

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name: SES-3		e. Estimated Date of Placement into Service: 8/12/2011		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date: 2/29/2008		f. Estimated Lifetime of Satellite(s): 15 Years		j. Number of transponders offered on a common carrier basis: 0	
c. Construction Completion Date: 7/6/2011		g. Total Number of Transponders: 49		k. Total Common Carrier Transponder Bandwidth: 0 MHz	
d1. Est Launch Date Begin: 7/16/2011	d2. Est Launch Date End: 7/16/2011	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)		
3.7	G	4.2	G	T	Fixed Satellite Service
5.925	G	6.425	G	R	Fixed Satellite Service
11.7	G	12.2	G	T	Fixed Satellite Service
11.7	G	12.2	G	T	Direct to Home in the Fixed Fixed Satellite Service
14.0	G	14.5	G	R	Fixed Satellite Service
17.3	G	17.8	G	T	Broadcasting Satellite Service - Video
24.75	G	25.25	G	R	Feeder Link for Broadcasting Satellite Service in FSS
3.7	G	4.2	G	T	Direct to Home in the Fixed Fixed Satellite Service

S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:

a. Nominal Orbital Longitude (Degrees E/W): 103 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: SES-3 will replace AMC-1 at 103 W.L. in the C- and Ku-bands.	
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	e. Toward East: 0.05 Degrees		g. Westernmost: _____ Degrees _____ E/W _____ h. Easternmost: _____		
i. Reason for service are selection (Optional):					

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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, Canada and Mexico
K-UL	E		CONUS, Hawaii and parts of Alaska, Canada and Mexico
C-DL	E		CONUS and parts of Alaska, Hawaii, Canada, Mexico and the Caribbean
C-UL	E		CONUS and parts of Alaska, Hawaii, Canada, Mexico 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				
										(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)	Input Attenuator (dB)	
		(q) Max. Value	(r) Step Size														
CRH	R	31.5	18	0.15	0	30	Y	0	C-UL				447	5	-99	21	1
CRV	R	31.9	16.9	0.15	0	30	Y	90	C-UL				451	5.3	-99.3	21	1
KRH	R	34.3	19.3	0.15	0	30	Y	0	K-UL				545	7	-103	21	1
KRV	R	34.5	19.3	0.15	0	30	Y	90	K-UL				561	7	-103	21	1
CTH	T	31.3	21.3	0.15	0	30	Y	0	C-DL	2.5	11.91	42.1					
CTV	T	31.2	21.2	0.15	0	30	Y	90	C-DL	2.5	12.16	42.1					
KTH	T	36.1	26.1	0.15	0	30	Y	0	K-DL	2.5	52.48	53.3					
KTV	T	34.9	24.9	0.15	0	30	Y	90	K-DL	2.5	57.02	52.5					
KAR	R	23.5	21.5	0.15	0	25	N		KABSS-U				1230	-7.4	-99.6	20	1
KATR	T	23.3	21.3	0.15	0	25	N		KABSS-D	3	10.67	33.6					
KATL	T	23.3	21.3	0.15	0	25	N		KABSS-D	3	10.67	33.6					

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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	-103		CRH.gxt					
CRV	R	C	-103		CRV.gxt					
KRH	R	C	-103		KRH.gxt					
KRV	R	C	-103		KRV.gxt					
CTH	T	C	-103		CTH.gxt	-154.5	-154.2	-153.7	-153.3	-152
CTV	T	C	-103		CTV.gxt	-154.5	-154.2	-153.7	-153.3	-152
KTH	T	C	-103		KTH.gxt					
KTV	T	C	-103		KTV.gxt					
KAR	R	C	-103		KAR.gxt					
KATL	T	C	-103		KATL.gxt	-131.6	-131.4	-131.2	-131	-130.8
KATR	T	C	-103		KATR.gxt	-131.6	-131.4	-131.2	-131	-130.8

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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)
KR001	36000	R	14020	V	C
KR003	36000	R	14060	V	C
KR005	36000	R	14100	V	C
KR007	36000	R	14140	V	C
KR009	36000	R	14180	V	C
KR011	36000	R	14220	V	C
KR013	36000	R	14260	V	C
KR015	36000	R	14300	V	C
KR017	36000	R	14340	V	C
KR019	36000	R	14380	V	C
KR021	36000	R	14420	V	C
KR023	36000	R	14460	V	C
KR002	36000	R	14040	H	C
KR004	36000	R	14080	H	C
KR006	36000	R	14120	H	C
KR008	36000	R	14160	H	C
KR010	36000	R	14200	H	C
KR012	36000	R	14240	H	C
KR014	36000	R	14280	H	C
KR016	36000	R	14320	H	C
KR018	36000	R	14360	H	C
KR020	36000	R	14400	H	C
KR022	36000	R	14440	H	C
KR024	36000	R	14480	H	C
KT001	36000	T	11720	H	C
KT003	36000	T	11760	H	C
KT005	36000	T	11800	H	C
KT007	36000	T	11840	H	C
KT009	36000	T	11880	H	C
KT011	36000	T	11920	H	C

(a) Transponder ID	(b) Transponder Gain (dB)	Receive Band		Transmit Band	
		(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID
K0001	113.2	KR001	KRV	KT001	KTH
K0003	113.2	KR003	KRV	KT003	KTH
K0005	113.2	KR005	KRV	KT005	KTH
K0007	113.2	KR007	KRV	KT007	KTH
K0009	113.2	KR009	KRV	KT009	KTH
K0011	113.2	KR011	KRV	KT011	KTH
K0013	113.2	KR013	KRV	KT013	KTH
K0015	113.2	KR015	KRV	KT015	KTH
K0017	113.2	KR017	KRV	KT017	KTH
K0019	113.2	KR019	KRV	KT019	KTH
K0021	113.2	KR021	KRV	KT021	KTH
K0023	113.2	KR023	KRV	KT023	KTH
K0002	113.8	KR002	KRH	KT002	KTV
K0004	113.8	KR004	KRH	KT004	KTV
K0006	113.8	KR006	KRH	KT006	KTV
K0008	113.8	KR008	KRH	KT008	KTV
K0010	113.8	KR010	KRH	KT010	KTV
K0012	113.8	KR012	KRH	KT012	KTV
K0014	113.8	KR014	KRH	KT014	KTV
K0016	113.8	KR016	KRH	KT016	KTV
K0018	113.8	KR018	KRH	KT018	KTV
K0020	113.8	KR020	KRH	KT020	KTV
K0022	113.8	KR022	KRH	KT022	KTV
K0024	113.8	KR024	KRH	KT024	KTV
C0001	100.2	CR001	CRV	CT001	CTH
C0003	100.2	CR003	CRV	CT003	CTH
C0005	100.2	CR005	CRV	CT005	CTH
C0007	100.2	CR007	CRV	CT007	CTH
C0009	100.2	CR009	CRV	CT009	CTH
C0011	100.2	CR011	CRV	CT011	CTH

KT013	36000	T	11960	H	C
KT015	36000	T	12000	H	C
KT017	36000	T	12040	H	C
KT019	36000	T	12080	H	C
KT021	36000	T	12120	H	C
KT023	36000	T	12160	H	C
KT002	36000	T	11740	V	C
KT004	36000	T	11780	V	C
KT006	36000	T	11820	V	C
KT008	36000	T	11860	V	C
KT010	36000	T	11900	V	C
KT012	36000	T	11940	V	C
KT014	36000	T	11980	V	C
KT016	36000	T	12020	V	C
KT018	36000	T	12060	V	C
KT020	36000	T	12100	V	C
KT022	36000	T	12140	V	C
KT024	36000	T	12180	V	C
CR001	36000	R	5945	V	C
CR003	36000	R	5985	V	C
CR005	36000	R	6025	V	C
CR007	36000	R	6065	V	C
CR009	36000	R	6105	V	C
CR011	36000	R	6145	V	C
CR013	36000	R	6185	V	C
CR015	36000	R	6225	V	C
CR017	36000	R	6265	V	C
CR019	36000	R	6305	V	C
CR021	36000	R	6345	V	C
CR023	36000	R	6385	V	C
CR002	36000	R	5965	H	C
CR004	36000	R	6005	H	C
CR006	36000	R	6045	H	C
CR008	36000	R	6085	H	C
CR010	36000	R	6125	H	C
CR012	36000	R	6165	H	C
CR014	36000	R	6205	H	C
CR016	36000	R	6245	H	C
CR018	36000	R	6285	H	C

C0013	100.2	CR013	CRV	CT013	CTH
C0015	100.2	CR015	CRV	CT015	CTH
C0017	100.2	CR017	CRV	CT017	CTH
C0019	100.2	CR019	CRV	CT019	CTH
C0021	100.2	CR021	CRV	CT021	CTH
C0023	100.2	CR023	CRV	CT023	CTH
C0002	100.6	CR002	CRH	CT002	CTV
C0004	100.6	CR004	CRH	CT004	CTV
C0006	100.6	CR006	CRH	CT006	CTV
C0008	100.6	CR008	CRH	CT008	CTV
C0010	100.6	CR010	CRH	CT010	CTV
C0012	100.6	CR012	CRH	CT012	CTV
C0014	100.6	CR014	CRH	CT014	CTV
C0016	100.6	CR016	CRH	CT016	CTV
C0018	100.6	CR018	CRH	CT018	CTV
C0020	100.6	CR020	CRH	CT020	CTV
C0022	100.6	CR022	CRH	CT022	CTV
C0024	100.6	CR024	CRH	CT024	CTV
X0001	107.1	KR014	KRH	CT014	CTV
X0002	107.1	KR016	KRH	CT016	CTV
X0003	107.1	KR018	KRH	CT018	CTV
X0004	107.1	KR020	KRH	CT020	CTV
X0005	107.1	KR022	KRH	CT022	CTV
X0006	107.1	KR024	KRH	CT024	CTV
X0007	107.3	CR014	CRH	KT014	KTV
X0008	107.3	CR016	CRH	KT016	KTV
X0009	107.3	CR018	CRH	KT018	KTV
X0010	107.3	CR020	CRH	KT020	KTV
X0011	107.3	CR022	CRH	KT022	KTV
X0012	107.3	CR024	CRH	KT024	KTV
KA001	136.7	KAR01	KAR	AT001	KATR
KA002	136.7	KAR02	KAR	AT002	KATR
KA003	136.7	KAR03	KAR	AT003	KATR
KA004	136.7	KAR04	KAR	AT004	KATR
KA005	136.7	KAR05	KAR	AT005	KATR
KA006	136.7	KAR06	KAR	AT006	KATR
KA007	136.7	KAR07	KAR	AT007	KATR
KA008	136.7	KAR08	KAR	AT008	KATR
KA009	136.7	KAR09	KAR	AT009	KATR

CR020	36000	R	6325	H	C
CR022	36000	R	6365	H	C
CR024	36000	R	6405	H	C
CT001	36000	T	3720	H	C
CT003	36000	T	3760	H	C
CT005	36000	T	3800	H	C
CT007	36000	T	3840	H	C
CT009	36000	T	3880	H	C
CT011	36000	T	3920	H	C
CT013	36000	T	3960	H	C
CT015	36000	T	4000	H	C
CT017	36000	T	4040	H	C
CT019	36000	T	4080	H	C
CT021	36000	T	4120	H	C
CT023	36000	T	4160	H	C
CT002	36000	T	3740	V	C
CT004	36000	T	3780	V	C
CT006	36000	T	3820	V	C
CT008	36000	T	3860	V	C
CT010	36000	T	3900	V	C
CT012	36000	T	3940	V	C
CT014	36000	T	3980	V	C
CT016	36000	T	4020	V	C
CT018	36000	T	4060	V	C
CT020	36000	T	4100	V	C
CT022	36000	T	4140	V	C
CT024	36000	T	4180	V	C
AT001	31000	T	17319.15	R	C
AT002	31000	T	17353.45	R	C
AT003	31000	T	17387.75	R	C
AT004	31000	T	17422.05	R	C
AT005	31000	T	17456.35	R	C
AT006	31000	T	17490.65	R	C
KAR01	31000	R	24769.15	L	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
KAR06	31000	R	24940.65	L	C

KA010	136.7	KAR10	KAR	AT010	KATR
KA011	136.7	KAR11	KAR	AT011	KATR
KA012	136.7	KAR12	KAR	AT012	KATR
KA013	136.7	KAR13	KAR	AT013	KATR
KA014	136.7	KAR14	KAR	AT014	KATR
KA015	136.7	KAR01	KAR	AT015	KATL
KA016	136.7	KAR02	KAR	AT016	KATL
KA017	136.7	KAR03	KAR	AT017	KATL
KA018	136.7	KAR04	KAR	AT018	KATL
KA019	136.7	KAR05	KAR	AT019	KATL
KA020	136.7	KAR06	KAR	AT020	KATL
KA021	136.7	KAR07	KAR	AT021	KATL
KA022	136.7	KAR08	KAR	AT022	KATL
KA023	136.7	KAR09	KAR	AT023	KATL
KA024	136.7	KAR10	KAR	AT024	KATL
KA025	136.7	KAR11	KAR	AT025	KATL
KA026	136.7	KAR12	KAR	AT026	KATL
KA027	136.7	KAR13	KAR	AT027	KATL
KA028	136.7	KAR14	KAR	AT028	KATL
TCC		CC1	CRV		
TCK		KC1	KRV		
TBC1				CBCN1	CTV
TBC2				CBCN2	CTH
TBK1				KBCN1	KTV
TBK2				KBCN2	KTH

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
AT007	31000	T	17524.95	R	C
AT008	31000	T	17559.25	R	C
AT009	31000	T	17593.55	R	C
AT010	31000	T	17627.85	R	C
AT011	31000	T	17662.15	R	C
AT012	31000	T	17696.45	R	C
AT013	31000	T	17730.75	R	C
AT014	31000	T	17765.05	R	C
AT015	31000	T	17319.15	L	C
AT016	31000	T	17353.45	L	C
AT017	31000	T	17387.75	L	C
AT018	31000	T	17422.05	L	C
AT019	31000	T	17456.35	L	C
AT020	31000	T	17490.65	L	C
AT021	31000	T	17524.95	L	C
AT022	31000	T	17559.25	L	C
AT023	31000	T	17593.55	L	C
AT024	31000	T	17627.85	L	C
AT025	31000	T	17662.15	L	C
AT026	31000	T	17696.45	L	C
AT027	31000	T	17730.75	L	C
AT028	31000	T	17765.05	L	C
CC1	800	R	6423.5	V	T
KC1	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

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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)
K1	36M0G7W	36000	4	40000	0.69		4.5	18.9
K2	27M0G7W	27000	4	32000	0.69		4.5	18.9
K3	6M95G1W	6950	4	8000	0.69		4.5	18.9
K4	5M00G1W	5000	4	6000	0.69		4.5	18.9
K5	100KG1W	100	4	56	0.69		4.5	18.9
K6	1M60G1W	1600	4	1544	0.69		4.5	18.9
K7	36M0G7W	36000	8	50000	0.69		7.1	20.7
C1	36M0G7W	36000	4	40000	0.69		4.5	18.9
C2	27M0G7W	27000	4	32000	0.69		4.5	18.9
C3	6M95G1W	6950	4	8000	0.69		4.5	18.9
C4	5M00G1W	5000	4	6000	0.69		4.5	18.9
C5	100KG1W	100	4	56	0.69		4.5	18.9
C6	1M60G1W	1600	4	1544	0.69		4.5	18.9
KA1	1M20G1W	1200	4	1430	0.75		4.7	19.3
KA2	5M50G1W	5500	4	4758	0.5		1.3	17.5
C7	36M0G7W	36000	8	50000	0.69		7.1	20.7

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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 ² /Hz)	(o) Assoc. Stn Rec. G/T (dB/K)
TCC	TCC		CTC			linkbuds.doc		60.2	10	16				
TBC1	TBC2		CTM			linkbuds.doc					19	29	-153.5	34.6
TBK1	TBK2		KTM			linkbuds.doc					16	26	-156.5	22.5
KA001	KA028	KA1		1		linkbuds.doc		65.6	4	4.3	29.6	33.6	-129.7	21.2
KA001	KA028	KA2		1		linkbuds.doc		65.6	10.5	10.9	29.6	33.6	-136.3	25.2
KA001	KA028	KA1		2	10000	linkbuds.doc		65.6	4	4.3	29.6	33.6	-129.7	21.2
KA001	KA028	KA2		2	10000	linkbuds.doc		65.6	10.5	10.9	29.6	33.6	-136.3	25.2
K0001	K0024	K1		1		linkbuds.doc		57.3	20	25.6	38.5	48.5	-153.5	19.9
K0001	K0024	K2		1		linkbuds.doc		57.3	20	24.3	37.3	47.3	-153.5	19.9
K0001	K0024	K3		5	6950	linkbuds.doc		53	8.9	18.4	27.4	37.4	-157.5	19.9
K0001	K0024	K4		6	5000	linkbuds.doc		53	8.9	17	25.9	35.9	-157.5	19.9
K0001	K0024	K5		250	100	linkbuds.doc		46.7	-2	0	8.9	18.9	-157.5	19.9
K0001	K0024	K6		20	1544	linkbuds.doc		46.7	8	12	21	31	-157.5	19.9
K0001	K0024	K7		1		linkbuds.doc		57.3	20	25.6	34.5	44.5	-157.5	19.9
C0001	C0024	C1		1		linkbuds.doc		53.5	25.1	31.1	36	42	-159.5	19.5
C0001	C0024	C2		1		linkbuds.doc		53.5	20	26	34.8	40.8	-159.5	19.5
C0001	C0024	C3		5	6950	linkbuds.doc		53.5	9.6	15.6	28.9	34.9	-159.5	19.5
C0001	C0024	C4		6	5000	linkbuds.doc		53.5	12	18	27.4	33.4	-159.5	19.5
C0001	C0024	C5		250	100	linkbuds.doc		47.5	-3.4	2.6	10.4	16.4	-159.5	19.5
C0001	C0024	C6		20	1544	linkbuds.doc		47.5	11.8	17.8	22.5	28.5	-159.5	19.5
C0001	C0024	C7		1		linkbuds.doc		53.5	25.1	31.1	36	42	-159.5	19.5
C0001	C0024		C8	1		linkbuds.doc	2000	53.5	25	26.5	36	42	-147.5	22.1
K0001	K0024		K8	1		linkbuds.doc	2000	57.3	22	27	38.2	48.2	-141.3	20.9
TCK	TCK		KTC			linkbuds.doc		57	10	20				

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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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Characteristics and
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S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S15a. Mass of spacecraft without fuel (kg): 1362	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 1750		
S15c. Mass of spacecraft and fuel at launch (kg): 3112	S15f. Length (m): 23.5	S15i. Payload: 0.94
S15d. Mass of fuel, in orbit, at beginning of life (kg): 528	S15g. Width (m): 7.7	S15j. Bus: 0.89
S15e. Deployed Area of Solar Array (square meters): 39	S15h. Height (m): 3.9	S15k. Total: 0.84

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): 4966	(f): 4966	(k): 4948	(p): 4948
Bus (Watts):	(b): 973	(g): 479	(l): 1064	(q): 350
Total (Watts):	(c): 5938	(h): 5445	(m): 6012	(r): 5428
Solar Array (Watts):	(d): 7370	(i): 6608	(n): 7048	(s): 6436
Depth of Battery Discharge (%):	(e) 54.4 %	(j) 0 %	(o) 63.6 %	(t) 15.3 %

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.