



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

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

Call Sign: E170138
File Number: SES-LIC-20170726-00805
Grant date: 12/15/2017 Expiration Date: 12/15/2032



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)	Woodbine	2323 Grimville Rd Mt. Airy, MD 21771	39°22'36.8"N	77°4'47.5"W	193	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 December 15, 2017 (3 AM Eastern Standard Time) and ending December 15, 2032 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is December 15, 2018 (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	N0N	Tx	52.10	52.10	WDB-K12		CW carrier
2)	14000.0000-14500.0000	H, V	100KG7W	Tx	60.08	46.10	WDB-K12		Digital Data
3)	14000.0000-14500.0000	H, V	36M0G7W	Tx	85.60	46.10	WDB-K12		Digital Data
4)	14000.0000-14500.0000	H, V	54M0G7W	Tx	87.10	45.80	WDB-K12		Digital data
5)	14000.0000-14500.0000	H, V	72M0G7W	Tx	87.10	44.50	WDB-K12		Digital Data
6)	14000.0000-14500.0000	H, V	1M00F9D	Tx	77.94	52.10	WDB-K12		Telecommand Carrier to the satellite
7)	13750.0000-14000.0000	H, V	36M0G7W	Tx	85.00	45.50	WDB-K12		Digital Data
8)	13750.0000-14000.0000	H, V	525KG7W	Tx	68.00	46.10	WDB-K12		Digital Data
9)	13750.0000-14000.0000	H, V	525KG7W	Tx	68.00	46.10	WDB-K12		Digital Data



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10)	13750.0000-14000.0000	H,V	54M0G7W	Tx	85.00	43.60	WDB-K12		Digital Data
11)	13750.0000-14000.0000	H,V,L,R	72M0G7W	Tx	85.00	42.40	WDB-K12		Digital Data
12)	13750.0000-14000.0000	H,V	1M00F9D	Tx	77.94	52.10	WDB-K12		Telecommand Carrier to the satellite
13)	11700.0000-12200.0000	H,V	NON	Rx			WDB-K12		Digital Carrier
14)	11700.0000-12200.0000	H,V	100KG7W	Rx			WDB-K12		Digital Data
15)	11700.0000-12200.0000	H,V	36M0G7W	Rx			WDB-K12		Digital Carrier
16)	11700.0000-12200.0000	H,V	54M0G7W	Rx			WDB-K12		Digital Carrier
17)	11700.0000-12200.0000	H,V	72M0G7W	Rx			WDB-K12		Digital Carrier
18)	11700.0000-12200.0000	H,V	500KG9D	Rx			WDB-K12		Telemetry Carrier
19)	11450.0000-11700.0000	H,V	NON	Rx			WDB-K12		CW Carrier
20)	11450.0000-11700.0000	H,V	100KG7W	Rx			WDB-K12		Digital Data
21)	11450.0000-11700.0000	H,V	36M0G7W	Rx			WDB-K12		Digital Data
22)	11450.0000-11700.0000	H,V	54M0G7W	Rx			WDB-K12		Digital Data
23)	11450.0000-11700.0000	H,V	72M0G7W	Rx			WDB-K12		Digital Data
24)	11450.0000-11700.0000	H,V	500KG9D	Rx			WDB-K12		Telemetry Carrier
25)	11200.0000-11450.0000	H,V	NON	Rx			WDB-K12		CW Carrier
26)	11200.0000-11450.0000	H,V	100KG7W	Rx			WDB-K12		Digital Data
27)	11200.0000-11450.0000	H,V	36M0G7W	Rx			WDB-K12		Digital Data
28)	11200.0000-11450.0000	H,V	54M0G7W	Rx			WDB-K12		Digital Data
29)	11200.0000-11450.0000	H,V	72M0G7W	Rx			WDB-K12		Digital Data
30)	11200.0000-11450.0000	H,V	500KG9D	Rx			WDB-K12		Telemetry Carrier
31)	10950.0000-11200.0000	H,V	NON	Rx			WDB-K12		CW Carrier
32)	10950.0000-11200.0000	H,V	100KG7W	Rx			WDB-K12		Digital Data
33)	10950.0000-11200.0000	H,V	36M0G7W	Rx			WDB-K12		Digital Data



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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
34)	10950.0000-11200.0000	H,V	54M0G7W	Rx			WDB-K12		Digital Data
35)	10950.0000-11200.0000	H,V	72M0G7W	Rx			WDB-K12		Digital Data
36)	10950.0000-11200.0000	H,V	500KG9D	Rx			WDB-K12		Telemetry Carrier
37)	10700.0000-10950.0000	H,V	N0N	Rx			WDB-K12		CW Carrier
38)	10700.0000-10950.0000	H,V	100KG7W	Rx			WDB-K12		Digital Data
39)	10700.0000-10950.0000	H,V	36M0G7W	Rx			WDB-K12		Digital Data
40)	10700.0000-10950.0000	H,V	54M0G7W	Rx			WDB-K12		Digital Data
41)	10700.0000-10950.0000	H,V	72M0G7W	Rx			WDB-K12		Digital Data
42)	10700.0000-10950.0000	H,V	500KG9D	Rx			WDB-K12		Telemetry 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)	10950.0000-11200.0000	12.0W	142.0W	10.5	10.6	106.4	253.5		WDB-K12
2)	11200.0000-11450.0000	12.0W	142.0W	10.5	10.6	106.4	253.5		WDB-K12
3)	13750.0000-14000.0000	12.0W	142.0W	10.5	10.6	106.4	253.5	-7.5	WDB-K12
4)	14000.0000-14500.0000	12.0W	142.0W	10.5	10.6	106.4	253.5	-7.5	WDB-K12
5)	10700.0000-10950.0000	12.0W	142.0W	10.5	10.6	106.4	253.5		WDB-K12
6)	11450.0000-11700.0000	12.0W	142.0W	10.5	10.6	106.4	253.5		WDB-K12
7)	11700.0000-12200.0000	12.0W	142.0W	10.5	10.6	106.4	253.5		WDB-K12

D) Points of Communications

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

- 1) Woodbine to Permitted Space Station List
- 2) Woodbine to SES-15 (S2951) @ 129.15 degrees W.L. (United Kingdom-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)
Woodbine	WDB-K12	1	9	GD Satcom	9.0 M.	193	9.7 AGL/ 202.7 AMSL	
Max Gains(s):		58.5 dBi @	11.7250 GHz	60.1 dBi @	14.1250 GHz			
Maximum total input power at antenna flange (Watts) =					2,000.00			
Maximum aggregate 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 (IBFS) in the "Other Filings" tab within 10 days of the change.
- 5 --- Licensee must notify the Commission when an 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.

176 --- In the 10.7-11.7 GHz band, all operations are on an unprotected basis. The licensee shall not claim protection from, and is required to accept interference from, other lawfully operating satellites or radiocommunication systems.

385 --- The use of the band 10.7-11.7 GHz (Space-to-Earth) and 12.75-13.25 GHz (Earth-to-Space) by the fixed-satellite service in the geostationary satellite orbit shall be limited to international systems, i.e. other than domestic systems. (NG52)

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. (Sec 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.
- 90454 --- Authorization to operate in the 13.75-14.00 GHz (Earth-to-space) frequency band is deferred until coordination with NTIA has been completed. Once completed this license will be reissued without this condition and possibly with other conditions germane to the completed coordination results.



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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.

