

RADIO STATION AUTHORIZATION

Name: SES Americom, Inc. Call Sign: E170139

Authorization Type: Modification of License File Number: SES-MFS-20191223-01767

Non Common Carrier Grant date: 12/14/2020 Expiration Date: 10/03/2032

Nature of Service: Fixed Satellite Service

Class of Station: Fixed Earth Stations

A) Site Location(s)

# Site ID	Address	Latitude	Longitude	Elevation (Meters)	Special Provisions NAD (Refer to Section H)
1) 1	5990 Solano Verde Dr (South Mountain) Somis, Ventura, CA 93066	34°19'32.3"N	118°59'43.2"W	5.49	83
	Licensee certifies antenna(s)	comply with g	ain patterns spe	ecified in	Section 25.209

Subject to the provisions of the Communications Act of 1934, The Communications Satellite Act of 1962, subsequent acts and treaties, and all present and future regulations made by this Commission, and further subject to the conditions and requirements set forth in this license, the grantee is authorized to construct, use and operate the radio facilities described below for radio communications for the term beginning October 3, 2017 (3 AM Eastern Standard Time) and ending October 3, 2032 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is December 14, 2021 (3 AM Eastern Standard Time). Grantee must file with the Commission a certification upon completion of construction and commencement of operation.

B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands.

The General Provision 1900 applies to all transmitting frequency bands.

For the text of these provisions, refer to Section H.

roi u	ie text of these provisions, refe	a to section in			Max EIRP	Max EIRP Density		Special Provisions			
#	Frequency (MHz)	Polarizatio Code	n Emission	Tx/Rx Mode	/Carrier (dBW)	/Carrier (dBW/4kHz)	Associated Antenna	(Refer to Section H)	Modulation/ Services		
1) 1	7300.0000-17550.0000	H,V	100KG7W	Tx	58.28	44.28	SM-K06		Digital Data		
2) 1	7300.0000-17550.0000	H,V	36M0G7W	Tx	83.72	44.28	SM-K06		Digital Data		
3) 1	7300.0000-17550.0000	Н,∨	NON	Tx	44.28	44.28	SM-K06		Unmodulated Carrier	i	Analog
4) 1	4000.0000-14500.0000	H,V	NON	Tx	52.10	52.10	SM-K06		CW Carrier		
5)1	4000.0000-14500.0000	H,V	100KG7W	Tx	60.08	46.10	SM-K06		Digital Data		
6) ₁	4000.0000-14500.0000	H,V	36M0G7W	Tx	85.60	46.10	SM-K06		Digital Data		
7) 1	4000.0000-14500.0000	H,V	54M0G7W	Tx	87.10	45.80	SM-K06		Digital data		
8) 1	4000.0000-14500.0000	H,V	72M0G7W	Tx	87.10	44.55	SM-K06		Digital Data		
9)1	4000.0000-14500.0000	H,V	1M00F9D	Tx	77.94	52.10	SM-K06		Telecommand the satellite	Carrier	to

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Frequency # (MHz)	Polarizatio Code	on Emission	Tx/Rx Mode	/Carrier (dBW)		Associated Antenna	(Refer to Section H)	Modulation/ Services
10) 13750.0000-14000.0000	H, V	1M82F9D	Tx	68.00	39.50	SM-K06		Digital Data
11) 13750.0000-14000.0000	H, V	1M82G7W	Tx	68.00	39.50	SM-K06		Digital Data
12) 13750.0000-14000.0000	H, V	1M82G7W	Tx	68.00	39.50	SM-K06		Digital Data
13) 13750.0000-14000.0000	H, V	36M0G7W	Тx	79.00	39.50	SM-K06		Digital Data
14) 13750.0000-14000.0000	H, V	54M0G7W	Тx	80.80	39.50	SM-K06		Digital Data
15) 13750.0000-14000.0000	H, V, L, F	R 72M0G7W	Tx	82.00	39.50	SM-K06		Digital Data
16) 11700.0000-12200.0000	H, V	NON	Rx			SM-K06		CW Carrier
17) 11700.0000-12200.0000	H, V	100KG7W	Rx			SM-K06		Digital Data
18) 11700.0000-12200.0000	H, V	36M0G7W	Rx			SM-K06		Digital Data
19) 11700.0000-12200.0000	H, V	54M0G7W	Rx			SM-K06		Digital Data
20) 11700.0000-12200.0000	H, V	72M0G7W	Rx			SM-K06		Digital Data
21) 11700.0000-12200.0000	H, V	500KG9D	Rx			SM-K06		Telemetry Carrier
22) 11450.0000-11700.0000	H, V	NON	Rx			SM-K06		CW Carrier
23) 11450.0000-11700.0000	H, V	100KG7W	Rx			SM-K06		Digital Data
24) 11450.0000-11700.0000	H, V	36M0G7W	Rx			SM-K06		Digital Data
25) 11450.0000-11700.0000	H, V	54M0G7W	Rx			SM-K06		Digital Data
26) 11450.0000-11700.0000	H, V	72M0G7W	Rx			SM-K06		Digital Data
27) 11450.0000-11700.0000	H, V	500KG9D	Rx			SM-K06		Telemetry Carrier
28) 11200.0000-11450.0000	H, V	NON	Rx			SM-K06		CW Carrier
29) 11200.0000-11450.0000	H, V	100KG7W	Rx			SM-K06		Digital Data
30) 11200.0000-11450.0000	H, V	36M0G7W	Rx			SM-K06		Digital Data
31) 11200.0000-11450.0000	H, V	54M0G7W	Rx			SM-K06		Digital Data
32) 11200.0000-11450.0000	H, V	72M0G7W	Rx			SM-K06		Digital Data
33) 11200.0000-11450.0000	H, V	500KG9D	Rx			SM-K06		Telemetry Carrier

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B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands. The General Provision 1900 applies to all transmitting frequency bands.

For the text of these provisions, refer to Section H.

#	Frequency (MHz)	Polarization	on Emission	Tx/Rx Mode	Max EIRP /Carrier (dBW)	Associated Antenna	Special Provisions (Refer to Section H)	Modulation/ Services
34)	10950.0000-11200.0000	H, V	NON	Rx		SM-K06		CW Carrier
35)	10950.0000-11200.0000	H,V	36M0G7W	Rx		SM-K06		Digital Data
36)	10950.0000-11200.0000	H,V	54M0G7W	Rx		SM-K06		Digital Data
37)	10950.0000-11200.0000	H,V	72M0G7W	Rx		SM-K06		Digital Data
38)	10950.0000-11200.0000	H,V	100KG7W	Rx		SM-K06		Didgital Data
39)	10950.0000-11200.0000	H,V	500KG9D	Rx		SM-K06		Telemetry Carrier
40)	10700.0000-10950.0000	H,V	NON	Rx		SM-K06		CW Carrier
41)	10700.0000-10950.0000	H,V	100KG7W	Rx		SM-K06		Digital Data
42)	10700.0000-10950.0000	H , V	36M0G7W	Rx		SM-K06		Digital Data
43)	10700.0000-10950.0000	H , V	54M0G7W	Rx		SM-K06		Digital Data
44)	10700.0000-10950.0000	H , V	72M0G7W	Rx		SM-K06		Digital Data
45)	10700.0000-10950.0000	H,V	500KG9D	Rx		SM-K06		Telemetry Carrier

C) Frequency Coordination Limits

#	Frequency Limits (MHz)	Satellite Arc (Deg. Long.) East West Limit Limit	Elevation (Degrees) East West Limit Limit	Azimuth (Degrees) East West Limit Limit	110112011	
1)	10700.0000-10950.0000	52.0W-174.0W	10.3-10.3	103.5-256.6	SM-K06	
2)	11200.0000-11450.0000	52.0W-174.0W	10.3-10.3	103.5-256.6	SM-K06	
3)	13750.0000-14000.0000	52.0W-174.0W	10.3-10.3	103.5-256.6	-13.9 SM-K06	
4)	14000.0000-14500.0000	52.0W-174.0W	10.3-10.3	103.5-256.6	-7.3 SM-K06	
5)	10950.0000-11200.0000	52.0W-174.0W	10.3-10.3	103.5-256.6	SM-K06	
6)	11450.0000-11700.0000	52.0W-174.0W	10.3-10.3	103.5-256.6	SM-K06	
7)	11700.0000-12200.0000	52.0W-174.0W	10.3-10.3	103.5-256.6	SM-K06	
8)	17300.0000-17550.0000	52.0W-186.0W	10.3-10.3	103.5-256.5	10.73 SM-K06	

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D) Points of Communications

The following stations located in the Satellite orbits consistent with Sections B and C of this Entry:

- 1) 1 to Permitted Space Station List
- 2) 1 to SES-15 (S2951) @ 129.15 degrees W.L. (United Kingdom-licensed)
- 3) 1 to SES-10 (S2950) @ 66.9 degrees W.L. (Colombia-licensed)

E) Antenna Facilities

	Site ID	Antenna ID	Units	Diameter (meters)	Manufacturer	Model number	Site Elevation (Meters)	Max Antenna Height (Meters)	Special Provisions (Refer to Section H)
1		SM-K06	1	9	GD Satcom	9.0M.	5.49	9.7 AGL/ 322.7 AMSL	
	Max	Gains(s): 17.5	60.1 5000 GH	dBi @ z	14.1250 GHz	58.5 dBi @ 11.725	0 GHz	61.9 dBi @	
	Maximum total input power at antenna flange (Watts) = 2,000.00								
	Maxi	.mum aggregate d	output :	EIRP for	all carriers (dBW	93.10			

G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions

H) Special and General Provisions

- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
 - 4 --- Licensee must ensure that a current listing of the name, title, mailing address, email address, and telephone number of the responsible point of contact are on file at the FCC. Any changes must be filed electronically in the International Bureau Filing System (MyIBFS) using the "Pleadings and Comments" link on the MyIBFS homepage within 10 days of the change.
 - 5 --- Licensee must notify the Commission when this earth station is no longer operational or when it has not been used to provide any service during any 6-month operation.
 - 6 --- Licensee must comply with the license modification and notification requirements of 47 CFR § 25.118 to change the coordinates of its authorized earth station.
- 90397 --- Telemetry, tracking and command (TT&C) operations identified in part B, Particulars of Operation in this authorization may be transmitted within the assigned bands that are not at a band edge only if the transmissions cause no greater interference and require no greater protection from harmful interference than the communications traffic on the satellite network or have been coordinated with operators of authorized co-frequency space stations at orbital locations within six degrees of the assigned orbital location. Frequencies, polarization, and coding of telemetry, tracking, and command transmissions must be selected to minimize interference into other satellite networks.

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H) Special and General Provisions

- A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:
- 90398 --- Changes to previously authorized transmitting facilities, operations and devices regulated by the Commission that may have significant environmental impact, and are not excluded by §1.1306, require the preparation of an Environmental Assessment (EA) by the licensee. (See 47 C.F.R. §§1.1307, 1.1308 and 1.1311)
- 90399 --- The licensee shall, at all times, take all necessary measures to ensure that operation of this (these) authorized earth station(s) does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310. Physical measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions, such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling, or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
- 90448 --- In the 17.3-17.55 GHz (Earth-to-space) operations are limited to operating with SES-10 (S2950). All operations must comply with conditions reflected in grant of SAT-PPL-20160117-00005.
- 90449 --- For operations with SES-10 (S2950) only. All operations are on a Non-Protected and Non-Interference basis.
- 900407 --- The Permitted Space Station List (Permitted List) is a list of all geostationary space stations providing fixed-satellite service pursuant to a Commission license or grant of U.S. market access. The Permitted List currently includes the following frequency bands per §25.103 and §25.115(k)(1):

3600-4200 MHz (space-to-Earth)

5850-6725 MHz (Earth-to-space)

10.95-11.2 GHz (space-to-Earth)

11.45-12.2 GHz (space-to-Earth)

13.75-14.5 GHz (Earth-to-space)

18.3-18.8 GHz (space-to-Earth)

19.7-20.2 GHz (space-to-Earth)

24.75-25.25 GHz (Earth-to-space)

28.35-28.6 GHz (Earth-to-space)

29.25-30.0 GHz (Earth-to-space).

Earth stations with "Permitted List" designated as a point of communication may access any space station on the Permitted List, provided the operations comply with the applicable "routine" uplink and downlink limits, are within the specific frequency bands authorized in the earth station license, have completed coordination with terrestrial stations pursuant to §25.203, and otherwise comply with all terms and conditions of both the earth station license and the space station grant.

900614 --- Operations in the BSS frequency band 17.3-17.55 GHz (Earth-to-space) with space station SES-10 (Call Sign 2950) at orbital location 66.9 °W are pursuant to condition 5 of New Skies Satellite B.V. authorization FCC IBFS File Number SAT-MPL-20170108-00002.



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B) This RADIO STATION AUTHORIZATION is granted subject to the additional conditions specified below:

This authorization is issued on the grantee's representation that the statements contained in the application are true and that the undertakings described will be carried out in good faith.

This authorization shall not be construed in any manner as a finding by the Commission on the question of marking or lighting of the antenna system should future conditions require. The grantee expressly agrees to install such marking or lighting as the Commission may require under the provisions of Section 303(q) of the Communications Act. 47 U.S.C. § 303(q).

Neither this authorization nor the right granted by this authorization shall be assigned or otherwise transferred to any person, firm, company or corporation without the written consent of the Commission. This authorization is subject to the right of use or control by the government of the United States conferred by Section 706 of the Communications Act. 47 U.S.C. § 706. Operation of this station is governed by Part 25 of the Commission's Rules. 47 C.F.R. Part 25.

This authorization shall not vest in the licensee any right to operate this station nor any right in the use of the designated frequencies beyond the term of this license, nor in any other manner than authorized herein.

This authorization is issued on the grantee's representation that the station is in compliance with environmental requirements set forth in Section 1.1307 of the Commission's Rules. 47 C.F.R. § 1.1307.

This authorization is issued on the grantee's representation that the station is in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules. 47 C.F.R.§ 17.4.

The following condition applies when this authorization permits construction of or modifies the construction permit of a radio station.

This authorization shall be automatically forfeited if the station does not meet each required construction deadline by the required date of completion unless, before such date(s), a specific application is timely filed to request an extension of the construction deadline(s), supported with good cause why that failure to construct by the required date was due to factors not under control of the grantee.

Licensees are required to pay annual regulatory fees related to this authorization. The requirement to collect annual regulatory fees from regulates is contained in Public Law 103-66, "The Omnibus Budget Reconciliation Act of 1993." These regulatory fees, which are likely to change each fiscal year, are used to offset costs associated with the Commission's enforcement, public service, international and policy and rulemaking activities. The Commission issues a Report and Order each year, setting the new regulatory fee rates. Receive only earth stations are exempt from payment of regulatory fees.

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