



**UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION**

RADIO STATION AUTHORIZATION

Name: COMTECH MOBILE DATACOM CORP.

Call Sign: E090027

Authorization Type: Modification of License

File Number: SES-MOD-20150702-00444

Non Common Carrier

Grant date: 11/02/2015

Expiration Date: 11/02/2017

Nature of Service: Mobile Satellite Service

Class of Station: Mobile Earth Station

A) Site Location(s)

#	Site ID	Address	Latitude	Longitude	Elevation (Meters)	Special Provisions NAD (Refer to Section H)
1)	R-CMT MSAT	AK, HI, US terr & poss in ftprint MSAT-1 & MSAT-2				27
2)	R-INMAR	CONUS, AK, HI, US terr & poss in ftprint ISAT list satellites				27
3)	R-OLD MSAT	US terr & poss in ftprint MSAT-1 & MSAT-2				27
4)	R-OLDM-AKHI	AK, HI in ftprint MSAT-1 & MSAT-2				27
5)	R-SKY	CONUS, AK, HI, US terr & poss in ftprint SkyTerra 1				27

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 2, 2015 (3 AM Eastern Standard Time) and ending November 2, 2017 (3 AM Eastern Standard Time) . The required date of completion of construction and commencement of operation is November 2, 2016 (3 AM Eastern Standard Time) . Grantee must file with the Commission a certification upon completion of construction and commencement of operation.



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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
1)	1646.5000-1660.5000	R	168KG1D	Tx	10.20	4.40	1		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
2)	1631.5000-1645.5000	R	168KG1D	Tx	10.20	4.40	1		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
3)	1545.0000-1559.0000	R	168KG1D	Rx			1		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
4)	1530.0000-1544.0000	R	168KG1D	Rx			1		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
5)	1646.5000-1660.5000	R	200KG7W	Tx	11.20	5.40	10		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
6)	1631.5000-1645.5000	R	200KG7W	Tx	11.20	5.40	10		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
7)	1545.0000-1559.0000	R	200KG7W	Rx			10		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
8)	1530.0000-1544.0000	R	200KG7W	Rx			10		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
9)	1646.5000-1660.5000	R	168KG1D	Tx	10.00	4.20	11		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
10)	1631.5000-1645.5000	R	168KG1D	Tx	10.00	4.20	11		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
11)	1545.0000-1559.0000	R	168KG1D	Rx			11		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
12)	1530.0000-1544.0000	R	168KG1D	Rx			11		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
13)	1646.5000-1660.5000	R	168KG1D	Tx	10.20	4.40	12		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE



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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
14)	1631.5000-1645.5000	R	168KG1D	Tx	10.20	4.40	12		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
15)	1545.0000-1559.0000	R	168KG1D	Rx			12		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
16)	1530.0000-1544.0000	R	168KG1D	Rx			12		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
17)	1646.5000-1660.5000	R	168KG1D	Tx	12.10	6.30	13		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
18)	1631.5000-1645.5000	R	168KG1D	Tx	12.10	6.30	13		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
19)	1545.0000-1559.0000	R	168KG1D	Rx			13		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
20)	1530.0000-1544.0000	R	168KG1D	Rx			13		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
21)	1646.5000-1660.5000	R	168KG1D	Tx	11.30	5.50	14		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
22)	1631.5000-1645.5000	R	168KG1D	Tx	11.30	5.50	14		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
23)	1545.0000-1559.0000	R	168KG1D	Rx			14		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
24)	1530.0000-1544.0000	R	168KG1D	Rx			14		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
25)	1646.5000-1660.5000	R	168KG1D	Tx	12.30	6.50	15		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
26)	1631.5000-1645.5000	R	168KG1D	Tx	12.30	6.50	15		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE



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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
27)	1545.0000-1559.0000	R	168KG1D	Rx			15		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
28)	1530.0000-1544.0000	R	168KG1D	Rx			15		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
29)	1646.5000-1660.5000	R	168KG1D	Tx	11.20	5.40	16		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
30)	1631.5000-1645.5000	R	168KG1D	Tx	11.20	5.40	16		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
31)	1545.0000-1559.0000	R	168KG1D	Rx			16		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
32)	1530.0000-1544.0000	R	168KG1D	Rx			16		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
33)	1646.5000-1660.5000	R	168KG1D	Tx	11.00	5.20	17		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
34)	1631.5000-1645.5000	R	168KG1D	Tx	11.00	5.20	17		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
35)	1545.0000-1559.0000	R	168KG1D	Rx			17		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
36)	1530.0000-1544.0000	R	168KG1D	Rx			17		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
37)	1646.5000-1660.5000	R	168KG1D	Tx	13.30	7.50	18		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
38)	1631.5000-1645.5000	R	168KG1D	Tx	13.30	7.50	18		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
39)	1545.0000-1559.0000	R	168KG1D	Rx			18		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE



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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
40)	1530.0000-1544.0000	R	168KG1D	Rx			18		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
41)	1646.5000-1660.5000	R	168KG1D	Tx	11.00	5.20	19		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
42)	1631.5000-1645.5000	R	168KG1D	Tx	11.00	5.20	19		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
43)	1545.0000-1559.0000	R	168KG1D	Rx			19		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
44)	1530.0000-1544.0000	R	168KG1D	Rx			19		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
45)	1646.5000-1660.5000	R	168KG1D	Tx	12.10	6.30	2		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
46)	1631.5000-1645.5000	R	168KG1D	Tx	12.10	6.30	2		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
47)	1545.0000-1559.0000	R	168KG1D	Rx			2		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
48)	1530.0000-1544.0000	R	168KG1D	Rx			2		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
49)	1646.5000-1660.5000	R	168KG1D	Tx	11.30	5.50	3		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
50)	1631.5000-1645.5000	R	168KG1D	Tx	11.30	5.50	3		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
51)	1545.0000-1559.0000	R	168KG1D	Rx			3		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
52)	1530.0000-1544.0000	R	168KG1D	Rx			3		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE



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The General Provision 1010 applies to all receiving frequency bands.

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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
53)	1646.5000-1660.5000	R	168KG1D	Tx	12.30	6.50	4		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
54)	1631.5000-1645.5000	R	168KG1D	Tx	12.30	6.50	4		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
55)	1545.0000-1559.0000	R	168KG1D	Rx			4		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
56)	1530.0000-1544.0000	R	168KG1D	Rx			4		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
57)	1646.5000-1660.5000	R	168KG1D	Tx	11.20	5.40	5		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
58)	1631.5000-1645.5000	R	168KG1D	Tx	11.20	5.40	5		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
59)	1545.0000-1559.0000	R	168KG1D	Rx			5		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
60)	1530.0000-1544.0000	R	168KG1D	Rx			5		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
61)	1646.5000-1660.5000	R	168KG1D	Tx	11.00	5.20	6		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
62)	1631.5000-1645.5000	R	168KG1D	Tx	11.00	5.20	6		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
63)	1545.0000-1559.0000	R	168KG1D	Rx			6		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
64)	1530.0000-1544.0000	R	168KG1D	Rx			6		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
65)	1646.5000-1660.5000	R	168KG1D	Tx	13.30	7.50	7		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE



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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
66)	1631.5000-1645.5000	R	168KG1D	Tx	13.30	7.50	7		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
67)	1545.0000-1559.0000	R	168KG1D	Rx			7		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
68)	1530.0000-1544.0000	R	168KG1D	Rx			7		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
69)	1646.5000-1660.5000	R	168KG1D	Tx	11.00	5.20	8		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
70)	1631.5000-1645.5000	R	168KG1D	Tx	11.00	5.20	8		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
71)	1545.0000-1559.0000	R	168KG1D	Rx			8		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
72)	1530.0000-1544.0000	R	168KG1D	Rx			8		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, MARINE, LAND MOBILE
73)	1646.5000-1660.5000	R	270KG7W	Tx	11.20	5.40	9		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
74)	1631.5000-1645.5000	R	270KG7W	Tx	11.20	5.40	9		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
75)	1545.0000-1559.0000	R	270KG7W	Rx			9		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL
76)	1530.0000-1544.0000	R	270KG7W	Rx			9		DSSS, BPSK, 21,094 TO 84, 375 CPS AND DATA, AERONAUTICAL



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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		
1)	1631.5000-1645.5000	0.0W	-360.0W					1.9	9
2)	1646.5000-1660.5000	0.0W	-360.0W					1.9	9
3)	1530.0000-1544.0000	0.0W	-360.0W						9
4)	1545.0000-1559.0000	0.0W	-360.0W						9
5)	1631.5000-1645.5000	0.0W	-360.0W					1.9	10
6)	1646.5000-1660.5000	0.0W	-360.0W					1.9	10
7)	1530.0000-1544.0000	0.0W	-360.0W						10
8)	1545.0000-1559.0000	0.0W	-360.0W						10
9)	1530.0000-1544.0000	0.0W	-360.0W						11
10)	1545.0000-1559.0000	0.0W	-360.0W						11
11)	1646.5000-1660.5000	0.0W	-360.0W					-3.5	11
12)	1631.5000-1645.5000	0.0W	-360.0W					-3.5	11
13)	1631.5000-1645.5000	0.0W	-360.0W					-1	3
14)	1646.5000-1660.5000	0.0W	-360.0W					-1	3
15)	1530.0000-1544.0000	0.0W	-360.0W						3
16)	1545.0000-1559.0000	0.0W	-360.0W						3
17)	1631.5000-1645.5000	0.0W	-360.0W					-1	1
18)	1646.5000-1660.5000	0.0W	-360.0W					-1	1
19)	1530.0000-1544.0000	0.0W	-360.0W						1
20)	1545.0000-1559.0000	0.0W	-360.0W						1
21)	1631.5000-1645.5000	0.0W	-360.0W					1.5	2
22)	1646.5000-1660.5000	0.0W	-360.0W					1.5	2
23)	1530.0000-1544.0000	0.0W	-360.0W						2
24)	1545.0000-1559.0000	0.0W	-360.0W						2
25)	1631.5000-1645.5000	0.0W	-360.0W					-1	4
26)	1646.5000-1660.5000	0.0W	-360.0W					-1	4
27)	1530.0000-1544.0000	0.0W	-360.0W						4
28)	1545.0000-1559.0000	0.0W	-360.0W						4
29)	1631.5000-1645.5000	0.0W	-360.0W					1.9	5
30)	1646.5000-1660.5000	0.0W	-360.0W					1.9	5
31)	1530.0000-1544.0000	0.0W	-360.0W						5
32)	1545.0000-1559.0000	0.0W	-360.0W						5
33)	1646.5000-1660.5000	0.0W	-360.0W					-1	6
34)	1631.5000-1645.5000	0.0W	-360.0W					-1	6
35)	1530.0000-1544.0000	0.0W	-360.0W						6



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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		
36)	1545.0000-1559.0000	0.0W	360.0W						6
37)	1631.5000-1645.5000	0.0W	360.0W					-3.5	7
38)	1646.5000-1660.5000	0.0W	360.0W					-3.5	7
39)	1530.0000-1544.0000	0.0W	360.0W						7
40)	1545.0000-1559.0000	0.0W	360.0W						7
41)	1631.5000-1645.5000	0.0W	360.0W					-1	8
42)	1646.5000-1660.5000	0.0W	360.0W					-1	8
43)	1530.0000-1544.0000	0.0W	360.0W						8
44)	1545.0000-1559.0000	0.0W	360.0W						8
45)	1631.5000-1645.5000	0.0W	360.0W					-1	12
46)	1646.5000-1660.5000	0.0W	360.0W					-1	12
47)	1530.0000-1544.0000	0.0W	360.0W						12
48)	1545.0000-1559.0000	0.0W	360.0W						12
49)	1631.5000-1645.5000	0.0W	360.0W					1.5	13
50)	1646.5000-1660.5000	0.0W	360.0W					1.5	13
51)	1530.0000-1544.0000	0.0W	360.0W						13
52)	1545.0000-1559.0000	0.0W	360.0W						13
53)	1631.5000-1645.5000	0.0W	360.0W					-1	14
54)	1646.5000-1660.5000	0.0W	360.0W					-1	14
55)	1530.0000-1544.0000	0.0W	360.0W						14
56)	1545.0000-1559.0000	0.0W	360.0W						14
57)	1631.5000-1645.5000	0.0W	360.0W					-1	15
58)	1646.5000-1660.5000	0.0W	360.0W					-1	15
59)	1530.0000-1544.0000	0.0W	360.0W						15
60)	1545.0000-1559.0000	0.0W	360.0W						15
61)	1631.5000-1645.5000	0.0W	360.0W					1.9	16
62)	1646.5000-1660.5000	0.0W	360.0W					1.9	16
63)	1530.0000-1544.0000	0.0W	360.0W						16
64)	1545.0000-1559.0000	0.0W	360.0W						16
65)	1545.0000-1559.0000	0.0W	360.0W						17
66)	1631.5000-1645.5000	0.0W	360.0W					-1	17
67)	1646.5000-1660.5000	0.0W	360.0W					-1	17
68)	1530.0000-1544.0000	0.0W	360.0W						17
69)	1631.5000-1645.5000	0.0W	360.0W					-3.5	18
70)	1646.5000-1660.5000	0.0W	360.0W					-3.5	18



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Call Sign: E090027

Authorization Type: Modification of License

File Number: SES-MOD-20150702-00444

Non Common Carrier

Grant date: 11/02/2015

Expiration Date: 11/02/2017

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		
71)	1530.0000-1544.0000	0.0W	-360.0W						18
72)	1545.0000-1559.0000	0.0W	-360.0W						18
73)	1631.5000-1645.5000	0.0W	-360.0W					-1	19
74)	1646.5000-1660.5000	0.0W	-360.0W					-1	19
75)	1530.0000-1544.0000	0.0W	-360.0W						19
76)	1545.0000-1559.0000	0.0W	-360.0W						19

D) Points of Communications

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

- 1) R-SKY to SKYTERRA 1 satellite @ 101.3 degrees W.L. satellite(s) of the (U.S.-licensed)
- 2) R-INMAR to All Inmarsat satellites on "ISAT List" authorized to access U.S. in the L-Band
- 3) R-CMT MSAT to MSAT-1 @ 106.5 degrees W.L. (Canadian Licensed) (Non-U.S.-licensed)
- 4) R-CMT MSAT to MSAT-2 satellite (AMSC-1) @ 103.3 degrees W.L. satellite (U.S.-licensed)
- 5) R-OLD MSAT to MSAT-1 @ 106.5 degrees W.L. (Canadian Licensed) (Non-U.S.-licensed)
- 6) R-OLD MSAT to MSAT-2 satellite (AMSC-1) @ 103.3 degrees W.L. satellite (U.S.-licensed)
- 7) R-OLDM-AKHI to MSAT-1 @ 106.5 degrees W.L. (Canadian Licensed) (Non-U.S.-licensed)
- 8) R-OLDM-AKHI to MSAT-2 satellite (AMSC-1) @ 103.3 degrees W.L. satellite (U.S.-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)
R-OLD MSAT	1		0.15	SCI SYSTEMS	MT-2010 INTERNAL			
Max Gains(s):		2.9 dBi @	1.5450 GHz	2.9 dBi @	1.6450 GHz			
Maximum total input power at antenna flange (Watts) =					5.30			
Maximum aggregate output EIRP for all carriers (dBW) =					10.20			
R-INMAR	10		0.27	SENSOR SYSTEMS	S65-8282-301			
Max Gains(s):		3.9 dBi @	1.6450 GHz	3.5 dBi @	1.5450 GHz			
Maximum total input power at antenna flange (Watts) =					5.30			
Maximum aggregate output EIRP for all carriers (dBW) =					11.20			



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Non Common Carrier

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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)
R-CMT MSAT	11		0.153	PCTEL	CMT-500			
		Max Gains(s):	4.5 dBi @	1.5450 GHz	4.5 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =				5.30		
		Maximum aggregate output EIRP for all carriers (dBW) =					10.00	
R-OLDM-AKHI	12		0.15	SCI SYSTEMS	MT-2010 INTERNAL			
		Max Gains(s):	2.9 dBi @	1.5450 GHz	2.9 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =				5.30		
		Maximum aggregate output EIRP for all carriers (dBW) =					10.20	
R-OLDM-AKHI	13		0.15	SENSOR SYSTEMS	S65-8582-101			
		Max Gains(s):	4.3 dBi @	1.5450 GHz	4.8 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =				5.30		
		Maximum aggregate output EIRP for all carriers (dBW) =					12.10	
R-OLDM-AKHI	14		0.06	SCI SYSTEMS	MT-2010 EXTERNAL			
		Max Gains(s):	4.0 dBi @	1.5450 GHz	4.0 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =				5.30		
		Maximum aggregate output EIRP for all carriers (dBW) =					11.30	
R-OLDM-AKHI	15		0.15	SCI SYSTEMS	MT-2010RL INTERNAL			
		Max Gains(s):	5.0 dBi @	1.5450 GHz	5.0 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =				5.30		
		Maximum aggregate output EIRP for all carriers (dBW) =					12.30	
R-OLDM-AKHI	16		0.27	SENSOR SYSTEMS	S65-8282-301			
		Max Gains(s):	3.5 dBi @	1.5450 GHz	3.9 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =				5.30		
		Maximum aggregate output EIRP for all carriers (dBW) =					11.20	



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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)
R-OLDM-AKHI	17		0.18	PCTEL	34811Z-3			
		Max Gains(s):	3.7 dBi @	1.5450 GHz	3.7 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =			5.30			
		Maximum aggregate output EIRP for all carriers (dBW) =			11.00			
R-OLDM-AKHI	18		0.18	PCTEL	34911Z-3			
		Max Gains(s):	6.0 dBi @	1.5450 GHz	6.0 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =			5.30			
		Maximum aggregate output EIRP for all carriers (dBW) =			13.30			
R-OLDM-AKHI	19		0.19	PCTEL	3561AW-1/A			
		Max Gains(s):	3.7 dBi @	1.5450 GHz	3.7 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =			5.30			
		Maximum aggregate output EIRP for all carriers (dBW) =			11.00			
R-OLD MSAT	2		0.15	SENSOR SYSTEMS	S65-8582-101			
		Max Gains(s):	4.3 dBi @	1.5450 GHz	4.8 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =			5.30			
		Maximum aggregate output EIRP for all carriers (dBW) =			12.10			
R-OLD MSAT	3		0.06	SCI SYSTEMS	MT-2010 EXTERNAL			
		Max Gains(s):	4.0 dBi @	1.5450 GHz	4.0 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =			5.30			
		Maximum aggregate output EIRP for all carriers (dBW) =			11.30			
R-OLD MSAT	4		0.15	SCI SYSTEMS	MT-2010RL INTERNAL			
		Max Gains(s):	5.0 dBi @	1.5450 GHz	5.0 dBi @	1.6450 GHz		
		Maximum total input power at antenna flange (Watts) =			5.30			
		Maximum aggregate output EIRP for all carriers (dBW) =			12.30			



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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)
R-OLD MSAT	5		0.27	SENSOR SYSTEMS	S65-8282-301			
Max Gains(s):		3.5 dBi @	1.5450 GHz	3.9 dBi @	1.6450 GHz			
Maximum total input power at antenna flange (Watts) =					5.30			
Maximum aggregate output EIRP for all carriers (dBW) =					11.20			
R-OLD MSAT	6		0.18	PCTEL	34811Z-3			
Max Gains(s):		3.7 dBi @	1.5450 GHz	3.7 dBi @	1.6450 GHz			
Maximum total input power at antenna flange (Watts) =					5.30			
Maximum aggregate output EIRP for all carriers (dBW) =					11.00			
R-OLD MSAT	7		0.18	PCTEL	34911Z-3			
Max Gains(s):		6.0 dBi @	1.5450 GHz	6.0 dBi @	1.6450 GHz			
Maximum total input power at antenna flange (Watts) =					5.30			
Maximum aggregate output EIRP for all carriers (dBW) =					13.30			
R-OLD MSAT	8		0.19	PCTEL	3561AW-1/A			
Max Gains(s):		3.7 dBi @	1.5450 GHz	3.7 dBi @	1.6450 GHz			
Maximum total input power at antenna flange (Watts) =					5.30			
Maximum aggregate output EIRP for all carriers (dBW) =					11.00			
R-SKY	9		0.27	SENSOR SYSTEMS	S65-8282-301			
Max Gains(s):		3.5 dBi @	1.5450 GHz	3.9 dBi @	1.6450 GHz			
Maximum total input power at antenna flange (Watts) =					5.30			
Maximum aggregate output EIRP for all carriers (dBW) =					11.20			

F) Remote Control Point:

R-CMT MSAT 20430 CENTURY BLVD.

Call Sign:

GERMANTOWN, MONTGOMERY, MD 20874

240-686-3389



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F) Remote Control Point:

R-INMAR	20430 CENTURY BLVD. GERMANTOWN, MONTGOMERY, MD 20874 240-686-3389	Call Sign:
R-OLD MSAT	20430 CENTURY BLVD. GERMANTOWN, MONTGOMERY, MD 20874 240-686-3389	Call Sign:
R-OLDM-AKH	20430 CENTURY BLVD GERMANTOWN, MONTGOMERY, MD 20874 240-686-3389	Call Sign:
R-SKY	20430 CENTURY BLVD. GERMANTOWN, MONTGOMERY, MD 20874 240-686-3389	Call Sign:

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:

263 --- Licensee shall coordinate with the National Science Foundation (NSF) in the 1660.0-1660.5 MHz band to ensure sharing of co-primary services.

498 --- Comtech Mobile Datacom Corporation is GRANTED a waiver of the priority access and real-time preemption requirements of Footnotes US308 and US315 to Section 2.106, and Section 25.136(d) of the Commission's rules, 47 C.F.R. §§ 2.106, Footnotes US308, US315, 25.136(d), for the term of the license.

499 --- Comtech Mobile Datacom Corporation is GRANTED to communicate with MSV-1, MSAT-1, MSAT-2, and any satellite on the Commission's ISAT List (Includes only Inmarsat satellites). Some of these terminals in specific geographical areas exceed the "3 second period". However, the total number of terminals that do not comply with the "3 second" value shall not exceed 10,000. See Letter from the United States Department of Commerce, National Telecommunications and Information Administration signed by Mr. Karl B. Nebbia, Associate Administrator, Office of Spectrum Management.

500 --- Comtech Mobile Datacom Corporation's MET operations shall be limited to spectrum in each direction of the 1631.5-1645.5 MHz, 1646.5-1660.5 MHz, 1530-1544 MHz, and 1545-1559 MHz frequency bands coordinated for the satellite(s) being accessed in the most recent annual L-band operator-to-operator agreement.



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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:

- 501 --- Comtech Mobile Datacom Corporation's MET operations shall be limited to spectrum that does not operate on frequencies assigned to services provided for GMDSS or the AMS(R)S.
- 502 --- The total number of METs in operation for call signs E990143, E090027, and E090029 shall not exceed 25,000 terminals.
- 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.
- 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.
- 2300 --- Authority is granted to operate this station by remote control provided that: (1) the parameters of the transmissions of this station monitored at the remote control point, and the operational functions sufficient to ensure that the operations of this station are in full compliance with the station authorization at all times; (2) upon detection by the grantee, or upon notification from the Commission, of a deviation of the operation of this station, transmissions shall be immediately suspended until the deviation is corrected, except that transmissions concerning the immediate safety of life or property may be conducted for the duration of such emergency; and (3) the grantee shall have available, at all times, the technical personnel necessary to perform the technical servicing and maintenance of this station expeditiously. See also Public Notice "The International Bureau Provides Guidance Concerning the Relocation of Earth Station Remote Control Points", DA 06-978 (rel. May 4, 2006).
- 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.
- 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.
- 5216 --- All operations shall be on a non-common carrier basis.



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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:

5852 --- The authorized mobile earth terminals (METs) shall comply with the out-of-band emission limits set forth in Sections 25.202(f) and 25.216 of the Commission's rules. See 47 C.F.R. §§ 25.202(f) and 25.216; Out-of-Band Emission Orders, FCC 02-34 (rel. May 14, 2002), as amended by FCC-03-0283 (rel. November 18, 2003).

90011 --- Comtech Mobile Datacom Corporation's authorization, (SES-MOD-20130206-00159) is limited to a two-year term ending November 2, 2017. If Comtech wishes to continue to operate beyond November 2, 2017, it must file a modification application, and in that application must justify its need to continue to operate under a waiver of Footnotes US308 and US315 to the Table of Frequency Allocations, Section 2.106 and Section 25.136(d) of the Commission's rules, 47 C.F.R. §§ 2.106, Footnotes US308, US315, 25.136(d), and must submit an analysis of its MET operations in the United States showing the number of packets each month having a transmission duration of 3 seconds or longer since the release of this authorization.



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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.