



# PUBLIC NOTICE

FEDERAL COMMUNICATIONS COMMISSION  
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Report No. SES-01124

Wednesday March 25, 2009

## 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.

SES-AFS-20080724-00975 E WB36 Vizada, Inc.  
Amendment  
Grant of Authority Date Effective: 03/24/2009

Class of Station: Fixed Earth Stations

Nature of Service: Fixed Satellite Service, Other

SITE ID: SOUTHBURY  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT  
41 ° 27 ' 5.30 " N LAT. 73 ° 17 ' 19.40 " W LONG.

ANTENNA ID:	21-C-NORM	12.8 meters	PHILCO FORD	12.8M
	6454.4000 - 6456.6000 MHz	2M20G1D	80.70 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
	6424.0000 - 6454.0000 MHz	NON	62.00 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
	6424.0000 - 6454.0000 MHz	34K0F3E	62.00 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
	6424.0000 - 6454.0000 MHz	2K40G7D-	51.10 dBW	BPSK, DATA/TDM
	6424.0000 - 6454.0000 MHz	132KG7D	62.00 dBW	BPSK, DATA/TDM
	6424.0000 - 6454.0000 MHz	2K40G1D-	51.10 dBW	BPSK, DATA
	6424.0000 - 6454.0000 MHz	2M20G1D	62.00 dBW	BPSK, DATA
	6424.0000 - 6454.0000 MHz	5K60G1W	54.80 dBW	QPSK, DATA/FAX
	6424.0000 - 6454.0000 MHz	24K0G1W	61.10 dBW	QPSK, DATA/FAX

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6424.0000 - 6454.0000 MHz	5K60G1E-	54.80 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	61.10 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	63.30 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	62.00 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	62.00 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	53.30 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED AND UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-		BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W		16QAM, DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F		QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK SPREAD SPECTRUM DATA - NAVIGATION CLOSE LOOP

ANTENNA ID:	21-C-TT&C	12.8 meters	PHILCO FORD	12.8M
	5925.0000 - 6425.0000 MHz		36M0F8W	86.50 dBW
				ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID:	21-L-BAND	12.8 meters	PHILCO FORD	12.8M
	1626.5000 - 1660.5000 MHz		NON	40.50 dBW
				UNMODULATED AFC PILOT (CLOSE LOOP)
	1626.5000 - 1660.5000 MHz		34K0F3E	36.00 dBW
				TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
	1626.5000 - 1660.5000 MHz		2K40G7D-	36.00 dBW
				TEST BPSK, DATA/TDM
	1626.5000 - 1660.5000 MHz		132KG7D	36.00 dBW
				TEST BPSK, DATA/TDM
	1626.5000 - 1660.5000 MHz		2K40G1D-	36.00 dBW
				TEST BPSK, DATA
	1626.5000 - 1660.5000 MHz		2M20G1D	36.00 dBW
				TEST BPSK, DATA
	1626.5000 - 1660.5000 MHz		5K60G1W-	36.00 dBW
				TEST QPSK, DATA/FAX
	1626.5000 - 1660.5000 MHz		2K40G1W	36.00 dBW
				TEST QPSK, DATA/FAX
	1626.5000 - 1660.5000 MHz		5K60G1E-	36.00 dBW
				TEST QPSK, TELEPHONY
	1626.5000 - 1660.5000 MHz		24K0G1E	36.00 dBW
				TEST QPSK, TELEPHONY
	1626.5000 - 1660.5000 MHz		40K0G1W	48.20 dBW
				TEST 16QAM DIGITAL TELEPHONY
	1626.5000 - 1660.5000 MHz		400KG1F	36.00 dBW
				TEST QPSK DIGITAL VIDEO/DATA
	1574.4000 - 1576.6000 MHz		2M20G1D	
				TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
	1525.0000 - 1559.0000 MHz		NON	
				UNMODULATED AFC PILOT (CLOSE LOOP)
	1525.0000 - 1559.0000 MHz		34K0F3E	
				TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
	1525.0000 - 1559.0000 MHz		2K40G7D-	
				TEST BPSK, DATA/TDM
	1525.0000 - 1559.0000 MHz		132KG7D	
				TEST BPSK, DATA/TDM
	1525.0000 - 1559.0000 MHz		2K40G1D-	
				TEST BPSK, DATA
	1525.0000 - 1559.0000 MHz		2M20G1D	
				TEST BPSK, DATA
	1525.0000 - 1559.0000 MHz		5K60G1W-	
				TEST QPSK, DATA/FAX
	1525.0000 - 1559.0000 MHz		2K40G1W	
				TEST QPSK, DATA/FAX

1525.0000 - 1559.0000 MHz	5K60G1E-			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W			TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F			TEST QPSK DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: 23A-C-NOR	10.4 meters	PHILCO FORD		10.4M
6454.4000 - 6456.6000 MHz	2M20G1D	73.50 dBW		BPSK SPREAD SPECTRUM DATA (NAVIGATION)
6424.0000 - 6454.0000 MHz	NON	59.50 dBW		UNMODULATED AFC PILOT
6424.0000 - 6454.0000 MHz	34K0F3E	59.50 dBW		FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	48.60 dBW		BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	59.50 dBW		BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	48.60 dBW		BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	71.70 dBW		BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W-	52.30 dBW		QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	58.60 dBW		QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	52.30 dBW		QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	58.60 dBW		QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	60.80 dBW		16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	59.50 dBW		QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	59.50 dBW		FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	50.80 dBW		TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D			PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W			TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON			UNMODULATED AFC PILOT

3600.0000 - 3629.0000 MHz	34K0F3E			FM TELEPHONY COMPANDED ANAD UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-			BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D			BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-			BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D			BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-			QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W			QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-			QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E			QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W			16QAM DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F			QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D			BPSK SPREAD SPECTRUM DATA (NAVIGATION)
ANTENNA ID: 23A-C-TT&C	10.4 meters	PHILCO FORD		104.M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 23B-L-BAND	1.8 meters	TRUE FOCUS		1.8M
1626.5000 - 1660.5000 MHz	NON	27.20 dBW		UNMODULATED AFC PILOT (CLOSE LOOP)
1574.4000 - 1576.6000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON			UNMODULATED AFC PILOT
1525.0000 - 1559.0000 MHz	34K0F3E			TEST FM TELEPHONY COMPANDED AND UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-			TEST QPSK, DATA/FAX

1525.0000 - 1559.0000 MHz	24K0G1W		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK, DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: SBY 30	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	36M0G7W	72.00 dBW	QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W	77.23 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA

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13780.0000 - 14500.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13780.0000 - 14500.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 14000.0000 MHz	36M0G7W	74.50 dBW	QPSK, DIGITAL TELEPHONY
13750.0000 - 13770.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	72M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0F8W		ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	2M29G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	1M60G1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	200KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	100KG7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA

	11450.0000 - 11700.0000 MHz		64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
	10700.0000 - 12750.0000 MHz		36M0G7W		QPSK, DIGITAL TELEPHONY
ANTENNA ID:	KU-BAND	9 meters	VERTEX		9KPK
	14000.0000 - 14500.0000 MHz		36M0G7W	72.00 dBW	QPSK, DIGITAL TELEPHONY
	11450.0000 - 11700.0000 MHz		36M0G7W		QPSK, DIGITAL TELEPHONY
	14000.0000 - 14500.0000 MHz		72M0G7W	88.55 dBW	QPSK DIGITAL DATA
	14000.0000 - 14500.0000 MHz		42M0G7W	86.31 dBW	QPSK DIGITAL DATA
	11450.0000 - 11700.0000 MHz		72M0G7W		QPSK DIGITAL DATA
	11450.0000 - 11700.0000 MHz		42M0G7W		QPSK DIGITAL DATA
	14000.0000 - 14500.0000 MHz		36M0F8W	80.14 dBW	ANALOG VIDEO
	11450.0000 - 11700.0000 MHz		36M0F8W		ANALOG VIDEO
	14000.0000 - 14500.0000 MHz		36M0G7W	77.23 dBW	QPSK DIGITAL DATA
	11450.0000 - 11700.0000 MHz		36M0G7W		QPSK DIGITAL DATA
	14000.0000 - 14500.0000 MHz		20M0G7W	83.08 dBW	QPSK DIGITAL DATA
	11450.0000 - 11700.0000 MHz		20M0G7W		QPSK DIGITAL DATA
	14000.0000 - 14500.0000 MHz		2M29G7W	73.67 dBW	QPSK DIGITAL DATA
	11450.0000 - 11700.0000 MHz		2M29G7W		QPSK DIGITAL DATA
	14000.0000 - 14500.0000 MHz		1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
	11450.0000 - 11700.0000 MHz		1M60G1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
	14000.0000 - 14500.0000 MHz		800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
	11450.0000 - 11700.0000 MHz		800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
	11450.0000 - 11700.0000 MHz		400KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
	14000.0000 - 14500.0000 MHz		200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
	11450.0000 - 11700.0000 MHz		200KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO



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14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	100KG7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W		QPSK DIGITAL DATA
13750.0000 - 14500.0000 MHz	36M0G7W	88.55 dBW	QPSK, DIGITAL TELEPHONY
11700.0000 - 12200.0000 MHz	100KG7W		
11700.0000 - 12200.0000 MHz	1M60G7W		
11700.0000 - 12200.0000 MHz	200KG1F		
11700.0000 - 12200.0000 MHz	20M0G7W		
11700.0000 - 12200.0000 MHz	2M29G7W		
11700.0000 - 12200.0000 MHz	32K0G7W		
11700.0000 - 12200.0000 MHz	36M0G8W		
11700.0000 - 12200.0000 MHz	36M0G7W		
11700.0000 - 12200.0000 MHz	400KG1F		
11700.0000 - 12200.0000 MHz	42M0G7W		
11700.0000 - 12200.0000 MHz	43K8G7W		
11700.0000 - 12200.0000 MHz	45K0G7W		
11700.0000 - 12200.0000 MHz	72M0G7W		

11700.0000 - 12200.0000 MHz	76K8G7W			
11700.0000 - 12200.0000 MHz	9K00G7W			
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW		ANALOG VIDEO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0G7W	85.64 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11700.0000 - 12200.0000 MHz	800KG1F			PSK DIGITAL VIDEO W/ASSOC DIG AUDIO

SITE ID: Ku-Band ESV Remotes  
LOCATION: Operate Up to 400 (1.5 m remotes) U.S. and International waters

ANTENNA ID: SeaTel6006 1.5 meters SEATEL 6006

10950.0000 - 11200.0000 MHz	1M43G1W			SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M35G1W			SCPC USING QPSK AND BPSK MODULATION

10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M43G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	2M35G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	40.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	43.00 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
10950.0000 - 11200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	151KG7W	45.30 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	194KG7W	46.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

14000.0000 - 14500.0000 MHz	291KG7W	48.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	388KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	445KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	452KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	81K0G7W	42.50 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	97K0G7W	43.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

SITE ID: SOUTHBURY-KU  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT  
41 ° 27 ' 5.00 " N LAT. 73 ° 17 ' 19.00 " W LONG.

SITE ID: C-band ESV Remotes  
LOCATION: Operate up to 300 (2.4m Remotes) U.S. and International waters

ANTENNA ID: SeaTel9707 2.4 meters SEATEL 9707

3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	57.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
ANTENNA ID: SeaTel9797	2.4 meters	SEATEL	9797
3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	58.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

**Points of Communication:**

- C-band ESV Remotes - NSS-7 - (338.5 E.L.)
- Ku-Band ESV Remotes - ALSAT - (ALSAT)
- Ku-Band ESV Remotes - ESTRELA DO SUL 1 - (63 W.L.)
- SOUTHBURY - ALSAT - (ALSAT)
- SOUTHBURY - AMAZONAS 1 - (61 W.L.)
- SOUTHBURY - AMOS-2 - (4.0 W.L.)
- SOUTHBURY - ESTRELA DO SUL 1 - (63 W.L.)
- SOUTHBURY - INMARSAT 4F2 - (52.75)
- SOUTHBURY - INMARSAT Ltd-3 - (15.5 W.L.)
- SOUTHBURY - INMARSAT Ltd-3 - (54 W.L.)
- SOUTHBURY - INMARSAT-2 AOR-WEST - (98 W.L.)
- SOUTHBURY - MARISAT-F2 - (33.9 W.L.)
- SOUTHBURY-KU - ALSAT - (ALSAT)
- SOUTHBURY-KU - AMOS-2 - (4.0 W.L.)

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SES-AFS-20081014-01318 E WB36 Vizada, Inc.

Amendment

Grant of Authority

Date Effective: 03/24/2009

**Class of Station:** Fixed Earth Stations

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**Nature of Service:** Fixed Satellite Service, Mobile Satellite Service, Other

SITE ID: SOUTHBURY

LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT

41 ° 27 ' 5.30 " N LAT.

73 ° 17 ' 19.40 " W LONG.

ANTENNA ID:	21-C-NORM	12.8 meters	PHILCO FORD	12.8M
6424.0000 - 6454.0000 MHz		NON	62.00 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
6424.0000 - 6454.0000 MHz		34K0F3E	62.00 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz		2K40G7D-	51.10 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz		132KG7D	62.00 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz		2K40G1D-	51.10 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz		2M20G1D	62.00 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz		5K60G1W	54.80 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz		24K0G1W	61.10 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz		5K60G1E-	54.80 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz		24K0G1E	61.10 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz		40K0G1W	63.30 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz		400KG1F	62.00 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz		27K0F3W	62.00 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz		NON	53.30 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz		131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3947.0000 - 3953.0000 MHz		131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz		36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3700.0000 - 4200.0000 MHz		36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE

3600.0000 - 3629.0000 MHz	NON			UNMODULATED AFC PILOT (CLOSE LOOP)
3600.0000 - 3629.0000 MHz	34K0F3E			FM TELEPHONY COMPANDED AND UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-			BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D			BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-			BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D			BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-			QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W			QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-			QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E			QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W			16QAM, DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F			QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D			BPSK SPREAD SPECTRUM DATA - NAVIGATION CLOSE LOOP
ANTENNA ID: 21-C-TT&C	12.8 meters	PHILCO FORD		12.8M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW		ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 21- L-BAND	12.8 meters	PHILCO FORD		12.8M
1626.5000 - 1660.5000 MHz	NON	40.50 dBW		UNMODULATED AFC PILOT (CLOSE LOOP)
1626.5000 - 1660.5000 MHz	34K0F3E	36.00 dBW		TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1626.5000 - 1660.5000 MHz	2K40G7D-	36.00 dBW		TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	132KG7D	36.00 dBW		TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	2K40G1D-	36.00 dBW		TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	2M20G1D	36.00 dBW		TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	5K60G1W-	36.00 dBW		TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	2K40G1W	36.00 dBW		TEST QPSK, DATA/FAX



1626.5000 - 1660.5000 MHz	5K60G1E-	36.00 dBW	TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	24K0G1E	36.00 dBW	TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	40K0G1W	48.20 dBW	TEST 16QAM DIGITAL TELEPHONY
1626.5000 - 1660.5000 MHz	400KG1F	36.00 dBW	TEST QPSK DIGITAL VIDEO/DATA
1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	2K40G1W		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: 23A-C-NOR	10.4 meters	PHILCO FORD	10.4M
6454.4000 - 6456.6000 MHz	2M20G1D	73.50 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
6424.0000 - 6454.0000 MHz	NON	59.50 dBW	UNMODULATED AFC PILOT
6424.0000 - 6454.0000 MHz	34K0F3E	59.50 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	48.60 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	59.50 dBW	BPSK, DATA/TDM

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6424.0000 - 6454.0000 MHz	2K40G1D-	48.60 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	71.70 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W-	52.30 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	58.60 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	52.30 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	58.60 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	60.80 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	59.50 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	59.50 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	50.80 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED ANAD UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-		BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W		16QAM DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F		QPSK, DIGITAL VIDEO/DATA

3600.0000 - 3629.0000 MHz	2M20G1D			BPSK SPREAD SPECTRUM DATA (NAVIGATION)
ANTENNA ID: 23A-C-TT&C	10.4 meters	PHILCO FORD		10.4M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 23B-L-BAND	1.8 meters	TRUE FOCUS		1.8M
1626.5000 - 1660.5000 MHz	NON	27.20 dBW		UNMODULATED AFC PILOT (CLOSE LOOP)
1574.4000 - 1576.6000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON			UNMODULATED AFC PILOT
1525.0000 - 1559.0000 MHz	34K0F3E			TEST FM TELEPHONY COMPANDED AND UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	24K0G1W			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W			TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F			TEST QPSK, DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: SBY30/VER	9 meters	VERTEX		9KPK
14000.0000 - 14500.0000 MHz	36M0G7W	72.00 dBW		QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW		ANALOG VIDEO

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14000.0000 - 14500.0000 MHz	36M0G7W	77.23 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
13780.0000 - 14500.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13780.0000 - 14500.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	72M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0F8W		ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W		QPSK DIGITAL DATA

11450.0000 - 11700.0000 MHz	2M29G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	1M60G1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	200KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	100KG7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
10700.0000 - 12750.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
13750.0000 - 14000.0000 MHz	36M0G7W	74.50 dBW	QPSK, DIGITAL TELEPHONY

SITE ID: Ku-Band ESV Remotes  
LOCATION: Operate Up to 400 (1.5 m remotes) U.S. and International waters

ANTENNA ID: SeaTel6006 1.5 meters SEATEL 6006

10950.0000 - 11200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION

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11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M43G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	2M35G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	40.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	43.00 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
10950.0000 - 11200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	151KG7W	45.30 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	194KG7W	46.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	291KG7W	48.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	388KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	445KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

14000.0000 - 14500.0000 MHz	452KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	81K0G7W	42.50 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	97K0G7W	43.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

SITE ID: S.BURY-SBY 30/VERTEX  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHURY, CT  
41 ° 27 ' 5.00 " N LAT. 73 ° 17 ' 19.00 " W LONG.

SITE ID: Kuband ESV 4003A  
LOCATION: Operate up to 250 (1.0 m Remotes) U.S. and International waters

ANTENNA ID: 4003A	1 meters	SEATEL	4003A
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	34.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	538KG1W	45.20 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	37.40 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	227KG7W	41.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION

14000.0000 - 14500.0000 MHz	340KG7W	43.20 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	378KG7W	43.60 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	454KG7W	44.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	908KG7W	45.80 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M40G7W	45.80 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	316KG7W	42.80 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	607KG7W	45.70 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION

SITE ID: Kuband ESV 4006  
LOCATION: Operate up to 250 (1.0 m Remotes) U.S. and International waters

ANTENNA ID: 4006                      1 meters                      SEATEL                      4006

10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION



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11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	34.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	46.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	37.40 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	227KG7W	41.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	340KG7W	43.20 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	378KG7W	43.60 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	454KG7W	44.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	908KG7W	47.40 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M40G7W	47.40 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	316KG7W	42.80 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION

14000.0000 - 14500.0000 MHz	607KG7W	45.70 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
SITE ID: Kuband ESV 4996T			
LOCATION: Operate up to 50 (1.2 m Remotes) U.S. and International waters			
ANTENNA ID: 4996T	1.2 meters	SEATEL	4996T
10950.0000 - 11200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M43G1W	51.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	36.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	48.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	39.10 dBW	SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 1220.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION

**Points of Communication:**

Kuband ESV 4003A - ALSAT - (ALSAT)

Kuband ESV 4003A - ESTRELA DO SUL 1 - (63 W.L.)

Kuband ESV 4006 - ALSAT - (ALSAT)

Kuband ESV 4006 - ESTRELA DO SUL 1 - (63 W.L.)



6424.0000 - 6454.0000 MHz	34K0F3E	62.00 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	51.10 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	62.00 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	51.10 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	62.00 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W	54.80 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	61.10 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	54.80 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	61.10 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	63.30 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	62.00 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	62.00 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	53.30 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED AND UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-		BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA

3600.0000 - 3629.0000 MHz	5K60G1W-			QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W			QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-			QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E			QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W			16QAM, DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F			QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D			BPSK SPREAD SPECTRUM DATA - NAVIGATION CLOSE LOOP
ANTENNA ID: 21-C-TT&C	12.8 meters	PHILCO FORD		12.8M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW		ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 21- L-BAND	12.8 meters	PHILCO FORD		12.8M
1626.5000 - 1660.5000 MHz	NON	40.50 dBW		UNMODULATED AFC PILOT (CLOSE LOOP)
1626.5000 - 1660.5000 MHz	34K0F3E	36.00 dBW		TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1626.5000 - 1660.5000 MHz	2K40G7D-	36.00 dBW		TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	132KG7D	36.00 dBW		TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	2K40G1D-	36.00 dBW		TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	2M20G1D	36.00 dBW		TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	5K60G1W-	36.00 dBW		TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	2K40G1W	36.00 dBW		TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	5K60G1E-	36.00 dBW		TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	24K0G1E	36.00 dBW		TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	40K0G1W	48.20 dBW		TEST 16QAM DIGITAL TELEPHONY
1626.5000 - 1660.5000 MHz	400KG1F	36.00 dBW		TEST QPSK DIGITAL VIDEO/DATA
1574.4000 - 1576.6000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON			UNMODULATED AFC PILOT (CLOSE LOOP)

1525.0000 - 1559.0000 MHz	34K0F3E			TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	2K40G1W			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W			TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F			TEST QPSK DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: 23A-C-NOR	10.4 meters	PHILCO FORD		10.4M
6454.4000 - 6456.6000 MHz	2M20G1D	73.50 dBW		BPSK SPREAD SPECTRUM DATA (NAVIGATION)
6424.0000 - 6454.0000 MHz	NON	59.50 dBW		UNMODULATED AFC PILOT
6424.0000 - 6454.0000 MHz	34K0F3E	59.50 dBW		FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	48.60 dBW		BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	59.50 dBW		BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	48.60 dBW		BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	71.70 dBW		BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W-	52.30 dBW		QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	58.60 dBW		QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	52.30 dBW		QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	58.60 dBW		QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	60.80 dBW		16QAM DIGITAL TELEPHONY

6424.0000 - 6454.0000 MHz	400KG1F	59.50 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	59.50 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	50.80 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED ANAD UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-		BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W		16QAM DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F		QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK SPREAD SPECTRUM DATA (NAVIGATION)
ANTENNA ID: 23A-C-TT&C	10.4 meters	PHILCO FORD	104.M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 23B-L-BAND	1.8 meters	TRUE FOCUS	1.8M
1626.5000 - 1660.5000 MHz	NON	27.20 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP

1525.0000 - 1559.0000 MHz	NON			UNMODULATED AFC PILOT
1525.0000 - 1559.0000 MHz	34K0F3E			TEST FM TELEPHONY COMPANDED AND UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	24K0G1W			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W			TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F			TEST QPSK, DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: SBY 30	9 meters	VERTEX		9KPK
14000.0000 - 14500.0000 MHz	36M0G7W	72.00 dBW		QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW		ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W	77.23 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO



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14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
13780.0000 - 14500.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13780.0000 - 14500.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 14000.0000 MHz	36M0G7W	74.50 dBW	QPSK, DIGITAL TELEPHONY
13750.0000 - 13770.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	72M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0F8W		ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	2M29G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	1M60G1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO

11450.0000 - 11700.0000 MHz	200KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	100KG7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
10700.0000 - 12750.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
ANTENNA ID: KU-BAND	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	36M0G7W	72.00 dBW	QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	72M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0F8W		ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W	77.23 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	2M29G7W		QPSK DIGITAL DATA

14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	1M60G1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	200KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	100KG7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W		QPSK DIGITAL DATA
13750.0000 - 14500.0000 MHz	36M0G7W	88.55 dBW	QPSK, DIGITAL TELEPHONY
11700.0000 - 12200.0000 MHz	100KG7W		
11700.0000 - 12200.0000 MHz	1M60G7W		
11700.0000 - 12200.0000 MHz	200KG1F		
11700.0000 - 12200.0000 MHz	20M0G7W		

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11700.0000 - 12200.0000 MHz	2M29G7W		
11700.0000 - 12200.0000 MHz	32K0G7W		
11700.0000 - 12200.0000 MHz	36M0G8W		
11700.0000 - 12200.0000 MHz	36M0G7W		
11700.0000 - 12200.0000 MHz	400KG1F		
11700.0000 - 12200.0000 MHz	42M0G7W		
11700.0000 - 12200.0000 MHz	43K8G7W		
11700.0000 - 12200.0000 MHz	45K0G7W		
11700.0000 - 12200.0000 MHz	72M0G7W		
11700.0000 - 12200.0000 MHz	76K8G7W		
11700.0000 - 12200.0000 MHz	9K00G7W		
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0G7W	85.64 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO

14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11700.0000 - 12200.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
SITE ID: Ku-Band ESV Remotes			
LOCATION: Operate Up to 400 (1.5 m remotes) U.S. and International waters			
ANTENNA ID: SeaTel6006	1.5 meters	SEATEL	6006
10950.0000 - 11200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M43G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	2M35G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	40.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION

14000.0000 - 14500.0000 MHz	89K6G1W	43.00 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
10950.0000 - 11200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	151KG7W	45.30 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	194KG7W	46.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	291KG7W	48.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	388KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	445KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	452KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	81K0G7W	42.50 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	97K0G7W	43.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

SITE ID: SOUTHBURY-KU  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT  
41 ° 27 ' 5.00 " N LAT. 73 ° 17 ' 19.00 " W LONG.

SITE ID: C-band ESV Remotes  
LOCATION: Operate up to 300 (2.4m Remotes) U.S. and International waters

ANTENNA ID: SeaTel9707 2.4 meters SEATEL 9707

3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	57.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
ANTENNA ID: SeaTel9797	2.4 meters	SEATEL	9797
3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	58.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

**Points of Communication:**

C-band ESV Remotes - NSS-7 - (338.5 E.L.)

Ku-Band ESV Remotes - ALSAT - (ALSAT)

Ku-Band ESV Remotes - ESTRELA DO SUL 1 - (63 W.L.)

SOUTHBURY - ALSAT - (ALSAT)

SOUTHBURY - AMAZONAS 1 - (61 W.L.)



SOUTHBURY - AMOS-2 - (4.0 W.L.)

SOUTHBURY - ESTRELA DO SUL 1 - (63 W.L.)

SOUTHBURY - INMARSAT 4F2 - (52.75)

SOUTHBURY - INMARSAT Ltd-3 - (15.5 W.L.)

SOUTHBURY - INMARSAT Ltd-3 - (54 W.L.)

SOUTHBURY - INMARSAT-2 AOR-WEST - (98 W.L.)

SOUTHBURY - MARISAT-F2 - (33.9 W.L.)

SOUTHBURY-KU - ALSAT - (ALSAT)

SOUTHBURY-KU - AMOS-2 - (4.0 W.L.)

**SES-AFS-20081029-01420** E WB36 Vizada, Inc.

Amendment

Grant of Authority

Date Effective: 03/24/2009

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Earth Stations on-board Vessels, Fixed Satellite Service, Mobile Satellite Service

**SITE ID:** SOUTHBURY

**LOCATION:** 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT

41 ° 27 ' 5.30 " N LAT.

73 ° 17 ' 19.40 " W LONG.

ANTENNA ID:	21-C-NORM	12.8 meters	PHILCO FORD	12.8M
6424.0000 - 6454.0000 MHz		NON	62.00 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
6424.0000 - 6454.0000 MHz		34K0F3E	62.00 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz		2K40G7D-	51.10 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz		132KG7D	62.00 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz		2K40G1D-	51.10 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz		2M20G1D	62.00 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz		5K60G1W	54.80 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz		24K0G1W	61.10 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz		5K60G1E-	54.80 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz		24K0G1E	61.10 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz		40K0G1W	63.30 dBW	16QAM DIGITAL TELEPHONY

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6424.0000 - 6454.0000 MHz	400KG1F	62.00 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	62.00 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	53.30 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED AND UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-		BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W		16QAM, DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F		QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK SPREAD SPECTRUM DATA - NAVIGATION CLOSE LOOP
3600.0000 - 3629.0000 MHz	100KG1X		DIGITAL DATA
3600.0000 - 3629.0000 MHz	10K0G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D		DIGITAL DATA

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3600.0000 - 3629.0000 MHz	20K0G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X		DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	34K0G7D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1W		DIGITAL DATA
6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA

	6425.0000 - 6454.0000 MHz		7K50G1W	58.40 dBW	DIGITAL DATA
ANTENNA ID:	21-C-TT&C	12.8 meters	PHILCO FORD		12.8M
	5925.0000 - 6425.0000 MHz		36M0F8W	86.50 dBW	ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID:	21- L-BAND	12.8 meters	PHILCO FORD		12.8M
	1626.5000 - 1660.5000 MHz		NON	40.50 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
	1626.5000 - 1660.5000 MHz		34K0F3E	36.00 dBW	TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
	1626.5000 - 1660.5000 MHz		2K40G7D-	36.00 dBW	TEST BPSK, DATA/TDM
	1626.5000 - 1660.5000 MHz		132KG7D	36.00 dBW	TEST BPSK, DATA/TDM
	1626.5000 - 1660.5000 MHz		2K40G1D-	36.00 dBW	TEST BPSK, DATA
	1626.5000 - 1660.5000 MHz		2M20G1D	36.00 dBW	TEST BPSK, DATA
	1626.5000 - 1660.5000 MHz		5K60G1W-	36.00 dBW	TEST QPSK, DATA/FAX
	1626.5000 - 1660.5000 MHz		2K40G1W	36.00 dBW	TEST QPSK, DATA/FAX
	1626.5000 - 1660.5000 MHz		5K60G1E-	36.00 dBW	TEST QPSK, TELEPHONY
	1626.5000 - 1660.5000 MHz		24K0G1E	36.00 dBW	TEST QPSK, TELEPHONY
	1626.5000 - 1660.5000 MHz		40K0G1W	48.20 dBW	TEST 16QAM DIGITAL TELEPHONY
	1626.5000 - 1660.5000 MHz		400KG1F	36.00 dBW	TEST QPSK DIGITAL VIDEO/DATA
	1574.4000 - 1576.6000 MHz		2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
	1525.0000 - 1559.0000 MHz		NON		UNMODULATED AFC PILOT (CLOSE LOOP)
	1525.0000 - 1559.0000 MHz		34K0F3E		TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
	1525.0000 - 1559.0000 MHz		2K40G7D-		TEST BPSK, DATA/TDM
	1525.0000 - 1559.0000 MHz		132KG7D		TEST BPSK, DATA/TDM
	1525.0000 - 1559.0000 MHz		2K40G1D-		TEST BPSK, DATA
	1525.0000 - 1559.0000 MHz		2M20G1D		TEST BPSK, DATA
	1525.0000 - 1559.0000 MHz		5K60G1W-		TEST QPSK, DATA/FAX

1525.0000 - 1559.0000 MHz	2K40G1W			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W			TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F			TEST QPSK DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: 23A-C-NOR	10.4 meters	PHILCO FORD		10.4M
6454.4000 - 6456.6000 MHz	2M20G1D	73.50 dBW		BPSK SPREAD SPECTRUM DATA (NAVIGATION)
6424.0000 - 6454.0000 MHz	NON	59.50 dBW		UNMODULATED AFC PILOT
6424.0000 - 6454.0000 MHz	34K0F3E	59.50 dBW		FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	48.60 dBW		BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	59.50 dBW		BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	48.60 dBW		BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	71.70 dBW		BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W-	52.30 dBW		QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	58.60 dBW		QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	52.30 dBW		QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	58.60 dBW		QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	60.80 dBW		16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	59.50 dBW		QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	59.50 dBW		FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	50.80 dBW		TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D			PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W			TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE

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3600.0000 - 3629.0000 MHz	NON	UNMODULATED AFC PILOT
3600.0000 - 3629.0000 MHz	34K0F3E	FM TELEPHONY COMPANDED ANAD UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-	BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W	16QAM DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F	QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
3600.0000 - 3629.0000 MHz	10K0G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	45K0G7D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D	DIGITAL DATA

3600.0000 - 3629.0000 MHz	7K50G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	100KG1X		DIGITAL DATA
6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
ANTENNA ID: 23A-C-TT&C	10.4 meters	PHILCO FORD	10.4M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 23B-L-BAND	1.8 meters	TRUE FOCUS	1.8M
1626.5000 - 1660.5000 MHz	NON	27.20 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT

1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM TELEPHONY COMPANDED AND UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	24K0G1W		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK, DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: SBY30/VER	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	36M0G7W	72.00 dBW	QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W	77.23 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO



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14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
13780.0000 - 14500.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13780.0000 - 14500.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	72M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0F8W		ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	2M29G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	1M60G1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	200KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	100KG7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W		QPSK DIGITAL DATA

11450.0000 - 11700.0000 MHz	43K8G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
10700.0000 - 12750.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
13750.0000 - 14000.0000 MHz	36M0G7W	74.50 dBW	QPSK, DIGITAL TELEPHONY

SITE ID: Ku-Band ESV Remotes  
LOCATION: Operate Up to 400 (1.5 m remotes) U.S. and International waters

ANTENNA ID:	SeaTel6006	1.5 meters	SEATEL	6006
10950.0000 - 11200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION	
10950.0000 - 11200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION	
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION	
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION	
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	1M43G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION	

14000.0000 - 14500.0000 MHz	2M35G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	40.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	43.00 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
10950.0000 - 11200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	151KG7W	45.30 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	194KG7W	46.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	291KG7W	48.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	388KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	445KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	452KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	81K0G7W	42.50 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	97K0G7W	43.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

SITE ID: S.BURY-SBY 30/VERTEX  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT  
41 ° 27 ' 5.00 " N LAT. 73 ° 17 ' 19.00 " W LONG.

SITE ID: Kuband ESV 4003A  
LOCATION: Operate up to 250 (1.0 m Remotes) U.S. and International waters

ANTENNA ID: 4003A 1 meters SEATEL 4003A

10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	34.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	538KG1W	45.20 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	37.40 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	227KG7W	41.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	340KG7W	43.20 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	378KG7W	43.60 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	454KG7W	44.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	908KG7W	45.80 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION

10950.0000 - 11200.0000 MHz	54M0G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M40G7W	45.80 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	316KG7W	42.80 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	607KG7W	45.70 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION

SITE ID: Kuband ESV 4006  
LOCATION: Operate up to 250 (1.0 m Remotes) U.S. and International waters

ANTENNA ID: 4006      1 meters      SEATEL      4006

10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	34.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	46.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	37.40 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION

11450.0000 - 12200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	227KG7W	41.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	340KG7W	43.20 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	378KG7W	43.60 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	454KG7W	44.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	908KG7W	47.40 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M40G7W	47.40 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	316KG7W	42.80 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	607KG7W	45.70 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION

SITE ID: Kuband ESV 4996T  
LOCATION: Operate up to 50 (1.2 m Remotes) U.S. and International waters

ANTENNA ID: 4996T      1.2 meters      SEATEL      4996T

10950.0000 - 11200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION

10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M43G1W	51.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	36.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	48.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	39.10 dBW	SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 1220.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION

**Points of Communication:**

- Kuband ESV 4003A - ALSAT - (ALSAT)
- Kuband ESV 4003A - ESTRELA DO SUL 1 - (63 W.L.)
- Kuband ESV 4006 - ALSAT - (ALSAT)
- Kuband ESV 4006 - ESTRELA DO SUL 1 - (63 W.L.)
- Kuband ESV 4996T - ALSAT - (ALSAT)
- Kuband ESV 4996T - ESTRELA DO SUL 1 - (63 W.L.)
- Ku-Band ESV Remotes - ALSAT - (ALSAT)
- Ku-Band ESV Remotes - ESTRELA DO SUL 1 - (63 W.L.)
- S.BURY-SBY 30/VERTEX - ALSAT - (ALSAT)
- S.BURY-SBY 30/VERTEX - AMAZONAS 1 - (61 W.L.)
- S.BURY-SBY 30/VERTEX - AMOS-2 - (4.0 W.L.)
- S.BURY-SBY 30/VERTEX - ESTRELA DO SUL 1 - (63 W.L.)
- SOUTHBURY - ALSAT - (ALSAT)

SOUTHBURY - AMAZONAS 1 - (61 W.L.)

SOUTHBURY - AMOS-2 - (4.0 W.L.)

SOUTHBURY - ESTRELA DO SUL 1 - (63 W.L.)

SOUTHBURY - INMARSAT 4F2 - (52.75)

SOUTHBURY - INMARSAT 4F3 - (98 W.L.)

SOUTHBURY - INMARSAT Ltd-3 - (15.5 W.L.)

SOUTHBURY - INMARSAT Ltd-3 - (54 W.L.)

SOUTHBURY - INMARSAT-2 AOR-WEST - (98 W.L.)

SOUTHBURY - ISAT List -

SOUTHBURY - MARISAT-F2 - (33.9 W.L.)

**SES-AFS-20090122-00058** E WB36 Vizada, Inc.

Amendment

Grant of Authority

Date Effective: 03/24/2009

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Earth Stations on-board Vessels, Fixed Satellite Service, Mobile Satellite Service, Other

**SITE ID:** SOUTHBURY

**LOCATION:** 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT

41 ° 27 ' 5.30 " N LAT.

73 ° 17 ' 19.40 " W LONG.

ANTENNA ID:	21-C-NORM	12.8 meters	PHILCO FORD	12.8M
6454.4000 - 6456.6000 MHz	2M20G1D	80.70 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)	
6424.0000 - 6454.0000 MHz	NON	62.00 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)	
6424.0000 - 6454.0000 MHz	34K0F3E	62.00 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED	
6424.0000 - 6454.0000 MHz	2K40G7D-	51.10 dBW	BPSK, DATA/TDM	
6424.0000 - 6454.0000 MHz	132KG7D	62.00 dBW	BPSK, DATA/TDM	
6424.0000 - 6454.0000 MHz	2K40G1D-	51.10 dBW	BPSK, DATA	
6424.0000 - 6454.0000 MHz	2M20G1D	62.00 dBW	BPSK, DATA	
6424.0000 - 6454.0000 MHz	5K60G1W	54.80 dBW	QPSK, DATA/FAX	
6424.0000 - 6454.0000 MHz	24K0G1W	61.10 dBW	QPSK, DATA/FAX	



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6424.0000 - 6454.0000 MHz	5K60G1E-	54.80 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	61.10 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	63.30 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	62.00 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	62.00 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	53.30 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED AND UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-		BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W		16QAM, DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F		QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK SPREAD SPECTRUM DATA - NAVIGATION CLOSE LOOP

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

6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
ANTENNA ID: 21-C-TT&C	12.8 meters	PHILCO FORD	12.8M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 21- L-BAND	12.8 meters	PHILCO FORD	12.8M
1626.5000 - 1660.5000 MHz	NON	40.50 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
1626.5000 - 1660.5000 MHz	34K0F3E	36.00 dBW	TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1626.5000 - 1660.5000 MHz	2K40G7D-	36.00 dBW	TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	132KG7D	36.00 dBW	TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	2K40G1D-	36.00 dBW	TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	2M20G1D	36.00 dBW	TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	5K60G1W-	36.00 dBW	TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	2K40G1W	36.00 dBW	TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	5K60G1E-	36.00 dBW	TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	24K0G1E	36.00 dBW	TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	40K0G1W	48.20 dBW	TEST 16QAM DIGITAL TELEPHONY
1626.5000 - 1660.5000 MHz	400KG1F	36.00 dBW	TEST QPSK DIGITAL VIDEO/DATA
1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D		TEST BPSK, DATA/TDM

1525.0000 - 1559.0000 MHz	2K40G1D-		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	2K40G1W		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: 23A-C-NOR	10.4 meters	PHILCO FORD	10.4M
6454.4000 - 6456.6000 MHz	2M20G1D	73.50 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
6424.0000 - 6454.0000 MHz	NON	59.50 dBW	UNMODULATED AFC PILOT
6424.0000 - 6454.0000 MHz	34K0F3E	59.50 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	48.60 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	59.50 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	48.60 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	71.70 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W-	52.30 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	58.60 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	52.30 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	58.60 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	60.80 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	59.50 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	59.50 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	50.80 dBW	TT&C RANGING CARRIER

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3947.0000 - 3953.0000 MHz	131KG2D	PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON	UNMODULATED AFC PILOT
3600.0000 - 3629.0000 MHz	34K0F3E	FM TELEPHONY COMPANDED ANAD UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-	BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W	16QAM DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F	QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
3600.0000 - 3629.0000 MHz	10K0G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	45K0G7D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E	DIGITAL DATA

3600.0000 - 3629.0000 MHz	5K00G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	100KG1X		DIGITAL DATA
6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
ANTENNA ID: 23A-C-TT&C	10.4 meters	PHILCO FORD	104.M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 23B-L-BAND	1.8 meters	TRUE FOCUS	1.8M
1626.5000 - 1660.5000 MHz	NON	27.20 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)

1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT
1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM TELEPHONY COMPANDED AND UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	24K0G1W		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK, DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: SBY 30	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	36M0G7W	72.00 dBW	QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W	77.23 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO

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14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
13780.0000 - 14500.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13780.0000 - 14500.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 14000.0000 MHz	36M0G7W	74.50 dBW	QPSK, DIGITAL TELEPHONY
13750.0000 - 13770.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	72M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0F8W		ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	2M29G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	1M60G1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO



11450.0000 - 11700.0000 MHz	400KG1F			PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	200KG1F			PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	100KG7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	10M0G7W			DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	64K0G7W			DIGITAL VIDEO, AUDIO AND DATA
10700.0000 - 12750.0000 MHz	36M0G7W			QPSK, DIGITAL TELEPHONY
ANTENNA ID:	KU-BAND	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	36M0G7W		72.00 dBW	QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	36M0G7W			QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W		88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W		86.31 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	72M0G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W			QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W		80.14 dBW	ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0F8W			ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W		77.23 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0G7W			QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W		83.08 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W			QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W		73.67 dBW	QPSK DIGITAL DATA

11450.0000 - 11700.0000 MHz	2M29G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	1M60G1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	200KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	100KG7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W		QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W		QPSK DIGITAL DATA
13750.0000 - 14500.0000 MHz	36M0G7W	88.55 dBW	QPSK, DIGITAL TELEPHONY
11700.0000 - 12200.0000 MHz	100KG7W		
11700.0000 - 12200.0000 MHz	1M60G7W		
11700.0000 - 12200.0000 MHz	200KG1F		

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11700.0000 - 12200.0000 MHz	20M0G7W		
11700.0000 - 12200.0000 MHz	2M29G7W		
11700.0000 - 12200.0000 MHz	32K0G7W		
11700.0000 - 12200.0000 MHz	36M0G8W		
11700.0000 - 12200.0000 MHz	36M0G7W		
11700.0000 - 12200.0000 MHz	400KG1F		
11700.0000 - 12200.0000 MHz	42M0G7W		
11700.0000 - 12200.0000 MHz	43K8G7W		
11700.0000 - 12200.0000 MHz	45K0G7W		
11700.0000 - 12200.0000 MHz	72M0G7W		
11700.0000 - 12200.0000 MHz	76K8G7W		
11700.0000 - 12200.0000 MHz	9K00G7W		
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0G7W	85.64 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO

14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11700.0000 - 12200.0000 MHz	800KG1F		PSK DIGITAL VIDEO W/ASSOC DIG AUDIO

SITE ID: Ku-Band ESV Remotes  
LOCATION: Operate Up to 400 (1.5 m remotes) U.S. and International waters

ANTENNA ID:	SeaTel6006	1.5 meters	SEATEL	6006
10950.0000 - 11200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION	
10950.0000 - 11200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION	
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION	
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION	
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION	
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	1M43G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	2M35G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	44K8G1W	40.00 dBW	SCPC USING QPSK AND BPSK MODULATION	

14000.0000 - 14500.0000 MHz	717KG1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	43.00 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
10950.0000 - 11200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	151KG7W	45.30 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	194KG7W	46.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	291KG7W	48.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	388KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	445KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	452KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	81K0G7W	42.50 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	97K0G7W	43.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

SITE ID: SOUTHURY-KU  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHURY, CT  
41 ° 27 ' 5.00 " N LAT. 73 ° 17 ' 19.00 " W LONG.

SITE ID: C-band ESV Remotes  
LOCATION: Operate up to 300 (2.4m Remotes) U.S. and International waters

ANTENNA ID: SeaTel9707 2.4 meters SEATEL 9707

3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
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5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	57.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
ANTENNA ID: SeaTel9797	2.4 meters	SEATEL	9797
3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	58.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION

**Points of Communication:**

C-band ESV Remotes - NSS-7 - (338.5 E.L.)

Ku-Band ESV Remotes - ALSAT - (ALSAT)

Ku-Band ESV Remotes - ESTRELA DO SUL 1 - (63 W.L.)

SOUTHBURY - ALSAT - (ALSAT)

SOUTHBURY - AMAZONAS 1 - (61 W.L.)

SOUTHBURY - AMOS-2 - (4.0 W.L.)

SOUTHBURY - ESTRELA DO SUL 1 - (63 W.L.)

SOUTHBURY - INMARSAT 4F2 - (52.75)

SOUTHBURY - INMARSAT 4F3 - (97.65 W.L.)

SOUTHBURY - INMARSAT 4F3 - (98 W.L.)

SOUTHBURY - INMARSAT Ltd-3 - (15.5 W.L.)

SOUTHBURY - INMARSAT Ltd-3 - (54 W.L.)

SOUTHBURY - INMARSAT-2 AOR-WEST - (98 W.L.)

SOUTHBURY - ISAT List -

SOUTHBURY - MARISAT-F2 - (33.9 W.L.)

SOUTHBURY-KU - ALSAT - (ALSAT)

SOUTHBURY-KU - AMOS-2 - (4.0 W.L.)

SES-AMD-20081216-01617 E WB36 Vizada, Inc.

Amendment

Grant of Authority

Date Effective: 03/24/2009

**Class of Station:** Other

**Nature of Service:** Fixed Satellite Service, Other

**SITE ID:** SOUTHBURY

**LOCATION:** 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT

41 ° 27 ' 5.30 " N LAT.

73 ° 17 ' 19.40 " W LONG.

ANTENNA ID:	21-C-NORM	12.8 meters	PHILCO FORD	12.8M
	6454.4000 - 6456.6000 MHz	2M20G1D	80.70 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
	6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW	DIGITAL DATA
	6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW	DIGITAL DATA
	6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW	DIGITAL DATA
	6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW	DIGITAL DATA
	6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW	DIGITAL DATA
	6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW	DIGITAL DATA



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6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
6424.0000 - 6454.0000 MHz	NON	62.00 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
6424.0000 - 6454.0000 MHz	34K0F3E	62.00 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	51.10 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	62.00 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	51.10 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	62.00 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W	54.80 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	61.10 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	54.80 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	61.10 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	63.30 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	62.00 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	62.00 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	53.30 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON

3947.0000 - 3953.0000 MHz	131KG2D	PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3700.0000 - 4200.0000 MHz	36M0F8W	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON	UNMODULATED AFC PILOT (CLOSE LOOP)
3600.0000 - 3629.0000 MHz	34K0F3E	FM TELEPHONY COMPANDED AND UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-	BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W	16QAM, DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F	QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK SPREAD SPECTRUM DATA - NAVIGATION CLOSE LOOP
3600.0000 - 3629.0000 MHz	100KG1X	DIGITAL DATA
3600.0000 - 3629.0000 MHz	10K0G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D	DIGITAL DATA

3600.0000 - 3629.0000 MHz	45K0G7D			DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D			DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E			DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1W			DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W			DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D			DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1E			DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1W			DIGITAL DATA
ANTENNA ID: 21-C-TT&C	12.8 meters	PHILCO FORD		12.8M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW		ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 21- L-BAND	12.8 meters	PHILCO FORD		12.8M
1626.5000 - 1660.5000 MHz	NON	40.50 dBW		UNMODULATED AFC PILOT (CLOSE LOOP)
1626.5000 - 1660.5000 MHz	34K0F3E	36.00 dBW		TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1626.5000 - 1660.5000 MHz	2K40G7D-	36.00 dBW		TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	132KG7D	36.00 dBW		TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	2K40G1D-	36.00 dBW		TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	2M20G1D	36.00 dBW		TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	5K60G1W-	36.00 dBW		TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	2K40G1W	36.00 dBW		TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	5K60G1E-	36.00 dBW		TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	24K0G1E	36.00 dBW		TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	40K0G1W	48.20 dBW		TEST 16QAM DIGITAL TELEPHONY
1626.5000 - 1660.5000 MHz	400KG1F	36.00 dBW		TEST QPSK DIGITAL VIDEO/DATA
1574.4000 - 1576.6000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP

1525.0000 - 1559.0000 MHz	NON			UNMODULATED AFC PILOT (CLOSE LOOP)
1525.0000 - 1559.0000 MHz	34K0F3E			TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132K67D			TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	2K40G1W			TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E			TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W			TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F			TEST QPSK DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D			TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: 23A-C-NOR	10.4 meters	PHILCO FORD		10.4M
6454.4000 - 6456.6000 MHz	2M20G1D	73.50 dBW		BPSK SPREAD SPECTRUM DATA (NAVIGATION)
6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW		DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW		DIGITAL DATA

6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
6424.0000 - 6454.0000 MHz	NON	59.50 dBW	UNMODULATED AFC PILOT
6424.0000 - 6454.0000 MHz	34K0F3E	59.50 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	48.60 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	59.50 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	48.60 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	71.70 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W-	52.30 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	58.60 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	52.30 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	58.60 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	60.80 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	59.50 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	59.50 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	50.80 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED ANAD UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM

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3600.0000 - 3629.0000 MHz	132KG7D	BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-	BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W	QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E	QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W	16QAM DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F	QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
3600.0000 - 3629.0000 MHz	10K0G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	45K0G7D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D	DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1E	DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1W	DIGITAL DATA
3600.0000 - 3629.0000 MHz	100KG1X	DIGITAL DATA

ANTENNA ID: 23A-C-TT&C 10.4 meters PHILCO FORD 104.M

5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 23B-L-BAND	1.8 meters	TRUE FOCUS	1.8M
1626.5000 - 1660.5000 MHz	NON	27.20 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT
1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM TELEPHONY COMPANDED AND UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	24K0G1W		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK, DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: SBY 30	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	36M0G7W	72.00 dBW	QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W	77.23 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA

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14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
13780.0000 - 14500.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13780.0000 - 14500.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 14000.0000 MHz	36M0G7W	74.50 dBW	QPSK, DIGITAL TELEPHONY
13750.0000 - 13770.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	72M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0F8W		ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W		QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	2M29G7W		QPSK DIGITAL DATA



11450.0000 - 11700.0000 MHz	1M60G1F			PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F			PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F			PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	200KG1F			PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	100KG7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W			QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	10M0G7W			DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	64K0G7W			DIGITAL VIDEO, AUDIO AND DATA
10700.0000 - 12750.0000 MHz	36M0G7W			QPSK, DIGITAL TELEPHONY
ANTENNA ID:	KU-BAND	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	36M0G7W		72.00 dBW	QPSK, DIGITAL TELEPHONY
14000.0000 - 14500.0000 MHz	72M0G7W		88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W		86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W		80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W		77.23 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W		83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W		73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F		72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F		69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F		63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO

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14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0G7W	85.64 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
13750.0000 - 14500.0000 MHz	36M0G7W	88.55 dBW	QPSK, DIGITAL TELEPHONY
11700.0000 - 12200.0000 MHz	100KG7W		
11700.0000 - 12200.0000 MHz	1M60G7W		

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11700.0000 - 12200.0000 MHz	200KG1F	
11700.0000 - 12200.0000 MHz	20M0G7W	
11700.0000 - 12200.0000 MHz	2M29G7W	
11700.0000 - 12200.0000 MHz	32K0G7W	
11700.0000 - 12200.0000 MHz	36M0G8W	
11700.0000 - 12200.0000 MHz	36M0G7W	
11700.0000 - 12200.0000 MHz	400KG1F	
11700.0000 - 12200.0000 MHz	42M0G7W	
11700.0000 - 12200.0000 MHz	43K8G7W	
11700.0000 - 12200.0000 MHz	45K0G7W	
11700.0000 - 12200.0000 MHz	72M0G7W	
11700.0000 - 12200.0000 MHz	76K8G7W	
11700.0000 - 12200.0000 MHz	9K00G7W	
11700.0000 - 12200.0000 MHz	800KG1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	36M0G7W	QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	72M0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	42M0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0F8W	ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	2M29G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	1M60G1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO

11450.0000 - 11700.0000 MHz	200KG1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	100KG7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W	QPSK DIGITAL DATA

SITE ID: Ku-Band ESV Remotes  
LOCATION: Operate Up to 400 (1.5 m remotes) U.S. and International waters

ANTENNA ID:	SeaTel6006	1.5 meters	SEATEL	6006
14000.0000 - 14500.0000 MHz	1M43G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	2M35G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	44K8G1W	40.00 dBW	SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	717KG1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	89K6G1W	43.00 dBW	SCPC USING QPSK AND BPSK MODULATION	
14000.0000 - 14500.0000 MHz	151KG7W	45.30 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS	
14000.0000 - 14500.0000 MHz	194KG7W	46.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS	
14000.0000 - 14500.0000 MHz	291KG7W	48.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS	
14000.0000 - 14500.0000 MHz	388KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS	
14000.0000 - 14500.0000 MHz	445KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS	
14000.0000 - 14500.0000 MHz	452KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS	
14000.0000 - 14500.0000 MHz	81K0G7W	42.50 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS	

14000.0000 - 14500.0000 MHz	97K0G7W	43.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
10950.0000 - 11200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
10950.0000 - 11200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

SITE ID: SOUTHBURY-KU  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT  
41 ° 27 ' 5.00 " N LAT. 73 ° 17 ' 19.00 " W LONG.

SITE ID: C-band ESV Remotes  
LOCATION: Operate up to 300 (2.4m Remotes) U.S. and International waters

ANTENNA ID: SeaTel9707 2.4 meters SEATEL 9707

5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
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5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	57.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
ANTENNA ID: SeaTel9797	2.4 meters	SEATEL	9797
5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION

5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	58.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8QAM; PSK, QPSK OR BPSK MODULATION

**Points of Communication:**

- C-band ESV Remotes - ALSAT - (ALSAT)
- C-band ESV Remotes - NSS-7 - (338.5 E.L.)
- Ku-Band ESV Remotes - ALSAT - (ALSAT)

Ku-Band ESV Remotes - ESTRELA DO SUL 1 - (63 W.L.)

SOUTHBURY - ALSAT - (ALSAT)

SOUTHBURY - AMAZONAS 1 - (61 W.L.)

SOUTHBURY - AMOS-2 - (4.0 W.L.)

SOUTHBURY - ESTRELA DO SUL 1 - (63 W.L.)

SOUTHBURY - INMARSAT 4F2 - (52.75)

SOUTHBURY - INMARSAT 4F3 - (97.65 W.L.)

SOUTHBURY - INMARSAT 4F3 - (98 W.L.)

SOUTHBURY - INMARSAT Ltd-3 - (15.5 W.L.)

SOUTHBURY - INMARSAT Ltd-3 - (54 W.L.)

SOUTHBURY - INMARSAT-2 AOR-WEST - (98 W.L.)

SOUTHBURY - ISAT List -

SOUTHBURY - MARISAT-F2 - (33.9 W.L.)

SOUTHBURY-KU - ALSAT - (ALSAT)

SOUTHBURY-KU - AMOS-2 - (4.0 W.L.)

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**SES-LIC-20090205-00147**    E E090024    DIRECTV Enterprises, LLC

Application for Authority

03/23/2009 - 03/23/2024

Grant of Authority

Date Effective: 03/23/2009

**Class of Station:**        Fixed Earth Stations

**Nature of Service:**     Direct to Home Fixed Satellite, Fixed Satellite Service

**SITE ID:**                CBC

**LOCATION:**              3800 Via Oro Ave., Los Angeles, Long Beach, CA

33 ° 49 ' 44.30 " N LAT.

118 ° 12 ' 42.90 " W LONG.

ANTENNA ID:	LBKA4	9.2 meters	Vertex RSI	9mKa-01-00
	18300.0000 - 18800.0000 MHz	36M0G7W	0.00 dBW	Modulation and Services PSK MOD Digital Video/Audio
	19700.0000 - 20200.0000 MHz	36M0G7W	0.00 dBW	Modulation and Services PSK MOD Digital Video/Audio
	28350.0000 - 28600.0000 MHz	36M0G7W	69.50 dBW	Modulation and Services PSK MOD Digital Video/Audio
	29250.0000 - 30000.0000 MHz	36M0G7W	69.50 dBW	Modulation and Services PSK MOD Digital Video/Audio

**Points of Communication:**



CBC - DIRECTV 10 - (102.8 W.L.)

CBC - DIRECTV 11 - (99.2 W.L.)

CBC - DIRECTV 8 (K) - (101 W.L.)

CBC - DIRECTV 9S - (101 W.L.)

CBC - SPACEWAY 1 - (103 W.L.)

CBC - SPACEWAY 2 - (99 W.L.)

**SES-LIC-20090205-00148** E E090025 DIRECTV Enterprises, LLC

Application for Authority

03/23/2009 - 03/23/2024

Grant of Authority

Date Effective: 03/23/2009

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Direct to Home Fixed Satellite, Fixed Satellite Service

**SITE ID:** LABC

**LOCATION:** 12800 Culver Boulevard, Los Angeles, Los Angeles, CA

33 ° 58 ' 59.20 " N LAT.

118 ° 25 ' 26.00 " W LONG.

<b>ANTENNA ID:</b> LKA16	9.2 meters	Vertex RSI	9mKa-01-00
18300.0000 - 18800.0000 MHz	36M0G7W	0.00 dBW	Modulation and Services PSK MOD Digital Video/Audio
19700.0000 - 20200.0000 MHz	36M0G7W	0.00 dBW	Modulation and Services PSK MOD Digital Video/Audio
28350.0000 - 28600.0000 MHz	36M0G7W	69.50 dBW	Modulation and Services PSK MOD Digital Video/Audio
29250.0000 - 30000.0000 MHz	36M0G7W	69.50 dBW	Modulation and Services PSK MOD Digital Video/Audio

**Points of Communication:**

LABC - DIRECTV 10 - (102.8 W.L.)

LABC - DIRECTV 11 - (99.2 W.L.)

LABC - DIRECTV 8 (K) - (101 W.L.)

LABC - DIRECTV 9S - (101 W.L.)

LABC - SPACEWAY 1 - (103 W.L.)

LABC - SPACEWAY 2 - (99 W.L.)

**SES-LIC-20090211-00168** E E090028 OSHKOSH SPECIALTY VEHICLES, INC.

Application for Authority

03/23/2009 - 03/23/2024

Grant of Authority

Date Effective: 03/23/2009

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

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**Nature of Service:** Fixed Satellite Service

SITE ID: TRUCK 1  
LOCATION: VARIOUS

ANTENNA ID:	1	2.4 meters	VERTEXRSI	2.4 DMK	
	14000.0000 - 14500.0000 MHz		36M0G7W	74.34 dBW	COMPRESSED DIGITAL VIDEO AND AUDIO
	14000.0000 - 14500.0000 MHz		36M0F8W	75.79 dBW	ANALOG VIDEO WITH AUDIO AND ATIS SUBCARRIERS

**Points of Communication:**

TRUCK 1 - ALSAT - (ALSAT)

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**SES-LIC-20090213-00183** E E090031 TRIBUNE TELEVISION NEW ORLEANS, INC.  
Application for Authority 03/23/2009 - 03/23/2024  
Grant of Authority Date Effective: 03/23/2009

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

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
LOCATION: WGNO SNG TRUCK, TRANSPORTABLE

ANTENNA ID:	T1	1.2 meters	MOTOSAT	1.2M.	
	14000.0000 - 14500.0000 MHz		2M00G7W	56.00 dBW	DIGITAL VIDEO AND AUDIO
	14000.0000 - 14500.0000 MHz		36M0G7W	64.00 dBW	DIGITAL VIDEO AND AUDIO

**Points of Communication:**

1 - ALSAT - (ALSAT)

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**SES-MFS-20080606-00715** E WB36 Vizada, Inc.  
Modification 10/22/2001 - 10/22/2011  
Grant of Authority Date Effective: 03/24/2009

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Earth Stations on-board Vessels, Fixed Satellite Service, Mobile Satellite Service

SITE ID: SOUTHBURY  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHBURY, CT  
41 ° 27 ' 5.30 " N LAT. 73 ° 17 ' 19.40 " W LONG.

ANTENNA ID:	21-C-NORM	12.8 meters	PHILCO FORD	12.8M	
	6454.4000 - 6456.6000 MHz		2M20G1D	80.70 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)

6424.0000 - 6454.0000 MHz	NON	62.00 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
6424.0000 - 6454.0000 MHz	34K0F3E	62.00 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	51.10 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	62.00 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	51.10 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	2M20G1D	62.00 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W	54.80 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	61.10 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	54.80 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	61.10 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	63.30 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	62.00 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	62.00 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	53.30 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED AND UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D		BPSK, DATA/TDM

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3600.0000 - 3629.0000 MHz	2K40G1D-		BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W		16QAM, DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F		QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK SPREAD SPECTRUM DATA - NAVIGATION CLOSE LOOP
3600.0000 - 3629.0000 MHz	100KG1X		DIGITAL DATA
3600.0000 - 3629.0000 MHz	10K0G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	17K5G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	20K0G1X		DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50F1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	2K50G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	45K0G7D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	5K00G1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	60K0D1W		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1D		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1E		DIGITAL DATA
3600.0000 - 3629.0000 MHz	7K50G1W		DIGITAL DATA
6425.0000 - 6454.0000 MHz	100KG1X	60.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	10K0G1W	59.70 dBW	DIGITAL DATA

6425.0000 - 6454.0000 MHz	10K0G1X	61.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	17K5G1D	61.40 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	20K0G1E	56.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50F1D	58.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	2K50G1D	65.70 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	45K0G7D	66.00 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1D	61.80 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1E	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	5K00G1W	51.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
ANTENNA ID: 21-C-TT&C	12.8 meters	PHILCO FORD	12.8M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 21- L-BAND	12.8 meters	PHILCO FORD	12.8M
1626.5000 - 1660.5000 MHz	NON	40.50 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
1626.5000 - 1660.5000 MHz	34K0F3E	36.00 dBW	TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1626.5000 - 1660.5000 MHz	2K40G7D-	36.00 dBW	TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	132KG7D	36.00 dBW	TEST BPSK, DATA/TDM
1626.5000 - 1660.5000 MHz	2K40G1D-	36.00 dBW	TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	2M20G1D	36.00 dBW	TEST BPSK, DATA
1626.5000 - 1660.5000 MHz	5K60G1W-	36.00 dBW	TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	2K40G1W	36.00 dBW	TEST QPSK, DATA/FAX
1626.5000 - 1660.5000 MHz	5K60G1E-	36.00 dBW	TEST QPSK, TELEPHONY

1626.5000 - 1660.5000 MHz	24K0G1E	36.00 dBW	TEST QPSK, TELEPHONY
1626.5000 - 1660.5000 MHz	40K0G1W	48.20 dBW	TEST 16QAM DIGITAL TELEPHONY
1626.5000 - 1660.5000 MHz	400KG1F	36.00 dBW	TEST QPSK DIGITAL VIDEO/DATA
1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT (CLOSE LOOP)
1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM, TELEPHONY COMPANDED OR UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	2K40G1W		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: 23A-C-NOR	10.4 meters	PHILCO FORD	10.4M
6454.4000 - 6456.6000 MHz	2M20G1D	73.50 dBW	BPSK SPREAD SPECTRUM DATA (NAVIGATION)
6424.0000 - 6454.0000 MHz	NON	59.50 dBW	UNMODULATED AFC PILOT
6424.0000 - 6454.0000 MHz	34K0F3E	59.50 dBW	FM TELEPHONY COMPANDED AND UNCOMPANDED
6424.0000 - 6454.0000 MHz	2K40G7D-	48.60 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	132KG7D	59.50 dBW	BPSK, DATA/TDM
6424.0000 - 6454.0000 MHz	2K40G1D-	48.60 dBW	BPSK, DATA

6424.0000 - 6454.0000 MHz	2M20G1D	71.70 dBW	BPSK, DATA
6424.0000 - 6454.0000 MHz	5K60G1W-	52.30 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	24K0G1W	58.60 dBW	QPSK, DATA/FAX
6424.0000 - 6454.0000 MHz	5K60G1E-	52.30 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	24K0G1E	58.60 dBW	QPSK, TELEPHONY
6424.0000 - 6454.0000 MHz	40K0G1W	60.80 dBW	16QAM DIGITAL TELEPHONY
6424.0000 - 6454.0000 MHz	400KG1F	59.50 dBW	QPSK, DIGITAL VIDEO/DATA
6424.0000 - 6454.0000 MHz	27K0F3W	59.50 dBW	FM9 ANALOG BROADCAST CARRIER
5927.0000 - 5927.0000 MHz	NON	50.80 dBW	TT&C RANGING CARRIER
3947.0000 - 3953.0000 MHz	131KG2D		PCM/PSK/BI-PHASE TRACKING BEACON
3700.0000 - 4200.0000 MHz	36M0F8W		TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
3600.0000 - 3629.0000 MHz	NON		UNMODULATED AFC PILOT
3600.0000 - 3629.0000 MHz	34K0F3E		FM TELEPHONY COMPANDED ANAD UNCOMPANDED
3600.0000 - 3629.0000 MHz	2K40G7D-		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	132KG7D		BPSK, DATA/TDM
3600.0000 - 3629.0000 MHz	2K40G1D-		BPSK, DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK, DATA
3600.0000 - 3629.0000 MHz	5K60G1W-		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	24K0G1W		QPSK, DATA/FAX
3600.0000 - 3629.0000 MHz	5K60G1E-		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	24K0G1E		QPSK, TELEPHONY
3600.0000 - 3629.0000 MHz	40K0G1W		16QAM DIGITAL TELEPHONY
3600.0000 - 3629.0000 MHz	400KG1F		QPSK, DIGITAL VIDEO/DATA
3600.0000 - 3629.0000 MHz	2M20G1D		BPSK SPREAD SPECTRUM DATA (NAVIGATION)

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



6425.0000 - 6454.0000 MHz	60K0D1W	65.90 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1D	59.10 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1E	62.20 dBW	DIGITAL DATA
6425.0000 - 6454.0000 MHz	7K50G1W	58.40 dBW	DIGITAL DATA
ANTENNA ID: 23A-C-TT&C	10.4 meters	PHILCO FORD	104.M
5925.0000 - 6425.0000 MHz	36M0F8W	86.50 dBW	TEST ANALOG CARRIER TO MONITOR TRANSPONDER PERFORMANCE
ANTENNA ID: 23B-L-BAND	1.8 meters	TRUE FOCUS	1.8M
1626.5000 - 1660.5000 MHz	NON	27.20 dBW	UNMODULATED AFC PILOT (CLOSE LOOP)
1574.4000 - 1576.6000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
1525.0000 - 1559.0000 MHz	NON		UNMODULATED AFC PILOT
1525.0000 - 1559.0000 MHz	34K0F3E		TEST FM TELEPHONY COMPANDED AND UNCOMPANDED
1525.0000 - 1559.0000 MHz	2K40G7D-		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	132KG7D		TEST BPSK, DATA/TDM
1525.0000 - 1559.0000 MHz	2K40G1D-		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK, DATA
1525.0000 - 1559.0000 MHz	5K60G1W-		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	24K0G1W		TEST QPSK, DATA/FAX
1525.0000 - 1559.0000 MHz	5K60G1E-		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	24K0G1E		TEST QPSK, TELEPHONY
1525.0000 - 1559.0000 MHz	40K0G1W		TEST 16QAM DIGITAL TELEPHONY
1525.0000 - 1559.0000 MHz	400KG1F		TEST QPSK, DIGITAL VIDEO/DATA
1525.0000 - 1559.0000 MHz	2M20G1D		TEST BPSK SPREAD SPECTRUM DATA - CLOSE LOOP
ANTENNA ID: SBY 30	9 meters	VERTEX	9KPK
14000.0000 - 14500.0000 MHz	36M0G7W	72.00 dBW	QPSK, DIGITAL TELEPHONY

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14000.0000 - 14500.0000 MHz	72M0G7W	88.55 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	42M0G7W	86.31 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0F8W	80.14 dBW	ANALOG VIDEO
14000.0000 - 14500.0000 MHz	36M0G7W	77.23 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	20M0G7W	83.08 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M29G7W	73.67 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G1F	72.12 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	800KG1F	69.11 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	400KG1F	66.10 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	200KG1F	63.08 dBW	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
14000.0000 - 14500.0000 MHz	100KG7W	60.07 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	76K8G7W	58.93 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	43K8G7W	56.49 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	45K0G7W	56.61 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	32K0G7W	55.13 dBW	QPSK DIGITAL DATA
14000.0000 - 14500.0000 MHz	9K00G7W	49.62 dBW	QPSK DIGITAL DATA
13780.0000 - 14500.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13780.0000 - 14500.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 14000.0000 MHz	36M0G7W	74.50 dBW	QPSK, DIGITAL TELEPHONY
13750.0000 - 13770.0000 MHz	10M0G7W	80.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
13750.0000 - 13770.0000 MHz	64K0G7W	58.10 dBW	DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	10M0G7W		DIGITAL VIDEO, AUDIO AND DATA
11700.0000 - 12200.0000 MHz	64K0G7W		DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	36M0G7W		QPSK, DIGITAL TELEPHONY
11450.0000 - 11700.0000 MHz	72M0G7W		QPSK DIGITAL DATA

11450.0000 - 11700.0000 MHz	42M0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	36M0F8W	ANALOG VIDEO
11450.0000 - 11700.0000 MHz	36M0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	20M0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	2M29G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	1M60G1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	800KG1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	400KG1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	200KG1F	PSK DIGITAL VIDEO W/ASSOC DIG AUDIO
11450.0000 - 11700.0000 MHz	100KG7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	76K8G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	43K8G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	45K0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	32K0G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	9K00G7W	QPSK DIGITAL DATA
11450.0000 - 11700.0000 MHz	10M0G7W	DIGITAL VIDEO, AUDIO AND DATA
11450.0000 - 11700.0000 MHz	64K0G7W	DIGITAL VIDEO, AUDIO AND DATA
10700.0000 - 12750.0000 MHz	36M0G7W	QPSK, DIGITAL TELEPHONY

SITE ID: Ku-Band ESV Remotes  
LOCATION: Operate Up to 400 (1.5 m remotes) U.S. and International waters

ANTENNA ID: SeaTel6006      1.5 meters      SEATEL      6006

10950.0000 - 11200.0000 MHz	1M43G1W	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M35G1W	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	44K8G1W	SCPC USING QPSK AND BPSK MODULATION

10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M35G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M43G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	2M35G1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	40.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	52.00 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	43.00 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
10950.0000 - 11200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	54M0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
11450.0000 - 12200.0000 MHz	81K0G7W		SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	151KG7W	45.30 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	194KG7W	46.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	291KG7W	48.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

14000.0000 - 14500.0000 MHz	388KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	445KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	452KG7W	49.10 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	81K0G7W	42.50 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS
14000.0000 - 14500.0000 MHz	97K0G7W	43.40 dBW	SCPC AND TDM/TDMA USING QPSK AND BPSK MODULATIONS

SITE ID: SOUTHURY-KU  
LOCATION: 2120 RIVER ROAD, NEW HAVEN, SOUTHURY, CT  
41 ° 27 ' 5.00 " N LAT. 73 ° 17 ' 19.00 " W LONG.

SITE ID: C-band ESV Remotes  
LOCATION: Operate up to 300 (2.4m Remotes) U.S. and International waters

ANTENNA ID:	SeaTel9707	2.4 meters	SEATEL	9707
3700.0000 - 4200.0000 MHz	179KG1W			SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	134KG1W			SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W			SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W			SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W			SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W			SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W			SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	57.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
ANTENNA ID: SeaTel9797	2.4 meters	SEATEL	9797
3700.0000 - 4200.0000 MHz	179KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	179KG1W	51.21 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	134KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	1M43G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	358KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	44K8G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	717KG1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
3700.0000 - 4200.0000 MHz	89K6G1W		SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

5925.0000 - 6425.0000 MHz	134KG1W	49.96 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	1M43G1W	58.80 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	358KG1W	54.22 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	44K8G1W	45.19 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	717KG1W	57.23 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION
5925.0000 - 6425.0000 MHz	89K6G1W	48.20 dBW	SCPC CARRIERS USING 16QAM, 8QAM, 8PSK, QPSK OR BPSK MODULATION

SITE ID: REMOTES ESV  
LOCATION: Operate up to 550 remotes, CONUS

ANTENNA ID: 4003A	1 meters	SEATEL	4003A
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	34.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	538KG1W	45.20 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	37.40 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION

11450.0000 - 12200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	227KG7W	41.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	340KG7W	43.20 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	378KG7W	43.60 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	454KG7W	44.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	908KG7W	45.80 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M60G7W		DVB/MFTMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		DVB/MFTMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M60G7W		DVB/MFTMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		DVB/MFTMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	316KG7W	42.80 dBW	DVB/MFTMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	607KG7W	45.70 dBW	DVB/MFTMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M40G7W	45.80 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
ANTENNA ID: 4006	1 meters	SEATEL	4006
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION



11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	34.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	46.40 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	37.40 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	151KG7W		TDM/TDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	227KG7W	41.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	340KG7W	43.20 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	378KG7W	43.60 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	454KG7W	44.50 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	908KG7W	47.40 dBW	TDM/TDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	54M0G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	2M60G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	54M0G7W		DVB/MFTDMA USING QPSK AND BPSK MODULATION

14000.0000 - 14500.0000 MHz	1M40G7W	47.40 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	316KG7W	42.80 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	607KG7W	45.70 dBW	DVB/MFTDMA USING QPSK AND BPSK MODULATION
ANTENNA ID: 4996T	1.2 meters	SEATEL	4996T
10950.0000 - 11200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	1M43G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	44K8G1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	717KG1W		SCPC USING QPSK AND BPSK MODULATION
11450.0000 - 12200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	1M43G1W	51.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	44K8G1W	36.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	717KG1W	48.10 dBW	SCPC USING QPSK AND BPSK MODULATION
14000.0000 - 14500.0000 MHz	89K6G1W	39.10 dBW	SCPC USING QPSK AND BPSK MODULATION
10950.0000 - 11200.0000 MHz	89K6G1W		SCPC USING QPSK AND BPSK MODULATION

**Points of Communication:**

C-band ESV Remotes - NSS-7 - (338.5 E.L.)

Ku-Band ESV Remotes - ALSAT - (ALSAT)

Ku-Band ESV Remotes - ESTRELA DO SUL 1 - (63 W.L.)

SOUTHBURY - ALSAT - (ALSAT)



11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote5			
LOCATION: 1.8 M. VSAT, (3000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 5	1.8 meters	PATRIOT	TX-INT180KU
14000.0000 - 14500.0000 MHz	2M50G7W	58.46 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	48.91 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote6			
LOCATION: 2.4 M. VSAT, (1000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 6	2.4 meters	PATRIOT	TXFCC-240KUS
14000.0000 - 14500.0000 MHz	2M50G7W	61.06 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	51.51 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote7			
LOCATION: 1.2 M. VSAT, (6000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 7	1.2 meters	CHANNEL MASTER	TYPE 123
14000.0000 - 14500.0000 MHz	2M50G7W	54.76 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	45.21 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote8			
LOCATION: 1.8 M. VSAT, (3000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 8	1.8 meters	CHANNEL MASTER	TYPE 180
14000.0000 - 14500.0000 MHz	2M50G7W	58.26 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	48.71 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA

11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote2			
LOCATION: 1.8 M. VSAT, (3000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R2	1.8 meters	PRODELIN	1183
14000.0000 - 14500.0000 MHz	2M50G7W	57.96 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	48.41 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote3			
LOCATION: 2.4 M. VSAT, (1000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 3	2.4 meters	PRODELIN	1251
14000.0000 - 14500.0000 MHz	2M50G7W	60.66 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	51.11 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote10			
LOCATION: 2.4 M. VSAT, (1000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 10	2.4 meters	CHANNEL MASTER	TYPE 243
14000.0000 - 14500.0000 MHz	2M50G7W	60.76 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	51.21 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote4			
LOCATION: 1.2 M. VSAT, (6000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 4	1.2 meters	PATRIOT	TX-INT120KU
14000.0000 - 14500.0000 MHz	2M50G7W	54.86 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	45.31 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA

11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote15			
LOCATION: 1.8 M. VSAT, (3000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 15	1.8 meters	PRODELIN	1189
14000.0000 - 14500.0000 MHz	2M50G7W	56.76 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	47.21 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote16			
LOCATION: 2.4 M. VSAT, (1000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 16	2.4 meters	PRODELIN	1259
14000.0000 - 14500.0000 MHz	2M50G7W	60.66 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	51.11 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote19			
LOCATION: 1.2 M. VSAT, (6000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 19	1.2 meters	PATRIOT	TXFLY-120KU
14000.0000 - 14500.0000 MHz	2M50G7W	54.96 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	45.41 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote20			
LOCATION: 1.8 M. VSAT, (3000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 20	1.8 meters	PATRIOT	TXFLY-180KU
14000.0000 - 14500.0000 MHz	2M50G7W	50.96 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	41.41 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA

11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote13			
LOCATION: 1.2 M. VSAT, (6000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 13	1.2 meters	PRODELIN	1134
14000.0000 - 14500.0000 MHz	2M50G7W	54.46 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	44.91 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote14			
LOCATION: 1.2 M. VSAT, (6000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 14	1.2 meters	PRODELIN	1138
14000.0000 - 14500.0000 MHz	2M50G7W	54.66 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	45.11 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote22			
LOCATION: 1.8 M. VSAT, (1000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 22	1.8 meters	PRODELIN	2194
14000.0000 - 14500.0000 MHz	2M50G7W	58.16 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	48.61 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: Remote23			
LOCATION: 2.4 M. VSAT, (1000 UNITS), CONUS, AK, HI PR, VI			
ANTENNA ID: R 23	2.4 meters	PRODELIN	2244
14000.0000 - 14500.0000 MHz	2M50G7W	59.06 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	49.51 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA

11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: BACKUP HUB2			
LOCATION: 604 E. HOAG ST. (9.0M. HUB2), CLARK, YACOLT, WA			
45 ° 51 ' 43.00 " N LAT.		122 ° 23 ' 46.00 " W LONG.	
ANTENNA ID: YAC-HUB2	9 meters	VERTEX/RSI	9.0M
14000.0000 - 14500.0000 MHz	36M0G7W	85.60 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	62.00 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	36M0G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: YAC REMOTE 11			
LOCATION: 0.95M. VSAT, (3000 UNITS), CONUS, AK, HI, PR VI			
ANTENNA ID: YAC-R 11	0.95 meters	PRODELIN	1951
14000.0000 - 14500.0000 MHz	2M50G7W	52.34 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	43.11 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: YAC REMOTE 12			
LOCATION: 0.98M. VSAT, (3000 UNITS), CONUS, AK, HI, PR VI			
ANTENNA ID: YAC-R 12	0.98 meters	PRODELIN	1981
14000.0000 - 14500.0000 MHz	2M50G7W	52.76 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	43.21 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: YAC REMOTE 17			
LOCATION: 0.96M. VSAT, (3000 UNITS), CONUS, AK, HI, PR VI			
ANTENNA ID: YAC-R 17	0.96 meters	CHANNEL MASTER	TYPE 960
14000.0000 - 14500.0000 MHz	2M50G7W	52.66 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	43.11 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA



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11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA
SITE ID: YAC REMOTE 18			
LOCATION: 1.0M. VSAT, (3000 UNITS), CONUS, AK, HI, PR VI			
ANTENNA ID: YAC-R 18	1 meters	PATRIOT	TX-INT100KUG
14000.0000 - 14500.0000 MHz	2M50G7W	53.36 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	43.81 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA

SITE ID: YAC REMOTE 21  
LOCATION: 0.98M. VSAT, (3000 UNITS), CONUS, AK, HI, PR VI

ANTENNA ID: YAC-R 21	0.98 meters	PRODELIN	1984
14000.0000 - 14500.0000 MHz	2M50G7W	52.76 dBW	DIGITAL VIDEO, AND DATA
14000.0000 - 14500.0000 MHz	156KG7W	43.21 dBW	DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	2M50G7W		DIGITAL VIDEO, AND DATA
11700.0000 - 12200.0000 MHz	156KG7W		DIGITAL VIDEO, AND DATA

**Points of Communication:**

- BACKUP HUB2 - ALSAT - (ALSAT)
- Remote1 - ALSAT - (ALSAT)
- Remote10 - ALSAT - (ALSAT)
- Remote13 - ALSAT - (ALSAT)
- Remote14 - ALSAT - (ALSAT)
- Remote15 - ALSAT - (ALSAT)
- Remote16 - ALSAT - (ALSAT)
- Remote19 - ALSAT - (ALSAT)
- Remote2 - ALSAT - (ALSAT)
- Remote20 - ALSAT - (ALSAT)
- Remote22 - ALSAT - (ALSAT)
- Remote23 - ALSAT - (ALSAT)
- Remote3 - ALSAT - (ALSAT)

Remote4 - ALSAT - (ALSAT)

Remote5 - ALSAT - (ALSAT)

Remote6 - ALSAT - (ALSAT)

Remote7 - ALSAT - (ALSAT)

Remote8 - ALSAT - (ALSAT)

YAC REMOTE 11 - GALAXY 28 - (89.0 W.L.)

YAC REMOTE 12 - GALAXY 28 - (89.0 W.L.)

YAC REMOTE 17 - GALAXY 28 - (89.0 W.L.)

YAC REMOTE 18 - GALAXY 28 - (89.0 W.L.)

YAC REMOTE 21 - GALAXY 28 - (89.0 W.L.)

YAC/HUB - ALSAT - (ALSAT)

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**SES-MOD-20090202-00123**    E E080035    New ICO Satellite Services G.P.

Application for Modification

04/14/2008 - 04/14/2023

Grant of Authority

Date Effective:    03/24/2009

**Class of Station:**        Fixed Earth Stations

**Nature of Service:**      Mobile Satellite Service

**SITE ID:**                North Las Vegas

**LOCATION:**              One Aerojet Way, Clark, North Las Vegas, NV

36 ° 14 ' 10.00 " N LAT.

115 ° 7 ' 3.00 " W LONG.

ANTENNA ID:	NLV	2.4 meters	General Dynamics	Prodelin
2180.0000 - 2200.0000 MHz		156KG7W	0.00 dBW	QPSK Test Carrier
2180.0000 - 2200.0000 MHz		41K6G7W	0.00 dBW	BPSK Calibration Signal
2180.0000 - 2200.0000 MHz		NON	0.00 dBW	CW Calibration Carrier
2000.0000 - 2020.0000 MHz		156KG7W	10.00 dBW	QPSK Test Carrier
2000.0000 - 2020.0000 MHz		41K6G7W	25.00 dBW	BPSK Calibration Signal
2000.0000 - 2020.0000 MHz		NON	49.70 dBW	CW Carrier for Calibration
2000.0000 - 2020.0000 MHz		1M25G7W	10.00 dBW	Phase modulation digital test carrier
2000.0000 - 2020.0000 MHz		469KG7W	15.00 dBW	Phase modulation digital test carrier
2000.0000 - 2020.0000 MHz		8K00G7W	10.00 dBW	Phase modulation digital test carrier
2180.0000 - 2200.0000 MHz		1M25G7W		Phase modulation digital test carrier



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14000.0000 - 14500.0000 MHz	425KG7D	46.40 dBW	128 KBPS, 1/2 RATE FEC, BPSK, 425 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	400KG7D	49.40 dBW	256 KBPS, 1/2 RATE FEC, QPSK, 400 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	800KG7D	49.40 dBW	256 KBPS, 1/2 RATE FEC, BPSK , 800 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	600KG7D	51.15 dBW	384 KBPS, 1/2 RATE FEC, QPSK, 600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M20G7D	51.15 dBW	384 KBPS, 1/2 RATE FEC, QPSK, 600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	800KG7D	52.40 dBW	512 KBPS, 1/2 RATE FEC, QPSK, 800 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G7D	52.40 dBW	512 KBPS, 1/2 RATE FEC, BPSK, 1600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M20G7D	54.15 dBW	768 KBPS, 1/2 RATE FEC, QPSK, 1200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M40G7D	54.15 dBW	768 KBPS, 1/2 RATE FEC, BPSK, 2400 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G7D	55.40 dBW	1024 KBPS, 1/2 RATE FEC, QPSK, 1600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	3M20G7D	55.40 dBW	1024 KBPS, 1/2 RATE FEC, BPSK, 3200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M40G7D	57.15 dBW	1536 KBPS, 1/2 RATE FEC, BPSK, 2400 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	4M80G7D	57.15 dBW	1536 KBPS, 1/2 RATE FEC, BPSK, 4800 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	3M20G7D	58.40 dBW	2048 KBPS, 1/2 RATE FEC, QPSK, 3200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	6M40G7D	58.40 dBW	2048 KBPS, 1/2 RATE FEC, BPSK, 6400 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	6M10G7D	65.20 dBW	3500 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 6100 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	8M10G7D	66.46 dBW	6000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 8100 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	10M8G7D	67.70 dBW	8000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 10800 KHZ, DIGITAL DATA

14000.0000 - 14500.0000 MHz	16M2G7D	69.47 dBW	12000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 16200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	21M6G7D	70.70 dBW	16000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 21600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	36M0G7D	72.94 dBW	26700 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 21600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	43M2G7D	73.73 dBW	32000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 4300 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	54M0G7D	74.70 dBW	40000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 54000 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	100KG7D		38.4 KBPS, 1/2 RATE FEC, DPSK (BPSK VARIANT), 100 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	60K0G7D		38.4 KBPS, 1/2 RATE FEC, MSK (QPSK VARIANT), 60 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	200KG7D		76.8 KBPS, 1/2 RATE FEC, DPSK (BPSK VARIANT), 200 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	120KG7D		76.8 KBPS, 1/2 RATE FEC, MSK (QPSK VARIANT), 120 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	400KG7D		153.6 KBPS, 1/2 RATE FEC, DPSK (BPSK VARIANT), 120 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	240KG7D		153.6 KBPS, 1/2 RATE FEC, MSK (QPSK VARIANT), 240 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	800KG7D		307.2 KBPS, 1/2 RATE FEC, DPSK (BPSK VARIANT), 800 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	480KG7D		307.2 KBPS, 1/2 RATE FEC, MSK (QPSK VARIANT), 480 KHZ, DIGITAL DATA
ANTENNA ID: 9.3M2	9.3 meters	VERTEX INC.	9.3KPK
14000.0000 - 14500.0000 MHz	425KG7D	46.40 dBW	128 KBPS, 1/2 RATE FEC, BPSK, 425 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	400KG7D	49.40 dBW	256 KBPS, 1/2 RATE FEC, QPSK, 400 KHZ, DIGITAL DATA

14000.0000 - 14500.0000 MHz	800KG7D	49.40 dBW	256 KBPS, 1/2 RATE FEC, BPSK , 800 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	600KG7D	51.15 dBW	384 KBPS, 1/2 RATE FEC, QPSK, 600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M20G7D	51.15 dBW	384 KBPS, 1/2 RATE FEC, QPSK, 600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	800KG7D	52.40 dBW	512 KBPS, 1/2 RATE FEC, QPSK, 800 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G7D	52.40 dBW	512 KBPS, 1/2 RATE FEC, BPSK, 1600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M20G7D	54.15 dBW	768 KBPS, 1/2 RATE FEC, QPSK, 1200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M40G7D	54.15 dBW	768 KBPS, 1/2 RATE FEC, BPSK, 2400 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	1M60G7D	55.40 dBW	1024 KBPS, 1/2 RATE FEC, QPSK, 1600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	3M20G7D	55.40 dBW	1024 KBPS, 1/2 RATE FEC, BPSK, 3200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	2M40G7D	57.15 dBW	1536 KBPS, 1/2 RATE FEC, BPSK, 2400 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	4M80G7D	57.15 dBW	1536 KBPS, 1/2 RATE FEC, BPSK, 4800 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	3M20G7D	58.40 dBW	2048 KBPS, 1/2 RATE FEC, QPSK, 3200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	6M40G7D	58.40 dBW	2048 KBPS, 1/2 RATE FEC, QPSK, 3200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	6M10G7D	65.20 dBW	3500 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 6100 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	8M10G7D	66.46 dBW	6000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 8100 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	10M8G7D	67.70 dBW	8000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 10800 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	16M2G7D	69.47 dBW	12000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 16200 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	21M6G7D	70.70 dBW	16000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 21600 KHZ, DIGITAL DATA

14000.0000 - 14500.0000 MHz	36M0G7D	72.94 dBW	26700 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 21600 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	43M2G7D	73.73 dBW	32000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 43000 KHZ, DIGITAL DATA
14000.0000 - 14500.0000 MHz	54M0G7D	74.70 dBW	40000 KSPS, 1/2, 2/3, 3/4, 5/6, 7/8 RATE FEC, QPSK, 54000 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	100KG7D		38.4 KBPS, 1/2 RATE FEC, DPSK (BPSK VARIANT), 100 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	60K0G7D		38.4 KBPS, 1/2 RATE FEC, MSK (QPSK VARIANT), 60 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	200KG7D		76.8 KBPS, 1/2 RATE FEC, DPSK (BPSK VARIANT), 200 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	120KG7D		76.8 KBPS, 1/2 RATE FEC, MSK (QPSK VARIANT), 120 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	400KG7D		153.6 KBPS, 1/2 RATE FEC, DPSK (BPSK VARIANT), 120 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	240KG7D		153.6 KBPS, 1/2 RATE FEC, MSK (QPSK VARIANT), 240 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	800KG7D		307.2 KBPS, 1/2 RATE FEC, DPSK (BPSK VARIANT), 800 KHZ, DIGITAL DATA
11700.0000 - 12200.0000 MHz	480KG7D		307.2 KBPS, 1/2 RATE FEC, MSK (QPSK VARIANT), 480 KHZ, DIGITAL DATA
ANTENNA ID: 9.3M3	9.3 meters	VERTEX INC.	9.3KPK
14000.0000 - 14500.0000 MHz	8M10G7D	78.80 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	800KG7D	68.70 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	6M40G7D	77.70 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	54M0G7D	82.20 dBW	DIGITAL PHASE MODULATED DATA

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14000.0000 - 14500.0000 MHz	4M80G7D	76.50 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	400KG7D	65.70 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	3M20G7D	74.70 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	36M0G7D	82.10 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	300KG7D	64.50 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	2M40G7D	73.50 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	21M6G7D	81.00 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	200KG7D	62.70 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	1M20G7D	70.50 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	16M2G7D	81.80 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	100KG7D	59.70 dBW	DIGITAL PHASE MODULATED DATA
14000.0000 - 14500.0000 MHz	26M0G7D	82.10 dBW	DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	800KG7D		DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	400KG7D		DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	3M20G7D		DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	36M0G7D		DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	2M40G7D		DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	200KG7D		DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	1M20G7D		DIGITAL PHASE MODULATED DATA



11700.0000 - 12200.0000 MHz	15M0G7D	DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	120KG7D	DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	10M0G7D	DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	100KG7D	DIGITAL PHASE MODULATED DATA
11700.0000 - 12200.0000 MHz	600KG7D	DIGITAL PHASE MODULATED DATA

**Points of Communication:**

HUB - ALSAT - (ALSAT)

SES - RWL - 20090317 - 00332 E E980375 ORBIMAGE License Corp.  
 Renewal 04/15/2009 - 04/15/2024  
 Grant of Authority Date Effective: 03/18/2009

**Class of Station:** Fixed Earth Stations

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

SITE ID: STATION 2  
 LOCATION: 21700 ATLANTIC BLVD., LOUDOUN, DULLES, VA  
 39 ° 0 ' 56.00 " N LAT. 77 ° 25 ' 42.00 " W LONG.

ANTENNA ID: UHF-2	M2 ENTERPRISES	400 CP30M
402.7200 - 402.7200 MHz	60K0F1D	34.26 dBW
		FSK Command & Control Communications via Orbview 3
401.5000 - 401.5000 MHz	60K0F1D	0.00 dBW
		Telemetry via Orbview 3
ANTENNA ID: S-BAND-2	0 meters	SCIENTIFIC ATLANTA
		V8x-Y PEDESTAL
2092.6000 - 2092.6000 MHz	128KG1D	55.00 dBW
		PSK, NRZ-S, LINEAR PM, 1 RADIAN Command & Control via Orbview 3
2092.6000 - 2092.6000 MHz	NON	55.00 dBW
		an unmodulated signal, transmit for less than one second on each pass of satellite (2 - 4 per day) via Orbview 3
2092.6000 - 2092.6000 MHz	128KG1D	53.00 dBW
		BPSK, Command via Orbview 5
ANTENNA ID: 8 GHz-2	5.4 meters	SCIENTIFIC ATLANTA
		V8x-Y PEDESTAL
8394.0000 - 8394.0000 MHz	59K7G1D	0.00 dBW
		OQPSK, Telemetry via Orbview 5
8210.0000 - 8210.0000 MHz	150MG1D	0.00 dBW
		OQPSK, Data Link operates at 370 Mbps or Mbps via Orbview 5

8210.0000 - 8210.0000 MHz	370MG1D	0.00 dBW	OQPSK, Data via Orbview 5
8190.0000 - 8190.0000 MHz	36K0G1D		Image data & telemetry via Orbview 3
8190.0000 - 8190.0000 MHz	150MG1D		Image data & telemetry via Orbview 3

**Points of Communication:**

STATION 2 - GeoEye 1 - (684 KM)

STATION 2 - OrbView 3 - (470 KM)

**SES-RWL-20090317-00333** E E980376 ORBIMAGE License Corp.  
 Renewal 04/15/2009 - 04/15/2024  
 Grant of Authority Date Effective: 03/18/2009

**Class of Station:** Fixed Earth Stations

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

SITE ID: STATION 1  
 LOCATION: NORTH SLOPE, BARROW, AK  
 71 ° 16 ' 16.00 " N LAT. 156 ° 45 ' 59.00 " W LONG.

ANTENNA ID: UHF-1	M2 ENTERPRISES	400 CP30M	
402.7200 - 402.7200 MHz	60K0F1D	34.26 dBW	FSK Command & Control communications view Orbview 3
401.5000 - 401.5000 MHz	60K0F1D	0.00 dBW	Telemetry via Orbview 3
ANTENNA ID: S-BAND-1	0 meters	SCIENTIFIC ATLANTA	V8x-Y PEDESTAL
2092.6000 - 2092.6000 MHz	128KG1D	55.00 dBW	PSK, NRZ-S, LINEAR PM, 1 RADIAN Command & Control Communications via Orbview 3
2092.6000 - 2092.6000 MHz	NON	55.00 dBW	an unmodulated signal, transmit for less than one second on each pass of satellite (10 - 12 per day) via Orbview 3
2092.6000 - 2092.6000 MHz	128KG1D	53.00 dBW	BPSK, Command via Orbview 5
ANTENNA ID: 8 GHz-1	5.4 meters	SCIENTIFIC ATLANTA	V8x-Y PEDESTAL
8394.0000 - 8394.0000 MHz	59K7G1D	0.00 dBW	OQPSK, Telemetry via Orbview 5
8210.0000 - 8210.0000 MHz	150MG1D	0.00 dBW	OQPSK, Data Link operates at 370 Mbps or 150 Mbps via Orbview 5
8210.0000 - 8210.0000 MHz	370MG1D	0.00 dBW	OQPSK, Data via Orbview 5
8190.0000 - 8190.0000 MHz	36K0G1D		Image data & telemetry via Orbview 3

8190.0000 - 8190.0000 MHz

150MG1D

Image data & telemetry via Orbview 3

**Points of Communication:**

STATION 1 - GeoEye 1 - (684 KM)

STATION 1 - OrbView 3 - (470 KM)

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<b>SES - RWL - 20090317 - 00335</b>	E E871193	Arizona Board of Regents for Arizona State University
Renewal		04/01/2009 - 04/01/2024
Grant of Authority		Date Effective: 03/18/2009

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: 555 NORTH CENTRAL AVE., PHOENIX, AZ  
33 ° 27 ' 14.39 " N LAT.

112 ° 46 ' 23.34 " W LONG.

ANTENNA ID: 1	3.7 meters	ANDREW	ES73MPJK-1
14000.0000 - 14500.0000 MHz	6M00G7W	70.46 dBW	6MHZ DIGITAL TV
14000.0000 - 14500.0000 MHz	9M00G7W	72.22 dBW	9MHZ DIGITAL TV
14000.0000 - 14500.0000 MHz	18M0G7W	75.23 dBW	18MHZ DIGITAL TV
14000.0000 - 14500.0000 MHz	36M0G7W	78.20 dBW	36MHZ DIGITAL TV
14000.0000 - 14500.0000 MHz	3M50G7W	68.12 dBW	3.5MHZ DIGITAL TV
14000.0000 - 14500.0000 MHz	5M50G7W	70.08 dBW	5.5MHZ DIGITAL TV
14000.0000 - 14500.0000 MHz	1M98G7W	65.64 dBW	1.98MHZ DIGITAL TV
14000.0000 - 14500.0000 MHz	18M0F8F	71.68 dBW	HALF 18MHZ ANALOG TV WITH AUDIO SUBCARRIERS
14000.0000 - 14500.0000 MHz	36M0F8F	71.68 dBW	FULL 36MHZ ANALOG TV WITH AUDIO SUBCARRIERS
11700.0000 - 12200.0000 MHz	6M00G7W		6MHZ DIGITAL TV
11700.0000 - 12200.0000 MHz	9M00G7W		9MHZ DIGITAL TV
11700.0000 - 12200.0000 MHz	18M0G7W		18MHZ DIGITAL TV
11700.0000 - 12200.0000 MHz	36M0G7W		36MHZ DIGITAL TV
11700.0000 - 12200.0000 MHz	3M50G7W		3.5MHZ DIGITAL TV
11700.0000 - 12200.0000 MHz	5M50G7W		5.5MHZ DIGITAL TV

11700.0000 - 12200.0000 MHz	1M98G7W	1.98MHZ DIGITAL TV
11700.0000 - 12200.0000 MHz	18M0F8F	HALF 18MHZ ANALOG TV WITH AUDIO SUBCARRIERS
11700.0000 - 12200.0000 MHz	36M0F8F	FULL 36MHZ ANALOG TV WITH AUDIO SUBCARRIERS

**Points of Communication:**

1 - ALSAT - (ALSAT)

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<b>SES-RWL-20090318-00340</b>	E E890537	SES Americom, Inc.	
Renewal			06/09/2009 - 06/09/2024
Grant of Authority			Date Effective: 03/18/2009

**Class of Station:** Fixed Earth Stations

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

SITE ID: 1  
 LOCATION: 787 VALLEY COURT, MESA, GRAND JUNCTION, CO  
 39 ° 7 ' 11.00 " N LAT. 108 ° 39 ' 0.00 " W LONG.

ANTENNA ID: 1	13 meters	UAI	1130/2130/13M
6423.3000 - 6423.7000 MHz	400KF3D	72.90 dBW	
6423.1000 - 6423.9000 MHz	800KF3D	75.90 dBW	
3700.0000 - 4200.0000 MHz	800KF3D		
3700.0000 - 4200.0000 MHz	400KF3D		

**Points of Communication:**

1 - ALSAT - (ALSAT)

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<b>SES-RWL-20090318-00342</b>	E E890531	SES Americom, Inc.	
Renewal			05/12/2009 - 05/12/2024
Grant of Authority			Date Effective: 03/18/2009

**Class of Station:** VSAT Network

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

SITE ID: 1  
 LOCATION: CONUS, AK, HI

ANTENNA ID: 1	2.4 meters	ANDREW	ESA24-124
14000.0000 - 14500.0000 MHz	5K50F7D	36.50 dBW	
14000.0000 - 14500.0000 MHz	4M09F7D	65.20 dBW	

ANTENNA ID:	2	2.4 meters	NEC/GEMINI	24KU/G24KU
	14000.0000 - 14500.0000 MHz		5K50F7D	35.90 dBW
	14000.0000 - 14500.0000 MHz		4M09F7D	64.60 dBW
ANTENNA ID:	3	2.4 meters	VERTEX	V24KU
	14000.0000 - 14500.0000 MHz		5K50F7D	36.70 dBW
	14000.0000 - 14500.0000 MHz		4M09F7D	65.40 dBW
ANTENNA ID:	4	2.4 meters	NORTHERN SATELLITE	2402
	14000.0000 - 14500.0000 MHz		2M35F7D	63.00 dBW
	14000.0000 - 14500.0000 MHz		9K60F7D	39.10 dBW
ANTENNA ID:	5	2.4 meters	PRODELIN	2.4M
	14000.0000 - 14500.0000 MHz		5K50F7D	36.60 dBW
	14000.0000 - 14500.0000 MHz		4M09F7D	65.30 dBW

**Points of Communication:**

1 - ALSAT - (ALSAT)

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<b>SES-RWL-20090318-00343</b>	E E890533	SES Americom, Inc.	
Renewal			05/12/2009 - 05/12/2024
Grant of Authority			Date Effective: 03/18/2009

**Class of Station:** VSAT Network

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

SITE ID: 1  
LOCATION: CONUS, AK & HI

ANTENNA ID:	1	3.7 meters	ANDREW	ESA37-124
	14000.0000 - 14500.0000 MHz		5K50F7D	40.30 dBW
	14000.0000 - 14500.0000 MHz		4M09F7D	69.00 dBW
	14000.0000 - 14500.0000 MHz		5K50F7D	39.50 dBW
	14000.0000 - 14500.0000 MHz		4M09F7D	68.20 dBW
	11700.0000 - 12200.0000 MHz		5K50F7D	
	11700.0000 - 12200.0000 MHz		4M09F7D	

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ANTENNA ID:	2	3.7 meters	AFC	PR-12
	14000.0000 - 14500.0000 MHz		5K50F7D	40.30 dBW
	14000.0000 - 14500.0000 MHz		4M09F7D	69.00 dBW
	14000.0000 - 14500.0000 MHz		5K50F7D	39.50 dBW
	14000.0000 - 14500.0000 MHz		4M09F7D	68.20 dBW
	11700.0000 - 12200.0000 MHz		5K50F7D	
	11700.0000 - 12200.0000 MHz		4M09F7D	

**Points of Communication:**

1 - ALSAT - (ALSAT)

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<b>SES - RWL - 20090318 - 00344</b>	E E980525	Digital Comm Link, Inc.	
Renewal			03/18/2009 - 03/18/2024
Grant of Authority			Date Effective: 03/18/2009

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

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

SITE ID: 1  
LOCATION: various

ANTENNA ID:	1	2.4 meters	Andrew	ESA24SM
	14000.0000 - 14500.0000 MHz		36M0F8F	77.10 dBW
	14000.0000 - 14500.0000 MHz		6M00G7F	67.90 dBW
	14000.0000 - 14500.0000 MHz		8M00G7F	69.10 dBW
	14000.0000 - 14500.0000 MHz		44K8G7D-	46.60 dBW
	14000.0000 - 14500.0000 MHz		1M85G7D	62.80 dBW
	11700.0000 - 12200.0000 MHz		36M0F8F	
	11700.0000 - 12200.0000 MHz		6M00G7F	
	11700.0000 - 12200.0000 MHz		8M00G7F	
	11700.0000 - 12200.0000 MHz		44K8G7D-	
	11700.0000 - 12200.0000 MHz		1M85G7D	

**Points of Communication:**



SES-RWL-20090318-00346 E E990120 FiberSat Global Services, Inc.

Renewal

06/01/2009 - 06/01/2024

Grant of Authority

Date Effective: 03/20/2009

**Class of Station:** Fixed Earth Stations

**Nature of Service:** Fixed Satellite Service

SITE ID: 1

LOCATION: 20640 BAHAMA ST., LOS ANGELES, CHATSWORTH, CA

34 ° 13 ' 55.00 " N LAT.

118 ° 34 ' 57.30 " W LONG.

ANTENNA ID:	3.7(1&3)	3.7 meters	ANDREW CORPORATION	ES37K-4124W
	14000.0000 - 14500.0000 MHz	1M22G1D	63.90 dBW	QPSK DATA & IBS
	14000.0000 - 14500.0000 MHz	307KG1D	57.90 dBW	BPSK DATA & IBS
	14000.0000 - 14500.0000 MHz	1M50G7D	64.70 dBW	QPSK DATA & IBS
	14000.0000 - 14500.0000 MHz	9M10G7F	72.60 dBW	MULTICHANNEL DIGITAL VIDEO
	11700.0000 - 12200.0000 MHz	1M22G1D		QPSK DATA & IBS
	11700.0000 - 12200.0000 MHz	307KG1D		BPSK DATA & IBS
	11700.0000 - 12200.0000 MHz	1M50G7D		QPSK DATA & IBS
	11700.0000 - 12200.0000 MHz	9M10G7F		MULTICHANNEL DIGITAL VIDEO
	11450.0000 - 11700.0000 MHz	1M22G1D		QPSK DATA & IBS
	11450.0000 - 11700.0000 MHz	307KG1D		BPSK DATA & IBS
	11450.0000 - 11700.0000 MHz	1M50G7D		QPSK DATA & IBS
	11450.0000 - 11700.0000 MHz	9M10G7F		MULTICHANNEL DIGITAL VIDEO
	10950.0000 - 11200.0000 MHz	1M22G1D		QPSK DATA & IBS
	10950.0000 - 11200.0000 MHz	307KG1D		BPSK DATA & IBS
	10950.0000 - 11200.0000 MHz	1M50G7D		QPSK DATA & IBS
	10950.0000 - 11200.0000 MHz	9M10G7F		MULTICHANNEL DIGITAL VIDEO
ANTENNA ID:	3.8K(2)	3.8 meters	PRODELIN	SERIES 1388
	14000.0000 - 14500.0000 MHz	45M4G1D	76.00 dBW	QPSK DIGITAL MOD, IP DATA
	14000.0000 - 14500.0000 MHz	36M0G7W	77.17 dBW	QPSK AND 8PSK DATA
	11700.0000 - 12200.0000 MHz	36M0G7W		QPSK AND 8PSK DATA



ANTENNA ID:	3.8M	3.8 meters	PRODELIN	SERIES 1388	
	5925.0000 - 6425.0000 MHz		1M22G7W	54.40 dBW	QPSK DATA
	5925.0000 - 6425.0000 MHz		800KG7W	52.90 dBW	BPSK DATA
	3700.0000 - 4200.0000 MHz		1M22G7W		QPSK DATA
	3700.0000 - 4200.0000 MHz		800KG7W		BPSK DATA

**Points of Communication:**

- 1 - ALSAT - (ALSAT)
- 1 - ANIK E1 - (118.7 W.L.)
- 1 - ANIK E2 - (111.1 W.L.)
- 1 - INTELSAT 805 - (304.5 E.L.)
- 1 - INTELSAT AOR - (307.0 E.L.)
- 1 - INTELSAT AOR - (310.0 E.L.)
- 1 - INTELSAT POR - (174.0 E.L.)
- 1 - INTELSAT POR - (176.0 E.L.)
- 1 - INTELSAT POR - (180.0 E.L.)
- 1 - PAS-2 - (169 E.L.)
- 1 - PAS-4 - (191.0 W.L.)
- 1 - PAS-9 - (58.0 W.L.)
- 1 - TDRS-5 - (174.3 W.L.)

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<b>SES-RWL-20090320-00354</b>	E E990071	Smith Media License Holdings, LLC	04/22/2009 - 04/22/2024
Renewal			Date Effective: 03/20/2009
Grant of Authority			

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

**Nature of Service:** Fixed Satellite Service

SITE ID: 1  
LOCATION: VARIOUS

ANTENNA ID:	1	1.2 meters	VERTEX COMM.	SMK	
	14000.0000 - 14500.0000 MHz		36M0G2F	60.20 dBW	DIGITAL VIDEO
	11700.0000 - 12200.0000 MHz		36M0G2F		DIGITAL VIDEO

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**Points of Communication:**

1 - ALSAT - (ALSAT)

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**SBS - RWL - 20090320 - 00356**    E E980156    Telesat Network Services, Inc.

Renewal

04/02/2009 - 04/02/2024

Grant of Authority

Date Effective:    03/23/2009

**Class of Station:**        Fixed Earth Stations

**Nature of Service:**      Fixed Satellite Service

SITE ID:                    1

LOCATION:                   91-340 FARRINGTON HIGHWAY, HONOLULU, KAPOLEI, HI

21 ° 20 ' 24.00 " N LAT.

158 ° 5 ' 32.00 " W LONG.

ANTENNA ID:	11m	11 meters	VERTEX	11KPC	
	14498.5000 - 14499.5000 MHz		850KF1D	85.00 dBW	TT&C COMMAND, DIGITAL DATA CARRIER, FM
	14000.0000 - 14500.0000 MHz		27M0F8F	82.00 dBW	Analog TV with associated audio
	14000.0000 - 14500.0000 MHz		36M0F8F	82.00 dBW	Analog TV with associated audio
	14000.0000 - 14500.0000 MHz		54M0G7W	88.30 dBW	DIGITAL MULTIPLEXED QPSK, DATA, VOICE, VIDEO
	14000.0000 - 14500.0000 MHz		27M0G7W	85.30 dBW	DIGITAL MULTIPLEXED QPSK, DATA, VOICE, VIDEO
	14000.0000 - 14500.0000 MHz		4M50G7W	77.50 dBW	DIGITAL QPSK, DATA, VOICE, VIDEO
	14000.0000 - 14500.0000 MHz		1M80G1W	73.50 dBW	DIGITAL SCPC QPSK, DATA AND VOICE
	14000.0000 - 14500.0000 MHz		50K0G1W	58.00 dBW	DIGITAL SCPC QPSK, DATA AND VOICE
	14000.0000 - 14500.0000 MHz		100HN0N	68.10 dBW	IN-ORBIT TEST CW SIGNAL
	14000.0000 - 14500.0000 MHz		18M0F8F-	82.00 dBW	TV/FM ANALOG VIDEO AND AUDIO via ALSAT, ANIK E1 & 2
	14000.0000 - 14500.0000 MHz		36M0F8F	82.00 dBW	TV/FM ANALOG VIDEO AND AUDIO via ALSAT, ANIK E1 & 2
	14000.0000 - 14500.0000 MHz		9M00G1D	80.50 dBW	DIGITAL AUDIO, DATA AND VIDEO via ALSAT, ANIK E1 & 2
	12749.3700 - 12749.6300 MHz		256KGXD		TT&C TELEMETRY DATA, PM
	12748.8700 - 12749.1300 MHz		256KGXD		TT&C TELEMETRY DATA, PM

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12748.3700 - 12748.6300 MHz	256KGXD	TT&C TELEMETRY DATA, PM
12250.0000 - 12750.0000 MHz	27M0F8F	Analog TV with associated audio
12250.0000 - 12750.0000 MHz	36M0F8F	Analog TV with associated audio
12250.0000 - 12750.0000 MHz	54M0G7W	DIGITAL MULTIPLEXED QPSK, DATA, VOICE, VIDEO
12250.0000 - 12750.0000 MHz	27M0G7W	DIGITAL MULTIPLEXED QPSK, DATA, VOICE, VIDEO
12250.0000 - 12750.0000 MHz	4M50G7W	DIGITAL QPSK, DATA, VOICE, VIDEO
12250.0000 - 12750.0000 MHz	1M80G1W	DIGITAL SCPC QPSK, DATA AND VOICE
12250.0000 - 12750.0000 MHz	50K0G1W	DIGITAL SCPC QPSK, DATA AND VOICE
12250.0000 - 12750.0000 MHz	100HNON	IN-ORBIT TEST CW SIGNAL
11700.0000 - 12200.0000 MHz	18M0F8W-	TV/FM ANALOG VIDEO AND AUDIO via ALSAT, ANIK E1 & 2
11700.0000 - 12200.0000 MHz	36M0F8W	TV/FM ANALOG VIDEO AND AUDIO via ALSAT, ANIK E1 & 2
11700.0000 - 12200.0000 MHz	9M00G1D	DIGITAL AUDIO, DATA AND VIDEO via ALSAT, ANIK E1 & 2
11450.0000 - 11700.0000 MHz	27M0F8F	Analog TV with associated audio
11450.0000 - 11700.0000 MHz	27M0G7W	DIGITAL MULTIPLEXED QPSK, DATA, VOICE, VIDEO
11450.0000 - 11700.0000 MHz	4M50G7W	DIGITAL QPSK, DATA, VOICE, VIDEO
11450.0000 - 11700.0000 MHz	1M80G1W	DIGITAL SCPC QPSK, DATA AND VOICE
11450.0000 - 11700.0000 MHz	50K0G1W	DIGITAL SCPC QPSK, DATA AND VOICE

**Points of Communication:**

- 1 - ALSAT - (ALSAT)
- 1 - ANIK E1 - (118.7 W.L.)
- 1 - ANIK E2 - (111.1 W.L.)
- 1 - ORION-3 - (139 E.L.)



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**Points of Communication:**

1 - ALSAT - (ALSAT)

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**SES-STA-20090209-00152** E E060076 BT Americas Inc.

Special Temporary Authority

Grant of Authority

Date Effective: 03/24/2009

**Class of Station:**

Extension of special temporary authority is GRANTED for an additional 120 days beginning March 11, 2009 and ending July 11, 2009.

**Points of Communication:**

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**SES-STA-20090209-00159** E PETROCOM LICENSE CORPORATION

Special Temporary Authority

Grant of Authority

Date Effective: 03/19/2009

**Class of Station:**

Special Temporary Authority is GRANTED for a period of 30 days commencing on March 19, 2009 and ending April 17, 2009.

**Points of Communication:**

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**SES-STA-20090209-00160** E PETROCOM LICENSE CORPORATION

Special Temporary Authority

Grant of Authority

Date Effective: 03/19/2009

**Class of Station:**

Special Temporary Authority is GRANTED for a period of 30 days commencing on March 19, 2009 and ending April 17, 2009.

**Points of Communication:**

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**SES-STA-20090213-00182** E KA399 Telesat Network Services, Inc.

Special Temporary Authority

Grant of Authority

Date Effective: 03/23/2009

**Class of Station:**

Special temporary authority is GRANTED with conditions for a period of 60 days beginning April 1, 2009 and ending May 30, 2009.

**Points of Communication:**

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**SES-STA-20090304-00235** E PETROCOM LICENSE CORPORATION

Special Temporary Authority

Grant of Authority

Date Effective: 03/24/2009

**Class of Station:**

Special temporary authority is GRANTED for a period of 60 days beginning March 24, 2009 and ending May 22, 2009.

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**Points of Communication:**

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SES-STA-20090316-00317    E   E080059    Inmarsat Hawaii Inc.  
Special Temporary Authority  
Grant of Authority  
Date Effective:    03/20/2009

**Class of Station:**

Extension of special temporary authority is GRANTED for an additional 60 days beginning March 20, 2009 and ending May 18, 2009.

**Points of Communication:**

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SES-STA-20090316-00318    E   KA25    Inmarsat Hawaii Inc.  
Special Temporary Authority  
Grant of Authority  
Date Effective:    03/20/2009

**Class of Station:**

Extension of special temporary authority is GRANTED for an additional 60 days beginning March 20, 2009 and ending May 18, 2009.

**Points of Communication:**

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SES-STA-20090317-00320    E   KA294    SES Americom, Inc.  
Special Temporary Authority  
Grant of Authority  
Date Effective:    03/20/2009

**Class of Station:**

**Points of Communication:**

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SES-STA-20090318-00347    E   E990120    FiberSat Global Services, Inc.  
Special Temporary Authority  
Grant of Authority  
Date Effective:    03/23/2009

**Class of Station:**

"MOD" to add Ku-band frequencies to antenna 3.8M.

**Points of Communication:**

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SES-STA-20090319-00349    E   E010011    Deere & Company  
Special Temporary Authority  
Grant of Authority  
Date Effective:    03/20/2009

**Class of Station:**

Extension of special temporary authority is GRANTED for an additional 60 days beginning March 20, 2009 and ending May 18, 2009.

**Points of Communication:**

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**SES-STA-20090320-00357**    E E000166    HNS License Sub, LLC  
Special Temporary Authority  
Grant of Authority

Date Effective:    03/24/2009

**Class of Station:**

Extension of special temporary authority is GRANTED for an additional 60 days beginning March 26, 2009 and ending May 24, 2009.

**Points of Communication:**

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**SES-T/C-20090213-00193**    E E950013    Game Show Network  
Application for Consent to Transfer of Control  
Grant of Authority

Date Effective:    03/23/2009

**Current Licensee:**    Game Show Network

**FROM:** SONY PICTURES CABLE VENTURES I INC.

**TO:**    LDIG Gamenet, Inc.

No. of Station(s) listed: 1

Transfer of Control is granted with condition.

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**Dismissal**

**SES-MOD-20090306-00267**    E990026    VIDEOCOM SATELLITE ASSOCIATES, INC.

Videocom Satellite Associates, Inc. (Videocom) Mod application is dismissed without prejudice as defective, see DA 09-645, released March 19, 2009.

**SURRENDER**

**SES-REG-19990325-00340**    E990119    Alaska Public Telecommunications, Inc.

Licensee has surrendered Receive Only Earth Station Registration per letter dated March 20, 2009.

**SES-RWL-19990407-00616**    E890393    SES Americom, Inc.

Licensee has surrendered Receive Only earth station Registration per letter dated March 18, 2009.

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