



**UNITED STATES OF AMERICA  
FEDERAL COMMUNICATIONS COMMISSION  
RADIO STATION AUTHORIZATION**

Name: SES Americom, Inc.

Call Sign: KA288

Authorization Type: Modification of License

File Number: SES-MFS-20160527-00459

Non Common Carrier

Grant date: 07/27/2016

Expiration Date: 07/05/2026



Nature of Service: Domestic Fixed Satellite Service  
Nature of Service: Fixed Satellite Service  
Nature of Service: International 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 DRIVE SOMIS, VENTURA, CA 93066	34°19'31.0"N	118°59'44.4"W	311	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 July 5, 2011 (3 AM Eastern Standard Time) and ending July 5, 2026 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is July 27, 2017 (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)	14000.0000-14500.0000	H,V	30M0F3F	Tx	85.20	85.20	TK1		Analog TV
2)	14000.0000-14500.0000	H,V	100KG7D	Tx	57.10	43.10	TK1		DIGITAL DATA
3)	14000.0000-14500.0000	H,V	100KG7W	Tx	57.10	43.10	TK1		DIGITAL DATA
4)	14000.0000-14500.0000	H,V	1M00F9D	Tx	73.00	49.10	TK1		FM, TELECOMMAND
5)	14000.0000-14500.0000	H,V	NON	Tx	85.20	85.20	TK1		Unmodulated carrier
6)	14000.0000-14500.0000	H,V	36M0G7D	Tx	82.60	43.10	TK1		DIGITAL VIDEO, AUDIO AND DATE
7)	14000.0000-14500.0000	H,V	36M0G7W	Tx	82.60	43.10	TK1		DIGITAL VIDEO, AUDIO AND DATE



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8)	13780.0000-14000.0000	H,V	36M0G7D	Tx	76.00	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
9)	13780.0000-14000.0000	H,V	36M0G7W	Tx	76.00	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
10)	13780.0000-14000.0000	H,V	6M00G7D	Tx	68.20	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
11)	13780.0000-14000.0000	H,V	6M00G7W	Tx	68.20	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
12)	13770.0000-13780.0000	H,V	10M0G7D	Tx	70.50	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
13)	13770.0000-13780.0000	H,V	10M0G7W	Tx	70.50	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
14)	13750.0000-14000.0000	H,V	30M0F3F	Tx	71.00	44.00	TK1		ANALOG TV via GE-4
15)	13750.0000-13770.0000	H,V	20M0G7D	Tx	73.50	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
16)	13750.0000-13770.0000	H,V	20M0G7W	Tx	73.50	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
17)	13750.0000-13770.0000	H,V	6M00G7D	Tx	68.20	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
18)	13750.0000-13770.0000	H,V	6M00G7W	Tx	68.20	36.50	TK1		DIGITAL VIDEO, AUDIO AND DATE
19)	11700.0000-12200.0000	H,V	30M0F3F	Rx			TK1		Analog TV
20)	11700.0000-12200.0000	H,V	500KF9D	Rx			TK1		TELEMETRY
21)	11700.0000-12200.0000	H,V	100KG7D	Rx			TK1		DIGITAL DATA
22)	11700.0000-12200.0000	H,V	100KG7W	Rx			TK1		DIGITAL DATA
23)	11700.0000-12200.0000	H,V	NON	Rx			TK1		CW TRACKING BEACON
24)	11700.0000-12200.0000	H,V	NON	Rx			TK1		Unmodulated carrier
25)	11700.0000-12200.0000	H,V	36M0G7D	Rx			TK1		DIGITAL VIDEO, AUDIO AND DATE
26)	11700.0000-12200.0000	H,V	36M0G7W	Rx			TK1		DIGITAL VIDEO, AUDIO AND DATE
27)	11450.0000-11700.0000	H,V	500KF9D	Rx			TK1		TELEMETRY



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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 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
28)	11450.0000-11700.0000	H,V	100KG7D	Rx			TK1		DIGITAL DATA
29)	11450.0000-11700.0000	H,V	100KG7W	Rx			TK1		DIGITAL DATA
30)	11450.0000-11700.0000	H,V	N0N	Rx			TK1		CW TRACKING BEACON
31)	11450.0000-11700.0000	H,V	30M0F3F	Rx			TK1		ANALOG TV via GE-4
32)	11450.0000-11700.0000	H,V	36M0G7D	Rx			TK1		DIGITAL VIDEO, AUDIO AND DATE
33)	11450.0000-11700.0000	H,V	36M0G7W	Rx			TK1		DIGITAL VIDEO, AUDIO AND DATE
34)	10950.0000-11200.0000	H,V	500KF9D	Rx			TK1		TELEMETRY
35)	10950.0000-11200.0000	H,V	100KG7D	Rx			TK1		DIGITAL DATA
36)	10950.0000-11200.0000	H,V	100KG7W	Rx			TK1		DIGITAL DATA
37)	10950.0000-11200.0000	H,V	N0N	Rx			TK1		CW TRACKING BEACON
38)	10950.0000-11200.0000	H,V	36M0G7D	Rx			TK1		DIGITAL VIDEO, AUDIO AND DATE
39)	10950.0000-11200.0000	H,V	36M0G7W	Rx			TK1		DIGITAL VIDEO, AUDIO AND DATE

**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)	11450.0000-11700.0000	58.0W	178.0W	15.2	16.8	107.4	251.3		TK1
2)	10950.0000-11200.0000	58.0W	178.0W	15.2	16.8	107.4	251.3		TK1
3)	14000.0000-14500.0000	45.0W	143.0W	04.5	42.6	099.2	218.3	14	TK1
4)	11700.0000-12200.0000	45.0W	143.0W	04.5	42.6	099.2	218.3		TK1
5)	13750.0000-14000.0000	101.0W	101.0W	45.0	45.0	150.0	150.0	-21.23	TK1
6)	11450.0000-11700.0000	101.0W	101.0W	45.0	45.0	150.0	150.0		TK1
7)	14000.0000-14500.0000	58.0W	178.0W	15.2	16.8	107.4	251.3	3.45	TK1
8)	13750.0000-14000.0000	58.0W	178.0W	15.2	16.8	107.4	251.3	-9.15	TK1



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**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		
9)	11700.0000-12200.0000	58.0W	-178.0W	15.2	-16.8	107.4	-251.3		TK1

**D) Points of Communications**

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

- 1) 1 to GE-4 @ 101 degrees W.L. (U.S.-licensed domestic satellite)
- 2) 1 to Permitted Space Station List
- 3) 1 to AMC-4 (S2135) @ 67 degrees W.L. (U.S.-licensed)
- 4) 1 to AMC-6 (S2347) @ 72 degrees W.L. (U.S.-licensed satellite)
- 5) 1 to EUTELSAT 172A (S2610) @ 172 degrees E.L. (formerly GE-23) (U.S.-licensed)
- 6) 1 to ASTRA 3A @ 86.85° W.L. (LUX Registered, HOL ITU Filing) (TT&C ops only)

**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	TK1	1	6.1	VERTEX	6.1 KPK	311	7 AGL/ 318 AMSL	
Max Gains(s):		57.1 dBi @	14.0000 GHz	55.7 dBi @	12.0000 GHz			
Maximum total input power at antenna flange (Watts) =					650.00			
Maximum aggregate output EIRP for all carriers (dBW) =					85.20			

**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:

- 217 --- The " ALSAT" authority listed in this authorization as a point of communication is limited to communications in the 14.0-14.5 and 11.7-12.2 GHz bands only.
- 1010 --- Applicable to all receiving frequency bands. Emission designator indicates the maximum bandwidth of received signal at associated station(s). Maximum EIRP and maximum EIRP density are not applicable to receive operations.



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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:

- 1900 --- Applicable to all transmitting frequency bands. Authority is granted to transmit any number of RF carriers with the specified parameters on any discrete frequencies within associated band in accordance with the other terms and conditions of this authorization, subject to any additional limitations that may be required to avoid unacceptable levels of inter-satellite interference.
- 2010 --- This authorization is issued pursuant to the Commission's Second Report and Order adopted June 16, 1972 (35 FCC 2d 844) and Memorandum, Opinion and Order adopted December 21, 1972 (38 FCC 2d 665) in Docket No. 16495 and is subject to the policies adopted in that proceeding.
- 2038 --- The licensee shall take extraordinary measures to ensure that the antenna does not create the potential for exposure of persons who may be within the immediate vicinity to radiofrequency radiation in excess of FCC safety guidelines. The earth station antenna shall be surrounded by a fence, at least 2 meters tall with a locked gate, to prevent human exposure in excess of the FCC-specified safety limit of 1 mW/cm<sup>2</sup>. Warning signs, such as those discussed in the FCC's OET Bulletin 65, shall be posted informing members of the public to keep outside the locked area.
- 2454 --- All satellite uplink transmissions carrying broadband video information shall comply with the Automatic Transmitter Identification System (ATIS) requirements of Section 25.281 of the Rules, as modified by FCC Report No. DS-1066, released on April 3, 1991.
- 2546 --- Operations with the satellite points of communication are limited to the frequencies identified on the FCC Current Authorizations List and the FCC Market Access List.
- 2916 --- Transmitter(s) must be turned off during antenna maintenance to ensure compliance with the FCC-specified safety guidelines for human exposure to radiofrequency radiation in the region between the antenna feed and the reflector. Appropriate measures must also be taken to restrict access to other regions in which the earth station's power flux density levels exceed the specified guidelines.
- 3219 --- All existing transmitting facilities, operations and devices regulated by the Commission must be in compliance with the Commission's radiofrequency (RF) exposure guidelines, pursuant to Section 1.1307(b)(1) through (b)(3) of the Commission's rules, or if not in compliance, file an Environmental Assessment (EA) as specified in Section 1.1311. See 47 CFR § 1.1307 (b) (5).
- 3428 --- This authorization is not to be construed as including any uplink or downlink authority in other countries.
- 3841 --- The use of the frequency bands 10.7-11.7 GHz and 12.75-13.25 GHz in the fixed-satellite service is limited to international systems.
- 5011 --- The Licensee(s) shall maintain on file with the Commission a current list or plan of the precise frequencies in use at the station, specifying for each frequency the RF center frequency, polarization, emission designator, nominal EIRP (in dBW) and maximum EIRP density (in dBW/4kHz). This list or plan may be submitted either on a station-by-station basis or on a system-wide basis and shall be updated within seven (7) days of any changes in frequency usage at this station. The Licensee(s) need not notify the Commission of temporary usage of frequencies for periods of less than seven (7) days. However, the Licensee(s) shall maintain accurate station records of the times and particulars of such temporary frequency usage.



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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:

- 5012 --- The authority granted here is limited to the operation of the facilities described above and does not include any authority to install and operate channelizing equipment or any other authority under Section 214 of the Communications Act of 1934, as amended, to establish channels of communications.
- 5014 --- With respect to potential co-channel interference to or from terrestrial microwave radio stations, the transmit and receive frequency bands listed in this license have been cleared for transmissions to and from satellites located in the geostationary or non-geostationary orbit for the emissions designated in Section B of this license.
- 5015 --- Upon completion of construction, each licensee must file with the Commission a certification including the following information: name of the licensee, file number of the application, call sign of the antenna, date of the license and certification that the facility as authorized has been completed, that each antenna facility has been tested and is within 2 dB of the pattern specified in Section 25.209 and that the station is operational including the date of commencement of service and will remain operational during the license period unless the license is submitted for cancellation.
- 5017 --- Operation of this station is governed by the terms, conditions and limitations in Part 25 of the Commission's Rules and Regulations and the following additional conditions: 1. This license shall not vest in the Licensee(s) any right to operate the station or any right in the use of the frequencies designated in the license beyond its term or in any other manner than authorized in the license; 2. Neither the license nor the right granted under it shall be assigned or otherwise transferred in violation of the Commission's Rules and Regulations issued under it; and 3. This station is subject to the right of use or control conferred by Section 706 of the Communications Act of 1934, as amended.
- 5018 --- This license shall be forfeited automatically if this station is not ready for operation within the time specified unless, prior to the expiration date of this license, the Commission receives an Application for Additional Time to Construct a Radio Station (FCC Form 701) filed by the Licensee(s) showing good cause why the Licensee(s) could not complete construction on time.
- 5021 --- A waiver of Section 25.205 of the Commission's Rules and Regulations is granted for antenna elevation angles below 5 degrees.
- 5203 --- All communications shall be in accordance with the satellites and services which have completed consultations under Article XIV(d) of the INTELSAT Agreement and which the Commission has approved.
- 5216 --- All operations shall be on a non-common carrier basis.
- 5225 --- This action constitutes the final step with respect to the provision of the services only insofar as the US regulatory process is concerned. However, this authority shall not be construed as authorizing the distribution of programming where the appropriate copyright clearances have not been obtained or where the U.S. Government has determined that appropriate copyright protection does not otherwise exist.
- 5525 --- This authorization is issued pursuant to the Commission's Report and Order released January 22, 1996 (FCC 96-14), Disco I.



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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:

5630 --- International services shall be consistent with this emission designator, the underlying title III application(s) and the acquisition of any necessary Section 214 authority.

5723 --- All communications shall be in accordance with the satellites and services which have completed any necessary technical consultations under Article XIV (d) of the INTELSAT Agreement and which the Commission has approved.



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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 is not ready for operation by the required date of completion of construction unless an application for modification of authorization to request additional time to complete construction is filed by that date, together with a showing that failure to complete construction 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.**