

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

a. Space Station or Satellite Network Name: INTELSAT 23		e. Estimated Date of Placement into Service: 5/31/2012		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date: 12/9/2009		f. Estimated Lifetime of Satellite(s): 15 Years		j. Number of transponders offered on a common carrier basis:	
c. Construction Completion Date: 12/31/2011		g. Total Number of Transponders: 29		k. Total Common Carrier Transponder Bandwidth: MHz	
d1. Est Launch Date Begin: 2/1/2012	d2. Est Launch Date End: 4/30/2011	h. Total Transponder Bandwidth (no. transponders x Bandwidth) 2951 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)		
5925	M	6425	M	R	Fixed Satellite Service
14000	M	14500	M	R	Fixed Satellite Service
3700	M	4200	M	T	Fixed Satellite Service
11450	M	11700	M	T	Fixed Satellite Service
11700	M	12200	M	T	Fixed Satellite Service

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

a. Nominal Orbital Longitude (Degrees E/W): 53 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: REPLACE EXISTING INTELSAT 707 SPACECRAFT			
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): Degrees    E/W	
d. Toward West:	0.05 Degrees	e. Toward East:				g. Westernmost: h. Easternmost:	
i. Reason for service are selection (Optional):		0.05 Degrees					

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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 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		NORTH AND SOUTH AMERICA
2	S		EUROPE AND AFRICA
3	S		SOUTHERN UNITED STATES, MEXICO, CENTRAL AMERICA, NORTHERN SOUTH AMERICA
4	S		ARGENTINA
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			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)														
WLU	R	27.8	17.8	0.09	0.18	30	N		1				398	1.8	-106	32	1
WRU	R	27.7	17.7	0.09	0.18	30	N		1				398	1.7	-106	32	1
ELUL	R	28.8	20.8	0.09	0.18	30	N		2				398	2.8	-107.1	32	1
ERUL	R	28.8	20.8	0.09	0.18	30	N		2				398	2.8	-107.1	32	1
GLUL	R	20.9	16.9	0.09	0.18	30	N		5				398	-5.1	-103.9	32	1
GRU	R	21	17	0.09	0.18	30	N		5				398	-5	-103.9	32	1
MHU	R	34.1	28.4	0.09	0.18	30	N		03				501	7.1	-106.1	32	1
MVU	R	34.1	28.1	0.09	0.18	30	N		903				501	7.1	-106.1	32	1
AHUL	R	35.2	29.2	0.09	0.18	30	N		04				501	8.2	-105.7	32	1
AVUL	R	35.2	29.2	0.09	0.18	30	N		904				501	8.2	-105.7	32	1
WLD	T	26.8	18.8	0.09	0.18	30	N		1	1	44.7	43.3					
WRD	T	26.6	18.6	0.09	0.18	30	N		1	1	44.7	43.1					
ELDL	T	28.5	22.5	0.09	0.18	27	N		2	1	44.7	45					
ERDL	T	28.5	22.5	0.09	0.18	27	N		2	1	44.7	45					
GLDL	T	20.6	16.6	0.09	0.18	30	N		5	1	44.7	37.1					
GRD	T	20.6	16.6	0.09	0.18	30	N		5	1	44.7	37.1					
MHD	T	32.5	26.5	0.09	0.18	30	N		03	1.6	112.2	53					
MVD	T	32.5	26.5	0.09	0.18	28	N		903	1.6	112.2	53					
AHDL	T	33.1	27.1	0.09	0.18	26	N		04	1.6	112.2	53.6					
AVDL	T	33.1	27.1	0.09	0.18	24	N		904	1.1	112.2	53.6					
CMD	R	20.9	17.9	0.09	0.18	30	N		5				5020	-16.1	-110.9		
CMD	R	2	-1	0.09	0.18	30	N		5				3867	-33.9	-95.6		
CMD	R	13	10	0.09	0.18	30	N		5				3912	-22.9	-105		
TLM	T	20.6	17.6	0.09	0.18	30	N		5	4.8	0.2	13.4					
TLM	T	2	-1	0.09	0.18	30	N		5	4.6	3.5	7.4					
TLM	T	13	10	0.09	0.18	30	N		5	6.9	2	16.1					
UPC	T	13	10.4	0.09	0.18	30	N		5	1.2	1.1	13.3					
UPK	T	21.2	17.1	0.09	0.18	30	N		5	2.6	0.3	16.6					

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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
WLU	R	C	-53		WLUL.gxt					
WRU	R	C	-53		WRUL.gxt					
ELUL	R	C	-53		ELUL.gxt					
ERUL	R	C	-53		ERUL.gxt					
GLUL	R	C	-53		GLUL.gxt					
GRU	R	C	-53		GRUL.gxt					
MHU	R	C	-53		MHUL.gxt					
MVU	R	C	-53		MVUL.gxt					
AHUL	R	C	-53		AHUL.gxt					
AVUL	R	C	-53		AVUL.gxt					
WLD	T	C	-53		WLDL.gxt	-152	-149.9	-149.7	-149.6	-149.5
WRD	T	C	-53		WRDL.gxt	-152	-150.1	-149.9	-149.8	-149.7
ELDL	T	C	-53		ELDL.gxt	-152	-149.5	-148	-147.9	-147.8
ERDL	T	C	-53		ERDL.gxt	-152	-149.5	-148	-147.9	-147.8
GLDL	T	C	-53		GLDL.gxt	-156.2	-156.1	-155.9	-155.8	-155.7
GRD	T	C	-53		GRDL.gxt	-156.2	-156.1	-155.9	-155.8	-155.7
MHD	T	C	-53		MHDL.gxt					
MVD	T	C	-53		MVDL.gxt					
AHDL	T	C	-53		AHDL.gxt					
AVDL	T	C	-53		AVDL.gxt	-150	-147.5	-145	-142.5	-140
CMD	R	C	-53		CMDG.gxt					
CMD	R	C	-53		CDMO.gxt					
CMD	R	C	-53		CMDW.gxt					
TLM	T	C	-53		TLMG.gxt	-168.6	-168.5	-168.4	-168.3	-168.2
TLM	T	C	-53		TLMO.gxt	-174.6	-174.5	-174.4	-174.3	-174.2
TLM	T	C	-53		TLMW.gxt	-165.9	-165.8	-165.7	-165.6	-165.5
UPC	T	C	-53		UPC.gxt	-157.9	-157.8	-157.7	-157.6	-157.5
UPK	T	C	-53		UPK.gxt	-154.6	-154.5	-154.4	-154.3	-154.2

ELDL	T	X	-53		ELDX.gxt					
ERDL	T	X	-53		ERDX.gxt					
MVD	T	X	-53		MVDX.gxt					
AHDL	T	X	-53		AHDX.gxt					
AVDL	T	X	-53		AVDX.gxt					

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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)
1CU	77000	R	5967.5	L	C
3CU	72000	R	6050	L	C
5CU	72000	R	6130	L	C
7CU	72000	R	6220	L	C
9CU	72000	R	6300	L	C
11CU	77000	R	5967.5	L	C
13CU	72000	R	6050	L	C
15CU	72000	R	6130	L	C
17CU	72000	R	6220	L	C
19CU	72000	R	6300	L	C
21CU	36000	R	6360	L	C
23CU	41000	R	6402.5	L	C
2CU	77000	R	5967.5	R	C
4CU	72000	R	6050	R	C
6CU	72000	R	6130	R	C
8CU	72000	R	6220	R	C
10CU	72000	R	6300	R	C
12CU	77000	R	6382.5	R	C
14CU	77000	R	5967.5	R	C
16CU	72000	R	6050	R	C
18CU	72000	R	6130	R	C
20CU	72000	R	6220	R	C
22CU	72000	R	6300	R	C
24CU	77000	R	6382.5	R	C
9GU	36000	R	6280	L	C
19GU	36000	R	6320	L	C
12GU	36000	R	6360	R	C
24GU	41000	R	6402.5	R	C
1CD	77000	T	3742.5	R	C
3CD	72000	T	3825	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
C0001	132	1CU	WLUL	1CD	WRDL
C0003	132	3CU	WLUL	3CD	WRDL
C0005	132	5CU	WLUL	5CD	WRDL
C0007	132	7CU	WLUL	7CD	WRDL
C0009	132	9CU	WLUL	9CD	WRDL
C0002	132.1	2CU	WRUL	2CD	WLDL
C0004	132.1	4CU	WRUL	4CD	WLDL
C0006	132.1	6CU	WRUL	6CD	WLDL
C0008	132.1	8CU	WRUL	8CD	WLDL
C0010	132.1	10CU	WRUL	10CD	WLDL
C0012	132.1	12CU	WRUL	12CD	WLDL
C0011	132.1	11CU	ELUL	11CD	ERDL
C0013	132.1	13CU	ELUL	13CD	ERDL
C0015	132.1	15CU	ELUL	15CD	ERDL
C0017	132.1	17CU	ELUL	17CD	ERDL
C0019	132.1	19CU	ELUL	19CD	ERDL
C0014	132.1	14CU	ERUL	14CD	ELDL
C0016	132.1	16CU	ERUL	16CD	ELDL
C0018	132.1	18CU	ERUL	18CD	ELDL
C0020	132.1	20CU	ERUL	20CD	ELDL
C0022	132.1	22CU	ERUL	22CD	ELDL
C0024	132.1	24CU	ERUL	24CD	ELDL
G0009	137	9GU	GLUL	9GD	GLDL
G0019	137	19GU	GLUL	19GD	GLDL
G0021	137	21CU	GLUL	21CD	GLDL
G0023	137	23CU	GLUL	23CD	GLDL
G0012	136.9	12GU	GLUL	12GD	GLDL
G0024	136.9	24GU	GLUL	24GD	GLDL
WE05	132.1	5CU	WLUL	15CD	ERDL
WE07	132.1	7CU	WLUL	17CD	ERDL

5CD	72000	T	3905	R	C
7CD	72000	T	3995	R	C
9CD	72000	T	4075	R	C
11CD	77000	T	3742.5	R	C
13CD	72000	T	3825	R	C
15CD	72000	T	3905	R	C
17CD	72000	T	3995	R	C
19CD	72000	T	4075	R	C
21CD	36000	T	4135	R	C
23CD	41000	T	4177.5	R	C
2CD	77000	T	3742.5	L	C
4CD	72000	T	3825	L	C
6CD	72000	T	3905	L	C
8CD	72000	T	3995	L	C
10CD	72000	T	4075	L	C
12CD	77000	T	4157.5	L	C
14CD	77000	T	3742.5	L	C
16CD	72000	T	3825	L	C
18CD	72000	T	3905	L	C
20CD	72000	T	3995	L	C
22CD	72000	T	4075	L	C
24CD	77000	T	4157.5	L	C
9GD	36000	T	4055	R	C
19GD	36000	T	4095	R	C
12GD	36000	T	4135	L	C
24GD	41000	T	4177.5	L	C
1KU	77000	R	14042.5	H	C
3KU	72000	R	14125	H	C
5KU	72000	R	14205	H	C
7KU	77000	R	14042.5	H	C
9KU	72000	R	14125	H	C
11KU	72000	R	14205	H	C
13KU	112000	R	14314	H	C
15KU	112000	R	14438	H	C
19KU	77000	R	14292.5	H	C
21KU	72000	R	14375	H	C
23KU	72000	R	14455	H	C
2KU	77000	R	14042.5	V	C
4KU	72000	R	14125	V	C

EW15	132.2	15CU	ELUL	5CD	WRDL
EW17	132.2	17CU	ELUL	7CD	WRDL
GW09	136.9	9GU	GLUL	9CD	WRDL
GE19	137	19GU	GLUL	19CD	ERDL
GW12	136.9	12GU	GRUL	12CD	WLDL
GW24	137	24GU	GRUL	24CD	ELDL
WG9C	132.1	9CU	WLUL	9GD	GRDL
WG12	132.3	12CU	WRUL	12GD	GLDL
EG19	132.3	19CU	ELUL	19GD	GRDL
EG24	132.4	24CU	ERUL	24GD	GLDL
K0001	137	1KU	MHUL	1KD	MVDL
K0003	137	3KU	MHUL	3KD	MVDL
K0005	137	5KU	MHUL	5KD	MVDL
K0019	137	19KU	MHUL	19KD	MVDL
K0021	137	21KU	MHUL	21KD	MVDL
K0023	137	23KU	MHUL	23KD	MVDL
K0002	137	2KU	MVUL	2KD	MHDL
K0004	137	4KU	MVUL	4KD	MHDL
K0006	137	6KU	MVUL	6KD	MHDL
K0008	137	8KU	MVUL	8KD	MHDL
K0010	137	10KU	MVUL	10KD	MHDL
K0007	135.5	7KU	AHUL	7KD	AVDL
K0009	135.5	9KU	AHUL	9KD	AVDL
K0011	135.5	11KU	AHUL	11KD	AVDL
K0013	135.5	13KU	AHUL	13KD	AVDL
K0015	135.5	15KU	AHUL	15KD	AVDL
K0012	135.5	12KU	AVUL	12KD	AHDL
K0014	135.5	14KU	AVUL	14KD	AHDL
K0016	135.5	16KU	AVUL	16KD	AHDL
K0018	135.5	18KU	AVUL	18KD	AHDL
AM012	135.4	12KU	AVUL	19KD	MVDL
AM014	135.4	14KU	AVUL	21KD	MVDL
AM016	135.4	16KU	AVUL	23KD	MVDL
MA019	137.1	19KU	MHUL	12KD	AHDL
MA021	137.1	21KU	MHUL	14KD	AHDL
MA023	137.1	23KU	MHUL	16KD	AHDL
AA015	135.6	15KU	AHUL	18KD	AHDL
AA018	135.6	18KU	AVUL	15KD	AVDL
AA013	135.6	13KU	AHUL	16KD	AHDL



6KU	72000	R	14205	V	C
8KU	112000	R	14314	V	C
10KU	112000	R	14438	V	C
12KU	77000	R	14042.5	V	C
14KU	72000	R	14125	V	C
16KU	72000	R	14205	V	C
18KU	112000	R	14314	V	C
1KD	77000	T	11747.5	V	C
3KD	72000	T	11830	V	C
5KD	72000	T	11910	V	C
7KD	77000	T	11747.5	V	C
9KD	72000	T	11830	V	C
11KD	72000	T	11910	V	C
13KD	112000	T	11514	V	C
15KD	112000	T	11638	V	C
19KD	77000	T	11997.5	V	C
21KD	72000	T	12080	V	C
23KD	72000	T	12160	V	C
2KD	77000	T	11747.5	H	C
4KD	72000	T	11830	H	C
6KD	72000	T	11910	H	C
8KD	112000	T	12019	H	C
10KD	112000	T	12143	H	C
12KD	77000	T	11747.5	H	C
14KD	72000	T	11830	H	C
16KD	72000	T	11910	H	C
18KD	112000	T	12019	H	C
CMD1	1000	R	6173.7	L	T
CMD2	1000	R	6176.3	L	T
TLM1	500	T	3947.5	R	T
TLM2	500	T	3948.0	R	T
TLM3	500	T	3952.0	R	T
TLM4	500	T	3952.5	R	T
UPC	25	T	3950	V	T
UPK	25	T	11700	R	T

AA016	135.5	16KU	AVUL	13KD	AVDL
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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	112MG7W	112000	4	76455	0.5		3.4	13.4
D2	77M0G7W	77000	4	52563	0.5		3.4	14.3
D3	72M0G7W	72000	4	49150	0.5		3.4	10.3
D4	41M0G7W	41000	4	27988	0.5		3.4	9.5
D5	34M0G7W	34000	4	23210	0.5		3.4	12.1
D6	10M3G7W	10300	4	6000	0.5		3.9	13.4
D7	100KG7W	100	4	64	0.5		3	12.7
D8	1M45G7W	1450	2	512	0.5		3.4	12.6
D9	400KG7W	400	2	128	0.5		3.4	12.6

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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	30M0F3F	30000	TV/FM	1					NTSC	12.8	2.6		10	16.3
A2	36M0F3F	36000	TV/FM	1					NTSC	12.8	2.6		10	21

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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/m2/Hz)	(o) Assoc. Stn Rec. G/T (dB/K)
C0001	AA016		A2	2	36000	IS23 Schedule	4000	60.2	13.5	23.5	28.9	36.9	-155.2	35.5
C0001	AA016	D2		1	77000	NOTE.txt		60.2	14.7	24.7	35.1	43.1	-161.1	23.6
C0001	AA016	D6		5	10300	NOTE.txt		49.4	11.3	21.3	24.6	32.6	-161.8	26.2
C0001	AA016	D7		551	100	NOTE.txt		49.4	-9.1	0.9	4.2	12.2	-162.7	26.2
C0001	AA016		A2	2	36000	NOTE.txt	4000	60.2	13.7	23.7	34.8	40.8	-151.3	29.4
C0001	AA016	D3		1	72000	NOTE.txt		58.4	14.5	24.5	39	45	-158.9	21
C0001	AA016	D6		4	10300	NOTE.txt		49.4	16.6	26.6	28.8	34.8	-159.6	20.9
C0001	AA016	D7		513	100	NOTE.txt		49.4	-3.8	6.2	8.4	14.4	-160.5	20.9
C0001	AA016		A1	1	30000	NOTE.txt	4000	60.5	13.4	23.4	33.1	37.1	-155	29.8
C0001	AA016	D5		1	34000	NOTE.txt		53.1	12.8	22.8	33.1	37.1	-163.5	24
C0001	AA016	D6		2	10300	NOTE.txt		49.7	13.5	23.5	26.1	30.1	-164.3	24
C0001	AA016	D7		246	100	NOTE.txt		49.7	-6.9	3.1	5.7	9.7	-165.2	24
C0001	AA016		A2	2	36000	NOTE.txt	4000	58.4	16.2	24.2	32.8	38.8	-153.3	31
C0001	AA016	D2		1	77000	NOTE.txt		58.4	16.4	24.4	39	45	-159.2	21
C0001	AA016	D6		7	10300	NOTE.txt		49.4	14.2	22.2	26.5	32.5	-161.9	23.6
C0001	AA016	D7		514	100	NOTE.txt		49.4	-3.9	4.1	8.4	14.4	-160.5	20.9
C0001	AA016		A2	2	36000	NOTE.txt	4000	60.2	15.4	23.4	28.9	36.9	-155.2	34.5
C0001	AA016	D3		1	72000	NOTE.txt		56.4	16.4	24.4	35.1	43.1	-160.8	23.6
C0001	AA016	D6		5	10300	NOTE.txt		49.4	11.2	19.2	24.6	32.6	-161.8	26.2
C0001	AA016	D7		548	100	NOTE.txt		49.4	-9.2	-1.2	4.2	12.2	-162.7	26.2
C0001	AA016		A1	1	30000	NOTE.txt	4000	60.5	16.3	24.3	33.1	37.1	-155	28.8
C0001	AA016	D5		1	34000	NOTE.txt		49.7	16.1	24.1	33.1	37.1	-163.5	24
C0001	AA016	D6		2	10300	NOTE.txt		49.7	13.4	21.4	26.1	30.1	-164.3	24
C0001	AA016	D7		245	100	NOTE.txt		49.7	-7	1	5.7	9.7	-165.2	24
C0001	AA016		A2	1	36000	NOTE.txt	4000	58.7	19.3	23.3	33.1	37.1	-155	29.8
C0001	AA016	D4		1	41000	NOTE.txt		49.7	19.3	23.3	33.1	37.1	-164.4	24
C0001	AA016	D6		2	10300	NOTE.txt		49.7	21.9	25.9	25.3	29.3	-165.1	24
C0001	AA016	D7		292	100	NOTE.txt		49.7	1.4	5.4	4.9	8.9	-166	24
C0001	AA016		A1	1	30000	NOTE.txt	4000	56.7	20.3	24.3	35.1	43.1	-149	27

C0001	AA016	D5		1	34000	NOTE.txt		49.7	18.3	22.3	35.1	43.1	-157.5	21.4
C0001	AA016	D6		2	10300	NOTE.txt		49.7	21.7	25.7	28.1	36.1	-158.3	21.3
C0001	AA016	D7		238	100	NOTE.txt		49.7	1.3	5.3	7.8	15.8	-159.1	21.4
C0001	AA016		A1	1	30000	NOTE.txt	4000	55.7	20.3	24.3	39	45	-147.1	24
C0001	AA016	D5		1	34000	NOTE.txt		49.7	20.3	24.3	39	45	-155.6	19.6
C0001	AA016	D6		2	10300	NOTE.txt		49.7	9.5	13.5	31.8	37.8	-156.6	21.4
C0001	AA016	D7		254	100	NOTE.txt		49.7	-11	-7	11.4	17.4	-157.5	21.4
C0001	AA016		A2	2	36000	NOTE.txt	4000	56.9	17.6	23.6	38.8	44.8	-147.3	36.6
C0001	AA016	D1		1	112000	NOTE.txt		56.9	17.9	23.9	47	53	-152.8	25
C0001	AA016	D6		8	10300	NOTE.txt		56.9	3.7	9.7	32.9	38.9	-155.5	28.6
C0001	AA016	D7		847	100	NOTE.txt		56.9	-16.6	-10.6	12.6	18.6	-156.3	28.6
C0001	AA016	D8		53	1450	NOTE.txt		56.9	-4.6	1.4	24.6	30.6	-156.4	28.6
C0001	AA016	D9		280	400	NOTE.txt		52.7	-9.2	-3.2	15.8	21.8	-159.2	33.1
C0001	AA016		A2	2	36000	NOTE.txt	4000	58.2	18.4	24.4	41.4	47.4	-144.7	34.5
C0001	AA016	D2		1	77000	NOTE.txt		57	17	23	46.1	52.1	-152.1	24.9
C0001	AA016	D6		5	10300	NOTE.txt		57	7.2	13.2	35.1	41.1	-153.3	24.9
C0001	AA016	D7		566	100	NOTE.txt		57	-12.9	-6.9	15	21	-153.9	24.9
C0001	AA016	D8		35	1450	NOTE.txt		57	-0.9	5.1	27	33	-154	24.9
C0001	AA016	D9		192	400	NOTE.txt		49.1	-4.6	1.4	15.4	21.4	-159.6	33
C0001	AA016		A2	3	36000	NOTE.txt	4000	56.9	17.3	23.3	39.3	45.3	-146.8	38
C0001	AA016	D1		1	112000	NOTE.txt		56.9	17.3	23.3	47.6	53.6	-152.2	22.3
C0001	AA016	D6		7	10300	NOTE.txt		56.9	6.2	12.2	33.6	39.6	-154.8	25
C0001	AA016	D7		829	100	NOTE.txt		56.9	-14.1	-8.1	13.3	19.3	-155.6	25
C0001	AA016	D8		52	1450	NOTE.txt		56.9	-2.1	3.9	25.3	31.3	-155.7	25
C0001	AA016			280	400	NOTE.txt		49	-6.3	-0.3	13.2	19.2	-161.8	33.1
C0001	AA016		A2	2	36000	NOTE.txt	4000	56.8	17.2	23.2	40.8	46.8	-145.3	33.2
C0001	AA016	D2		1	77000	NOTE.txt		56.8	17.7	23.7	46.1	52.1	-152.1	25.1
C0001	AA016	D6		5	10300	NOTE.txt		56.8	4.9	10.9	34.6	40.6	-153.8	25.1
C0001	AA016	D7		573	100	NOTE.txt		56.8	-15.4	-9.4	14.3	20.3	-154.6	25.1
C0001	AA016	D8		36	1450	NOTE.txt		56.8	-3.4	2.6	26.3	32.3	-154.7	25.1
C0001	AA016	D9		192	400	NOTE.txt		48.9	-7.3	-1.3	14.5	20.5	-160.5	33.2

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

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 INTERNTIONAL 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):	

**FEDERAL COMMUNICATIONS COMMISSION  
SATELLITE SPACE STATION AUTHORIZATIONS  
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Characteristics and  
Certifications**

**S15. SPACECRAFT PHYSICAL CHARACTERISTICS:**

S15a. Mass of spacecraft without fuel (kg): 1503	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 1237		
S15c. Mass of spacecraft and fuel at launch (kg): 2740	S15f. Length (m): 23.6	S15i. Payload: 0.792
S15d. Mass of fuel, in orbit, at beginning of life (kg): 1155	S15g. Width (m): 8.9	S15j. Bus: 0.848
S15e. Deployed Area of Solar Array (square meters): 29.7	S15h. Height (m): 5.6	S15k. Total: 0.672

**S16. SPACECRAFT ELECTRICAL CHARACTERISTICS:**

**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.**