

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name: ANIK F1R		e. Estimated Date of Placement into Service: 9/1/2005		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date: 2/1/2003		f. Estimated Lifetime of Satellite(s): 15 Years		j. Number of transponders offered on a common carrier basis: 0	
c. Construction Completion Date: 8/1/2005		g. Total Number of Transponders: 56		k. Total Common Carrier Transponder Bandwidth: 0 MHz	
d1. Est Launch Date Begin: 8/1/2005	d2. Est Launch Date End: 9/1/2005	h. Total Transponder Bandwidth (no. transponders x Bandwidth) 1728 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)		
3700	M	4200	M	T	Fixed Satellite Service
5925	M	6425	M	R	Fixed Satellite Service
11.7	G	12.2	G	T	Fixed Satellite Service
14	G	14.5	G	R	Fixed Satellite Service
13.99	G	14	G	R	Fixed Satellite Service

S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:

a. Nominal Orbital Longitude (Degrees E/W): 107.3 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: This position was granted by the Canadian administration. Under this application, Telesat is only seeking authority to provide services to the US territories. ANIK F1R will be a replacement satellite complementing a part of ANIK F1 payload and will be co-located with ANIK F1 at 107.3 WL.
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): 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.
1	S	Service Area 1.gxt	CAN, USA, ALS, HWA

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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															
CNT	T	28.7	18.7	0.1	0	30	N	0	1	1.6	40	43						
CNT	T	28.7	18.7	0.1	0	30	N	90	1	1.6	40	43						
CNR	R	28.8	18.8	0.1	0	30	N	0	1				600	1	-99.5	20	1	
CNR	R	28.8	18.8	0.1	0	30	N	90	1				600	1	-99.5	20	1	
KNT	T	34.7	19.7	0.1	0	30	N	0	1	1.5	120	52.5						
KNT	T	34.7	19.7	0.1	0	30	N	90	1	1.5	120	52.5						
KNR	R	36.1	21.1	0.1	0	30	N	0	1				521	9	-106	20	1	
KNR	R	36.1	21.1	0.1	0	30	N	90	1				521	9	-106	20	1	

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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
CNT	T	C	-107.3		F1RCNTH.gxt	-152.2	-152.15	-152.1	-151.9	-151.74
CNT	T	C	-107.3		F1RCNTV.gxt	-152.2	-152.15	-152.1	-151.9	-151.74
CNR	R	C	-107.3		F1RCNRH.gxt					
CNR	R	C	-107.3		F1RCNRV.gxt					
KNT	T	C	-107.3		F1RKNTH.gxt					
KNT	T	C	-107.3		F1RKNTV.gxt					
KNR	R	C	-107.3		F1RKNRH.gxt					
KNR	R	C	-107.3		F1RKNRV.gxt					
CNT	T	X	-107.3		F1RCNTH-XP.gxt					
CNT	T	X	-107.3		F1RCNTV-XP.gxt					
CNR	R	X	-107.3		F1RCNRH-XP.gxt					
CNR	R	X	-107.3		F1RCNRV-XP.gxt					
KNT	T	X	-107.3		F1RKNTH-XP.gxt					
KNT	T	X	-107.3		F1RKNTV-XP.gxt					
KNR	R	X	-107.3		F1RKNRH-XP.gxt					
KNR	R	X	-107.3		F1RKNRV-XP.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)
T7	27000	T	11897.75	V	C
T8	27000	T	11928.25	V	C
T9	27000	T	11958.75	V	C
T10	27000	T	11989.25	V	C
T11	27000	T	12019.75	V	C
T12	27000	T	12050.25	V	C
T13	27000	T	12080.75	V	C
T14	27000	T	12111.25	V	C
T15	27000	T	12141.75	V	C
T16	27000	T	12172.25	V	C
T17	27000	T	11727.75	H	C
T18	27000	T	11758.25	H	C
T19	27000	T	11788.75	H	C
T20	27000	T	11819.25	H	C
T21	27000	T	11849.75	H	C
T22	27000	T	11880.25	H	C
T23	27000	T	11910.75	H	C
T24	27000	T	11941.25	H	C
T25	27000	T	11971.75	H	C
T26	27000	T	12002.25	H	C
T27	27000	T	12032.75	H	C
T28	27000	T	12063.25	H	C
T29	27000	T	12093.75	H	C
T30	27000	T	12124.25	H	C
T31	27000	T	12154.75	H	C
T32	27000	T	12185.25	H	C
T1R	27000	R	14014.75	H	C
T2R	27000	R	14045.25	H	C
T3R	27000	R	14075.75	H	C
T4R	27000	R	14106.25	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
1A	123	1AR	CNRV	1A	CNTH
2A	123	2AR	CNRV	2A	CNTH
3A	123	3AR	CNRV	3A	CNTH
4A	123	4AR	CNRV	4A	CNTH
5A	123	5AR	CNRV	5A	CNTH
6A	123	6AR	CNRV	6A	CNTH
7A	123	7AR	CNRV	7A	CNTH
8A	123	8AR	CNRV	8A	CNTH
9A	123	9AR	CNRV	9A	CNTH
10A	123	10AR	CNRV	10A	CNTH
11A	123	11AR	CNRV	11A	CNTH
12A	123	12AR	CNRV	12A	CNTH
1B	123	1BR	CNRH	1B	CNTV
2B	123	2BR	CNRH	2B	CNTV
3B	123	3BR	CNRH	3B	CNTV
4B	123	4BR	CNRH	4B	CNTV
5B	123	5BR	CNRH	5B	CNTV
6B	123	6BR	CNRH	6B	CNTV
7B	123	7BR	CNRH	7B	CNTV
8B	123	8BR	CNRH	8B	CNTV
9B	123	9BR	CNRH	9B	CNTV
10B	123	10BR	CNRH	10B	CNTV
11B	123	11BR	CNRH	11B	CNTV
12B	123	12BR	CNRH	12B	CNTV
T1	133.5	T1R	KNRH	T1	KNTV
T2	133.5	T2R	KNRH	T2	KNTV
T3	133.5	T3R	KNRH	T3	KNTV
T4	133.5	T4R	KNRH	T4	KNTV
T5	133.5	T5R	KNRH	T5	KNTV
T6	133.5	T6R	KNRH	T6	KNTV

T5R	27000	R	14136.75	H	C
T6R	27000	R	14167.25	H	C
T7R	27000	R	14197.75	H	C
T8R	27000	R	14228.25	H	C
T9R	27000	R	14258.75	H	C
T10R	27000	R	14289.25	H	C
T11R	27000	R	14319.75	H	C
T12R	27000	R	14350.25	H	C
T13R	27000	R	14380.75	H	C
T14R	27000	R	14411.25	H	C
T15R	27000	R	14441.75	H	C
T16R	27000	R	14472.25	H	C
T17R	27000	R	14027.75	V	C
T18R	27000	R	14058.25	V	C
T19R	27000	R	14088.75	V	C
T20R	27000	R	14119.25	V	C
T21R	27000	R	14149.75	V	C
T22R	27000	R	14180.25	V	C
T23R	27000	R	14210.75	V	C
T24R	27000	R	14241.25	V	C
T25R	27000	R	14271.75	V	C
T26R	27000	R	14302.25	V	C
T27R	27000	R	14332.75	V	C
T28R	27000	R	14363.25	V	C
T29R	27000	R	14393.75	V	C
T30R	27000	R	14424.25	V	C
T31R	27000	R	14454.75	V	C
T32R	27000	R	14485.25	V	C
C1	1500	R	13996.5	V	T
C2	1500	R	13996.5	L	T
C3	1500	R	13996.5	R	T
C4	1500	R	13998.5	V	T
C5	1500	R	13998.5	L	T
C6	1500	R	13998.5	R	T
C7	500	T	12198.9	V	T
C8	500	T	12198.9	L	T
C9	500	T	12198.9	R	T
C10	500	T	12199.9	V	T
C11	500	T	12199.9	L	T

T7	133.5	T7R	KNRH	T7	KNTV
T8	133.5	T8R	KNRH	T8	KNTV
T9	133.5	T9R	KNRH	T9	KNTV
T10	133.5	T10R	KNRH	T10	KNTV
T11	133.5	T11R	KNRH	T11	KNTV
T12	133.5	T12R	KNRH	T12	KNTV
T13	133.5	T13R	KNRH	T13	KNTV
T14	133.5	T14R	KNRH	T14	KNTV
T15	133.5	T15R	KNRH	T15	KNTV
T16	133.5	T16R	KNRH	T16	KNTV
T17	133.5	T17R	KNRV	T17	KNTH
T18	133.5	T18R	KNRV	T18	KNTH
T19	133.5	T19R	KNRV	T19	KNTH
T20	133.5	T20R	KNRV	T20	KNTH
T21	133.5	T21R	KNRV	T21	KNTH
T22	133.5	T22R	KNRV	T22	KNTH
T23	133.5	T23R	KNRV	T23	KNTH
T24	133.5	T24R	KNRV	T24	KNTH
T25	133.5	T25R	KNRV	T25	KNTH
T26	133.5	T26R	KNRV	T26	KNTH
T27	133.5	T27R	KNRV	T27	KNTH
T28	133.5	T28R	KNRV	T28	KNTH
T29	133.5	T29R	KNRV	T29	KNTH
T30	133.5	T30R	KNRV	T30	KNTH
T31	133.5	T31R	KNRV	T31	KNTH
T32	133.5	T32R	KNRV	T32	KNTH
C1		C1	KNRV		
C2		C2	KNRV		
C3		C3	KNRV		
C4		C4	KNRV		
C5		C5	KNRV		
C6		C6	KNRV		
C7				C7	KNTV
C8				C8	KNTV
C9				C9	KNTV
C10				C10	KNTV
C11				C11	KNTV
C12				C12	KNTV

C12	500	T	12199.9	R	T
1A	36000	T	3720	H	C
2A	36000	T	3760	H	C
3A	36000	T	3800	H	C
4A	36000	T	3840	H	C
5A	36000	T	3880	H	C
6A	36000	T	3920	H	C
7A	36000	T	3960	H	C
8A	36000	T	4000	H	C
9A	36000	T	4040	H	C
10A	36000	T	4080	H	C
11A	36000	T	4120	H	C
12A	36000	T	4160	H	C
1B	36000	T	3740	V	C
2B	36000	T	3780	V	C
3B	36000	T	3820	V	C
4B	36000	T	3860	V	C
5B	36000	T	3900	V	C
6B	36000	T	3940	V	C
7B	36000	T	3980	V	C
8B	36000	T	4020	V	C
9B	36000	T	4060	V	C
10B	36000	T	4100	V	C
11B	36000	T	4140	V	C
12B	36000	T	4180	V	C
1AR	36000	R	5945	V	C
2AR	36000	R	5985	V	C
3AR	36000	R	6025	V	C
4AR	36000	R	6065	V	C
5AR	36000	R	6105	V	C
6AR	36000	R	6145	V	C
7AR	36000	R	6185	V	C
8AR	36000	R	6225	V	C
9AR	36000	R	6265	V	C
10AR	36000	R	6305	V	C
11AR	36000	R	6345	V	C
12AR	36000	R	6385	V	C
1BR	36000	R	5965	H	C
2BR	36000	R	6005	H	C

3BR	36000	R	6045	H	C
4BR	36000	R	6085	H	C
5BR	36000	R	6125	H	C
6BR	36000	R	6165	H	C
7BR	36000	R	6205	H	C
8BR	36000	R	6245	H	C
9BR	36000	R	6285	H	C
10BR	36000	R	6325	H	C
11BR	36000	R	6365	H	C
12BR	36000	R	6405	H	C
T1	27000	T	11714.75	V	C
T2	27000	T	11745.25	V	C
T3	27000	T	11775.75	V	C
T4	27000	T	11806.25	V	C
T5	27000	T	11836.75	V	C
T6	27000	T	11867.25	V	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)
DC1	160KG7D	160	2	64	0.5		2.8	20
DC2	33M3G7D	33300	4	44736	0.875		9.8	25
DC3	4M33G7D	4330	4	6312	0.875		6.4	24
DC4	24K0G7D	24	4	19.2	0.5		2.8	20
DC5	26K7G7D	26.7	4	32	0.75		8.3	25
DC6	80K0G7D	80	2	56	0.875		7	24
DC7	640KG7D	640	2	256	0.5		2.8	20
DC8	6M10G7W	6100	4	6740	0.75		6.4	24
DC9	106KG7D	106	4	128	0.75		2.8	20
DC10	30M0G7W	30000	4	34600	0.75		6.1	23
DC11	8M00G7D	8000	4	10750	0.875		9.8	25
DK1	26K7G1E	26.7	4	32	0.75		5.3	22
DK2	32K0G7D	32	2	19.2	0.75		5.3	22
DK3	80K0G7D	80	2	56	0.875		7	24
DK4	160KG7D	160	2	64	0.5		2.8	20
DK5	320KG7D	320	2	192	0.75		2.8	20
DK6	640KG7D	640	2	256	0.5		2.8	20
DK7	1M28G7D	1280	2	512	0.5		2.8	20
DK8	23M9G7D	23900	4	32064	0.875		6.7	25
DK9	1M85G7D	1850	4	2048	0.75		6.1	23
DK10	5M48G7D	5480	4	6312	0.75		6.1	23
DK11	6M10G7W	6100	4	6740	0.75		6.4	24
TLM	300KG1D	300		4.1			9.8	25

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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)
1A	12A	DC1		70	500	LINK BUDGET.		47.4	-1.4	2.6	15.8	19.8	-160.4	24.5
1A	12A	DC2		1		LINK BUDGET.		54.4	14.2	18.2	39	43	-160.1	31.5
1A	12A	DC3		5	7200	LINK BUDGET.		47.4	10.1	14.2	27	31	-163.3	24.5
1A	12A	DC4		630	50	LINK BUDGET.		51.3	-14.6	-10.6	6	10	-161.7	24.5
1A	12A	DC5		350	100	LINK BUDGET.		51.3	-12.1	-8.1	8.5	12.5	-159.7	24.5
1A	12A	DC6		140	250	LINK BUDGET.		51.3	-8.1	-4.1	12.5	16.5	-160.4	24.5
1A	12A	DC7		18	2000	LINK BUDGET.		51.3	0.9	4.9	21.5	25.5	-160.5	24.5
1A	12A	DC8		3	12000	LINK BUDGET.		51.3	8.9	12.9	29.5	33.5	-162.3	24.5
1A	12A	DC9		112	300	LINK BUDGET.		52.4	-8.1	-4.1	13.5	17.5	-160.7	24.5
1A	12A	DC10		1		LINK BUDGET.		52.4	15.9	19.9	39	43	-159.7	24.5
1A	12A	DC11		3	12000	LINK BUDGET.		52.4	8.7	12.7	30	34	-162.9	28.4
1A	12A		FC1	1		LINK BUDGET.	2000	52.4	22.4	26.4	36	40	-152.2	29.5
1B	12B	DC1		70	500	LINK BUDGET.		47.4	-1.4	2.6	15.8	19.8	-160.4	24.5
1B	12B	DC2		1		LINK BUDGET.		54.4	14.2	18.2	39	43	-160.1	31.5
1B	12B	DC3		5	7200	LINK BUDGET.		47.4	10.1	14.1	27	31	-163.3	24.5
1B	12B	DC4		630	50	LINK BUDGET.		51.3	-14.6	-10.6	6	10	-161.7	24.5
1B	12B	DC5		350	100	LINK BUDGET.		51.3	-12.1	-8.1	8.5	12.5	-159.7	24.5
1B	12B	DC6		140	250	LINK BUDGET.		51.3	-8.1	-4.1	12.5	16.5	-160.4	24.5
1B	12B	DC7		18	2000	LINK BUDGET.		51.3	0.9	4.9	21.5	25.5	-160.5	24.5
1B	12B	DC8		3	12000	LINK BUDGET.		51.3	8.9	12.9	29.5	33.5	-162.3	24.5
1B	12B	DC9		112	300	LINK BUDGET.		52.4	-8.1	-4.1	13.5	17.5	-160.7	24.5
1B	12B	DC10		1		LINK BUDGET.		52.4	15.9	19.9	39	43	-159.7	24.5
1B	12B	DC11		3	12000	LINK BUDGET.		52.4	8.7	12.7	30	34	-162.9	28.4
1B	12B		FC1	1		LINK BUDGET.	2000	52.4	22.4	26.4	36	40	-152.2	29.5
T1	T32	DK1		1000	27	LINK BUDGET.		43.2	-9.2	-6.2	14	17		31.1
T1	T32	DK2		840	32	LINK BUDGET.		43.2	-8.2	-5.2	15	18		31.1
T1	T32	DK3		340	80	LINK BUDGET.		43.2	-4.2	-1.2	18.5	21.5		25.6
T1	T32	DK4		170	160	LINK BUDGET.		43.2	-1.2	1.8	21.9	24.9		25.6
T1	T32	DK5		85	320	LINK BUDGET.		43.2	1.8	4.8	25	28		25.6

T1	T32	DK6		42	640	LINK BUDGET.		46.7	4.4	7.4	28	31		25.6
T1	T32	DK7		21	1285	LINK BUDGET.		49.2	3	6	29.6	32.6		25.6
T1	T32	DK8		1		LINK BUDGET.		54.7	16.5	19.5	43.5	46.5		33
T1	T32	DK9		14	1900	LINK BUDGET.		53	1.1	4.1	31.2	34.2		29.4
T1	T32	DK10		4	6750	LINK BUDGET.		53	5.8	8.8	35.9	38.9		29.4
T1	T32	DK11		4	6750	LINK BUDGET.		53	6.3	9.3	36.3	39.3		29.4
T1	T32		FK1	1		LINK BUDGET.	400	53	18	21	49.5	52.5		31.1
C1	C6		TCM	1				60.7	18.3	28.3				37.1
C7	C12	TLM		1							7.5	15		37.1

**FEDERAL COMMUNICATIONS COMMISSION
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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): No

Remote Control (TT C) Location(s):

S14a: Street Address: Allan Park			
S14b. City: Allan Park	S14c. County: West Grey	S14d. State/Country ON	S14e. Zip Code: N4N 3B8
S14f. Telephone Number: 519 371-7490		S14g. Call Sign of Control Station (if appropriate):	

Remote Control (TT C) Location(s):

S14a: Street Address: Harrietsfield			
S14b. City: Harrietsfield	S14c. County:	S14d. State/Country NS	S14e. Zip Code: B3V 1B6
S14f. Telephone Number: 902 477-1825		S14g. Call Sign of Control Station (if appropriate):	

**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): 2135	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 2465		
S15c. Mass of spacecraft and fuel at launch (kg): 4600	S15f. Length (m): 2.4	S15i. Payload: 0.88
S15d. Mass of fuel, in orbit, at beginning of life (kg): 930	S15g. Width (m): 2.9	S15j. Bus: 0.86
S15e. Deployed Area of Solar Array (square meters): 69.5	S15h. Height (m): 3.3	S15k. Total: 0.71

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): 8360	(f): 8360	(k): 8360	(p): 8360
Bus (Watts):	(b): 1390	(g): 580	(l): 1390	(q): 580
Total (Watts):	(c): 9750	(h): 8940	(m): 9750	(r): 8940
Solar Array (Watts):	(d): 12560	(i): 11180	(n): 10980	(s): 9940
Depth of Battery Discharge (%):	(e) 71 %	(j) 0 %	(o) 71 %	(t) 0 %

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.