



UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

RADIO STATION AUTHORIZATION

Name: SES Americom, Inc.
Authorization Type: License
 Non Common Carrier

Call Sign: E190489
File Number: SES-LIC-20190611-00756

Grant date: 06/26/2020 **Expiration Date:** 06/26/2035

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)	SSBK5K6	Comsat Road Haleiwa Kooluloa, Honolulu, HI 96712	21°40'16.4"N	158°1'52.8"W	143	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 June 26, 2020 (3 AM Eastern Standard Time) and ending June 26, 2035 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is June 26, 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)	14497.6000-14498.4000	H, V	800KF9W	Tx	81.00	58.00	SSBK5		ANALOG COMMAND CARRIER
2)	14000.0000-14500.0000	H, V	N0N	Tx	52.10	52.10	SSBK5		CW carrier
3)	14000.0000-14500.0000	H, V	100KF9W	Tx	66.10	52.10	SSBK5		Analog Data Carrier
4)	14000.0000-14500.0000	H, V	36M0F9W	Tx	87.10	47.55	SSBK5		Analog Data Carrier
5)	14000.0000-14500.0000	H, V	72M0F9W	Tx	87.10	44.54	SSBK5		Analog Data Carrier
6)	14000.0000-14500.0000	H, V	100KG7W	Tx	60.10	46.10	SSBK5		Digital Data Carrier
7)	14000.0000-14500.0000	H, V	50M2G7W	Tx	87.10	46.10	SSBK5		Digital Data Carrier
8)	14000.0000-14500.0000	H, V	72M0G7W	Tx	87.10	44.50	SSBK5		Digital Data Carrier
9)	14000.0000-14500.0000	H, V	72M0G7W	Tx	87.10	44.54	SSBK5		Digital Data Carrier



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#	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
10)	14000.0000-14500.0000	H, V	1M00F9D	Tx	76.00	52.10	SSBK5		Analog Command Carrier
11)	13780.0000-14000.0000	H, V	72M0G7W	Tx	84.70	42.10	SSBK5		Digital Data Carrier
12)	13770.0000-13780.0000	H, V	10M0G7W	Tx	73.30	39.20	SSBK5		Digital Data Carrier
13)	13770.0000-13780.0000	H, V	6M00G7W	Tx	71.00	39.20	SSBK5		Digital Data Carrier
14)	13750.0000-14000.0000	H, V	1M55G7W	Tx	68.00	42.10	SSBK5		Digital Data Carrier
15)	13750.0000-14000.0000	H, V	72M0G7W	Tx	81.80	39.20	SSBK5		Digital Data Carrier
16)	13750.0000-13770.0000	H, V	20M0G7W	Tx	79.10	42.10	SSBK5		Digital Data Carrier
17)	12250.0000-12750.0000	H, V	N0N	Rx			SSBK5		CW carrier
18)	12250.0000-12750.0000	H, V	100KF9W	Rx			SSBK5		Analog Data Carrier
19)	12250.0000-12750.0000	H, V	72M0F9W	Rx			SSBK5		Analog Data Carrier
20)	12250.0000-12750.0000	H, V	100KG7W	Rx			SSBK5		Digital Data Carrier
21)	12250.0000-12750.0000	H, V	72M0G7W	Rx			SSBK5		Digital Data Carrier
22)	11700.0000-12200.0000	H, V	N0N	Rx			SSBK5		CW carrier
23)	11700.0000-12200.0000	H, V	100KF9W	Rx			SSBK5		Analog Data Carrier
24)	11700.0000-12200.0000	H, V	72M0F9W	Rx			SSBK5		Analog Data Carrier
25)	11700.0000-12200.0000	H, V	100KG7W	Rx			SSBK5		Digital Data Carrier
26)	11700.0000-12200.0000	H, V	72M0G7W	Rx			SSBK5		Digital Data Carrier
27)	11200.0000-11700.0000	H, V	N0N	Rx			SSBK5		CW carrier
28)	11200.0000-11700.0000	H, V	100KF9W	Rx			SSBK5		Analog Data Carrier
29)	11200.0000-11700.0000	H, V	72M0F9W	Rx			SSBK5		Analog Data Carrier
30)	11200.0000-11700.0000	H, V	100KG7W	Rx			SSBK5		Digital Data Carrier
31)	11200.0000-11700.0000	H, V	72M0G7W	Rx			SSBK5		Digital Data Carrier
32)	10950.0000-11200.0000	H, V	N0N	Rx			SSBK5		CW carrier
33)	10950.0000-11200.0000	H, V	100KF9W	Rx			SSBK5		Analog Data Carrier



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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
34)	10950.0000-11200.0000	H, V	72M0F9W	Rx			SSBK5		Analog Data Carrier
35)	10950.0000-11200.0000	H, V	100KG7W	Rx			SSBK5		Digital Data Carrier
36)	10950.0000-11200.0000	H, V	72M0G7W	Rx			SSBK5		Digital Data Carrier
37)	14000.0000-14500.0000	H, V	N0N	Tx	52.10	52.10	SSBK6		CW carrier
38)	14000.0000-14500.0000	H, V	100KF9W	Tx	66.10	52.10	SSBK6		Analog Data Carrier
39)	14000.0000-14500.0000	H, V	36M0F9W	Tx	87.10	47.55	SSBK6		Analog Data Carrier
40)	14000.0000-14500.0000	H, V	72M0F9W	Tx	87.10	44.54	SSBK6		Analog Data Carrier
41)	14000.0000-14500.0000	H, V	100KG7W	Tx	60.10	46.10	SSBK6		Digital Data Carrier
42)	14000.0000-14500.0000	H, V	50M2G7W	Tx	87.10	46.10	SSBK6		Digital Data Carrier
43)	14000.0000-14500.0000	H, V	72M0G7W	Tx	87.10	44.50	SSBK6		Digital Data Carrier
44)	14000.0000-14500.0000	H, V	1M00F9D	Tx	76.00	52.10	SSBK6		Analog Command Carrier
45)	13780.0000-14000.0000	H, V	72M0G7W	Tx	84.70	42.10	SSBK6		Digital Data Carrier
46)	13770.0000-13780.0000	H, V	10M0G7W	Tx	73.30	39.20	SSBK6		Digital Data Carrier
47)	13770.0000-13780.0000	H, V	6M00G7W	Tx	71.00	39.20	SSBK6		Digital Data Carrier
48)	13750.0000-14000.0000	H, V	1M55F9W	Tx	68.00	42.10	SSBK6		Analog Data Carrier
49)	13750.0000-14000.0000	H, V	72M0F9W	Tx	81.80	39.20	SSBK6		Analog Data Carrier
50)	13750.0000-14000.0000	H, V	1M55G7W	Tx	68.00	42.10	SSBK6		Digital Data Carrier
51)	13750.0000-14000.0000	H, V	72M0G7W	Tx	81.80	39.20	SSBK6		Digital Data Carrier
52)	13750.0000-13770.0000	H, V	20M0G7W	Tx	79.10	42.10	SSBK6		Digital Data Carrier
53)	12250.0000-12750.0000	H, V	N0N	Rx			SSBK6		CW carrier
54)	12250.0000-12750.0000	H, V	100KF9W	Rx			SSBK6		Analog Data Carrier
55)	12250.0000-12750.0000	H, V	72M0F9W	Rx			SSBK6		Analog Data Carrier
56)	12250.0000-12750.0000	H, V	100KG7W	Rx			SSBK6		Digital Data Carrier
57)	12250.0000-12750.0000	H, V	72M0G7W	Rx			SSBK6		Digital Data 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 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
58)	11700.0000-12200.0000	H, V	N0N	Rx			SSBK6		CW carrier
59)	11700.0000-12200.0000	H, V	100KF9W	Rx			SSBK6		Analog Data Carrier
60)	11700.0000-12200.0000	H, V	72M0F9W	Rx			SSBK6		Analog Data Carrier
61)	11700.0000-12200.0000	H, V	100KG7W	Rx			SSBK6		Digital Data Carrier
62)	11700.0000-12200.0000	H, V	72M0G7W	Rx			SSBK6		Digital Data Carrier
63)	11200.0000-11700.0000	H, V	N0N	Rx			SSBK6		CW carrier
64)	11200.0000-11700.0000	H, V	100KF9W	Rx			SSBK6		Analog Data Carrier
65)	11200.0000-11700.0000	H, V	72M0F9W	Rx			SSBK6		Analog Data Carrier
66)	11200.0000-11700.0000	H, V	100KG7W	Rx			SSBK6		Digital Data Carrier
67)	11200.0000-11700.0000	H, V	72M0G7W	Rx			SSBK6		Digital Data Carrier
68)	10950.0000-11200.0000	H, V	N0N	Rx			SSBK6		CW carrier
69)	10950.0000-11200.0000	H, V	100KF9W	Rx			SSBK6		Analog Data Carrier
70)	10950.0000-11200.0000	H, V	72M0F9W	Rx			SSBK6		Analog Data Carrier
71)	10950.0000-11200.0000	H, V	100KG7W	Rx			SSBK6		Digital Data Carrier
72)	10950.0000-11200.0000	H, V	72M0G7W	Rx			SSBK6		Digital Data Carrier

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)	13750.0000-13770.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-14.02	SSBK5
2)	13770.0000-13780.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-16.92	SSBK5
3)	12250.0000-12750.0000	88.0W	132.0E	10.0	10.1	097.6	262.3		SSBK5
4)	13780.0000-14000.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-14.02	SSBK5
5)	13750.0000-14000.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-14.02	SSBK5
6)	14000.0000-14500.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-4.2	SSBK5



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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		
7)	10950.0000-11200.0000	88.0W	132.0E	10.0	10.1	097.6	262.3		SSBK5
8)	11200.0000-11700.0000	88.0W	132.0E	10.0	10.1	097.6	262.3		SSBK5
9)	11700.0000-12200.0000	88.0W	132.0E	10.0	10.1	097.6	262.3		SSBK5
10)	14497.6000-14498.4000	88.0W	132.0E	10.0	10.1	097.6	262.3	1.7	SSBK5
11)	10950.0000-11200.0000	88.0W	132.0E	10.0	10.1	097.6	262.3		SSBK6
12)	13750.0000-13770.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-14.02	SSBK6
13)	11700.0000-12200.0000	88.0W	132.0E	10.0	10.1	097.6	262.3		SSBK6
14)	12250.0000-12750.0000	88.0W	132.0E	10.0	10.1	097.6	262.3		SSBK6
15)	13770.0000-13780.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-16.92	SSBK6
16)	13780.0000-14000.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-14.02	SSBK6
17)	13750.0000-14000.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-16.92	SSBK6
18)	14000.0000-14500.0000	88.0W	132.0E	10.0	10.1	097.6	262.3	-4.2	SSBK6
19)	11200.0000-11700.0000	88.0W	132.0E	10.0	10.1	097.6	262.3		SSBK6

D) Points of Communications

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

- 1) SSBK5K6 to Permitted Space Station List
- 2) SSBK5K6 to NSS-11 (S3037) @ 176° E.L. (Gibraltar-licensed)
- 3) SSBK5K6 to NSS-6 (S3048) @ 169.5 degrees W.L. (Netherlands-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)
SSBK5K6	SSBK5	1	9	GD Satcom	9mKXX	143	9.7 AGL/ 152.7 AMSL	
Max Gains(s):		60.1 dBi @	14.1250 GHz	59.0 dBi @	11.7250 GHz			
Maximum total input power at antenna flange (Watts) =					750.00			
Maximum aggregate output EIRP for all carriers (dBW) =					88.90			



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Site ID	Antenna ID	Units	Diameter (meters)	Manufacturer	Model number	Site Elevation (Meters)	Max Antenna Height (Meters)	Special Provisions (Refer to Section H)
SSBK5K6	SSBK6	1	9	GD Satcom	9mKXX	143	9.7 AGL/ 152.7 AMSL	
Max Gains(s):		60.1 dBi @	14.1250 GHz	58.5 dBi @	11.7250 GHz			
Maximum total input power at antenna flange (Watts) =					750.00			
Maximum aggregate output EIRP for all carriers (dBW) =					88.90			

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.
- 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.
- 8 --- Licensee must notify the Commission when all earth stations operating under this authorization are no longer operational or when they have not been used to provide any service during any 6-month operation.
- 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.
- 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.



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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:

- 90405 --- Operations with PERMITTED LIST satellite must comply with §25.212 levels and operations above these levels must coordinate with satellite operators prior to operations.
- 90576 --- Operations of Antenna IDs SSBK5 and SSBK6 as authorized by File Number SES-LIC-20190611-00756 were based on the U.S. market access grant under authority of File Number SAT-PDR-20190403-00022 for satellite NSS-6 (Call Sign S3048) at orbital location 169.5°W and U.S. market access grant under authority of File Number SAT-PPL-20180815-00062 for satellite NSS-11 (Call Sign S3037) at orbital location 176.0° E.
- 90577 --- NTIA coordination for 13.75-14.0 GHz frequencies (Earth-to-space) pursuant to US337, US356, and US357 was completed on February 26, 2020.
- 90578 --- Earth station operations authorized herein by US market access authority are not permitted to provide Direct-to-Home services.
- 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.



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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.