expiration Date Other

6. Temporary Orbit Location

7. Requested Extended Expiration Date

8. Description (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)

Applicant seeks special temporary authority to communicate with the Kongsberg Satellite Services ground stations in Troll, Antarctica and Punta Arenas, Chile for 30 days.

9. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of "party to the application" for these purposes. Yes No

10. Name of Person Signing
Michael Safyan

11. Title of Person Signing
Director of Launch and Regulatory Affairs

12. Please supply any need attachments.

Attachment 1: Narrative

Attachment 2:

Attachment 3:

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT
(U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION
(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104-13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

Request for Special Temporary Authority

Planet Labs Inc. (“Planet”) hereby requests special temporary authority (“STA”) for 30 days,¹ beginning on March 14, 2017, to modify Condition 8 of the Planet satellite license² and allow all satellites in the Planet constellation to communicate in the 8025-8400 MHz band on a temporary basis with the Kongsberg Satellite Services (“KSAT”) ground stations in Troll, Antarctica and Punta Arenas, Chile.³ On February 15, 2017, Planet successfully launched 88 Dove satellites into orbit.⁴ As a result of this increase in the number of satellites, Planet requires additional downlink capacity, beyond the capability of its current ground station network, to support the transmission of imaging data from its 132-satellite constellation.

Planet is currently in the process of obtaining a license for an earth station in Inuvik, Canada, which will be used long term to support the additional downlink capacity needs.⁵ Unfortunately, the process has been delayed. Planet will not be able to obtain the necessary Canadian license or coordinate use of that station with the required U.S. agencies in a timely manner.

The International Bureau (“Bureau”) has previously found that the grant of STAs permitting earth stations to communicate with satellites pending the processing of permanent applications serves the public interest, convenience, and necessity by allowing for the deployment of new and additional satellite services in a timely manner.⁶ Further, Planet has commenced coordination for the temporary use of the KSAT ground stations with the relevant U.S. federal agencies and expects completion prior to the requested STA commencement date.⁷ Accordingly, Planet requests that the Bureau expeditiously grant this STA.

¹ See 47 C.F.R. § 25.120(b)(4).

² See Stamp Grant, IBFS File No. SAT-MOD-20150802-00053 at Condition 8 (granted Sept. 15, 2016) (limiting transmissions in the 8025-8400 MHz band to certain ground stations) (“Planet License”).

³ With respect to the operations in the 8025-8400 MHz frequency band, the technical characteristics of the Troll, Antarctica and Punta Arenas, Chile ground stations are similar to Planet’s Maddock, North Dakota ground station. See IBFS File No. SES-LIC-20150120-00021 (granted Sept. 30, 2015). Attached as Exhibit A is a chart of the relevant technical information for the requested operations in the 8025-8400 MHz band for the two KSAT ground stations. Although not relevant to this application, the ground stations will also communicate with the Planet satellites in the S-band frequencies.

⁴ See Glenn Fleishman, *Planet Labs Goes for Record 88-Satellite Launch*, AIRSPACEMAG.COM (Feb. 14, 2017), <http://www.airspacemag.com/daily-planet/planet-labs-goes-record-88-satellite-launch-180962178/>.

⁵ In accordance with its licensing condition, Planet intends to file a modification application to allow for transmissions in the 8025-8400 MHz band to the Inuvik ground station. See Planet License at Condition 8.

⁶ See, e.g., Stamp Grant, Spire Global, Inc., SES-STA-201660324-00292 to 00294 (granted Apr. 19, 2016); Stamp Grant, DG Consents Sub, Inc., SES-STA-20140717-00605 (granted Aug. 12, 2014); Stamp Grant, EchoStar Broadcasting Corporation, SES-STA-20130108-00019 (granted Jan. 10, 2013).

⁷ In the event that coordination with the relevant U.S. federal agencies for the temporary use of the KSAT ground stations is not completed by March 14, 2017, and the grant of the STA is conditioned on that coordination, Planet requests that the term of this STA not begin until after the coordination is completed.

Exhibit A
Earth Station Information

Site Address	Latitude/ Longitude	Number of Antennas	Manufacturer	Diameter (m)	Peak Gain (dBi)	3dB Beamwidth (deg)	Polarization
Troll Research Station, Jutulsessen, Queen Maud Land, Antarctica	72°0'45.08"S/ 2°31'56.06"E (-72.012522/ 2.532239)	2	Orbital Systems	3.7m	48	0.67	RHCP
Route 9 North, km. 28 Punta Arenas, Chile	52°56'17.16"S/70°51'25.92"W (-52.9381/ -70.8572)	1	ViaSat	7.3m	54	0.23	RHCP