FCC	31	2	
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FEDERAL COMMUNICATIONS COMMISSION SATELLITE SPACE STATION AUTHORIZATIONS (Technical and Operational Description)

Page 1: General, Frequency Bands, and GSO Orbit

					(166	innical and Operational Descri	ption) and 600 orbit				
S1. GENERAL INFO	ORMAT	ION Complete for	all satellite	applications	i.						
a. Space Station or Sa LM-RPS-131.8E	itellite Ne	twork Name:		e. Estimat	ed Date o	of Placement into Service:	i Will the space station(s) operate on a Common Carrier Basis:				
b. Construction Comm	iencemen	t Date:		f. Estimate	ed Lifetim	ne of Satellite(s): Years	j. Number of transponders offered on a common carrier basis:				
c. Construction Comple	etion Date	e:		g. Total N	umber of	Transponders:	k. Total Common Carrier Transponder Bandwidth: MHz				
d1. Est Launch Date B	Begin: (d2. Est Launch Date	End:	h. Total Tr	ransponde	I. Orbit Type: Mark all boxes that apply: X GSO NGSO					
		Als				ansmit/receive mode for all frequency ba s) for each frequency band.	nds in which this station will oper				
Lower Frequency (Frequency Band Limits Lower Frequency (_Hz) Upper Frequency (_Hz) a. Numeric b. Unit (K/M/G) c. Numeric d. Unit (K/M/G)				Mode	f. Nature of So	vice(s): List all that apply to this band				
6652.3175	M	6664.3225		R		Fixed Satellite Service					
S3. ORBITAL INFO	RMATIO	ON FOR GEOST	ATIONARY	SATELLITE	S ONLY	/ :					
a. Nominal Orbital Lon 131.8 E	igitude (D	egrees E/W):	b. Alternate (Orbital Longitu	ide (Degr	rees E/W):	c. Reason for orbital location selection:				
Longitudinal Tolerance d. Toward West: e. Toward East:		0.05 Degrees 0.05 Degrees	f. Inclination N/S Station-A Tolerance: 0.05		provided g. V	of orbital are in which adequate service can be d (Optional): Degrees E/W Westernmost: Easternmost:					
i. Reason for servic	e are se	election (Optional)	:								

Page 2: NGSO Orbits

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	(f) No. of	(g) Inclination	(h) Orbital	(i) Apogee (km)	(j) Perigee (km)	(k) Right Ascension	(I) Argument of	Active Se	Active Service Arc Range ([
Plane No.	Satellites in	Angle (degrees)	Period			of the Ascending	Perigee	(m) Begin	(n) End	(o) Other
	Plane		(Seconds)			Node (Deg.)	(Degrees)	Angle	Ångle	. ,
			(=====)			(9-)	(5,000)	,g.o	gio	

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

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)	(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.
(BL	S	Visible areas of Earth. XVE

Page 3: Service Areas

Page 4: Antenna Beams

FCC Form 312 - Schedule S: (Technical and Operational Description)

S7. SPACE STATION ANTENNA BEAM CHARACTERISTICS For each antenna beam provide:

(a)	(b)	Isotropic	Antenna	(e)	(f)	(g) Min.	(h) Polar-	(i) Polarization	(j) Service	Transmit			Receive				
Beam	T/R	Ga	ain	Pointing	Rotational	Cross-	ization	Alignment Rel.	Area ID	(k)	(I) Effective	(m)	(n)	(o) G/T	(p) Min.	lin. Input Attenuato	
ID	Mode	(c) Peak (dBi)	(d) Edge (dBi)	Error (Degrees)	Error (Degrees)	Polar Iso- lation (dB)	Switch- able?	Equatorial Plane (Degrees)		Input Losses	Output Power (W)	Max. EIRP	System Noice	Max. Gain Pt.	Saturation Flux Density	(q) Max.	(r) Step
		(ubi)	(dbi)	(13 111)	(13 111)	,	(Y/N)	((dB)	. 6.16. (11)	(dBW)	Temp (k)		(dBW/m2)	Value	Size
CGB	R	11	8	0.15	0.1	30	N	0	GBL				1000	-19			
CGB	R	11	8	0.15	0.1	30	N	90	GBL				1000	-19			

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)	(b)	(c) Co-or	(d) GSO	(e) NGSO Antenna Gain	(f) GSO Antenna		Max. Power I	Flux Density (dB	BW/M2/Hz)				
Beam	T/R	Cross	Ref.	Contour Description	Gain Contour Data (GXT File)	7 K 7 Kingle of 7 Kint an above Herizeritan (for enhaction than highest in 2)							
ID	Mode	Polar Mode ("C" or" X")	Orbital Longitude (Deg. E/W)	(Figure/Table/ Exhibit)		(g) 5 Deg	(h) 10 Deg	(i) 15 Deg	(j) 20 Deg	(k) 25 Deg			
CGB	R	С	131.8		CGBLH 131.8E.gxt								
CGB	R	С	-131.8		CGBLV 131.8E.gxt								
CGB	R	С	131.8		CGBLH 131.8E.gxt								
CGB	R	С	-131.8		CGBLV 131.8E.gxt								

Page 5: Beam Diagrams

Page 6: Channels and Transponders

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)
CU1	5	R	6652.32	Н	С
CU2	5	R	6656.32	Н	С
CU3	5	R	6660.32	Н	С
CU4	5	R	6664.32	Н	С
CU5	5	R	6652.32	V	С
CU6	5	R	6656.32	V	С
CU7	5	R	6660.32	V	С
CU8	5	R	6664.32	V	С

(a)	(b)	Receive	Band	Transmi	t Band
Transponder ID	Transponder Gain (dB)	(c) Channel No.	(d) Beam ID	(e) Channel No.	(f) Beam ID
CU1		CU1	CGBLH		
CU2		CU2	CGBLH		
CU3		CU3	CGBLH		
CU4		CU4	CGBLH		
CU5		CU5	CGBLV		
CU6		CU6	CGBLV		
CU7		CU7	CGBLV		
CU8		CU8	CGBLV		

Page 7: Digital Modulation

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	5K00G7D	5	2	2.5	1		10	22.2

Page 8: Analog Modulation

FCC Form 312 - Schedule S: (Technical and Operational Description)

S12. ANALOG MODULATION PARAMETERS For each analog emission provide:

(a)	(b) Emission	(c)	(d) Signal	(e)	Multi-channel Telephony (j				(j) Video	(k) Video	(I) Video	(m) SCPC/FM	(n) Total C/N	(o) Single
Analo Mod.		Assigned Bandwidth (kHz)	Туре	Channels per Carrier	(f) Ave. Companded Talker Level (dBm0)	(g) Bottom Baseband Freq. (MHz)		(i) RMS Modulation Index	Standard NTSC, PAL, etc.	- 3 - 3	and SCPC/FM Modulation Index	Compander, Preemphasis, and Noise Weighting (dB)	Performance Objective (dB)	Entry C/I Objective (dB)

Page 9: Typical Emissions

FCC Form 312 - Schedule S: (Technical and Operational Description)

S13. TYPICAL EMISSIONS For each planned type of emission provide:

	ciated		lation ID	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		pacing Reference (Table	Dispersal Bandwidth	Receive Ba	and (Assoc. Tr	ransmit Stn)	Trai	nsmit Band	(This Space State	tion)
Transponder ID Range (a) Start (b) End		(c) Digital (Table	, , ,	per Transponder	- 1 3			(i)Assoc. Stn. Max.	Assoc. Station		EIRP	(dBW)	(n) Max. Power Flux	(o)Assoc. Stn
(a) Start	(D) End	`S11)	,				(KHZ)	Antenna Gain (dBi)	(j) Min.	(k) Max.	(I) Min.	(m) Max.		Rec. G/T (dB/K)
CU1	CU8	D1		1		RPS-Cu LB.doc		59.4	-5.4	-2.4				

Page 10: TT and C

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): #Error

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

Page 11: Characteristics and Certifications

S15. SPACECRAFT PHYSICAL CHARACTERISTICS:

S16. SPACECRAFT ELECTRICAL CHARACTERISTICS:

S17. CERTIFICATIONS:

a. Are the power flux density limits of § 25.208 met?:	YES	# NO	# N/A	
b. Are the appropriate service area coverage requirements of § 25.143(b)(ii) and (iii), or § 25.145(c)(1) and (20.145(c)(1))	2) met? YES	# NO	# 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? YES	# NO	# N/A	
In addition to the information required in this Form, the apparentation applicant is required to previde all the information appointed in Section 2F 444 of the				

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.