

S1. GENERAL INFORMATION Complete for all satellite applications.

a. Space Station or Satellite Network Name: AMC-3		e. Estimated Date of Placement into Service: 9/30/1997		i. Will the space station(s) operate on a Common Carrier Basis: N	
b. Construction Commencement Date:		f. Estimated Lifetime of Satellite(s): 20 Years		j. Number of transponders offered on a common carrier basis: 0	
c. Construction Completion Date:		g. Total Number of Transponders: 48		k. Total Common Carrier Transponder Bandwidth: 0 MHz	
d1. Est Launch Date Begin: 9/3/1997	d2. Est Launch Date End: 9/3/1997	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)		
14.00	G	14.50	G	R	Fixed Satellite Service
11.70	G	12.20	G	T	Fixed Satellite Service
5.925	G	6.425	G	R	Fixed Satellite Service
3.70	G	4.20	G	T	Fixed Satellite Service
11.70	G	12.20	G	T	Direct to Home in the Fixed Fixed Satellite Service
14.00	G	14.50	G	R	Direct to Home in the Fixed Fixed Satellite Service

S3. ORBITAL INFORMATION FOR GEOSTATIONARY SATELLITES ONLY:

a. Nominal Orbital Longitude (Degrees E/W): 67 W		b. Alternate Orbital Longitude (Degrees E/W):		c. Reason for orbital location selection: Satellite will be colocated with AMC-4 at 67W.		
Longitudinal Tolerance or E/W Station-Keeping:		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			
d. Toward West: 0.05 Degrees	g. Westernmost:		h. Easternmost:			
e. Toward East: 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.
K-DL	E		Southern US, Mexico, parts of Caribbean
K-UL	E		Southern US, Mexico, parts of Caribbean
C-DL	E		CONUS, Mexico, parts of Central America and Caribbean
C-UL	E		CONUS, Mexico, parts of Central America and Caribbean

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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														
CRH	R	33	23	0.15	0	30	Y	0	C-UL				537	5.7	-92.4	21	1
CRV	R	31.91	21.91	0.15	0	30	Y	90	C-UL				513	4.81	-91.51	21	1
KRH	R	35.12	25.12	0.15	0	30	Y	0	K-UL				684	6.77	-93.77	21	1
KRV	R	33.93	23.93	0.15	0	30	Y	90	K-UL				714	5.39	-92.39	21	1
CTH	T	29.89	19.89	0.15	0	30	Y	0	C-DL	1.8	20	41.1					
CTV	T	30.67	20.67	0.15	0	30	Y	90	C-DL	1.7	20	42.02					
KTH	T	33.61	23.61	0.15	0	30	Y	0	K-DL	1	60	50.58					
KTV	T	33.14	23.14	0.15	0	30	Y	90	K-DL	1	60	50.34					

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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
CRH	R	C	-67		CRHclean.gxt					
CRV	R	C	-67		CRVclean.gxt					
KRH	R	C	-67		KRHclean.gxt					
KRV	R	C	-67		KRVclean.gxt					
CTH	T	C	-67		CTHclean.gxt	-166.52	-165.9	-165.05	-164.28	-163.13
CTV	T	C	-67		CTV2clean.gxt	-166.52	-165.9	-165.05	-164.28	-163.13
KTH	T	C	-67		KTHclean.gxt					
KTV	T	C	-67		KTVclean.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)
KR01	36000	R	14020	H	C
KR02	36000	R	14040	V	C
KR03	36000	R	14060	H	C
KR04	36000	R	14080	V	C
KR05	36000	R	14100	H	C
KR06	36000	R	14120	V	C
KR07	36000	R	14140	H	C
KR08	36000	R	14160	V	C
KR09	36000	R	14180	H	C
KR10	36000	R	14200	V	C
KR11	36000	R	14220	H	C
KR12	36000	R	14240	V	C
KR13	36000	R	14260	H	C
KR14	36000	R	14280	V	C
KR15	36000	R	14300	H	C
KR16	36000	R	14320	V	C
KR17	36000	R	14340	H	C
KR18	36000	R	14360	V	C
KR19	36000	R	14380	H	C
KR20	36000	R	14400	V	C
KR21	36000	R	14420	H	C
KR22	36000	R	14440	V	C
KR23	36000	R	14460	H	C
KR24	36000	R	14480	V	C
KT01	36000	T	11720	V	C
KT02	36000	T	11740	H	C
KT03	36000	T	11760	V	C
KT04	36000	T	11780	H	C
KT05	36000	T	11800	V	C
KT06	36000	T	11820	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
K01	120.9	KR01	KRH	KT01	KTV
K03	120.9	KR03	KRH	KT03	KTV
K05	120.9	KR05	KRH	KT05	KTV
K07	120.9	KR07	KRH	KT07	KTV
K09	120.9	KR09	KRH	KT09	KTV
K11	120.9	KR11	KRH	KT11	KTV
K13	120.9	KR13	KRH	KT13	KTV
K15	120.9	KR15	KRH	KT15	KTV
K17	120.9	KR17	KRH	KT17	KTV
K19	120.9	KR19	KRH	KT19	KTV
K21	120.9	KR21	KRH	KT21	KTV
K23	120.9	KR23	KRH	KT23	KTV
K02	120.9	KR02	KRV	KT02	KTH
K04	120.9	KR04	KRV	KT04	KTH
K06	120.9	KR06	KRV	KT06	KTH
K08	120.9	KR08	KRV	KT08	KTH
K10	120.9	KR10	KRV	KT10	KTH
K12	120.9	KR12	KRV	KT12	KTH
K14	120.9	KR14	KRV	KT14	KTH
K16	120.9	KR16	KRV	KT16	KTH
K18	120.9	KR18	KRV	KT18	KTH
K20	120.9	KR20	KRV	KT20	KTH
K22	120.9	KR22	KRV	KT22	KTH
K24	120.9	KR24	KRV	KT24	KTH
C01	109.3	CR01	CRV	CT01	CTH
C03	109.3	CR03	CRV	CT03	CTH
C05	109.3	CR05	CRV	CT05	CTH
C07	109.3	CR07	CRV	CT07	CTH
C09	109.3	CR09	CRV	CT09	CTH
C11	109.3	CR11	CRV	CT11	CTH

KT07	36000	T	11840	V	C
KT08	36000	T	11860	H	C
KT09	36000	T	11880	V	C
KT10	36000	T	11900	H	C
KT11	36000	T	11920	V	C
KT12	36000	T	11940	H	C
KT13	36000	T	11960	V	C
KT14	36000	T	11980	H	C
KT15	36000	T	12000	V	C
KT16	36000	T	12020	H	C
KT17	36000	T	12040	V	C
KT18	36000	T	12060	H	C
KT19	36000	T	12080	V	C
KT20	36000	T	12100	H	C
KT21	36000	T	12120	V	C
KT22	36000	T	12140	H	C
KT23	36000	T	12160	V	C
KT24	36000	T	12180	H	C
CR01	36000	R	5945	V	C
CR02	36000	R	5965	H	C
CR03	36000	R	5985	V	C
CR04	36000	R	6005	H	C
CR05	36000	R	6025	V	C
CR06	36000	R	6045	H	C
CR07	36000	R	6065	V	C
CR08	36000	R	6085	H	C
CR09	36000	R	6105	V	C
CR10	36000	R	6125	H	C
CR11	36000	R	6145	V	C
CR12	36000	R	6165	H	C
CR13	36000	R	6185	V	C
CR14	36000	R	6205	H	C
CR15	36000	R	6225	V	C
CR16	36000	R	6245	H	C
CR17	36000	R	6265	V	C
CR18	36000	R	6285	H	C
CR19	36000	R	6305	V	C
CR20	36000	R	6325	H	C
CR21	36000	R	6345	V	C

C13	109.3	CR13	CRV	CT13	CTH
C15	109.3	CR15	CRV	CT15	CTH
C17	109.3	CR17	CRV	CT17	CTH
C19	109.3	CR19	CRV	CT19	CTH
C21	109.3	CR21	CRV	CT21	CTH
C23	109.3	CR23	CRV	CT23	CTH
C02	109.3	CR02	CRH	CT02	CTV
C04	109.3	CR04	CRH	CT04	CTV
C06	109.3	CR06	CRH	CT06	CTV
C08	109.3	CR08	CRH	CT08	CTV
C10	109.3	CR10	CRH	CT10	CTV
C12	109.3	CR12	CRH	CT12	CTV
C14	109.3	CR14	CRH	CT14	CTV
C16	109.3	CR16	CRH	CT16	CTV
C18	109.3	CR18	CRH	CT18	CTV
C20	109.3	CR20	CRH	CT20	CTV
C22	109.3	CR22	CRH	CT22	CTV
C24	109.3	CR24	CRH	CT24	CTV
TCC		CC1	CRH		
TBC1				CBCN1	CTV
TBC2				CBCN2	CTH
TBK2				KBCN2	KTV

CR22	36000	R	6365	H	C
CR23	36000	R	6385	V	C
CR24	36000	R	6405	H	C
CT01	36000	T	3720	H	C
CT02	36000	T	3740	V	C
CT03	36000	T	3760	H	C
CT04	36000	T	3780	V	C
CT05	36000	T	3800	H	C
CT06	36000	T	3820	V	C
CT07	36000	T	3840	H	C
CT08	36000	T	3860	V	C
CT09	36000	T	3880	H	C
CT10	36000	T	3900	V	C
CT11	36000	T	3920	H	C
CT12	36000	T	3940	V	C
CT13	36000	T	3960	H	C
CT14	36000	T	3980	V	C
CT15	36000	T	4000	H	C
CT16	36000	T	4020	V	C
CT17	36000	T	4040	H	C
CT18	36000	T	4060	V	C
CT19	36000	T	4080	H	C
CT20	36000	T	4100	V	C
CT21	36000	T	4120	H	C
CT22	36000	T	4140	V	C
CT23	36000	T	4160	H	C
CT24	36000	T	4180	V	C
CC1	800	R	6423.5	V	T
CBCN1	400	T	3700.5	V	T
CBCN2	400	T	4199.5	H	T
KBCN2	400	T	12198	V	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)
K_A	36M0G7W	36000	4	40000	0.69		6.8	19
K_B	27M0G7W	27000	4	32000	0.69		6.8	19
K_C	6M95G1W	6950	4	8000	0.69		6.8	19
K_D	5M00G1W	5000	4	6000	0.69		6.8	19
K_E	100KG1W	100	4	56	0.69		6.8	19
K_F	1M60G1W	1600	4	1544	0.69		6.8	19
K_G	36M0G7W	36000	8	50000	0.61		9.9	20
C_A	36M0G7W	36000	4	40000	0.69		6.8	19
C_B	27M0G7W	27000	4	32000	0.69		6.8	19
C_C	6M95G1W	6950	4	8000	0.69		6.8	19
C_D	5M00G1W	5000	4	6000	0.69		6.8	19
C_E	100KG1W	100	4	56	0.69		6.8	19
C_F	1M60G1W	1600	4	1544	0.69		6.8	19
C_G	36M0G7W	36000	8	50000	0.61		9.9	20

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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): #Error

Remote Control (TT C) Location(s):

S14a: Street Address: Woodbine TT&C			
S14b. City: Mt. Airy	S14c. County:	S14d. State/Country MD	S14e. Zip Code: 21771
S14f. Telephone Number: 410-549-4300		S14g. Call Sign of Control Station (if appropriate): E2037	

Remote Control (TT C) Location(s):

S14a: Street Address: South Mountain Earth Station			
S14b. City: Somis	S14c. County:	S14d. State/Country CA	S14e. Zip Code: 93066
S14f. Telephone Number: 805-386-2710		S14g. Call Sign of Control Station (if appropriate): E000289	

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Characteristics and
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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 %	(i) 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.