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SITE ID: COGS  
LOCATION: 3060 Flying View (COGS), El Paso, Ellicott, CO  
38 ° 52 ' 25.58 " N LAT. 104 ° 24 ' 26.10 " W LONG.

ANTENNA ID:	UHF-1	1.85 meters	M2 Antenna Systems	401CP14
	402.0000 - 403.0000 MHz		15K0F1D 31.50 dBW	Command
	402.0000 - 403.0000 MHz		15K0F1D 0.00 dBW	Telemetry and Tracking and Digital Data
ANTENNA ID:	SBAND-1	1.2 meters	ARA - Seavey	C1502-800
	2020.0000 - 2025.0000 MHz		250KG1D 0.00 dBW	Digital Data

**Points of Communication:**

COGS - LEMUR Phase I - (NGSO)

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**SES-LIC-20160317-00247** E E160032 Spire Global, Inc.  
Application for Authority 06/22/2016 - 06/22/2031  
Grant of Authority Date Effective: 06/22/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Earth Exploration Satellite Service

SITE ID: CTGS  
LOCATION: 155 Locust Street (CTGS), Hartford, Hartford, CT  
41 ° 44 ' 42.27 " N LAT. 72 ° 39 ' 54.66 " W LONG.

ANTENNA ID:	UHF-1	1.85 meters	M2 Antenna Systems	401CP14
	402.0000 - 403.0000 MHz		15K0F1D 31.50 dBW	Command
	402.0000 - 403.0000 MHz		15K0F1D 0.00 dBW	Telemetry and Tracking and Digital Data

**Points of Communication:**

CTGS - LEMUR Phase I - (NGSO)

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**SES-LIC-20160317-00257** E E160043 Spire Global, Inc.  
Application for Authority 06/23/2016 - 06/23/2031  
Grant of Authority Date Effective: 06/23/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Earth Exploration Satellite Service, Other

SITE ID: SFGS  
LOCATION: 466 8th Street, San Francisco, San Francisco, CA  
37 ° 46 ' 22.15 " N LAT. 122 ° 24 ' 27.80 " W LONG.

ANTENNA ID:	UHF-1	1.85 meters	M2 Antenna Systems	401CP14
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402.0000 - 403.0000 MHz	15K0F1D	31.50 dBW	command
402.0000 - 403.0000 MHz	15K0F1D	0.00 dBW	Digital/Backup Data Downlink, telemetry and tracking
ANTENNA ID: SBAND-1	1.2 meters	ARA - Seavey	C1502-800
2020.0000 - 2025.0000 MHz	250KG1D	0.00 dBW	Digital Data

**Points of Communication:**

SFGS - LEMUR Phase I - (NGSO)

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**SES-LIC-20160317-00258** E E160044 Spire Global, Inc.  
 Application for Authority 06/23/2016 - 06/23/2031  
 Grant of Authority Date Effective: 06/23/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Earth Exploration Satellite Service, Other

SITE ID: VIGS  
 LOCATION: 23 Estate Northside, N/A, Saint Croix, VI  
 17 ° 45 ' 43.12 " N LAT. 64 ° 53 ' 6.01 " W LONG.

ANTENNA ID: UHF-1	1.85 meters	M2 Antenna Systems	401CP14
402.0000 - 403.0000 MHz	15K0F1D	31.50 dBW	command
402.0000 - 403.0000 MHz	15K0F1D	0.00 dBW	Digital/Backup Data Downlink, telemetry and tracking
ANTENNA ID: SBAND-1	1.2 meters	ARA - Seavey	C1502-800
2020.0000 - 2025.0000 MHz	250KG1D	0.00 dBW	Digital data

**Points of Communication:**

VIGS - LEMUR Phase I - (NGSO)

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**SES-LIC-20160426-00373** E E160070 The Boeing Company  
 Application for Authority 06/22/2016 - 06/22/2031  
 Grant of Authority Date Effective: 06/22/2016

**Class of Station:** Temporary Fixed Earth Station

**Nature of Service:** Fixed Satellite Service

SITE ID: DA-120  
 LOCATION: Various, Various, Various  
 0 ° 0 ' 0.00 " N LAT. 0 ° 0 ' 0.00 " W LONG.

ANTENNA ID: DA-120	1.2 meters	Swedish	DA-120
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14000.0000 - 14500.0000 MHz	5M00G7D	55.36 dBW	Angle-modulated, phase modulation; Data
11700.0000 - 12200.0000 MHz	5M00G7D		Angle-modulated, phase modulation; Data

**Points of Communication:**

DA-120 - GALAXY 17 (S2715) - (91 W.L.)

<b>SES-MFS-20160222-00152</b>	E WA28	Comsat, Inc.	
Modification			04/08/2003 - 04/08/2018
Grant of Authority			Date Effective: 06/27/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service, Feeder Link for Mobile Satellite Service, Mobile Satellite Service

SITE ID: 21CTTC/HUB  
LOCATION: 2120 RIVER ROAD (12.8M.)-C-BAND/L-BAND, NEW HAVEN, SOUTHURY, CT  
41 ° 27 ' 4.10 " N LAT. 73 ° 17 ' 20.87 " W LONG.

ANTENNA ID: 21CTTC 12.8 meters PHILCO FORD 12.8M.

5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
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SITE ID: 21CNORM  
LOCATION: 2120 RIVER ROAD (12.8M.)-C-BAND, NEW HAVEN, SOUTHURY, CT  
41 ° 27 ' 4.10 " N LAT. 73 ° 17 ' 20.90 " W LONG.

ANTENNA ID: 21CNORM 12.8 meters PHILCO FORD 12.8M.

6454.4000 - 6456.6000 MHz	2M20G1D	80.70 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
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6424.0000 - 6454.0000 MHz	34K0F3E	62.00 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
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6424.0000 - 6454.0000 MHz	NON	62.00 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
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6424.0000 - 6454.0000 MHz	27K0F3W	62.00 dBW	FM9 ANALOG BROADCAST CARRIER
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6424.0000 - 6454.0000 MHz	400KG1F	62.00 dBW	QPSK, DIGITAL VIDEO/DATA
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6424.0000 - 6454.0000 MHz	40K0G1D	63.30 dBW	16 QAM DIGITAL TELEPHONY
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5927.0000 - 5927.0000 MHz	NON	53.30 dBW	TT&C RANGING CARRIER
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6424.0000 - 6454.0000 MHz	5K60G1E	54.80 dBW	QPSK, TELEPHONY
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6424.0000 - 6454.0000 MHz	24K0G1E	61.10 dBW	QPSK, TELEPHONY
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6424.0000 - 6454.0000 MHz	5K60G1W	54.80 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	2M20G1D	62.00 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G7D	51.10 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D	51.10 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	24K0G1W	61.10 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	132KG7D	62.00 dBW	BPSK, DATA/TDM
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW	DIGITAL DATA
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK SPREAD SPECTRUM DATA-NAVIGATION CLOSE LOOP
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED AND UNCOMPANDED

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3947.0000 - 3953.0000 MHz	131KG2D	PCM/PSK/BI-PHASE TRACKING BEACON
3600.0000 - 3629.0000 MHz	NON	UNMODULATED AFC PILOT (CLOSE LOOP)
3600.0000 - 3629.0000 MHz	40K0G1W	16 QAM, DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F	QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	5K60G1E	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	5K60G1W	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	2K40G7D	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	24K0G1W	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	132KG7D	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	7K50G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	45K0G7D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	10K0G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	100KG1X	DIGITAL DATA

3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA
3600.0000 - 3629.0000 MHz	2K40G1D		BPSK, DATA
SITE ID: 1			
LOCATION: 2120 RIVER ROAD (12.8M.), NEW HAVEN, SOUTHURY, CT			
41 ° 27 ' 5.00 " N LAT.		73 ° 17 ' 21.00 " W LONG.	
ANTENNA ID: 12.8M.	12.8 meters	PHILCO-FORD	42 FOOT
6454.4000 - 6456.6000 MHz	600HG1D	44.50 dBW	DIGITAL CARRIER
6454.4000 - 6456.6000 MHz	600HG2D	44.50 dBW	DIGITAL CARRIER
6454.4000 - 6456.6000 MHz	1K20G2D	44.50 dBW	DIGITAL CARRIER
6454.4000 - 6456.6000 MHz	2K40G2D	44.50 dBW	DIGITAL CARRIER
6454.4000 - 6456.6000 MHz	10K5G2F	44.50 dBW	DIGITAL CARRIER
6454.4000 - 6456.6000 MHz	2M20G1D	78.00 dBW	DIGITAL CARRIER
6454.4000 - 6456.6000 MHz	2M20G1D	82.30 dBW	DIGITAL CARRIER
6425.0000 - 6454.0000 MHz	1K20G1D	44.50 dBW	DIGITAL CARRIER
6425.0000 - 6454.0000 MHz	600HG1D	44.50 dBW	DIGITAL CARRIER
6425.0000 - 6454.0000 MHz	600HG2D	44.50 dBW	DIGITAL CARRIER
6425.0000 - 6454.0000 MHz	1K20G2D	44.50 dBW	DIGITAL CARRIER
6425.0000 - 6454.0000 MHz	2K40G2D	44.50 dBW	DIGITAL CARRIER
6425.0000 - 6454.0000 MHz	10K5G2F	44.50 dBW	DIGITAL CARRIER
6425.0000 - 6454.0000 MHz	2M20G1D	78.00 dBW	DIGITAL CARRIER
6425.0000 - 6454.0000 MHz	2M20G1D	82.30 dBW	DIGITAL CARRIER
6425.0000 - 6443.0000 MHz	6K00G1D		Feeder link for INMARSAT-B & M
6425.0000 - 6443.0000 MHz	12K0G3E		Feeder link for INMARSAT-B & M
6425.0000 - 6443.0000 MHz	12K0G1D		Feeder link for INMARSAT-B & M
6425.0000 - 6443.0000 MHz	7K50G3E		Feeder link for INMARSAT-B & M
6425.0000 - 6443.0000 MHz	4K00G3E		Feeder link for INMARSAT-B & M
6425.0000 - 6443.0000 MHz	4K00G1D		Feeder link for INMARSAT-B & M

6420.0000 - 6424.0000 MHz	6K00G1D		Feeder link for INMARSAT-B & M
6420.0000 - 6424.0000 MHz	12K0G3E		Feeder link for INMARSAT-B & M
6420.0000 - 6424.0000 MHz	12K0G1D		Feeder link for INMARSAT-B & M
6420.0000 - 6424.0000 MHz	7K50G3E		Feeder link for INMARSAT-B & M
6420.0000 - 6424.0000 MHz	4K00G3E		Feeder link for INMARSAT-B & M
6420.0000 - 6424.0000 MHz	4K00G1D		Feeder link for INMARSAT-B & M
6417.5000 - 6443.0000 MHz	600HG1D	65.00 dBW	Aeronautical Digital transmit channels
6417.5000 - 6443.0000 MHz	1K20G1D	65.00 dBW	Aeronautical Digital transmit channels
6417.5000 - 6443.0000 MHz	2K40G1D	65.00 dBW	Aeronautical Digital transmit channels
6417.5000 - 6443.0000 MHz	10K5G1E	69.20 dBW	Aeronautical Digital transmit channels
6417.5000 - 6440.0000 MHz	30K0F3E	77.00 dBW	STD A VOICE
6417.5000 - 6440.0000 MHz	1K20G1D	77.00 dBW	STD A Telex
6417.5000 - 6440.0000 MHz	600HG1D	77.00 dBW	STD-C Digital
6417.5000 - 6440.0000 MHz	1K20G1D	77.00 dBW	STD-C Digital
6417.5000 - 6440.0000 MHz	NON	77.00 dBW	PILOT
4195.0000 - 4199.0000 MHz	3K00G1D		Feeder link for INMARSAT-B & M
4195.0000 - 4199.0000 MHz	12K0G3E		Feeder link for INMARSAT-B & M
4195.0000 - 4199.0000 MHz	12K0G1D		Feeder link for INMARSAT-B & M
4195.0000 - 4199.0000 MHz	7K50G3E		Feeder link for INMARSAT-B & M
4195.0000 - 4199.0000 MHz	4K00G3E		Feeder link for INMARSAT-B & M
4195.0000 - 4199.0000 MHz	4K00G1D		Feeder link for INMARSAT-B & M
3600.0000 - 3629.0000 MHz	2M20G1D	0.00 dBW	DIGITAL CARRIER
3600.0000 - 3623.0000 MHz	3K00G1D		Feeder link for INMARSAT-B & M
3600.0000 - 3623.0000 MHz	12K0G3E		Feeder link for INMARSAT-B & M
3600.0000 - 3623.0000 MHz	120KG1D		Feeder link for INMARSAT-B & M
3600.0000 - 3623.0000 MHz	7K50G3E		Feeder link for INMARSAT-B & M



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3600.0000 - 3623.0000 MHz	4K00G3E		Feeder link for INMARSAT-B & M
3600.0000 - 3623.0000 MHz	4K00G1D		Feeder link for INMARSAT-B & M
3600.0000 - 3623.0000 MHz	10K5G1E		AERO
3600.0000 - 3623.0000 MHz	1K20G1D		AERO
3600.0000 - 3623.0000 MHz	600HG1D		AERO
3600.0000 - 3623.0000 MHz	2K40G1D		AERO
3600.0000 - 3620.0000 MHz	30K0F3E		STD A VOICE
3600.0000 - 3620.0000 MHz	4K80G1D		STD A TELEX
3600.0000 - 3620.0000 MHz	NON		PILOT
3600.0000 - 3620.0000 MHz	1K20G1D		STD-C
3600.0000 - 3620.0000 MHz	600HG1D		STD-C
1626.5000 - 1660.5000 MHz	24K0F3E	36.00 dBW	ANALOG CARRIER
1626.5000 - 1660.5000 MHz	NON	31.00 dBW	PILOT
1626.5000 - 1660.5000 MHz	24K0G2D	36.00 dBW	DIGITAL CARRIER
1626.5000 - 1660.5000 MHz	1K20G1D	36.00 dBW	DIGITAL CARRIER
1626.5000 - 1660.5000 MHz	600HG1D	36.00 dBW	DIGITAL CARRIER
1626.5000 - 1660.5000 MHz	600HG2D	36.00 dBW	DIGITAL CARRIER
1626.5000 - 1660.5000 MHz	1K20G2D	36.00 dBW	DIGITAL CARRIER
1626.5000 - 1660.5000 MHz	10K5G2F	36.00 dBW	DIGITAL CARRIER
1626.5000 - 1649.5000 MHz	600HG1D	15.00 dBW	AERO
1626.5000 - 1649.5000 MHz	1K20G1D	18.00 dBW	AERO
1626.5000 - 1649.5000 MHz	2K40G1D	21.00 dBW	AERO
1626.5000 - 1649.5000 MHz	10K5G1E	31.20 dBW	AERO
1626.5000 - 1647.5000 MHz	30K0F3E	37.00 dBW	STD A VOICE
1626.5000 - 1647.5000 MHz	NON	37.00 dBW	PILOT
1626.5000 - 1647.5000 MHz	1K20G1D	16.00 dBW	STD-C

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1626.5000 - 1647.5000 MHz	600HG1D	16.00 dBW	STD-C
1626.5000 - 1647.5000 MHz	4K80G1D	37.00 dBW	STD A TELEX
1574.4000 - 1576.6000 MHz	2K40G2D		DIGITAL CARRIER
1574.4000 - 1576.6000 MHz	1K20G1D		DIGITAL CARRIER
1574.4000 - 1576.6000 MHz	600HG1D		DIGITAL CARRIER
1574.4000 - 1576.6000 MHz	600HG2D		DIGITAL CARRIER
1574.4000 - 1576.6000 MHz	1K20G2D		DIGITAL CARRIER
1574.4000 - 1576.6000 MHz	10K5G2F		DIGITAL CARRIER
1530.0000 - 1548.0000 MHz	10K5G1E		AERO
1530.0000 - 1548.0000 MHz	2K40G1D		AERO
1530.0000 - 1548.0000 MHz	1K20G1D		AERO
1530.0000 - 1548.0000 MHz	600HG1D		AERO
1530.0000 - 1545.0000 MHz	30K0F3E		STD A VOICE
1530.0000 - 1545.0000 MHz	NON		PILOT
1530.0000 - 1545.0000 MHz	1K20G1D		STD A TELEX
1530.0000 - 1545.0000 MHz	1K20G1D		STD-C
1530.0000 - 1545.0000 MHz	600HG1D		STD-C
1525.0000 - 1559.0000 MHz	2K40G2D	0.00 dBW	DIGITAL CARRIER
1525.0000 - 1559.0000 MHz	1K20G1D		DIGITAL CARRIER
1525.0000 - 1559.0000 MHz	600HG1D		DIGITAL CARRIER
1525.0000 - 1559.0000 MHz	600HG2D		DIGITAL CARRIER
1525.0000 - 1559.0000 MHz	1K20G2D		DIGITAL CARRIER
1525.0000 - 1559.0000 MHz	10K5G2F		DIGITAL CARRIER
3600.0000 - 3629.0000 MHz	100KG1X		DIGITAL DATA
3600.0000 - 3629.0000 MHz	10K0G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D		DIGITAL DATA

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3600.0000 - 3629.0000 MHz	20K0G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X		DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	45K0G7D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1W		DIGITAL DATA
6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA

6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
SITE ID: 21LBAND			
LOCATION: 2120 RIVER ROAD (12.8M.)-L-BAND, NEW HAVEN, SOUTHURY, CT			
41 ° 27 ' 4.10 " N LAT.		73 ° 17 ' 20.97 " W LONG.	
ANTENNA ID: 21LBAND	12.8 meters	PHILCO FORD	12.8M.
1626.5000 - 1660.5000 MHz	34K0F3E	36.00 dBW	TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1626.5000 - 1660.5000 MHz	NON	40.50 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
1626.5000 - 1660.5000 MHz	40K0G1W	48.20 dBW	TEST 16 QAM DIGITAL TELEPHONY
1626.5000 - 1660.5000 MHz	400KG1F	36.00 dBW	TEST QPSK DIGITAL VIDEO/DATA
1626.5000 - 1660.5000 MHz	5K60G1E	36.00 dBW	TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	2K40G7D-	36.00 dBW	TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	24K0G1E	36.00 dBW	TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	5K60G1W	36.00 dBW	TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	2K40G1W	36.00 dBW	TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	132KG7D	36.00 dBW	TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	2M20G1D	36.00 dBW	TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	2K40G1D	36.00 dBW	TEST BPSK, DATA
1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA- CLOSE LOOP
1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA- CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16 QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	5K60G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY

1525.0000 - 1559.0000 MHz	5K60G1W	TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	2K40G7D	TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1W	TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	132KG7D	TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2M20G1D	TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2K40G1D	TEST BPSK, DATA

SITE ID: 23ACTTC  
LOCATION: 2120 RIVER ROAD (10.4M.)-C-BAND, NEW HAVEN, SOUTHURY, CT  
41 ° 27 ' 4.50 " N LAT. 73 ° 17 ' 21.50 " W LONG.

ANTENNA ID: 23ACTTC	10.4 meters	PHILCO FORD	10.4M.
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE

SITE ID: 23ACNOR  
LOCATION: 2120 RIVER ROAD (10.4M.)-C-BAND, NEW HAVEN, SOUTHURY, CT  
41 ° 27 ' 4.50 " N LAT. 73 ° 17 ' 21.00 " W LONG.

ANTENNA ID: 23ACNOR	10.4 meters	PHILCO FORD	10.4M.
6454.4000 - 6456.6000 MHz	2M20G1D	73.50 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
6424.0000 - 6454.0000 MHz	34K0F3E	59.50 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	27K0F3W	59.50 dBW	FM9 ANALOG BROADCAST CARRIER
6424.0000 - 6454.0000 MHz	400KG1F	59.50 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	40K0G1W	60.80 dBW	16 QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	NON	59.50 dBW	UNMODULATED AFC PILOT
5927.0000 - 5927.0000 MHz	NON	50.80 dBW	TT&C RANGING CARRIER
6424.0000 - 6454.0000 MHz	5K60G1E	53.20 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	58.60 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	5K60G1W	52.30 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	2K40G7D	48.60 dBW	BPSK, DATA/TDM

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6424.0000 - 6454.0000 MHz	24K0G1W	58.60 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	132KG7D	59.50 dBW	BPSK, DATA/TDM
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW	DIGITAL DATA
6424.0000 - 6454.0000 MHz	2M20G1D	71.70 dBW	BPSK, DATA
6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW	DIGITAL DATA
6424.0000 - 6454.0000 MHz	2K40G1D	48.60 dBW	BPSK, DATA
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED AND UNCOMPANDED
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK SPREAD SPECTRUM DATA (NAVIGATION)
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3600.0000 - 3629.0000 MHz	400KG1F		QPSK, DIGITAL VIDEO/DATA

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3600.0000 - 3629.0000 MHz	40K0G1W	16 QAM DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	NON	UNMODULATED AFC PILOT
3600.0000 - 3629.0000 MHz	5K60G1E	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	5K60G1W	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	2K40G7D	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	24K0G1W	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	132K0G7D	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	7K50G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	45K0G7D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	10K0G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	100K0G1X	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK, DATA
3600.0000 - 3629.0000 MHz	2K40G1D	BPSK, DATA

SITE ID: 23BLBAND  
 LOCATION: 2120 RIVER ROAD (1.8M.)-BL-BAND, NEW HAVEN, SOUTHURY, CT  
 41 ° 27 ' 4.50 " N LAT. 73 ° 17 ' 21.80 " W LONG.

ANTENNA ID:	23BLBAND	1.8 meters	TRUE FOCUS	1.8M.
	1626.5000 - 1660.5000 MHz	NON	27.20 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
	1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA- CLOSE LOOP
	1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM, TELEPHONY COMPANDED AND UNCOMPANDED
	1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA- CLOSE LOOP
	1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK, DIGITAL VIDEO/DATA
	1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16 QAM DIGITAL TELEPHONY
	1525.0000 - 1559.0000 MHz	5K60G1E		TEST QPSK, TELEPHONY
	1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
	1525.0000 - 1559.0000 MHz	5K60G1W		TEST QPSK, DATA/FAX
	1525.0000 - 1559.0000 MHz	2K40G7D		TEST BPSK, DATA/TDM
	1525.0000 - 1559.0000 MHz	24K0G1W		TEST QPSK, DATA/FAX
	1525.0000 - 1559.0000 MHz	132KG7D		TEST BPSK, DATA/TDM
	1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT
	1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK, DATA
	1525.0000 - 1559.0000 MHz	2K40G1D		TEST BPSK, DATA

**Points of Communication:**

- 1 - INMARSAT 4F2 - (52.75)
- 1 - INMARSAT 4F3 - (98 W.L.)
- 1 - ISAT List -
- 21CNORM - INMARSAT 3F2 - (15.5 W.L.)
- 21CNORM - INMARSAT 3F5 - (54 W.L.)
- 21CNORM - INMARSAT 4F3 - (97.65 W.L.)
- 21CNORM - PERMITTED LIST - ()



21CTTC/HUB - INMARSAT 3F2 - (15.5 W.L.)

21CTTC/HUB - INMARSAT 3F5 - (54 W.L.)

21CTTC/HUB - INMARSAT 4F3 - (97.65 W.L.)

21CTTC/HUB - PERMITTED LIST - ()

21LBAND - ISAT List -

23ACNOR - INMARSAT 3F2 - (15.5 W.L.)

23ACNOR - INMARSAT 3F5 - (54 W.L.)

23ACNOR - INMARSAT 3F5 - (54 W.L.)

23ACNOR - PERMITTED LIST - ()

23ACTTC - INMARSAT 3F2 - (15.5 W.L.)

23ACTTC - INMARSAT 3F5 - (54 W.L.)

23ACTTC - INMARSAT 4F3 - (97.65 W.L.)

23ACTTC - PERMITTED LIST - ()

23BLBAND - ISAT List -

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**SES-MFS-20160404-00304** E E120043 Denali 20020, LLC

Modification

06/20/2012 - 06/20/2027

Grant of Authority

Date Effective: 06/27/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: 66C TELEPORT DRIVE, OKANOGAN, BREWSTER, WA

48 ° 8 ' 47.00 " N LAT.

119 ° 41 ' 29.00 " W LONG.

ANTENNA ID:	1	3.5 meters	VERTEX	3.5KPK
	14000.0000 - 14500.0000 MHz	36M0F2D	77.84 dBW	Digital Data Carrier
	14000.0000 - 14500.0000 MHz	36M0F3F	74.30 dBW	Analog Video Carrier
	14000.0000 - 14500.0000 MHz	36M0G7W	77.84 dBW	Digital Data Carrier
	14000.0000 - 14500.0000 MHz	36M0F8W	77.84 dBW	Digital Data Carrier
	11450.0000 - 12200.0000 MHz	36M0F2D		Digital Video Carrier
	11450.0000 - 12200.0000 MHz	36M0F3F		Analog Video Carrier
	11450.0000 - 12200.0000 MHz	36M0G7W		Digital Data Carrier

11450.0000 - 12200.0000 MHz	36M0F8W		Digital Data Carrier
10950.0000 - 11200.0000 MHz	36M0F2D		Digital Video Carrier
10950.0000 - 11200.0000 MHz	36M0F3F		Analog Video Carrier
10950.0000 - 11200.0000 MHz	36M0G7W		Digital Data Carrier
10950.0000 - 11200.0000 MHz	36M0F8W		Digital Data Carrier
ANTENNA ID: 2	3.7 meters	GLOBAL STAR	GS-370
14000.0000 - 14500.0000 MHz	36M0G7W	78.20 dBW	Digital Data Carrier
11700.0000 - 12200.0000 MHz	36M0G7W		Digital Data Carrier
ANTENNA ID: 3	6.1 meters	VERTEX	6.1KPK
14000.0000 - 14500.0000 MHz	1M00G7D	66.80 dBW	Digital Data Carrier
14000.0000 - 14500.0000 MHz	36M0G7W	80.87 dBW	Digital Data Carrier
14000.0000 - 14500.0000 MHz	36M0F3F	78.90 dBW	Analog Video Carrier
14000.0000 - 14500.0000 MHz	72M0G7W	80.87 dBW	Digital Data Carrier
13750.0000 - 14000.0000 MHz	72M0G7W	80.87 dBW	Digital Data Carrier
13750.0000 - 14000.0000 MHz	36M0G7W	76.90 dBW	Digital Data Carrier
13750.0000 - 14000.0000 MHz	1M00G7D	66.80 dBW	Digital Data Carrier
11450.0000 - 12200.0000 MHz	1M00G7D		Digital Data Carrier
11450.0000 - 12200.0000 MHz	36M0G7W		Digital Data Carrier
11450.0000 - 12200.0000 MHz	36M0F3F		Analog Video Carrier
11450.0000 - 12200.0000 MHz	72M0G7W		Digital Data Carrier
10950.0000 - 11200.0000 MHz	1M00G7D		Digital Data Carrier
10950.0000 - 11200.0000 MHz	36M0G7W		Digital Data Carrier
10950.0000 - 11200.0000 MHz	36M0F3F		Analog Video Carrier
10950.0000 - 11200.0000 MHz	72M0G7W		Digital Data Carrier
ANTENNA ID: 4	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	1M00G7D	70.08 dBW	Digital Data Carrier

14000.0000 - 14500.0000 MHz	36M0F2D	77.70 dBW	Digital Data Carrier
14000.0000 - 14500.0000 MHz	36M0F3F	86.00 dBW	Analog Video Carrier
14000.0000 - 14500.0000 MHz	72M0G7W	85.60 dBW	Digital Data Carrier
11450.0000 - 12200.0000 MHz	1M00G7D		Digital Data Carrier
11450.0000 - 12200.0000 MHz	36M0F2D		Digital Data Carrier
11450.0000 - 12200.0000 MHz	36M0F3F		Analog Video Carrier
11450.0000 - 12200.0000 MHz	72M0G7W		Digital Data Carrier
10950.0000 - 11200.0000 MHz	1M00G7D		Digital Data Carrier
10950.0000 - 11200.0000 MHz	36M0F2D		Digital Data Carrier
10950.0000 - 11200.0000 MHz	36M0F3F		Analog Video Carrier
10950.0000 - 11200.0000 MHz	72M0G7W		Digital Data Carrier

ANTENNA ID: 5                      4.8 meters                      VERTEX                      4.8 KPK

14000.0000 - 14500.0000 MHz	72M0G7W	81.22 dBW	Digital Data Carrier
14000.0000 - 14500.0000 MHz	1M00G7D	65.17 dBW	Digital Data Carrier
11450.0000 - 12200.0000 MHz	72M0G7W		Digital Data Carrier
11450.0000 - 12200.0000 MHz	1M00G7D		Digital Data Carrier
10950.0000 - 11200.0000 MHz	72M0G7W		Digital Data Carrier
10950.0000 - 11200.0000 MHz	1M00G7D		Digital Data Carrier

**Points of Communication:**

- 1 - AMAZONAS 2 (S2793) - (61 W.L.)
- 1 - INTELSAT 707 - (53 W.L.)
- 1 - NSS 9 (S2756) - (177 W.L.)
- 1 - PERMITTED LIST - ()
- 1 - Yamal 300K - (177 W.L.)

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SES-MOD-20150921-00630    E E080118    Global Crossing Americas Solutions, Inc.    06/24/2008 - 06/24/2023  
Application for Modification    Date Effective: 06/28/2016  
Grant of Authority

**Class of Station:**    Fixed Earth Stations

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**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: Plaza Fajardo 65 Inf. Av. 1st Floor, Fajardo, Fajardo, PR  
18 ° 20 ' 14.00 " N LAT. 65 ° 40 ' 47.00 " W LONG.

ANTENNA ID:	FAJA-1	2.4 meters	PRODELIN	1251	
	5925.0000 - 6425.0000 MHz		230KG7D	41.99 dBW	Digital data carrier
	5925.0000 - 6425.0000 MHz		115KG7D	38.98 dBW	Digital data carrier
	3700.0000 - 4200.0000 MHz		230KG7D		Digital data carrier
	3700.0000 - 4200.0000 MHz		115KG7D		Digital data carrier
	5925.0000 - 6425.0000 MHz		750KG7D	48.40 dBW	Digital data carrier
	3700.0000 - 4200.0000 MHz		8M45G7D		Digital data carrier

**Points of Communication:**

1 - INTELSAT 805 (S2404) - (304.5 E.L.)

1 - PAS-1R - (45.0 W.L.)

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**SES-MOD-20160505-00400** E E050324 The University Of Texas At Austin  
Application for Modification 11/05/2005 - 11/05/2020  
Grant of Authority Date Effective: 06/28/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: CMB, 2504B WHITIS AVE, KUT, TRAVIS, AUSTIN, TX  
30 ° 17 ' 21.70 " N LAT. 97 ° 44 ' 28.00 " W LONG.

ANTENNA ID:	1	3.8 meters	DH SATELLITE	3.8 METER	
	3700.0000 - 4200.0000 MHz		30K0F1D		DIGITAL AUDIO CARRIER
	3700.0000 - 4200.0000 MHz		10M3G7W		DIGITAL AUDIO CARRIER

**Points of Communication:**

1 - PERMITTED LIST - ()

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**SES-MOD-20160505-00401** E E040039 Public Radio International  
Application for Modification 01/18/2004 - 01/18/2019  
Grant of Authority Date Effective: 06/28/2016

**Class of Station:** Fixed Earth Stations

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**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
LOCATION: 401 2nd NORTH STREET (PRI), HENNEPIN, MINNEAPOLIS, MN  
44 ° 58 ' 54.10 " N LAT. 93 ° 16 ' 25.20 " W LONG.

ANTENNA ID:	1	3.7 meters	PRODELIN	136-750
	3700.0000 - 4200.0000 MHz		10M3G7W	DIGITAL BROADCAST AUDIO CARRIER
	3700.0000 - 4200.0000 MHz		30K0F1D	DIGITAL AUDIO CARRIER

**Points of Communication:**

1 - PERMITTED LIST - ()

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**SES-MOD-20160512-00412** E E030241 Rainbird Community Broadcasting, Inc.  
Application for Modification 10/23/2003 - 10/23/2018  
Grant of Authority Date Effective: 06/28/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
LOCATION: 1101 COPPER RIDGE LANE (KRBD-FM), KETCHIKAN, KETCHIKAN, AK  
55 ° 20 ' 57.90 " N LAT. 131 ° 39 ' 5.90 " W LONG.

ANTENNA ID:	3.7 M.	3.7 meters	PRODELIN CORPORATION	136-750
	3700.0000 - 4200.0000 MHz		30K0F1D	DIGITAL AUDIO CARRIER
	3700.0000 - 4200.0000 MHz		10M3G7W	DIGITAL AUDIO CARRIER

**Points of Communication:**

1 - PERMITTED LIST - ()

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**SES-MOD-20160512-00414** E E030252 Narrows Broadcasting Corporation  
Application for Modification 10/27/2003 - 10/27/2018  
Grant of Authority Date Effective: 06/28/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
LOCATION: 404 NORTH SECOND STREET PO BOX 149 (KFSK-FM), WRANGELL, PETERSBURG, AK  
56 ° 48 ' 52.60 " N LAT. 132 ° 57 ' 15.70 " W LONG.

ANTENNA ID:	3.8 M.	3.8 meters	COMTECH ANTENNA SYSTEMS	3.8 METER PF
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3700.0000 - 4200.0000 MHz	30K0F1D	DIGITAL AUDIO CARRIER
3700.0000 - 4200.0000 MHz	10M3G7W	DIGITAL AUDIO CARRIER

**Points of Communication:**

1 - PERMITTED LIST - ()

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<b>SES-MOD-20160512-00415</b>	E E030267	Raven Radio Foundation	10/31/2003 - 10/31/2018
Application for Modification			Date Effective: 06/28/2016
Grant of Authority			

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
 LOCATION: 2 B LINCOLN STREET (KCAW-FM), SITKA, SITKA, AK  
 57 ° 2 ' 52.90 " N LAT. 135 ° 20 ' 14.10 " W LONG.

ANTENNA ID: 3.8 M. 3.8 meters COMTECH ANTENNA SYSTEMS 3.8 METER PF

3700.0000 - 4200.0000 MHz	30K0F1D	DIGITAL AUDIO CARRIER
3700.0000 - 4200.0000 MHz	10M3G7W	DIGITAL AUDIO CARRIER

**Points of Communication:**

1 - PERMITTED LIST - ()

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<b>SES-MOD-20160512-00416</b>	E E990118	Capital Community Broadcasting, Inc.	03/24/2009 - 03/24/2024
Application for Modification			Date Effective: 06/28/2016
Grant of Authority			

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
 LOCATION: 360 EGAN DRIVE, JUNEAU, JUNEAU, AK  
 58 ° 17 ' 58.10 " N LAT. 134 ° 24 ' 51.90 " W LONG.

ANTENNA ID: 1 4.5 meters SCIENTIFIC-ATLANTA, INC. 8345

3700.0000 - 4200.0000 MHz	154KG7D	DATA, BPSK, FEC 1/2
3700.0000 - 4200.0000 MHz	30K0F1D	DIGITAL AUDIO CARRIER
3700.0000 - 4200.0000 MHz	10M3G7W	DIGITAL AUDIO CARRIER

**Points of Communication:**

1 - PERMITTED LIST - ()

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**SES-MOD-20160512-00425** E E960314 Viacom International Inc.  
Application for Modification 07/26/2006 - 07/26/2021  
Grant of Authority Date Effective: 06/27/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
LOCATION: 35 ADAMS AVENUE, SUFFOLK, HAUPPAUGE, NY  
40 ° 49 ' 15.00 " N LAT. 73 ° 15 ' 19.00 " W LONG.

ANTENNA ID:	1	6 meters	SCIENTIFIC ATLANTA	8060
	14000.0000 - 14500.0000 MHz		36M0G7F	85.40 dBW
	14000.0000 - 14500.0000 MHz		28M0G7F	85.40 dBW
	11700.0000 - 12200.0000 MHz		36M0G7F	
	11700.0000 - 12200.0000 MHz		28M0G7F	

**Points of Communication:**

1 - PERMITTED LIST - ()

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**SES-MOD-20160512-00426** E E950458 Viacom International Inc.  
Application for Modification 11/09/2005 - 11/09/2020  
Grant of Authority Date Effective: 06/27/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
LOCATION: 35 Adams Avenue, SUFFOLK, HAUPPAUGE, NY  
40 ° 49 ' 15.00 " N LAT. 73 ° 15 ' 19.00 " W LONG.

ANTENNA ID:	1	4.5 meters	VERTEX	KPK
	14000.0000 - 14500.0000 MHz		9M00G7W	73.30 dBW TELEVISION (VIDEO)
	11700.0000 - 12200.0000 MHz		27M0G7W	TELEVISION (VIDEO)
	11700.0000 - 12200.0000 MHz		9M00G7W	TELEVISION (VIDEO)
	11450.0000 - 11700.0000 MHz		27M0G7W	TELEVISION (VIDEO)
	10950.0000 - 11200.0000 MHz		27M0G7W	TELEVISION (VIDEO)
	10950.0000 - 11200.0000 MHz		9M00G7W	TELEVISION (VIDEO)
	14000.0000 - 14500.0000 MHz		27M0G7W	73.30 dBW TELEVISION (VIDEO)

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11450.0000 - 11700.0000 MHz

9M00G7W

TELEVISION (VIDEO)

**Points of Communication:**

1 - PERMITTED LIST - ()

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**SES-REG-20160511-00411** E E160079 National Public Radio

Registration

05/11/2016 - 05/11/2031

Grant of Authority

Date Effective: 06/22/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: 1111 North Capital Street, NE. (3.7M.), District of Columbia, Washington, DC

38 ° 54 ' 16.30 " N LAT.

77 ° 0 ' 31.30 " W LONG.

ANTENNA ID: 3.7M. 3.7 meters Prodelin 136-750

3700.0000 - 4200.0000 MHz 30K0G3W Analog SCPC

3700.0000 - 4200.0000 MHz 36M0G3W Analog video

3700.0000 - 4200.0000 MHz 36M0G7W Digital data

3700.0000 - 4200.0000 MHz 30K0G7W Digital Traffic

**Points of Communication:**

1 - PERMITTED LIST - ()

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**SES-REG-20160512-00413** E E160080 WRANGELL RADIO GROUP

Registration

05/12/2016 - 05/12/2031

Grant of Authority

Date Effective: 06/22/2016

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: 202 St. Michaels Street, Wrangell, Wrangell, AK

56 ° 28 ' 17.70 " N LAT.

132 ° 22 ' 46.80 " W LONG.

ANTENNA ID: 3.8M. 3.8 meters Prodelin 1383

3700.0000 - 4200.0000 MHz 10M3G7W Digital Audio Carrier

3700.0000 - 4200.0000 MHz 30K0F1D Digital Audio Carrier

**Points of Communication:**

1 - PERMITTED LIST - ()

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**SES-STA-20160512-00429**    E    E7541    Lockheed Martin Corporation  
Special Temporary Authority  
Grant of Authority  
Date Effective:    06/27/2016

**Class of Station:**

On June 27, 2016, Lockheed Martin Corporation was granted special temporary authority for 180 days beginning July 9, 2016, to use its fixed earth station in Carpentersville, NJ, to conduct telemetry, tracking and command (TT&C) operations for the Eutelsat 117 West B satellite during the post launch and early orbit phase (LEOP) services as it proceeds to the 116.8° W.L. orbital location using the following center frequencies: 6423.3 MHz (Earth-to-space), and the 4198.20 MHz, and 4199.80 MHz (space-to-Earth).

**Points of Communication:**

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**SES-STA-20160513-00431**    E       Universal Space Network, Inc.  
Special Temporary Authority  
Grant of Authority  
Date Effective:    06/27/2016

**Class of Station:**

On June 27, 2016, Universal Space Network, Inc. was granted special temporary authority for 90 days beginning June 27, 2016, to operate its fixed earth station in Naalehu, HI, to support telemetry, tracking and command (TT&C) operations of the Nimiq-2 satellite at the 148° E.L. orbital location using the following center frequencies: 12202.50 MHz and 12695.00 MHz (space-to-Earth).

**Points of Communication:**

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**SES-STA-20160607-00488**    E       Hawaii Pacific Teleport, L.P.  
Special Temporary Authority  
Grant of Authority  
Date Effective:    06/22/2016

**Class of Station:**

On June 22, 2016, Hawaii Pacific Teleport, L.P. was granted a special temporary authority, for 30 days beginning June 22, 2016, to operate a 1.2-meter antenna fixed earth station in Kapolei, HI, teleport to provide in-orbit testing (IOT) of the Nimiq-2 satellite at the 148° E.L. orbital location in the 19.7-20.2 GHz (space-to-Earth) and 29.5-30.0 GHz (Earth-to-space) frequency bands.

**Points of Communication:**

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**SES-STA-20160620-00556**    E    E160081    UNITED TELEPORTS INC.  
Special Temporary Authority  
Grant of Authority  
Date Effective:    06/27/2016

**Class of Station:**

On June 27, 2016, United Teleports Inc. was granted special temporary authority for 60 days beginning June 29, 2016, to operate a 7-meter gateway earth station in Port St. Lucie, FL, to transmit U.S. television and video programming distribution to the Eutelsat 65 West A (E65WA) satellite at the 65° W.L. orbital location in the 12.75-13.25 GHz (Earth-to-space) frequency band.

**Points of Communication:**

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**SES-STA-20160622-00567**    E    KA258    Intelsat License LLC  
Special Temporary Authority  
Grant of Authority  
Date Effective:    06/24/2016

**Class of Station:**

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On June 24, 2016, Intelsat License, LLC was granted special temporary authority for 30 days, beginning June 27, 2016, to continue to operate its fixed earth station in Hagerstown, MD, to: 1) provide launch and early orbit phase (LEOP) services for Intelsat 31 satellite; (2) conduct telemetry, tracking, and command (TT&C) operations during in-orbit testing (IOT) at the 132.0° W.L orbital location; and (3) conduct TT&C as Intelsat drifts to the 95.05° W.L. orbital location. All operations will use the following center frequencies: 13998.50 MHz and 14006.0 MHz (Earth-to-space), and 11194.25 MHz, 11195.5 MHz, 11196.25 MHz, and 11196.75 MHz (space-to-Earth).

**Points of Communication:**

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**SES-STA-20160622-00568**    E    E140121    Intelsat License LLC  
Special Temporary Authority  
Grant of Authority  
Date Effective:    06/24/2016

**Class of Station:**

On June 24, 2016, Intelsat License, LLC was granted special temporary authority for 30 days beginning July 6, 2016, to operate its fixed earth station in Hagerstown, MD, to: 1) provide launch and early orbit phase (LEOP) services for Intelsat 31 satellite; (2) conduct telemetry, tracking, and command (TT&C) operations during in-orbit testing (IOT) at the 132.0° W.L orbital location; and (3) conduct TT&C as Intelsat drifts to the 95.05° W.L. orbital location. All operations will use the following center frequencies: 13998.50 MHz and 14006.0 MHz (Earth-to-space), and 11194.25 MHz, 11195.5 MHz, 11196.25 MHz, and 11196.75 MHz (space-to-Earth).

**Points of Communication:**

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**SES-STA-20160622-00571**    E    KL92    Intelsat License LLC  
Special Temporary Authority  
Grant of Authority  
Date Effective:    06/24/2016

**Class of Station:**

On June, 2016, Intelsat License LLC was granted special temporary authority for 30 days, beginning June 27, 2016, to use its fixed earth station in Castle Rock, CO, to: (1) provide launch and early orbit phase (LEOP) services for the Intelsat 31 satellite; (2) conduct telemetry, tracking, and command (TT&C) operations during in-orbit testing (IOT) at the 132° W.L. orbital location; and (3) provide TT&C as Intelsat 31 drifts to the 95.05° W.L. orbital location. All operations will use the following center frequencies: 13998.50 MHz and 14006.0 MHz (Earth-to-space), and 11194.25 MHz, 11195.5 MHz, 11196.25 MHz, and 11196.75 MHz (space-to-Earth).

**Points of Communication:**

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**SES-T/C-20160617-00559**    E    WH33    HPI Acquisition Co. LLC  
Application for Consent to Transfer of Control  
Consummated  
Date Effective:    05/18/2016

**Current Licensee:**    HPI Acquisition Co. LLC  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:**    Charter Communications, Inc.

No. of Station(s) listed: 1

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**SES-T/C-20160617-00560**    E    E090183    Falcon Video Communications, L.P.  
Application for Consent to Transfer of Control  
Consummated  
Date Effective:    05/18/2016

**Current Licensee:**    Falcon Video Communications, L.P.  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:**    Charter Communications, Inc.

No. of Station(s) listed: 7

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**SES-T/C-20160617-00561** E E000185 Marcus Cable Associates, L.L.C.  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** Marcus Cable Associates, L.L.C.  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 7

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**SES-T/C-20160617-00562** E E890917 Robin Media Group, LLC  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** Robin Media Group, LLC  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 2

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**SES-T/C-20160617-00563** E E6784 Plattsburgh Cablevision, LLC  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** Charter Communications Entertainment I, LLC  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 1

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**SES-T/C-20160617-00564** E E040177 The Helicon Group, L.P.  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** The Helicon Group, L.P.  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 2

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**SES-T/C-20160617-00565** E E020100 Marcus Cable of Alabama, L.L.C.  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** Marcus Cable of Alabama, L.L.C.  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 3

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**SES-T/C-20160617-00572** E E100094 Bresnan Communications, LLC  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** Bresnan Communications, LLC  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 34

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<b>SES-T/C-20160617-00574</b>	E E090140	Bright House Networks, LLC	
Application for Consent to Transfer of Control			Date Effective: 05/18/2016
Consummated			
<b>Current Licensee:</b>	Bright House Networks, LLC		
<b>FROM:</b>	ADVANCE/NEWHOUSE PARTNERSHIP		
<b>TO:</b>	Charter Communications, Inc.		No. of Station(s) listed: 29
<b>SES-T/C-20160617-00575</b>	E E010328	Interlink Communications Partners, LLC	
Application for Consent to Transfer of Control			Date Effective: 05/18/2016
Consummated			
<b>Current Licensee:</b>	Interlink Communications Partners, LLC		
<b>FROM:</b>	CHARTER COMMUNICATIONS, INC.		
<b>TO:</b>	Charter Communications, Inc.		No. of Station(s) listed: 9
<b>SES-T/C-20160617-00576</b>	E E2578	Falcon Community Cable, L.P.	
Application for Consent to Transfer of Control			Date Effective: 05/18/2016
Consummated			
<b>Current Licensee:</b>	Falcon Community Cable, L.P.		
<b>FROM:</b>	CHARTER COMMUNICATIONS, INC.		
<b>TO:</b>	Charter Communications, Inc.		No. of Station(s) listed: 2
<b>SES-T/C-20160617-00577</b>	E KP47	Falcon Community Ventures I Limited Partnership	
Application for Consent to Transfer of Control			Date Effective: 05/18/2016
Consummated			
<b>Current Licensee:</b>	Falcon Community Ventures I Limited Partnership		
<b>FROM:</b>	CHARTER COMMUNICATIONS, INC.		
<b>TO:</b>	Charter Communications, Inc.		No. of Station(s) listed: 1
<b>SES-T/C-20160617-00578</b>	E E3573	Falcon Telecable, a California Limited Partnership	
Application for Consent to Transfer of Control			Date Effective: 05/18/2016
Consummated			
<b>Current Licensee:</b>	Falcon Telecable, a California Limited Partnership		
<b>FROM:</b>	CHARTER COMMUNICATIONS, INC.		
<b>TO:</b>	Charter Communications, Inc.		No. of Station(s) listed: 1
<b>SES-T/C-20160617-00579</b>	E WU58	Falcon Cable Media, a California Limited Partnership	
Application for Consent to Transfer of Control			Date Effective: 05/18/2016
Consummated			
<b>Current Licensee:</b>	Falcon Cable Media, a California Limited Partnership		
<b>FROM:</b>	CHARTER COMMUNICATIONS, INC.		
<b>TO:</b>	Charter Communications, Inc.		No. of Station(s) listed: 1

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**SES-T/C-20160617-00580** E E010189 Charter Communications, LLC  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** Charter Communications, LLC  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 15

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**SES-T/C-20160617-00581** E E2091 Insight Kentucky Partners II, L.P.  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** Insight Kentucky Partners II, L.P.  
**FROM:** TIME WARNER CABLE INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 4

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**SES-T/C-20160617-00582** E E030157 Falcon Cable Systems Company II, L.P.  
Application for Consent to Transfer of Control  
Consummated Date Effective: 05/18/2016

**Current Licensee:** Falcon Cable Systems Company II, L.P.  
**FROM:** CHARTER COMMUNICATIONS, INC.  
**TO:** Charter Communications, Inc.

No. of Station(s) listed: 9

**Dismissal**

**SES-STA-20160516-00436** E160070 The Boeing Company  
Application requests for special temporary authority is dismissed as Moot. See IBFS File No. SES-LIC-20160427-00373 Granted June 22, 2016.

For more information concerning this Notice, contact the Satellite Division at 418-0719; TTY 1-888-835-5322.