

**Spire Global, Inc.**

8000 Towers Crescent Drive  
Suite 1225, Vienna,  
VA 22182, United States  
spire.com

June 25, 2020

**VIA IBFS**

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

**Re: Spire Global, Inc. 2020 Annual Report for IBFS Call Signs S2946 and S3045**

Dear Ms. Dortch,

Spire Global, Inc. (“Spire”), licensee of the authorized LEMUR-2 satellite system operating under Call Sign S2946 and holder of the market access grant of the MINAS satellite system operating under Call Sign S3045, hereby submits its 2020 Annual Report (“Report”), which contains details on the operation of its satellite system from June 1, 2019 to May 31, 2020 and anticipated launch dates for future satellites to be added to the system.

This Report is being filed pursuant to Section 25.170 of the Commission’s rules.<sup>1</sup>

**I. Status of the Satellite System**

Spire has launched and deployed twenty-eight (28) of its authorized Phase IA<sup>2</sup> LEMUR-2 satellites of which twenty-eight (28) remain on orbit, twenty-eight (28) of its authorized Phase IB<sup>3</sup> LEMUR-2 satellites of which twenty-eight (28) remain on orbit, twenty-four (24) of its

<sup>1</sup> See 47 C.F.R. § 25.170.

<sup>2</sup> See Stamp Grant, Spire Global, Inc., File No. SAT-LOA-20151123-00078 (granted in part and deferred in part Mar. 18, 2016, as corrected Mar. 24, 2016); Stamp Grant, Spire Global, Inc., File No. SAT-LOA- 20151123- 00078 (granted in part and deferred in part June 16, 2016); Stamp Grant, Spire Global, Inc., File No. SAT-LOA- 20151123-00078 (granted in part and deferred in part Oct. 14, 2016).

<sup>3</sup> See Stamp Grant, Spire Global, Inc., IBFS File No. SAT-AMD-20161114-00107 (granted in part and deferred in part Apr. 7, 2017); Stamp Grant, Spire Global, Inc., IBFS File No. SAT-AMD-20161114- 00107 (granted in part and deferred in part May 18, 2017); Stamp Grant, Spire Global, Inc., File No. SAT-AMD-20180102-00001 (granted in part and deferred in part Nov. 29, 2018).

authorized Phase IC<sup>4</sup> LEMUR-2 satellites of which twenty-four (24) remain on orbit, and zero (0) of its authorized Phase II<sup>5</sup> LEMUR-2 satellites.

LEMUR-2 Satellite	# of Satellites	Launch Vehicle	Orbit	Deployment Date	Deployment Status	Operational Status
Phase 1A	4	PSLV	650	9/28/2015	Successful	4 satellites on orbit
Phase 1A	4	Atlas V	400/ISS	05/18/2016	Successful	4 satellites on orbit
Phase 1A	4	Atlas V	≈385	06/21/2016	Partially Successful <sup>4</sup>	4 satellites on orbit
Phase 1A	4	Antares	500	11/25/2016	Successful	4 satellites on orbit
Phase 1A	4	H2B	400/ISS	03/6/2017	Successful	4 satellites deorbited
Phase 1A	8	PSLV	500	02/15/2017	Successful	8 satellites on orbit
Phase 1B	4	Atlas V	480	06/08/2017	Successful	4 satellites on orbit
Phase 1B	8	PSLV	500	06/23/2017	Successful	8 satellites on orbit
Phase 1B	8	Soyuz	600	07/14/2017	Successful	8 satellites on orbit
Phase 1B	4	Antares	445	12/06/2017	Successful	4 satellites on orbit
Phase 1B	4	PSLV	505	01/12/2018	Successful	4 satellites on orbit

<sup>4</sup> One LEMUR-2 satellite remained onboard the Cygnus OA-6 and was not deployed because of a failure in the deployment door. The satellite was destroyed upon reentry of the Cygnus OA-6 into the Earth's atmosphere. See Letter from Tony Lin, Counsel, Spire, to Marlene H. Dortch, Secretary, Federal Communications Commission, IBFS File No. SAT-LOA-20151123-00078 (filed June 29, 2016).

--	10	Soyuz	--	11/28/2017	Launch Failure	--
Phase 1C	4	Antares	445	12/6/2017	Successful	4 satellites on orbit
Phase 1C	4	Soyuz	585	02/01/2018	Successful	4 satellites on orbit
Phase 1C	4	Antares	445	7/15/2018	Successful	4 satellites on orbit
Phase 1C	8	Soyuz	530	07/05/2019	Successful	8 satellites on orbit
Phase 1C	4	PSLV	550	12/11/2019	Successful	4 satellites on orbit

**Table 1. LEMUR-2 satellites operating under the IBFS Call Sign S3045**

Spire has launched and deployed twelve (12) of its authorized MINAS satellites of which twelve (12) remain on orbit.<sup>5</sup>

MINAS Satellite	# of Satellites	Launch Vehicle	Orbit	Deployment Date	Deployment Status	Operational Status
MINAS	8	Soyuz	585	12/27/2018	Successful	8 satellites on orbit
MINAS	4	PSLV	505	04/01/2019	Successful	4 satellites on orbit

**Table 2. MINAS satellites operating under the IBFS Call Sign S2946**

## II. Contact Persons

Responsible for emergency purposes, resolution of interference problems, long-term engineering, and technical design issues

<sup>5</sup> See Stamp Grant, Spire Global, Inc., IBFS File No. SAT-PDR-20190321-00018 (granted in part and deferred in part October 7, 2019).

Vincent Furia  
Director, Space Operations  
[ops@spire.com](mailto:ops@spire.com)  
+1-415-356-3400 x307

III. Construction Progress and Anticipated Launch Dates for Authorized Replacement Satellites

Table 2 below contains anticipated launch dates for Spire's upcoming launches for its Phase IC<sup>6</sup> LEMUR-2 constellation.

LEMUR-2 Satellite	# of Satellites	Launch Date
Phase 1C	8	2Q 2020
Phase 1C	2	3Q 2020
Phase II	6	3Q 2020
Phase II	9	4Q 2020
MINAS	1	4Q 2020

**Table 2. Anticipated launch dates for future LEMUR-2 satellites operating under the IBFS Call Sign S2946**

Please direct any questions regarding this filing to the undersigned.

Sincerely,

/s/ Michelle A. McClure

---

Michelle A. McClure  
Regulatory & Legislative Counsel  
[michelle.mcclure@spire.com](mailto:michelle.mcclure@spire.com)  
+1-202-734-6883

---

<sup>6</sup> See Stamp Grant, Spire, IBFS File No. SAT-AMD-20161114-00107 (granted July 13, 2017).