FCC 312	FE	DERAL COMMUNICA	TIONS (COMMISSION	ſ			Page 1: Location	
	PLICATION FOR	SATELLITE SPACE A Technical and Opera (Place an "X" in one	ational De	escription)	AUTHOR	RIZATI	ONS		
License of New Station Regi	istration of new Domestic Receive-Only Station	Amendment to a Pending App	olication	Modification of Lic	cense/Registra	tion	Notification of M	linor Modification	
B1. Location of Earth Station Site.	For VSAT networks at	bbile, or VSAT remote facility, tach individual Schedule B, Pa mmunications, and Destination	ge 1 sheets f	or each hub station	and each re e station.	mote stat	ion. Individual		
Ü	identifier (HUB, REMOTE1, e HIO1	,	ne Number 929-8069		B1j. Geographic Coordinates N/S, B1k. Lat./Lon. Deg Min Sec E/W Coordinates are				
B1d. Mailing Street Address of Station or Ai 93-1704 South Point Road	rea of Operation	B1e. Name of Contact Person Joanne Greet			Lat. <u>19°</u> Lon. <u>155</u>		50.3" N 46.6" W	□ NAD-27 □ NAD-83	
B1f. City B Naalehu	1g. County Ka'u		B1h. State	B1i. Zip Code 96772-0842		B11. Site E	levation (AMSL)	378.0 meters	
B2. Points of Communications:		it locations of all satellites with locations of all satellite facilities							
Satellite Name and Orbit Location	n	Satellite Name and Orbit Lo	Satellite Name and Orbit Location						
EDRS-C Geosynhronous transfe 31East	er orbit to								
B3. Destination points for commun destination point(s) (countries) where									
Satellite Name	List of Destina								
EDRS-31E	DLR Germa	ny							
								_	

FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS FCC Form 312 - Schedule B: (Technical and Operational Description)

B4. Earth Station Antenna Facilities: Use additional pages as needed.

(a) Site ID*	(b) Antenna ID**	(c) Quantity	(d) Manufacturer	(e) Model	(f) Antenna Size (meters)	(g) Antenna Gain Transmit and/or Receive (dBi atGHz)
USHI01	HI-13M	1	Datron	1453	13.0	46.9 dBi at 2.245 GHz 45.9 dBi at 2.067 GHz

B5. Antenna Heights and Maximum Power Limits: (The corresponding Antenna ID in tables B4 and B5 applies to the same antenna)

(a) Antenna ID**	(b) Antenna Structure Registration No.	Maximum Ar (c) Above Ground Level (meters)	tenna Height (d) Above Mean Sea Level (meters)	(e) Building Height Above Ground Level (meters)***	(f) Maximum Antenna Height Above Rooftop (meters)***	(g) Total Input Power at antenna flange (Watts)	(h) Total EIRP for all carriers (dBW)
HI-13M		20.0	398.0	(meters)	(meters)	200.0	68.9

Notes:

- * If this is an application for a VSAT network, identify the site (Item B1b, Schedule B, Page 1) where each antenna is located. Also include this Site-ID on Schedule B, Page 5.
- ** Identify each antenna in VSAT network or multi-antenna station with a unique identifier, such as HUB, REMOTE1, A1, A2, 10M, 12M, 7M, etc. Use this same antenna ID throughout tables B4, B5, B6, and B7 when referring to the same antenna.
- *** Attach sketch of site or exemption, See 47 CFR Part 17.

Page 3: Coordination

APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

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

B6. Frequency Coordination Limits: Use additional pages as needed.

HI-13M 2285.000 0.0 W.L. 360.0 W.L. 5.0 5.0 4.8	(a) Antenna ID*	(b) Frequency Limits (MHz)	(c) Range of Satellite Arc Eastern Limit**	(d) Range of Satellite Arc Western Limit**	(e) Antenna Elevation Angle Eastern Limit	(f) Antenna Elevation Angle Western Limit	(g) Earth Station Azimuth Angle Eastern Limit	(h) Earth Station Azimuth Angle Western Limit	(i) Maximum EIRP Density toward the Horizon (dBW/4kHz)
HI-13M 2104.104 0.0° W.L. 360.0° W.L. 5.0° 5.0° 4.8	HI-13M	2285.000	0.0 W.L.	360.0 W.L.	5.0	5.0			
	HI-13M	2104.104	0.0° W.L.	360.0° W.L.	5.0°	5.0°			4.8

Notes:

^{*} Provide the ANTENNA-ID from table B4 to identify the antenna to which each frequency band and orbital arc range is associated.

^{**} If operating with geostationary satellites, give the orbital arc limits and the associated elevation and azimuth angles. If operating with non-geostationary satellites, give the notation "NON-GEO" for the satellite arc and give the minimum operational elevation angle and the maximum azimuth angle range.

FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS

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

B7. Particulars of Operation (Full particulars are required for each r.f. carrier): Use additional pages as needed.

(a) Antenna ID*	(b) Frequency Limits (MHz)	(c) T/R Mode **	(d) Antenna Polarization (H,V,L,R)	(e) Emission Designator	(f) Maximum EIRP per Carrier (dBW)	(g) Maximum EIRP Density per Carrier (dBW/4kHz)	(h) Description of Modulation and Services
HI-13M	2285.000	R	L, R	2M05G2D		(db W/4K11Z)	1024 kbps data is PM modulated with 413 kHz major ranging tones
HI-13M	2104.104	Т	L, R	826KG2D	68.0	44.8	1 kbps data PSK modulated onto an 8 kHz subcarrier with 413 kHz major ranging tones

Notes: * Provide the ANTENNA-ID from table B4 to identify the antenna to which each frequency band and emission is associated. For VSAT networks, include frequencies and emissions for all HUB and REMOTE units.

^{**} Indicate whether the earth station transmits or receives in each frequency band.

FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SATELLITE SPACE AND EARTH STATION AUTHORIZATIONS FCC Form 312 - Schedule B: (Technical and Operational Description)

If VSAT Network, provide the SITE-ID (Item B1b) of the station that B8-B13 are in response to (HUB, REMOTE1, etc.):

B8. If the proposed antenna(s) operate in the comply with the antenna gain patterns sp measurements? If NO, provide as an ext		YES	□ NO	N/A						
	B9. If the proposed antenna(s) do not operate in the Fixed Satellite Service (FSS), or if they operate in the Fixed Satellite Service									
	do(es) the proposed antenna(s) comply with		ns specified in	× Y	YES	NO				
	ted by the manufacturer's qualification measu		al maint							
B10. Is the facility operated by remote control	or. If 1 Es, provide the location and telephon	ie number of the contro	от роши.	X Y	YES	□ NO				
Remote Control Point Location:										
B10a. Street Address										
417 Caredean Drive Sui	ite A									
B10b. City	B10c. County		B10.d. State/Country	I	B10e. Zip Code					
Horsham	Montgomery		PA		19044					
B10f. Telephone Number		B10g. Call Sign of Con	trol Station (if appropriate)							
215-328-9130										
B11. Is frequency coordination required? If	YES, attach a frequency coordination report a	as an exhibit.		<u> </u>						
	\boxtimes Y	YES	∐ NO							
B12. Is coordination with another country required? If YES, attach the name of the country(ies)										
and plot of coordination contours as an		YES	\bowtie NO							
D44 714 37 48 41 (G 45 CPEP) 45 45 45 (CPEP) 45 442 (W										
B13. FAA Notification - (See 47 CFT Part		VEC	M NO							
Where FAA notification is required, have you attached a copy of a completed FCC Form 854										
and/or the FAA's study regarding the potential hazard of the structure to aviation?										
FAILURE TO COMPLY WITH 47 CFT PARTS 17 AND 25 WILL RESULT IN THE RETURN OF THIS APPLICATION										