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 22		5/1/2012	N
b. Construction Commencement Date:		f. Estimated Lifetime of Satellite(s):	j. Number of transponders offered on a common carrier basis:
6/1/2009		15 Years	
c. Construction Completion Date:		g. Total Number of Transponders:	k. Total Common Carrier Transponder Bandwidth:
11/30/2011		51	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:
2/1/2012	4/1/2012	2602.813 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)		
5850	M	6425	M	R	Fixed Satellite Service
3625	M	4200	M	T	Fixed Satellite Service
11450	M	11700	M	T	Fixed Satellite Service
14000	M	14500	M	R	Fixed Satellite Service
12250	M	12750	M	T	Fixed Satellite Service
292.835	M	317.330	M	R	Mobile-Satellite Service
243.52	M	268.160	M	T	Mobile-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:
72.1 E			REPLACE THE EXISTING INTELSAT 709 SPACECRAFT
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): Degrees E/W g. Westernmost: h. Easternmost:	
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:

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		AFRICA, EUROPE, MIDDLE EAST
2	S		EAST ASIA, AUSTRALIA
3	S		EUROPE, EASTERN AFRICA, MIDDLE EAST
4	S		SOUTHEAST ASIA, WESTERN AUSTRALIA, INDIA
5	S		GLOBAL

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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				
		(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
WHL	R	27.8	17.8	0.08	0.18	30	N		1				398	1.8	-109.2	34	1
WHR	R	27.8	17.8	0.08	0.18	30	N		1				398	1.8	-109.2	34	1
EHLU	R	29.8	19.8	0.08	0.18	30	N		2				407	3.7	-109.8	34	1
EHR	R	29.8	19.8	0.08	0.18	30	N		2				407	3.7	-109.8	34	1
MAH	R	32.5	26.5	0.08	0.18	30	N		3				380	6.7	-113.1	34	1
MAV	R	32.5	26.5	0.08	0.18	30	N		3				380	6.7	-113.1	34	1
MOH	R	30.4	22.4	0.08	0.18	30	N		4				372	4.7	-111	34	1
MOV	R	30.4	22.4	0.08	0.18	30	N		4				372	4.7	-111	34	1
URUL	R	17.2	14.2	0.3	0.1	25	N		5				634	-10.8	-155	37	1
WHL	T	27.2	17.2	0.08	0.18	30	N		1	1.4	51.3	44.3					
WHR	T	27.2	17.2	0.08	0.18	30	N		1	1.4	51.3	44.3					
EHLD	T	27.6	17.6	0.08	0.18	30	N		2	1.4	51.3	44.7					
EHR	T	27.6	17.6	0.08	0.18	30	N		2	1.4	51.3	44.7					
MAH	T	30.4	24.4	0.08	0.18	30	N		3	1.8	100	50.4					
MAV	T	30.4	24.4	0.08	0.18	30	N		3	1.8	100	50.4					
MOH	T	29.4	22.4	0.08	0.18	30	N		4	1.5	107.2	49.7					
MOV	T	29.4	22.4	0.08	0.18	30	N		4	1.5	107.2	49.7					
UHF	T	16.5	14.5	0.3	0.1	25	N		5	1.6	17.4	28.9					
CMD	R	27.8	17.8	0.08	0.18		N		1				31883	-17.2	-109.1		
CMD	R	-0.8	-3.2	0.08	0.18		N		5				10874	-41.2	-85.4		
CMD	R	2.4	-1.6	0.08	0.18		N		5				9581	-37.4	-88.1		
TLMR	T	27.2	17.2	0.08	0.18		N		1	6.2	0.2	20					
TLMB	T	5	1	0.08	0.18		N		5	5	3.5	10.5					
TLMP	T	8	4	0.08	0.18		N		5	6.1	2.7	12.4					
UPC	T	12.5	11.5	0.08	0.18		N		5	1.2	0.4	8.8					
UPK	T	18.5	16.5	0.08	0.18		N		5	1	0.6	16.5					
UPKL	T	19	17	0.08	0.18		N		5	1.1	0.6	16.9					

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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
WHL	R	C	72.1		WHLU.gxt					
WHR	R	C	72.1		WHRU.gxt					
EHLU	R	C	72.1		EHLU.gxt					
EHR	R	C	72.1		EHRU.gxt					
MAH	R	C	72.1		MAHU.gxt					
MAV	R	C	72.1		MAVU.gxt					
MOH	R	C	72.1		MOHU.gxt					
MOV	R	C	72.1		MOVU.gxt					
URUL	R	C	72.1		URUL.gxt					
WHL	T	C	72.1		WHLD.gxt	-152	-149.5	-148.7	-148.6	-148.5
WHR	T	C	72.1		WHRD.gxt	-152	-149.5	-148.7	-148.6	-148.5
EHLD	T	C	72.1		EHLD.gxt	-152	-149.5	-148.3	-148.2	-148.1
EHR	T	C	72.1		EHRD.gxt	-152	-149.5	-148.3	-148.2	-148.1
MAH	T	C	72.1		MAHD.gxt	-148	-145.5	-143	-142.5	-142.4
MAV	T	C	72.1		MAVD.gxt	-148	-145.5	-143	-142.5	-142.4
MOH	T	C	72.1		MOHD.gxt	-148	-145.5	-143.3	-143.2	-143.1
MOV	T	C	72.1		MOVD.gxt	-148	-145.5	-143.3	-143.2	-143.1
UHF	T	C	72.1		UHFD.gxt					
CMD	R	C	72.1		CMDR.gxt					
CMD	R	C	72.1		CMDB.gxt					
CMD	R	C	72.1		CMDP.gxt					
TLMR	T	C	72.1		TLMR.gxt	-162	-161.9	-161.8	-161.7	-161.6
TLMB	T	C	72.1		TLMB.gxt	-171.5	-171.4	-171.3	-171.2	-171.1
TLMP	T	C	72.1		TLMP.gxt	-169.6	-169.5	-169.4	-169.3	-169.2
UPC	T	C	72.1		UPCV.gxt	-162.4	-162.3	-162.2	-162.1	-162
UPK	T	C	72.1		UPKR.gxt	-154.7	-154.6	-154.5	-154.4	-154.3
UPKL	T	C	72.1		UPKL.gxt	-154.3	-154.2	-154.1	-154	-153.9
WHR	R	X	72.1		WRUX.gxt					

EHLU	R	X	72.1		ELUX.gxt					
EHR	R	X	72.1		ERUX.gxt					
MOH	R	X	72.1		MHUX.gxt					
MOV	R	X	72.1		MVUX.gxt					
WHL	T	X	72.1		WLDX.gxt					
WHR	T	X	72.1		WRDX.gxt					
EHLD	T	X	72.1		ELDX.gxt					
EHR	T	X	72.1		ERDX.gxt					
MAH	T	X	72.1		AHDX.gxt					
MAV	T	X	72.1		AVDX.gxt					
MOH	T	X	72.1		MHDX.gxt					
MOV	T	X	72.1		MVDX.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)
CU001	72000	R	5895	L	C
CU003	72000	R	5975	L	C
CU005	72000	R	6055	L	C
CU007	72000	R	6135	L	C
CU009	72000	R	6215	L	C
CU011	72000	R	6295	L	C
CU013	72000	R	6375	L	C
CU002	72000	R	5895	R	C
CU004	72000	R	5975	R	C
CU006	72000	R	6055	R	C
CU008	72000	R	6135	R	C
CU010	72000	R	6215	R	C
CU012	72000	R	6295	R	C
CU014	72000	R	6375	R	C
CU015	72000	R	6055	L	C
CU017	72000	R	6135	L	C
CU019	72000	R	6215	L	C
CU021	72000	R	6295	L	C
CU023	72000	R	6375	L	C
CU016	72000	R	6055	R	C
CU018	72000	R	6135	R	C
CU020	72000	R	6215	R	C
CU022	72000	R	6295	R	C
CU024	72000	R	6375	R	C
CD001	72000	T	3670	R	C
CD003	72000	T	3750	R	C
CD005	72000	T	3830	R	C
CD007	72000	T	3910	R	C
CD009	72000	T	3990	R	C
CD011	72000	T	4070	R	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
C0001	135.8	CU001	WHLU	CD001	WHRD
C0003	135.8	CU003	WHLU	CD003	WHRD
C0005	135.8	CU005	WHLU	CD005	WHRD
C0007	135.8	CU007	WHLU	CD007	WHRD
C0009	135.8	CU009	WHLU	CD009	WHRD
C0011	135.8	CU011	WHLU	CD011	WHRD
C0013	135.8	CU013	WHLU	CD013	WHRD
C0002	135.8	CU002	WHRU	CD002	WHLD
C0004	135.8	CU004	WHRU	CD004	WHLD
C0006	135.8	CU006	WHRU	CD006	WHLD
C0008	135.8	CU008	WHRU	CD008	WHLD
C0010	135.8	CU010	WHRU	CD010	WHLD
C0012	135.8	CU012	WHRU	CD012	WHLD
C0014	135.8	CU014	WHRU	CD014	WHLD
C0015	134.4	CU015	EHLU	CD015	EHRD
C0017	134.4	CU017	EHLU	CD017	EHRD
C0019	134.4	CU019	EHLU	CD019	EHRD
C0021	134.4	CU021	EHLU	CD021	EHRD
C0023	134.4	CU023	EHLU	CD023	EHRD
C0016	134.4	CU016	EHRU	CD016	EHLD
C0018	134.4	CU018	EHRU	CD018	EHLD
C0020	134.4	CU020	EHRU	CD020	EHLD
C0022	134.4	CU022	EHRU	CD022	EHLD
C0024	134.4	CU024	EHRU	CD024	EHLD
K0001	145.1	KU001	MAVU	KD001	MAHD
K0003	145.1	KU003	MAVU	KD003	MAHD
K0005	145.1	KU005	MAVU	KD005	MAHD
K0007	145.1	KU007	MAVU	KD007	MAHD
K0009	145.1	KU009	MAVU	KD009	MAHD
K0011	145.1	KU011	MAVU	KD011	MAHD

CD013	72000	T	4150	R	C
CD002	72000	T	3670	L	C
CD004	72000	T	3750	L	C
CD006	72000	T	3830	L	C
CD008	72000	T	3910	L	C
CD010	72000	T	3990	L	C
CD012	72000	T	4070	L	C
CD014	72000	T	4150	L	C
CD015	72000	T	3830	R	C
CD017	72000	T	3910	R	C
CD019	72000	T	3990	R	C
CD021	72000	T	4070	R	C
CD023	72000	T	4150	R	C
CD016	72000	T	3830	L	C
CD018	72000	T	3910	L	C
CD020	72000	T	3990	L	C
CD022	72000	T	4070	L	C
CD024	72000	T	4150	L	C
KU001	36000	R	14025	V	C
KU003	36000	R	14065	V	C
KU005	36000	R	14105	V	C
KU007	36000	R	14145	V	C
KU009	36000	R	14185	V	C
KU011	36000	R	14225	V	C
KU013	72000	R	14375	V	C
KU015	72000	R	14455	V	C
KU002	72000	R	14045	H	C
KU004	72000	R	14125	H	C
KU006	72000	R	14205	H	C
KU008	36000	R	14315	H	C
KU010	36000	R	14355	H	C
KU012	36000	R	14395	H	C
KU014	36000	R	14435	H	C
KU016	36000	R	14475	H	C
KU031	72000	R	14295	V	C
KU033	72000	R	14375	V	C
KU035	72000	R	14455	V	C
KU032	36000	R	14275	H	C
KU034	36000	R	14315	H	C

K0013	145.1	KU013	MAVU	KD013	MAHD
K0015	145.1	KU015	MAVU	KD015	MAHD
K0002	145.1	KU002	MAHU	KD002	MAVD
K0004	145.1	KU004	MAHU	KD004	MAVD
K0006	145.1	KU006	MAHU	KD006	MAVD
K0008	145.1	KU008	MAHU	KD008	MAVD
K0010	145.1	KU010	MAHU	KD010	MAVD
K0012	145.1	KU012	MAHU	KD012	MAVD
K0014	145.1	KU014	MAHU	KD014	MAVD
K0016	145.1	KU016	MAHU	KD016	MAVD
K0031	145.5	KU031	MOVU	KD031	MOHD
K0033	145.5	KU033	MOVU	KD033	MOHD
K0035	145.5	KU035	MOVU	KD035	MOHD
K0032	145.5	KU032	MOHU	KD032	MOVD
K0034	145.5	KU034	MOHU	KD034	MOVD
K0036	145.5	KU036	MOHU	KD036	MOVD
K0038	145.5	KU038	MOHU	KD038	MOVD
K0040	145.5	KU040	MOHU	KD040	MOVD
K0042	145.5	KU042	MOHU	KD042	MOVD
U0001	161.3	UU1	URUL	UD1	UHFD
U0002	161.3	UU1	URUL	UD2	UHFD
U0003	161.3	UU1	URUL	UD3	UHFD
U0004	161.3	UU1	URUL	UD4	UHFD
U0005	161.3	UU1	URUL	UD5	UHFD
U0007	161.3	UU1	URUL	UD7	UHFD
U0008	161.3	UU1	URUL	UD8	UHFD
U0009	161.3	UU1	URUL	UD9	UHFD
U0010	161.3	UU1	URUL	UD10	UHFD

KU036	36000	R	14355	H	C
KU038	36000	R	14395	H	C
KU040	36000	R	14435	H	C
KU042	36000	R	14475	H	C
KD001	36000	T	12525	H	C
KD003	36000	T	12565	H	C
KD005	36000	T	12605	H	C
KD007	36000	T	12645	H	C
KD009	36000	T	12685	H	C
KD011	36000	T	12725	H	C
KD013	72000	T	11575	H	C
KD015	72000	T	11655	H	C
KD002	72000	T	12545	V	C
KD004	72000	T	12625	V	C
KD006	72000	T	12705	V	C
KD008	36000	T	11515	V	C
KD010	36000	T	11555	V	C
KD012	36000	T	11595	V	C
KD014	36000	T	11635	V	C
KD016	36000	T	11675	V	C
KD031	72000	T	12295	H	C
KD033	72000	T	12375	H	C
KD035	72000	T	12455	H	C
KD032	72000	T	12275	V	C
KD034	72000	T	12315	V	C
KD036	72000	T	12355	V	C
KD038	72000	T	12395	V	C
KD040	72000	T	12435	V	C
KD042	72000	T	12475	V	C
CMD1	1000	R	5850.5	L	T
CMD2	1000	R	6424.5	L	T
CMD3	1000	R	5850.5	H	T
TLM1	500	T	4197.25	L	T
TLM2	500	T	4197.75	L	T
TLM3	500	T	4198.25	L	T
TLM4	500	T	4198.75	L	T
TLM5	500	T	4197.25	V	T
TLM6	500	T	4197.75	V	T
TLM7	500	T	4198.25	V	T

TLM8	500	T	4198.75	V	T
UPC	25	T	4196.75	V	T
UPK1	25	T	11699	R	T
UPK2	25	T	12499	L	T
UU1	24495	R	305.0825	R	C
UD1	2065	T	251.3675	R	C
UD2	2390	T	254.730	R	C
UD3	2065	T	257.8675	R	C
UD4	728	T	265.599	R	C
UD5	1425	T	267.4475	R	C
UD7	340	T	260.53	R	C
UD8	700	T	261.95	R	C
UD9	380	T	263.75	R	C
UD10	720	T	243.88	R	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)
D1	72M0G7W	72000	4	49150	0.5		3.4	16.5
D2	10M3G7W	10300	4	6000	0.5		3.9	17.2
D3	100KG7W	100	4	64	0.5		3	16.6
D4	1M45G7W	1450	2	512	0.5		3.4	16.5
D5	400KG7W	400	2	128	0.5		3.4	15.7

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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						
A1	36M0F3F	36000	TV/FM	1					PAL	15.6	1.5		10	23

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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.		
C0001	K0042		A1	2	36000	IS22 SCHEDUL	4000	60.2	13.5	23.5	30.1	40.1	-152	28.4
C0001	K0042	D1		1	72000	NOTE.txt		60.2	13.5	23.5	34.3	44.3	-159.6	19.2
C0001	K0042	D2		4	10300	NOTE.txt		49.4	11.2	21.2	23.8	33.8	-160.6	21
C0001	K0042	D3		545	100	NOTE.txt		49.4	-9.3	0.7	3.4	13.4	-161.5	21
C0001	K0042		A1	2	36000	NOTE.txt	4000	60.2	12.9	22.9	30.5	40.5	-151.6	28.4
C0001	K0042	D1		1	72000	NOTE.txt		58.4	12.7	22.7	34.7	44.7	-159.2	19.2
C0001	K0042	D2		5	10300	NOTE.txt		49.4	10.5	20.5	24.2	34.2	-160.2	21
C0001	K0042	D3		552	100	NOTE.txt		49.4	-9.9	0.1	3.8	13.8	-161.1	21
C0001	K0042		A1	2	36000	NOTE.txt	4000	56.8	17	23	40.2	46.2	-145.9	31.5
C0001	K0042	D1		1	72000	NOTE.txt		56.8	18	24	44.4	50.4	-153.5	22.8
C0001	K0042	D2		5	10300	NOTE.txt		56.8	0.8	6.8	33.9	39.9	-154.5	25.5
C0001	K0042	D3		528	100	NOTE.txt		56.8	-19.4	-13.4	13.6	19.6	-155.3	25.5
C0001	K0042	D4		33	1450	NOTE.txt		56.8	-7.4	-1.4	25.7	31.7	-155.3	25.5
C0001	K0042	D5		180	400	NOTE.txt		48.9	-8.1	-2.1	17.1	23.1	-157.9	33.6
C0001	K0042		A1	2	36000	NOTE.txt	4000	60.3	18.5	24.5	40.2	46.2	-145.9	32.8
C0001	K0042	D1		1	72000	NOTE.txt		57	17.8	23.8	44.4	50.4	-153.5	24.7
C0001	K0042	D2		5	10300	NOTE.txt		57	5.4	11.4	33.7	39.7	-154.7	26.4
C0001	K0042	D3		542	100	NOTE.txt		57	-14.7	-8.7	13.5	19.5	-155.4	26.4
C0001	K0042	D4		34	1450	NOTE.txt		60.3	-6	0	25.5	31.5	-155.5	26.4
C0001	K0042	D5		180	400	NOTE.txt		49.8	-5.6	0.4	15.5	21.5	-159.5	32.8
C0001	K0042		A1	2	36000	NOTE.txt	4000	61.8	15.1	23.1	38.5	45.5	-146.6	33.4
C0001	K0042	D1		1	72000	NOTE.txt		60.3	14.6	22.6	42.7	49.7	-154.2	22.6
C0001	K0042	D2		5	10300	NOTE.txt		57	5.6	13.6	32.1	39.1	-155.3	27
C0001	K0042	D3		528	100	NOTE.txt		57	-14.5	-6.5	12	19	-155.9	27
C0001	K0042	D4		33	1450	NOTE.txt		57	-2.6	5.4	23.9	30.9	-156.1	27
C0001	K0042	D5		180	400	NOTE.txt		49.8	-4.8	3.2	14.5	21.5	-159.5	33.4

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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: 3400 INTERNATIONAL DRIVE, NW			
S14b. City: WASHINGTON DC	S14c. County:	S14d. State/Country DC	S14e. Zip Code: 20008
S14f. Telephone Number: 202-944-7701	S14g. Call Sign of Control Station (if appropriate):		

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S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S15a: Mass of spacecraft without fuel (kg): 2789	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 3669		
S15c. Mass of spacecraft and fuel at launch (kg): 6458	S15f. Length (m): 36.9	S15i. Payload: 0.912
S15d. Mass of fuel, in orbit, at beginning of life (kg): 676	S15g. Width (m): 9.3	S15j. Bus: 0.854
S15e. Deployed Area of Solar Array (square meters): 51.9	S15h. Height (m): 7.6	S15k. Total: 0.779

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): 8365	(f): 8365	(k): 8365	(p): 8365
Bus (Watts):	(b): 2004	(g): 1165	(l): 2009	(q): 986
Total (Watts):	(c): 10369	(h): 9530	(m) 10374	(r): 9351
Solar Array (Watts):	(d): 13277	(i): 11660	(n): 11580	(s): 10323
Depth of Battery Discharge (%):	(e) 65.5 %	(j) %	(o) 73.9 %	(t) %

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?		**YES**		**NO**	X	**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.