

RADIO STATION AUTHORIZATION

Name: Comsat, Inc.

Call Sign: KA312

Authorization Type: Modification of License

File Number: SES-MOD-20151009-00698

Common Carrier

Grant date:

04/25/2016 Expiration Date:

02/27/2024

COMMUNICATION OF THE PROPERTY OF THE PROPERTY

Nature of Service: Fixed Satellite Service

Class of Station: Fixed Earth Stations

A) Site Location(s)

# Site ID	Address	Latitude	Longitude	Elevation (Meters)	NAD	Special Provisions (Refer to Section H)
1) SBY20	2120 RIVER ROAD (new C-band Hub Antenna) SOUTHBURY, NEW HAVEN, CT 96488	41°27'6.3"N	73°17'16.4"W	36.6	83	
	Licensee certifies antenna(s)	comply with g	ain patterns spe	ecified in	Section	25.209
2) SOUTHBURY	2120 RIVER RD. SOUTHBURY, NEW HAVEN, CT 06488	41°27'6.3"N	73°17'21.4"W	36.6	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 February 27, 2009 (3 AM Eastern Standard Time) and ending February 27, 2024 (3 AM Eastern Standard Time). The required date of completion of construction and commencement of operation is April 25, 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

5) 1626.5000-1660.5000

The General Provision 1010 applies to all receiving frequency bands.

L,R

1K20G2D

The General Provision 1900 applies to all transmitting frequency bands. For the text of these provisions, refer to Section H.

Max Max EIRP Special **Provisions** EIRP Density Frequency /Carrier /Carrier (Refer to Polarization Tx/Rx Associated Modulation/ (MHz) (dBW) (dBW/4kHz) Antenna Section H) Code **Emission Mode** Services 1) 1626.5000-1660.5000 NON 31.00 31.00 1.52M PILOT Tx 2) 1626.5000-1660.5000 24K0F3E ANALOG CARRIER L,R Tx36.00 33.70 1.52M 3) 1626.5000-1660.5000 L,R 10K5G2F 36.00 31.80 1.52M DIGTIAL CARRIER Tx4) 1626.5000-1660.5000 1K20G1D 36.00 36.00 DIGTIAL CARRIER L,R 1.52M Tx

36.00

36.00

1.52M

DIGTIAL CARRIER



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For	the text of these provisions, ref	er to Section	H.		Max EIRP	Max EIRP Density		Special Provisions	
#	Frequency (MHz)	Polarizati Code	on Emission	Tx/Rx Mode	/Carrier	/Carrier (dBW/4kHz)	Associated Antenna	(Refer to Section H)	Modulation/ Services
6)	1626.5000-1660.5000	L,R	2K40G2D	Tx	36.00	36.00	1.52M		DIGTIAL CARRIER
7)	1626.5000-1660.5000	L,R	600HG1D	Tx	36.00	36.00	1.52M		DIGTIAL CARRIER
8)	1626.5000-1660.5000	L,R	600HG2D	Tx	36.00	36.00	1.52M		DIGTIAL CARRIER
9)	1626.5000-1649.5000	L,R	10K5G1E	Тx	31.20	27.00	1.52M		AERO
10)	1626.5000-1649.5000	L,R	1K20G1D	Т×	18.00	18.00	1.52M		AERO
11)	1626.5000-1649.5000	L,R	2K40G1D	Тx	21.00	21.00	1.52M		AERO
12)	1626.5000-1649.5000	L,R	600HG1D	Tx	15.00	15.00	1.52M		AERO
13)	1626.5000-1647.5000	L,R	NON	Tx	37.00	37.00	1.52M		PILOT
14)	1626.5000-1647.5000	L,R	1K20G1D	Tx	16.00	16.00	1.52M		STD-C
15)	1626.5000-1647.5000	L,R	600HG1D	Тx	16.00	16.00	1.52M		STD-C
16)	1626.5000-1647.5000	L,R	30K0F3E	Tx	37.00	33.70	1.52M		STA A VOICE
17)	1626.5000-1647.5000	L,R	4K80G1D	Tx	37.00	37.00	1.52M		STD A TELEX
18)	1574.4000-1576.6000	L,R	10K5G2F	Rx			1.52M		DIGTIAL CARRIER
19)	1574.4000-1576.6000	L,R	1K20G1D	Rx			1.52M		DIGTIAL CARRIER
20)	1574.4000-1576.6000	L,R	1K20G2D	Rx			1.52M		DIGTIAL CARRIER
21)	1574.4000-1576.6000	L,R	2K40G1D	Rx			1.52M		DIGTIAL CARRIER
22) :	1574.4000-1576.6000	L,R	600HG1D	Rx			1.52M		DIGTIAL CARRIER
23)	1574.4000-1576.6000	L,R	600HG2D	Rx			1.52M		DIGTIAL CARRIER
24)	1530.0000-1548.0000	L,R	10K5G1E	Rx			1.52M		AERO
25) 1	1530.0000-1548.0000	L,R	1K20G1D	Rx			1.52M		AERO
26) 1	1530.0000-1548.0000	L,R	2K40G1D	Rx			1.52M		AERO
27) 1	1530.0000-1548.0000	L,R	600HG1D	Rx			1.52M		AERO
28)]	1530,0000-1545.0000	L,R	NON	Rx			1.52M		PILOT
29) 1	1530.0000-1545.0000	L,R	1K20G1D	Rx			1.52M		STD-C



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For the text of these	provisions,	refer to	Section H.
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101 11	no text of these provisions, re		Max EIRP	Max EIRP		Special			
#	Frequency (MHz)	Polarizatio Code	on Emission	Tx/Rx Mode	/Carrier	Density /Carrier (dBW/4kHz)	Associated Antenna	Provisions (Refer to Section H)	Modulation/ Services
30) 1	530.0000-1545.0000	L,R	600HG1D	Rx			1.52M		STD-C
31) 1	530.0000-1545.0000	L,R	1K20G1D	Rx			1.52M		STRD A TELEX
32) 1	530.0000-1545.0000	L,R	30K0F3E	Rx			1.52M		STD A VOICE
33) 1	525.0000-1599.0000	L,R	10K5G2F	Rx			1.52M		DIGTIAL CARRIER
34) 1	525.0000-1599.0000	L,R	1K20G1D	Rx			1.52M		DIGTIAL CARRIER
35) ₁	525.0000-1599.0000	L,R	1K20G2D	Rx	0.00	0.00	1.52M		DIGTIAL CARRIER
36) 1	525.0000-1559.0000	L,R	2K40G1D	Rx	0.00	0.00	1.52M		DIGTIAL CARRIER
37) 1	525.0000-1559.0000	L,R	600HG2D	Rx	0.00	0.00	1.52M		DIGTIAL CARRIER
38) 64	454.4000-6456.6000	L,R	1K20G1D	Tx	42.50	42.50	11M		DIGTIAL CARRIER
39) 64	454.4000-6456.6000	L,R	10K5G2F	Tx	42.50	38.30	11M		DIGTIAL CARRIER
40) 64	454.4000-6456.6000	L,R	1K20G2D	Tx	42.50	42.50	11M		DIGTIAL CARRIER
41) 64	454.4000-6456.6000	L,R	2K40G2D	Tx	42.50	42.50	11M		DIGTIAL CARRIER
42) 64	454.4000-6456.6000	L,R	2M20G1D	Тx	78.00	50.60	11M		DIGTIAL CARRIER
43) 64	454.4000-6456.6000	L,R	600HG1D	Тx	42.50	42.50	11M		DIGTIAL CARRIER
44) 64	454.4000-6456.6000	L,R	600HG2D	Tx	42.50	42.50	11M		DIGTIAL CARRIER
45) 64	454.4000-6456.6000	L,R	2M20G1D	Тx	82.30	54.90	11M	•	BPSK SPREAD SPECTRUM DAT (NAVIGATION) TO SUPPORT FAA-WASS PROGRAM
46) 64	425.0000-6454.0000	L,R	10K5G2F	Tx	42.50	38.30	11M		DIGTIAL CARRIER
47) 64	125.0000-6454.0000	L,R	1K20G1D	$\mathbf{T}\mathbf{x}$	42.50	42.50	11M		DIGTIAL CARRIER
48) 64	125.0000-6454.0000	L,R	1K20G2D	Tx	42.50	42.50	11M		DIGTIAL CARRIER
49) 64	125.0000-6454.0000	L,R	2K40G2D	Тх	42.50	42.50	11M		DIGTIAL CARRIER
50) 64	125.0000-6454.0000	L,R	2M20G1D	Tx	78.00	50.60	11M		DIGTIAL CARRIER
51) 64	125.0000-6454.0000	L,R	2M20G1D	Tx	82.30	54.90	11M		DIGTIAL CARRIER
52) 64	125.0000-6454.0000	L,R	600HG1D	Tx	42.50	42.50	11M		DIGTIAL CARRIER



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

For	the text of these provisions, ref		Max	Max EIRP		Special				
#	Frequency (MHz)	Polarizatio Code	n Emission	Tx/Rx Mode	EIRP /Carrier (dBW)	Density /Carrier (dBW/4kHz)	Associated Antenna	Provisions (Refer to Section H)	Modulation/ Services	
53)	6425.0000-6454.0000	L,R	600HG2D	Тx	42.50	42.50	11M		DIGTIAL CARRIER	
54)	6417.5000-6443.0000	L,R	6K00G1D	Tx			11M		INM B,C,M, FEEDERLINK	
55)	6417.5000-6443.0000	L,R	12K0G1D	Тx			11M		INM B,C,M, FEEDERLINK	
56)	6417.5000-6443.0000	L,R	4K00G1D	Тх			11M		INM B,C,M, FEEDERLINK	
57)	6417.5000-6443.0000	L,R	4K00G3E	Tx			11M		INM B,C,M, FEEDERLINK	
58)	6417.5000-6443.0000	L,R	7K50G3E	Tx			11M		INM B,C,M, FEEDERLINK	
59)	6417,5000-6443.0000	L,R	1K20G1D	Tx	65.00	65.00	11M		AERO, FEEDERLINK	
60)	6417.5000-6443.0000	L,R	600HG1D	Тx	65.00	65.00	11M		AERO, FEEDERLINK	
61)	6417.5000-6443.0000	L,R	2K40G1D	Тx	65.00	65.00	11M		TDM, AERO, FEEDERLINK	
62)	6417.5000-6443.0000	L,R	10K5G1E	Tx	69.20	65.00	11M		DIGITAL VOICE, AER FEEDERLINK	Ο,
63)	6417.5000-6440.0000	L,R	NON	Tx	77.00	77.00	11M		PILOT	
64)	5417.5000-6440.0000	L,R	1K20G1D	Tx	77.00	77.00	11M		TDM, STD-C, FEEDERLINK	
65)	5417.5000-6440.0000	L,R	1K20G1D	Tx	77.00	77.00	11M		TDM, STD-A, TELE FEEDERLINK	Х,
66)	5417.5000-6440.0000	L,R	30K0F3E	Tx	77.00	77.00	11M		ANALOG STD-A, VOIC FEEDERLINK	E,
67) <u>(</u>	5925.0000-6425.0000	H,V,L,R	18M0F8F-	Tx	80.50	53.50	11M		ANALOG VIDEO	
68) <u>:</u>	5925.0000-6425.0000	H,V,L,R	36M0F8F	Tx	80.50	53.50	11M		ANALOG VIDEO	
69) (5925.0000-6425.0000	H,V,L,R	4M00G7F-	Tx	85.80	46.30	11M		DIGITAL VIDEO	
70) إ	5925.0000-6425.0000	H,V,L,R	36M0G7F	Tx	81.30	51.30	11M		DIGITAL VIDEO	
71) ;	5925.0000-6425.0000	H,V,L,R	21K9G7D-	Тх	85.80	43.20	11M		DIGITAL DATA	
72) إ	5925.0000-6425.0000	H,V,L,R	72M0G7D	Tx	58.70	51.30	11M		DIGITAL DATA	
73) 4	1192.5000-4200.0000	L,R	12K0G1D	Rx			11M		INM B,C,M	
74)	1192.5000-4200.0000	L,R	12K0G3E	Rx			11M		INM B,C,M	
75)	1192.5000-4200.0000	L,R	3K00G1E	Rx			11M		INM B,C,M	



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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 thece	nrovicione	rafar to	Section H
roi me text	or mese	DIOVISIONS.	refer to	Section n.

101	the text of these provisions, re-	ici to section i	1.		Max EIRP	Max EIRP Density		Special Provisions			
#	Frequency (MHz)	Polarizatio Code	n Emission	Tx/Rx Mode	/Carrier	•	Associated Antenna	(Refer to Section H)	Modulation Services	/	
76)	4192.5000-4200.0000	L,R	4K00G1D	Rx			1.1M		INM B,C,M	 	
77)	4192.5000-4200.0000	L,R	4K00G3E	Rx			11M		INM B,C,M		
78)	4192.5000-4200.0000	L,R	7K50G3E	Rx			11M	•	INM B,C,M		
79)	4192.5000-4200.0000	L,R	2K40G1D	Rx			11M		TDM, AERO,	FEEDERLINK	:
80)	4192.5000-4200.0000	L,R	1K20G1D	Rx			11M		TDM, FEEDERLINE	STD-C,	AERO
81)	4192.5000-4200.0000	L,R	600HG1D	Rx			11M		TDM, FEEDERLINE	STD-C,	AERO
82)	4192.5000-4200.0000	L,R	10K5G1E	Rx			11M		TDM, FEEDERLINE	STD-C,	AERO
83)	4192.5000-4200.0000	L,R	4K80G1D	Rx			11M		TDM, FEEDERLINE	STD-C,	AERO
84)	4192.5000-4200.0000	L,R	NON	Rx			11M		PILOT		
85)	3700.0000-4200.0000	H,V,L,R	18M0F8F-	Rx			11M		ANALOG VII	DEO	
86)	3700.0000-4200.0000	H,V,L,R	36M0F8F	Rx			11M		ANALOG VII	DEO	
87)	3700.0000-4200.0000	H,V,L,R	4M00G7F-	Rx			11M		DIGITAL VI	DEO	
88)	3700.0000-4200.0000	H,V,L,R	36M0G7F	Rx			11M		DIGITAL VI	DEO	
89)	3700.0000-4200.0000	H,V,L,R	21K9G7D-	Rx			11M		DIGITAL DA	ATA	
90)	3700.0000-4200.0000	H,V,L,R	72M0G7D	Rx			11M		DIGITAL DA	TA	
91)	3629,4000-3631.6000	L,R	2M20G1D	Rx			11M		BPSK SPREA (NAVIGATION FAA-WASS F		DATA PORT
92)	3600.0000-3629.0000	L,R	2M20G1D	Rx			11M		DIGITAL CA	RRIER	
93)	3600.0000-3623.0000	L,R	10K5G1E	Rx			11M		DIGITAL VO	OICE, AERO	
94)	3600.0000-3623.0000	L,R	12K0G1D	Rx			11M		INM B,C,M,	FEEDERLINK	
95)	3600.0000-3623.0000	L,R	12K0G3E	Rx			11M		INM B,C,M,	FEEDERLINK	
96)	3600.0000-3623.0000	L,R	3K00G1D	Rx			11M		INM B,C,M,	FEEDERLINK	
97)	3600.0000-3623.0000	L,R	4K00G1D	Rx			11M		INM B,C,M,	FEEDERLINK	



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115) 1564,4200-1586,4200

116) 1564.4200-1586.4200

117) 1165.4500-1187.4500

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04/25/2016

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Max EIRP

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#	Frequency (MHz)	Polarizatio Code	on Emission	Tx/Rx Mode	EIRP /Carrier (dBW)	Density /Carrier (dBW/4kHz)	Associated Antenna	Provisions (Refer to Section H)	Modulation/ Services	
98) 36	500.0000-3623.0000	L,R	4K00G3E	Rx			11M		INM B,C,M,	FEEDERLINK
99) 36	500:0000-3623.0000	L,R	7K50G3E	Rx			11M		INM B,C,M,	FEEDERLINK
100) 36	500.0000-3623.0000	L,R	1K20G1D	Rx			11M		TDM, AERO,	FEEDERLINK
101) 36	500.0000-3623.0000	L,R	2K40G1D	Rx			11M		TDM, AERO,	FEEDERLINK
102) 36	500.0000-3623.0000	L,R	4K80G1D	Rx			11M		TDM, AERO,	FEEDERLINK
103)36	00.0000-3623.0000	L,R	600HG1D	Rx			11M		TDM, AERO,	FEEDERLINK
104)36	00.0000-3620.0000	L,R	1K20G1D	Rx			11M		STD-C	
105)36	00.0000-3620.0000	L,R	600HG1D	Rx			11M		STD-C	
106)36	00.0000-3620.0000	L,R	NON	Rx			11M		PILOT	
107)36	00.0000-3620.0000	L,R	30K0F3E	Rx			11M		STD A VOICE	3
108)36	00.0000-3260.0000	L,R	4K80G1D	Rx			11M		STD A TELE	ζ
109)66	79.4200-6701.4200	R	22M0G7W	Tx	83.00	45.60	SBY20			ITAL DATA FEEDER STEM TESTING
110)66	79.4200-6701.4200	R	22M0G7W	Tx	78.00	40.60	SBY20		OPERATIONAL DATA FEEDER	
111) 66	28.2700-6650.2700	R	22M0G7W	Тx	83.00	45.60	SBY20			TTAL DATA FEEDER STEM TESTING
112) 66	28.2700-6650.2700	R	22M0G7W	Tx	78.00	40.60	SBY20		OPERATIONAL DATA FEEDER	
113)41	99.6000-4200.0000	R	0M4KG7W	Rx			SBY20		BEACON-2 PO	EM .
114)41	98.0000-4198.4000	R	0M4KG7W	Rx			SBY20		BEACON-1 PO	CM

SBY20

SBY20

SBY20

Max

FCC Form 488

IOT-DIGITAL DATA SYSTEM

OPERATIONAL C1 DIGITAL

IOT-DIGITAL DATA SYSTEM

TESTING FAA-WAAS

TESTING FAA-WAAS

DATA FAA-WAAS

22M0G7W

22M0G7W

22M0G7W

Rx

Rx

Rx



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101 mil 1011 01 mil 100 provide							Special Provisions		
Frequency # (MHz)	Polarizatio Code	on Emission	Tx/Rx Mode	/Carrier (dBW)	/Carrier (dBW/4kHz)	Associated Antenna	(Refer to Section H)	Modulation/ Services	
118) 1165.4500-1187.45	500 R	22M0G7W	Rx			SBY20		OPERATIONAL CS	5 DIGITAL
119) 6417.5000-6440.00	000 L,R	600HG1D	Тх	77.00	77.00	11M		TDM, STD-C, FEE	DERLINK
120) 1525.0000-1559.00	000 L,R	600HG1D	Rx	0.00	0.00	1.52M		DIGTIAL CARRIER	
121) 6417.5000-6443.00	000 L,R	12K0G3E	Тx			11M		INM B,C,M, FEED	ERLINK

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		Associated Antenna(s)
1)	1525.0000-1559.0000		05.2-05.7	102.6-256.9	0	1.52M
2)	1626.5000-1660.5000		05.2-05.7	102.6-256.9	0	1.52M
3)	1574.4000-1576.6000	2.0W-144.0W	05.2-05.7	102.6-256.9	0	11M
4)	3600.0000-3623.0000	2.0W-144.0W	05.2-05.7	102.6-256.9	0	11M
5)	4192.5000-4200.0000	2.0W-144.0W	05.2-05.7	102.6-256.9	0	11M
6)	6417.5000-6454.0000	2.0W-144.0W	05.2-05.7	102.6-256.9	13.9	11M
7)	6454.4000-6456.6000	2.0W-91.0W	05.3-38.8	102.6-205.7	13.9	11M
8)	3629.4000-3631.6000	2.0W-91.0W	05.3-38.8	102.6-205.7		11M
9)	3600.0000-3629.0000	2.0W-91.0W	05.3-38.8	102.6-205.7		11M
10)	5925.0000-6425.0000	2.0W-144.0W	05.3-05.7	102.6-257.0	39.7	11M
11)	3700.0000-4200.0000	2.0W-144.0W	05.3-05.7	102.6-257.0		11M
12)	6678.4200-6702.4200	116.0W-118.0W	25.6-24.3	234.4-236.2	-13.79	SBY20
13)	6627.2700~6651.2700	116.0W-118.0W	25.6-24.3	234.4-236.2	-13.79	SBY20
14)	1563.4200-1587.4200	116.0W-118.0W	25.6-24.3	234.4-236.2		SBY20
15)	1164.4500-1188.4500	116.0W-118.0W	25.6-24.3	234.4-236.2		SBY20
16)	4199.6000-4200.0000	116.0W-118.0W	25.6-24.3	234.4-236.2		SBY20
17)	4198.0000-4198.4000	116.0W-118.0W	25.6-24.3	234.4-236.2		SBY20



RADIO STATION AUTHORIZATION

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Common Carrier

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02/27/2024

D) Points of Communications

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

- 1) SOUTHBURY to INMARSAT Ltd.-2 satellite(s) @ 17 W.L. in AOR-EAST (United Kingdom-licensed) (Non-U.S.-licensed)
- 2) SOUTHBURY to INMARSAT Ltd.-2 satellite(s) @ 98 W.L. in AOR-WEST (United Kingdom-licensed) (Non-U.S.-licensed)
- 3) SOUTHBURY to INMARSAT Ltd.-3 satellite(s) @ 15.5 W.L. in AOR-E (United Kingdom-licensed) (Non-U.S.-licensed)
- 4) SOUTHBURY to INTELSAT V F-6 satellite 18.5 W.L. of the INTELSAT system (U.S.-licensed)
- 5) SOUTHBURY to Permitted Space Station List
- 6) SOUTHBURY to INMARSAT 4F2 satellite(s) @52.75 W.L. in AOR-EAST (United Kingdom-licensed)
- 7) SOUTHBURY to All Inmarsat satellites on "ISAT List" authorized to access U.S. in the L-Band
- 8) SBY20 to SATMEX-9 (S2926) @ 117 degrees W.L. (Mexico-licensed) [awaiting UNOOSA registration]

E) Antenna Facilities

Site ID	_	Antenna ID	Units	Diameter (meters)	Manufacturer	Model numbe	Site Elevation (Meters)	Max Antenna Height (Meters)	Special Provisions (Refer to Section H)
SOUTHBU	JRY	1.52M	1	1.52	COMSAT LABS		36.6	2.13 AGL/ 38.7 AMS	L
I		total input	power		1.0000 GHz na flange (Watts) ull carriers (dBW)	= .00	6400 GHz		
SOUTHBU	URY	11M	0	11	SCIENTIFIC-ATLA	NTA 8007	36.6	12.8 AGL/ 49.4 AMS	L
1		total input	-		na flange (Watts) ll carriers (dBW)				
SOUTHBU	ЛХ	11M	1	11	SCIENTIFIC-ATLA	NTA 8007	36.6	12.8 AGL/ 49.4 AMS	L
ľ	Max Gain		51.5 00 GHz	dBi @ 54.0	4.0000 GHz dBi @ 6.1750		0000 GHz	51.5 dBi @	
		_	-		a flange (Watts) all carriers (dBW)				



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E) Antenna Facilities

Sit II		Diamet Units (meter		Model number	Site Elevation (Meters)	Max Antenna Height (Meters)	Provisions (Refer to Section H)
SBY20	SBY20	1 13.1	. GD SATCOM	13.1 METER	36.6	15.1 AGL/ 51.7 AMSI	•
	Max Gains(s): 6.3	37.3 dBi @	1.1750 GHz	53.4 dBi @ 4.2	000 GHz	57.2 dBi @	
	_	-	enna flange (Watts) r all carriers (dBW				

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:
 - 214 --- Authority IS GRANTED pursuant to Section 25.210(j) of the Commission's rules, to permit operations of earth stations with the Inmarsat 4F2 satellite, maintained at ±.10 degree of the 52.75° W.L., subject to the condition that this waiver and the operations it permits shall terminate in the event that a satellite is launched into a location such that its stationkeeping volume would overlap the Inmarsat 4F2 satellite's ±0.10 degree stationkeeping volume, but would not overlap the Inmarsat 4F2 satellite's ±0.05° degree stationkeeping volume, unless Inmarsat has successfully coordinated its physical operations with those of the other spacecraft.
 - 215 --- Operations via the Inmarsat 4F2 satellite using a north-south inclination of as much as three degrees ARE GRANTED, conditioned on operations of the 4F2 complying with the inclined orbit requirements set forth in Sections 25.280(b)(1)-(3) of the Commission's rules
 - 216 --- Operations in the 1544-1545/1645.5-1646.5 MHz frequency bands ARE LIMITED to distress and safety communications, in accordance with International Footnotes 5.356 and 5.375 of the ITU Radio Regulations.
 - 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.
 - 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.
 - 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/cm2. 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.



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Authorization Type: Modification of License File Number: SES-MOD-20151009-00698

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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:
 - 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.
 - 3848 --- The authorized frequency band(s) has (have) been cleared with the National Telecommunications and Information Administration.
 - 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.
 - 5062 --- the Licensee(s) shall maintain as its first priority the service of maritime commercial, safety and distress needs, and in particular uphold the safety and distress requirements of the Global Maritime Distress and Safety System.
 - 5208 --- The licensee shall take all necessary measures to ensure that the antenna 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 wherever such exposures might occur. 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.
 - 5957 --- Licensees must comply with the terms of any L-band operator-to-operator coordination agreement. In the absence of a continuing L-band operator-to-operator coordination agreement, operations of METs in the 1525-1559 and 1626.5-1660.5 MHz bands will be on a non-harmful interference basis until a future operator-to-operator agreement is concluded. In this instance, each licensee must notify the other operators in these frequency bands that it will be operating on a non-harmful interference basis. Each licensee must notify its customers that its operations are on a non-harmful interference basis.
- 90204 --- Communications with the Satmex 9 space station are authorized based upon and subject to the conditions, waivers, and findings specified for Call Sign S2926.



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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 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.