



# PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION  
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Report No. SES-01771

Wednesday August 5, 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-LIC-20150616-00357 E E150095 Higher Ground LLC

Application for Authority

Class of Station: Mobile Earth Station

Nature of Service: Direct Broadcast Satellite Service, Fixed Satellite Service

Higher Ground LLC requests a blanket authorization to operate up to 50,000 mobile earth stations to provide consumer-based text messaging/light email and Internet of Things (IoT) communications in the United States. The mobile earth stations consist of SatPaq antennas embedded in smartphone cases. The mobile earth stations will operate with the Galaxy 3-C satellite at the 95.05° W.L. orbital location, the Galaxy 12 satellite at the 129° W.L. orbital location, and the Galaxy 19 satellite at the 97° W.L. orbital location in the 5925-6425 MHz (Earth-to-space) and the 3700-4200 MHz (space-to-Earth) frequency bands. Higher Ground LLC request waivers of the Commission's coordination rules, 47 C.F.R. §§ 25.130(b), 25.203(c), 101.103., based on low power operations of its transmitter and an automated frequency coordination analysis system described in the technical exhibit included in its application. Higher Ground LLC also requests a waiver of 47 C.F.R. § 2.106, the Table of Allocations, to permit mobile earth station operations as an application for the Fixed Satellite Service allocation.

SITE ID: SATPAQ

LOCATION: AK, HI, PR, VI, (0.07M.) REMOTE, US, CONUS

ANTENNA ID:	REMOTE	0.07 meters	Higher Ground LLC	SatPaq
5925.0000 - 6425.0000 MHz			5M00G1D 12.00 dBW	TDMA, Spread Spectrum
5925.0000 - 6425.0000 MHz			10M0G1D 12.00 dBW	TDMA, Spread Spectrum
3700.0000 - 4200.0000 MHz			250KG1D	TDMA, Spread Spectrum
3700.0000 - 4200.0000 MHz			250KG1D	TDMA, Spread Spectrum

### Points of Communication:

SATPAQ - GALAXY 12 (S2422) - (129 W.L.)

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SATPAQ - GALAXY 19 (S2647) - (97 W.L.)

SATPAQ - GALAXY 3C (S2381) - (95.05 W.L.)

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**SES-MOD-20150701-00437** E E030029 Telesat Network Services, Inc.

Application for Modification

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

Telesat Network Services, Inc. requests modification of its authorization of its Mt. Jackson, VA, VSAT hub antenna, Antenna ID 9.0M/V, to operate with the Telstar 12 satellite operating at 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.

**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	66.70 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 - 13811.0000 MHz	54M0G7W	79.90 dBW	QPSK, 8PSK, 16APSK
13750.0000 - 14000.0000 MHz	600KG7W	68.10 dBW	QPSK, 8PSK, 16APSK
13811.0000 - 14000.0000 MHz	54M0G7W	84.70 dBW	QPSK, 8PSK, 16APSK
14000.0000 - 14500.0000 MHz	500KG7W	64.40 dBW	QPSK, 8PSK, 16APSK
14000.0000 - 14500.0000 MHz	54M0G7W	84.70 dBW	QPSK, 8PSK, 16APSK
10950.0000 - 11200.0000 MHz	500KG7W		QPSK, 8PSK, 16APSK
10950.0000 - 11200.0000 MHz	54M0G7W		QPSK, 8PSK, 16APSK
11700.0000 - 12200.0000 MHz	500KG7W		QPSK, 8PSK, 16APSK
11700.0000 - 12200.0000 MHz	54M0G7W		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

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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

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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



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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

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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
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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

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

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REMOTE 11PROD - PERMITTED LIST - ()

REMOTE 2 - PERMITTED LIST - ()

REMOTE 2 - Telstar 12 (S2462) - (15W)

REMOTE 3 - PERMITTED LIST - ()

REMOTE 3 - Telstar 12 (S2462) - (15W)

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

REMOTE 5 - PERMITTED LIST - ()

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

REMOTE 6 - PERMITTED LIST - ()

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

REMOTE 7 - PERMITTED LIST - ()

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

REMOTE 8P - PERMITTED LIST - ()

REMOTE 9P - PERMITTED LIST - ()

REMOTE12 - PERMITTED LIST - ()

REMOTE13 - PERMITTED LIST - ()

REMOTE14 - PERMITTED LIST - ()

REMOTE15 - PERMITTED LIST - ()

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