FCC 312 Schedule S	FEDERAL COMMUNICATIONS COMMISSION SATELLITE SPACE STATION AUTHORIZATIONS (Technical and Operational Description)	Page 1: General, Frequency Bands, and GSO Orbit

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name:		e. Estimated Date of Placement into Service:	i Will the space station(s) operate on a Common Carrier Basis:
INTELSAT AMERICAS-9		8/30/2008	Y
b. Construction Commencement Date:		f. Estimated Lifetime of Satellite(s):	j. Number of transponders offered on a common carrier basis:
1/11/2004		13 Years	44
c. Construction Completion Date:		g. Total Number of Transponders:	k. Total Common Carrier Transponder Bandwidth:
1/11/2007		44	1296 MHz
d1. Est Launch Date Begin:	d2. Est Launch Date End:	h. Total Transponder Bandwidth (no. transponders x Bandwidth)	l. Orbit Type: Mark all boxes that apply:
1/1/2008	6/30/2008	1296 MHz	[X] GSO [ ] NGSO

S2. OPERATING FREQUENCY BANDS Identify the frequency range and transmit/receive mode for all frequency bands in which this station will oper
Also indicate the nature of service(s) for each frequency band.

Frequency Band Limits				e. T/R Mode	f. Nature of Service(s): List all that apply to this band
Lower Frequency (_Hz)		Upper Frequency (_Hz)			
a. Numeric	b. Unit (K/M/G)	c. Numeric	d. Unit (K/M/G)		
5925	M	6425	M	R	Fixed Satellite Service
3700	M	4200	M	T	Fixed Satellite Service
14	G	14.5	G	R	Fixed Satellite Service
11.7	G	12.2	G	T	Fixed Satellite Service

S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:

a. Nominal Orbital Longitude (Degrees E/W):	b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection:
77 W			Intelsat North America already holds an FCC authorization to operate a satellite at this orbital location. This application seeks authorization for a replacement satellite in that same orbital location.
Longitudinal Tolerance or E/W Station-Keeping: d. Toward West: 0.05 Degrees e. Toward East: 0.05 Degrees	f. Inclination Excursion or N/S Station-Keeping Tolerance: 0.05 Degrees	Range of orbital are in which adequate service can be provided (Optional): g. Westernmost: 129 W h. Easternmost: 77 W	
i. Reason for service are selection (Optional): The satellite Intelsat Americas-9 can replace any of the Intelsat spacecrafts located within this arc in case of a catas trophic failure			

FEDERAL COMMUNICATIONS COMMISSION **Page 2: NGSO Orbits**
SATELLITE SPACE STATION AUTHORIZATIONS
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S4. ORBITAL INFORMATION FOR NON-GEOSTATIONARY SATELLITES ONLY

S4a. Total Number of Satellites in Network or System:

S4b. Total Number of Orbital Planes in Network or System:

S4c. Celestial Reference Body (Earth, Sun, Moon, etc.):

S4d. Orbit Epoch Date:

For each Orbital Plane Provide:

(e) Orbital Plane No.	(f) No. of Satellites in Plane	(g) Inclination Angle (degrees)	(h) Orbital Period (Seconds)	(i) Apogee (km)	(j) Perigee (km)	(k) Right Ascension of the Ascending Node (Deg.)	(l) Argument of Perigee (Degrees)	Active Service Arc Range (Degrees)		
								(m) Begin Angle	(n) End Angle	(o) Other

S5. INITIAL SATELLITE PHASE ANGLE For each satellite in each orbital plane, provide the intital phase angle.

(a) Orbital Plane No.	(b) Satellite Number	(c) Initial Phase Angle (Degrees)

NO NGSO DATA FILED

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S6. SERVICE AREA CHARACTERISTICS for each service area provide:

(a) Service Area ID	(b) Type of Associated Station (Earth or Space)	(c) Service Area Diagram File Name (GXT File)	(d) Service Area Description. Provide list of geographic areas (state postal codes or ITU 3-ltr codes), satellites or Figure No. of Service Area Diagram.
1	S	Service Area 1.gxt	USA, CAN, DOM, HTI, MEX, VIR, PTR
2	S	Service Area 2.gxt	CLM, EQA, PRU, BOL, CHL, PRG, ARG, URG, B, VEN, GUF, SUR

FEDERAL COMMUNICATIONS COMMISSION **Page 4: Antenna Beams**
SATELLITE SPACE STATION AUTHORIZATIONS
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S7. SPACE STATION ANTENNA BEAM CHARACTERISTICS For each antenna beam provide:

(a) Beam ID	(b) T/R Mode	Isotropic Antenna Gain		(e) Pointing Error (Degrees)	(f) Rotational Error (Degrees)	(g) Min. Cross-Polar Isolation (dB)	(h) Polarization Switchable? (Y/N)	(i) Polarization Alignment Rel. Equatorial Plane (Degrees)	(j) Service Area ID	Transmit			Receive				
		(c) Peak (dBi)	(d) Edge (dBi)							(k) Input Losses (dB)	(l) Effective Output Power (W)	(m) Max. EIRP (dBW)	(n) System Noice Temp (k)	(o) G/T Max. Gain Pt. (db/K)	(p) Min. Saturation Flux Density (dBW/m2)	Input Attenuator (dB)	
																(q) Max. Value	(r) Step Size
CTF	T	29.8	22.8	0.15	0.4	30	Y	0	1	3	14	43.8					
CRF	R	29.1	24.6	0.15	0.4	30	Y	0	1				483	0.8	-92	20	1
KTF	T	31.6	24.4	0.15	0.4	30	N	0	1	3	18.3	49.9					
KRF	R	31.6	23.8	0.15	0.4	30	N	0	1				490	3.3	-96	20	1
KTR	T	37	28.2	0.15	0.4	30	N	0	2	3	18.3	55.3					
KRR	R	36	26.9	0.15	0.4	30	N	0	2				768	7.7	-96	20	1

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S8. ANTENNA BEAM DIAGRAMS For each beam pattern provide the reference to the graphic image and numerical data:
Also provide the power flux density levels in each beam that result from the emission with the highest power flux density.

(a) Beam ID	(b) T/R Mode	(c) Co-or Cross Polar Mode ("C" or" X")	(d) GSO Ref. Orbital Longitude (Deg. E/W)	(e) NGSO Antenna Gain Contour Description (Figure/Table/ Exhibit)	(f) GSO Antenna Gain Contour Data (GXT File)	Max. Power Flux Density (dBW/M2/Hz) At Angle of Arrival above horizontal (for emission with highest PFD)				
						(g) 5 Deg	(h) 10 Deg	(i) 15 Deg	(j) 20 Deg	(k) 25 Deg
CTF	T	C	77		ctf_c.gxt	-158.2	-158.2	-158.2	-158.2	-158.2
CTF	T	X	77		ctf_x.gxt					
CRF	R	C	77		crf_c.gxt					
CRF	R	X	77		crf_x.gxt					
KTF	T	C	77		ktf_c.gxt	-150.9	-150.9	-150.9	-150.9	-150.9
KTF	T	X	77							
KRF	R	C	77							
KRF	R	X	77							
KTR	T	C	77		ktr_c.gxt	-146.7	-146.7	-146.7	-146.7	-146.7
KTR	T	X	77		ktr_x.gxt					
KRR	R	C	77		krr_c.gxt					
KRR	R	X	77		krr_x.gxt					

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S9. SPACE STATION CHANNELS For each frequency channel provide:

(a) Channel No.	(B) Assigned Bandwidth (kHz)	(c) T/R Mode	(d) Center Frequency (MHz)	(e) Polarization (H, V, L, R)	(f) TTC or Comm Channel (T or C)
CT1	36	T	3720	V	C
CT2	36	T	3740	H	C
CT3	36	T	3760	V	C
CT4	36	T	3780	H	C
CT5	36	T	3800	V	C
CT6	36	T	3820	H	C
CT7	36	T	3840	V	C
CT8	36	T	3860	H	C
CT9	36	T	3880	V	C
CT10	36	T	3900	H	C
CT11	36	T	3920	V	C
CT12	36	T	3940	H	C
CT13	36	T	3960	V	C
CT14	36	T	3980	H	C
CT15	36	T	4000	V	C
CT16	36	T	4020	H	C
CT17	36	T	4040	V	C
CT18	36	T	4060	H	C
CT19	36	T	4080	V	C
CT20	36	T	4100	H	C
CT21	36	T	4120	V	C
CT22	36	T	4140	H	C
CT23	36	T	4160	V	C
CT24	36	T	4180	H	C
CR1	36	R	5945	H	C
CR2	36	R	5965	V	C
CR3	36	R	5985	H	C
CR4	36	R	6005	V	C
CR5	36	R	6025	H	C
CR6	36	R	6045	V	C

S10. SPACE STATION TRANSPONDERS For each transponder provide:

(a) Transponder ID	(b) Transponder Gain (dB)	Receive Band		Transmit Band	
		(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID
C1	148	CR1	CRF	CT1	CTF
C2	148	CR2	CRF	CT2	CTF
C3	148	CR3	CRF	CT3	CTF
C4	148	CR4	CRF	CT4	CTF
C5	148	CR5	CRF	CT5	CTF
C6	148	CR6	CRF	CT6	CTF
C7	148	CR7	CRF	CT7	CTF
C8	148	CR8	CRF	CT8	CTF
C9	148	CR9	CRF	CT9	CTF
C10	148	CR10	CRF	CT10	CTF
C11	148	CR11	CRF	CT11	CTF
C12	148	CR12	CRF	CT12	CTF
C13	148	CR13	CRF	CT13	CTF
C14	148	CR14	CRF	CT14	CTF
C15	148	CR15	CRF	CT15	CTF
C16	148	CR16	CRF	CT16	CTF
C17	148	CR17	CRF	CT17	CTF
C18	148	CR18	CRF	CT18	CTF
C19	148	CR19	CRF	CT19	CTF
C20	148	CR20	CRF	CT20	CTF
C21	148	CR21	CRF	CT21	CTF
C22	148	CR22	CRF	CT22	CTF
C23	148	CR23	CRF	CT23	CTF
C24	148	CR24	CRF	CT24	CTF
K1	159.1	KR1	KRF	KT1	KTF
K2	159.1	KR2	KRF	KT2	KTF
K3	159.1	KR3	KRF	KT3	KTF
K4	159.1	KR4	KRF	KT4	KTF
K5	159.1	KR5	KRF	KT5	KTF
K6	159.1	KR6	KRF	KT6	KTF

CR7	36	R	6065	H	C
CR8	36	R	6085	V	C
CR9	36	R	6105	H	C
CR10	36	R	6125	V	C
CR11	36	R	6145	H	C
CR12	36	R	6165	V	C
CR13	36	R	6185	H	C
CR14	36	R	6205	V	C
CR15	36	R	6225	H	C
CR16	36	R	6245	V	C
CR17	36	R	6265	H	C
CR18	36	R	6285	V	C
CR19	36	R	6305	H	C
CR20	36	R	6325	V	C
CR21	36	R	6345	H	C
CR22	36	R	6365	V	C
CR23	36	R	6385	H	C
CR24	36	R	6405	V	C
KT1	27	T	11715	V	C
KT2	27	T	11721.5	H	C
KT3	27	T	11745	V	C
KT4	27	T	11751.5	H	C
KT5	27	T	11775	V	C
KT6	27	T	11781.5	H	C
KT7	27	T	11805	V	C
KT8	27	T	11811.5	H	C
KT9	27	T	11836	V	C
KT10	27	T	11842.5	H	C
KT11	27	T	11867	V	C
KT12	27	T	11873.5	H	C
KT13	27	T	11898	V	C
KT14	27	T	11904.5	H	C
KT15	27	T	11929	V	C
KT16	27	T	11935.5	H	C
KT17	27	T	11960	V	C
KT18	27	T	11966.5	H	C
KT19	27	T	11991	V	C
KT20	27	T	11997.5	H	C
KT21	27	T	12022	V	C

K7	159.1	KR7	KRF	KT7	KTF
K8	159.1	KR8	KRF	KT8	KTF
K9	159.1	KR9	KRF	KT9	KTF
K10	159.1	KR10	KRF	KT10	KTF
K11	159.1	KR11	KRF	KT11	KTF
K12	159.1	KR12	KRF	KT12	KTF
K13	159.1	KR13	KRF	KT13	KTF
K14	159.1	KR14	KRF	KT14	KTF
K15	159.1	KR15	KRF	KT15	KTF
K16	159.1	KR16	KRF	KT16	KTF
K17	159.1	KR17	KRF	KT17	KTF
K18	159.1	KR18	KRF	KT18	KTF
K19	159.1	KR19	KRF	KT19	KTF
K20	159.1	KR20	KRF	KT20	KTF
K21	159.1	KR21	KRF	KT21	KTF
K22	159.1	KR22	KRF	KT22	KTF
K23	159.1	KR23	KRF	KT23	KTF
K24	159.1	KR24	KRF	KT24	KTF
K25	159.1	KR25	KRF	KT25	KTF
K26	159.1	KR26	KRF	KT26	KTF
K27	159.1	KR27	KRF	KT27	KTF
K28	159.1	KR28	KRF	KT28	KTF
K29	159.1	KR29	KRF	KT29	KTF
K30	159.1	KR30	KRF	KT30	KTF
K31	159.1	KR31	KRF	KT31	KTF
K32	159.1	KR32	KRF	KT32	KTF
S1	167.6	SR1	KRR	ST1	KTR
S2	167.6	SR2	KRR	ST2	KTR
S3	167.6	SR3	KRR	ST3	KTR
S4	167.6	SR4	KRR	ST4	KTR
S5	167.6	SR5	KRR	ST5	KTR
S6	167.6	SR6	KRR	ST6	KTR

KT22	27	T	12028.5	H	C
KT23	27	T	12053	V	C
KT24	27	T	12059.5	H	C
KT25	27	T	12084	V	C
KT26	27	T	12090.5	H	C
KT27	27	T	12115	V	C
KT28	27	T	12121.5	H	C
KT29	27	T	12146	V	C
KT30	27	T	12152.5	H	C
KT31	27	T	12177	V	C
KT32	27	T	12183.5	H	C
KR1	27	R	14015	H	C
KR2	27	R	14021.5	V	C
KR3	27	R	14045	H	C
KR4	27	R	14051.5	V	C
KR5	27	R	14075	H	C
KR6	27	R	14081.5	V	C
KR7	27	R	14105	H	C
KR8	27	R	14111.5	V	C
KR9	27	R	14136	H	C
KR10	27	R	14142.5	V	C
KR11	27	R	14167	H	C
KR12	27	R	14173.5	V	C
KR13	27	R	14198	H	C
KR14	27	R	14204.5	V	C
KR15	27	R	14229	H	C
KR16	27	R	14235.5	V	C
KR17	27	R	14260	H	C
KR18	27	R	14266.5	V	C
KR19	27	R	14291	H	C
KR20	27	R	14297.5	V	C
KR21	27	R	14322	H	C
KR22	27	R	14328.5	V	C
KR23	27	R	14353	H	C
KR24	27	R	14359.5	V	C
KR25	27	R	14384	H	C
KR26	27	R	14390.5	V	C
KR27	27	R	14415	H	C
KR28	27	R	14421.5	V	C

KR29	27	R	14446	H	C
KR30	27	R	14452.5	V	C
KR31	27	R	14477	H	C
KR32	27	R	14483.5	V	C
ST1	36	T	11725	V	C
ST2	36	T	11765	V	C
ST3	36	T	11805	V	C
ST4	36	T	11845	V	C
ST5	36	T	11885	V	C
ST6	36	T	11925	V	C
SR1	36	R	14025	H	C
SR2	36	R	14065	H	C
SR3	36	R	14105	H	C
SR4	36	R	14145	H	C
SR5	36	R	14185	H	C
SR6	36	R	14225	H	C

FEDERAL COMMUNICATIONS COMMISSION **Page 7: Digital Modulation**
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S11. DIGITAL MODULATION PARAMETERS For each digital emission provide:

(a) Digital Mod. ID	(b) Emission Designator	(c) Assigned Bandwidth (kHz)	(d) No. of Phases	(e)Uncoded Data Rate (kbps)	(f) FEC Error Correction Coding Rate	(g) CDMA Processing Gain (dB)	(h) Total C/N Performance Objective (dB)	(i) Single Entry C/I Objective (dB)
1	67K5G1W	67.5	8	64	0.6667		10.5	22.7
2	203KG1W	202.5	8	256	0.6667		10.5	22.7
3	833KG1W	832.5	8	1024	0.6667		10.5	22.7
4	1M28G7W	1282.5	8	1544	0.6667		10.5	22.7
5	4M93G7W	4927.5	8	6312	0.6667		10.5	22.7
6	6M55G7W	6547.5	8	8448	0.6667		10.5	22.7
7	24M6G7W	24625	8	32064	0.6667		10.5	22.7
8	26M4G7W	34250	8	34368	0.6667		10.5	22.7
9	113KG1W	112.5	4	64	0.5		4.9	17.1
10	788KG1W	787.5	4	512	0.5		4.9	17.1
11	245KG7W	2452.5	4	1544	0.5		4.9	17.1
12	3M13G7W	3127.5	4	2048	0.5		4.9	17.1
13	9M70G7W	9697.5	4	6312	0.5		4.9	17.1
14	12M9G7W	12892.5	4	8448	0.5		4.9	17.1

FEDERAL COMMUNICATIONS COMMISSION **Page 8: Analog Modulation**
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S12. ANALOG MODULATION PARAMETERS For each analog emission provide:

(a) Analog Mod. ID	(b) Emission Designator	(c) Assigned Bandwidth (kHz)	(d) Signal Type	(e) Channels per Carrier	Multi-channel Telephony				(j) Video Standard NTSC, PAL, etc.	(k) Video Noise-Weighting (dB)	(l) Video and SCPC/FM Modulation Index	(m) SCPC/FM Compander, Preemphasis, and Noise Weighting (dB)	(n) Total C/N Performance Objective (dB)	(o) Single Entry C/I Objective (dB)
					(f) Ave. Companded Talker Level (dBm0)	(g) Bottom Baseband Freq. (MHz)	(h) Top Baseband Freq. (MHz)	(i) RMS Modulation Index						
1	20M0F3F	20000	TV/FM	1					NTSC	2.5	2.4		15.5	27.7
2	30M0F3F	30000	TV/FM	1					NTSC	2.5	2.4		17.2	29.4

FEDERAL COMMUNICATIONS COMMISSION **Page 9: Typical Emissions**
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S13. TYPICAL EMISSIONS For each planned type of emission provide:

Associated Transponder ID Range		Modulation ID		(e) Carriers per Transponder	(f) Carrier Spacing (kHz)	(g)Noise Budget Reference (Table No.)	(h) Energy Dispersal Bandwidth (kHz)	Receive Band (Assoc. Transmit Stn)			Transmit Band (This Space Station)			
								(i)Assoc. Stn. Max. Antenna Gain (dBi)	Assoc. Station Transmit Power (dBW)		EIRP (dBW)		(n) Max. Power Flux Density (dBW/m2/Hz)	(o)Assoc. Stn Rec. G/T (dB/K)
(a) Start	(b) End	(c) Digital (Table S11)	(d) Analog (Table S12)						(j) Min.	(k) Max.	(l) Min.	(m) Max.		
C1	C24		1	2	36000	Link Budget	8000	54.1	27	27	41.8	43.8	-152.49	29.3
C1	C24		2	2	18000	Link Budget	4000	54.1	27	27	36.3	38.3	-154.99	29.3
C1	C24	1		465		Link Budget		54.1	-10.9	-2.6	11.1	13.1	-160.75	23.3
C1	C24	2		116		Link Budget		54.1	-4.9	3.4	17.1	19.1	-160.75	23.3
C1	C24	3		29		Link Budget		54.1	1.1	9.4	23.1	25.1	-160.75	23.3
C1	C24	4		19		Link Budget		54.1	2.9	11.2	24.9	26.9	-160.75	23.3
C1	C24	5		5		Link Budget		54.1	9	17.3	31	33	-160.75	23.3
C1	C24	6		4		Link Budget		54.1	10.3	18.6	32.3	34.3	-160.75	23.3
C1	C24	7		1		Link Budget		54.1	16.1	24.4	38.1	40.1	-160.75	23.3
C1	C24	8		1		Link Budget		54.1	16.4	24.7	38.4	40.4	-160.75	23.3
C1	C24	9		233		Link Budget		54.1	-7.9	0.4	14.1	16.1	-158.03	19.8
C1	C24	10		29		Link Budget		54.1	1.1	9.4	23.1	25.1	-158.03	19.8
C1	C24	11		10		Link Budget		54.1	5.9	14.2	27.9	29.9	-158.03	19.8
C1	C24	12		7		Link Budget		54.1	7.2	15.5	29.2	31.2	-158.03	19.8
C1	C24	13		2		Link Budget		54.1	12	20.3	34	36	-158.03	19.8
C1	C24	14		2		Link Budget		54.1	13.3	21.6	35.3	37.3	-158.03	19.8
K1	K32	1		300		Link Budget		60.3	-12.7	-4.5	19.1	21.1	-152.75	27.3
K1	K32	2		75		Link Budget		60.3	-6.7	1.5	25.1	27.1	-152.75	27.3
K1	K32	3		19		Link Budget		60.3	-0.7	7.5	31.1	33.1	-152.75	27.3
K1	K32	4		12		Link Budget		60.3	1.1	9.3	32.9	34.9	-152.75	27.3
K1	K32	5		3		Link Budget		60.3	7.2	15.4	39	41	-152.75	27.3
K1	K32	6		2		Link Budget		60.3	8.5	16.7	40.3	42.3	-152.75	27.3
K1	K32	7		1		Link Budget		60.3	14.3	22.5	46.1	48.1	-152.75	27.3
K1	K32	8		1		Link Budget		60.3	14.6	22.8	46.4	48.4	-152.75	27.3
K1	K32	9		189		Link Budget		61.3	-9.8	-1.6	21.1	23.1	-151.03	21.3
K1	K32	10		24		Link Budget		61.3	-0.8	7.4	30.1	32.1	-151.03	21.3
K1	K32	11		8		Link Budget		61.3	4	12.2	34.9	36.9	-151.03	21.3
K1	K32	12		6		Link Budget		61.3	5.3	13.5	36.2	38.2	-151.03	21.3
K1	K32	13		2		Link Budget		61.3	10.1	18.3	41	43	-151.03	21.3

K1	K32	14		1		Link Budget		61.3	11.4	19.6	42.3	44.3	-151.03	21.3
S1	S6	1		720		Link Budget		60.3	-13.1	-2.8	19.7	22.7	-151.15	27.3
S1	S6	2		180		Link Budget		60.3	-7.1	3.2	25.7	28.7	-151.15	27.3
S1	S6	3		45		Link Budget		60.3	-1.1	9.2	31.7	34.7	-151.15	27.3
S1	S6	4		30		Link Budget		60.3	0.7	11	33.5	36.5	-151.15	27.3
S1	S6	5		7		Link Budget		60.3	6.8	17.1	39.6	42.6	-151.15	27.3
S1	S6	6		5		Link Budget		60.3	8.1	18.4	40.9	43.9	-151.15	27.3
S1	S6	7		1		Link Budget		60.3	13.9	24.2	46.7	49.7	-151.15	27.3
S1	S6	8		1		Link Budget		60.3	14.2	24.5	47	50	-151.15	27.3
S1	S6	9		443		Link Budget		61.3	-10.1	0.2	21.8	24.8	-149.33	21.3
S1	S6	10		55		Link Budget		61.3	-1.1	9.2	30.8	33.8	-149.33	21.3
S1	S6	11		18		Link Budget		61.3	3.7	14	35.6	38.6	-149.33	21.3
S1	S6	12		14		Link Budget		61.3	5	15.3	36.9	39.9	-149.33	21.3
S1	S6	13		4		Link Budget		61.3	9.8	20.1	41.7	44.7	-149.33	21.3
S1	S6	14		3		LInk Budget		61.3	11.1	21.4	43	46	-149.33	21.3

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S14. Is the space station(s) controlled and monitored remotely? If Yes, provide the location and telephone number of the TT and C control point(s): Yes

Remote Control (TT C) Location(s):

S14a: Street Address: 17625 Technology Blvd			
S14b. City: Hagerstown	S14c. County:	S14d. State/Country MD	S14e. Zip Code: 21740
S14f. Telephone Number: 240-420-8991	S14g. Call Sign of Control Station (if appropriate):		

Remote Control (TT C) Location(s):

S14a: Street Address: 22021 COMSAT Drive			
S14b. City: Clarksburg	S14c. County:	S14d. State/Country MD	S14e. Zip Code: 20871
S14f. Telephone Number: 301-428-1501	S14g. Call Sign of Control Station (if appropriate):		

FEDERAL COMMUNICATIONS COMMISSION
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S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S15a: Mass of spacecraft without fuel (kg): 2464	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 3164		
S15c. Mass of spacecraft and fuel at launch (kg): 5610	S15f. Length (m): 8.72	S15i. Payload: 0.83
S15d. Mass of fuel, in orbit, at beginning of life (kg): 956	S15g. Width (m): 4.83	S15j. Bus: 0.87
S15e. Deployed Area of Solar Array (square meters): 56	S15h. Height (m): 5.97	S15k. Total: 0.7

S16. SPACECRAFT ELECTRICAL CHARACTERISTICS:

Spacecraft Subsystem	Electrical Power (Watts) At Beginning of Life		Electrical Power (Watts) At End of Life	
	At Equinox	At Solstice	At Equinox	At Solstice
Payload (Watts):	(a): 8355	(f): 8355	(k): 8355	(p): 8355
Bus (Watts):	(b): 2741	(g): 1536	(l): 2741	(q): 1536
Total (Watts):	(c): 11096	(h): 9891	(m) 11096	(r): 9891
Solar Array (Watts):	(d): 12655	(i): 11403	(n): 12075	(s): 10531
Depth of Battery Discharge (%):	(e) 77 %	(j) 77 %	(o) 76.1 %	(t) 76.1 %

S17. CERTIFICATIONS:

a. Are the power flux density limits of § 25.208 met?:	X	**YES**		**NO**		**N/A**
b. Are the appropriate service area coverage requirements of § 25.143(b)(ii) and (iii), or § 25.145(c)(1) and (2) met?	X	**YES**		**NO**		**N/A**
c. Are the frequency tolerances of § 25.202(e) and the out-of-band emission limits of § 25.202(f)(1), (2) and (3) met?	X	**YES**		**NO**		**N/A**

In addition to the information required in this Form, the space station applicant is required to provide all the information specified in Section 25.114 of the Commission's rules, 47 C.F.R § 25.114.