

**S1. GENERAL INFORMATION** Complete for all satellite applications.

a. Space Station or Satellite Network Name: SES-2		e. Estimated Date of Placement into Service:		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date:		f. Estimated Lifetime of Satellite(s): 15 Years		j. Number of transponders offered on a common carrier basis: 0	
c. Construction Completion Date:		g. Total Number of Transponders: 49		k. Total Common Carrier Transponder Bandwidth: 0 MHz	
d1. Est Launch Date Begin:	d2. Est Launch Date End:	h. Total Transponder Bandwidth (no. transponders x Bandwidth) 2228 MHz		i. Orbit Type: Mark all boxes that apply: <input checked="" type="checkbox"/> GSO <input type="checkbox"/> 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)		
14.00	G	14.50	G	R	Fixed Satellite Service
11.70	G	12.20	G	T	Fixed Satellite Service
14.00	G	14.50	G	R	Direct to Home in the Fixed Fixed Satellite Service
11.70	G	12.20	G	T	Direct to Home in the Fixed Fixed Satellite Service
5.925	G	6.425	G	R	Fixed Satellite Service
3.70	G	4.20	G	T	Fixed Satellite Service
24.75	G	25.25	G	R	Feeder Link for Broadcasting Satellite Service in FSS
17.3	G	17.8	G	T	Broadcasting Satellite Service - Video

**S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:**

a. Nominal Orbital Longitude (Degrees E/W): 87 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: Orbital location is that of AMC-3 which will be replaced by SES-2.	
Longitudinal Tolerance or E/W Station-Keeping:		f. Inclination Excursion or N/S Station-Keeping Tolerance:	Range of orbital are in which adequate service can be provided (Optional):		
d. Toward West:	0.05 Degrees		g. Westernmost: h. Easternmost:		
e. Toward East:	0.05 Degrees	0.05 Degrees			
i. Reason for service are selection (Optional):					

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S4. ORBITAL INFORMATION FOR NON-GEOSTATIONARY SATELLITES ONLY

S4a. Total Number of Satellites in Network or System:

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

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

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 initial 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.
K-DL	E		CONUS, Hawaii and parts of Alaska
K-UL	E		CONUS, Hawaii and parts of Alaska
C-DL	E		CONUS and parts of Alaska, Canada and the Caribbean
C-UL	E		CONUS and parts of Alaska, Canada and the Caribbean
KABSS-UL	E		North America
KABSS-DL	E		North America

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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 Iso- lation (dB)	(h) Polar- ization Switch- able? (Y/N)	(i) Polarization Alignment Rel. Equatorial Plane (Degrees)	(j) Service Area ID	Transmit			Receive			Input Attenuator (dB)	
										(k) Input Losses (dB)	(l) Effective Output Power (W)	(m) Max. EIRP (dBW)	(n) System Noise Temp (k)	(o) G/T Max. Gain Pt. (db/K)	(p) Min. Saturation Flux Density (dBW/m2)	(q) Max. Value	(r) Step Size
		(c) Peak (dBi)	(d) Edge (dBi)														
CRH	R	31.12	21.12	0.15	0	30	Y	0	C-UL				593	3.39	-97.39	21	1
CRV	R	31.4	21.4	0.15	0	30	Y	90	C-UL				646	3.3	-97.3	21	1
KRH	R	34.37	24.37	0.15	0	30	Y	0	K-UL				470	7.65	-103.65	21	1
KRV	R	34.87	24.87	0.15	0	30	Y	90	K-UL				488	7.99	-103.99	21	1
CTH	T	30.12	20.12	0.15	0	30	Y	0	C-DL	2.5	12.71	43.66					
CTV	T	30.4	20.4	0.15	0	30	Y	90	C-DL	2.5	12.45	43.85					
KTH	T	34.27	24.27	0.15	0	30	Y	0	K-DL	2.5	34.67	52.17					
KTV	T	35.3	25.3	0.15	0	30	Y	90	K-DL	2.5	30.34	52.62					
KAR	R	23.55	18.55	0.15	0	25	N		KABSS-U				1230	-7.35	-87.65	20	1
KAT	T	23.48	18.48	0.15	0	25	N		KABSS-D	3	4.8	33.28					
KATL	T	23.48	18.48	0.15	0	25	N		KABSS-D	3	4.8	33.28					

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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
CRH	R	C	-87		CRH.gxt					
CRV	R	C	-87		CRV.gxt					
KRH	R	C	-87		KRH.gxt					
KRV	R	C	-87		KRV.gxt					
CTH	T	C	-87		CTH.gxt	-153.5	-153.2	-152.6	-151.6	-150.2
CTV	T	C	-87		CTV.gxt	-153.5	-153.2	-152.6	-151.6	-150.2
KTH	T	C	-87		KTH.gxt					
KTV	T	C	-87		KTV.gxt					
KAR	R	C	-87		KAR.gxt					
KATL	T	C	-87		KATL.gxt	-146	-145.9	-145.7	-145.5	-145.3
KAT	T	C	-87		KATR.gxt	-146	-145.9	-145.7	-145.5	-145.3

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S9. SPACE STATION CHANNELS For each frequency channel provide: S10. SPACE STATION TRANSPONDERS For each transponder 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)
KR01	36000	R	14020	V	C
KR02	36000	R	14040	H	C
KR03	36000	R	14060	V	C
KR04	36000	R	14080	H	C
KR05	36000	R	14100	V	C
KR06	36000	R	14120	H	C
KR07	36000	R	14140	V	C
KR08	36000	R	14160	H	C
KR09	36000	R	14180	V	C
KR10	36000	R	14200	H	C
KR11	36000	R	14220	V	C
KR12	36000	R	14240	H	C
KR13	36000	R	14260	V	C
KR14	36000	R	14280	H	C
KR15	36000	R	14300	V	C
KR16	36000	R	14320	H	C
KR17	36000	R	14340	V	C
KR18	36000	R	14360	H	C
KR19	36000	R	14380	V	C
KR20	36000	R	14400	H	C
KR21	36000	R	14420	V	C
KR22	36000	R	14440	H	C
KR23	36000	R	14460	V	C
KR24	36000	R	14480	H	C
KT01	36000	T	11720	H	C
KT02	36000	T	11740	V	C
KT03	36000	T	11760	H	C
KT04	36000	T	11780	V	C
KT05	36000	T	11800	H	C
KT06	36000	T	11820	V	C

(a) Transponder ID	(b) Transponder Gain (dB)	Receive Band		Transmit Band	
		(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID
K01	119.5	KR01	KRV	KT01	KTH
K03	119.5	KR03	KRV	KT03	KTH
K05	119.5	KR05	KRV	KT05	KTH
K07	119.5	KR07	KRV	KT07	KTH
K09	119.5	KR09	KRV	KT09	KTH
K11	119.5	KR11	KRV	KT11	KTH
K13	119.5	KR13	KRV	KT13	KTH
K15	119.5	KR15	KRV	KT15	KTH
K17	119.5	KR17	KRV	KT17	KTH
K19	119.5	KR19	KRV	KT19	KTH
K21	119.5	KR21	KRV	KT21	KTH
K23	119.5	KR23	KRV	KT23	KTH
K02	119.5	KR02	KRH	KT02	KTV
K04	119.5	KR04	KRH	KT04	KTV
K06	119.5	KR06	KRH	KT06	KTV
K08	119.5	KR08	KRH	KT08	KTV
K10	119.5	KR10	KRH	KT10	KTV
K12	119.5	KR12	KRH	KT12	KTV
K14	119.5	KR14	KRH	KT14	KTV
K16	119.5	KR16	KRH	KT16	KTV
K18	119.5	KR18	KRH	KT18	KTV
K20	119.5	KR20	KRH	KT20	KTV
K22	119.5	KR22	KRH	KT22	KTV
K24	119.5	KR24	KRH	KT24	KTV
C01	105.5	CR01	CRV	CT01	CTH
C03	105.5	CR03	CRV	CT03	CTH
C05	105.5	CR05	CRV	CT05	CTH
C07	105.5	CR07	CRV	CT07	CTH
C09	105.5	CR09	CRV	CT09	CTH
C11	105.5	CR11	CRV	CT11	CTH

KT07	36000	T	11840	H	C
KT08	36000	T	11860	V	C
KT09	36000	T	11880	H	C
KT10	36000	T	11900	V	C
KT11	36000	T	11920	H	C
KT12	36000	T	11940	V	C
KT13	36000	T	11960	H	C
KT14	36000	T	11980	V	C
KT15	36000	T	12000	H	C
KT16	36000	T	12020	V	C
KT17	36000	T	12040	H	C
KT18	36000	T	12060	V	C
KT19	36000	T	12080	H	C
KT20	36000	T	12100	V	C
KT21	36000	T	12120	H	C
KT22	36000	T	12140	V	C
KT23	36000	T	12160	H	C
KT24	36000	T	12180	V	C
CR01	36000	R	5945	V	C
CR02	36000	R	5965	H	C
CR03	36000	R	5985	V	C
CR04	36000	R	6005	H	C
CR05	36000	R	6025	V	C
CR06	36000	R	6045	H	C
CR07	36000	R	6065	V	C
CR08	36000	R	6085	H	C
CR09	36000	R	6105	V	C
CR10	36000	R	6125	H	C
CR11	36000	R	6145	V	C
CR12	36000	R	6165	H	C
CR13	36000	R	6185	V	C
CR14	36000	R	6205	H	C
CR15	36000	R	6225	V	C
CR16	36000	R	6245	H	C
CR17	36000	R	6265	V	C
CR18	36000	R	6285	H	C
CR19	36000	R	6305	V	C
CR20	36000	R	6325	H	C
CR21	36000	R	6345	V	C

C13	105.5	CR13	CRV	CT13	CTH
C15	105.5	CR15	CRV	CT15	CTH
C17	105.5	CR17	CRV	CT17	CTH
C19	105.5	CR19	CRV	CT19	CTH
C21	105.5	CR21	CRV	CT21	CTH
C23	105.5	CR23	CRV	CT23	CTH
C02	105.5	CR02	CRH	CT02	CTV
C04	105.5	CR04	CRH	CT04	CTV
C06	105.5	CR06	CRH	CT06	CTV
C08	105.5	CR08	CRH	CT08	CTV
C10	105.5	CR10	CRH	CT10	CTV
C12	105.5	CR12	CRH	CT12	CTV
C14	105.5	CR14	CRH	CT14	CTV
C16	105.5	CR16	CRH	CT16	CTV
C18	105.5	CR18	CRH	CT18	CTV
C20	105.5	CR20	CRH	CT20	CTV
C22	105.5	CR22	CRH	CT22	CTV
C24	105.5	CR24	CRH	CT24	CTV
X01	112.5	KR14	KRH	CT14	CTV
X02	112.5	KR16	KRH	CT16	CTV
X03	112.5	KR18	KRH	CT18	CTV
X04	112.5	KR20	KRH	CT20	CTV
X05	112.5	KR22	KRH	CT22	CTV
X06	112.5	KR24	KRH	CT24	CTV
X07	111	CR14	CRH	KT14	KTV
X08	111	CR16	CRH	KT16	KTV
X09	111	CR18	CRH	KT18	KTV
X10	111	CR20	CRH	KT20	KTV
X11	111	CR22	CRH	KT22	KTV
X12	111	CR24	CRH	KT24	KTV
TCC		CC1	CRV		
TCK		KUC1	KRV		
TBC1				CBCN1	CTV
TBC2				CBCN2	CTH
TBK1				KBCN1	KTV
TBK2				KBCN2	KTH
KA02	106.9	KAR02	KAR	KAT02	KATR
KA03	106.9	KAR03	KAR	KAT03	KATR
KA04	106.9	KAR04	KAR	KAT04	KATR

CR22	36000	R	6365	H	C
CR23	36000	R	6385	V	C
CR24	36000	R	6405	H	C
CT01	36000	T	3720	H	C
CT02	36000	T	3740	V	C
CT03	36000	T	3760	H	C
CT04	36000	T	3780	V	C
CT05	36000	T	3800	H	C
CT06	36000	T	3820	V	C
CT07	36000	T	3840	H	C
CT08	36000	T	3860	V	C
CT09	36000	T	3880	H	C
CT10	36000	T	3900	V	C
CT11	36000	T	3920	H	C
CT12	36000	T	3940	V	C
CT13	36000	T	3960	H	C
CT14	36000	T	3980	V	C
CT15	36000	T	4000	H	C
CT16	36000	T	4020	V	C
CT17	36000	T	4040	H	C
CT18	36000	T	4060	V	C
CT19	36000	T	4080	H	C
CT20	36000	T	4100	V	C
CT21	36000	T	4120	H	C
CT22	36000	T	4140	V	C
CT23	36000	T	4160	H	C
CT24	36000	T	4180	V	C
CC1	800	R	6423.5	V	T
KUC1	800	R	14499	V	T
CBCN1	400	T	3700.5	V	T
CBCN2	400	T	4199.5	H	T
KBCN1	400	T	11701	V	T
KBCN2	400	T	12199	H	T
KAR01	31000	R	24769.15	L	C
KAT01	31000	T	17319.15	R	C
KAR02	31000	R	24803.45	L	C
KAR03	31000	R	24837.75	L	C
KAR04	31000	R	24872.05	L	C
KAR05	31000	R	24906.35	L	C

KA05	106.9	KAR05	KAR	KAT05	KATR
KA06	106.9	KAR06	KAR	KAT06	KATR
KA07	106.9	KAR07	KAR	KAT07	KATR
KA08	106.9	KAR08	KAR	KAT08	KATR
KA09	106.9	KAR09	KAR	KAT09	KATR
KA10	106.9	KAR10	KAR	KAT10	KATR
KA11	106.9	KAR11	KAR	KAT11	KATR
KA12	106.9	KAR12	KAR	KAT12	KATR
KA13	106.9	KAR13	KAR	KAT13	KATR
KA14	106.9	KAR14	KAR	KAT14	KATR
KA15	106.9	KAR01	KAR	KAT15	KATL
KA16	106.9	KAR02	KAR	KAT16	KATL
KA17	106.9	KAR03	KAR	KAT17	KATL
KA18	106.9	KAR04	KAR	KAT18	KATL
KA19	106.9	KAR05	KAR	KAT19	KATL
KA20	106.9	KAR06	KAR	KAT20	KATL
KA21	106.9	KAR07	KAR	KAT21	KATL
KA22	106.9	KAR08	KAR	KAT22	KATL
KA23	106.9	KAR09	KAR	KAT23	KATL
KA24	106.9	KAR10	KAR	KAT24	KATL
KA25	106.9	KAR11	KAR	KAT25	KATL
KA01	106.9	KAR01	KAR	KAT01	KATR
KA26	106.9	KAR12	KAR	KAT26	KATL
KA27	106.9	KAR13	KAR	KAT27	KATL
KA28	106.9	KAR14	KAR	KAT28	KATL



KAR06	31000	R	24940.65	L	C
KAR07	31000	R	24974.95	L	C
KAR08	31000	R	25009.25	L	C
KAR09	31000	R	25043.55	L	C
KAR10	31000	R	25077.85	L	C
KAR11	31000	R	25112.15	L	C
KAR12	31000	R	25146.45	L	C
KAR13	31000	R	25180.75	L	C
KAR14	31000	R	25215.05	L	C
KAT02	31000	T	17353.45	R	C
KAT03	31000	T	17387.75	R	C
KAT04	31000	T	17422.05	R	C
KAT05	31000	T	17456.35	R	C
KAT06	31000	T	17490.65	R	C
KAT07	31000	T	17524.95	R	C
KAT08	31000	T	17559.25	R	C
KAT09	31000	T	17593.55	R	C
KAT10	31000	T	17627.85	R	C
KAT11	31000	T	17662.15	R	C
KAT12	31000	T	17696.45	R	C
KAT13	31000	T	17730.75	R	C
KAT14	31000	T	17765.05	R	C
KAT15	31000	T	17319.15	L	C
KAT16	31000	T	17353.45	L	C
KAT17	31000	T	17387.75	L	C
KAT18	31000	T	17422.05	L	C
KAT19	31000	T	17456.35	L	C
KAT20	31000	T	17490.65	L	C
KAT21	31000	T	17524.95	L	C
KAT22	31000	T	17559.25	L	C
KAT23	31000	T	17593.55	L	C
KAT24	31000	T	17627.85	L	C
KAT25	31000	T	17662.15	L	C
KAT26	31000	T	17696.45	L	C
KAT27	31000	T	17730.75	L	C
KAT28	31000	T	17765.05	L	C

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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)
K_A	36M0G7W	36000	4	40000	0.69		6.8	19
K_B	27M0G7W	27000	4	32000	0.69		6.8	19
K_C	6M95G1W	6950	4	8000	0.69		6.8	19
K_D	5M00G1W	5000	4	6000	0.69		6.8	19
K_E	100KG1W	100	4	56	0.69		6.8	19
K_F	1M60G1W	1600	4	1544	0.69		6.8	19
K_G	36M0G7W	36000	8	50000	0.61		9.9	20
C_A	36M0G7W	36000	4	40000	0.69		6.8	19
C_B	27M0G7W	27000	4	32000	0.69		6.8	19
C_C	6M95G1W	6950	4	8000	0.69		6.8	19
C_D	5M00G1W	5000	4	6000	0.69		6.8	19
C_E	100KG1W	100	4	56	0.69		6.8	19
C_F	1M60G1W	1600	4	1544	0.69		6.8	19
C_G	36M0G7W	36000	8	50000	0.61		9.9	20
KA_1	1M20G1W	1200	4	1430	0.75		4.7	10
KA_2	5M50G1W	5500	4	4758	0.5		1.3	10



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S13. TYPICAL EMISSIONS For each planned type of emission provide:

Associated Transponder ID Range (a) Start (b) End		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)			
		(c) Digital (Table S11)	(d) Analog (Table S12)					(i) Assoc. Stn. Max. Antenna Gain (dBi)	Assoc. Station Transmit Power (dBW) (j) Min. (k) Max.		EIRP (dBW) (l) Min. (m) Max.		(n) Max. Power Flux Density (dBW/m <sup>2</sup> /Hz)	(o) Assoc. Stn Rec. G/T (dB/K)
K01	K24	K_A		1		S13_linkbuds.xl		57.3	20	25	46.4	49.4	-154.4	18.4
K01	K24	K_B		1		S13_linkbuds.xl		57.3	20	25	45.1	48.1	-154.5	18.4
K01	K24	K_C		5	6950	S13_linkbuds.xl		53	8.9	14	32.7	35.7	-161	26.9
K01	K24	K_D		6	5000	S13_linkbuds.xl		53	8.9	14	31.3	34.3	-161	26.9
K01	K24	K_E		250	100	S13_linkbuds.xl		46.7	-2	3	15.5	18.5	-159.8	20.9
K01	K24	K_F		20	1544	S13_linkbuds.xl		46.7	8	13	25.5	28.5	-161.8	26.9
K01	K24	K_G		1		S13_linkbuds.xl		57.3	20	25	46.4	49.4	-154.4	26.9
C01	C24	C_A		1		S13_linkbuds.xl		53.5	21.6	25.1	36.5	37	-166.8	22.1
C01	C24	C_B		1		S13_linkbuds.xl		53.5	16.5	20	36.5	37	-165.6	22.1
C01	C24	C_C		5	6950	S13_linkbuds.xl		53.5	6.1	9.6	25.3	25.8	-170.9	22.1
C01	C24	C_D		6	5000	S13_linkbuds.xl		53.5	8.5	12	25.3	25.8	-169.5	22.1
C01	C24	C_E		250	100	S13_linkbuds.xl		47.5	-6.9	-3.4	6.3	6.8	-171.5	22.1
C01	C24	C_F		20	1544	S13_linkbuds.xl		47.5	8.3	11.8	21.5	22	-168.3	22.1
C01	C24	C_G		1		S13_linkbuds.xl		53.5	21.6	25.1	36.5	37	-166.8	22.1
K01	K24		K_H	1		S13_linkbuds.xl	2000	57.3	19	22	45.2	48.2	-155.7	20.9
C01	C24		C_H	1		S13_linkbuds.xl	2000	53.5	23.5	25	39.2	39.7	-160.5	22.1
TCK	TCK		K_TC	1		S13_linkbuds.xl		60.2	10	15				
TCC	TCC		C_TC	1		S13_linkbuds.xl		57	10	15				
TBK1	TBK2		K_TM	1		S13_linkbuds.xl					19	29	-168	34.6
TBC1	TBC2		C_TM	1		S13_linkbuds.xl					16	26	-176.9	22.5
KA01	KA28	KA_1		1		S13_linkbuds.xl		65	3	4	28.3	31.3	-144.1	20.9
KA01	KA28	KA_2		1		S13_linkbuds.xl		65	8	10.5	28.3	31.3	-144.1	24.87
KA01	KA28	KA_1		2	10000	S13_linkbuds.xl		65	3	4	28.3	31.3	-144.1	20.9
KA01	KA28	KA_2		2	10000	S13_linkbuds.xl		65	8	10.5	28.3	31.3	-144.1	24.87

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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): #Error

**Remote Control (TT C) Location(s):**

S14a: Street Address: Woodbine TT&C			
S14b. City: Mt. Airy	S14c. County:	S14d. State/Country MD	S14e. Zip Code: 21771
S14f. Telephone Number: 410-549-4300		S14g. Call Sign of Control Station (if appropriate): E7169	

**Remote Control (TT C) Location(s):**

S14a: Street Address: Vernon Valley Spacecraft Operations			
S14b. City: Sussex	S14c. County:	S14d. State/Country NJ	S14e. Zip Code: 07461
S14f. Telephone Number: 973-823-6000		S14g. Call Sign of Control Station (if appropriate): WB81	

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S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S15a. Mass of spacecraft without fuel (kg): 1445	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 1822		
S15c. Mass of spacecraft and fuel at launch (kg): 3267	S15f. Length (m): 23.5	S15i. Payload: 0.94
S15d. Mass of fuel, in orbit, at beginning of life (kg): 619	S15g. Width (m): 7.7	S15j. Bus: 0.88
S15e. Deployed Area of Solar Array (square meters): 39	S15h. Height (m): 3.9	S15k. Total: 0.83

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): 4916	(f): 4916	(k): 4916	(p): 4916
Bus (Watts):	(b): 429	(g): 361	(l): 467	(q): 375
Total (Watts):	(c): 5345	(h): 5277	(m): 5383	(r): 5291
Solar Array (Watts):	(d): 7312	(i): 6561	(n): 6265	(s): 5720
Depth of Battery Discharge (%):	(e) 15 %	(j) 12.6 %	(o) 10.9 %	(t) 19.1 %

S17. CERTIFICATIONS:

a. Are the power flux density limits of § 25.208 met?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> 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?	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input checked="" type="checkbox"/> 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?	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> 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.**