

**FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
(Technical and Operational Description)**

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name: ICO 2GHZ GSO		e. Estimated Date of Placement into Service: 7/17/2007		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date: 7/31/2005		f. Estimated Lifetime of Satellite(s): 15 Years		j. Number of transponders offered on a common carrier basis: 0	
c. Construction Completion Date: 10/1/2006		g. Total Number of Transponders: 98		k. Total Common Carrier Transponder Bandwidth: 0 MHz	
d1. Est Launch Date Begin: 6/1/2007	d2. Est Launch Date End: 7/1/2007	h. Total Transponder Bandwidth (no. transponders x Bandwidth) 1960 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)		
2000	M	2020	M	R	Mobile-Satellite Service
2180	M	2200	M	T	Mobile-Satellite Service
18.55	G	18.8	G	T	Feeder Link for Mobile Satellite Service in FSS
19.7	G	20.2	G	T	Feeder Link for Mobile Satellite Service in FSS
29.25	G	30	G	R	Feeder Link for Mobile Satellite Service in FSS
29998.5	M	29999.5	M	R	Fixed Satellite Service
20198.85	M	20199.15	M	T	Fixed Satellite Service
5925	M	5930	M	R	Fixed Satellite Service
6420	M	6425	M	R	Fixed Satellite Service
3700	M	3705	M	T	Fixed Satellite Service
4195	M	4200	M	T	Fixed Satellite Service

S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:

a. Nominal Orbital Longitude (Degrees E/W): 93 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: This orbital location provides high elevation angles to all of CONUS, which is very important for the link between the satellite and the user terminal in the MSS. The high elevation angle minimizes the risk of signal blockage due to buildings and foliage. This orbital location also provides coverage of Alaska and Hawaii.
Longitudinal Tolerance or E/W Station-Keeping:		f. Inclination Excursion or N/S Station-Keeping Tolerance:		
d. Toward West:	0.05 Degrees	Range of orbital are in which adequate service can be provided (Optional): <u>Degrees</u> <u>E/W</u> g. Westernmost: h. Easternmost:		
e. Toward East:	0.05 Degrees	6 Degrees		
i. Reason for service are selection (Optional):				



**FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)**

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

**FEDERAL COMMUNICATIONS COMMISSION
 SATELLITE SPACE STATION AUTHORIZATIONS
 FCC Form 312 - Schedule S: (Technical and Operational Description)**

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.
SA1	S		CONUS, Alaska, Hawaii, Puerto Rico, US Virgin Islands
SA2	S		CONUS

FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)

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)														
SU	R	44	41	0.1	1	20	N		SA1				427	17.7		20	1
SD	T	43	40	0.1	1	20	N		SA1	1.1	1677	75.2					
KAUL	R	49.2	46.2	0.1	1	30	N		SA2				1234	18.3		20	1
KAU	R	49.2	46.2	0.1	1	30	N		SA2				1234	18.3		20	1
KADL	T	49.5	46.5	0.1	1	30	N		SA2	4	51.8	66.6					
KAD	T	49.5	46.5	0.1	1	30	N		SA2	4	51.8	66.6					
GBL	T	28	25	1	1	30	N		SA2	8	0.063	16					
OMN	R	0	-4	1	1	30	N	0	SA2				1000	-30			
OMN	T	0	-4	1	1	30	N	0	SA2	4.4	14.5	11.6					
OMN	R	0	-4	1	1	30	N	90	SA2				1000	-30			
OMN	T	0	-4	1	1	30	N	90	SA2	4.4	14.5	11.6					
KAU	R	49.2	46.2	1	1	30	N		SA2				1778	16.7			

**FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)**

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
SU	R	C	-93		SU.GXT					
SD	T	C	-93		SD.GXT					
KAUL	R	C	-93		KAUL.GXT					
KAU	R	C	-93		KAUR.GXT					
KADL	T	C	-93		KADL.GXT	-132.5	-132.5	-132.5	-132.5	-132.5
KAD	T	C	-93		KADR.GXT	-132.5	-132.5	-132.5	-132.5	-132.5
GBL	T	C	-93		GBL.gxt	-146	-146	-146	-146	-146
KAU	R	C	-93		KAUCR.gxt					
OMN	T	C	-93			-154	-154	-154	-154	-154
OMN	T	C	-93			-154	-154	-154	-154	-154

FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)

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)
U0001	20000	R	29325	L	C
U0002	20000	R	29350	L	C
U0003	20000	R	29375	L	C
U0004	20000	R	29400	L	C
U0005	20000	R	29425	L	C
U0006	20000	R	29450	L	C
U0007	20000	R	29475	L	C
U0008	20000	R	29500	L	C
U0009	20000	R	29525	L	C
U0010	20000	R	29550	L	C
U0011	20000	R	29575	L	C
U0012	20000	R	29600	L	C
U0013	20000	R	29625	L	C
U0014	20000	R	29650	L	C
U0015	20000	R	29675	L	C
U0016	20000	R	29700	L	C
U0017	20000	R	29725	L	C
U0018	20000	R	29750	L	C
U0019	20000	R	29775	L	C
U0020	20000	R	29800	L	C
U0021	20000	R	29825	L	C
U0022	20000	R	29850	L	C
U0023	20000	R	29875	L	C
U0024	20000	R	29900	L	C
U0025	20000	R	29325	R	C
U0026	20000	R	29350	R	C
U0027	20000	R	29375	R	C
U0028	20000	R	29400	R	C
U0029	20000	R	29425	R	C
U0030	20000	R	29450	R	C

(a) Transponder ID	(b) Transponder Gain (dB)	Receive Band		Transmit Band	
		(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID
FL001	120	U0001	KAUL	SD001	SD
FL002	120	U0002	KAUL	SD001	SD
FL003	120	U0003	KAUL	SD001	SD
FL005	120	U0005	KAUL	SD001	SD
FL004	120	U0004	KAUL	SD001	SD
FL006	120	U0006	KAUL	SD001	SD
FL007	120	U0007	KAUL	SD001	SD
FL008	120	U0008	KAUL	SD001	SD
FL009	120	U0009	KAUL	SD001	SD
FL010	120	U0010	KAUL	SD001	SD
FL011	120	U0011	KAUL	SD001	SD
FL012	120	U0012	KAUL	SD001	SD
FL013	120	U0013	KAUL	SD001	SD
FL014	120	U0014	KAUL	SD001	SD
FL015	120	U0015	KAUL	SD001	SD
FL016	120	U0016	KAUL	SD001	SD
FL017	120	U0017	KAUL	SD001	SD
FL018	120	U0018	KAUL	SD001	SD
FL019	120	U0019	KAUL	SD001	SD
FL020	120	U0020	KAUL	SD001	SD
FL021	120	U0021	KAUL	SD001	SD
FL022	120	U0022	KAUL	SD001	SD
FL023	120	U0023	KAUL	SD001	SD
FL024	120	U0024	KAUL	SD001	SD
FL025	120	U0025	KAUR	SD001	SD
FL026	120	U0026	KAUR	SD001	SD
FL027	120	U0027	KAUR	SD001	SD
FL028	120	U0028	KAUR	SD001	SD
FL029	120	U0029	KAUR	SD001	SD
FL030	120	U0030	KAUR	SD001	SD

U0031	20000	R	29475	R	C
U0032	20000	R	29500	R	C
U0033	20000	R	29525	R	C
U0034	20000	R	29550	R	C
U0035	20000	R	29575	R	C
U0036	20000	R	29600	R	C
U0037	20000	R	29625	R	C
U0038	20000	R	29650	R	C
U0039	20000	R	29675	R	C
U0040	20000	R	29700	R	C
U0041	20000	R	29725	R	C
U0042	20000	R	29750	R	C
U0043	20000	R	29775	R	C
U0044	20000	R	29800	R	C
U0045	20000	R	29825	R	C
U0046	20000	R	29850	R	C
U0047	20000	R	29875	R	C
U0048	20000	R	29900	R	C
D0001	20000	T	18600	L	C
D0002	20000	T	18625	L	C
D0003	20000	T	18650	L	C
D0004	20000	T	18675	L	C
D0005	20000	T	18700	L	C
D0006	20000	T	18725	L	C
D0007	20000	T	18750	L	C
D0008	20000	T	18775	L	C
D0009	20000	T	19725	L	C
D0010	20000	T	19750	L	C
D0011	20000	T	19775	L	C
D0012	20000	T	19800	L	C
D0013	20000	T	19825	L	C
D0014	20000	T	19850	L	C
D0015	20000	T	19875	L	C
D0016	20000	T	19900	L	C
D0017	20000	T	19925	L	C
D0018	20000	T	19950	L	C
D0019	20000	T	19975	L	C
D0020	20000	T	20000	L	C
D0021	20000	T	20025	L	C

FL031	120	U0031	KAUR	SD001	SD
FL032	120	U0032	KAUR	SD001	SD
FL033	120	U0033	KAUR	SD001	SD
FL034	120	U0034	KAUR	SD001	SD
FL035	120	U0035	KAUR	SD001	SD
FL036	120	U0036	KAUR	SD001	SD
FL037	120	U0037	KAUR	SD001	SD
FL038	120	U0038	KAUR	SD001	SD
FL039	120	U0039	KAUR	SD001	SD
FL040	120	U0040	KAUR	SD001	SD
FL041	120	U0041	KAUR	SD001	SD
FL042	120	U0042	KAUR	SD001	SD
FL043	120	U0043	KAUR	SD001	SD
FL044	120	U0044	KAUR	SD001	SD
FL045	120	U0045	KAUR	SD001	SD
FL046	120	U0046	KAUR	SD001	SD
FL047	120	U0047	KAUR	SD001	SD
FL048	120	U0048	KAUR	SD001	SD
RL001	130	SU001	SU	D0001	KADL
RL002	130	SU001	SU	D0002	KADL
RL003	130	SU001	SU	D0003	KADL
RL004	130	SU001	SU	D0004	KADL
RL005	130	SU001	SU	D0005	KADL
RL006	130	SU001	SU	D0006	KADL
RL007	130	SU001	SU	D0007	KADL
RL008	130	SU001	SU	D0008	KADL
RL009	130	SU001	SU	D0009	KADL
RL010	130	SU001	SU	D0010	KADL
RL011	130	SU001	SU	D0011	KADL
RL012	130	SU001	SU	D0012	KADL
RL013	130	SU001	SU	D0013	KADL
RL014	130	SU001	SU	D0014	KADL
RL015	130	SU001	SU	D0015	KADL
RL016	130	SU001	SU	D0016	KADL
RL017	130	SU001	SU	D0017	KADL
RL018	130	SU001	SU	D0018	KADL
RL019	130	SU001	SU	D0019	KADL
RL020	130	SU001	SU	D0020	KADL
RL021	130	SU001	SU	D0021	KADL

D0022	20000	T	20050	L	C
D0023	20000	T	20075	L	C
D0024	20000	T	20100	L	C
D0025	20000	T	20125	L	C
D0026	20000	T	18600	R	C
D0027	20000	T	18625	R	C
D0028	20000	T	18650	R	C
D0029	20000	T	18675	R	C
D0030	20000	T	18700	R	C
D0031	20000	T	18725	R	C
D0032	20000	T	18750	R	C
D0033	20000	T	18775	R	C
D0034	20000	T	19725	R	C
D0035	20000	T	19750	R	C
D0036	20000	T	19775	R	C
D0037	20000	T	19800	R	C
D0038	20000	T	19825	R	C
D0039	20000	T	19850	R	C
D0040	20000	T	19875	R	C
D0041	20000	T	19900	R	C
D0042	20000	T	19925	R	C
D0043	20000	T	19950	R	C
D0044	20000	T	19975	R	C
D0045	20000	T	20000	R	C
D0046	20000	T	20025	R	C
D0047	20000	T	20050	R	C
D0048	20000	T	20075	R	C
D0049	20000	T	20100	R	C
D0050	20000	T	20125	R	C
CMD1	1000	R	5926	H	T
SU001	20000	R	2010	R	C
SD001	20000	T	2190	R	C
CMD2	1000	R	6424	V	T
CMD3	1000	R	29999	R	T
TLM1	300	T	3701	H	T
TLM2	300	T	4196	V	T
TLM3	300	T	20199	L	T

RL022	130	SU001	SU	D0022	KADL
RL023	130	SU001	SU	D0023	KADL
RL024	130	SU001	SU	D0024	KADL
RL025	130	SU001	SU	D0025	KADL
RL026	130	SU001	SU	D0026	KADR
RL027	130	SU001	SU	D0027	KADR
RL028	130	SU001	SU	D0028	KADR
RL029	130	SU001	SU	D0029	KADR
RL030	130	SU001	SU	D0030	KADR
RL031	130	SU001	SU	D0031	KADR
RL032	130	SU001	SU	D0032	KADR
RL033	130	SU001	SU	D0033	KADR
RL034	130	SU001	SU	D0034	KADR
RL035	130	SU001	SU	D0035	KADR
RL036	130	SU001	SU	D0036	KADR
RL037	130	SU001	SU	D0037	KADR
RL038	130	SU001	SU	D0038	KADR
RL039	130	SU001	SU	D0039	KADR
RL040	130	SU001	SU	D0040	KADR
RL041	130	SU001	SU	D0041	KADR
RL042	130	SU001	SU	D0042	KADR
RL043	130	SU001	SU	D0043	KADR
RL044	130	SU001	SU	D0044	KADR
RL045	130	SU001	SU	D0045	KADR
RL046	130	SU001	SU	D0046	KADR
RL047	130	SU001	SU	D0047	KADR
RL048	130	SU001	SU	D0048	KADR
RL049	130	SU001	SU	D0049	KADR
RL050	130	SU001	SU	D0050	KADR
C001		CMD1	OMNRH		
C002		CMD2	OMNRV		
C003		CMD3	KAUCR		
T001				TLM1	OMNTH
T002				TLM2	OMNTV
T003				TLM3	GBL

FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)

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	200KG7W	200	4	118.75	0.5		3.4	15.6
D2	1M25G7W	1250	4	4.75	0.561	21.1	-18.9	-6.7
D3	8K00G1W	8	4	4.75	0.5		3.4	15.6
D4	8K00G1W	8	4	4.75	0.5		2.3	14.5
D5	1M25G7W	1250	4	4.75	0.561	21.1	-18.9	-6.7

FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)

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	1M00F1D	1000		1									10	22.2
A2	300KG1D	300		1									9	21.2
A3	1M00F1D	1000		1									10	22.2
A4	300KG1D	300		1									10.4	22.6

FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)

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)
FL001	FL048	D1		100	200	HT TDMA Fow		68.1	-14.1	2.7	54.3	57.3		-27
FL001	FL048	D2		16	1250	HT CDMA Fow		68.1	-28.4	-11.6	40	43		-27
FL001	FL048	D3		10	200	HT HPN Fowar		68.1	-10.9	5.9	57.4	60.4		-27
FL001	FL048	D1		100	200	PA TDMA Fow		68.1	-23.8	-7	44.5	47.5		-22
FL001	FL048	D2		16	1250	PA CDMA Fow		68.1	-38.1	-21.3	30.2	33.2		-22
FL001	FL048	D3		10	200	PA HPN Fowar		68.1	-10.9	5.9	57.4	60.4		-22
RL001	RL050	D4		2500	8	HT FDMA Retu		0	0	0	5.5	8.5	-132.5	40.6
RL001	RL050	D5		16	1250	HT CDMA Retu		0	-1	-1	8.9	11.9	-132.5	40.6
RL001	RL050	D4		2500	8	PA FDMA Retu		3	3	3	5.5	8.5	-132.5	40.6
RL001	RL050	D5		16	1250	PA CDMA Retu		3	2	2	8.9	11.9	-132.5	40.6
C001	C002		A1	1		C-Band CMD L		53	7.3	28.3				
C003	C003		A3	1		Ka-Band CMD		65	-29.7	-8.7				
T001	T002		A2	1		C-Band TLM L					7.6	11.6	-154	
T003	T003		A4	1		Ka-Band TLM L					13	16	-146	

**FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)**

Page 10: TT and C

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

**FEDERAL COMMUNICATIONS COMMISSION
SATELLITE SPACE STATION AUTHORIZATIONS
FCC Form 312 - Schedule S: (Technical and Operational Description)**

S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S15a. Mass of spacecraft without fuel (kg): 2735	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 3011		
S15c. Mass of spacecraft and fuel at launch (kg): 5580	S15f. Length (m): 22	S15i. Payload: 0.79
S15d. Mass of fuel, in orbit, at beginning of life (kg): 850	S15g. Width (m): 31	S15j. Bus: 0.84
S15e. Deployed Area of Solar Array (square meters): 60	S15h. Height (m): 11	S15k. Total: 0.66

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): 6605	(f): 6605	(k): 6605	(p): 6605
Bus (Watts):	(b): 2080	(g): 1055	(l): 2080	(q): 1055
Total (Watts):	(c): 8685	(h): 7660	(m): 8685	(r): 7660
Solar Array (Watts):	(d): 11220	(i): 10310	(n): 10000	(s): 9335
Depth of Battery Discharge (%):	(e) 74 %	(j) 0 %	(o) 74 %	(t) 74 %

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 checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input 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.