

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name: AMC-2		e. Estimated Date of Placement into Service: 3/5/1997		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date: 1/1/1994		f. Estimated Lifetime of Satellite(s): 17.5 Years		j. Number of transponders offered on a common carrier basis: 0	
c. Construction Completion Date: 8/1/1996		g. Total Number of Transponders: 48		k. Total Common Carrier Transponder Bandwidth: 0 MHz	
d1. Est Launch Date Begin: 1/30/1997	d2. Est Launch Date End: 1/30/1997	h. Total Transponder Bandwidth (no. transponders x Bandwidth) 1920 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)		
14.0	G	14.5	G	R	Fixed Satellite Service
11.7	G	12.2	G	T	Fixed Satellite Service
5.925	G	6.425	G	R	Fixed Satellite Service
3.7	G	4.2	G	T	Fixed Satellite Service
11.7	G	12.2	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): 80.85 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: Redeploy AMC-2 to the nominal 80.85 WL orbit location.
Longitudinal Tolerance or E/W Station-Keeping:		f. Inclination Excursion or N/S Station-Keeping Tolerance: Degrees	Range of orbital are in which adequate service can be provided (Optional): Degrees E/W	
d. Toward West: 0.15 Degrees	e. Toward East: 0.15 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.
KUL	S		Southern South America
KDL	S		Southern South America
CUL	S		Southern South America
CDL	S		Southern South America
GBL	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)	
		(c) Peak (dBi)	(d) Edge (dBi)							(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
KRV	R	30.9	24.9	0.15	0	30	Y	90	KUL				550	3.5	-96.5	18	1
KRH	R	33.6	27.6	0.15	0	30	Y	0	KUL				589	5.9	-99	18	1
KTV	T	33	27	0.15	0	30	Y	90	KDL	1.5	41.7	49.2					
KTH	T	33.3	27.3	0.15	0	30	Y	0	KDL	1.4	44	49.7					
CRV	R	31.3	25.3	0.15	0	30	Y	90	CUL				531	4.1	-101.1	18	1
CRH	R	32.9	26.9	0.15	0	30	Y	0	CUL				509	5.8	-103	18	1
CTV	T	31	25	0.15	0	30	Y	90	CDL	1.9	12.8	42.1					
CTH	T	30.3	24.3	0.15	0	30	Y	0	CDL	2.5	11.2	40.8					
GBL	R	10.3	9.3	0.15	0	30	Y	90	GBL				600	-17.5	-90		
GBLT	T	11.3	10.3	0.15	0	30	Y	90	GBL	3	1.1	11.8					

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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
KRV	R	C	-80.85		AMC-2 KRV.gxt					
KRH	R	C	-80.85		AMC-2 KRH.gxt					
CRV	R	C	-80.85		AMC-2 CRV.gxt					
CRH	R	C	-80.85		AMC-2 CRH.gxt					
KTV	T	C	-80.85		AMC-2 KTV.gxt	-159.5	-158.6	-157.3	-156.6	-155.5
KTH	T	C	-80.85		AMC-2 KTH.gxt	-161.5	-160.6	-159.3	-157.6	-155.1
CTV	T	C	-80.85		AMC-2 CTV.gxt	-171	-170.7	-170.1	-168.9	-167.8
CTH	T	C	-80.85		AMC-2 CTH.gxt	-169.1	-168.8	-168.2	-167.4	-166.5

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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
KR002	36000	R	14040	H	C
KR003	36000	R	14060	V	C
KR004	36000	R	14080	H	C
KR005	36000	R	14100	V	C
KR006	36000	R	14120	H	C
KR007	36000	R	14140	V	C
KR008	36000	R	14160	H	C
KR009	36000	R	14180	V	C
KR010	36000	R	14200	H	C
KR011	36000	R	14220	V	C
KR012	36000	R	14240	H	C
KR013	36000	R	14260	V	C
KR014	36000	R	14280	H	C
KR015	36000	R	14300	V	C
KR016	36000	R	14320	H	C
KR017	36000	R	14340	V	C
KR018	36000	R	14360	H	C
KR019	36000	R	14380	V	C
KR020	36000	R	14400	H	C
KR021	36000	R	14420	V	C
KR022	36000	R	14440	H	C
KR023	36000	R	14460	V	C
KR024	36000	R	14480	H	C
KT001	36000	T	11720	H	C
KT002	36000	T	11740	V	C
KT003	36000	T	11760	H	C
KT004	36000	T	11780	V	C
KT005	36000	T	11800	H	C
KT006	36000	T	11820	V	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	127.8	KR001	KRV	KT001	KTH
K0002	127.5	KR002	KRH	KT002	KTV
K0003	127.8	KR003	KRV	KT003	KTH
K0004	127.5	KR004	KRH	KT004	KTV
K0005	127.9	KR005	KRV	KT005	KTH
K0006	127.5	KR006	KRH	KT006	KTV
K0007	127.9	KR007	KRV	KT007	KTH
K0008	127.6	KR008	KRH	KT008	KTV
K0009	127.9	KR009	KRV	KT009	KTH
K0010	127.6	KR010	KRH	KT010	KTV
K0011	127.9	KR011	KRV	KT011	KTH
K0012	127.6	KR012	KRH	KT012	KTV
K0013	128	KR013	KRV	KT013	KTH
K0014	127.6	KR014	KRH	KT014	KTV
K0015	128	KR015	KRV	KT015	KTH
K0016	127.7	KR016	KRH	KT016	KTV
K0017	128	KR017	KRV	KT017	KTH
K0018	127.7	KR018	KRH	KT018	KTV
K0019	128	KR019	KRV	KT019	KTH
K0020	127.7	KR020	KRH	KT020	KTV
K0021	128.1	KR021	KRV	KT021	KTH
K0022	127.7	KR022	KRH	KT022	KTV
K0023	128.1	KR023	KRV	KT023	KTH
K0024	127.8	KR024	KRH	KT024	KTV
C0001	120	CR001	CRH	CT001	CTV
C0002	119.8	CR002	CRV	CT002	CTH
C0003	120.1	CR003	CRH	CT003	CTV
C0004	119.8	CR004	CRV	CT004	CTH
C0005	120.1	CR005	CRH	CT005	CTV
C0006	119.9	CR006	CRV	CT006	CTH

KT007	36000	T	11840	H	C
KT008	36000	T	11860	V	C
KT009	36000	T	11880	H	C
KT010	36000	T	11900	V	C
KT011	36000	T	11920	H	C
KT012	36000	T	11940	V	C
KT013	36000	T	11960	H	C
KT014	36000	T	11980	V	C
KT015	36000	T	12000	H	C
KT016	36000	T	12020	V	C
KT017	36000	T	12040	H	C
KT018	36000	T	12060	V	C
KT019	36000	T	12080	H	C
KT020	36000	T	12100	V	C
KT021	36000	T	12120	H	C
KT022	36000	T	12140	V	C
KT023	36000	T	12160	H	C
KT024	36000	T	12180	V	C
CR001	36000	R	5945	H	C
CR002	36000	R	5965	V	C
CR003	36000	R	5985	H	C
CR004	36000	R	6005	V	C
CR005	36000	R	6025	H	C
CR006	36000	R	6045	V	C
CR007	36000	R	6065	H	C
CR008	36000	R	6085	V	C
CR009	36000	R	6105	H	C
CR010	36000	R	6125	V	C
CR011	36000	R	6145	H	C
CR012	36000	R	6165	V	C
CR013	36000	R	6185	H	C
CR014	36000	R	6205	V	C
CR015	36000	R	6225	H	C
CR016	36000	R	6245	V	C
CR017	36000	R	6265	H	C
CR018	36000	R	6285	V	C
CR019	36000	R	6305	H	C
CR020	36000	R	6325	V	C
CR021	36000	R	6345	H	C

C0007	120.2	CR007	CRH	CT007	CTV
C0008	119.9	CR008	CRV	CT008	CTH
C0009	120.2	CR009	CRH	CT009	CTV
C0010	120	CR010	CRV	CT010	CTH
C0011	120.3	CR011	CRH	CT011	CTV
C0012	120	CR012	CRV	CT012	CTH
C0013	120.3	CR013	CRH	CT013	CTV
C0014	120.1	CR014	CRV	CT014	CTH
C0015	120.4	CR015	CRH	CT015	CTV
C0016	120.2	CR016	CRV	CT016	CTH
C0017	120.5	CR017	CRH	CT017	CTV
C0018	120.2	CR018	CRV	CT018	CTH
C0019	120.5	CR019	CRH	CT019	CTV
C0020	120.3	CR020	CRV	CT020	CTH
C0021	120.6	CR021	CRH	CT021	CTV
C0022	120.3	CR022	CRV	CT022	CTH
C0023	120.6	CR023	CRH	CT023	CTV
C0024	120.4	CR024	CRV	CT024	CTH
C1		TC	GBLRV		
T1				TM1	GBLTV
T2				TM2	GBLTV
T3				TM3	KTH

CR022	36000	R	6365	V	C
CR023	36000	R	6385	H	C
CR024	36000	R	6405	V	C
CT001	36000	T	3720	V	C
CT002	36000	T	3740	H	C
CT003	36000	T	3760	V	C
CT004	36000	T	3780	H	C
CT005	36000	T	3800	V	C
CT006	36000	T	3820	H	C
CT007	36000	T	3840	V	C
CT008	36000	T	3860	H	C
CT009	36000	T	3880	V	C
CT010	36000	T	3900	H	C
CT011	36000	T	3920	V	C
CT012	36000	T	3940	H	C
CT013	36000	T	3960	V	C
CT014	36000	T	3980	H	C
CT015	36000	T	4000	V	C
CT016	36000	T	4020	H	C
CT017	36000	T	4040	V	C
CT018	36000	T	4060	H	C
CT019	36000	T	4080	V	C
CT020	36000	T	4100	H	C
CT021	36000	T	4120	V	C
CT022	36000	T	4140	H	C
CT023	36000	T	4160	H	C
CT024	36000	T	4180	V	C
TC	800	R	6423.5	H	T
TM1	300	T	3700.5	V	T
TM2	300	T	4199.5	V	T
TM3	300	T	12198.0	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)
KU_1	6M95G7W	6945	4	8000	0.691		6.9	19.1
KU_2	5M04G1W	5035	4	5800	0.691		6.9	19.1
KU_3	100KG1W	55	4	56.2	0.691		6.9	19.1
KU_4	1M40G7W	1390	4	1544	0.75		9.3	21.5
C_1	9M00G7W	9000	4	6144	0.461		4.1	16.3
C_2	1M51G7W	1508	4	1544	0.691		6.9	19.1
C_3	100KG1D	55	4	56.2	0.691		6.9	19.1
C_4	4M05G7W	4050	4	2765	0.461		4.1	16.3
KU_5	36M0G7W	35999	4	41470	0.691		6.9	19.1
C_5	36M0G7W	35999	4	41470	0.691		6.9	19.1

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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)
K0001	K0024	KU_1		4	9000	AMC-2_Link_B		49.1	6.5	12.5	32.5	38.5	-155.2	26.9
K0001	K0024	KU_2		6	6000	Please see AM		49.1	5.1	11.1	31.1	37.1	-155.2	26.9
K0001	K0024	KU_3		486	74	Please see AM		49.1	-15	-9	10.9	16.9	-155.2	26.9
K0001	K0024	KU_4		19	1895	Please see AM		53.1	-4.5	1.5	25.6	31.6	-154.6	30.9
C1	C1		Q_C	1		Please see AM		53	13	19				
T1	T2		R_C	1		Please see AM					5.8	11.8	-169.1	29
T3	T3		S_KU	1		Please see AM					6.4	12.4	-168.4	38.5
K0001	K0024	KU_5		1		Please see AM		57.3	11.5	17.5	42.5	48.5	-152.3	20.9
C0001	C0024	C_1		3	12000	Please see AM		45.9	5.3	11.3	21.4	27.4	-166.9	22.1
C0001	C0024	C_2		18	2000	Please see AM		45.9	0.4	6.4	16.6	22.6	-164	22.1
C0001	C0024	C_3		486	74	Please see AM		45.9	-13.2	-7.2	0.1	6.1	-166	22.1
C0001	C0024	C_4		7	5143	Please see AM		45.9	1.5	7.5	13.7	19.7	-171.1	22.1
C0001	C0024	C_5		1		Please see AM		53.5	16.6	22.6	31	37	-163.8	22.1

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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: Vernon Valley TT&C			
S14b. City: Vernon	S14c. County: Sussex	S14d. State/Country NJ	S14e. Zip Code: 07461
S14f. Telephone Number: 973-823-6000		S14g. Call Sign of Control Station (if appropriate): WB81	

Remote Control (TT C) Location(s):

S14a: Street Address: DENALI 20020, LLC			
S14b. City: Brewster	S14c. County:	S14d. State/Country WA	S14e. Zip Code: 98812
S14f. Telephone Number: 206-910-4614		S14g. Call Sign of Control Station (if appropriate): KA337	

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S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S15a. Mass of spacecraft without fuel (kg): 1310.8	Spacecraft Dimensions (meters)	Probability of Survival to End of Life (0.0 - 1.0)
S15b. Mass of fuel and disposables at launch (kg): 1338.3		
S15c. Mass of spacecraft and fuel at launch (kg): 2649	S15f. Length (m): 26.8	S15i. Payload: 0.78
S15d. Mass of fuel, in orbit, at beginning of life (kg): 320	S15g. Width (m): 1.8	S15j. Bus: 0.88
S15e. Deployed Area of Solar Array (square meters): 75.5	S15h. Height (m): 3.78	S15k. Total: 0.69

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): 3772	(f): 3740	(k): 3772	(p): 3740
Bus (Watts):	(b): 1089	(g): 674	(l): 1089	(q): 674
Total (Watts):	(c): 4861	(h): 4414	(m): 4861	(r): 4414
Solar Array (Watts):	(d): 6513	(i): 6212	(n): 5250	(s): 4836
Depth of Battery Discharge (%):	(e) 70 %	(j) 70 %	(o) 70 %	(t) 70 %

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.