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June 29, 2016

## 2016 ANNUAL REPORT

### FILED VIA MYIBFS

Ms. Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

Subject: Planet Labs Inc.  
2016 Annual Report  
Space Station Call Sign S2912

Dear Ms. Dortch:

Planet Labs Inc. (“Planet Labs”), licensee of the authorized remote sensing satellite systems operating under Call Sign S2912, hereby submits this report on the operation of the satellite system for the 2016 annual period from June 1, 2015 to May 31, 2016. This report is being filed pursuant to Section 25.170 of the Commission’s rules.

### **I. STATUS OF THE SATELLITE SYSTEM**

On December 03, 2013, the Commission granted Planet Labs authority to construct, launch, and operate a non-geostationary-orbit (“NGSO”) satellite system consisting of twenty eight (28) Earth Exploration Satellite Service (“EESS”) satellites – collectively known as Flock 1 – that operates in the 8025-8400 MHz frequency bands and receives command signals in the 2025-2110 MHz band.<sup>1</sup> Planet Labs was also authorized to use the 401-402 MHz and 449.75-450.25 MHz<sup>2</sup> bands for early-phase and emergency-backup telemetry, tracking, and command operation.

On June 18, 2014 the Commission granted Planet Labs authority to construct, launch and operate an additional twenty eight (28) NGSO EESS satellites – collectively known as Flock 1b – and eleven (11) NGSO EES spacecraft – collectively known as Flock 1c – as a Modification to the original grant of authority.<sup>3</sup>

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<sup>1</sup> *Planet Labs Inc.*, Stamp Grant, File No. SAT-LOA-20130626-00087 (released December 03, 2013).

<sup>2</sup> *Ibid.*

<sup>3</sup> *Planet Labs Inc.*, Stamp Grant, File No. SAT-MOD-20140321-00032 (released June 18, 2014)



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The Commission granted a further Modification on October 23, 2014 to maintain a continuous fleet of up to fifty six (56) NGSO EESS satellites in an orbit just below the International Space Station (“ISS”). To maintain such a fleet, the Commission granted the authority to launch up to five hundred (500) satellites to that orbit over the next 10 years due to the short orbital lifetime of the satellites in that particular orbit.<sup>4</sup>

On June 15, 2016 the Commission granted-in-part / deferred-in-part a Modification in Planet Labs authority to construct, deploy, and operate up to six hundred (600) NGSO EESS satellites in addition to those satellites already deployed and currently operational. The satellites will be deployed at altitudes between 350 km and 660 km and will transmit remote sensing and telemetry data to fixed earth stations in the 80-8400 MHz and receive command signals in the 2025-2110 MHz frequency band, and use 401-402 MHz and 449.75-450.25 MHz frequency bands for early-phase and emergency-backup TT&C, and ranging and orbit determination on a nonemergency basis. A portion of this grant is deferred, specifically related to the launch of Flock 2c on the Spaceflight Falcon 9/SHERPA mission, until such time as a resolution can be reached with regards to the concerns raised in Orbcomm’s petition<sup>5</sup> related to the filing.<sup>6</sup>

Table 1 summarizes the prior launches of Planet Labs’ satellites operating under Call Sign S2912.

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<sup>4</sup> *Planet Labs Inc.*, Stamp Grant, File No. SAT-MOD-20140912-00100 (released October 23, 2014)

<sup>5</sup> *ORBCOMM License Corp.*, Petition to Dismiss, Deny or Hold in Abeyance, File No. SAT-MOD-20150802-00053 (filed Jan. 19, 2016)

<sup>6</sup> *Planet Labs Inc.*, Stamp Grant, File No. SAT-MOD-20150802-00053 (released June 15, 2016)



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Table 1 – Prior Launches of Planet Labs’ Satellites

<b>Name</b>	<b>No. of Satellites</b>	<b>Launch Vehicle</b>	<b>Orbit</b>	<b>Launch Date</b>	<b>Launch Status</b>
Flock 1	28	Antares (Cygnus)	ISS	1/9/2014	Successful Launch
Flock 1c	11	Dnepr	620 km SSO	6/19/2014	Successful Launch
Flock 1b	28	Antares (Cygnus)	ISS	7/13/2014	Successful Launch
Flock 1d	26	Antares (Cygnus)	ISS	10/24/2014	Failed Launch
Flock 1d’	2	Falcon 9 (Dragon)	ISS	1/10/2015	Successful Launch
Flock 1e	14	Falcon 9 (Dragon)	ISS	4/13/2015	Successful Launch
Flock 1f	8	Falcon 9 (Dragon)	ISS	6/28/2015	Failed Launch
Flock 2b	14	H-IIB (HTV-5)	ISS	8/19/2015	Successful Launch
Flock 2e	12	Atlas V (OA-4)	ISS	12/6/2015	Successful Launch
Flock 2e’	20	Atlas V (OA-6)	ISS	3/23/2016	Successful Launch
Flock 2p	12	PSLV	505 km SSO	6/22/2016	Successful Launch

**II. CONTACT PERSON FOR RESOLUTION OF INTERFERENCE PROBLEMS AND FOR EMERGENCY PURPOSES**

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### III. CONSTRUCTION PROGRESS AND ANTICIPATED LAUNCH DATES

Table 2 - Summary of Flock satellite status, as of May 31, 2016.

Satellite Name	Status
Flock 1-1 to Flock 1-28	De-orbited
Flock 1b-1 to Flock 1b-28	De-orbited
Flock 1c-1 to Flock 1c-11	<b>5 satellites Operational;</b> 6 satellites Non-Operational
Flock 1d-1 to Flock 1d-26	Failed Launch
Flock 1d <sup>1</sup> -1, Flock 1d <sup>2</sup> -2	De-orbited
Flock 1e-1 to Flock 1e-14	<b>6 satellites Operational;</b> 8 De-orbited
Flock 1f-1 to Flock 1f-8	Failed Launch
Flock 2b-1 to Flock 2b-14	<b>10 satellites Operational;</b> 2 De-orbited
Flock 2e-1 to Flock 2e-12	<b>Operational</b>
Flock 2e <sup>1</sup> -1 to Flock 2e <sup>2</sup> -20	<b>12 satellites Operational;</b> 8 on ISS awaiting deploy
Flock 2p-1 to Flock 2p-12	<b>Operational<sup>7</sup></b>

Respectfully submitted,

**PLANET LABS INC.**

By:

s/ Michael Safyan

Michael Safyan

Director of Launch and Regulatory Affairs

Planet Labs Inc.

<sup>7</sup> Flock 2p began operations after May 31, 2016, but is included in this report for completeness.