Exhibit B – Technical Annex

1. Scope

This Attachment contains additional information regarding the Yet Another Mission 5 (YAM-5) non-geostationary satellite orbit (NGSO) constellation, required by Section 25.114 and other sections of the Part 25 rules that cannot be entered into the Schedule S online submission system.

2. General Description (Section 25.114(d)(1))

The YAM-5 satellite hosts the following customer or experimental payloads:

- A customer furnished flight computer
- A longwave infrared camera
- A sensing payload
- An experimental S-band payload transmitting in the 2240-2290 MHz band and receiving in the 2067-2110 MHz band.
- An S-band Internet of Things (IoT) payload that transmits and receives in the 2400-2483.5 MHz band
    - TX
        - 2400 – 2483.5 MHz (9 channels within a 26MHz sub-band between 2445.0 MHz to 2479.5 MHz)
        - RHCP
        - Patch antenna
        - 7.0 dBi antenna gain
        - 7.0 dBW EIRP
    - RX – Data Collection
        - 2400 – 2483.5 MHz (16 channels within a 26MHz sub-band between 2445.0 MHz to 2479.25 MHz)
        - RHCP
        - Patch antenna
        - 7.0 dBi antenna gain
        - 3.5 dB NF

3. Spacecraft Overview

The YAM-5 satellite bus will be manufactured and supplied by LeoStella. The bus design derived from the heritage design that LeoStella has produced for BlackSky Global, an Earth observation company. The satellite is 3-axis stabilized, achieves beam steering via body steering of the bus, and does not employ any form of propulsion.

The YAM-5 satellite has the following characteristics:

- 5-year operational life
- 3-axis stabilized
- UHF uplink and downlink telemetry, tracking, and command (TT&C)
- S-band uplink telemetry, tracking, and command (TT&C)
- X-band downlink mission data
- Software defined radios (SDR)

The spacecraft will operate in the frequencies listed below.

Table 1 Frequencies

Usage	Link Direction	Spectrum Range
TT&C Uplink	Uplink (Earth-space)	2025-2110 MHz
TT&C UHF Uplink (backup)	Uplink (Earth-space)	449.75-450.25 MHz
TT&C UHF Downlink (backup)	Downlink (space-Earth)	400.15-401.0 MHz, 401.0-402.0 MHz
Payload Downlink	Downlink (space-Earth)	8025-8400 MHz
S-band IoT TX	Downlink (space-Earth)	2400.0 – 2483.5 MHz
S-band IoT RX	Uplink (Earth-space)	2400.0 – 2483.5 MHz
L-band Data Signal	Receive (space-space)	1535-1559 MHz
Experimental TT&C	Transmit (space-Earth)	2240-2290 MHz
Experimental TT&C	Receive (Earth-space)	2067-2110 MHz

The spacecraft will also sense the signals of interest listed below.

Table 2 Signals of Interest

Frequency Range
399.9-400.05 MHz
401-403 MHz
2010-2025 MHz

4. Orbital Parameters

The YAM-5 satellite is expected to be deployed at a target altitude of 525 km orbital altitude at an inclination of 97.6 degrees.[1]

5. Telemetry, Tracking and Control (TT&C)

The YAM-5 TT&C sub-system provides for communications during on-station operations, as well as during spacecraft emergencies. S-band telecommand transmissions are received by the spacecraft through patch antennas with near-omni directional patterns during on-station operations and during both transfer orbit and emergency operations. The UHF band is used for backup TT&C operations. UHF telecommand transmissions are received by the spacecraft and UHF telemetry is transmitted by the spacecraft through whip antennas with near-omni directional patterns during on-station operations and during both transfer orbit and emergency operations.

The S-band command channels have a bandwidth of up to 132 kHz. The UHF commanding channels have a bandwidth of up to 17 kHz and UHF telemetry channels have a bandwidth of up to 34 kHz. TT&C operations will be conducted from Kongsberg Satellite Services (KSAT) TT&C sites (including Svalbard,

[1] As a worst-case analysis, Loft Orbital has assumed a 550 km deployment orbital altitude for purposes of the orbital debris analysis.

Troll, Punta Arenas, Brostabotn, Hartebeesthoek, and Awarua) and ATLAS TT&C sites (including Harmon, Guam and Awarua, New Zealand). The specific S-band commanding channel and UHF commanding and telemetry channels are listed in the Schedule S and reproduced below for convenience. Planned UHF band command and telemetry channel information is provided below in Table 3 and Table 4.

The S-band TT&C command receive beam have peak gains of 6 dBiC, and the UHF command/telemetry beams have peak gains of 4.4/4.1 dBiL respectively. Pursuant to Section 25.114(c)(4)(vi)(A) of the Commission's rules, contours for these beams are provided in the associated GXT files included in Schedule S. Planned channel S-band command channel information is provided below in Table 5.

The YAM-5 satellite also includes an experimental S-band subsystem, designated the Y5-PDP. The Y5-PDP S-band uplink channels have a bandwidth of up to 200 kHz, listed in Table 6. The Y5-PDP S-band downlink channels have a bandwidth of up to 2 MHz, as listed in Table 7. The Y5-PDP S-band receive beam has a peak gain of 6.9 dBiC, and the S-band transmit beam has a peak gain of 6.0 dBiC. Pursuant to Section 25.114(c)(4)(vi)(A) of the Commission's rules, contours for these beams are provided in the associated GXT files included in Schedule S.

The YAM-5 satellite will use a sufficiently unique telemetry marker at deployment to assure that its telemetry stream can be unambiguously identified.

Contact details for the control center are provided below:

Address:
Alexander B. Greenberg
Co-Founder and Chief Operating Officer
715 Bryant Street, Suite 202
San Francisco, CA 94118
Telephone:
410-382-5050

6. Frequency Plan

6.1 UHF

The following tables list the uplink and downlink UHF channels planned for the YAM-5 satellite. This information is also provided in the accompanying Schedule S but is included here for completeness.

Table 3 UHF Downlink Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization
UTX1	0.034	400.875	H
UTX2	0.034	401.015	H
UTX3	0.034	401.085	H
UTX4	0.034	401.155	H
UTX5	0.034	401.225	H
UTX6	0.034	401.375	H
UTX7	0.034	401.4375	H
UTX8	0.034	401.5	H

Table 4 UHF Uplink Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization
UR1	0.017	450.125	H
UR2	0.017	450.2	H

6.2 S-Band

The following tables list the uplink S-band channel planned for the YAM-5 satellite. These channels are not finalized and define representative uplink and downlink S-band channels. This information is also provided in the accompanying Schedule S but is included here for completeness.

Table 5 S-Band Uplink Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization
SU11	0.132	2070	R
SU12	0.132	2071.25	R
SU13	0.132	2071.875	R
SU14	0.132	2072.5	R
SU15	0.132	2073.5	R
SU21	0.099	2070	R
SU22	0.099	2071.25	R
SU23	0.099	2071.875	R
SU24	0.099	2072.5	R
SU25	0.099	2073.5	R

Table 6 Y5-PDP S-Band Uplink Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization
SU31	0.2	2067.5	R
SU41	0.02	2067.5	R
SU51	0.002	2067.5	R

Table 7 Y5-PDP S-Band Downlink Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization

ST11	2.0	2245	R
ST21	0.2	2245	R
ST31	0.02	2245	R

6.3 X-Band

The following table lists the downlink X-band channel planned for the YAM-5 satellite. This information is also provided in the accompanying Schedule S but is included here for completeness.

Table 8 X-Band Downlink Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization
XD1H	100	8125	R

6.4 L-band Data Signals

The following table lists the L-band space-to-space receive channels planned for the YAM-5 satellite. The receive-only payload concurrently receives MSS L-band data signals in the 1535-1559 MHz band from authorized and coordinated Inmarsat satellites. The L-band data signal provides satellite navigation correction data, augmenting the accuracy of Loft Orbital's location assessment.[2]

Table 9 L-Band Data Signal Space-to-Space Receive Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization
IR01	0.005	1539.9325	RHCP
IR02	0.005	1545.895	RHCP
IR03	0.0025	1539.9525	RHCP
IR04	0.0025	1546.26	RHCP
IR05	0.005	1539.9125	RHCP
IR06	0.005	1545.9275	RHCP
IR07	0.005	1545.9375	RHCP
IR08	0.0025	1539.9625	RHCP
IR09	0.0025	1545.835	RHCP
IR10	0.0025	1545.52	RHCP
IR11	0.005	1539.9625	RHCP
IR12	0.005	1545.875	RHCP

[2] *See* Narrative at 4, 16. The Commission has authorized earth stations licensed in the United States to communicate with Inmarsat satellites in this band. *See, e.g.*, Stamp Grant, Loft Orbital, IBFS No. SAT-LOA-20200907-00105 (granted May 28, 2021); Application of Deere & Company, IBFS File No. SES-LIC-20130422-00340, Exhibit C (filed Mar. 14, 2013); *see also Inmarsat, Inc. Request to Streamline Licensing of L-band Mobile-Satellite Service Terminals Using Inmarsat Satellites as Points of Communication*, Order, IBFS File No. SES-PDR-20080303-00367 (rel. Oct. 21, 2008).

6.5 S-Band IOT Signals

The following table lists the proposed S-band space-to-Earth transmit channels planned for the YAM-5 satellite. The S-band IOT downlink operates on 9 of the available channels in a 26 MHz sub-band at 2445.0 – 2479.5 MHz with a bandwidth of 500 kHz and varying spreading factors depending upon operational mode. The experimental IOT payload is configurable to evaluate best channel performance between 2445.0 -2479.0

Table 10 S-Band IOT Downlink Signal Space-to-Earth Transmit Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization
TT01	0.5	2445.25	RHCP
TT02	0.5	2446.25	RHCP
TT03	0.5	2447.25	RHCP
TT04	0.5	2448.25	RHCP
TT05	0.5	2449.25	RHCP
TT06	0.5	2450.25	RHCP
TT07	0.5	2451.25	RHCP
TT08	0.5	2452.25	RHCP
TT09	0.5	2453.25	RHCP
TT10	0.5	2454.25	RHCP
TT11	0.5	2455.25	RHCP
TT12	0.5	2456.25	RHCP
TT13	0.5	2457.25	RHCP
TT14	0.5	2468.25	RHCP
TT15	0.5	2469.25	RHCP
TT16	0.5	2470.25	RHCP
TT17	0.5	2471.25	RHCP
TT18	0.5	2472.25	RHCP
TT19	0.5	2473.25	RHCP
TT20	0.5	2474.25	RHCP
TT21	0.5	2475.25	RHCP
TT22	0.5	2476.25	RHCP
TT23	0.5	2477.25	RHCP
TT24	0.5	2478.25	RHCP
TT25	0.5	2479.25	RHCP

The following table lists the proposed S-band Earth-to-space IOT receive channels planned for the YAM-5 satellite. The S-band IOT uplink operates on 16 channels in a 26 MHz sub-band between 2445.0 – 2479.25 MHz with a bandwidth of 500 kHz and varying spreading factors depending upon operational mode. The received S-band IOT signals are in the 2400.0 – 2483.5 MHz.

Table 11 S-Band IOT Uplink Signal Earth-to-Space Receive Frequency Plan

Channel ID	Bandwidth (MHz)	Center Frequency (MHz)	Polarization
TR01	0.5	2445.25	RHCP
TR02	0.5	2445.75	RHCP
TR03	0.5	2446.25	RHCP
TR04	0.5	2446.75	RHCP
TR05	0.5	2447.25	RHCP
TR06	0.5	2447.75	RHCP
TR07	0.5	2448.25	RHCP
TR08	0.5	2448.75	RHCP
TR09	0.5	2449.25	RHCP
TR10	0.5	2449.75	RHCP
TR11	0.5	2450.25	RHCP
TR12	0.5	2450.75	RHCP
TR13	0.5	2451.25	RHCP
TR14	0.5	2451.75	RHCP
TR15	0.5	2452.25	RHCP
TR16	0.5	2452.75	RHCP
TR17	0.5	2453.25	RHCP
TR18	0.5	2453.75	RHCP
TR19	0.5	2454.25	RHCP
TR20	0.5	2454.75	RHCP
TR21	0.5	2455.25	RHCP
TR22	0.5	2455.75	RHCP
TR23	0.5	2456.25	RHCP
TR24	0.5	2456.75	RHCP
TR25	0.5	2457.25	RHCP
TR26	0.5	2468.50	RHCP
TR27	0.5	2469.00	RHCP
TR28	0.5	2469.50	RHCP
TR29	0.5	2470.00	RHCP
TR30	0.5	2470.50	RHCP
TR31	0.5	2471.00	RHCP
TR32	0.5	2471.50	RHCP
TR33	0.5	2472.00	RHCP
TR34	0.5	2472.50	RHCP
TR35	0.5	2473.00	RHCP
TR36	0.5	2473.50	RHCP
TR37	0.5	2474.00	RHCP

TR38	0.5	2474.50	RHCP
TR39	0.5	2475.00	RHCP
TR40	0.5	2475.50	RHCP
TR41	0.5	2476.00	RHCP
TR42	0.5	2476.50	RHCP
TR43	0.5	2477.00	RHCP
TR44	0.5	2477.50	RHCP
TR45	0.5	2478.00	RHCP
TR46	0.5	2478.50	RHCP
TR47	0.5	2479.00	RHCP

7. Frequency Tolerance

The frequency tolerance requirements of Section 25.202(e) that the carrier frequency of each space station transmitter be maintained within 0.002% of the reference frequency will be met.

8. Out of Band Emissions

The out-of-band emission limits of Section 25.202(f)(1), (2), and (3) will be met.

9. Frequency Reuse

The YAM-5 satellite does not operate in any frequency bands where Section 25.210(f) applies.

10. Cessation of Emissions

All downlink transmissions can be turned on and off by ground telecommand, thereby achieving cessation of emissions from the satellite, as required by Section 25.207 of the FCC's rules.

11. ITU Filings

Concurrent with this filing, Loft Orbital is submitting an ITU API and an ITU CR filing for the YAM-5 satellite.

12. Power Flux Density ("PFD") Analysis

A. 8025-8400 MHz

The Commission's rules do not specify a PFD limit in the 8025–8400 MHz band; however, there are PFD limits specified in rule No. 21.16 of the International Telecommunication Union (ITU) Radio Regulations. The maximum PFD levels for the YAM-5 transmissions were calculated for the 8025–8400 MHz band and the results are provided in Schedule S and demonstrate that the downlink PFD levels of the YAM-5 carriers do not exceed the limits specified in rule No. 21.16 of the ITU Radio Regulations.

Figure 1 below illustrates the X-band downlink PFD values in comparison with the ITU PFD limits in No. 21.16. This figure represents the maximum transmitted EIRP when the satellite is at the lowest expected operational orbital altitude of 425 km.

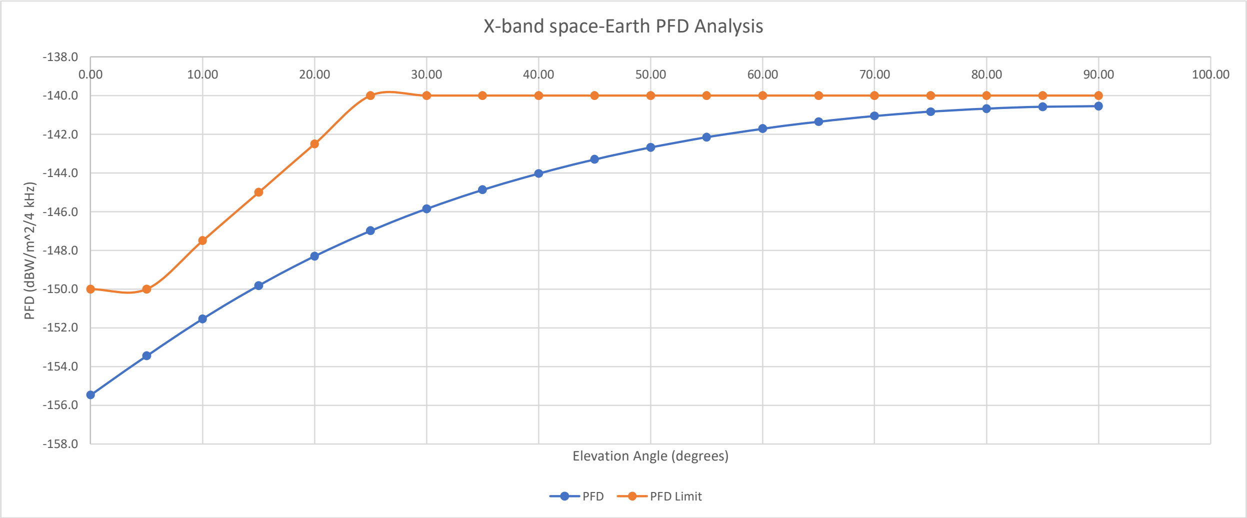

Figure 1 X-band Downlink PFD Analysis

B. 8400-8500 MHz

PFD at the surface of the Earth in the 8400-8450 MHz band ITU-R Recommendation SA-1157 specifies a maximum allowable interference power spectral flux-density level at the earth's surface of -221 dB(W/Hz) to protect ground receivers in the deep-space research band operating in the 8400-8450 MHz frequencies.[3] Loft Orbital uses a combination of baseband digital filtering and hardware radio frequency filtering to achieve the ITU recommended protection for its out-of-band emissions in this frequency band.

13. S-band Interference Analysis

2400-2483.5 MHz Frequency Band

The YAM-5 satellite will transmit in this band via a near-omni antenna with a maximum EIRP of 7 dBW in a channel bandwidth of 500 kHz. At an orbit altitude of 525 km, this results in interference levels that are as high as 21 dB below the received noise power for a typical Wifi receiver with 0 dBi gain towards Zenith and a noise figure of 2 dB. This maximum aggregate interference power drops down to ~ 40 dB below the noise floor at the edge of coverage. Since the aggregate interference into a Wifi device peaks at -21 dB I/N, it causes no harmful interference.

The combined operations of the S-band IOT payloads from both YAM-3 and YAM-5 will be operational within line of sight of any point on the ground no more than 1.33 hour / day, in a TDD configuration. For a Bluetooth device, employing frequency hopped spread spectrum (FHSS), the maximum interference from the S-band IOT payload would be ~9 dB below the noise floor and only effect up to 1of 79 FHSS channels at a time. This results in a maximum increase of the noise floor by ~12%, an increase of the noise floor by 6% only 0.001% of the time and any measurable interference only 0.07% of the time. It is important to note that the Bluetooth air-interface protocol is designed to operate in heavily interference-limited environments where each additional operating Bluetooth device causes ~1.5% packet error rate

[3] *See* Recommendation ITU-R SA.1157-1 (Protection criteria for deep-space research) (2006).

(PER). In comparison with the interference environment typical of the ISM band[4], the added interference from the YAM-5 payload is effectively immeasurable.

It should also be noted that most wireless devices operating in unlicensed spectrum do so in an indoor environment where an additional 5-40 dB of RF isolation can be expected. In the case of outdoor point-point links operating in the 2.4 GHz unlicensed ISM band, these links would typically employ directional antennas operating at low elevation angle with minimal directivity towards Zenith.[5]

14. Satellite Antennas

S-band uplink employs a patch receive antenna. An antenna pattern cut for the antenna in the vicinity of the planned uplink carriers, 2072 MHz, is shown in Figure 2. The peak uplink antenna gain is 6 dBi towards Nadir. The S-band uplink beam is effectively steerable via body steering of the YAM-5 satellite. This beam can be steered to a minimum elevation angle of 5 degrees anywhere within the satellite footprint. The X-band downlink antenna is a fixed-steering patch array with maximum gain of 16.2 dBi. The antenna pattern for the downlink X-band antenna is illustrated in Figure 3 and a projection of the X-band downlink antenna pattern, pointed towards Nadir, is illustrated in Figure 4. The X-band downlink beam is effectively steerable via body steering of the YAM-5 satellite. This beam can be steered to a minimum elevation angle of 5 degrees anywhere within the satellite footprint.

The antenna pattern for the reception of the L-band data signals from Inmarsat satellites is illustrated in Figure 5. The L-band data signal RX beam is Zenith pointing and has a maximum gain of 5.0 dBi and a 3dB beamwidth of 80 degrees.

The UHF uplink and downlink TT&C links employ a whip antenna on the satellite with maximum transmit gain of 4.1 dBiL at 401 MHz and maximum receive gain of 4.4 dBiL at 450 MHz. The UHF TT&C antenna patterns are illustrated in Figure 6.

The S-band IOT payload uses a common patch antenna for both transmit and receive signals in the 2400-2483.5 MHz band. The maximum antenna gain is 7 dBi and the antenna pattern is illustrated in Figure 7.

The Y5-PDP S-band experimental payload uses a common patch antenna for both transmit and receive signals in the 2067-2110 MHz and 2240-2290 MHz bands. The maximum TX antenna gain is 7.4 dBiC, the maximum RX antenna gain is 6.9 dBiC and the antenna pattern is illustrated in Figure 8.

The antenna projections provided in the accompanying Schedule S reflect the beam projection towards Nadir from a NGSO satellite with an orbital altitude of 525 km. Due to limitations in the ITU GIMS software, the beam projections provided are GSO footprints. This approach was taken in order to provide actual GXT contours rather than just images of projected contours which is the only available option for NGSO systems.

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[4] The nominal interference of co-located Part 15 compliant devices (Wifi, Bluetooth, LoRa, etc.) operating in the 2.4 GHz ISB band is orders of magnitude greater than the interference from the YAM-5 payload.

[5] PFD Analysis of this S-band IOT payload shows that it is safely below the PFD limits provided in ITU-R SA.1273 for protection of FS services in 2025-2110MHz and 2200-2290 MHz. Furthermore, the calculated PFD is below the PFD limits from Article 21 for the band 2500-2690 MHz.

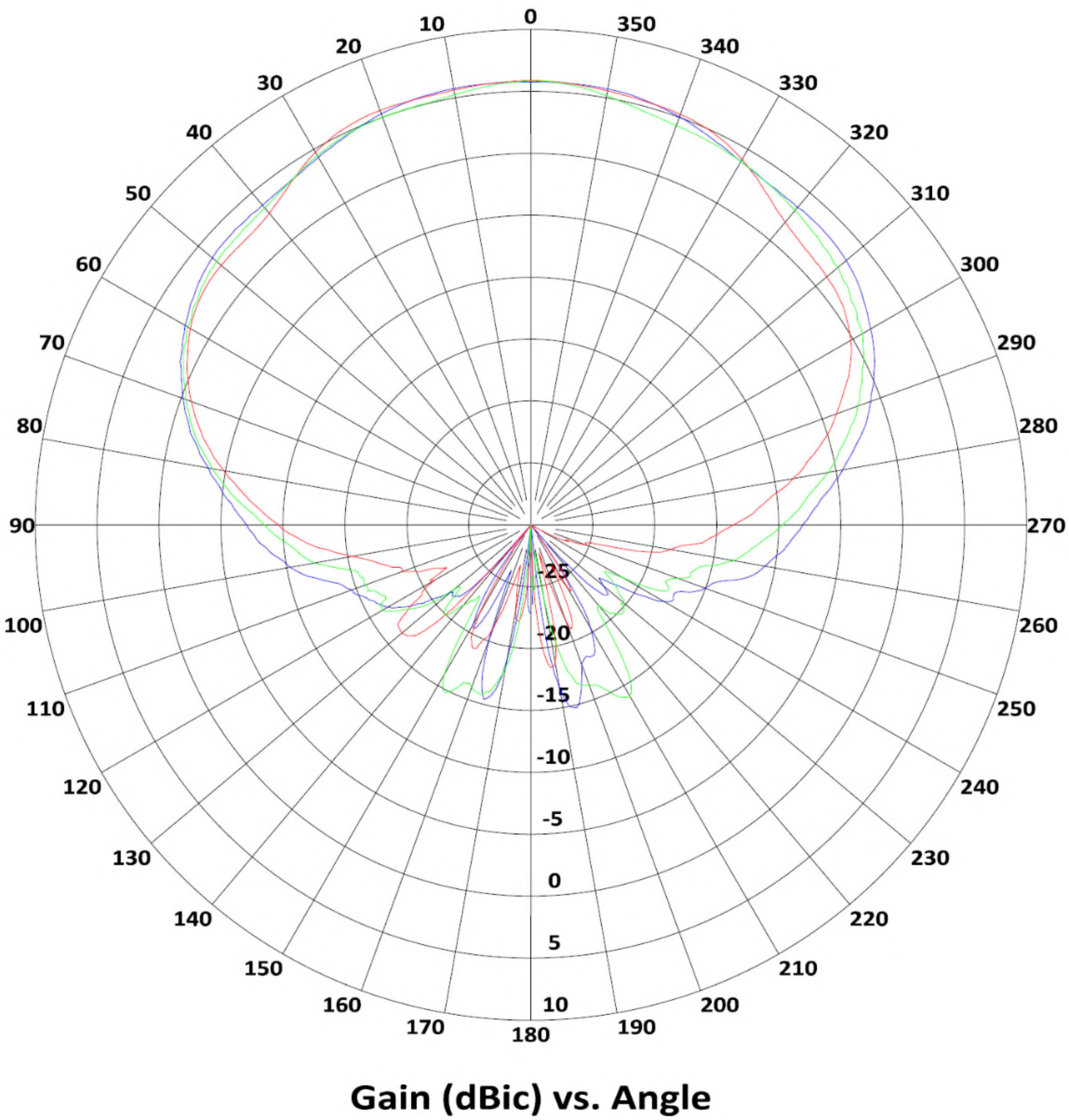

Figure 2 S-band Uplink TT&C (SRX) - Antenna Pattern

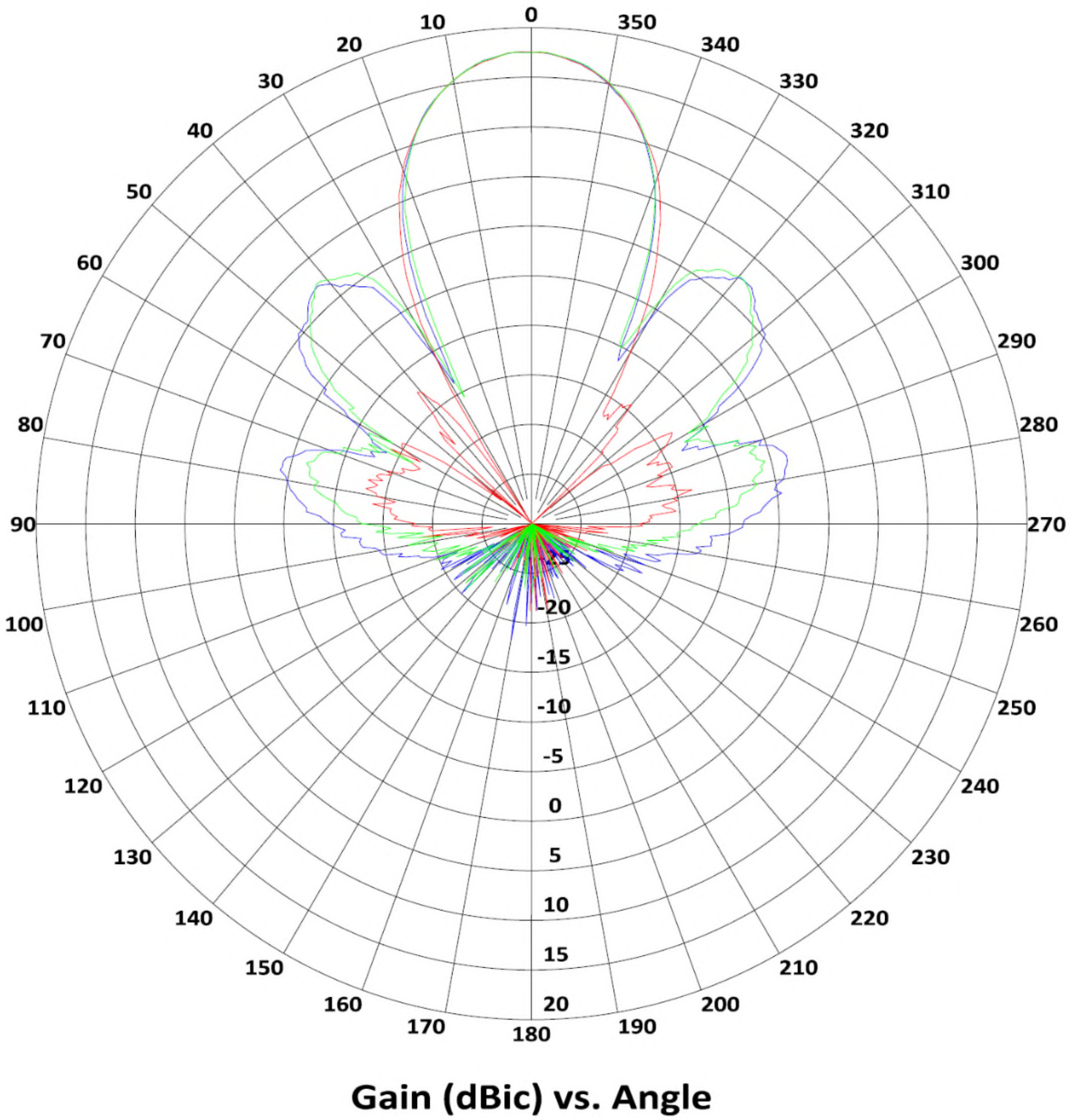

Figure 3 X-band Downlink Mission Data - Antenna Pattern

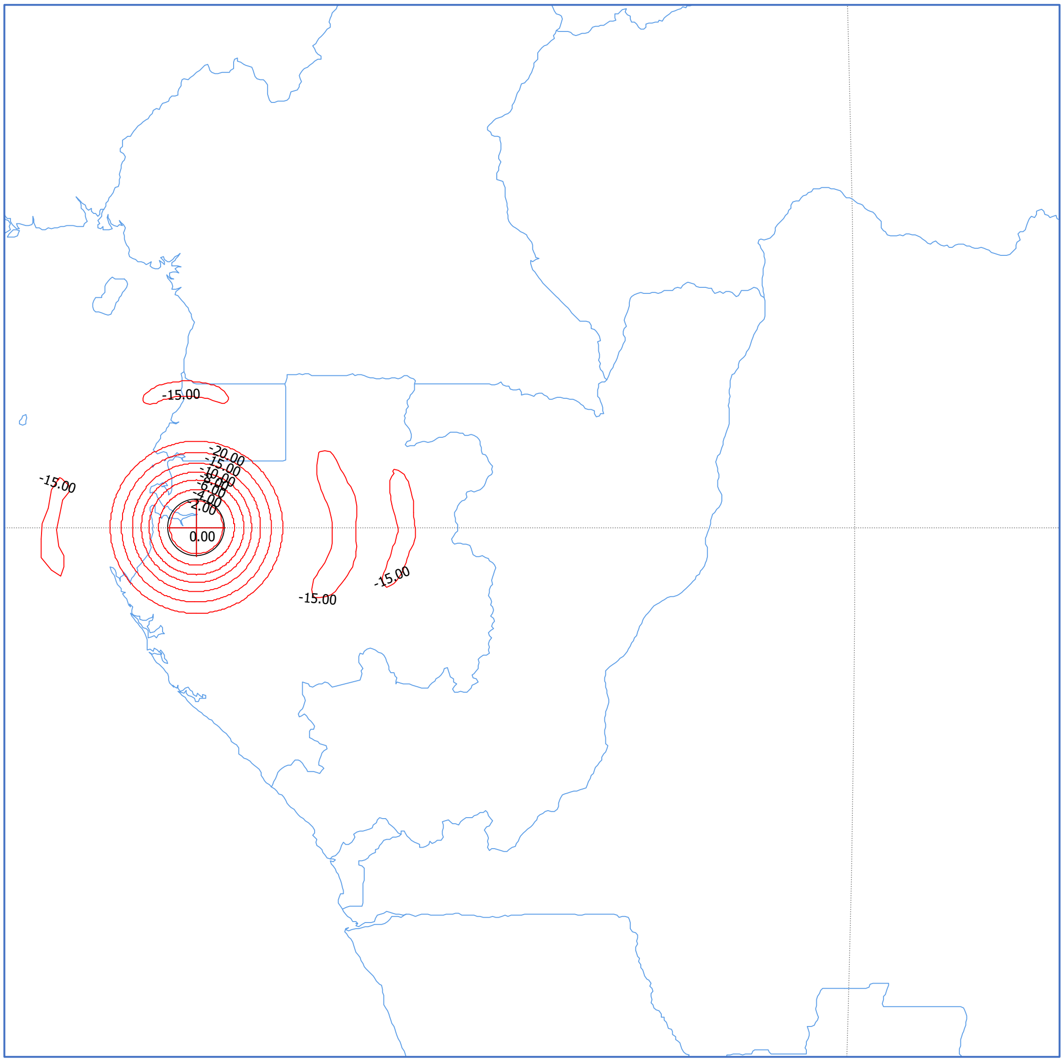

Figure 4 Projection of Nadir X-band Downlink Beam (XTX) over the West Coast of Africa

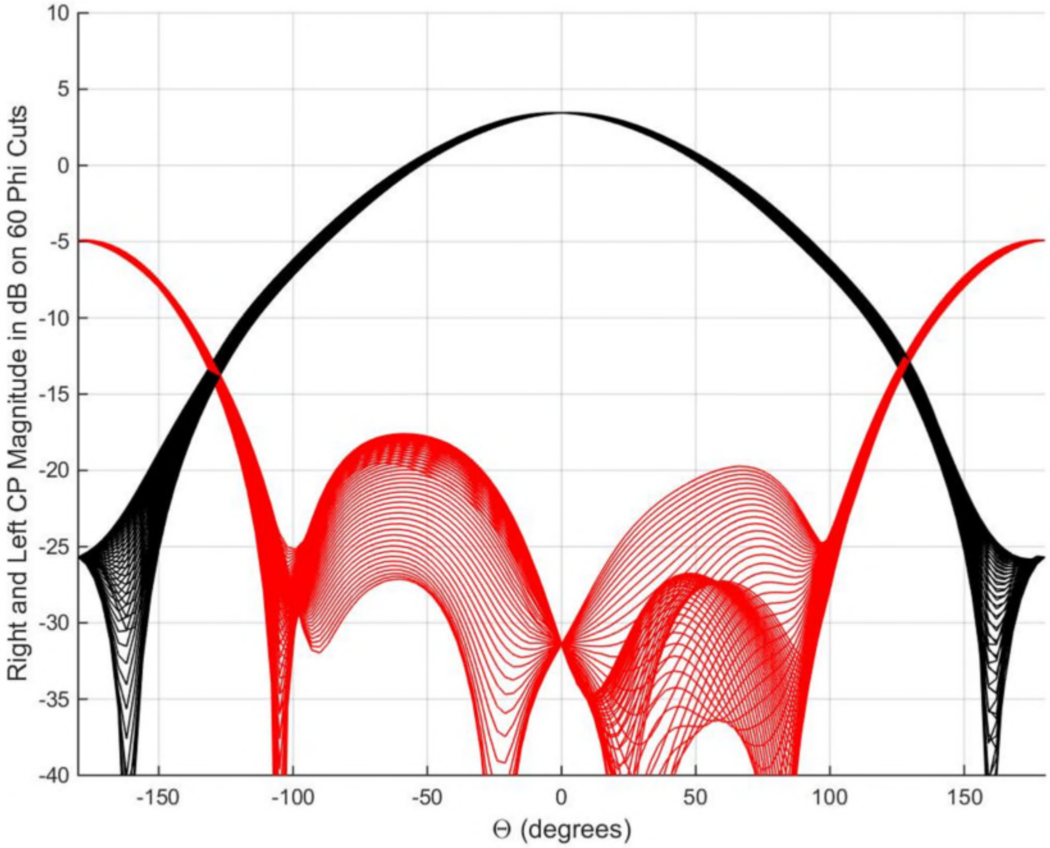

Figure 5 Inmarsat Antenna (IRX) – L-band Receive Pattern

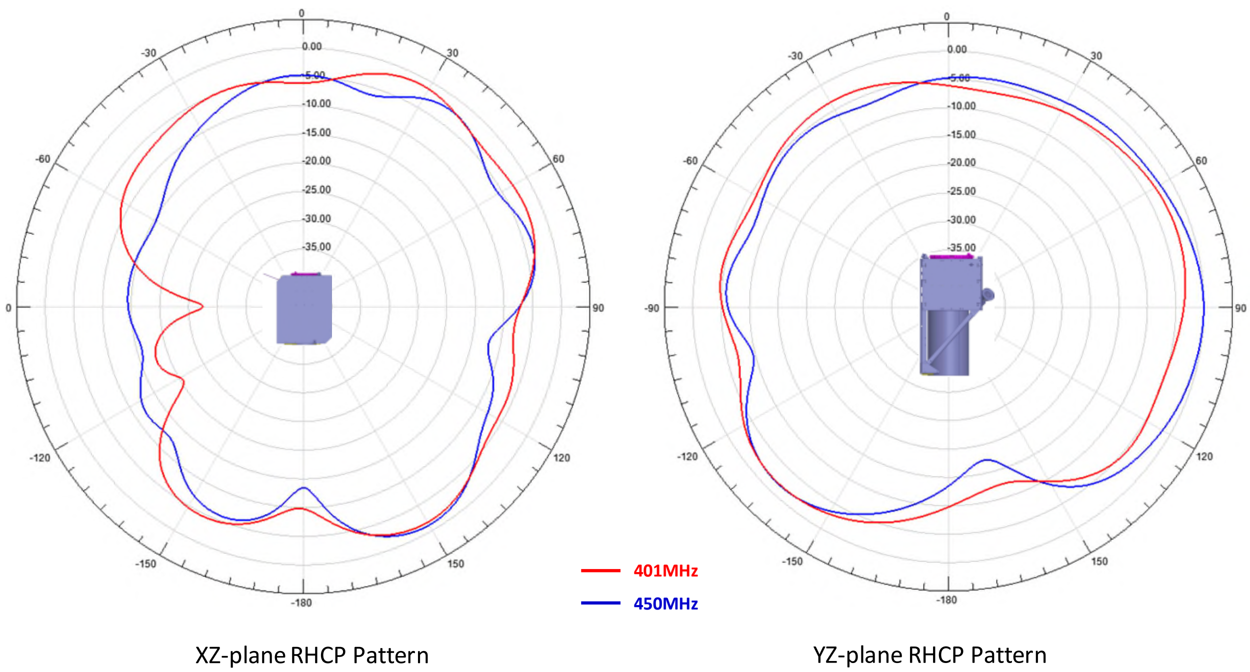

Figure 6 UHF TT&C Uplink (450 MHz) and Downlink (401 MHz) Satellite Antenna Patterns

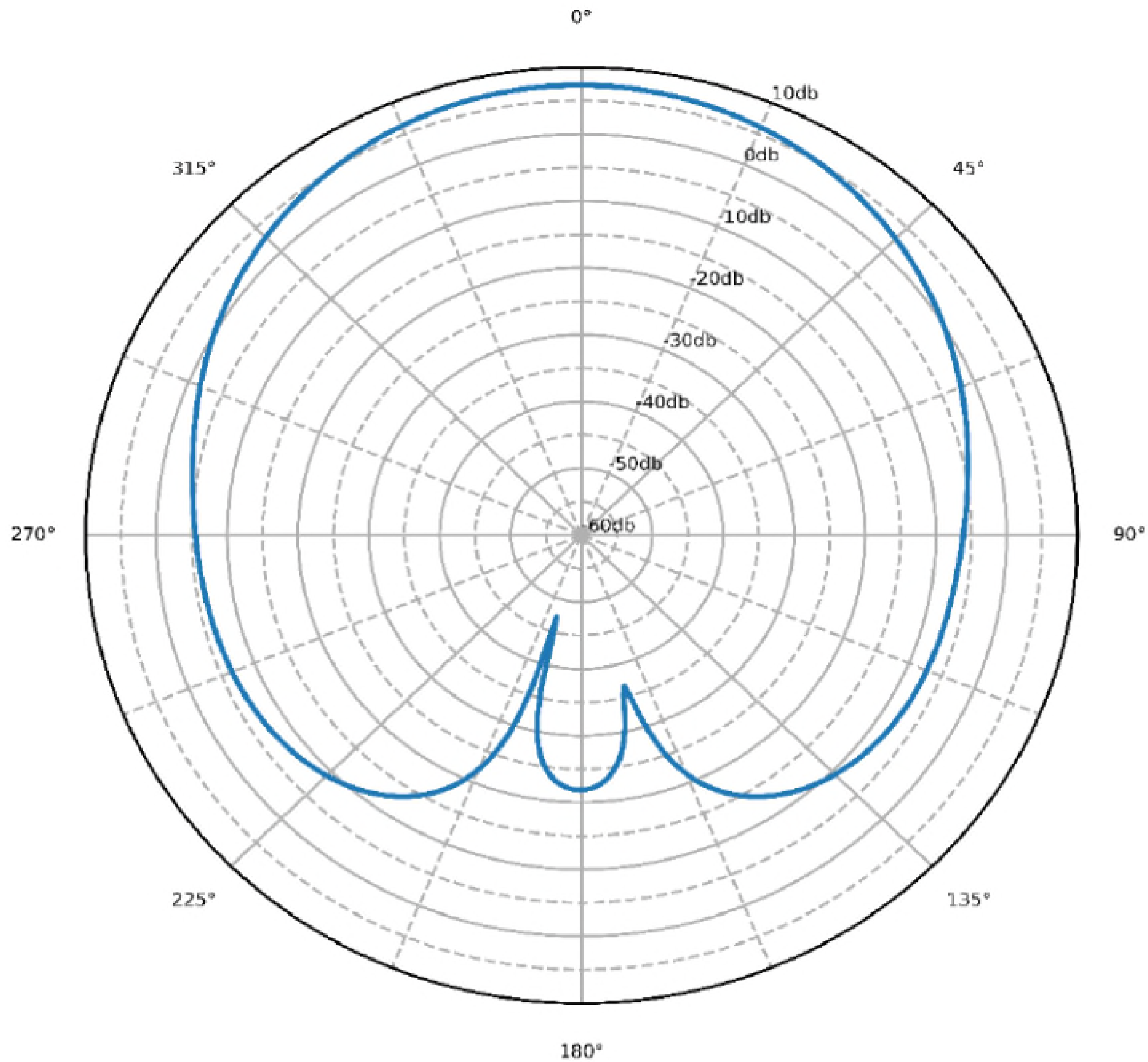

Figure 7 S-Band IOT Payload Uplink / Downlink Satellite Antenna Pattern

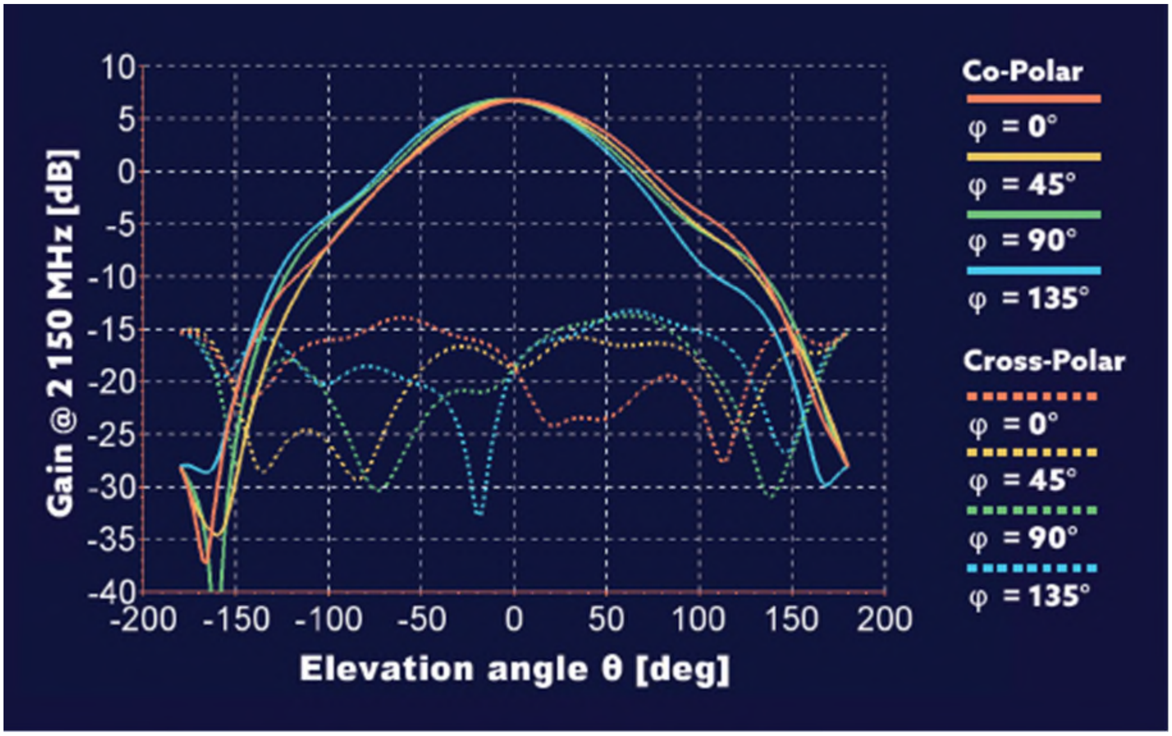

Figure 8 S-Band Y5-PDP Payload Uplink / Downlink Satellite Antenna Pattern

15. Earth Stations

The YAM-5 satellite will rely upon the KSAT Lite network of 3.7m Earth Stations for S-band uplink TT&C communications and X-band downlink payload communications services. The characteristics of the KSAT Lite network of 3.7m antennas is summarized in Table 12 below. The characteristics of the ATLAS network of UHF antennas is summarized in Table 13 below.

Table 12 KSAT Antenna Characteristics

	S-band (RX)	S-band (TX)	X-band (RX)
Reflector Size	3.7m	3.7m	3.7m
Downlink Band	NA	2240-2290 MHz	8025-8400 MHz
G/T (20-deg elevation)	NA	11.7 dB/K	26.5 dB/K
Polarization	LHCP/RHCP	LHCP/RHCP	LHCP/RHCP
Uplink Band	2025-2110 MHz	NA	NA
EIRP	44.8 dBW	NA	NA

Table 13 ATLAS UHF Antenna Characteristics

	UHF-band (RX)	UHF-band (TX)
Downlink Band	NA	400.15-402.0 MHz
G/T (20-deg elevation)	NA	-13.2 dB/K
Polarization	Linear	Linear
Uplink Band	449.75-450.25 MHz	NA
EIRP	24.4 dBW	NA

Loft Orbital will be using six ground stations in the KSAT Lite network, SvalSat, TrollSat, Punta Arenas, Hartebeesthoek, Brostadbotn and Awarua:

Table 14 KSAT Earth Station Locations Supporting the YAM-5 Satellite

Name	Type	Country	Coordinates
Svalbard	S band (uplink, downlink) X band (downlink)	Norway	78.2298° N, 15.3965° E
Troll	S band (uplink, downlink) X band (downlink)	Antarctica	72.0167° S, 2.5333° E
Punta Arenas	S band (uplink, downlink) X band (downlink)	Chile	53.0° S, 70.0° W
Hartebeesthoek	S band (uplink, downlink) X band (downlink)	South Africa	25.8° S, 27.7° E
Awarua	S band (uplink, downlink) X band (downlink)	New Zealand	46.5° S, 168.4° E
Brostadbotn	UHF (downlink)	Norway	69.0° N, 17.6° E

The YAM-5 satellite will rely upon the ATLAS network in Harmon, Guam for UHF uplink and downlink TT&C communications and Awarua, New Zealand for backup S-band and X-band support.

Table 15 ATLAS Earth Station Locations Supporting the YAM-5 Satellite

Name	Type	Country	Coordinates
Harmon	UHF (uplink) UHF (downlink)	Guam	13.51° N, 144.82° W
Awarua	S band (uplink, downlink) X band (downlink)	New Zealand	46.53° S, 168.38° E

16. Orbital Debris Risk Mitigation Plan

Loft Orbital confirms that the YAM-5 satellite will not undergo any planned release of debris during their normal operations.[6] In addition, all separation and deployment mechanisms, and any other potential source of debris, will be retained by the spacecraft. Loft Orbital has also assessed the probability of the space station becoming a source of debris by collision with small debris or meteoroids of less than one centimeter in diameter that could cause loss of control and prevent post-mission disposal. Loft Orbital has taken steps to limit the effects of such collisions through shielding, the placement of components, and the use of redundant systems.

Loft Orbital has assessed and limited the probability of accidental explosions during and after completion of mission operations through a failure-mode verification analysis.[7] As part of the satellite manufacturing process, Loft Orbital has taken steps to ensure that debris generation will not result from the conversion of energy sources on board the satellite into energy that fragments the satellite. All sources of stored energy onboard the spacecraft will have been depleted or safely contained when no longer required for mission operations or post-mission disposal.

[6] See 47 C.F.R. § 25.114(d)(14)(i).
[7] *See* 47 C.F.R. § 25.114(d)(14)(ii).

Loft Orbital has assessed and limited the probability of the space station becoming a source of debris by collisions with large debris or other operational spacecraft.[8] Loft Orbital will work closely with its launch providers to ensure that the satellite is deployed in such a way as to minimize the potential for in-plane collision. This specifically includes minimizing the potential for collision with crewed spacecraft.

Loft Orbital participates in a sharing agreement with the Combined Space Operations Center ("CSpOC") to better coordinate collision avoidance measures and receive conjunction threat reports. YAM-5 will carry onboard GPS receivers that provide for precise orbital position determination. Loft Orbital also receives from CSpOC updated two-line element sets, or "TLEs," which facilitate the identification and tracking of YAM-5. CSpOC will be able to reach Loft Orbital's satellite operations team that is accessible twenty-four hours per day/seven days per week to ensure that Loft Orbital can take immediate action to coordinate collision avoidance measures.

The YAM-5 satellite will not maintain its inclination angle, apogee, perigee, and right ascension of the ascending node to any specified degrees of accuracy.

Loft Orbital's detailed Orbital Debris Assessment Report is attached as Exhibit C.[9] The disclosure of the orbital deployment parameters, orbital plane inclination, and the orbital period to be used can assist third parties in identifying potential problems. This information also lends itself to coordination between Loft Orbital and other operators located in similar orbits.

[8] *See* 47 C.F.R. § 25.114(d)(14)(iii).
[9] *See* 47 C.F.R. § 25.114(d)(14)(iv).

CERTIFICATION OF PERSON RESPONSIBLE FOR PREPARING ENGINEERING INFORMATION

I hereby certify that I am the technically qualified person responsible for preparation of the engineering information contained in this application, that I am familiar with Part 25 of the Commission's rules, that I have either prepared or reviewed the engineering information submitted in this application and that it is complete and accurate to the best of my knowledge and belief.

/s/

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Date: June 6, 2022