
14000.0000 - 14500.0000 MHz	3M66G7D	44.55 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	3M79G7D	44.48 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	3M89G7D	44.55 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	3M90G7D	44.49 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	6M57G7D	44.53 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	882KG7D	44.56 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	9M36G7D	42.32 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	8M19G7D	43.20 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	4M10G7D	38.10 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M40G7D	44.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M00G7W	44.33 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M20G7W	44.20 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M67G7W	42.74 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M75G7W	43.10 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M00G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	3M00G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	4M00G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	5M00G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	6M76G7W	43.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	830KG7W	42.40 dBW	DIGITAL DATA SERVICES
12200.0000 - 12750.0000 MHz	30M0G7D	0.00 dBW	Digital Data Services
14000.0000 - 14500.0000 MHz	6M35G7W	43.70 dBW	Digital Data Services
14000.0000 - 14500.0000 MHz	2M50G7W	44.25 dBW	Digital Data Services
14000.0000 - 14500.0000 MHz	2M30G7W	44.50 dBW	Digital Data Services
14000.0000 - 14250.0000 MHz	2M05G7W	42.67 dBW	Digital Data Services
11200.0000 - 11450.0000 MHz	30M0G7W		Digital Data Services

SITE ID: AES2
LOCATION: UP TO 1000 ESAA TERMINALS (0.74 m), CONUS and OCONUS

ANTENNA ID:	AES2	0.74 meters	THINKOM	2KUANTENNA
	14000.0000 - 14500.0000 MHz	7M28G7D	41.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	1M51G7D	44.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	1M80G7D	43.20 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	2M00G7D	43.90 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	2M00G7D	44.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	2M10G7D	44.20 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	2M27G7D	44.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	2M40G7D	44.50 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	3M00G7D	44.50 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	3M60G7D	44.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	4M10G7D	41.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	4M80G7D	44.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	5M60G7D	44.50 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	5M64G7D	40.70 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	5M83G7D	44.50 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	5M97G7D	43.10 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	6M72G7D	42.30 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	7M17G7D	40.90 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	7M40G7D	41.40 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	7M50G7D	41.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	8M00G7D	44.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	8M10G7D	43.20 dBW	DIGITAL DATA SERVICES
	10950.0000 - 11200.0000 MHz	30M0G7D		DIGITAL DATA SERVICES

11450.0000 - 11700.0000 MHz	30M0G7D		DIGITAL DATA SERVICES
11700.0000 - 12200.0000 MHz	30M0G7D		DIGITAL DATA SERVICES
12250.0000 - 12750.0000 MHz	30M0G7D		DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M00G7W	44.71 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M20G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M75G7W	42.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M00G7W	46.98 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	3M00G7W	50.20 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	4M00G7W	45.94 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	6M00G7W	45.08 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	7M48G7W	43.87 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	930KG7W	42.40 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	7M20G7W	42.43 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	6M35G7W	44.80 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	5M05G7W	45.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M50G7W	48.70 dBW	DIGITAL DATA SERVICES
14000.0000 - 14250.0000 MHz	2M05G7W	41.70 dBW	DIGITAL DATA SERVICES
11200.0000 - 11450.0000 MHz	30M0G7W		DIGITAL DATA SERVICES

Points of Communication:

AES1 - AMC 21 - (124.9 W.L.)

AES1 - AMC-1(S2445) - (129.15)

AES1 - AsiaSat 7 - (105.5 E.L.)

AES1 - ASTRA 4A - (4.8 E.L.)

AES1 - E117 WA (S2873) - (116.8 W.L.)

AES1 - EUTELSAT 172A(S2610) - (172 E. L.)

AES1 - EUTELSAT115WB(S2938) - (114.9 W.L.)

AES1 - GALAXY 17 (S2715) - (91 W.L.)

AES1 - GALAXY 28 (S2160) - (89.0 W.L.)

AES1 - INTEL 907 (S2411) - (27.5 W.L.)

AES1 - INTELSAT 14 (S2785) - (45.0 W.L.)

AES1 - INTELSAT 18 (S2817) - (180 E.L.)

AES1 - INTELSAT 19 (S2850) - (166.0 E.L.)

AES1 - INTELSAT 20 - (68.5 E.L.)

AES1 - INTELSAT 21 (S2863) - (58.0 W.L.)

AES1 - INTELSAT 22 - (72.1 E. L.)

AES1 - INTELSAT 29e (S2913) - (50.0 W.L.)

AES1 - INTELSAT 33e - (60.0 E.L.)

AES1 - INTELSAT 904 - (60 E.L.)

AES1 - JCSAT 5A - (132 E.L.)

AES1 - JCSAT-2B - (154 E.L.)

AES1 - SES-1 - (101.0 W.L.)

AES1 - SES-2 (S2826) - (87 W.L.)

AES1 - SES-3 (S2892) - (103 W.L.)

AES1 - SES-4 (S2828) - (22.0 W.L.)

AES1 - SES-6 (S2870) - (40.5 W.L.)

AES1 - TELSTAR 11N (S2357) - (37.5 W.L.)

AES1 - TELSTAR 12 V (S2933) - (15 W.L.)

AES1 - Yamal 300K - (183 E.L.)

AES1 - Yamal 401 - (90 E.L.)

AES2 - AMC 21 - (124.9 W.L.)

AES2 - AMC-1(S2445) - (129.15)

AES2 - AMC-6 (S2347) - (67 W.L.)

AES2 - APSTAR V - (138 E.L.)

AES2 - AsiaSat 7 - (105.5 E.L.)

AES2 - ASTRA 4A - (4.8 E.L.)

AES2 - E117 WA (S2873) - (116.8 W.L.)

AES2 - EUTELSAT115WB(S2938) - (114.9 W.L.)

AES2 - GALAXY 17 (S2715) - (91 W.L.)

AES2 - GALAXY 28 (S2160) - (89.0 W.L.)

AES2 - INTEL 907 (S2411) - (27.5 W.L.)

AES2 - INTELSAT 14 (S2785) - (45.0 W.L.)

AES2 - INTELSAT 18 (S2817) - (180 E.L.)

AES2 - INTELSAT 19 (S2850) - (166.0 E.L.)

AES2 - INTELSAT 20 - (68.5 E.L.)

AES2 - INTELSAT 21 (S2863) - (58.0 W.L.)

AES2 - INTELSAT 22 - (72.1 E. L.)

AES2 - INTELSAT 29e (S2913) - (50.0 W.L.)

AES2 - INTELSAT 33e - (60.0 E.L.)

AES2 - INTELSAT 904 - (60 E.L.)

AES2 - JCSAT-2B - (154 E.L.)

AES2 - SES-1 - (101.0 W.L.)

AES2 - SES-3 (S2892) - (103 W.L.)

AES2 - SES-4 (S2828) - (22.0 W.L.)

AES2 - SES-6 (S2870) - (40.5 W.L.)

AES2 - TELSTAR 11N (S2357) - (37.5 W.L.)

AES2 - TELSTAR 12 V (S2933) - (15 W.L.)

AES2 - Yamal 300K - (183 E.L.)

AES2 - Yamal 401 - (90 E.L.)

SES-LIC-20170303-00234 E E170080 RR Media Inc.

Application for Authority

04/12/2017 - 04/12/2032

Grant of Authority

Date Effective: 04/12/2017

Class of Station: Fixed Earth Stations

Nature of Service: Fixed Satellite Service

SITE ID: 1

LOCATION: 157 Kimbles Road, Wayne, Hawley, PA

41 ° 27 ' 49.80 " N LAT.

75 ° 7 ' 51.30 " W LONG.

ANTENNA ID: HS7B

9.3 meters

ASC Signal

9.3 meter

14000.0000 - 14500.0000 MHz	780KG7D	46.00 dBW	Digital
11700.0000 - 12200.0000 MHz	200KG7D	0.00 dBW	Digital
11700.0000 - 12200.0000 MHz	1M85G7D		Digital
11700.0000 - 12200.0000 MHz	1M92G7D		Digital
11700.0000 - 12200.0000 MHz	3M85G7D		Digital
11700.0000 - 12200.0000 MHz	5M76G7D		Digital
11700.0000 - 12200.0000 MHz	7M68G7D		Digital
11700.0000 - 12200.0000 MHz	8M67G7D		Digital
ANTENNA ID: ESV6012	1.5 meters	SEATEL	6012
14000.0000 - 14500.0000 MHz	100KG7D	37.00 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	150KG7D	38.80 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	1M17G7D	47.80 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	1M56G7D	49.10 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	200KG7D	40.00 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	300KG7D	41.80 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	390KG7D	43.00 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	50K0G7D	34.00 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	780KG7D	46.00 dBW	DIGITAL
12500.0000 - 12750.0000 MHz	1M76G7W		DIGITAL
12500.0000 - 12750.0000 MHz	2M41G7W		DIGITAL
12500.0000 - 12750.0000 MHz	3M52G7W		DIGITAL
12500.0000 - 12750.0000 MHz	5M77G7W		DIGITAL
11700.0000 - 12200.0000 MHz	1M92G7D		DIGITAL
11700.0000 - 12200.0000 MHz	3M85G7D		DIGITAL
11700.0000 - 12200.0000 MHz	5M76G7D		DIGITAL
11700.0000 - 12200.0000 MHz	7M68G7D		DIGITAL

11700.0000 - 12200.0000 MHz	8M67G7D		DIGITAL
11450.0000 - 11700.0000 MHz	1M76G7W		DIGITAL
11450.0000 - 11700.0000 MHz	2M41G7W		DIGITAL
11450.0000 - 11700.0000 MHz	3M52G7W		DIGITAL
11450.0000 - 11700.0000 MHz	5M77G7W		DIGITAL
10950.0000 - 11200.0000 MHz	1M76G7W		DIGITAL
10950.0000 - 11200.0000 MHz	2M41G7W		DIGITAL
10950.0000 - 11200.0000 MHz	3M52G7W		DIGITAL
10950.0000 - 11200.0000 MHz	5M77G7W		DIGITAL
ANTENNA ID: ESV6009	1.5 meters	SEATEL	6009
14000.0000 - 14500.0000 MHz	100KG7D	37.00 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	150KG7D	38.80 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	1M17G7D	47.80 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	1M56G7D	49.10 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	200KG7D	40.00 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	300KG7D	41.80 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	390KG7D	43.00 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	50K0G7D	34.00 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	780KG7D	46.00 dBW	DIGITAL
12500.0000 - 12750.0000 MHz	1M76G7W		DIGITAL
12500.0000 - 12750.0000 MHz	2M41G7W		DIGITAL
12500.0000 - 12750.0000 MHz	3M52G7W		DIGITAL
12500.0000 - 12750.0000 MHz	5M77G7W		DIGITAL
11700.0000 - 12200.0000 MHz	1M92G7D		DIGITAL
11700.0000 - 12200.0000 MHz	3M85G7D		DIGITAL
11700.0000 - 12200.0000 MHz	5M76G7D		DIGITAL

11700.0000 - 12200.0000 MHz	7M68G7D	DIGITAL
11700.0000 - 12200.0000 MHz	8M67G7D	DIGITAL
11450.0000 - 11700.0000 MHz	1M76G7W	DIGITAL
11450.0000 - 11700.0000 MHz	2M41G7W	DIGITAL
11450.0000 - 11700.0000 MHz	3M52G7W	DIGITAL
11450.0000 - 11700.0000 MHz	5M77G7W	DIGITAL
10950.0000 - 11200.0000 MHz	1M76G7W	DIGITAL
10950.0000 - 11200.0000 MHz	2M41G7W	DIGITAL
10950.0000 - 11200.0000 MHz	3M52G7W	DIGITAL
10950.0000 - 11200.0000 MHz	5M77G7W	DIGITAL

SITE ID: Oceans
LOCATION: 4400 S. Sam Houston Pkwy, USA, Houston, TX

ANTENNA ID:	ESV4003	1 meters	Seatel	4003
14000.0000 - 14500.0000 MHz	100KG7D	37.00 dBW	Digital	
14000.0000 - 14500.0000 MHz	150KG7D	38.80 dBW	Digital	
14000.0000 - 14500.0000 MHz	200KG7D	40.00 dBW	Digital	
14000.0000 - 14500.0000 MHz	300KG7D	41.80 dBW	Digital	
14000.0000 - 14500.0000 MHz	50K0G7D	34.00 dBW	Digital	
14000.0000 - 14500.0000 MHz	780KG7D	46.00 dBW	Digital	
12500.0000 - 12750.0000 MHz	1M76G7W	Digital		
12500.0000 - 12750.0000 MHz	2M41G7W	Digital		
12500.0000 - 12750.0000 MHz	3M52G7W	Digital		
12500.0000 - 12750.0000 MHz	5M77G7W	Digital		
11700.0000 - 12200.0000 MHz	1M92G7D	Digital		
11700.0000 - 12200.0000 MHz	3M85G7D	Digital		
11700.0000 - 12200.0000 MHz	5M76G7D	Digital		

11700.0000 - 12200.0000 MHz	7M68G7D		Digital
11700.0000 - 12200.0000 MHz	8M67G7D		Digital
11700.0000 - 12200.0000 MHz	390KG7D		Digital
11450.0000 - 11700.0000 MHz	1M76G7W		Digital
11450.0000 - 11700.0000 MHz	2M41G7W		Digital
11450.0000 - 11700.0000 MHz	3M52G7W		Digital
11450.0000 - 11700.0000 MHz	5M77G7W		Digital
10950.0000 - 11200.0000 MHz	1M76G7W		Digital
10950.0000 - 11200.0000 MHz	2M41G7W		Digital
10950.0000 - 11200.0000 MHz	3M52G7W		Digital
10950.0000 - 11200.0000 MHz	5M77G7W		Digital
ANTENNA ID: ESV4006	1 meters	Seatel	4006
14000.0000 - 14500.0000 MHz	150KG7D	38.80 dBW	Digital
14000.0000 - 14500.0000 MHz	200KG7D	40.00 dBW	Digital
14000.0000 - 14500.0000 MHz	300KG7D	41.80 dBW	Digital
14000.0000 - 14500.0000 MHz	390KG7D	43.00 dBW	Digital
14000.0000 - 14500.0000 MHz	50K0G7D	34.00 dBW	Digital
14000.0000 - 14500.0000 MHz	780KG7D	46.00 dBW	Digital
12500.0000 - 12750.0000 MHz	1M76G7W		Digital
12500.0000 - 12750.0000 MHz	2M41G7W		Digital
12500.0000 - 12750.0000 MHz	3M52G7W		Digital
12500.0000 - 12750.0000 MHz	5M77G7W		Digital
11700.0000 - 12200.0000 MHz	1M92G7D		Digital
11700.0000 - 12200.0000 MHz	3M85G7D		Digital
11700.0000 - 12200.0000 MHz	5M76G7D		Digital
11700.0000 - 12200.0000 MHz	7M68G7D		Digital

11700.0000 - 12200.0000 MHz	8M67G7D		Digital
11700.0000 - 12200.0000 MHz	100KG7D		Digital
11450.0000 - 11700.0000 MHz	1M76G7W		Digital
11450.0000 - 11700.0000 MHz	3M52G7W		Digital
11450.0000 - 11700.0000 MHz	5M77G7W		Digital
10950.0000 - 11200.0000 MHz	1M76G7W		Digital
10950.0000 - 11200.0000 MHz	2M41G7W		Digital
10950.0000 - 11200.0000 MHz	3M52G7W		Digital
10950.0000 - 11200.0000 MHz	5M77G7W		Digital
ANTENNA ID: ESV4996	1.2 meters	Seatel	4996
ANTENNA ID: ESV6006	1.5 meters	Seatel	6006
14000.0000 - 14500.0000 MHz	100KG7D	37.00 dBW	Digital
14000.0000 - 14500.0000 MHz	150KG7D	38.80 dBW	Digital
14000.0000 - 14500.0000 MHz	1M17G7D	47.80 dBW	Digital
14000.0000 - 14500.0000 MHz	1M56G7D	49.10 dBW	Digital
14000.0000 - 14500.0000 MHz	200KG7D	40.00 dBW	Digital
14000.0000 - 14500.0000 MHz	300KG7D	41.80 dBW	Digital
14000.0000 - 14500.0000 MHz	390KG7D	43.00 dBW	Digital
14000.0000 - 14500.0000 MHz	50K0G7D	34.00 dBW	Digital
14000.0000 - 14500.0000 MHz	780KG7D	46.00 dBW	Digital
12500.0000 - 12750.0000 MHz	1M76G7W		Digital
12500.0000 - 12750.0000 MHz	2M41G7W		Digital
12500.0000 - 12750.0000 MHz	3M52G7W		Digital
12500.0000 - 12750.0000 MHz	5M77G7W		Digital
11700.0000 - 12200.0000 MHz	1M92G7D		Digital
11700.0000 - 12200.0000 MHz	3M85G7D		Digital

11700.0000 - 12200.0000 MHz	5M76G7D		Digital
11700.0000 - 12200.0000 MHz	7M68G7D		Digital
11700.0000 - 12200.0000 MHz	8M67G7D		Digital
11450.0000 - 11700.0000 MHz	1M76G7W		Digital
11450.0000 - 11700.0000 MHz	2M41G7W		Digital
11450.0000 - 11700.0000 MHz	3M52G7W		Digital
11450.0000 - 11700.0000 MHz	5M77G7W		Digital
10950.0000 - 11200.0000 MHz	1M76G7W		Digital
10950.0000 - 11200.0000 MHz	2M41G7W		Digital
10950.0000 - 11200.0000 MHz	3M52G7W		Digital
10950.0000 - 11200.0000 MHz	5M77G7W		Digital
ANTENNA ID: ESV9797	2.4 meters	Seatel	9797
14000.0000 - 14500.0000 MHz	100KG7D	37.00 dBW	Digital
14000.0000 - 14500.0000 MHz	1M17G7D	47.80 dBW	Digital
14000.0000 - 14500.0000 MHz	1M56G7D	49.10 dBW	Digital
14000.0000 - 14500.0000 MHz	200KG7D	40.00 dBW	Digital
14000.0000 - 14500.0000 MHz	300KG7D	41.80 dBW	Digital
14000.0000 - 14500.0000 MHz	390KG7D	43.00 dBW	Digital
14000.0000 - 14500.0000 MHz	50K0G7D	34.00 dBW	Digital
14000.0000 - 14500.0000 MHz	780KG7D	46.00 dBW	Digital
14000.0000 - 14500.0000 MHz	3M30G7W	54.94 dBW	Digital
14000.0000 - 14500.0000 MHz	4M00G7W	55.80 dBW	Digital
11700.0000 - 12200.0000 MHz	1M92G7D		Digital
11700.0000 - 12200.0000 MHz	3M85G7D		Digital
11700.0000 - 12200.0000 MHz	5M76G7D		Digital
11700.0000 - 12200.0000 MHz	7M68G7D		Digital

11700.0000 - 12200.0000 MHz	8M67G7D		Digital
11700.0000 - 12200.0000 MHz	150KG7D		Digital
11700.0000 - 12200.0000 MHz	27M0G7W		Digital

SITE ID: SEATEL 75CM(USAT30)
LOCATION: 0.75CM (500 UNITS), OCEANS

ANTENNA ID: ESV75CM	0.75 meters	SEATEL	USAT 30
14000.0000 - 14500.0000 MHz	840KG7W	40.62 dBW	DIGITAL
11700.0000 - 12200.0000 MHz	1M59G7W		DIGITAL

SITE ID: ORBIT 7103
LOCATION: 1.2M (250 UNITS), LA

ANTENNA ID: ORBIT7103	1.2 meters	ORBIT	7103
14000.0000 - 14500.0000 MHz	1M1G7D	42.50 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	4M68G7D	48.50 dBW	DIGITAL
11700.0000 - 12200.0000 MHz	8M67G7D		DIGITAL

SITE ID: INTELLIAN V60
LOCATION: 0.6M. (500 UNITS) GM AO PO CARRIBBEAN SEA, US WATERWAYS

ANTENNA ID: INEL60CM	0.6 meters	INTELLIAN TECHNOLOGIES	INTELLIAN V60
14000.0000 - 14500.0000 MHz	567KG7W	37.22 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	3M00G7W	44.29 dBW	DIGITAL
11700.0000 - 12200.0000 MHz	2M30G7W		DIGITAL

SITE ID: INTELLIAN V80
LOCATION: 0.83M. (500 UNITS) GM AO PO CARRIBBEAN SEA, US WATERWAYS

ANTENNA ID: INTE83CM	0.83 meters	INTELLIAN	INTELLIAN V80
14000.0000 - 14500.0000 MHz	248KG7W	37.80 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	1M50G7W	44.78 dBW	DIGITAL
14000.0000 - 14500.0000 MHz	2M05G7W	44.13 dBW	DIGITAL
11700.0000 - 12200.0000 MHz	2M30G7W		DIGITAL

SITE ID: ST5000-2.4
LOCATION: 4400 S. SAM HOUSTON CENTER US AND INTERNATIONAL WATERWAYS, HOUSTON, TX

ANTENNA ID:	ST5000C	2.4 meters	HARRIS CAPROCK	ST5000
	5925.0000 - 6425.0000 MHz		1M00G7D 58.30 dBW	UP TO 32 APSK
	5925.0000 - 6425.0000 MHz		20M0G7D 61.40 dBW	UP TO 32 APSK
	3700.0000 - 4200.0000 MHz		1M00G7D	UP TO 32 APSK
	3700.0000 - 4200.0000 MHz		20M0G7D	UP TO 32 APSK
ANTENNA ID:	ST5000KU	2.4 meters	HARRIS CAPROCK	ST5000
	14000.0000 - 14500.0000 MHz		1M00G7D 53.40 dBW	UP TO 32 APSK
	14000.0000 - 14500.0000 MHz		20M0G7D 66.40 dBW	UP TO 32 APSK
	11700.0000 - 12200.0000 MHz		1M00G7D 0.00 dBW	UP TO 32 APSK
	11700.0000 - 12200.0000 MHz		20M0G7D	UP TO 32 APSK
ANTENNA ID:	ST5000KA	2.4 meters	HARRIS CAPROCK	ST5000
	27600.0000 - 28400.0000 MHz		1M00G7D 69.40 dBW	UP TO 32 APSK
	27600.0000 - 28400.0000 MHz		40M0G7D 69.40 dBW	UP TO 32 APSK
	28600.0000 - 29100.0000 MHz		1M00G7D 69.40 dBW	UP TO 32 APSK
	28600.0000 - 29100.0000 MHz		40M0G7D 69.40 dBW	UP TO 32 APSK
	28350.0000 - 28600.0000 MHz		1M00G7D 69.40 dBW	UP TO 32 APSK
	28350.0000 - 28600.0000 MHz		40M0G7D 69.40 dBW	UP TO 32 APSK
	29250.0000 - 30000.0000 MHz		1M00G7D 69.40 dBW	UP TO 32 APSK
	29250.0000 - 30000.0000 MHz		40M0G7D 69.40 dBW	UP TO 32 APSK
	17800.0000 - 18600.0000 MHz		1M00G7D	UP TO 32 APSK
	17800.0000 - 18600.0000 MHz		40M0G7D	UP TO 32 APSK
	18300.0000 - 18800.0000 MHz		40M0G7D	UP TO 32 APSK
	18800.0000 - 19300.0000 MHz		1M00G7D	UP TO 32 APSK
	18800.0000 - 19300.0000 MHz		40M0G7D	UP TO 32 APSK

SITE ID: AES1
LOCATION: UP TO 1000 ESAA TERMINALS (0.24 m), CONUS and OCONUS

ANTENNA ID:	AES1	0.24 meters	AeroSat	HR6400
	14000.0000 - 14500.0000 MHz	8M00G7D	44.50 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	6M94G7D	44.45 dBW	DIGITAL DATA SERVICES
	11700.0000 - 12200.0000 MHz	30M0G7D		Digital Data Services
	10950.0000 - 11200.0000 MHz	30M0G7D		Digital Data Services
	11450.0000 - 11700.0000 MHz	30M0G7D		Digital Data Services
	14000.0000 - 14500.0000 MHz	6M56G7D	44.43 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	6M00G7D	44.40 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	4M10G7D	42.80 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	2M34G7D	44.63 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	2M40G7D	43.89 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	2M50G7D	44.57 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	3M66G7D	44.55 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	3M79G7D	44.48 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	3M89G7D	44.55 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	3M90G7D	44.49 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	6M57G7D	44.53 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	882KG7D	44.56 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	9M36G7D	42.32 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	8M19G7D	43.20 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	4M10G7D	38.10 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	1M40G7D	44.60 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	1M00G7W	44.33 dBW	DIGITAL DATA SERVICES
	14000.0000 - 14500.0000 MHz	1M20G7W	44.20 dBW	DIGITAL DATA SERVICES

14000.0000 - 14500.0000 MHz	1M67G7W	42.74 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M75G7W	43.10 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M00G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	3M00G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	4M00G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	5M00G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	6M76G7W	43.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	830KG7W	42.40 dBW	DIGITAL DATA SERVICES
12200.0000 - 12750.0000 MHz	30M0G7D	0.00 dBW	Digital Data Services
14000.0000 - 14500.0000 MHz	6M35G7W	43.70 dBW	Digital Data Services
14000.0000 - 14500.0000 MHz	2M50G7W	44.25 dBW	Digital Data Services
14000.0000 - 14500.0000 MHz	2M30G7W	44.50 dBW	Digital Data Services
14000.0000 - 14250.0000 MHz	2M05G7W	42.67 dBW	Digital Data Services
11200.0000 - 11450.0000 MHz	30M0G7W		Digital Data Services

SITE ID: AES2
LOCATION: UP TO 1000 ESAA TERMINALS (0.74 m), CONUS and OCONUS

ANTENNA ID: AES2	0.74 meters	THINKOM	2KUANTENNA
14000.0000 - 14500.0000 MHz	7M28G7D	41.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M51G7D	44.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M80G7D	43.20 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M00G7D	43.90 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M00G7D	44.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M10G7D	44.20 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M27G7D	44.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M40G7D	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	3M00G7D	44.50 dBW	DIGITAL DATA SERVICES

14000.0000 - 14500.0000 MHz	3M60G7D	44.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	4M10G7D	41.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	4M80G7D	44.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	5M60G7D	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	5M64G7D	40.70 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	5M83G7D	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	5M97G7D	43.10 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	6M72G7D	42.30 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	7M17G7D	40.90 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	7M40G7D	41.40 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	7M50G7D	41.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	8M00G7D	44.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	8M10G7D	43.20 dBW	DIGITAL DATA SERVICES
10950.0000 - 11200.0000 MHz	30M0G7D		DIGITAL DATA SERVICES
11450.0000 - 11700.0000 MHz	30M0G7D		DIGITAL DATA SERVICES
11700.0000 - 12200.0000 MHz	30M0G7D		DIGITAL DATA SERVICES
12250.0000 - 12750.0000 MHz	30M0G7D		DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M00G7W	44.71 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M20G7W	44.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	1M75G7W	42.60 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M00G7W	46.98 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	3M00G7W	50.20 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	4M00G7W	45.94 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	6M00G7W	45.08 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	7M48G7W	43.87 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	930KG7W	42.40 dBW	DIGITAL DATA SERVICES

14000.0000 - 14500.0000 MHz	7M20G7W	42.43 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	6M35G7W	44.80 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	5M05G7W	45.50 dBW	DIGITAL DATA SERVICES
14000.0000 - 14500.0000 MHz	2M50G7W	48.70 dBW	DIGITAL DATA SERVICES
14000.0000 - 14250.0000 MHz	2M05G7W	41.70 dBW	DIGITAL DATA SERVICES
11200.0000 - 11450.0000 MHz	30M0G7W		DIGITAL DATA SERVICES

Points of Communication:

AES1 - AMC 21 - (124.9 W.L.)

AES1 - AMC-1(S2445) - (129.15)

AES1 - AsiaSat 7 - (105.5 E.L.)

AES1 - ASTRA 4A - (4.8 E.L.)

AES1 - E117 WA (S2873) - (116.8 W.L.)

AES1 - EUTELSAT 172A(S2610) - (172 E. L.)

AES1 - EUTELSAT115WB(S2938) - (114.9 W.L.)

AES1 - GALAXY 17 (S2715) - (91 W.L.)

AES1 - GALAXY 28 (S2160) - (89.0 W.L.)

AES1 - INTEL 907 (S2411) - (27.5 W.L.)

AES1 - INTELSAT 14 (S2785) - (45.0 W.L.)

AES1 - INTELSAT 18 (S2817) - (180 E.L.)

AES1 - INTELSAT 19 (S2850) - (166.0 E.L.)

AES1 - INTELSAT 20 - (68.5 E.L.)

AES1 - INTELSAT 21 (S2863) - (58.0 W.L.)

AES1 - INTELSAT 22 - (72.1 E. L.)

AES1 - INTELSAT 29e (S2913) - (50.0 W.L.)

AES1 - INTELSAT 33e - (60.0 E.L.)

AES1 - INTELSAT 904 - (60 E.L.)

AES1 - JCSAT 5A - (132 E.L.)

AES1 - JCSAT-2B - (154 E.L.)

AES1 - SES-1 - (101.0 W.L.)

AES1 - SES-2 (S2826) - (87 W.L.)

AES1 - SES-3 (S2892) - (103 W.L.)

AES1 - SES-4 (S2828) - (22.0 W.L.)

AES1 - SES-6 (S2870) - (40.5 W.L.)

AES1 - TELSTAR 11N (S2357) - (37.5 W.L.)

AES1 - TELSTAR 12 V (S2933) - (15 W.L.)

AES1 - Yamal 300K - (183 E.L.)

AES1 - Yamal 401 - (90 E.L.)

AES2 - AMC 21 - (124.9 W.L.)

AES2 - AMC-1(S2445) - (129.15)

AES2 - AMC-6 (S2347) - (67 W.L.)

AES2 - APSTAR V - (138 E.L.)

AES2 - AsiaSat 7 - (105.5 E.L.)

AES2 - ASTRA 4A - (4.8 E.L.)

AES2 - E117 WA (S2873) - (116.8 W.L.)

AES2 - EUTELSAT115WB(S2938) - (114.9 W.L.)

AES2 - GALAXY 17 (S2715) - (91 W.L.)

AES2 - GALAXY 28 (S2160) - (89.0 W.L.)

AES2 - INTEL 907 (S2411) - (27.5 W.L.)

AES2 - INTELSAT 14 (S2785) - (45.0 W.L.)

AES2 - INTELSAT 18 (S2817) - (180 E.L.)

AES2 - INTELSAT 19 (S2850) - (166.0 E.L.)

AES2 - INTELSAT 20 - (68.5 E.L.)

AES2 - INTELSAT 21 (S2863) - (58.0 W.L.)

AES2 - INTELSAT 22 - (72.1 E. L.)

AES2 - INTELSAT 29e (S2913) - (50.0 W.L.)

AES2 - INTELSAT 33e - (60.0 E.L.)

AES2 - INTELSAT 904 - (60 E.L.)

AES2 - JCSAT-2B - (154 E.L.)

AES2 - SES-1 - (101.0 W.L.)

AES2 - SES-3 (S2892) - (103 W.L.)

AES2 - SES-4 (S2828) - (22.0 W.L.)

AES2 - SES-6 (S2870) - (40.5 W.L.)

AES2 - TELSTAR 11N (S2357) - (37.5 W.L.)

AES2 - TELSTAR 12 V (S2933) - (15 W.L.)

AES2 - Yamal 300K - (183 E.L.)

AES2 - Yamal 401 - (90 E.L.)

SES-MOD-20161130-00917 E E140029 ISAT US Inc.

Application for Modification

09/29/2015 - 09/29/2030

Grant of Authority

Date Effective: 04/17/2017

Class of Station: Fixed Land-based Ship Earth Station

Nature of Service: Domestic Maritime Mobile-Satellite Service

SITE ID: REMOTE 4

LOCATION: Maritime Vessels/4000units South Atlantic Ocean, Pacific Ocean, CONUS PR USVI

ANTENNA ID:	JUE-60GX	0.65 meters	JRC	JUE-60GX
	29500.0000 - 30000.0000 MHz	6M96G7W	50.90 dBW	Various Modulations up to 32APSK; Digital Data Link
	29500.0000 - 30000.0000 MHz	600KG7W	44.00 dBW	Various Modulations up to 32APSK; Digital Data Link
	29500.0000 - 30000.0000 MHz	5M00G1W	50.90 dBW	Modulation and Services Digital Data Signalling
	29500.0000 - 30000.0000 MHz	2M70G1W	50.50 dBW	Modulation and Services Digital Data Signalling
	29100.0000 - 29500.0000 MHz	600KG7W	44.00 dBW	Various Modulations up to 32APSK; Digital Data Link
	19700.0000 - 20200.0000 MHz	32M0G7W		Modulation and Services Digital Data Signalling
	29100.0000 - 29500.0000 MHz	6M96G7W	50.90 dBW	Various Modulations up to 32APSK; Digital Data Link
	29100.0000 - 29500.0000 MHz	5M00G1W	50.90 dBW	Modulation and Services Digital Data Signalling

29100.0000 - 29500.0000 MHz	2M70G1W	50.50 dBW	Modulation and Services Digital Data Signalling
19300.0000 - 19700.0000 MHz	32M0G7W		Modulation and Services Digital Data Signalling

SITE ID: REMOTE 5
LOCATION: Maritime Vessels/4000units South Atlantic Ocean, Pacific Ocean, CONUS PR USVI

ANTENNA ID: INT GX100	1.03 meters	INTELLIAN	GX100
29500.0000 - 30000.0000 MHz	6M96G7W	54.50 dBW	Various Modulations up to 32APSK; Digital Data Link
29500.0000 - 30000.0000 MHz	600KG7W	47.80 dBW	Various Modulations up to 32APSK; Digital Data Link
29500.0000 - 30000.0000 MHz	5M00G1W	54.50 dBW	Modulation and Services Digital Data Signalling
29500.0000 - 30000.0000 MHz	1M79G1W	54.60 dBW	Modulation and Services Digital Data Signalling
19700.0000 - 20200.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link
29100.0000 - 29500.0000 MHz	6M96G7W	54.50 dBW	Various Modulations up to 32APSK; Digital Data Link
29100.0000 - 29500.0000 MHz	600KG7W	47.80 dBW	Various Modulations up to 32APSK; Digital Data Link
29100.0000 - 29500.0000 MHz	5M00G1W	54.50 dBW	Modulation and Services Digital Data Signalling
29100.0000 - 29500.0000 MHz	1M79G1W	54.60 dBW	Modulation and Services Digital Data Signalling
19300.0000 - 19700.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link

SITE ID: REMOTE 6
LOCATION: Maritime Vessels/4000units South Atlantic Ocean, Pacific Ocean, CONUS PR USVI

ANTENNA ID: INT GX60	0.65 meters	INTELLIAN	GX60
29500.0000 - 30000.0000 MHz	6M96G7W	50.90 dBW	Various Modulations up to 32APSK; Digital Data Link
29500.0000 - 30000.0000 MHz	492KG7W	44.00 dBW	Various Modulations up to 32APSK; Digital Data Link
29500.0000 - 30000.0000 MHz	5M00G1W	50.90 dBW	Modulation and Services Digital Data Signalling

29500.0000 - 30000.0000 MHz	2M20G1W	50.50 dBW	Modulation and Services Digital Data Signalling
19700.0000 - 20200.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link
29100.0000 - 29500.0000 MHz	6M96G7W	50.90 dBW	Various Modulations up to 32APSK; Digital Data Link
29100.0000 - 29500.0000 MHz	492KG7W	44.00 dBW	Various Modulations up to 32APSK; Digital Data Link
29100.0000 - 29500.0000 MHz	2M20G1W	50.50 dBW	Modulation and Services Digital Data Signalling
29100.0000 - 29500.0000 MHz	5M00G1W	50.90 dBW	Modulation and Services Digital Data Signalling
19300.0000 - 19700.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link

SITE ID: REMOTE 7

LOCATION: Maritime Vessels/4000units South Atlantic Ocean, Pacific Ocean, CONUS PR USVI

ANTENNA ID:	SAILOR 60	0.65 meters	COBHAM SEATEL	SAILOR GX60
29500.0000 - 30000.0000 MHz	6M96G7W	50.70 dBW	Various Modulations up to 32APSK; Digital Data Link	
29500.0000 - 30000.0000 MHz	492KG7W	44.00 dBW	Various Modulations up to 32APSK; Digital Data Link	
29500.0000 - 30000.0000 MHz	5M00G1W	50.70 dBW	Modulation and Services Digital Data Signalling	
29500.0000 - 30000.0000 MHz	2M20G1W	50.50 dBW	Modulation and Services Digital Data Signalling	
19700.0000 - 20200.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link	
29100.0000 - 29500.0000 MHz	6M96G7W	50.70 dBW	Various Modulations up to 32APSK; Digital Data Link	
29100.0000 - 29500.0000 MHz	492KG7W	44.00 dBW	Various Modulations up to 32APSK; Digital Data Link	
29100.0000 - 29500.0000 MHz	5M00G1W	50.70 dBW	Modulation and Services Digital Data Signalling	
29100.0000 - 29500.0000 MHz	2M20G1W	50.50 dBW	Modulation and Services Digital Data Signalling	
19300.0000 - 19700.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link	

SITE ID: REMOTE 3
LOCATION: Maritime Vessels/4000units South Atlantic Ocean, Pacific Ocean, CONUS PR USVI

ANTENNA ID:	SAILOR 100	1.03 meters	Cobham SatCom	Sailor 100 GX
	29500.0000 - 30000.0000 MHz	6M96G7W	54.50 dBW	Various Modulations up to 32APSK; Digital Data Link
	29500.0000 - 30000.0000 MHz	600KG7W	47.80 dBW	Various Modulations up to 32APSK; Digital Data Link
	29500.0000 - 30000.0000 MHz	5M00G1W	54.50 dBW	Modulation and Services Digital Data Signalling
	29500.0000 - 30000.0000 MHz	2M70G1W	54.30 dBW	Modulation and Services Digital Data Signalling
	19700.0000 - 20200.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link
	29100.0000 - 29500.0000 MHz	6M96G7W	54.50 dBW	Various Modulations up to 32APSK; Digital Data Link
	29100.0000 - 29500.0000 MHz	600KG7W	47.80 dBW	Various Modulations up to 32APSK; Digital Data Link
	29100.0000 - 29500.0000 MHz	5M00G1W	54.50 dBW	Modulation and Services Digital Data Signalling
	29100.0000 - 29500.0000 MHz	2M70G1W	54.30 dBW	Modulation and Services Digital Data Signalling
	19300.0000 - 19700.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link

SITE ID: REMOTE 1
LOCATION: Maritime Vessels/4000units South Atlantic Ocean, Pacific Ocean, CONUS, PR, USVI

ANTENNA ID:	SEA4012GX	1 meters	Cobham-Sea Tel	4012GX
	29500.0000 - 30000.0000 MHz	2M30G1W	54.10 dBW	Modulation and Services Digital Data Signalling
	29500.0000 - 30000.0000 MHz	5M00G1W	54.10 dBW	Modulation and Services Digital Data Signalling
	29500.0000 - 30000.0000 MHz	6M96G7W	54.10 dBW	Various Modulations up to 32APSK; Digital Data Link
	29500.0000 - 30000.0000 MHz	600KG7W	46.50 dBW	Various Modulations up to 32APSK; Digital Data Link
	19700.0000 - 20200.0000 MHz	32M0G7W	0.00 dBW	Various Modulations up to 32APSK; Digital Data Link

29100.0000 - 29500.0000 MHz	2M30G1W	54.10 dBW	Modulation and Services Digital Data Signalling
29100.0000 - 29500.0000 MHz	5M00G1W	54.10 dBW	Modulation and Services Digital Data Signalling
29100.0000 - 29500.0000 MHz	6M96G7W	54.10 dBW	Various Modulations up to 32APSK; Digital Data Link
29100.0000 - 29500.0000 MHz	600KG7W	46.50 dBW	Various Modulations up to 32APSK; Digital Data Link
19300.0000 - 19700.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link

SITE ID: REMOTE 2

LOCATION: Maritime Vessels/4000units South Atlantic Ocean, Pacific Ocean, CONUS PR USVI

ANTENNA ID:	SEAGX60	0.65 meters	Cobham-Sea Tel	GX60
29500.0000 - 30000.0000 MHz	2M70G1W	50.30 dBW	Modulation and Services Digital Data Signalling	
29500.0000 - 30000.0000 MHz	5M00G1W	50.30 dBW	Modulation and Services Digital Data Signalling	
29500.0000 - 30000.0000 MHz	6M96G7W	50.30 dBW	Various Modulations up to 32APSK; Digital Data Link	
29500.0000 - 30000.0000 MHz	600KG7W	43.30 dBW	Various Modulations up to 32APSK; Digital Data Link	
19700.0000 - 20200.0000 MHz	32M0G7W	0.00 dBW	Various Modulations up to 32APSK; Digital Data Link	
29100.0000 - 29500.0000 MHz	6M96G7W	50.30 dBW	Various Modulations up to 32APSK; Digital Data Link	
29100.0000 - 29500.0000 MHz	600KG7W	43.30 dBW	Various Modulations up to 32APSK; Digital Data Link	
29100.0000 - 29500.0000 MHz	5M00G1W	50.30 dBW	Modulation and Services Digital Data Signalling	
29100.0000 - 29500.0000 MHz	2M70G1W	50.30 dBW	Modulation and Services Digital Data Signalling	
19300.0000 - 19700.0000 MHz	32M0G7W		Various Modulations up to 32APSK; Digital Data Link	

Points of Communication:

REMOTE 1 - INMARSAT 5F2 - (55.0 W.L.)

REMOTE 1 - INMARSAT 5F3 - (179.6 E.L.)

SES-MOD-20170208-00135 E E050282 Iridium Satellite LLC
 Application for Modification 02/09/2006 - 02/09/2021
 Grant of Authority Date Effective: 04/17/2017

Class of Station: Fixed Earth Stations

Nature of Service: Fixed Satellite Service

SITE ID: 1
 LOCATION: North Star Industrial Park Lot 1 of Tract B-5, North Star Borough, Fairbanks, AK
 64 ° 49 ' 3.20 " N LAT. 147 ° 43 ' 26.80 " W LONG.

ANTENNA ID:	A1	3 meters	Scientific-Atlanta	3M.	
29100.0000 - 29300.0000 MHz			3M13G7W	67.50 dBW	Digital Telemetry, Tracking and Command Carriers
19400.0000 - 19600.0000 MHz			3M31G7W		Digital Telemetry, Tracking and Command Carriers
29100.0000 - 29300.0000 MHz			14M0G7W	67.50 dBW	Digital
19400.0000 - 19600.0000 MHz			14M0G7W		Digital

Points of Communication:

1 - IRIDIUM (S2110) - (NGSO)

SES-MOD-20170208-00136 E E960131 Iridium Satellite LLC
 Application for Modification 11/01/2006 - 11/01/2021
 Grant of Authority Date Effective: 04/13/2017

Class of Station: Fixed Earth Stations

Nature of Service: Fixed Satellite Service

SITE ID: 1
 LOCATION: SW CORNER OF PRICE RD & ELLIOT ROAD LOT 21, MARICOPA, TEMPE, AZ
 33 ° 20 ' 32.00 " N LAT. 111 ° 53 ' 56.00 " W LONG.

ANTENNA ID:	1	3 meters	SCIENTIFIC-ATLANTA	3M	
29227.0000 - 29233.0000 MHz			25K0G2D	71.50 dBW	BPSK/PM
29100.0000 - 29300.0000 MHz			6M25G7W	71.50 dBW	OPSK
19504.0000 - 19510.0000 MHz			25K0G2D		BPSK/PM
19400.0000 - 19600.0000 MHz			6M25G7W		OPSK
29100.0000 - 29300.0000 MHz			14M0G7W	71.50 dBW	DIGITAL
19400.0000 - 19600.0000 MHz			14M0G7W		DIGITAL

ANTENNA ID:	ET4	3 meters	SCIENTIFIC-ATLANTA	3M
	29100.0000 - 29300.0000 MHz		3M13G7W	67.50 dBW
				DIGITAL TELEMETRY, TRACKING, AND COMMAND CARRIERS
	19400.0000 - 19600.0000 MHz		3M13G7W	
				DIGITAL TELEMETRY, TRACKING, AND COMMAND CARRIERS

Points of Communication:

1 - IRIDIUM (S2110) - (NGSO)

1 - ORBCOMM GEN1 (S2103) - (NGSO)

SES-MOD-20170208-00138	E E960244	Iridium Constellation LLC	
Application for Modification			01/31/2007 - 01/31/2022
Grant of Authority			Date Effective: 04/17/2017

Class of Station: Fixed Earth Stations

Nature of Service: Fixed Satellite Service

SITE ID: 1

LOCATION: 2501 S. PRICE ROAD, MARICOPA, CHANDLER, AZ
 33 ° 15 ' 59.20 " N LAT. 111 ° 52 ' 53.90 " W LONG.

ANTENNA ID:	ET1 & 2	3 meters	SCIENTIFIC-ATLANTA	495600-311
	29227.0000 - 29233.0000 MHz		25K0G2D	50.40 dBW
				Feederlink / BPSK PM low gain
	29100.0000 - 29250.0000 MHz		6M25G1D	71.50 dBW
				Feederlink / QPSK High Gain
	19504.0000 - 19510.0000 MHz		25K0G2D	
				Feederlink / BPSK low gain
	19400.0000 - 19600.0000 MHz		6M25G7W	0.00 dBW
				Feederlink / QPSK High Gain
	29227.0000 - 29233.0000 MHz		14M0G7W	50.40 dBW
				NULL
	29100.0000 - 29250.0000 MHz		14M0G7W	71.50 dBW
				NULL
	19400.0000 - 19600.0000 MHz		14M0G7W	
				Digital
	19504.0000 - 19510.0000 MHz		14M0G7W	
				NULL

ANTENNA ID:	ET3 & 4	3 meters	SCIENTIFIC-ATLANTA	495600-311
	29100.0000 - 29250.0000 MHz		6M25G7W	69.40 dBW
				Feederlink / MULTIPLEXED QPSK VOICE, DATA, FAX
	29100.0000 - 29250.0000 MHz		6M25G1D	69.40 dBW
				QPSK TTAC DATA
	19400.0000 - 19600.0000 MHz		6M25G7W	
				Feederlink / MULTIPLEXED QPSK VOICE, DATA, FAX

29100.0000 - 29250.0000 MHz	14M0G7W	69.40 dBW	Digital
19400.0000 - 19600.0000 MHz	14M0G7W		Digital

Points of Communication:

1 - IRIDIUM CONSTELLATIO - (NGSO)

SES-MOD-20170213-00150 E E000707 RR Media Inc.
 Application for Modification 12/05/2011 - 12/05/2026
 Grant of Authority Date Effective: 04/18/2017

Class of Station: Fixed Earth Stations

Nature of Service: Fixed Satellite Service

SITE ID: 9.2 Ku
 LOCATION: RR #1 BOX 672, SATELLITE ROAD, PIKE, HAWLEY, PA
 41 ° 27 ' 50.00 " N LAT. 75 ° 7 ' 48.00 " W LONG.

ANTENNA ID:	1	9.2 meters	VERTEX/RSI	VERTEX/RSI 9.2 METER
	14000.0000 - 14500.0000 MHz	960KF2D	83.00 dBW	COMMAND & RANGING for TT&C functionality
	11700.0000 - 12200.0000 MHz	960KF2D		COMMAND & RANGING for TT&C functionality
	11450.0000 - 11700.0000 MHz	960KF2D		COMMAND & RANGING for TT&C functionality
	10950.0000 - 11200.0000 MHz	960KF2D		COMMAND & RANGING for TT&C functionality
	14000.0000 - 14500.0000 MHz	36M0G7W	85.80 dBW	DIGITAL DATA
	14000.0000 - 14500.0000 MHz	6M00G7W	78.00 dBW	DIGITAL DATA
	10950.0000 - 11200.0000 MHz	6M00G7W		DIGITAL DATA
	11700.0000 - 12200.0000 MHz	6M00G7W		DIGITAL DATA
	10950.0000 - 11200.0000 MHz	36M0G7W		DIGITAL DATA
	11700.0000 - 12200.0000 MHz	36M0G7W		DIGITAL DATA

Points of Communication:

9.2 Ku - INTEL 907 (S2411) - (27.5 W.L.)
 9.2 Ku - PERMITTED LIST - ()

SES-MOD-20170303-00233 E E040399 WLS Television, Inc.
Application for Modification
Grant of Authority

11/30/2004 - 11/30/2019
Date Effective: 04/17/2017

Class of Station: Temporary Fixed Earth Station

Nature of Service: Fixed Satellite Service

SITE ID: 1

LOCATION: GREATER CHICAGO METRO AREA AND MIDWESTERN USA, VARIOUS

ANTENNA ID:	1	1.5 meters	ADVENT COMMUNICATIONS	NEWS SWIFT 150 KMA	
	14000.0000 - 14500.0000 MHz		36M0G7W	65.30 dBW	Digital MCPC carrier used for video, audio and data
	11700.0000 - 12200.0000 MHz		36M0G7W		Digital MCPC carrier used for video, audio and data
ANTENNA ID:	2CHICAGO	1.4 meters	AVL TECHNOLOGIES	1410	
	14000.0000 - 14500.0000 MHz		36M0G7W	65.00 dBW	SINGLE CARRIER DVB S/S2 DIGITAL VIDEO, PROGRAM AUDIO,, VOICE AND DATA.

Points of Communication:

1 - PERMITTED LIST - ()

SES-MOD-20170309-00254 E E000732 WVTM Hearst Television Inc.
Application for Modification
Grant of Authority

02/07/2011 - 02/07/2026
Date Effective: 04/17/2017

Class of Station: Temporary Fixed Earth Station

Nature of Service: Fixed Satellite Service

SITE ID: 1

LOCATION: (WVTM-TV) SNG vehicle, VARIOUS

ANTENNA ID:	1	1.45 meters	SAT-LITE TECHNOLOGIES	1411	
	14000.0000 - 14500.0000 MHz		3M50D7W	60.21 dBW	QAM or APSK; Digital Video, Digital Audio and Data
	14000.0000 - 14500.0000 MHz		36M0D7W	64.20 dBW	QAM or APSK; Digital Video, Digital Audio and Data
	11700.0000 - 12200.0000 MHz		3M50D7W		QAM or APSK; Digital Video, Digital Audio and Data
	11700.0000 - 12200.0000 MHz		36M0D7W		QAM or APSK; Digital Video, Digital Audio and Data

Points of Communication:

1 - PERMITTED LIST - ()

SES-RWL-20170406-00372 E E920456 KOB-TV, LLC
Renewal 06/10/2017 - 06/10/2032
Grant of Authority Date Effective: 04/13/2017

Class of Station: Fixed Earth Stations

Nature of Service: Domestic Fixed Satellite Service

SITE ID: 1
LOCATION: CHAVES, CAPROCK, NM
33 ° 22 ' 32.00 " N LAT. 103 ° 46 ' 5.00 " W LONG.

ANTENNA ID: 1 5 meters ODOM 5 METER
3700.0000 - 4200.0000 MHz 25M0F8W

Points of Communication:

1 - PERMITTED LIST - ()

SES-STA-20170110-00024 E E110104 SES Americom, Inc.
Special Temporary Authority
Grant of Authority Date Effective: 04/11/2017

Class of Station:

On April 11, 2017, SES Americom Inc. was granted special temporary authority for 30 days, beginning April 13, 2017, to operate its fixed earth stations in Manassas, VA and Somis, CA to provide: (1) telemetry, tracking and command (TT&C) services during in-orbit testing (IOT) at the 68.5° W.L. orbital location for the SES-10 satellite, and (2) TT&C services for the SES-10 satellite as it proceeds to the 66.9° W.L. orbital location. All operations will be in the 13.75-14.0 GHz and 14.0-14.5 GHz (Earth-to-space), and 10.95-11.2 GHz, 11.45-11.7 GHz, and 11.7-12.2 GHz (space-to-Earth) frequency bands.

Points of Communication:

SES-STA-20170216-00171 E Universal Space Network, Inc.
Special Temporary Authority
Grant of Authority Date Effective: 04/13/2017

Class of Station:

On April 13, 2017, Universal Space Network, Inc. was granted special temporary authority for 30 days, beginning April 24, 2017, to operate its fixed earth station in Naalehu, HI with the Millennium-Space Inc.'s Altair Pathfinder spacecraft after it is ejected from the International Space Station (ISS) on center frequencies: 2072.011 MHz (Earth-to-space) and 2250.180 MHz (space-to-Earth).

Points of Communication:

SES-STA-20170222-00191 E E120008 Intelsat License LLC
Special Temporary Authority
Grant of Authority Date Effective: 04/14/2017

Class of Station:

On April 14, 2017, Intelsat License LLC was granted special temporary authority for 180 days, beginning June 1, 2017, to operate its earth station in Paumalu, HI to provide telemetry, tracking, and command (TT&C) services for the Intelsat 1R satellite (S2368) during its drift from the 50.1° W.L. orbital location to the 169.2° E.L. orbital location and on-station at the 169.2° E.L. orbital location, using the following center frequencies: 14498.50 MHz (Earth-to-space), and 11696.00 MHz and 11697.00 MHz (space-to-Earth).

Points of Communication:

SES-STA-20170222-00192 E KA288 SES Americom, Inc.
Special Temporary Authority
Grant of Authority
Date Effective: 04/12/2017

Class of Station:

On April 12, 2017, SES Americom Inc. was granted special temporary authority for 30 days, beginning April 13, 2017, to operate its fixed earth station in Somis, CA to provide: (1) telemetry, tracking and command (TT&C) service during in-orbit testing (IOT) for the SES-10 satellite at the 68.5° W.L. orbital location, and (2) TT&C services for the SES-10 satellite as it proceeds to the 66.9° W.L. orbital location. All operations will be in the 14000-14500 MHz (Earth-to-space) and 11700-12200 MHz (space-to-Earth) frequency bands.

Points of Communication:

SES-STA-20170228-00207 E SES Americom, Inc.
Special Temporary Authority
Grant of Authority
Date Effective: 04/12/2017

Class of Station:

On April 12, 2017, SES Americom Inc. was granted special temporary authority for 30 days, beginning April 13, 2017, to operate its fixed earth station in Mt. Airy, MD to provide: (1) telemetry, tracking and command (TT&C) services during in-orbit testing (IOT) for the SES-10 satellite at the 68.5° W.L. orbital location, and (2) TT&C services for the SES-10 satellite as it proceeds to the 66.9° W.L. orbital location. All operations will be in the 13.75-14.0 GHz and 14.0-14.5 GHz (Earth-to-space), and 10.95-11.2 GHz, 11.45-11.7 GHz, and 11.7-12.2 GHz (space-to-Earth) frequency bands.

Points of Communication:

SES-STA-20170228-00208 E SES Americom, Inc.
Special Temporary Authority
Grant of Authority
Date Effective: 04/11/2017

Class of Station:

On April 11, 2017, SES Americom Inc. was granted special temporary authority for 30 days, beginning April 13, 2017, to operate its fixed earth station in Somis, with the SES-10 satellite at the 68.5° W.L. orbital location in the 19700.30 MHz (space-to-Earth) frequency band.

Points of Communication:

SES-STA-20170228-00214 E E980502 Intelsat License LLC
Special Temporary Authority
Grant of Authority
Date Effective: 04/14/2017

Class of Station:

On April 14, 2017, Intelsat License LLC was granted special temporary authority for 180 days, beginning May 1, 2017, to operate its fixed earth station in Ellenwood, GA to provide telemetry, tracking, and command (TT&C) services for the Intelsat 9 (S2380) satellite during its drift from the 43.1° W.L. orbital location to the 29.5° W.L. orbital location and on-station at 29.5° W.L. on the following center frequencies: 14000.50 MHz and 14494.50 MHz (Earth-to-space), and 11700.50 MHz and 11702.00 MHz (space-to-Earth).

Points of Communication:

SES-STA-20170302-00231 E SES Americom, Inc.
Special Temporary Authority
Grant of Authority Date Effective: 04/11/2017

Class of Station:

On April 11, 2017, SES Americom Inc. was granted special temporary authority for 30 days, beginning April 13, 2017, to operate its fixed earth station in Somis, CA with the SES-10 satellite at the 68.5° W.L. orbital location to: (1) perform in-orbit testing (IOT) in the 13.75-14.0 GHz, 14.0-14.5 GHz and 17.30-17.55 GHz (Earth-to-space), and 10.95-11.2 GHz, 11.45-11.7 GHz, and 11.7-12.2 GHz (space-to-Earth) frequency bands, and (2) provide telemetry, tracking and command (TT&C) services as it proceeds to the 66.9° W.L. orbital location.

Points of Communication:

SES-STA-20170412-00380 E KL92 Intelsat License LLC
Special Temporary Authority
Grant of Authority Date Effective: 04/17/2017

Class of Station:

On April 17, 2017, Intelsat License, LLC was granted special temporary authority for 30 days, beginning April 16, 2017, to operate its fixed earth station in Castle Rock, CO to provide telemetry, tracking, and command (TT&C) services for the Sky-B1 satellite, during the in-orbit testing (IOT) at 33.0° W.L. as it drifts to the 43.15° W.L. orbital location. The operation will continue to operate with the following center frequencies: 13249.50 MHz and 14498.00 MHz (Earth-to-space), and 11443.00 MHz, 11443.50 MHz, 11444.50 MHz, 11446.50 MHz and 11447.00 MHz (space-to-Earth).

Points of Communication:

Dismissal

SES-STA-20170303-00236 E170080 RR Media Inc.
Request for special temporary authority dismissed as Moot. See IBFS File No. SES-LIC-20170303-00234 granted on April 12, 2017.

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