



UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
RADIO STATION AUTHORIZATION

Kuiper Systems LLC

Call Sign: E210299

Authorization Type: License
Non Common Carrier

File Number: SES-LIC-20210730-01290

Grant date:

Expiration Date:

Nature of Service: Fixed Satellite Service
Nature of Service: Mobile Satellite Service

Class of Station: Fixed Earth Stations

A) Site Location(s)

#	Site ID	Address	Latitude	Longitude	Elevation (Meters)	Special Provisions NAD (Refer to Section H)
1)	Kapolei, HI Gateway	Kapolei, Honolulu, HI	21°20'9.2"N	158°5'20.8"W	34.94	83

Subject to the provisions of the Communications Act of 1934, The Communications Satellite Act of 1962, subsequent acts and treaties, and all present and future regulations made by this Commission, and further subject to the conditions and requirements set forth in this license, the grantee is authorized to construct, use and operate the radio facilities described below for radio communications for the term beginning 00/00/0000 and ending 00/00/0000. The required date of completion of construction and commencement of operation is 00/00/0000. Grantee must file with the Commission a certification upon completion of construction and commencement of operation.

B) Particulars of Operations

The General Provision 1010 applies to all receiving frequency bands.

The General Provision 1900 applies to all transmitting frequency bands.

For the text of these provisions, refer to Section H.

#	Frequency (MHz)	Polarization Code	Emission	Tx/Rx Mode	Max EIRP /Carrier (dBW)	Max EIRP Density /Carrier (dBW/4kHz)	Associated Antenna	Special Provisions (Refer to Section H)	Modulation/ Services
1)	27500.0000-30000.0000	L,R	500MG7D	Tx	63.80	12.83	AMZN-2.4M		BPSK up to 512QAM; Digital Data
2)	27500.0000-30000.0000	L,R	50M0G7D	Tx	53.80	12.83	AMZN-2.4M		BPSK up to 512QAM; Digital Data
3)	18800.0000-20200.0000	L,R	100MG7D	Rx			AMZN-2.4M		BPSK up to 64 QAM; Digital Data
4)	18800.0000-20200.0000	L,R	500MG7D	Rx			AMZN-2.4M		BPSK up to 64 QAM; Digital Data
5)	17800.0000-18600.0000	L,R	100MG7D	Rx			AMZN-2.4M		BPSK up to 64 QAM; Digital Data
6)	17800.0000-18600.0000	L,R	500MG7D	Rx			AMZN-2.4M		BPSK up to 64 QAM; Digital Data



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C) Frequency Coordination Limits

#	Frequency Limits (MHz)	Satellite Arc (Deg. Long.)		Elevation (Degrees)		Azimuth (Degrees)		Max EIRP Density toward Horizon (dBW/4kHz)	Associated Antenna(s)
		East Limit	West Limit	East Limit	West Limit	East Limit	West Limit		
1)	27500.0000-30000.0000	NGSO		20.0-20.0		000.0-360.0		-57.979	AMZN-2.4M
2)	18800.0000-20200.0000	NGSO		20.0-20.0		000.0-360.0			AMZN-2.4M
3)	17800.0000-18600.0000	NGSO		20.0-20.0		000.0-360.0			AMZN-2.4M

D) Points of Communications

The following stations located in the Satellite orbits consistent with Sections B and C of this Entry:

1) Kapolei, HI Gateway to Kuiper NGSO Satellites (S3051)

E) Antenna Facilities

Site ID	Antenna ID	Units	Diameter (meters)	Manufacturer	Model number	Site Elevation (Meters)	Max Antenna Height (Meters)	Special Provisions (Refer to Section H)
Kapolei, HI Gateway	AMZN-2.4M	6	2.4	Kuiper	24001	34.94	4 AGL/ 38.94 AMSL	
Max Gains(s): 49.0 dBi @ 17.8000 GHz 53.8 dBi @ 27.5000 GHz								
Maximum total input power at antenna flange (Watts) =					100.00			
Maximum aggregate output EIRP for all carriers (dBW) =					73.80			

F) Remote Control Point:

Kapolei, HI 18460 NE 76th Street
Gateway

Call Sign:

Redmond, King, WA 98052
206-646-2992

G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions



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H) Special and General Provisions

A) This RADIO STATION AUTHORIZATION is granted subject to the following special provisions and general conditions:

- 4 --- Licensee must ensure that a current listing of the name, title, mailing address, email address, and telephone number of the responsible point of contact are on file at the FCC. Any changes must be filed electronically in the International Communications Filing System (ICFS) using the "Pleadings and Comments" link on the ICFS homepage within 10 days of the change.
- 8 --- Licensee must notify the Commission when all earth stations under this authorization are no longer operational or when they have not been used to provide service during any continuous six-month period.
- 22 --- The values for the "Max EIRP Density toward the Horizon" specified in Section C of this license reflect the maximum aggregate EIRP density toward the Horizon for all antennas at the site.
- 55470 --- Grant of operations in the 27.5-28.35 GHz frequency band is based on the applicant's calculation of the aggregate population affected by all earth stations in the relevant market area, under 47 CFR §25.136(a)(4)(ii), using the "actual area method." The estimated population affected by this earth station was determined to be 0 persons, out of a maximum of 953 persons allowed to be affected in Honolulu County, Hawaii.
- 90491 --- Operations in the 27.5-28.35 GHz (Earth-to-space) frequency band are authorized based on a demonstration of compliance with 47 CFR § 25.136(a)(4). Consequently, this earth station may operate without providing any additional interference protection to stations in the Upper Microwave Flexible Use Service (UMFUS) in the 27.5-28.35 GHz frequency band.
- 90530 --- The earth station licensee is required to take corrective action to mitigate interference in the 27.5-28.35 GHz frequency band if the actual PFD, at ten meters above ground level, exceeds -77.6 dBm/m2/MHz anywhere outside the contour specified in the application.
- 90573 --- To the extent that the actual gain pattern of the antenna ultimately deployed by the licensee exceeds the antenna mask used in the calculation of the PFD contour, the contour resulting from the actual antenna pattern must continue to meet all of the criteria specified in 47 CFR § 25.136(a)(4)(i-iv).
- 90623 --- Operations in the 17.8-18.3 GHz frequency band are on a secondary basis to the Fixed Service (FS). Licensee must accept any interference from existing and future FS transmissions in the 17.8-18.3 GHz frequency band.
- 90900 --- Grant of the instant application is subject to the terms and condition of all associated current or future space station authorization(s) or grant(s) of market access. Operations pursuant to the instant authorization must be consistent with the associated space station(s) authorizations(s) or grant(s) of market access.



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B) This RADIO STATION AUTHORIZATION is granted subject to the additional conditions specified below:

This authorization is issued on the grantee's representation that the statements contained in the application are true and that the undertakings described will be carried out in good faith.

This authorization shall not be construed in any manner as a finding by the Commission on the question of marking or lighting of the antenna system should future conditions require. The grantee expressly agrees to install such marking or lighting as the Commission may require under the provisions of Section 303(q) of the Communications Act. 47 U.S.C. § 303(q).

Neither this authorization nor the right granted by this authorization shall be assigned or otherwise transferred to any person, firm, company or corporation without the written consent of the Commission. This authorization is subject to the right of use or control by the government of the United States conferred by Section 706 of the Communications Act. 47 U.S.C. § 706. Operation of this station is governed by Part 25 of the Commission's Rules. 47 C.F.R. Part 25.

This authorization shall not vest in the licensee any right to operate this station nor any right in the use of the designated frequencies beyond the term of this license, nor in any other manner than authorized herein.

This authorization is issued on the grantee's representation that the station is in compliance with environmental requirements set forth in Section 1.1307 of the Commission's Rules. 47 C.F.R. § 1.1307.

This authorization is issued on the grantee's representation that the station is in compliance with the Federal Aviation Administration (FAA) requirements as set forth in Section 17.4 of the Commission's Rules. 47 C.F.R. § 17.4.

The following condition applies when this authorization permits construction of or modifies the construction permit of a radio station.

This authorization shall be automatically forfeited if the station does not meet each required construction deadline by the required date of completion unless, before such date(s), a specific application is timely filed to request an extension of the construction deadline(s), supported with good cause why that failure to construct by the required date was due to factors not under control of the grantee.

Licensees are required to pay annual regulatory fees related to this authorization. The requirement to collect annual regulatory fees from regulatees is contained in Public Law 103-66, "The Omnibus Budget Reconciliation Act of 1993." These regulatory fees, which are likely to change each fiscal year, are used to offset costs associated with the Commission's enforcement, public service, international and policy and rulemaking activities. The Commission issues a Report and Order each year, setting the new regulatory fee rates. Receive only earth stations are exempt from payment of regulatory fees.