FCC 312										Page 1: Location
Schedule B		FE	DERAL COMN	IUNICA	TIONS C	COMMISSION	I			
A	APPLICA	ATION FOR	SATELLITE SI	PACE AN	ND EART	TH STATION	AUTHO	RIZATI	IONS	
			Technical ar	ıd Opera	tional De	escription)				
			(Place ar	n "X" in one o	f the blocks be	elow)				
License of New Station	Registration	of new Domestic	Amendment to a l	Pending Ann	lication	Modification of Lie	cense/Registr	ation \square	Notification of M	Inor Modification
Elective of New Station		e-Only Station		chang ripp		j woodineation of Ex	conse, registr		1 (otherwise)	inioi modification
B1. Location of Earth Station	Cito If to	man anomy fixed m	obile on VCAT nom	oto fooility	an a sifty and	o of operation and	maint of and	stoot If V	ICAT hub statio	un aiva ita laaatian
b1. Location of Earth Station			attach individual Sch							
			ommunications, and					Terriote st	ation. marvidus	any provide the
B1a. Station Call Sign B1b. S		(HUB, REMOTE1, e		B1c. Telephor			B1j. Geograp	hic Coordin	nates N/S,	B1k. Lat./Lon.
	USHI01				29-8069		Deg	Min	Sec E/W	Coordinates are:
B1d. Mailing Street Address of Station of	or Area of Op	eration	B1e. Name of Contact l	Person					o" N	NAD-27
93-1704 South Point Roa	ad		Joanne Greet				Lat. <u>19</u>		50.3" N	—
93-1704 South Point Roa	au		ocarino Croo	•			Lon. <u>155</u>	<u>° 39'</u>	<u>46.6"</u> W	NAD-83
B1f. City	B1g. Count		B1h. State B1i. Zip Code					B11. Site I	Elevation (AMSL)	
Naalehu	Ka'ı	u			HI	96772-0842				378.0 meters
B2. Points of Communications	: List	the names and or	bit locations of all sa	itellites wit	h which this	s earth station will	communica	te. The e	ntrv "ALSAT" i	is sufficient to
			d locations of all sate							
Satellite Name and Orbit Loca	tion		Satellite Name and		Satellite Name and Orbit Location					
Galileo Constellation (GFOC	1 & GFOC	C2) MEO								
Orbits										
B3. Destination points for com	municatio	ons using non-U.	S. licensed satellites	s. For each	non-U.S. li	icensed satellite fa	cility identif	ied in sec	tion B2 above, s	specify the
destination point(s) (countries) v										
Satellite Name		List of Destina	tion Points							
Galileo - GFOC1 (MSATNAV	/-2)	ESA (Non US	Spacecraft)							
Galileo – GFOC2 (MSATNAV	/-2)	ESA (Non US Spacecraft)								

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	, ,	, ,	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.

(a) Antenna ID*	(b) Frequency Limits	(c) Range of Satellite Arc	(d) Range of Satellite Arc	(e) Antenna Elevation Angle	(f) Antenna Elevation Angle	(g) Earth Station Azimuth Angle	(h) Earth Station Azimuth Angle	(i) Maximum EIRP Density toward the
	(MHz)	Eastern Limit**	Western Limit**	Eastern Limit	Western Limit	Eastern Limit	Western Limit	Horizon (dBW/4kHz)
HI-13M	2221.995	0.0° W.L.	360.0° W.L.	5.0°	5.0°			
HI-13M	2225.024	0.0° W.L.	360.0° W.L.	5.0°	5.0°			
HI-13M	2237.250	0.0° W.L.	360.0° W.L.	5.0°	5.0°			
HI-13M	2046.051	0.0° W.L.	360.0° W.L.	5.0°	5.0°			9.6
HI-13M	2048.887	0.0° W.L.	360.0° W.L.	5.0°	5.0°			9.6
HI-13M	2060.181	0.0° W.L.	360.0° W.L.	5.0°	5.0°			9.6

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.

Bit I di ticulai s	of Operation (Full partic	uluib ul C	equired for	each in carre). esc dudition	ar pages as ne	eucu.
(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	2221.995	R	L, R	510KG2D			20 kbps data is PSK modulated into a 255 kHz subcarrier with 100 kHz tone
HI-13M	2225.024	R	L, R	510KG2D			20 kbps data is PSK modulated into a 255 kHz subcarrier with 100 kHz tone
HI-13M	2237.250	R	L, R	510KG2D			20 kbps data is PSK modulated into a 255 kHz subcarrier with 100 kHz tone (EMERGENCY USE ONLY)
HI-13M	2046.051	Т	L, R	200KG2D	68.0	51.0	2 kbps data PSK modulated onto an 8 kHz subcarrier with 100 kHz major ranging tones
HI-13M	2048.887	Т	L, R	200KG2D	68.0	51.0	2 kbps data PSK modulated onto an 8 kHz subcarrier with 100 kHz major ranging tones
HI-13M	2060.181	Т	L, R	200KG2D	68.0	51.0	2 kbps data PSK modulated onto an 8 kHz subcarrier with 100 kHz major ranging tones (EMERGENCY USE ONLY)

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 Fixed Satellite Set comply with the antenna gain patterns specified in Section measurements? If NO, provide as an exhibit, a technical at		YES	□ NO	N/A						
B9. If the proposed antenna(s) do not operate in the Fixed Satel										
(FSS) with non-geostationary satellites, do(es) the propose			ns specified in	\boxtimes	YES	NO				
Section 25.209(a2) and (b) as demonstrated by the manufac			1							
B10. Is the facility operated by remote control? If YES, provid	e the location and telephoi	ne number of the contr	of point.	\boxtimes	YES	□ NO				
Remote Control Point Location:										
B10a. Street Address										
417 Caredean Drive Suite A										
B10b. City	B10c. County		B10.d. State/Country		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	iency coordination report	as an exhibit.			NAME					
		\boxtimes	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 exhibit.		YES	\bowtie NO							
B13. FAA Notification - (See 47 CFT Part 17and 47 CFT Part 25.113(c))										
Where FAA notification is required, have you at		YES	\boxtimes NO							
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										