



PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION
445 12th STREET S.W.
WASHINGTON D.C. 20554

News media information 202-418-0500
Internet: <http://www.fcc.gov> (or <ftp.fcc.gov>)
TTY (202) 418-2555

Report No. SES-01807

Wednesday December 16, 2015

Satellite Communications Services re: Satellite Radio Applications Accepted For Filing

The applications listed herein have been found, upon initial review, to be acceptable for filing. The Commission reserves the right to return any of the applications if, upon further examination, it is determined they are defective and not in conformance with the Commission's Rules and Regulations and its Policies. Final action will not be taken on any of these applications earlier than 30 days following the date of this notice. 47 U.S.C. § 309(b). All applications accepted for filing will be assigned call signs, or other unique station identifiers. However, these assignments are for administrative purposes only and do not in any way prejudice Commission action.

SES-AMD-20151105-00815 E E030029 Telesat Network Services, Inc.
Amendment
Class of Station: Fixed Earth Stations
Nature of Service: Fixed Satellite Service

See IBFS File No. SES-MOD-20150701-00437 for a description of application as amended.

SITE ID: 1 HUB
LOCATION: 1305 INDUSTRIAL PARK ROAD (9.0M. HUB), SHENANDOAH, MT. JACKSON, VA
38 ° 43 ' 42.00 " N LAT. 78 ° 39 ' 25.00 " W LONG.

ANTENNA ID:	9.0M/V	9 meters	VERTEX	9 KPK	
	14000.0000 - 14500.0000 MHz		3M91G7W	67.00 dBW	QPSK 3MBPS HUB OUTBOUND TO VSAT
	14000.0000 - 14500.0000 MHz		8M79G7W	69.50 dBW	QPSK 8MBPS HUB OUTBOUND TO VSAT
	14000.0000 - 14500.0000 MHz		54M0G7W	75.00 dBW	QPSK 48MBPS 2/3 FEC
	13750.0000 - 13770.0000 MHz		600KG7W	68.10 dBW	DATA (QPSK, 8PSK, 16APSK)
	11700.0000 - 12200.0000 MHz		324KG7W		QPSK 144 KBPS
	11700.0000 - 12200.0000 MHz		842KG7W		QPSK 384 KBPS
	11700.0000 - 12200.0000 MHz		4M41G7W		QPSK 2048 KBPS

11700.0000 - 12200.0000 MHz	3M17G7W		QPSK 2048 KBPS, RATE 1/2 CODE
11700.0000 - 12200.0000 MHz	380KG7W		QPSK 256 KBPS, TURBO CODE
11700.0000 - 12200.0000 MHz	750KG7W		QPSK 512 KBPS, TURBO CODE
11700.0000 - 12200.0000 MHz	1M50G7W		QPSK 1024 KBPS, TURBO CODE
11700.0000 - 12200.0000 MHz	3M00G7W		QPSK 2048 KBPS, TURBO CODE
11700.0000 - 12200.0000 MHz	360KG7W		QPSK 144 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	936KG7W		QPSK 384 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	2M45G7W		QPSK 1024 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	4M90G7W		QPSK 2048 KBPS, CONCATENATED CODE
13750.0000 - 13811.0000 MHz	54M0G7W	79.90 dBW	DATA (QPSK, 8PSK, 16APSK)
13770.0000 - 13780.0000 MHz	4M00G7W	69.20 dBW	DATA (QPSK, 8PSK, 16APSK)
13780.0000 - 14000.0000 MHz	600KG7W	68.10 dBW	DATA (QPSK, 8PSK, 16APSK)
13811.0000 - 14000.0000 MHz	54M0G7W	84.70 dBW	DATA (QPSK, 8PSK, 16APSK)
14000.0000 - 14500.0000 MHz	500KG7W	64.40 dBW	DATA (QPSK, 8PSK, 16APSK)
14000.0000 - 14500.0000 MHz	54M0G7W	84.70 dBW	DATA (QPSK, 8PSK, 16APSK)
10950.0000 - 11200.0000 MHz	500KG7W		DATA (QPSK, 8PSK, 16APSK)
10950.0000 - 11200.0000 MHz	54M0G7W		DATA (QPSK, 8PSK, 16APSK)
11700.0000 - 12200.0000 MHz	500KG7W		DATA (QPSK, 8PSK, 16APSK)
11700.0000 - 12200.0000 MHz	54M0G7W		DATA (QPSK, 8PSK, 16APSK)

SITE ID: REMOTE 1
LOCATION: (0.95M.VSAT), CONUS, (5000 UNITS)

ANTENNA ID: 0.95M/R 0.95 meters RAYTHEON SMDS 2100

14000.0000 - 14500.0000 MHz	4M41G7W	44.70 dBW	QPSK 2048 KBPS
14000.0000 - 14500.0000 MHz	842KG7W	44.70 dBW	QPSK 384 KBPS
14000.0000 - 14500.0000 MHz	324KG7W	44.70 dBW	QPSK 144 KBPS

14000.0000 - 14500.0000 MHz	3M17G7W	44.70 dBW	QPSK 2048 KBPS, RATE 1/2 CODE
14000.0000 - 14500.0000 MHz	360KG7W	44.70 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	44.70 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	44.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	44.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	360KG7W	41.70 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	41.70 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	41.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	41.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 2
LOCATION: (1.2M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.2M/P	1.2 meters	PRODELIN	1134
14000.0000 - 14500.0000 MHz	3M17G7W	46.00 dBW	QPSK 2048 KBPS, RATE 1/2 CODE	
14000.0000 - 14500.0000 MHz	324KG7W	46.00 dBW	QPSK 144 KBPS	
14000.0000 - 14500.0000 MHz	842KG7W	46.00 dBW	QPSK 384 KBPS	
14000.0000 - 14500.0000 MHz	4M41G7W	46.00 dBW	QPSK 2048 KBPS	
14000.0000 - 14500.0000 MHz	380KG7W	43.30 dBW	QPSK 256 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	750KG7W	43.30 dBW	QPSK 512 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	1M50G7W	43.30 dBW	QPSK 1024 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	3M00G7W	43.30 dBW	QPSK 2048 KBPS, TURBO CODE	

14000.0000 - 14500.0000 MHz	360KG7W	46.00 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	46.00 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	46.00 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	46.00 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	360KG7W	43.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	43.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	43.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	43.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W	0.00 dBW	QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 3
LOCATION: (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/P	1.8 meters	PRODELIN	1194
14000.0000 - 14500.0000 MHz	4M41G7W	49.70 dBW	QPSK 2048 KBPS	
14000.0000 - 14500.0000 MHz	842KG7W	49.70 dBW	QPSK 384 KBPS	
14000.0000 - 14500.0000 MHz	324KG7W	49.70 dBW	QPSK 144 KBPS	
14000.0000 - 14500.0000 MHz	3M17G7W	52.70 dBW	QPSK 2048 KBPS, RATE 1/2 CODE	
14000.0000 - 14500.0000 MHz	380KG7W	52.50 dBW	QPSK 256 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	750KG7W	52.70 dBW	QPSK 512 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	1M50G7W	52.70 dBW	QPSK 1025 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	3M00G7W	52.70 dBW	QPSK 2048 KBPS, TURBO CODE	

14000.0000 - 14500.0000 MHz	360KG7W	52.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	52.70 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	52.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	52.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	380KG7W	49.80 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	75K0G7W	49.80 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	49.80 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	49.80 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	360KG7W	49.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	49.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	49.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	49.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 7
LOCATION: (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	2.4M/CM	2.4 meters	CHANNEL MASTER	TYPE 240
14000.0000 - 14500.0000 MHz	380KG7W	55.10 dBW	QPSK 256 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	750KG7W	58.00 dBW	QPSK 512 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	1M50G7W	58.30 dBW	QPSK 1024 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	3M00G7W	58.30 dBW	QPSK 2048 KBPS, TURBO CODE	

14000.0000 - 14500.0000 MHz	360KG7W	54.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	58.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	58.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	58.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 4
LOCATION: (.96M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	0.96M/CM	0.96 meters	CHANNEL MASTER	TYPE 960	
14000.0000 - 14500.0000 MHz			380KG7W	44.20 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	44.20 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	44.20 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	44.20 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			380KG7W	38.20 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	38.20 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	38.20 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	38.20 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			360KG7W	44.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			936KG7W	44.20 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			2M45G7W	44.20 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			4M90G7W	44.20 dBW	QPSK 2048 KBPS, CONCATENATED CODE

14000.0000 - 14500.0000 MHz	360KG7W	38.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	38.20 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	38.20 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	38.20 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 5
LOCATION: (1.2M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.2M/CM	1.2 meters	CHANNEL MASTER	TYPE 120	
14000.0000 - 14500.0000 MHz			380KG7W	46.30 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	46.30 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	46.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	46.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			380KG7W	43.30 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	43.30 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	43.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	43.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			360KG7W	46.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			936KG7W	46.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			2M45G7W	46.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			4M90G7W	46.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE

14000.0000 - 14500.0000 MHz	360KG7W	43.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	43.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	43.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	43.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 6
LOCATION: (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/CM	1.8 meters	CHANNEL MASTER	TYPE180	
14000.0000 - 14500.0000 MHz			380KG7W	52.60 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	52.80 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	52.80 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	52.80 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			360KG7W	52.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			936KG7W	52.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			2M45G7W	52.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			4M90G7W	52.80 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			380KG7W	49.80 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	49.80 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	49.80 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	49.80 dBW	QPSK 2048 KBPS, TURBO CODE

14000.0000 - 14500.0000 MHz	360KG7W	49.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	49.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	49.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	49.80 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 8P
LOCATION: 1305 INDUSTRIAL PARK ROAD (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID: 2.4M/PAT	2.4 meters	PATRIOT	TXFCC-240KU
14000.0000 - 14500.0000 MHz	380KG7W	55.00 dBW	QPSK, 256KBPS, TURBOCODE, 2/3 FEC
14000.0000 - 14500.0000 MHz	3M00G7W	55.30 dBW	QPSK 2048KBPS, TURBOCODE, 2/3 FEC
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK, 3 MBPS, HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK, 48 MBPS, HUB OUTBOUND TO VSAT

SITE ID: REMOTE 9P
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID: 1.2M/PAT	1.2 meters	PATRIOT	TXFCC-120KU
14000.0000 - 14500.0000 MHz	3M00G7W	43.30 dBW	2048KBPS 2/3FEC TURBO CODE
14000.0000 - 14500.0000 MHz	380KG7W	43.30 dBW	256 KBPS 2/3FEC TURBO CODE
11700.0000 - 12200.0000 MHz	54M0G7W		48 MBPS 2/3 FEC HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		3 MBPS 2/3 FEC HUB OUTBOUND TO VSAT

SITE ID: REMOTE 10P
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/PAT	1.8 meters	PATRIOT	TXFCC-180KU	
	14000.0000 - 14500.0000 MHz		3M00G7W	52.80 dBW	QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		380KG7W	52.80 dBW	QPSK, 256KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz		54M0G7W		48 MBPS 2/3 FEC HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz		3M91G7W		3 MBPS 2/3 FEC HUB OUTBOUND TO VSAT

SITE ID: REMOTE 11PROD
LOCATION: 1305 INDUSTRIAL PARK ROAD (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	2.4M/PRO.	2.4 meters	PRODELIN	P24	
	14000.0000 - 14500.0000 MHz		380KG7W	52.70 dBW	QPSK, 256KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		750KG7W	52.60 dBW	QPSK, 512 KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		1M50G7W	52.90 dBW	QPSK, 1024 KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		3M00G7W	52.90 dBW	QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		360KG7W	52.40 dBW	QPSK, 144 KBPS, 2/3 FEC CONCATENATED CODE
	14000.0000 - 14500.0000 MHz		4M90G7W	52.90 dBW	QPSK, 2048 KBPS, 2/3 FEC CONCATENATED CODE
	11700.0000 - 12200.0000 MHz		54M0G7W		QPSK 48 MBPS 2/3 FEC
	11700.0000 - 12200.0000 MHz		3M91G7W		QPSK 3 MBPS HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz		8M79G7W		QPSK 8 MBPS HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz		380KG7W		QPSK, 256KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz		750KG7W		QPSK, 512 KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz		1M50G7W		QPSK, 1024 KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz		3M00G7W		QPSK, 2048 KBPS, 2/3 FEC TURBOCODING

11700.0000 - 12200.0000 MHz	360KG7W		QPSK, 144 KBPS, 2/3 FEC CONCATENATED CODE
11700.0000 - 12200.0000 MHz	4M90G7W		QPSK, 2048 KBPS, 2/3 FEC CONCATENATED CODE

SITE ID: REMOTE12
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID: ENS 1.2 4W	1.2 meters	PATRIOT	TXFLY-120KU
14000.0000 - 14500.0000 MHz	356KG7W	48.20 dBW	395 QPSK
14000.0000 - 14500.0000 MHz	693KG7W	48.20 dBW	770 QPSK
11700.0000 - 12200.0000 MHz	356KG7W		395 QPSK
11700.0000 - 12200.0000 MHz	693KG7W		770 QPSK

SITE ID: REMOTE13
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID: ENS 1.2 2W	1.2 meters	PATRIOT	TXFLY-120KU
14000.0000 - 14500.0000 MHz	356KG7W	45.50 dBW	395 QPSK
14000.0000 - 14500.0000 MHz	693KG7W	45.50 dBW	770 QPSK
11700.0000 - 12200.0000 MHz	356KG7W		395 QPSK
11700.0000 - 12200.0000 MHz	693KG7W		770 QPSK

SITE ID: REMOTE14
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID: ENS 1.8 2W	1.8 meters	PATRIOT	TXFLY-180KU
14000.0000 - 14500.0000 MHz	356KG7W	49.00 dBW	395 QPSK
14000.0000 - 14500.0000 MHz	693KG7W	49.00 dBW	770 QPSK
11700.0000 - 12200.0000 MHz	356KG7W		395 QPSK
11700.0000 - 12200.0000 MHz	693KG7W		770 QPSK

SITE ID: REMOTE15
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID: ENS 1.8 4W	1.8 meters	PATRIOT	TXFLY-180KU
14000.0000 - 14500.0000 MHz	356KG7W	51.70 dBW	395 QPSK

14000.0000 - 14500.0000 MHz	693KG7W	52.60 dBW	770 QPSK
11700.0000 - 12200.0000 MHz	356KG7W		395 QPSK
11700.0000 - 12200.0000 MHz	693KG7W		770 QPSK

Points of Communication:

- 1 HUB - PERMITTED LIST - ()
- 1 HUB - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 1 - TELSTAR 11N (S2357) - (37.5 W.L.)
- REMOTE 1 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 10P - PERMITTED LIST - ()
- REMOTE 11PROD - PERMITTED LIST - ()
- REMOTE 2 - PERMITTED LIST - ()
- REMOTE 2 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 3 - PERMITTED LIST - ()
- REMOTE 3 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 4 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 5 - PERMITTED LIST - ()
- REMOTE 5 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 6 - PERMITTED LIST - ()
- REMOTE 6 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 7 - PERMITTED LIST - ()
- REMOTE 7 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 8P - PERMITTED LIST - ()
- REMOTE 9P - PERMITTED LIST - ()
- REMOTE12 - PERMITTED LIST - ()
- REMOTE13 - PERMITTED LIST - ()
- REMOTE14 - PERMITTED LIST - ()
- REMOTE15 - PERMITTED LIST - ()

Nature of Service: Fixed Satellite Service

See IBFS File No. SES-MOD-2015-070100437 for a description of application as amended.

SITE ID: REMOTE 11PROD

LOCATION: 1305 INDUSTRIAL PARK ROAD (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	2.4M/PRO.	2.4 meters	PRODELIN	P24	
	14000.0000 - 14500.0000 MHz		380KG7W	52.70 dBW	QPSK, 256KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		750KG7W	52.60 dBW	QPSK, 512 KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		1M50G7W	52.90 dBW	QPSK, 1024 KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		3M00G7W	52.90 dBW	QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz		360KG7W	52.40 dBW	QPSK, 144 KBPS, 2/3 FEC CONCATENATED CODE
	14000.0000 - 14500.0000 MHz		4M90G7W	52.90 dBW	QPSK, 2048 KBPS, 2/3 FEC CONCATENATED CODE
	11700.0000 - 12200.0000 MHz		54M0G7W		QPSK 48 MBPS 2/3 FEC
	11700.0000 - 12200.0000 MHz		3M91G7W		QPSK 3 MBPS HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz		8M79G7W		QPSK 8 MBPS HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz		380KG7W		QPSK, 256KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz		750KG7W		QPSK, 512 KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz		1M50G7W		QPSK, 1024 KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz		3M00G7W		QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz		360KG7W		QPSK, 144 KBPS, 2/3 FEC CONCATENATED CODE
	11700.0000 - 12200.0000 MHz		4M90G7W		QPSK, 2048 KBPS, 2/3 FEC CONCATENATED CODE

SITE ID: REMOTE12

LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID:	ENS 1.2 4W	1.2 meters	PATRIOT	TXFLY-120KU	
	14000.0000 - 14500.0000 MHz		356KG7W	48.20 dBW	395 QPSK
	14000.0000 - 14500.0000 MHz		693KG7W	48.20 dBW	770 QPSK
	11700.0000 - 12200.0000 MHz		356KG7W		395 QPSK
	11700.0000 - 12200.0000 MHz		693KG7W		770 QPSK

SITE ID: REMOTE13
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID:	ENS 1.2 2W	1.2 meters	PATRIOT	TXFLY-120KU	
	14000.0000 - 14500.0000 MHz		356KG7W	45.50 dBW	395 QPSK
	14000.0000 - 14500.0000 MHz		693KG7W	45.50 dBW	770 QPSK
	11700.0000 - 12200.0000 MHz		356KG7W		395 QPSK
	11700.0000 - 12200.0000 MHz		693KG7W		770 QPSK

SITE ID: REMOTE14
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID:	ENS 1.8 2W	1.8 meters	PATRIOT	TXFLY-180KU	
	14000.0000 - 14500.0000 MHz		356KG7W	49.00 dBW	395 QPSK
	14000.0000 - 14500.0000 MHz		693KG7W	49.00 dBW	770 QPSK
	11700.0000 - 12200.0000 MHz		356KG7W		395 QPSK
	11700.0000 - 12200.0000 MHz		693KG7W		770 QPSK

SITE ID: REMOTE15
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID:	ENS 1.8 4W	1.8 meters	PATRIOT	TXFLY-180KU	
	14000.0000 - 14500.0000 MHz		356KG7W	51.70 dBW	395 QPSK
	14000.0000 - 14500.0000 MHz		693KG7W	52.60 dBW	770 QPSK
	11700.0000 - 12200.0000 MHz		356KG7W		395 QPSK
	11700.0000 - 12200.0000 MHz		693KG7W		770 QPSK

SITE ID: 1 HUB
 LOCATION: 1305 INDUSTRIAL PARK ROAD (9.0M. HUB), SHENANDOAH, MT. JACKSON, VA
 38 ° 43 ' 42.00 " N LAT. 78 ° 39 ' 25.00 " W LONG.

ANTENNA ID:	9.0M/V	9 meters	VERTEX	9 KPK
	14000.0000 - 14500.0000 MHz	3M91G7W	67.00 dBW	QPSK 3MBPS HUB OUTBOUND TO VSAT
	14000.0000 - 14500.0000 MHz	8M79G7W	69.50 dBW	QPSK 8MBPS HUB OUTBOUND TO VSAT
	14000.0000 - 14500.0000 MHz	54M0G7W	75.00 dBW	QPSK 48MBPS 2/3 FEC
	14000.0000 - 14500.0000 MHz	500KG7W	64.40 dBW	DATA (QPSK, 8PSK, 16APSK)
	14000.0000 - 14500.0000 MHz	54M0G7W	84.70 dBW	DATA (QPSK, 8PSK, 16APSK)
	13811.0000 - 14000.0000 MHz	54M0G7W	84.70 dBW	DATA (QPSK, 8PSK, 16APSK)
	13770.0000 - 13780.0000 MHz	4M00G7W	62.00 dBW	DATA (QPSK, 8PSK, 16APSK)
	13750.0000 - 13811.0000 MHz	54M0G7W	79.90 dBW	DATA (QPSK, 8PSK, 16APSK)
	13750.0000 - 13770.0000 MHz	600KG7W	68.10 dBW	DATA (QPSK, 8PSK, 16APSK)
	11700.0000 - 12200.0000 MHz	324KG7W		QPSK 144 KBPS
	11700.0000 - 12200.0000 MHz	842KG7W		QPSK 384 KBPS
	11700.0000 - 12200.0000 MHz	4M41G7W		QPSK 2048 KBPS
	11700.0000 - 12200.0000 MHz	3M17G7W		QPSK 2048 KBPS, RATE 1/2 CODE
	11700.0000 - 12200.0000 MHz	380KG7W		QPSK 256 KBPS, TURBO CODE
	11700.0000 - 12200.0000 MHz	750KG7W		QPSK 512 KBPS, TURBO CODE
	11700.0000 - 12200.0000 MHz	1M50G7W		QPSK 1024 KBPS, TURBO CODE
	11700.0000 - 12200.0000 MHz	3M00G7W		QPSK 2048 KBPS, TURBO CODE
	11700.0000 - 12200.0000 MHz	360KG7W		QPSK 144 KBPS, CONCATENATED CODE
	11700.0000 - 12200.0000 MHz	936KG7W		QPSK 384 KBPS, CONCATENATED CODE
	11700.0000 - 12200.0000 MHz	2M45G7W		QPSK 1024 KBPS, CONCATENATED CODE
	11700.0000 - 12200.0000 MHz	4M90G7W		QPSK 2048 KBPS, CONCATENATED CODE

11700.0000 - 12200.0000 MHz	500KG7W		DATA (QPSK, 8PSK, 16APSK)
11700.0000 - 12200.0000 MHz	54M0G7W		DATA (QPSK, 8PSK, 16APSK)
10950.0000 - 11200.0000 MHz	500KG7W		DATA (QPSK, 8PSK, 16APSK)
10950.0000 - 11200.0000 MHz	54M0G7W		DATA (QPSK, 8PSK, 16APSK)
13770.0000 - 13780.0000 MHz	4M00G7W	69.20 dBW	DATA (QPSK, 8PSK, 16APSK)
13780.0000 - 14000.0000 MHz	600KG7W	68.10 dBW	DATA (QPSK, 8PSK, 16APSK)

SITE ID: REMOTE 1
LOCATION: (0.95M.VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	0.95M/R	0.95 meters	RAYTHEON	SMDS 2100
14000.0000 - 14500.0000 MHz		4M41G7W	44.70 dBW	QPSK 2048 KBPS
14000.0000 - 14500.0000 MHz		842KG7W	44.70 dBW	QPSK 384 KBPS
14000.0000 - 14500.0000 MHz		324KG7W	44.70 dBW	QPSK 144 KBPS
14000.0000 - 14500.0000 MHz		3M17G7W	44.70 dBW	QPSK 2048 KBPS, RATE 1/2 CODE
14000.0000 - 14500.0000 MHz		360KG7W	44.70 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		936KG7W	44.70 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		2M45G7W	44.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		4M90G7W	44.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		360KG7W	41.70 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		936KG7W	41.70 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		2M45G7W	41.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		4M90G7W	41.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz		3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz		8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT

11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC
SITE ID: REMOTE 2			
LOCATION: (1.2M. VSAT), CONUS, (5000 UNITS)			
ANTENNA ID: 1.2M/P	1.2 meters	PRODELIN	1134
14000.0000 - 14500.0000 MHz	3M17G7W	46.00 dBW	QPSK 2048 KBPS, RATE 1/2 CODE
14000.0000 - 14500.0000 MHz	324KG7W	46.00 dBW	QPSK 144 KBPS
14000.0000 - 14500.0000 MHz	842KG7W	46.00 dBW	QPSK 384 KBPS
14000.0000 - 14500.0000 MHz	4M41G7W	46.00 dBW	QPSK 2048 KBPS
14000.0000 - 14500.0000 MHz	380KG7W	43.30 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	750KG7W	43.30 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	43.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	43.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	360KG7W	46.00 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	46.00 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	46.00 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	46.00 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	360KG7W	43.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	43.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	43.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	43.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W	0.00 dBW	QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 3
 LOCATION: (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/P	1.8 meters	PRODELIN	1194
	14000.0000 - 14500.0000 MHz	4M41G7W	49.70 dBW	QPSK 2048 KBPS
	14000.0000 - 14500.0000 MHz	842KG7W	49.70 dBW	QPSK 384 KBPS
	14000.0000 - 14500.0000 MHz	324KG7W	49.70 dBW	QPSK 144 KBPS
	14000.0000 - 14500.0000 MHz	3M17G7W	52.70 dBW	QPSK 2048 KBPS, RATE 1/2 CODE
	14000.0000 - 14500.0000 MHz	380KG7W	52.50 dBW	QPSK 256 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	750KG7W	52.70 dBW	QPSK 512 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	1M50G7W	52.70 dBW	QPSK 1025 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	3M00G7W	52.70 dBW	QPSK 2048 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	360KG7W	52.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	936KG7W	52.70 dBW	QPSK 384 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	2M45G7W	52.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	4M90G7W	52.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	380KG7W	49.80 dBW	QPSK 256 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	75K0G7W	49.80 dBW	QPSK 512 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	1M50G7W	49.80 dBW	QPSK 1024 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	3M00G7W	49.80 dBW	QPSK 2048 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	360KG7W	49.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	936KG7W	49.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	2M45G7W	49.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	4M90G7W	49.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE

11700.0000 - 12200.0000 MHz	3M91G7W	QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W	QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W	QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 7
LOCATION: (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	2.4M/CM	2.4 meters	CHANNEL MASTER	TYPE 240
14000.0000 - 14500.0000 MHz			380KG7W 55.10 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W 58.00 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W 58.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W 58.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			360KG7W 54.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			936KG7W 58.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			2M45G7W 58.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			4M90G7W 58.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz			8M79G7W	QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz			3M91G7W	QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz			54M0G7W	QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 4
LOCATION: (.96M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	0.96M/CM	0.96 meters	CHANNEL MASTER	TYPE 960
14000.0000 - 14500.0000 MHz			380KG7W 44.20 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W 44.20 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W 44.20 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W 44.20 dBW	QPSK 2048 KBPS, TURBO CODE

14000.0000 - 14500.0000 MHz	380KG7W	38.20 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	750KG7W	38.20 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	38.20 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	38.20 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	360KG7W	44.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	44.20 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	44.20 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	44.20 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	360KG7W	38.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	38.20 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	38.20 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	38.20 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 5
LOCATION: (1.2M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.2M/CM	1.2 meters	CHANNEL MASTER	TYPE 120
14000.0000 - 14500.0000 MHz	380KG7W	46.30 dBW	QPSK 256 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	750KG7W	46.30 dBW	QPSK 512 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	1M50G7W	46.30 dBW	QPSK 1024 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	3M00G7W	46.30 dBW	QPSK 2048 KBPS, TURBO CODE	
14000.0000 - 14500.0000 MHz	380KG7W	43.30 dBW	QPSK 256 KBPS, TURBO CODE	

14000.0000 - 14500.0000 MHz	750KG7W	43.30 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	43.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	43.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	360KG7W	46.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	46.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	46.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	46.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	360KG7W	43.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	43.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	43.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	43.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 6
LOCATION: (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/CM	1.8 meters	CHANNEL MASTER	TYPE180	
14000.0000 - 14500.0000 MHz			380KG7W	52.60 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	52.80 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	52.80 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	52.80 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			360KG7W	52.30 dBW	QPSK 144 KBPS, CONCATENATED CODE

14000.0000 - 14500.0000 MHz	936KG7W	52.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	52.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	52.80 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	380KG7W	49.80 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	750KG7W	49.80 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	49.80 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	49.80 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	360KG7W	49.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	49.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	49.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	49.80 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 8P

LOCATION: 1305 INDUSTRIAL PARK ROAD (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	2.4M/PAT	2.4 meters	PATRIOT	TXFCC-240KU
14000.0000 - 14500.0000 MHz	380KG7W	55.00 dBW	QPSK, 256KBPS, TURBOCODE, 2/3 FEC	
14000.0000 - 14500.0000 MHz	3M00G7W	55.30 dBW	QPSK 2048KBPS, TURBOCODE, 2/3 FEC	
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK, 3 MBPS, HUB OUTBOUND TO VSAT	
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK, 48 MBPS, HUB OUTBOUND TO VSAT	

SITE ID: REMOTE 9P
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.2M/PAT	1.2 meters	PATRIOT	TXFCC-120KU
	14000.0000 - 14500.0000 MHz	3M00G7W	43.30 dBW	2048KBPS 2/3FEC TURBO CODE
	14000.0000 - 14500.0000 MHz	380KG7W	43.30 dBW	256 KBPS 2/3FEC TURBO CODE
	11700.0000 - 12200.0000 MHz	54M0G7W		48 MBPS 2/3 FEC HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz	3M91G7W		3 MBPS 2/3 FEC HUB OUTBOUND TO VSAT

SITE ID: REMOTE 10P
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/PAT	1.8 meters	PATRIOT	TXFCC-180KU
	14000.0000 - 14500.0000 MHz	3M00G7W	52.80 dBW	QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
	14000.0000 - 14500.0000 MHz	380KG7W	52.80 dBW	QPSK, 256KBPS, 2/3 FEC TURBOCODING
	11700.0000 - 12200.0000 MHz	54M0G7W		48 MBPS 2/3 FEC HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz	3M91G7W		3 MBPS 2/3 FEC HUB OUTBOUND TO VSAT

Points of Communication:

- 1 HUB - PERMITTED LIST - ()
- 1 HUB - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 1 - TELSTAR 11N (S2357) - (37.5 W.L.)
- REMOTE 1 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 10P - PERMITTED LIST - ()
- REMOTE 11PROD - PERMITTED LIST - ()
- REMOTE 2 - PERMITTED LIST - ()
- REMOTE 2 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 3 - PERMITTED LIST - ()
- REMOTE 3 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 4 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 5 - PERMITTED LIST - ()

REMOTE 5 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 6 - PERMITTED LIST - ()

REMOTE 6 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 7 - PERMITTED LIST - ()

REMOTE 7 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 8P - PERMITTED LIST - ()

REMOTE 9P - PERMITTED LIST - ()

REMOTE12 - PERMITTED LIST - ()

REMOTE13 - PERMITTED LIST - ()

REMOTE14 - PERMITTED LIST - ()

REMOTE15 - PERMITTED LIST - ()

SES-ASG-20151030-00793 E E880698 Sander Operating Co. III LLC

Application for Consent to Assignment

Current Licensee: Sander Operating Co. III LLC

FROM: SANDER OPERATING CO., III LLC

TO: Advanced Broadcast Solutions

No. of Station(s) listed: 1

SES-ASG-20151204-00905 E E150125 WAGT Television Inc.

Application for Consent to Assignment

Current Licensee: WAGT Television Inc.

FROM: WAGT TELEVISION INC.

TO: Gray Television Licensee, LLC

No. of Station(s) listed: 1

SES-LIC-20151211-00919 E E150145 Pacific and Southern, LLC

Application for Authority

Class of Station: Temporary Fixed Earth Station

Nature of Service: Fixed Satellite Service

SITE ID: 1

LOCATION:

ANTENNA ID: 1 1.4 meters AVL Technologies 1410K

14000.0000 - 14500.0000 MHz 36M0G7W 67.50 dBW Compressed Digital Video and Audio

Points of Communication:

1 - PERMITTED LIST - ()

Application for Modification

Class of Station: Fixed Earth Stations

Nature of Service: Fixed Satellite Service

Telesat Network Services, Inc. requests modification of its VSAT Network in Mt. Jackson, VA, to change the hub Antenna ID 9.0M/V to communicate with the Telstar 12V (S2933) satellite at the 15° W.L. orbital location in the 13.75-14.0 GHz (Earth-to-space) and 10.95-11.2 GHz (space-to-Earth) frequency bands. This application was amended by IBFS File Nos. SES-AMD-20151105-00815 and SES-AMD-20151124-00872, which corrected technical data previously submitted.

SITE ID: 1 HUB

LOCATION: 1305 INDUSTRIAL PARK ROAD (9.0M. HUB), SHENANDOAH, MT. JACKSON, VA

38 ° 43 ' 42.00 " N LAT. 78 ° 39 ' 25.00 " W LONG.

ANTENNA ID:	9.0M/V	9 meters	VERTEX	9 KPK
	14000.0000 - 14500.0000 MHz	3M91G7W	67.00 dBW	QPSK 3MBPS HUB OUTBOUND TO VSAT
	14000.0000 - 14500.0000 MHz	8M79G7W	69.50 dBW	QPSK 8MBPS HUB OUTBOUND TO VSAT
	14000.0000 - 14500.0000 MHz	54M0G7W	75.00 dBW	QPSK 48MBPS 2/3 FEC
	11700.0000 - 12200.0000 MHz	324KG7W		QPSK 144 KBPS
	11700.0000 - 12200.0000 MHz	842KG7W		QPSK 384 KBPS
	11700.0000 - 12200.0000 MHz	4M41G7W		QPSK 2048 KBPS
	11700.0000 - 12200.0000 MHz	3M17G7W		QPSK 2048 KBPS, RATE 1/2 CODE
	11700.0000 - 12200.0000 MHz	380KG7W		QPSK 256 KBPS, TURBO CODE
	11700.0000 - 12200.0000 MHz	750KG7W		QPSK 512 KBPS, TURBO CODE
	11700.0000 - 12200.0000 MHz	1M50G7W		QPSK 1024 KBPS, TURBO CODE
	11700.0000 - 12200.0000 MHz	3M00G7W		QPSK 2048 KBPS, TURBO CODE
	11700.0000 - 12200.0000 MHz	360KG7W		QPSK 144 KBPS, CONCATENATED CODE
	11700.0000 - 12200.0000 MHz	936KG7W		QPSK 384 KBPS, CONCATENATED CODE
	11700.0000 - 12200.0000 MHz	2M45G7W		QPSK 1024 KBPS, CONCATENATED CODE
	11700.0000 - 12200.0000 MHz	4M90G7W		QPSK 2048 KBPS, CONCATENATED CODE
	13750.0000 - 13770.0000 MHz	600KG7W	68.10 dBW	DATA (QPSK, 8PSK, 16APSK)

13750.0000 - 13811.0000 MHz	54M0G7W	79.90 dBW	DATA (QPSK, 8PSK, 16APSK)
13811.0000 - 14000.0000 MHz	54M0G7W	84.70 dBW	DATA (QPSK, 8PSK, 16APSK)
14000.0000 - 14500.0000 MHz	500KG7W	64.40 dBW	DATA (QPSK, 8PSK, 16APSK)
14000.0000 - 14500.0000 MHz	54M0G7W	84.70 dBW	DATA (QPSK, 8PSK, 16APSK)
10950.0000 - 11200.0000 MHz	500KG7W		DATA (QPSK, 8PSK, 16APSK)
10950.0000 - 11200.0000 MHz	54M0G7W		DATA (QPSK, 8PSK, 16APSK)
11700.0000 - 12200.0000 MHz	500KG7W		DATA (QPSK, 8PSK, 16APSK)
11700.0000 - 12200.0000 MHz	54M0G7W		DATA (QPSK, 8PSK, 16APSK)
13770.0000 - 13780.0000 MHz	4M00G7W	69.20 dBW	DATA (QPSK, 8PSK, 16APSK)
13780.0000 - 14000.0000 MHz	600KG7W	68.10 dBW	DATA (QPSK, 8PSK, 16APSK)

SITE ID: REMOTE 1
LOCATION: (0.95M.VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	0.95M/R	0.95 meters	RAYTHEON	SMDS 2100
14000.0000 - 14500.0000 MHz	4M41G7W	44.70 dBW	QPSK 2048 KBPS	
14000.0000 - 14500.0000 MHz	842KG7W	44.70 dBW	QPSK 384 KBPS	
14000.0000 - 14500.0000 MHz	324KG7W	44.70 dBW	QPSK 144 KBPS	
14000.0000 - 14500.0000 MHz	3M17G7W	44.70 dBW	QPSK 2048 KBPS, RATE 1/2 CODE	
14000.0000 - 14500.0000 MHz	360KG7W	44.70 dBW	QPSK 144 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	936KG7W	44.70 dBW	QPSK 384 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	2M45G7W	44.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	4M90G7W	44.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	360KG7W	41.70 dBW	QPSK 144 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	936KG7W	41.70 dBW	QPSK 384 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	2M45G7W	41.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE	

14000.0000 - 14500.0000 MHz	4M90G7W	41.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 2
LOCATION: (1.2M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.2M/P	1.2 meters	PRODELIN	1134
14000.0000 - 14500.0000 MHz		3M17G7W	46.00 dBW	QPSK 2048 KBPS, RATE 1/2 CODE
14000.0000 - 14500.0000 MHz		324KG7W	46.00 dBW	QPSK 144 KBPS
14000.0000 - 14500.0000 MHz		842KG7W	46.00 dBW	QPSK 384 KBPS
14000.0000 - 14500.0000 MHz		4M41G7W	46.00 dBW	QPSK 2048 KBPS
14000.0000 - 14500.0000 MHz		380KG7W	43.30 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz		750KG7W	43.30 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz		1M50G7W	43.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz		3M00G7W	43.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz		360KG7W	46.00 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		936KG7W	46.00 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		2M45G7W	46.00 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		4M90G7W	46.00 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		360KG7W	43.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		936KG7W	43.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz		2M45G7W	43.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE

14000.0000 - 14500.0000 MHz	4M90G7W	43.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W	0.00 dBW	QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 3
LOCATION: (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/P	1.8 meters	PRODELIN	1194	
14000.0000 - 14500.0000 MHz			4M41G7W	49.70 dBW	QPSK 2048 KBPS
14000.0000 - 14500.0000 MHz			842KG7W	49.70 dBW	QPSK 384 KBPS
14000.0000 - 14500.0000 MHz			324KG7W	49.70 dBW	QPSK 144 KBPS
14000.0000 - 14500.0000 MHz			3M17G7W	52.70 dBW	QPSK 2048 KBPS, RATE 1/2 CODE
14000.0000 - 14500.0000 MHz			380KG7W	52.50 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	52.70 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	52.70 dBW	QPSK 1025 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	52.70 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			360KG7W	52.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			936KG7W	52.70 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			2M45G7W	52.70 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			4M90G7W	52.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			380KG7W	49.80 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			75K0G7W	49.80 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	49.80 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	49.80 dBW	QPSK 2048 KBPS, TURBO CODE

14000.0000 - 14500.0000 MHz	360KG7W	49.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	49.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	49.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	49.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 7
LOCATION: (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	2.4M/CM	2.4 meters	CHANNEL MASTER	TYPE 240	
14000.0000 - 14500.0000 MHz			380KG7W	55.10 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			750KG7W	58.00 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			1M50G7W	58.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			3M00G7W	58.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz			360KG7W	54.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			936KG7W	58.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			2M45G7W	58.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz			4M90G7W	58.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz			8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz			3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz			54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 4
LOCATION: (.96M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	0.96M/CM	0.96 meters	CHANNEL MASTER	TYPE 960
	14000.0000 - 14500.0000 MHz	380KG7W	44.20 dBW	QPSK 256 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	750KG7W	44.20 dBW	QPSK 512 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	1M50G7W	44.20 dBW	QPSK 1024 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	3M00G7W	44.20 dBW	QPSK 2048 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	380KG7W	38.20 dBW	QPSK 256 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	750KG7W	38.20 dBW	QPSK 512 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	1M50G7W	38.20 dBW	QPSK 1024 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	3M00G7W	38.20 dBW	QPSK 2048 KBPS, TURBO CODE
	14000.0000 - 14500.0000 MHz	360KG7W	44.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	936KG7W	44.20 dBW	QPSK 384 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	2M45G7W	44.20 dBW	QPSK 1024 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	4M90G7W	44.20 dBW	QPSK 2048 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	360KG7W	38.20 dBW	QPSK 144 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	936KG7W	38.20 dBW	QPSK 384 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	2M45G7W	38.20 dBW	QPSK 1024 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	4M90G7W	38.20 dBW	QPSK 2048 KBPS, CONCATENATED CODE
	11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
	11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 5
LOCATION: (1.2M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID:	1.2M/CM	1.2 meters	CHANNEL MASTER	TYPE 120
-------------	---------	------------	----------------	----------

14000.0000 - 14500.0000 MHz	380KG7W	46.30 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	750KG7W	46.30 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	46.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	46.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	380KG7W	43.30 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	750KG7W	43.30 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	43.30 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	43.30 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	360KG7W	46.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	46.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	46.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	46.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	360KG7W	43.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	43.30 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	43.30 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	43.30 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 6
LOCATION: (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID: 1.8M/CM 1.8 meters CHANNEL MASTER TYPE180

14000.0000 - 14500.0000 MHz 380KG7W 52.60 dBW QPSK 256 KBPS, TURBO CODE

14000.0000 - 14500.0000 MHz	750KG7W	52.80 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	52.80 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	52.80 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	360KG7W	52.30 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	52.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	52.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	52.80 dBW	QPSK 2048 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	380KG7W	49.80 dBW	QPSK 256 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	750KG7W	49.80 dBW	QPSK 512 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	1M50G7W	49.80 dBW	QPSK 1024 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	3M00G7W	49.80 dBW	QPSK 2048 KBPS, TURBO CODE
14000.0000 - 14500.0000 MHz	360KG7W	49.80 dBW	QPSK 144 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	936KG7W	49.80 dBW	QPSK 384 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	2M45G7W	49.80 dBW	QPSK 1024 KBPS, CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	49.80 dBW	QPSK 2048 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48MBPS 2/3 FEC

SITE ID: REMOTE 8P
LOCATION: 1305 INDUSTRIAL PARK ROAD (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID: 2.4M/PAT 2.4 meters PATRIOT TXFCC-240KU

14000.0000 - 14500.0000 MHz	380KG7W	55.00 dBW	QPSK, 256KBPS, TURBOCODE, 2/3 FEC
-----------------------------	---------	-----------	-----------------------------------

14000.0000 - 14500.0000 MHz	3M00G7W	55.30 dBW	QPSK 2048KBPS, TURBOCODE, 2/3 FEC
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK, 3 MBPS, HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK, 48 MBPS, HUB OUTBOUND TO VSAT

SITE ID: REMOTE 9P
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID: 1.2M/PAT	1.2 meters	PATRIOT	TXFCC-120KU
14000.0000 - 14500.0000 MHz	3M00G7W	43.30 dBW	2048KBPS 2/3FEC TURBO CODE
14000.0000 - 14500.0000 MHz	380KG7W	43.30 dBW	256 KBPS 2/3FEC TURBO CODE
11700.0000 - 12200.0000 MHz	54M0G7W		48 MBPS 2/3 FEC HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		3 MBPS 2/3 FEC HUB OUTBOUND TO VSAT

SITE ID: REMOTE 10P
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID: 1.8M/PAT	1.8 meters	PATRIOT	TXFCC-180KU
14000.0000 - 14500.0000 MHz	3M00G7W	52.80 dBW	QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
14000.0000 - 14500.0000 MHz	380KG7W	52.80 dBW	QPSK, 256KBPS, 2/3 FEC TURBOCODING
11700.0000 - 12200.0000 MHz	54M0G7W		48 MBPS 2/3 FEC HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	3M91G7W		3 MBPS 2/3 FEC HUB OUTBOUND TO VSAT

SITE ID: REMOTE 11PROD
LOCATION: 1305 INDUSTRIAL PARK ROAD (2.4M. VSAT), CONUS, (5000 UNITS)

ANTENNA ID: 2.4M/PRO.	2.4 meters	PRODELIN	P24
14000.0000 - 14500.0000 MHz	380KG7W	52.70 dBW	QPSK, 256KBPS, 2/3 FEC TURBOCODING
14000.0000 - 14500.0000 MHz	750KG7W	52.60 dBW	QPSK, 512 KBPS, 2/3 FEC TURBOCODING
14000.0000 - 14500.0000 MHz	1M50G7W	52.90 dBW	QPSK, 1024 KBPS, 2/3 FEC TURBOCODING

14000.0000 - 14500.0000 MHz	3M00G7W	52.90 dBW	QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
14000.0000 - 14500.0000 MHz	360KG7W	52.40 dBW	QPSK, 144 KBPS, 2/3 FEC CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	52.90 dBW	QPSK, 2048 KBPS, 2/3 FEC CONCATENATED CODE
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK 48 MBPS 2/3 FEC
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK 3 MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	8M79G7W		QPSK 8 MBPS HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	380KG7W		QPSK, 256KBPS, 2/3 FEC TURBOCODING
11700.0000 - 12200.0000 MHz	750KG7W		QPSK, 512 KBPS, 2/3 FEC TURBOCODING
11700.0000 - 12200.0000 MHz	1M50G7W		QPSK, 1024 KBPS, 2/3 FEC TURBOCODING
11700.0000 - 12200.0000 MHz	3M00G7W		QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
11700.0000 - 12200.0000 MHz	360KG7W		QPSK, 144 KBPS, 2/3 FEC CONCATENATED CODE
11700.0000 - 12200.0000 MHz	4M90G7W		QPSK, 2048 KBPS, 2/3 FEC CONCATENATED CODE

SITE ID: REMOTE12

LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID: ENS 1.2 4W 1.2 meters PATRIOT TXFLY-120KU

14000.0000 - 14500.0000 MHz	356KG7W	48.20 dBW	395 QPSK
14000.0000 - 14500.0000 MHz	693KG7W	48.20 dBW	770 QPSK
11700.0000 - 12200.0000 MHz	356KG7W		395 QPSK
11700.0000 - 12200.0000 MHz	693KG7W		770 QPSK

SITE ID: REMOTE13

LOCATION: 1305 INDUSTRIAL PARK ROAD (1.2M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID: ENS 1.2 2W 1.2 meters PATRIOT TXFLY-120KU

14000.0000 - 14500.0000 MHz	356KG7W	45.50 dBW	395 QPSK
-----------------------------	---------	-----------	----------

14000.0000 - 14500.0000 MHz	693KG7W	45.50 dBW	770 QPSK
11700.0000 - 12200.0000 MHz	356KG7W		395 QPSK
11700.0000 - 12200.0000 MHz	693KG7W		770 QPSK

SITE ID: REMOTE14
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID: ENS 1.8 2W	1.8 meters	PATRIOT	TXFLY-180KU
14000.0000 - 14500.0000 MHz	356KG7W	49.00 dBW	395 QPSK
14000.0000 - 14500.0000 MHz	693KG7W	49.00 dBW	770 QPSK
11700.0000 - 12200.0000 MHz	356KG7W		395 QPSK
11700.0000 - 12200.0000 MHz	693KG7W		770 QPSK

SITE ID: REMOTE15
LOCATION: 1305 INDUSTRIAL PARK ROAD (1.8M. VSAT) ENSURE, CONUS, 5000 UNITS

ANTENNA ID: ENS 1.8 4W	1.8 meters	PATRIOT	TXFLY-180KU
14000.0000 - 14500.0000 MHz	356KG7W	51.70 dBW	395 QPSK
14000.0000 - 14500.0000 MHz	693KG7W	52.60 dBW	770 QPSK
11700.0000 - 12200.0000 MHz	356KG7W		395 QPSK
11700.0000 - 12200.0000 MHz	693KG7W		770 QPSK

Points of Communication:

- 1 HUB - PERMITTED LIST - ()
- 1 HUB - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 1 - TELSTAR 11N (S2357) - (37.5 W.L.)
- REMOTE 1 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 10P - PERMITTED LIST - ()
- REMOTE 11PROD - PERMITTED LIST - ()
- REMOTE 2 - PERMITTED LIST - ()
- REMOTE 2 - Telstar 12 (S2462) - (15 W. L.)
- REMOTE 3 - PERMITTED LIST - ()
- REMOTE 3 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 4 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 5 - PERMITTED LIST - ()

REMOTE 5 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 6 - PERMITTED LIST - ()

REMOTE 6 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 7 - PERMITTED LIST - ()

REMOTE 7 - Telstar 12 (S2462) - (15 W. L.)

REMOTE 8P - PERMITTED LIST - ()

REMOTE 9P - PERMITTED LIST - ()

REMOTE12 - PERMITTED LIST - ()

REMOTE13 - PERMITTED LIST - ()

REMOTE14 - PERMITTED LIST - ()

REMOTE15 - PERMITTED LIST - ()

SES-MOD-20151028-00781 E E150015 NBC Telemundo License LLC

Application for Modification

Class of Station: Fixed Earth Stations

Nature of Service: Fixed Satellite Service

NBC Telemundo License LLC requests modification of its fixed earth station, in Washington, D.C., to operate with the Telstar 12V (S2933) satellite at the 15° W.L. orbital location and the Telstar 12 (S2462) satellite at 15° W.L. orbital location in the 13787-14000 MHz (Earth-to-space), and 10950-11200 MHz and 1145-11700 MHz (space-to-Earth) frequency bands.

SITE ID: 1

LOCATION: 4001 Nebraska Avenue, NW, Washington, DC

38 ° 56 ' 27.20 " N LAT.

77 ° 4 ' 54.70 " W LONG.

ANTENNA ID:	1	5.6 meters	Andrew Corp.	KU-5.6
	14000.0000 - 14500.0000 MHz	36M0G7W	82.50 dBW	Digital video, audio and data
	14000.0000 - 14500.0000 MHz	500KG7W	64.00 dBW	Digital video, audio and data
	11700.0000 - 12200.0000 MHz	36M0G7W		Digital video, audio and data
	11700.0000 - 12200.0000 MHz	500KG7W		Digital video, audio and data
	13787.0000 - 14000.0000 MHz	36M0G7W	82.50 dBW	Digital video, audio and data
	13787.0000 - 14000.0000 MHz	500KG7W	64.00 dBW	Digital video, audio and data
	10950.0000 - 11200.0000 MHz	36M0G7W		Digital video, audio and data

10950.0000 - 11200.0000 MHz	500KG7W	Digital video, audio and data
11450.0000 - 11700.0000 MHz	36M0G7W	Digital video, audio and data
11450.0000 - 11700.0000 MHz	500KG7W	Digital video, audio and data

Points of Communication:

1 - PERMITTED LIST - ()

1 - Telstar 12 (S2462) - (15 W. L.)

1 - TELSTAR 12 (S2933) - (15 W.L.)

SES-T/C-20151202-00902 E E150127 Sander Operating Co. III LLC

Application for Consent to Transfer of Control

Current Licensee: Sander Operating Co. III LLC

FROM: SANDER HOLDINGS CO. LLC

TO: KING BROADCASTING COMPANY

No. of Station(s) listed: 2

SES-T/C-20151202-00903 E E150124 Sander Operating Co. I LLC

Application for Consent to Transfer of Control

Current Licensee: Sander Operating Co. I LLC

FROM: SANDER HOLDINGS CO. LLC

TO: Belo Kentucky, Inc.

No. of Station(s) listed: 1

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