



UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

RADIO STATION AUTHORIZATION

Name: SES Americom, Inc.

Call Sign: E170090

Authorization Type: Modification of License

File Number: SES-MOD-20190827-01112

Non Common Carrier

Grant date: 12/14/2020

Expiration Date: 11/09/2032

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. Somis, Ventura, CA 93066	34°19'31.2"N	118°59'43.6"W	308	83

Licensee certifies antenna(s) comply with gain patterns specified 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 November 9, 2017 (3 AM Eastern Standard Time) and ending November 9, 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.

#	Frequency (MHz)	Polarization Code	Emission	Tx/Rx Mode	Max EIRP /Carrier (dBW)	Max EIRP Density /Carrier (dBW/4kHz)	Associated Antenna	Special Provisions (Refer to Section H)	Modulation/ Services
1)	17300.0000-17550.0000	H, V	100KG7W	Tx	56.88	42.88	SMK5		Digital data
2)	17300.0000-17550.0000	H, V	36M0G7W	Tx	82.42	42.88	SMK5		Digital data
3)	17300.0000-17550.0000	H, V	N0N	Tx	42.88	42.88	SMK5		Unmodulated carrier analog
4)	14000.0000-14500.0000	H, V	100KG7W	Tx	57.10	43.10	SMK5		Digital data
5)	14000.0000-14500.0000	H, V	54M0G7W	Tx	84.40	43.10	SMK5		Digital data
6)	14000.0000-14500.0000	H, V	N0N	Tx	49.10	49.10	SMK5	90449	Analog CW carrier
7)	14000.0000-14500.0000	H, V	800KF9D	Tx	72.10	49.10	SMK5	90449	Analog command carrier
8)	13770.0000-13780.0000	H, V	6M00G7W	Tx	68.06	36.30	SMK5		Digital data
9)	13750.0000-14000.0000	H, V	2M83G7W	Tx	68.00	39.50	SMK5		Digital data



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10)	13750.0000-14000.0000	H, V	54M0G7W	Tx	77.60	36.30	SMK5		Digital data
11)	13750.0000-14000.0000	H, V	5M93G7W	Tx	68.00	36.30	SMK5		Digital data
12)	11700.0000-12200.0000	H, V	100KG7W	Rx	0.00	0.00	SMK5		Digital data
13)	11700.0000-12200.0000	H, V	54M0G7W	Rx	0.00	0.00	SMK5		Digital data
14)	11450.0000-11700.0000	H, V	100KG7W	Rx	0.00	0.00	SMK5		Digital data
15)	11450.0000-11700.0000	H, V	54M0G7W	Rx	0.00	0.00	SMK5		Digital data
16)	10950.0000-11200.0000	H, V	100KG7W	Rx	0.00	0.00	SMK5		Digital data
17)	10950.0000-11200.0000	H, V	54M0G7W	Rx	0.00	0.00	SMK5		Digital data

C) Frequency Coordination Limits

#	Frequency Limits (MHz)	Satellite Arc (Deg. Long.)		Elevation (Degrees)		Azimuth (Degrees)		Max EIRP Density toward Horizon (dBW/4kHz)	Associated Antenna(s)
		East Limit	West Limit	East Limit	West Limit	East Limit	West Limit		
1)	17300.0000-17550.0000	47.0W	-143.0W	06.1	-42.6	100.4	-218.3	9.33	SMK5
2)	10950.0000-11200.0000	47.0W	-143.0W	06.1	-42.6	100.4	-218.3	0	SMK5
3)	11450.0000-11700.0000	47.0W	-143.0W	06.1	-42.6	100.4	-218.3	0	SMK5
4)	11700.0000-12200.0000	47.0W	-143.0W	06.1	-42.6	100.4	-218.3	0	SMK5
5)	13750.0000-14000.0000	47.0W	-143.0W	06.1	-42.6	100.4	-218.3	4.63	SMK5
6)	14000.0000-14500.0000	47.0W	-143.0W	06.1	-42.6	100.4	-218.3	11.43	SMK5

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-10 (S2950) @ 66.9 degrees W.L. (Colombia-licensed)



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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	SMK5	1	9	GD Satcom	904106-2421	308	9.7 AGL/ 317.7 AMSL	
Max Gains(s):		58.5 dBi @	11.7250 GHz	60.1 dBi @	14.1250 GHz	62.0 dBi @		
		17.6000 GHz						
Maximum total input power at antenna flange (Watts) =					650.00			
Maximum aggregate output EIRP for all carriers (dBW) =					88.23			

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:

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.

90396 --- Waiver of footnote NG52 to the U.S. Table of Frequency Allocations, 47 C.F.R. Section 2.106, NG52, to use the 10.95-11.7 GHz (space-to-Earth) frequency band to receive signals in the United States on an unprotected basis from terrestrial stations is granted. This grant is limited to reception from those Permitted List satellites authorized to offer domestic services in the 10.7-11.7 GHz band via waiver of footnote NG52, and operations in this band are subject to the conditions, waivers, and findings specified in each space station authorization.

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.



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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:

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 regulatees 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.