



# PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION  
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**Report No. SES-01009**

**Wednesday February 20, 2008**

## SATELLITE COMMUNICATIONS SERVICES INFORMATION

### RE: ACTIONS TAKEN

The Commission, by its International Bureau, took the following actions pursuant to delegated authority. The effective dates of the actions are the dates specified.

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**SES-AMD-20070620-00839**    E E060101    RaySat Antenna Systems, LLC  
Amendment  
Grant of Authority    Date Effective:    02/15/2008

**Class of Station:**    Mobile Earth Station

**Nature of Service:**    Mobile Satellite Service

This is GRANTED with conditions pursuant to Order and Authorization, DA 08-401, released February 15, 2008. See File No. SES-LIC-20060629-01083.

SITE ID:    Remote1  
LOCATION:    various

ANTENNA ID:	Remote1	0.124 meters	RaySat	StealthRay
	14000.0000 - 14500.0000 MHz	2M07G7W	30.50 dBW	BPSK Rate 1/3 digital carrier
	14000.0000 - 14500.0000 MHz	518KG7W	30.50 dBW	BPSK, Rate 1/3 digital carrier
	11700.0000 - 12200.0000 MHz	512KG7W		Narrowband digital data receive
	11700.0000 - 12200.0000 MHz	36M0G7W		Broadband digital data receive

**Points of Communication:**

- Remote1 - AMC-4 (formerl GE-4 - (101 W.L.))
- Remote1 - AMC-5 (formerl GE-5 - (79 W.L.))
- Remote1 - AMC-6 - (72 W.L.)
- Remote1 - HORIZONS 1 - (127 DEG WL)

Remote1 - IA-7 - (129 W.L.)

Remote1 - INTELSAT 8 - (89 W.L.)

Remote1 - SBS-6 - (74 DEG. WL)

**SES-AMD-20071105-01532** E KB34 Vizada Satellite, Inc.

Amendment

Grant of Authority

Date Effective: 02/15/2008

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Mobile Satellite Service

SITE ID: SANTA PAULA

LOCATION: 7676 PINE GROVE ROAD, VENTURA, SANTA PAULA, CA

34 ° 24 ' 5.00 " N LAT.

119 ° 4 ' 29.40 " W LONG.

ANTENNA ID:	12.8M	12.8 meters	PHILCO-FORD	
	5925.0000 - 6425.0000 MHz		36M0F8F	82.50 dBW
				ANALOG VIDEO
	5925.0000 - 6425.0000 MHz		18M0F8F-	82.50 dBW
				ANALOG VIDEO
	5925.0000 - 6425.0000 MHz		36M0G7F	87.80 dBW
				DIGITAL VIDEO
	5925.0000 - 6425.0000 MHz		4M00G7F-	83.30 dBW
				DIGITAL VIDEO
	5925.0000 - 6425.0000 MHz		72M0G7W	87.80 dBW
				DIGITAL VOICE, AND DATA
	5925.0000 - 6425.0000 MHz		21K9G7W-	60.70 dBW
				DIGITAL VOICE, AND DATA
	3700.0000 - 4200.0000 MHz		36M0F8F	
				ANALOG VIDEO
	3700.0000 - 4200.0000 MHz		18M0F8F-	
				ANALOG VIDEO
	3700.0000 - 4200.0000 MHz		36M0G7F	
				DIGITAL VIDEO
	3700.0000 - 4200.0000 MHz		4M00G7F-	
				DIGITAL VIDEO
	3700.0000 - 4200.0000 MHz		72M0G7W	
				DIGITAL VOICE, AND DATA
	3700.0000 - 4200.0000 MHz		21K9G7W-	
				DIGITAL VOICE, AND DATA

ANTENNA ID: 12.8M 12.8 meters PHILCO-FORD 42 FT.

6454.4000 - 6456.6000 MHz

6443.0000 - 6454.0000 MHz

6440.0000 - 6443.0000 MHz 600HG1D 70.00 dBW AERO

6440.0000 - 6443.0000 MHz 1K20G1D 70.00 dBW AERO

6440.0000 - 6443.0000 MHz	2K40G1D	70.00 dBW	AERO
6440.0000 - 6443.0000 MHz	10K5G1E	70.00 dBW	AERO
6425.0000 - 6443.0000 MHz	NON	70.00 dBW	Communications System Monitoring (CSM)
6425.0000 - 6443.0000 MHz	600KFXN	70.00 dBW	CSM
6425.0000 - 6440.0000 MHz	NON	77.00 dBW	PILOT
6425.0000 - 6440.0000 MHz	30K0F3E	77.00 dBW	
6425.0000 - 6440.0000 MHz	600HG1D	77.00 dBW	
6425.0000 - 6440.0000 MHz	1K20G1D	77.00 dBW	
6420.0000 - 6424.0000 MHz	24K0F3E	67.00 dBW	
6420.0000 - 6424.0000 MHz	2K50G1D	68.00 dBW	
6420.0000 - 6424.0000 MHz	24K0G1D	65.00 dBW	
6420.0000 - 6424.0000 MHz	24K0F3E	77.00 dBW	AFRTS audio program channel services vis satellite at 176.5 degrees East
6417.0000 - 6443.0000 MHz	4K00G3E	77.00 dBW	
6417.0000 - 6443.0000 MHz	4K00G1D	77.00 dBW	
6417.0000 - 6443.0000 MHz	6K00G1D	77.00 dBW	
6417.0000 - 6443.0000 MHz	7K50G3E	77.00 dBW	
6417.0000 - 6443.0000 MHz	12K0G3E	77.00 dBW	
6417.0000 - 6443.0000 MHz	12K0G1D	77.00 dBW	
6416.0000 - 6418.0000 MHz	600KFXN	75.00 dBW	TT&C / MARECS
6416.0000 - 6418.0000 MHz	900KF2D	75.00 dBW	TT&C / MARECS
6174.6000 - 6175.4000 MHz	800KFXD	85.00 dBW	
6170.0000 - 6180.0000 MHz	900KF2D	89.00 dBW	TT&C / INMARSAT II
5927.0000 - 5927.0000 MHz	800KFXD	85.00 dBW	
5925.0000 - 6425.0000 MHz	34M0FXN	85.00 dBW	
4195.0000 - 4199.0000 MHz	24K0F3E		

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4195.0000 - 4199.0000 MHz	2K50G1D	
4195.0000 - 4199.0000 MHz	24K0G1D	
4192.5000 - 4200.0000 MHz	3K00G1D	
4192.5000 - 4200.0000 MHz	4K00G1D	
4192.5000 - 4200.0000 MHz	4K00G3E	
4192.5000 - 4200.0000 MHz	7K50G3E	
4192.5000 - 4200.0000 MHz	12K0G1D	
4192.5000 - 4200.0000 MHz	12K0G3E	
4192.5000 - 4200.0000 MHz	NON	PILOT
4192.5000 - 4200.0000 MHz	600HG1D	
4192.5000 - 4200.0000 MHz	1K20G1D	
4192.5000 - 4200.0000 MHz	4K80G1D	
4188.0000 - 4189.0000 MHz	1K00G1D	TT&C / MARECS
3954.5000 - 3954.5000 MHz	1K00G1D	
3954.5000 - 3954.5000 MHz	14K5F2D	
3945.5000 - 3945.5000 MHz	1K00G1D	
3945.5000 - 3945.5000 MHz	1K00G1D	
3945.5000 - 3945.5000 MHz	14K5F2D	
3945.0000 - 3955.0000 MHz	1K00G1D	TT&C / INMARSAT II
3700.5000 - 3700.5000 MHz	1K00G1D	
3620.0000 - 3623.0000 MHz	600HG1D	AERO
3620.0000 - 3623.0000 MHz	1K20G1D	AERO
3620.0000 - 3623.0000 MHz	2K40G1D	AERO
3620.0000 - 3623.0000 MHz	10K5G1E	AERO
3600.0000 - 3629.0000 MHz		
3600.0000 - 3623.0000 MHz	NON	CSM

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3600.0000 - 3623.0000 MHz	300KFXN		CSM
3600.0000 - 3623.0000 MHz	3K00G1D		
3600.0000 - 3623.0000 MHz	4K00G1D		
3600.0000 - 3623.0000 MHz	4K00G3E		
3600.0000 - 3623.0000 MHz	7K50G3E		
3600.0000 - 3623.0000 MHz	12K0G1D		
3600.0000 - 3623.0000 MHz	12K0G3E		
3600.0000 - 3620.0000 MHz	NON		PILOT
3600.0000 - 3620.0000 MHz	600HG1D		
3600.0000 - 3620.0000 MHz	4K80G1D		
3600.0000 - 3620.0000 MHz	30K0F3E		
1646.5000 - 1649.5000 MHz	600HG1D	15.00 dBW	AERO
1646.5000 - 1649.5000 MHz	1K20G1D	18.00 dBW	AERO
1646.5000 - 1649.5000 MHz	2K40G1D	21.00 dBW	AERO
1646.5000 - 1649.5000 MHz	10K5G1E	27.00 dBW	AERO
1638.5000 - 1642.5000 MHz	NON	37.00 dBW	
1626.5000 - 1660.5000 MHz			
1626.5000 - 1649.5000 MHz	300KFXN	62.00 dBW	CSM
1626.5000 - 1649.5000 MHz	NON	62.00 dBW	PILOT
1626.5000 - 1646.5000 MHz	NON	37.00 dBW	PILOT
1626.5000 - 1646.5000 MHz	600HG1D	16.00 dBW	CSM
1626.5000 - 1646.5000 MHz	1K20G1D	16.00 dBW	CSM
1626.5000 - 1646.5000 MHz	4K80G1D	37.00 dBW	CSM
1626.5000 - 1646.5000 MHz	30K0F3E	37.00 dBW	CSM
1574.4000 - 1576.6000 MHz			
1545.0000 - 1548.0000 MHz	600HG1D		AERO

1545.0000 - 1548.0000 MHz	1K20G1D		AERO
1545.0000 - 1548.0000 MHz	2K40G1D		AERO
1545.0000 - 1548.0000 MHz	10K5G1E		AERO
1541.5000 - 1541.5000 MHz	NON		
1530.0000 - 1548.0000 MHz	NON		CSM
1530.0000 - 1548.0000 MHz	600KFXN		CSM
1530.0000 - 1545.0000 MHz	NON		PILOT
1530.0000 - 1545.0000 MHz	600HG1D		CSM
1530.0000 - 1545.0000 MHz	1K20G1D		CSM
1530.0000 - 1545.0000 MHz	30K0F3E		CSM
1525.0000 - 1559.0000 MHz			
ANTENNA ID: 10.4M	10.4 meters	NEC	34 FT.
6420.0000 - 6424.0000 MHz	24K0F3E	67.00 dBW	
6420.0000 - 6424.0000 MHz	2K50G1D	68.00 dBW	
6420.0000 - 6424.0000 MHz	24K0G1D	65.00 dBW	
6174.6000 - 6175.4000 MHz	800KFXD	85.00 dBW	
5927.0000 - 5927.0000 MHz	800KFXD	85.00 dBW	
5925.0000 - 6425.0000 MHz	34M0FXN	85.00 dBW	
5925.0000 - 6425.0000 MHz	36M0F8F	80.00 dBW	ANALOG VIDEO
5925.0000 - 6425.0000 MHz	18M0F8F-	80.00 dBW	ANALOG VIDEO
5925.0000 - 6425.0000 MHz	36M0G7F	85.30 dBW	DIGITAL VIDEO
5925.0000 - 6425.0000 MHz	4M00G7F-	80.80 dBW	DIGITAL VIDEO
5925.0000 - 6425.0000 MHz	72M0G7W	85.30 dBW	DIGITAL VOICE, AND DATA
5925.0000 - 6425.0000 MHz	21K9G7W-	58.20 dBW	DIGITAL VOICE, AND DATA
4195.0000 - 4199.0000 MHz	24K0F3E		
4195.0000 - 4199.0000 MHz	2K50G1D		

4195.0000 - 4199.0000 MHz	24K0G1D			
3954.5000 - 3954.5000 MHz	1K00G1D			
3954.5000 - 3954.5000 MHz	14K5F2D			
3945.5000 - 3945.5000 MHz	1K00G1D			
3945.5000 - 3945.5000 MHz	1K00G1D			
3945.5000 - 3945.5000 MHz	14K5F2D			
3700.5000 - 3700.5000 MHz	1K00G1D			
3700.0000 - 4200.0000 MHz	36M0F8F			ANALOG VIDEO
3700.0000 - 4200.0000 MHz	18M0F8F-			ANALOG VIDEO
3700.0000 - 4200.0000 MHz	36M0G7F			DIGITAL VIDEO
3700.0000 - 4200.0000 MHz	4M00G7F-			DIGITAL VIDEO
3700.0000 - 4200.0000 MHz	72M0G7W			DIGITAL VOICE, AND DATA
3700.0000 - 4200.0000 MHz	21K9G7W-			DIGITAL VOICE, AND DATA
1638.5000 - 1642.5000 MHz	NON	37.00 dBW		
1541.5000 - 1541.5000 MHz	NON			
ANTENNA ID: 12.8M	12.8 meters	PHILCO-FORD		42 FT
ANTENNA ID: SAPA 13	10.4 meters	NEC		34 FT
6425.0000 - 6454.0000 MHz	100KG1X	61.80 dBW		O-QPSK, 64 KBPS DATA
6425.0000 - 6454.0000 MHz	1K65G1D	52.30 dBW		DIFFERENTIAL GPS DATA
6425.0000 - 6454.0000 MHz	20K0G1E	58.60 dBW		O-QPSK, VOICE TELEPHONY
6425.0000 - 6454.0000 MHz	10K0G1X	51.60 dBW		BPSK, 9.6 KBPS FAX AND DATA
3600.0000 - 3629.0000 MHz	100KG1X			O-QPSK, 64 KBPS DATA
3600.0000 - 3629.0000 MHz	20K0G1E			O-QPSK, VOICE TELEPHONY
3600.0000 - 3629.0000 MHz	20K0G1X			BPSK, 9.6 KBPS FAX AND DATA

**Points of Communication:**

SANTA PAULA - ALSAT - (ALSAT)

SANTA PAULA - INMARSAT 3F4 - (142 W.L.)

SANTA PAULA - INMARSAT AOR-W -

SANTA PAULA - INMARSAT POR -

SANTA PAULA - KS29 - (76 W.L.)

**SES-AMD-20071231-01768** E KB34 Vizada, Inc.

Amendment

Grant of Authority

Date Effective: 02/15/2008

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Mobile Satellite Service

Vizada, Inc. submits this amendment to substitute itself for Vizada Satellite, Inc. as the party to this application. Vizada Satellite, Inc. is being merged into Vizada, Inc. pursuant to a pro forma assignment of licenses and authorizations approved by the Commission on December 17, 2007. See File Nos. SES-ASG-20071207-01680 and 01681. A new ownership statement for Vizada, Inc. is attached.

**SITE ID:** SANTA PAULA

**LOCATION:** 7676 PINE GROVE ROAD, VENTURA, SANTA PAULA, CA

34 ° 24 ' 5.00 " N LAT.

119 ° 4 ' 29.40 " W LONG.

<b>ANTENNA ID:</b>	12.8M	12.8 meters	PHILCO-FORD	
	5925.0000 - 6425.0000 MHz	36M0F8F	82.50 dBW	ANALOG VIDEO
	5925.0000 - 6425.0000 MHz	18M0F8F-	82.50 dBW	ANALOG VIDEO
	5925.0000 - 6425.0000 MHz	36M0G7F	87.80 dBW	DIGITAL VIDEO
	5925.0000 - 6425.0000 MHz	4M00G7F-	83.30 dBW	DIGITAL VIDEO
	5925.0000 - 6425.0000 MHz	72M0G7W	87.80 dBW	DIGITAL VOICE, AND DATA
	5925.0000 - 6425.0000 MHz	21K9G7W-	60.70 dBW	DIGITAL VOICE, AND DATA
	3700.0000 - 4200.0000 MHz	36M0F8F		ANALOG VIDEO
	3700.0000 - 4200.0000 MHz	18M0F8F-		ANALOG VIDEO
	3700.0000 - 4200.0000 MHz	36M0G7F		DIGITAL VIDEO
	3700.0000 - 4200.0000 MHz	4M00G7F-		DIGITAL VIDEO
	3700.0000 - 4200.0000 MHz	72M0G7W		DIGITAL VOICE, AND DATA
	3700.0000 - 4200.0000 MHz	21K9G7W-		DIGITAL VOICE, AND DATA

**ANTENNA ID:** 12.8M 12.8 meters PHILCO-FORD 42 FT.

6454.4000 - 6456.6000 MHz



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6443.0000 - 6454.0000 MHz				
6440.0000 - 6443.0000 MHz	600HG1D	70.00 dBW	AERO	
6440.0000 - 6443.0000 MHz	1K20G1D	70.00 dBW	AERO	
6440.0000 - 6443.0000 MHz	2K40G1D	70.00 dBW	AERO	
6440.0000 - 6443.0000 MHz	10K5G1E	70.00 dBW	AERO	
6425.0000 - 6443.0000 MHz	NON	70.00 dBW	Communications System Monitoring (CSM)	
6425.0000 - 6443.0000 MHz	600KFXN	70.00 dBW	CSM	
6425.0000 - 6440.0000 MHz	NON	77.00 dBW	PILOT	
6425.0000 - 6440.0000 MHz	30K0F3E	77.00 dBW		
6425.0000 - 6440.0000 MHz	600HG1D	77.00 dBW		
6425.0000 - 6440.0000 MHz	1K20G1D	77.00 dBW		
6420.0000 - 6424.0000 MHz	24K0F3E	67.00 dBW		
6420.0000 - 6424.0000 MHz	2K50G1D	68.00 dBW		
6420.0000 - 6424.0000 MHz	24K0G1D	65.00 dBW		
6420.0000 - 6424.0000 MHz	24K0F3E	77.00 dBW	AFRTS audio program channel services vis satellite at 176.5 degrees East	
6417.0000 - 6443.0000 MHz	4K00G3E	77.00 dBW		
6417.0000 - 6443.0000 MHz	4K00G1D	77.00 dBW		
6417.0000 - 6443.0000 MHz	6K00G1D	77.00 dBW		
6417.0000 - 6443.0000 MHz	7K50G3E	77.00 dBW		
6417.0000 - 6443.0000 MHz	12K0G3E	77.00 dBW		
6417.0000 - 6443.0000 MHz	12K0G1D	77.00 dBW		
6416.0000 - 6418.0000 MHz	600KFXN	75.00 dBW	TT&C / MARECS	
6416.0000 - 6418.0000 MHz	900KF2D	75.00 dBW	TT&C / MARECS	
6174.6000 - 6175.4000 MHz	800KFXD	85.00 dBW		
6170.0000 - 6180.0000 MHz	900KF2D	89.00 dBW	TT&C / INMARSAT II	

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5927.0000 - 5927.0000 MHz	800KFXD	85.00 dBW	
5925.0000 - 6425.0000 MHz	34M0FXN	85.00 dBW	
4195.0000 - 4199.0000 MHz	24K0F3E		
4195.0000 - 4199.0000 MHz	2K50G1D		
4195.0000 - 4199.0000 MHz	24K0G1D		
4192.5000 - 4200.0000 MHz	3K00G1D		
4192.5000 - 4200.0000 MHz	4K00G1D		
4192.5000 - 4200.0000 MHz	4K00G3E		
4192.5000 - 4200.0000 MHz	7K50G3E		
4192.5000 - 4200.0000 MHz	12K0G1D		
4192.5000 - 4200.0000 MHz	12K0G3E		
4192.5000 - 4200.0000 MHz	NON		PILOT
4192.5000 - 4200.0000 MHz	600HG1D		
4192.5000 - 4200.0000 MHz	1K20G1D		
4192.5000 - 4200.0000 MHz	4K80G1D		
4188.0000 - 4189.0000 MHz	1K00G1D		TT&C / MARECS
3954.5000 - 3954.5000 MHz	1K00G1D		
3954.5000 - 3954.5000 MHz	14K5F2D		
3945.5000 - 3945.5000 MHz	1K00G1D		
3945.5000 - 3945.5000 MHz	1K00G1D		
3945.5000 - 3945.5000 MHz	14K5F2D		
3945.0000 - 3955.0000 MHz	1K00G1D		TT&C / INMARSAT II
3700.5000 - 3700.5000 MHz	1K00G1D		
3620.0000 - 3623.0000 MHz	600HG1D		AERO
3620.0000 - 3623.0000 MHz	1K20G1D		AERO
3620.0000 - 3623.0000 MHz	2K40G1D		AERO

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3620.0000 - 3623.0000 MHz	10K5G1E		AERO
3600.0000 - 3629.0000 MHz			
3600.0000 - 3623.0000 MHz	NON		CSM
3600.0000 - 3623.0000 MHz	300KFXN		CSM
3600.0000 - 3623.0000 MHz	3K00G1D		
3600.0000 - 3623.0000 MHz	4K00G1D		
3600.0000 - 3623.0000 MHz	4K00G3E		
3600.0000 - 3623.0000 MHz	7K50G3E		
3600.0000 - 3623.0000 MHz	12K0G1D		
3600.0000 - 3623.0000 MHz	12K0G3E		
3600.0000 - 3620.0000 MHz	NON		PILOT
3600.0000 - 3620.0000 MHz	600HG1D		
3600.0000 - 3620.0000 MHz	4K80G1D		
3600.0000 - 3620.0000 MHz	30K0F3E		
1646.5000 - 1649.5000 MHz	600HG1D	15.00 dBW	AERO
1646.5000 - 1649.5000 MHz	1K20G1D	18.00 dBW	AERO
1646.5000 - 1649.5000 MHz	2K40G1D	21.00 dBW	AERO
1646.5000 - 1649.5000 MHz	10K5G1E	27.00 dBW	AERO
1638.5000 - 1642.5000 MHz	NON	37.00 dBW	
1626.5000 - 1660.5000 MHz			
1626.5000 - 1649.5000 MHz	300KFXN	62.00 dBW	CSM
1626.5000 - 1649.5000 MHz	NON	62.00 dBW	PILOT
1626.5000 - 1646.5000 MHz	NON	37.00 dBW	PILOT
1626.5000 - 1646.5000 MHz	600HG1D	16.00 dBW	CSM
1626.5000 - 1646.5000 MHz	1K20G1D	16.00 dBW	CSM
1626.5000 - 1646.5000 MHz	4K80G1D	37.00 dBW	CSM

1626.5000 - 1646.5000 MHz	30K0F3E	37.00 dBW	CSM
1574.4000 - 1576.6000 MHz			
1545.0000 - 1548.0000 MHz	600HG1D		AERO
1545.0000 - 1548.0000 MHz	1K20G1D		AERO
1545.0000 - 1548.0000 MHz	2K40G1D		AERO
1545.0000 - 1548.0000 MHz	10K5G1E		AERO
1541.5000 - 1541.5000 MHz	NON		
1530.0000 - 1548.0000 MHz	NON		CSM
1530.0000 - 1548.0000 MHz	600KFXN		CSM
1530.0000 - 1545.0000 MHz	NON		PILOT
1530.0000 - 1545.0000 MHz	600HG1D		CSM
1530.0000 - 1545.0000 MHz	1K20G1D		CSM
1530.0000 - 1545.0000 MHz	30K0F3E		CSM
1525.0000 - 1559.0000 MHz			
ANTENNA ID: 10.4M	10.4 meters	NEC	34 FT.
6420.0000 - 6424.0000 MHz	24K0F3E	67.00 dBW	
6420.0000 - 6424.0000 MHz	2K50G1D	68.00 dBW	
6420.0000 - 6424.0000 MHz	24K0G1D	65.00 dBW	
6174.6000 - 6175.4000 MHz	800KFXD	85.00 dBW	
5927.0000 - 5927.0000 MHz	800KFXD	85.00 dBW	
5925.0000 - 6425.0000 MHz	34M0FXN	85.00 dBW	
5925.0000 - 6425.0000 MHz	36M0F8F	80.00 dBW	ANALOG VIDEO
5925.0000 - 6425.0000 MHz	18M0F8F-	80.00 dBW	ANALOG VIDEO
5925.0000 - 6425.0000 MHz	36M0G7F	85.30 dBW	DIGITAL VIDEO
5925.0000 - 6425.0000 MHz	4M00G7F-	80.80 dBW	DIGITAL VIDEO
5925.0000 - 6425.0000 MHz	72M0G7W	85.30 dBW	DIGITAL VOICE, AND DATA

5925.0000 - 6425.0000 MHz	21K9G7W-	58.20 dBW	DIGITAL VOICE, AND DATA
4195.0000 - 4199.0000 MHz	24K0F3E		
4195.0000 - 4199.0000 MHz	2K50G1D		
4195.0000 - 4199.0000 MHz	24K0G1D		
3954.5000 - 3954.5000 MHz	1K00G1D		
3954.5000 - 3954.5000 MHz	14K5F2D		
3945.5000 - 3945.5000 MHz	1K00G1D		
3945.5000 - 3945.5000 MHz	1K00G1D		
3945.5000 - 3945.5000 MHz	14K5F2D		
3700.5000 - 3700.5000 MHz	1K00G1D		
3700.0000 - 4200.0000 MHz	36M0F8F		ANALOG VIDEO
3700.0000 - 4200.0000 MHz	18M0F8F-		ANALOG VIDEO
3700.0000 - 4200.0000 MHz	36M0G7F		DIGITAL VIDEO
3700.0000 - 4200.0000 MHz	4M00G7F-		DIGITAL VIDEO
3700.0000 - 4200.0000 MHz	72M0G7W		DIGITAL VOICE, AND DATA
3700.0000 - 4200.0000 MHz	21K9G7W-		DIGITAL VOICE, AND DATA
1638.5000 - 1642.5000 MHz	NON	37.00 dBW	
1541.5000 - 1541.5000 MHz	NON		
ANTENNA ID: 12.8M	12.8 meters	PHILCO-FORD	42 FT
ANTENNA ID: SAPA 13	10.4 meters	NEC	34 FT
6425.0000 - 6454.0000 MHz	100KG1X	61.80 dBW	O-QPSK, 64 KBPS DATA
6425.0000 - 6454.0000 MHz	1K65G1D	52.30 dBW	DIFFERENTIAL GPS DATA
6425.0000 - 6454.0000 MHz	20K0G1E	58.60 dBW	O-QPSK, VOICE TELEPHONY
6425.0000 - 6454.0000 MHz	10K0G1X	51.60 dBW	BPSK, 9.6 KBPS FAX AND DATA
3600.0000 - 3629.0000 MHz	100KG1X		O-QPSK, 64 KBPS DATA
3600.0000 - 3629.0000 MHz	20K0G1E		O-QPSK, VOICE TELEPHONY

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3600.0000 - 3629.0000 MHz

20K0G1X

BPSK, 9.6 KBPS FAX AND DATA

**Points of Communication:**

SANTA PAULA - ALSAT - (ALSAT)

SANTA PAULA - INMARSAT 3F4 - (142 W.L.)

SANTA PAULA - INMARSAT AOR-W -

SANTA PAULA - INMARSAT POR -

SANTA PAULA - KS29 - (76 W.L.)

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**SES-AMD-20080129-00100** E E2454 Oral Roberts University

Amendment

Grant of Authority

Date Effective: 02/13/2008

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

Amendment filed to replace the exhibit describing the change in interest from the originally filing. See File No. SES-T/C-20080128-00096.

**Points of Communication:**

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**SES-LIC-20060629-01083** E E060101 RaySat Antenna Systems, LLC

Application for Authority

02/15/2008 - 02/15/2023

Grant of Authority

Date Effective: 02/15/2008

**Class of Station:** Mobile Earth Station

**Nature of Service:** Mobile Satellite Service

This is GRANTED with conditions pursuant to Order and Authorization, DA 08-401, released February 15, 2008.

SITE ID: Remote1

LOCATION: Operate up to 400 (.124 mobile terminals Various

ANTENNA ID: Remote1 0.124 meters RaySat StealthRay

11700.0000 - 12200.0000 MHz 36M0G7W Broadband digital data receive

14000.0000 - 14500.0000 MHz 518KG7W 30.50 dBW BPSK, Rate 1/3 digital carrier

11700.0000 - 12200.0000 MHz 512KG7W Narrowband digital data receive

**Points of Communication:**

Remote1 - AMC-4 (formerl GE-4 - (101 W.L.)

Remote1 - AMC-5 (formerl GE-5 - (79 W.L.)

Remote1 - AMC-6 - (72 W.L.)

Remote1 - HORIZONS 1 - (127 DEG WL)

Remote1 - IA-7 - (129 W.L.)

Remote1 - INTELSAT 8 - (89 W.L.)

Remote1 - SBS-6 - (74 DEG. WL)

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**SES-LIC-20060629-02248** P E060447 RaySat Antenna Systems, LLC

Application for Authority

02/15/2008 - 02/15/2023

Grant of Authority

Date Effective: 02/15/2008

**Class of Station:** Mobile Earth Station

**Nature of Service:** Mobile Satellite Service

This is GRANTED with conditions pursuant to Order and Authorization, DA 08-401, released February 15, 2008.

**SITE ID:** Remote1

**LOCATION:** operate up to 400 (.124 mobile terminals, VARIOUS

<b>ANTENNA ID:</b> Remote1	0.124 meters	RaySat	StealthRay
14000.0000 - 14500.0000 MHz	518KG7W	30.50 dBW	BPSK, Rate 1/3 digital carrier
11700.0000 - 12200.0000 MHz	512KG7W		Narrowband digital data receive
11700.0000 - 12200.0000 MHz	36M0G7W		Broadband digital data receive

**Points of Communication:**

Remote1 - AMC-4 (formerl GE-4 - (101 W.L.)

Remote1 - AMC-5 (formerl GE-5 - (79 W.L.)

Remote1 - AMC-6 - (72 W.L.)

Remote1 - HORIZONS 1 - (127 DEG WL)

Remote1 - IA-7 - (129 W.L.)

Remote1 - INTELSAT 8 - (89 W.L.)

Remote1 - SBS-6 - (74 DEG. WL)

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**SES-LIC-20060629-02249** P E060448 RaySat Antenna Systems, LLC

Application for Authority

02/15/2008 - 02/15/2023

Grant of Authority

Date Effective: 02/15/2008

**Class of Station:** Mobile Earth Station

**Nature of Service:** Mobile Satellite Service

This is GRANTED with conditions pursuant to Order and Authorization, DA 08-401, released February 15, 2008.

SITE ID: Remote1  
LOCATION: operate up to 400 (.124 mobile terminals, VARIOUS)

ANTENNA ID:	Remote1	0.124 meters	RaySat	StealthRay	
	14000.0000 - 14500.0000 MHz		518KG7W	30.50 dBW	BPSK, Rate 1/3 digital carrier
	11700.0000 - 12200.0000 MHz		512KG7W		Narrowband digital data receive
	11700.0000 - 12200.0000 MHz		36M0G7W		Broadband digital data receive

**Points of Communication:**

Remote1 - AMC-4 (formerl GE-4 - (101 W.L.)  
Remote1 - AMC-5 (formerl GE-5 - (79 W.L.)  
Remote1 - AMC-6 - (72 W.L.)  
Remote1 - HORIZONS 1 - (127 DEG WL)  
Remote1 - IA-7 - (129 W.L.)  
Remote1 - INTELSAT 8 - (89 W.L.)  
Remote1 - SBS-6 - (74 DEG. WL)

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SES-LIC-20060629-02250 P E060449 RaySat Antenna Systems, LLC  
Application for Authority 02/15/2008 - 02/15/2023  
Grant of Authority Date Effective: 02/15/2008

**Class of Station:** Mobile Earth Station

**Nature of Service:** Mobile Satellite Service

This is GRANTED with conditions pursuant to Order and Authorization, DA 08-401, released February 15, 2008.

SITE ID: Remote1  
LOCATION: operate up to 400 (.124 mobile terminals, Various)

ANTENNA ID:	Remote1	0.124 meters	RaySat	StealthRay	
	14000.0000 - 14500.0000 MHz		518KG7W	30.50 dBW	BPSK, Rate 1/3 digital carrier
	11700.0000 - 12200.0000 MHz		512KG7W		Narrowband digital data receive
	11700.0000 - 12200.0000 MHz		36M0G7W		Broadband digital data receive

**Points of Communication:**

Remote1 - AMC-4 (formerl GE-4 - (101 W.L.)



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Remote1 - AMC-5 (formerl GE-5 - (79 W.L.))

Remote1 - AMC-6 - (72 W.L.)

Remote1 - HORIZONS 1 - (127 DEG WL)

Remote1 - IA-7 - (129 W.L.)

Remote1 - INTELSAT 8 - (89 W.L.)

Remote1 - SBS-6 - (74 DEG. WL)

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**SES-LIC-20060629-02251** P E060450 RaySat Antenna Systems, LLC

Application for Authority

02/15/2008 - 02/15/2023

Grant of Authority

Date Effective: 02/15/2008

**Class of Station:** Mobile Earth Station

**Nature of Service:** Mobile Satellite Service

This is GRANTED with conditions pursuant to Order and Authorization, DA 08-401, released February 15, 2008.

**SITE ID:** Remote1

**LOCATION:** operate up to 400 (.124 mobile terminals, Various

<b>ANTENNA ID:</b> Remote1	0.124 meters	RaySat	StealthRay
14000.0000 - 14500.0000 MHz	518KG7W	30.50 dBW	BPSK, Rate 1/3 digital carrier
11700.0000 - 12200.0000 MHz	512KG7W		Narrowband digital data receive
11700.0000 - 12200.0000 MHz	36M0G7W		Broadband digital data receive

**Points of Communication:**

Remote1 - AMC-4 (formerl GE-4 - (101 W.L.))

Remote1 - AMC-5 (formerl GE-5 - (79 W.L.))

Remote1 - AMC-6 - (72 W.L.)

Remote1 - HORIZONS 1 - (127 DEG WL)

Remote1 - IA-7 - (129 W.L.)

Remote1 - INTELSAT 8 - (89 W.L.)

Remote1 - SBS-6 - (74 DEG. WL)

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**SES-LIC-20060629-02252** P E060451 RaySat Antenna Systems, LLC

Application for Authority

02/15/2008 - 02/15/2023

Grant of Authority

Date Effective: 02/15/2008

**Class of Station:** Mobile Earth Station

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**Nature of Service:** Mobile Satellite Service

This is GRANTED with conditions pursuant to Order and Authorization, DA 08-401, released February 15, 2008.

SITE ID: Remote1

LOCATION: operate up to 400 (.124 mobile terminals, Various

ANTENNA ID:	Remote1	0.124 meters	RaySat	StealthRay
	14000.0000 - 14500.0000 MHz	518KG7W	30.50 dBW	BPSK, Rate 1/3 digital carrier
	11700.0000 - 12200.0000 MHz	512KG7W		Narrowband digital data receive
	11700.0000 - 12200.0000 MHz	36M0G7W		Broadband digital data receive

**Points of Communication:**

Remote1 - AMC-4 (formerl GE-4 - (101 W.L.)

Remote1 - AMC-5 (formerl GE-5 - (79 W.L.)

Remote1 - AMC-6 - (72 W.L.)

Remote1 - HORIZONS 1 - (127 DEG WL)

Remote1 - IA-7 - (129 W.L.)

Remote1 - INTELSAT 8 - (89 W.L.)

Remote1 - SBS-6 - (74 DEG. WL)

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**SES-LIC-20080109-00028** E E080006 Intelsat LLC

Application for Authority

02/19/2008 - 02/19/2023

Grant of Authority

Date Effective: 02/19/2008

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: 17633 Technology Blvd., Washington, Hagerstown, MD

39 ° 42 ' 0.00 " N LAT.

77 ° 44 ' 0.00 " W LONG.

ANTENNA ID:	1	11 meters	GDSatcom	KXX
	14000.0000 - 14500.0000 MHz	56K0G7W	59.36 dBW	Digital Data
	14000.0000 - 14500.0000 MHz	36M0G7W	87.44 dBW	Digital Data
	11700.0000 - 12200.0000 MHz	56K0G7W		Digital Data
	11700.0000 - 12200.0000 MHz	36M0G7W		Digital Data



**Nature of Service:** Fixed Satellite Service, International Aeronautical Mobile-Satellite Serv., Feeder Link for Mobile Satellite Service, International Maritime Mobile Satellite Service, Mobile Satellite Service

**SITE ID:** SANTA PAULA  
**LOCATION:** 7676 PINE GROVE ROAD, VENTURA, SANTA PAULA, CA  
 34 ° 24 ' 5.00 " N LAT. 119 ° 4 ' 29.40 " W LONG.

ANTENNA ID:	12.8M	12.8 meters	PHILCO-FORD	
	5925.0000 - 6425.0000 MHz		36M0F8F	82.50 dBW ANALOG VIDEO
	5925.0000 - 6425.0000 MHz		18M0F8F-	82.50 dBW ANALOG VIDEO
	5925.0000 - 6425.0000 MHz		36M0G7F	87.80 dBW DIGITAL VIDEO
	5925.0000 - 6425.0000 MHz		4M00G7F-	83.30 dBW DIGITAL VIDEO
	5925.0000 - 6425.0000 MHz		72M0G7W	87.80 dBW DIGITAL VOICE, AND DATA
	5925.0000 - 6425.0000 MHz		21K9G7W-	60.70 dBW DIGITAL VOICE, AND DATA
	3700.0000 - 4200.0000 MHz		36M0F8F	ANALOG VIDEO
	3700.0000 - 4200.0000 MHz		18M0F8F-	ANALOG VIDEO
	3700.0000 - 4200.0000 MHz		36M0G7F	DIGITAL VIDEO
	3700.0000 - 4200.0000 MHz		4M00G7F-	DIGITAL VIDEO
	3700.0000 - 4200.0000 MHz		72M0G7W	DIGITAL VOICE, AND DATA
	3700.0000 - 4200.0000 MHz		21K9G7W-	DIGITAL VOICE, AND DATA
ANTENNA ID:	12.8M	12.8 meters	PHILCO-FORD	42 FT.
	6454.4000 - 6456.6000 MHz			
	6443.0000 - 6454.0000 MHz			
	6440.0000 - 6443.0000 MHz		600HG1D	70.00 dBW AERO
	6440.0000 - 6443.0000 MHz		1K20G1D	70.00 dBW AERO
	6440.0000 - 6443.0000 MHz		2K40G1D	70.00 dBW AERO
	6440.0000 - 6443.0000 MHz		10K5G1E	70.00 dBW AERO
	6425.0000 - 6443.0000 MHz		NON	70.00 dBW Communications System Monitoring (CSM)
	6425.0000 - 6443.0000 MHz		600KFXN	70.00 dBW CSM

6425.0000 - 6440.0000 MHz	NON	77.00 dBW	PILOT
6425.0000 - 6440.0000 MHz	30K0F3E	77.00 dBW	
6425.0000 - 6440.0000 MHz	600HG1D	77.00 dBW	
6425.0000 - 6440.0000 MHz	1K20G1D	77.00 dBW	
6420.0000 - 6424.0000 MHz	24K0F3E	67.00 dBW	
6420.0000 - 6424.0000 MHz	2K50G1D	68.00 dBW	
6420.0000 - 6424.0000 MHz	24K0G1D	65.00 dBW	
6420.0000 - 6424.0000 MHz	24K0F3E	77.00 dBW	AFRTS audio program channel services vis satellite at 176.5 degrees East
6417.0000 - 6443.0000 MHz	4K00G3E	77.00 dBW	
6417.0000 - 6443.0000 MHz	4K00G1D	77.00 dBW	
6417.0000 - 6443.0000 MHz	6K00G1D	77.00 dBW	
6417.0000 - 6443.0000 MHz	7K50G3E	77.00 dBW	
6417.0000 - 6443.0000 MHz	12K0G3E	77.00 dBW	
6417.0000 - 6443.0000 MHz	12K0G1D	77.00 dBW	
6416.0000 - 6418.0000 MHz	600KFXN	75.00 dBW	TT&C / MARECS
6416.0000 - 6418.0000 MHz	900KF2D	75.00 dBW	TT&C / MARECS
6174.6000 - 6175.4000 MHz	800KFXD	85.00 dBW	
6170.0000 - 6180.0000 MHz	900KF2D	89.00 dBW	TT&C / INMARSAT II
5927.0000 - 5927.0000 MHz	800KFXD	85.00 dBW	
5925.0000 - 6425.0000 MHz	34M0FXN	85.00 dBW	
4195.0000 - 4199.0000 MHz	24K0F3E		
4195.0000 - 4199.0000 MHz	2K50G1D		
4195.0000 - 4199.0000 MHz	24K0G1D		
4192.5000 - 4200.0000 MHz	3K00G1D		
4192.5000 - 4200.0000 MHz	4K00G1D		
4192.5000 - 4200.0000 MHz	4K00G3E		

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4192.5000 - 4200.0000 MHz	7K50G3E	
4192.5000 - 4200.0000 MHz	12K0G1D	
4192.5000 - 4200.0000 MHz	12K0G3E	
4192.5000 - 4200.0000 MHz	NON	PILOT
4192.5000 - 4200.0000 MHz	600HG1D	
4192.5000 - 4200.0000 MHz	1K20G1D	
4192.5000 - 4200.0000 MHz	4K80G1D	
4188.0000 - 4189.0000 MHz	1K00G1D	TT&C / MARECS
3954.5000 - 3954.5000 MHz	1K00G1D	
3954.5000 - 3954.5000 MHz	14K5F2D	
3945.5000 - 3945.5000 MHz	1K00G1D	
3945.5000 - 3945.5000 MHz	1K00G1D	
3945.5000 - 3945.5000 MHz	14K5F2D	
3945.0000 - 3955.0000 MHz	1K00G1D	TT&C / INMARSAT II
3700.5000 - 3700.5000 MHz	1K00G1D	
3620.0000 - 3623.0000 MHz	600HG1D	AERO
3620.0000 - 3623.0000 MHz	1K20G1D	AERO
3620.0000 - 3623.0000 MHz	2K40G1D	AERO
3620.0000 - 3623.0000 MHz	10K5G1E	AERO
3600.0000 - 3629.0000 MHz		
3600.0000 - 3623.0000 MHz	NON	CSM
3600.0000 - 3623.0000 MHz	300KFXN	CSM
3600.0000 - 3623.0000 MHz	3K00G1D	
3600.0000 - 3623.0000 MHz	4K00G1D	
3600.0000 - 3623.0000 MHz	4K00G3E	
3600.0000 - 3623.0000 MHz	7K50G3E	

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3600.0000 - 3623.0000 MHz	12K0G1D		
3600.0000 - 3623.0000 MHz	12K0G3E		
3600.0000 - 3620.0000 MHz	NON		PILOT
3600.0000 - 3620.0000 MHz	600HG1D		
3600.0000 - 3620.0000 MHz	4K80G1D		
3600.0000 - 3620.0000 MHz	30K0F3E		
1646.5000 - 1649.5000 MHz	600HG1D	15.00 dBW	AERO
1646.5000 - 1649.5000 MHz	1K20G1D	18.00 dBW	AERO
1646.5000 - 1649.5000 MHz	2K40G1D	21.00 dBW	AERO
1646.5000 - 1649.5000 MHz	10K5G1E	27.00 dBW	AERO
1638.5000 - 1642.5000 MHz	NON	37.00 dBW	
1626.5000 - 1660.5000 MHz			
1626.5000 - 1649.5000 MHz	300KFXN	62.00 dBW	CSM
1626.5000 - 1649.5000 MHz	NON	62.00 dBW	PILOT
1626.5000 - 1646.5000 MHz	NON	37.00 dBW	PILOT
1626.5000 - 1646.5000 MHz	600HG1D	16.00 dBW	CSM
1626.5000 - 1646.5000 MHz	1K20G1D	16.00 dBW	CSM
1626.5000 - 1646.5000 MHz	4K80G1D	37.00 dBW	CSM
1626.5000 - 1646.5000 MHz	30K0F3E	37.00 dBW	CSM
1574.4000 - 1576.6000 MHz			
1545.0000 - 1548.0000 MHz	600HG1D		AERO
1545.0000 - 1548.0000 MHz	1K20G1D		AERO
1545.0000 - 1548.0000 MHz	2K40G1D		AERO
1545.0000 - 1548.0000 MHz	10K5G1E		AERO
1541.5000 - 1541.5000 MHz	NON		
1530.0000 - 1548.0000 MHz	NON		CSM

1530.0000 - 1548.0000 MHz	600KFXN		CSM
1530.0000 - 1545.0000 MHz	NON		PILOT
1530.0000 - 1545.0000 MHz	600HG1D		CSM
1530.0000 - 1545.0000 MHz	1K20G1D		CSM
1530.0000 - 1545.0000 MHz	30K0F3E		CSM
1525.0000 - 1559.0000 MHz			
ANTENNA ID: 10.4M	10.4 meters	NEC	34 FT.
6420.0000 - 6424.0000 MHz	24K0F3E	67.00 dBW	
6420.0000 - 6424.0000 MHz	2K50G1D	68.00 dBW	
6420.0000 - 6424.0000 MHz	24K0G1D	65.00 dBW	
6174.6000 - 6175.4000 MHz	800KFXD	85.00 dBW	
5927.0000 - 5927.0000 MHz	800KFXD	85.00 dBW	
5925.0000 - 6425.0000 MHz	34M0FXN	85.00 dBW	
4195.0000 - 4199.0000 MHz	24K0F3E		
4195.0000 - 4199.0000 MHz	2K50G1D		
4195.0000 - 4199.0000 MHz	24K0G1D		
3954.5000 - 3954.5000 MHz	1K00G1D		
3954.5000 - 3954.5000 MHz	14K5F2D		
3945.5000 - 3945.5000 MHz	1K00G1D		
3945.5000 - 3945.5000 MHz	1K00G1D		
3945.5000 - 3945.5000 MHz	14K5F2D		
3700.5000 - 3700.5000 MHz	1K00G1D		
1638.5000 - 1642.5000 MHz	NON	37.00 dBW	
1541.5000 - 1541.5000 MHz	NON		
5925.0000 - 6425.0000 MHz	36M0F8F	80.00 dBW	ANALOG VIDEO
5925.0000 - 6425.0000 MHz	18M0F8F-	80.00 dBW	ANALOG VIDEO



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5925.0000 - 6425.0000 MHz	36M0G7F	85.30 dBW	DIGITAL VIDEO
5925.0000 - 6425.0000 MHz	4M00G7F-	80.80 dBW	DIGITAL VIDEO
5925.0000 - 6425.0000 MHz	72M0G7W	85.30 dBW	DIGITAL VOICE, AND DATA
5925.0000 - 6425.0000 MHz	21K9G7W-	58.20 dBW	DIGITAL VOICE, AND DATA
3700.0000 - 4200.0000 MHz	36M0F8F		ANALOG VIDEO
3700.0000 - 4200.0000 MHz	18M0F8F-		ANALOG VIDEO
3700.0000 - 4200.0000 MHz	36M0G7F		DIGITAL VIDEO
3700.0000 - 4200.0000 MHz	4M00G7F-		DIGITAL VIDEO
3700.0000 - 4200.0000 MHz	72M0G7W		DIGITAL VOICE, AND DATA
3700.0000 - 4200.0000 MHz	21K9G7W-		DIGITAL VOICE, AND DATA
ANTENNA ID: 12.8M	12.8 meters	PHILCO-FORD	42 FT
ANTENNA ID: SAPA 13	10.4 meters	NEC	34 FT
3600.0000 - 3629.0000 MHz	100KG1X		O-QPSK, 64 KBPS DATA
6425.0000 - 6454.0000 MHz	100KG1X	61.80 dBW	O-QPSK, 64 KBPS DATA
6425.0000 - 6454.0000 MHz	1K65G1D	52.30 dBW	DIFFERENTIAL GPS DATA
3600.0000 - 3629.0000 MHz	20K0G1E		O-QPSK, VOICE TELEPHONY
6425.0000 - 6454.0000 MHz	20K0G1E	58.60 dBW	O-QPSK, VOICE TELEPHONY
6425.0000 - 6454.0000 MHz	10K0G1X	51.60 dBW	BPSK, 9.6 KBPS FAX AND DATA
3600.0000 - 3629.0000 MHz	20K0G1X		BPSK, 9.6 KBPS FAX AND DATA

**Points of Communication:**

SANTA PAULA - ALSAT - (ALSAT)

SANTA PAULA - INMARSAT 3F4 - (142 W.L.)

SANTA PAULA - INMARSAT AOR-W -

SANTA PAULA - INMARSAT POR -

SANTA PAULA - KS29 - (76 W.L.)

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Modification 07/11/2007 - 07/11/2022  
 Grant of Authority Date Effective: 02/19/2008

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
 LOCATION: 201 Browntown Road, Allegheny, New Kensington, PA  
 40 ° 32 ' 3.00 " N LAT. 79 ° 45 ' 17.00 " W LONG.

ANTENNA ID:	6.1m/2	6.1 meters	Vertex	6.1 KPK
	14000.0000 - 14500.0000 MHz		178KG7D	58.48 dBW DATA
	14000.0000 - 14500.0000 MHz		1M00G7D	65.97 dBW DATA
	14000.0000 - 14500.0000 MHz		27M0G7D	80.29 dBW DATA
	14000.0000 - 14500.0000 MHz		2M00G7D	68.98 dBW DATA
	14000.0000 - 14500.0000 MHz		2M86G7D	70.54 dBW DATA
	14000.0000 - 14500.0000 MHz		358KG7D	61.50 dBW DATA
	14000.0000 - 14500.0000 MHz		4K00G7D	42.00 dBW DATA
	14000.0000 - 14500.0000 MHz		538KG7D	63.28 dBW DATA
	14000.0000 - 14500.0000 MHz		717KG7D	64.53 dBW DATA
	14000.0000 - 14500.0000 MHz		90K0G7D	55.52 dBW DATA
	14000.0000 - 14500.0000 MHz		9M00G7D	75.52 dBW DATA
	14000.0000 - 14500.0000 MHz		36M0F3F	83.50 dBW ANALOG VIDEO
	14000.0000 - 14500.0000 MHz		36M0G7D	81.54 dBW DIGITAL VIDEO
	14000.0000 - 14500.0000 MHz		4M80G7D	72.79 dBW DIGITAL VIDEO
	11700.0000 - 12200.0000 MHz		178KG7D	DATA
	11700.0000 - 12200.0000 MHz		1M00G7D	DATA
	11700.0000 - 12200.0000 MHz		27M0G7D	DATA
	11700.0000 - 12200.0000 MHz		2M00G7D	DATA
	11700.0000 - 12200.0000 MHz		2M86G7D	DATA

11700.0000 - 12200.0000 MHz	358KG7D		DATA
11700.0000 - 12200.0000 MHz	4K00G7D		DATA
11700.0000 - 12200.0000 MHz	538KG7D		DATA
11700.0000 - 12200.0000 MHz	717KG7D		DATA
11700.0000 - 12200.0000 MHz	90K0G7D		DATA
11700.0000 - 12200.0000 MHz	9M00G7D		DATA
11700.0000 - 12200.0000 MHz	36M0F3F		ANALOG VIDEO
11700.0000 - 12200.0000 MHz	36M0G7D		DIGITAL VIDEO
11700.0000 - 12200.0000 MHz	4M80G7D		DIGITAL VIDEO
ANTENNA ID: 6.1m/1	6.1 meters	Vertex	6.1 KPK
14000.0000 - 14500.0000 MHz	36M0F3F	83.50 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	4K00G7D	42.00 dBW	DATA
14000.0000 - 14500.0000 MHz	90K0G7D	55.52 dBW	DATA
14000.0000 - 14500.0000 MHz	178KG7D	58.48 dBW	DATA
14000.0000 - 14500.0000 MHz	358KG7D	61.50 dBW	DATA
14000.0000 - 14500.0000 MHz	538KG7D	63.28 dBW	DATA
14000.0000 - 14500.0000 MHz	717KG7D	64.53 dBW	DATA
14000.0000 - 14500.0000 MHz	1M00G7D	65.97 dBW	DATA
14000.0000 - 14500.0000 MHz	2M00G7D	68.98 dBW	DATA
14000.0000 - 14500.0000 MHz	2M86G7D	70.54 dBW	DATA
14000.0000 - 14500.0000 MHz	4M80G7F	72.79 dBW	DIGITAL VIDEO
14000.0000 - 14500.0000 MHz	9M00G7D	75.52 dBW	DATA
14000.0000 - 14500.0000 MHz	27M0G7D	80.29 dBW	DATA
14000.0000 - 14500.0000 MHz	36M0G7D	81.54 dBW	DIGITAL VIDEO
11700.0000 - 12200.0000 MHz	36M0F3F	0.00 dBW	ANALOG VIDEO
11700.0000 - 12200.0000 MHz	4K00G7D	0.00 dBW	DATA

11700.0000 - 12200.0000 MHz	90K0G7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	178KG7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	358KG7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	538KG7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	717KG7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	1M00G7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	2M00G7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	2M86G7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	4M80G7F	0.00 dBW	DIGITAL VIDEO
11700.0000 - 12200.0000 MHz	9M00G7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	27M0G7D	0.00 dBW	DATA
11700.0000 - 12200.0000 MHz	36M0G7D	0.00 dBW	DIGITAL VIDEO
ANTENNA ID: SA 7m/1	7 meters	Scientific Atlanta	8010
12200.0000 - 11700.0000 MHz	178KG7D		DATA
12200.0000 - 11700.0000 MHz	1M00G7D		DATA
12200.0000 - 11700.0000 MHz	27M0G7D		DATA
12200.0000 - 11700.0000 MHz	2M00G7D		DATA
12200.0000 - 11700.0000 MHz	2M86G7D		DATA
12200.0000 - 11700.0000 MHz	358KG7D		DATA
12200.0000 - 11700.0000 MHz	4K00G7D		DATA
12200.0000 - 11700.0000 MHz	538KG7D		DATA
12200.0000 - 11700.0000 MHz	717KG7D		DATA
12200.0000 - 11700.0000 MHz	90K0G7D		DATA
12200.0000 - 11700.0000 MHz	9M00G7D		DATA
14000.0000 - 14500.0000 MHz	178KG7D	59.58 dBW	DATA
14000.0000 - 14500.0000 MHz	1M00G7D	67.07 dBW	DATA

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14000.0000 - 14500.0000 MHz	27M0G7D	81.39 dBW	DATA
14000.0000 - 14500.0000 MHz	2M00G7D	70.08 dBW	DATA
14000.0000 - 14500.0000 MHz	2M86G7D	71.64 dBW	DATA
14000.0000 - 14500.0000 MHz	358KG7D	62.60 dBW	DATA
14000.0000 - 14500.0000 MHz	4K00G7D	43.10 dBW	DATA
14000.0000 - 14500.0000 MHz	538KG7D	64.38 dBW	DATA
14000.0000 - 14500.0000 MHz	717KG7D	65.63 dBW	DATA
14000.0000 - 14500.0000 MHz	90K0G7D	56.62 dBW	DATA
14000.0000 - 14500.0000 MHz	9M00G7D	76.62 dBW	DATA
12200.0000 - 11700.0000 MHz	36M0F3F		ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0F3F	84.60 dBW	ANALOG VIDEO
12200.0000 - 11700.0000 MHz	36M0G7D		DIGITAL VIDEO
12200.0000 - 11700.0000 MHz	4M80G7F		DIGITAL VIDEO
14000.0000 - 14500.0000 MHz	36M0G7D	82.64 dBW	DIGITAL VIDEO
14000.0000 - 14500.0000 MHz	4M80G7F	73.89 dBW	DIGITAL VIDEO

**Points of Communication:**

- 1 - ALSAT - (ALSAT)
- 1 - AMAZONAS 1 - (61 W.L.)
- 1 - ANIK F1 - (107.3 W.L.)
- 1 - ANIK F1R - (107.3 W.L.)
- 1 - ANIK F2 - (111.1 W.L.)
- 1 - HISPASAT 1C - (30.0 W.L.)
- 1 - HISPASAT 1D - (30.0 W.L.)
- 1 - INTEL 903 - (34.5 W.L.)
- 1 - INTELSAT 705 - (50 W.L.)
- 1 - INTELSAT 707 - (53 W.L.)
- 1 - INTELSAT 805 - (304.5 E.L.)

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

1 - PAS-3R - (43.0 W.L.)

1 - PAS-9 - (58.0 W.L.)

1 - SATMEX 6 - (113 W.L.)

1 - SATMEX-5 - (116.8 W.L.)

1 - TELSTAR 11 - (37.5 W.L.)

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

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**SES-MOD-20071101-01507**    E E020101    TELESAT NETWORK SERVICES, INC.

Application for Modification

09/17/2002 - 09/17/2017

Grant of Authority

Date Effective:    02/19/2008

**Class of Station:**        VSAT Network

**Nature of Service:**     Fixed Satellite Service

SITE ID:                REMOTE 0.95M

LOCATION:                VSAT (0.95M), CONUS, (5000 UNITS)

ANTENNA ID:	0.95M/R	0.95 meters	RAYTHEON	SMDS2100
	14000.0000 - 14500.0000 MHz	324KG7W	44.70 dBW	QPSK 144 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	842KG7W	44.70 dBW	QPSK 384 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	4M41G7W	44.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE
	14000.0000 - 14500.0000 MHz	3M17G7W	49.50 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	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 1.2M  
LOCATION: VSAT ( 1.2M), CONUS, (5000 UNITS)

ANTENNA ID:	1.2M/P	1.2 meters	PRODELIN	1134
14000.0000 - 14500.0000 MHz	324KG7W	46.00 dBW	QPSK 144 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	842KG7W	46.00 dBW	QPSK 384 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	4M41G7W	46.00 dBW	QPSK 2048 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	3M17G7W	49.50 dBW	QPSK 2048 KBPS 1/2 FEC	
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	43.10 dBW	QPSK 144 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	936KG7W	43.10 dBW	QPSK 384 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	2M45G7W	43.10 dBW	QPSK 1024 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	4M90G7W	43.10 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 5  
LOCATION: VSAT (0.96M), 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 6  
LOCATION: VSAT (1.2M), 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 7  
LOCATION: VSAT (1.8M), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/CM	1.8 meters	CHANNEL MASTER	TYPE 180
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 8  
LOCATION: VSAT (2.4M), 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, TIRBO 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: REMOTE9P  
LOCATION: VSAT (1.2M) 1305 INDUSTRIAL PARK ROAD, CONUS, (5000 UNITS)

ANTENNA ID:	1.2M PAT	1.2 meters	PATRIOT	TXFCC-120KU
14000.0000 - 14500.0000 MHz	3M00G7W	46.50 dBW		2048 KBPS 2/3FEC TURBO CODE
14000.0000 - 14500.0000 MHz	380KG7W	46.50 dBW		256 KBPS 2/3FEC TURBO CODE
14000.0000 - 14500.0000 MHz	4M90G7W	46.00 dBW		QPSK, 2048 KBPS, 1/2 FEC CONCATENATED CODE
14000.0000 - 14500.0000 MHz	360KG7W	43.30 dBW		QPSK, 144 KBPS, 1/2 FEC CONCATENATED 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
11700.0000 - 12200.0000 MHz	3M91G7W		QPSK, 3 MBPS 2/3 FEC HUB OUTBOUND TO VSAT
11700.0000 - 12200.0000 MHz	54M0G7W		QPSK, 48 MBPS 2/3 FEC HUB OUTBOUND TO VSAT

SITE ID: REMOTE10P  
LOCATION: VSAT (1.8M) 1305 INDUSTRIAL PARK ROAD, CONUS, (5000 UNITS)

ANTENNA ID:	1.8M PAT	1.8 meters	PATRIOT	TXFCC-180KU
14000.0000 - 14500.0000 MHz	3M00G7W	56.00 dBW		QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
14000.0000 - 14500.0000 MHz	380KG7W	56.00 dBW		QPSK, 256 KBPS, 2/3 FEC TURBOCODING
11700.0000 - 12200.0000 MHz	3M00G7W			QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
11700.0000 - 12200.0000 MHz	380KG7W			QPSK, 256 KBPS, 2/3 FEC TURBOCODING

SITE ID: REMOTE8P  
LOCATION: VSAT (2.4M) 1305 INDUSTRIAL PARK ROAD, CONUS, (5000 UNITS)

ANTENNA ID:	2.4M PAT	2.4 meters	PATRIOT	TXFCC-240KU
14000.0000 - 14500.0000 MHz	380KG7W	58.50 dBW		QPSK, 256 KBPS, TURBOCODE, 2/3 FEC
14000.0000 - 14500.0000 MHz	3M00G7W	58.50 dBW		QPSK 2048 KBPS, 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: REMOTE11 PROD  
LOCATION: VSAT (2.4M) 1305 INDUSTRIAL PARK ROAD, CONUS, (5000 UNITS)

ANTENNA ID:	2.4M PROD	2.4 meters	PRODELIN	P24
14000.0000 - 14500.0000 MHz	380KG7W	54.10 dBW		QPSK, 256KBPS, 2/3 FEC TURBOCODING
14000.0000 - 14500.0000 MHz	750KG7W	52.50 dBW		QPSK, 512 KBPS, 2/3 FEC TURBOCODING
14000.0000 - 14500.0000 MHz	1M50G7W	52.80 dBW		QPSK, 1024 KBPS, 2/3 FEC TURBOCODING

14000.0000 - 14500.0000 MHz	3M00G7W	52.80 dBW	QPSK, 2048 KBPS, 2/3 FEC TURBOCODING
14000.0000 - 14500.0000 MHz	360KG7W	52.80 dBW	QPSK, 144 KBPS, 2/3 FEC CONCATENATED CODE
14000.0000 - 14500.0000 MHz	4M90G7W	52.80 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, 256 KBPS, 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: REMOTE 1.8M  
LOCATION: VSAT ( 1.8M), CONUS, (5000 UNITS)

ANTENNA ID:	1.8M/P	1.8 meters	PRODELIN	1194
14000.0000 - 14500.0000 MHz	324KG7W	49.70 dBW	QPSK 144 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	842KG7W	49.70 dBW	QPSK 384 KBPS, CONCATENATED CODE	
14000.0000 - 14500.0000 MHz	4M41G7W	49.70 dBW	QPSK 2048 KBPS, CONCATENATED CODE	
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	52.80 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	52.20 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	49.70 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: HUB 9.3-M  
LOCATION: 1305 INDUSTRIAL PARK ROAD (9.3M. HUB), SHENANDOAH, MT. JACKSON, VA  
38 ° 43 ' 47.42 " N LAT. 78 ° 39 ' 29.92 " W LONG.

ANTENNA ID:	9.3-MT. J	9.3 meters	VERTEX	9KPC
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	78.30 dBW	QPSK 48MBPS 2/3 FEC	

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13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	168,768 KBPS 8PSK, FEC TPC, 0.879, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	152.256 KBPS 8PSK, FEC TPC, 0.793, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	112.512 KBPS QPSK, FEC TPC, 0.879, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	101.504 KBPS QPSK, FEC TPC, 0.793, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	68.224 KBPS QPSK, FEC TPC, 0.533, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	63.36 KBPS QPSK, FEC TPC, 0.495, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	55.168 KBPS QPSK, FEC TPC, 0.431, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	56.256 KBPS BPSK, FEC TPC, 0.879, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	27.584 KBPS BPSK, FEC TPC, 0.431, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	50.752 KBPS BPSK, FEC TPC, 0.793, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	34.112 KBPS BPSK, FC TPC, 0.533, SCPC
13800.0000 - 14500.0000 MHz	76K8G7W	77.20 dBW	31.68 KBPS BPSK, FEC TPC, 0.495, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	30.3255 MBPS 8PSK, FEC TPC, 0.879, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	27.3585 MBPS 8PSK, FEC TPC, 0.793, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	20.217 MBPS QPSK, FEC TPC, 0.879, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	18.239 MBPS QPSK, FEC TPC, 0.793, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	12.259 MBPS QPSK, FEC TPC, 0.533, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	11.385 MBPS QPSK, FEC TPC, 0.495, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	9.913 MBPS QPSK, FEC TPC, 0.431, SCPC

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13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	10.1085 MBPS BPSK, FEC TPC, 0.879, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	9.1195 MBPS BPSK, FEC TPC, 0.793, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	6.1295 MBPS BPSK, FEC TPC, 0.533, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	5.6925 MBPS BPSK, FEC TPC, 0.495, SCPC
13800.0000 - 14500.0000 MHz	13M8G7W	77.20 dBW	4.9565 MBPS BPSK, FEC TPC, 0.431, SCPC
13800.0000 - 14500.0000 MHz	6M90G7W	77.20 dBW	9.1195 MBPS QPSK, FEC TPC, 0.793, SCPC
13800.0000 - 14500.0000 MHz	6M90G7W	77.20 dBW	5.6925 MBPS QPSK, FEC TPC, 0.495 SCPC
11700.0000 - 12200.0000 MHz	324KG7W		QPSK 144 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	842KG7W		QPSK 384 KBPS, CONCATENATED CODE
11700.0000 - 12200.0000 MHz	4M41G7W		QPSK 2048 KBPS, CONCATENATED CODE
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	3M45G1W		6.839625 MBPS BPSK, FEC TPC, 0.793, TDMA



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11700.0000 - 12200.0000 MHz	3M45G1W	5.6925 MBPS BPSK, FEC TPC, 0.66, TDMA
11700.0000 - 12200.0000 MHz	3M45G1W	4.55975 MBPS QPSK, FEC TPC, 0.793, TDMA
11700.0000 - 12200.0000 MHz	3M45G1W	3.795 MBPS QPSK, FEC TPC, 0.66, TDMA
11700.0000 - 12200.0000 MHz	3M45G1W	3.06475 MBPS QPSK, FEC TPC, 0.533, TDMA
11700.0000 - 12200.0000 MHz	3M45G1W	2.4825 MBPS QPSK, FEC TPC, 0.431, TDMA
11700.0000 - 12200.0000 MHz	3M45G1W	2.279875 MBPS BPSK, FEC TPC, 0.793, TDMA
11700.0000 - 12200.0000 MHz	3M45G1W	1.8975 MBPS BPSK, FEC TPC, 0.66, TDMA
11700.0000 - 12200.0000 MHz	3M45G1W	1.532375 MBPS BPSK, FEC TPC, 0.533, TDMA
11700.0000 - 12200.0000 MHz	3M45G1W	1.239125 MBPS BPSK, FEC TPC, 0.431, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	152.256 KBPS 8PSK, FEC TPC, 0.793, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	126.72 KBPS 8PSK, FEC TPC, 0.66, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	101.504 KBPS QPSK, FEC TPC, 0.793, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	84.48 KBPS QPSK, FEC TPC, 0.66, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	68.224 KBPS QPSK, FEC TPC, 0.533, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	55.168 KBPS QPSK, FEC TPC, 0.431, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	50.752 KBPS BPSK, FEC TPC, 0.793, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	42.24 KBPS BPSK, FEC TPC, 0.66, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	34.112 KBPS BPSK, FEC TPC, 0.533, TDMA
11700.0000 - 12200.0000 MHz	76K8G7W	27.584 KBPS BPSK, FEC TPC, 0.431, TDMA

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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: 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

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**Points of Communication:**

- HUB 9.3-M - ALSAT - (ALSAT)
- HUB 9.3-M - ESTRELA DO SUL 1 - (63 W.L.)
- REMOTE 0.95M - TELSTAR 11 - (37.5 W.L.)
- REMOTE 0.95M - TELSTAR 6 - (93 W.L.)
- REMOTE 1.2M - ALSAT - (ALSAT)
- REMOTE 1.8M - ALSAT - (ALSAT)
- REMOTE 5 - TELSTAR 6 - (93 W.L.)
- REMOTE 6 - ALSAT - (ALSAT)
- REMOTE 7 - ALSAT - (ALSAT)
- REMOTE 8 - ALSAT - (ALSAT)
- REMOTE10P - ALSAT - (ALSAT)
- REMOTE11 PROD - ALSAT - (ALSAT)
- REMOTE12 - ALSAT - (ALSAT)
- REMOTE13 - ALSAT - (ALSAT)
- REMOTE14 - ALSAT - (ALSAT)
- REMOTE15 - ALSAT - (ALSAT)
- REMOTE8P - ALSAT - (ALSAT)
- REMOTE9P - ALSAT - (ALSAT)

**SES-MOD-20071102-01523**    E E000158    XM Radio Inc.

Application for Modification

03/20/2001 - 03/20/2011

Grant of Authority

Date Effective: 02/14/2008

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Satellite Digital Audio Radio Service

SITE ID: 1

LOCATION: 1500 ECKINGTON PLACE, WASHINGTON, DC

38 ° 54 ' 36.40 " N LAT.

77 ° 0 ' 19.90 " W LONG.

ANTENNA ID: 001/002            7 meters            RSI SATCOM TECH.            7M S/X

7056.8450 - 7074.8690 MHz            1M84G1W            78.00 dBW            AUDIO CONTENT, ANCILLARY  
DATA, QPSK

7042.6000 - 7074.4000 MHz            800KF2D            64.00 dBW            COMMAND AND RANGING

2322.5000 - 2345.0000 MHz	100KG2D	TELEMETRY
2332.5000 - 2345.0000 MHz	1M84G1W	AUDIO CONTENT, ANCILLARY DATA, QPSK

**Points of Communication:**

- 1 - XM 1 - (85.150 W.L)
- 1 - XM 2 - (85.217 W.L)
- 1 - XM 3 - (85.083 W.L)
- 1 - XM-4 - (115 W.L.)

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<b>SES-MOD-20071102-01524</b>	E E040204	XM Radio Inc.	08/06/2004 - 08/06/2019
Application for Modification			Date Effective: 02/14/2008
Grant of Authority			

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Satellite Digital Audio Radio Service

SITE ID: Atlanta  
LOCATION: 2875 Fork Creek Church Road, Clayton, Ellenwood, GA  
33 ° 39 ' 51.00 " N LAT. 84 ° 16 ' 24.00 " W LONG.

ANTENNA ID:	AX31/AX32	7.2 meters	VertexRSI	7.2 KPCX/KPKX
	7056.8450 - 7074.8690 MHz		1M84G1W	78.00 dBW
				Audio Content, Ancillary Data, QPSK
	7042.6000 - 7074.4000 MHz		800KF2D	74.00 dBW
				Command and Ranging
	2332.5000 - 2345.0000 MHz		100KG2D	Telemetry
	2332.5000 - 2345.0000 MHz		1M84G1W	Audio Content, Ancillary Data, QPSK

**Points of Communication:**

- Atlanta - XM 1 - (85.150 W.L)
- Atlanta - XM 2 - (85.217 W.L)
- Atlanta - XM 3 - (85.083 W.L)
- Atlanta - XM-4 - (115 W.L.)

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<b>SES-MOD-20080108-00019</b>	E E990294	SPACENET SERVICES LICENSE SUB INC	06/23/2000 - 06/23/2010
Application for Modification			Date Effective: 02/19/2008
Grant of Authority			

**Class of Station:** Other

**Nature of Service:** Fixed Satellite Service

SITE ID: REMOTE 1  
 LOCATION: VSAT (75000 UNITS) CONUS, AK, HI, PR, VI

ANTENNA ID:	1.2Mremote	1.2 meters	CHANNEL MASTER	123
	14000.0000 - 14500.0000 MHz	44K0G7D	39.70 dBW	19.2 kbps DATA, 1/2 RATE FEC, DPSK
	14000.0000 - 14500.0000 MHz	60K0G7D	40.00 dBW	38.4 kbps DATA, 1/2 RATE FEC, MSK
	14000.0000 - 14500.0000 MHz	94K0G7D	40.00 dBW	38.4 kbps DATA, 1/2 RATE FEC, DPSK
	14000.0000 - 14500.0000 MHz	120KG7D	43.00 dBW	76.8 kbps DATA, 1/2 RATE FEC MSK
	14000.0000 - 14500.0000 MHz	194KG7D	43.00 dBW	76.8 kbps DATA, 1/2 RATE FEC, DPSK
	14000.0000 - 14500.0000 MHz	240KG7D	43.00 dBW	1,536 kbps DATA, 1/2 RATE FEC, MSK
	11700.0000 - 12200.0000 MHz	400KG7D		256 kbps DATA, 1/2 RATE FEC, QPSK
	11700.0000 - 12200.0000 MHz	600KG7D		384 kbps DATA, 1/2 RATE FEC, QPSK
	11700.0000 - 12200.0000 MHz	1M20G7D		768 kbps DATA, 1/2 RATE FEC, QPSK
	11700.0000 - 12200.0000 MHz	1M60G7D		1,024 kbps DATA, 1/2 RATE FEC, QPSK
	11700.0000 - 12200.0000 MHz	2M40G7D		768 kbps DATA, 1/2 RATE FEC, BPSK
	11700.0000 - 12200.0000 MHz	3M20G7D		1,024 kbps DATA, 1/2 RATE FEC, BPSK
	11700.0000 - 12200.0000 MHz	1M02G7D		384 kbps DATA, 1/2 RATE FEC, BPSK
	11700.0000 - 12200.0000 MHz	1M60G7D		512 kbps DATA, 1/2 RATE FEC, BPSK
	11700.0000 - 12200.0000 MHz	2M40G7D		1,536 kbps DATA, 1/2 RATE FEC, QPSK
	11700.0000 - 12200.0000 MHz	4M80G7D		1,536 kbps DATA, 1/2 RATE FEC, BPSK
	11700.0000 - 12200.0000 MHz	3M20G7D		2,048 kbps DATA, 1/2 RATE FEC, QPSK
	11700.0000 - 12200.0000 MHz	6M40G7D		2,048 kbps DATA, 1/2 RATE FEC, BPSK
	11700.0000 - 12200.0000 MHz	6M10G7D		3,500 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
	11700.0000 - 12200.0000 MHz	8M10G7D		6,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK

11700.0000 - 12200.0000 MHz	10M8G7D		8,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	10M2G7D		12,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	21M6G7D		16,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	36M0G7D		26,700 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	43M2G7D		32,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	54M0G7D		40,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	425KG7D		128 kbps, 1/2 RATE FEC, BPSK
11700.0000 - 12200.0000 MHz	800KG7D		256 kbps, 1/2 RATE FEC, BPSK
14000.0000 - 14500.0000 MHz	101KG7D	43.30 dBW	BPSK, QPSK or 8PSK Modulated Digital Carrier
14000.0000 - 14500.0000 MHz	1M20G7D	49.30 dBW	BPSK, QPSK or 8PSK Modulated Digital Carrier
14000.0000 - 14500.0000 MHz	2M20G7D	49.30 dBW	BPSK, QPSK or 8PSK Modulated Digital Carrier
14000.0000 - 14500.0000 MHz	404KG7D	49.30 dBW	BPSK, QPSK or 8PSK Modulated Digital Carrier
14000.0000 - 14500.0000 MHz	202KG7D	46.30 dBW	BPSK, QPSK or 8PSK Modulated Digital Carrier
14000.0000 - 14500.0000 MHz	300KG7D	46.30 dBW	BPSK, QPSK or 8PSK Modulated Digital Carrier
14000.0000 - 14500.0000 MHz	600KG7D	49.30 dBW	BPSK, QPSK or 8PSK Modulated Digital Carrier

SITE ID: REMOTE TF  
LOCATION: 1.2-METER (10, 000 UNITS) CONUS, AK, HI, PR, VI

ANTENNA ID:	1.2 TF	1.2 meters	CHANNEL MASTER	123
14000.0000 - 14500.0000 MHz	44K0G7D	39.70 dBW	19.2 kbps, DATA, 1/2 RATE FEC, DPSK	
14000.0000 - 14500.0000 MHz	60K0G7D	40.00 dBW	38.4 kbps DATA, 1/2 RATE FEC, MSK	
14000.0000 - 14500.0000 MHz	94K0G7D	40.00 dBW	38.4 kbps DATA, 1/2 RATE FEC, DPSK	
14000.0000 - 14500.0000 MHz	120KG7D	43.00 dBW	76.8 kbps DATA, 1/2 RATE FEC MSK	

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14000.0000 - 14500.0000 MHz	194KG7D	43.00 dBW	76.8 kbps DATA, 1/2 RATE FEC, MSK
14000.0000 - 14500.0000 MHz	240KG7D	43.00 dBW	1,536 kbps DAT, 1/2 RATE FEC, MSK
11700.0000 - 12200.0000 MHz	400KG7D		256 kbps, 1/2 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	600KG7D		384 kbps DATA, 1/2 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	1M20G7D		768 kbps DATA, 1/2 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	1M60G7D		512 kbps DATA, 1/2 RATE FEC, BPSK
11700.0000 - 12200.0000 MHz	2M40G7D		768 kbps DATA, 1/2 RATE FEC, BPSK
11700.0000 - 12200.0000 MHz	3M20G7D		1,024 kbps DATA, 1/2 RATE FEC, BPSK
11700.0000 - 12200.0000 MHz	1M02G7D		384 kbps DATA, 1/2 RATE FEC, BPSK
11700.0000 - 12200.0000 MHz	1M60G7D		512 kbps DATA, 1/2 RATE FEC, BPSK
11700.0000 - 12200.0000 MHz	2M40G7D		1,536 kbps DATA, 1/2 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	3M20G7D		2,048 kbps DATA, 1/2 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	800KG7D		512 kbps DATA, 1/2 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	4M80G7D		1,536 kbps DATA, 1/2 RATE FEC, BPSK
11700.0000 - 12200.0000 MHz	6M40G7D		2,048 kbps DATA, 1/2 RATE FEC, BPSK
11700.0000 - 12200.0000 MHz	10M8G7D		8,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	6M10G7D		3,500 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	8M10G7D		6,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	10M2G7D		12,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	21M6G7D		16,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	36M0G7D		26,700 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK
11700.0000 - 12200.0000 MHz	43M2G7D		32,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK

11700.0000 - 12200.0000 MHz

54M0G7D

40,000 kbps, 1/2, 2/3, 3/4, 5/6, 7/8 RATE  
FEC, QPSK

**Points of Communication:**

REMOTE 1 - ALSAT - (ALSAT)

REMOTE TF - ALSAT - (ALSAT)

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<b>SES-REG-20080102-00001</b>	E	E080001	CBS Broadcasting Inc.		<b>EZ</b>
Registration				01/02/2008 - 01/02/2023	
Grant of Authority				Date Effective:	02/13/2008

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: 4200 Radford Ave, Las Angeles, Studio City, CA

34 ° 8 ' 46.00 " N LAT.

118 ° 23 ' 22.00 " W LONG.

ANTENNA ID: 1                      4.5 meters                      Andrew                      ES45MP-1

3700.0000 - 4200.0000 MHz                      36M0G7W                      video, audio, data

**Points of Communication:**

1 - PERMITTED LIST - ()

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<b>SES-RWL-20080206-00130</b>	E	E980090	NBC Telemundo License Co.		
Renewal				02/06/2008 - 02/06/2023	
Grant of Authority				Date Effective:	02/12/2008

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

**Nature of Service:** Domestic Fixed Satellite Service

SITE ID: 1

LOCATION: VARIOUS

ANTENNA ID: 1                      2.4 meters                      ANDREW CORPORATION                      ES24VS-1

14000.0000 - 14500.0000 MHz                      36M0F8F                      73.90 dBW

14000.0000 - 14500.0000 MHz                      2M00G7F-                      73.90 dBW

14000.0000 - 14500.0000 MHz                      54MOG7F                      73.90 dBW

**Points of Communication:**

1 - ALSAT - (ALSAT)



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SES-RWL-20080211-00144 E E900093 AT&T Corp.  
Renewal 04/09/2008 - 04/09/2023  
Grant of Authority Date Effective: 02/12/2008

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

**Nature of Service:** Domestic Fixed Satellite Service

SITE ID: 1  
LOCATION: VARIOUS

ANTENNA ID:	1	1.2 meters	AVL TECHNOLOGIES	1.2M USA DSNG
	14000.0000 - 14500.0000 MHz		1M34G7W 54.70 dBW	QPSK, FEC 3/4, VOICE AND DATA
	11700.0000 - 12200.0000 MHz		1M34G7W 0.00 dBW	QPSK, FEC 3/4, VOICE AND DATA

**Points of Communication:**

1 - ALSAT - (ALSAT)

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SES-RWL-20080211-00145 E E900096 AT&T Corp.  
Renewal 04/09/2008 - 04/09/2023  
Grant of Authority Date Effective: 02/12/2008

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

**Nature of Service:** Domestic Fixed Satellite Service

SITE ID: 1  
LOCATION: VARIOUS

ANTENNA ID:	1	1.2 meters	AVL TECHNOLOGIES	1.2M USA DSNG
	14000.0000 - 14500.0000 MHz		1M34G7W 54.70 dBW	QPSK, FEC 3/4, VOICE AND DATA
	11700.0000 - 12200.0000 MHz		1M34G7W 0.00 dBW	QPSK, FEC 3/4, VOICE AND DATA

**Points of Communication:**

1 - ALSAT - (ALSAT)

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SES-RWL-20080213-00155 E E880543 Pacific and Southern Company, Inc.  
Renewal 04/08/2008 - 04/08/2023  
Grant of Authority Date Effective: 02/14/2008

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

**Nature of Service:** Domestic Fixed Satellite Service

SITE ID: 1  
LOCATION: VARIOUS

ANTENNA ID:	1	2.4 meters	SATCOM TECHNOLOGIES	INC MODEL 240KV
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14000.0000 - 14500.0000 MHz      36MOG9W      75.00 dBW

**Points of Communication:**

1 - ALSAT - (ALSAT)

**SES-RWL-20080213-00156**    E E880396    Post Newsweek Stations, Michigan, Inc.  
Renewal      02/26/2008 - 02/26/2023  
Grant of Authority      Date Effective:    02/14/2008

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

**Nature of Service:**    Domestic Fixed Satellite Service

SITE ID:            1  
LOCATION:            WITHIN 100 RADIUS OF DETROIT, MI, VARIOUS

ANTENNA ID:    1                    2.4 meters            ANDREW                    ESA-24-SNG-LTE-25

14000.0000 - 14500.0000 MHz      64K0G7D      42.60 dBW      ANALOG VIDEO

14000.0000 - 14500.0000 MHz      10M0G7W      68.60 dBW      ONE 10MBIT MCPC DIGITAL  
CARRIER FOR VOICE/DATA

**Points of Communication:**

1 - ALSAT - (ALSAT)

**SES-RWL-20080214-00161**    E E861065    Skynet Satellite Corporation  
Renewal      04/15/2008 - 04/15/2023  
Grant of Authority      Date Effective:    02/15/2008

**Class of Station:**      Fixed Earth Stations

**Nature of Service:**    Domestic Fixed Satellite Service

SITE ID:            1  
LOCATION:            PIKE, HAWLEY, PA  
                          41 ° 27 ' 51.00 " N LAT.                    75 ° 7 ' 48.00 " W LONG.

ANTENNA ID:    1                    6.1 meters            VERTEX MODEL 6.1KPCK

14497.0000 - 14499.0000 MHz      960KF2D      80.00 dBW      TT&C

14000.0000 - 14500.0000 MHz      250KG7W      55.00 dBW

14000.0000 - 14500.0000 MHz      500KG7W      58.00 dBW

14000.0000 - 14500.0000 MHz      36M0F9W      80.00 dBW

14000.0000 - 14500.0000 MHz      512KG7W      59.00 dBW

12197.5000 - 12199.0000 MHz      850KF2D      TT&C

11700.0000 - 12200.0000 MHz	250KG7W
11700.0000 - 12200.0000 MHz	512KG7W
11700.0000 - 12200.0000 MHz	36M0F9W
11700.0000 - 12200.0000 MHz	32K0G7W

**Points of Communication:**

1 - ALSAT - (ALSAT)

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<b>SES-RWL-20080214-00162</b>	E E980126	UNIVERSITY OF WASHINGTON	03/20/2008 - 03/20/2023
Renewal			Date Effective: 02/15/2008
Grant of Authority			

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Domestic Fixed Satellite Service

SITE ID: 1  
 LOCATION: KANE HALL ROOF, KING, SEATTLE, WA  
 47 ° 35 ' 46.00 " N LAT. 122 ° 19 ' 47.00 " W LONG.

ANTENNA ID: 1	7.2 meters	VERTEX	KPK
14000.0000 - 14500.0000 MHz	51K2G7D-	55.50 dBW	
14000.0000 - 14500.0000 MHz	8M50G7D	77.70 dBW	
11700.0000 - 12200.0000 MHz	51K2G7D-		
11700.0000 - 12200.0000 MHz	8M50G7D		

**Points of Communication:**

1 - ALSAT - (ALSAT)

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<b>SES-RWL-20080214-00163</b>	E E970201	PetroCom License Corporation	02/27/2008 - 02/27/2023
Renewal			Date Effective: 02/15/2008
Grant of Authority			

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

**Nature of Service:** Domestic Fixed Satellite Service

SITE ID: 1  
 LOCATION: U.S. AND U.S. OFFSHORE WATERS, VARIOUS

ANTENNA ID: 1	2.4 meters	CHANNEL MASTER	62-241-3201
5925.0000 - 6425.0000 MHz	5M38G1W	54.90 dBW	



Extension of special temporary authority is GRANTED for an additional 30 days beginning February 19, 2008 and ending March 19, 2008.

**Points of Communication:**

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**SES-STA-20080213-00159** E E000166 HNS License Sub, LLC  
Special Temporary Authority  
Withdrawn Date Effective: 02/14/2008

**Class of Station:**

**Points of Communication:**

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**SES-T/C-20080128-00096** E E2454 Oral Roberts University  
Application for Consent to Transfer of Control  
Grant of Authority Date Effective: 02/13/2008

**Current Licensee:** Oral Roberts University

**FROM:** ORAL ROBERTS UNIVERSITY

**TO:** Oral Roberts University

No. of Station(s) listed: 1

See Amendment File No. SES-AMD-20080129-00100.

**INFORMATIVE**

**SES-STA-20071207-01678** E020074 SATAMATICS, INC.

The FCC has taken the administrative action of listing this request as granted. The request sought continuation of operations authorized in File No. SES-STA-20061221-02209. The stations operated during the requested period pursuant to Section 1.62 of the Commission's rules, subject to the conditions specified in the original authorization. This action is without prejudice to action on any pending request for current operations.

**SURRENDER**

**SES-RWL-19981217-01921** E880614 TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE PARTNERSHIP

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-19990217-00233** E881179 TIME WARNER ENTERTAINMENT-ADVANCE/NEWHOUSE PARTNERSHIP

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-20001016-01987** E2470 TIME WARNER ENTERTAINMENT- ADVANCE/NEWHOUSE PARTNERSHIP

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-20010412-00754** E3037 TIME WARNER ENTERTAINMENT- ADVANCE/NEWHOUSE PARTNERSHIP

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-20020422-00710** WQ90 Time Warner NY Cable LLC

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-20020709-01103** WS43 Time Warner NY Cable LLC

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-20040429-00616** E940354 Time Warner NY Cable LLC

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-20050415-00465** E8851 Time Warner NY Cable LLC

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-20050816-01108** E9442 Time Warner NY Cable LLC

Licensee has surrendered license, per letter dated February 7, 2008.

**SES-RWL-20060328-00535** E860476 Time Warner NY Cable LLC

Licensee has surrendered license, per letter dated February 7, 2008.

For more information concerning this Notice, contact the Satellite and Radiocommunication Division at 418-0719; TTY 202-418-2555.