



UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

RADIO STATION AUTHORIZATION

Name: DISH Broadcasting Corporation

Call Sign: E950288

Authorization Type: Renewal of License

File Number: SES-RWL-20200916-01025

Non Common Carrier

Grant date: 10/30/2020

Expiration Date: 10/27/2035

Nature of Service: Direct Broadcast Satellite Service
Nature of Service: Feeder Link for DBS in Fixed Satellite Service
Nature of Service: Other

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)	T3 and T4	530 ECHOSTAR DRIVE CHEYENNE, LARAMIE, WY 82007	41°7'56.0"N	104°44'9.0"W	1808.4	27

Licensee certifies antenna(s) comply with gain patterns specified in Section 25.209

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 October 27, 2020 (3 AM Eastern Standard Time) and ending October 27, 2035 (3 AM Eastern Standard Time). 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)	17798.4820-17798.5180	R	36K0G2D	Tx	63.00	53.46	1		BPSK IDENTIFICATION CODE
2)	17790.0000-17800.0000	H, V, L, R	800KG2D	Tx	84.67	61.66	1		TT&C
3)	17790.0000-17800.0000	L, R	1M50G2D	Tx	87.40	61.66	1		COMMAND BEACON (TT&C)
4)	17310.0000-17790.0000	L, R	24M0G7W	Tx	87.40	49.62	1		DIGITAL VIDEO ANDDATA
5)	17308.2500-17308.7500	L, R	1M50G2D	Tx	87.40	61.66	1		COMMAND BEACON (TT&C)
6)	17300.0000-17800.0000	L, R	24M0M1F	Tx	87.40	49.62	1		DIGITAL, COMPRESSED VIDEO
7)	17300.0000-17310.0000	H, V, L, R	800KG2D	Tx	84.67	61.66	1		TT&C
8)	17300.0000-17310.0000	L, R	1M50G2D	Tx	87.40	61.66	1		COMMAND BEACON (TT&C)



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9)	12698.3500-12698.6500	H, V	300KG2D	Rx			1		TELEMETRY & TRACKING BEACON (TT&C)
10)	12690.0000-12700.0000	H, V, L, R	800KG2D	Rx			1		TT&C
11)	12690.0000-12700.0000	H, V	300KG2D	Rx			1		TELEMETRY & TRACKING BEACON (TT&C)
12)	12210.0000-12690.0000	L, R	24M0G7W	Rx			1		DIGITAL VIDEO AND DATA
13)	12202.3500-12202.6500	H, V	300KG2D	Rx			1		TELEMETRY & TRACKING BEACON (TT&C)
14)	12200.3500-12200.6500	H, V	300KG2D	Rx			1		TELEMETRY & TRACKING BEACON (TT&C)
15)	12200.0000-12700.0000	L, R	24M0M1F	Rx			1		DIGITAL, COMPRESSED VIDEO
16)	12200.0000-12210.0000	H, V, L, R	800KG2D	Rx			1		TT&C
17)	12200.0000-12210.0000	H, V	300KG2D	Rx			1		TELEMETRY & TRACKING BEACON (TT&C)

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)	17300.0000-17800.0000	110.0W	119.0W	42.2	40.3	188.0	201.1	-4.9	1
2)	12200.0000-12700.0000	110.0W	119.0W	42.2	40.3	188.0	201.1		1
3)	17308.2500-17308.7500	34.0W	176.0W	05.7	05.3	102.9	257.4	12.77	1
4)	12200.3500-12200.6500	34.0W	176.0W	05.7	05.3	102.9	257.4		1
5)	12202.3500-12202.6500	34.0W	176.0W	05.7	05.3	102.9	257.4		1
6)	12698.3500-12698.6500	34.0W	176.0W	05.7	05.3	102.9	257.4		1
7)	12200.0000-12210.0000	34.0W	176.0W	05.7	05.3	102.9	257.4		1
8)	12200.0000-12700.0000	34.0W	176.0W	05.7	05.3	102.9	257.4		1
9)	12690.0000-12700.0000	34.0W	176.0W	05.7	05.3	102.9	257.4		1
10)	17300.0000-17310.0000	34.0W	176.0W	05.7	05.3	102.9	257.4	12.8	1
11)	17300.0000-17800.0000	34.0W	176.0W	05.7	05.3	102.9	257.4	-4.9	1
12)	17790.0000-17800.0000	34.0W	176.0W	05.7	05.3	102.9	257.4	12.8	1



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		East Limit	West Limit	East Limit	West Limit	East Limit	West Limit		
13)	12200.0000-12210.0000	34.0W	-176.0W	05.7	-05.3	102.9	-257.4		1
14)	12690.0000-12700.0000	34.0W	-176.0W	05.7	-05.3	102.9	-257.4		1
15)	17300.0000-17310.0000	34.0W	-176.0W	05.7	-05.3	102.9	-257.4	12.8	1
16)	17790.0000-17800.0000	34.0W	-176.0W	05.7	-05.3	102.9	-257.4	12.8	1
17)	12210.0000-12690.0000	34.0W	-176.0W	05.7	-05.3	102.9	-257.4		1
18)	17310.0000-17790.0000	34.0W	-176.0W	05.7	-05.3	102.9	-257.4	12.8	1
19)	17798.4820-17798.5180	34.0W	-176.0W	05.7	-05.3	102.9	-257.4	12.8	1

D) Points of Communications

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

- 1) T3 and T4 to ECHOSTAR 14 @ 118.9 degrees W.L. (of the Direct Broadcast satellite system (U.S.-licensed))
- 2) T3 and T4 to ECHOSTAR 10 @ 110.2 degrees W.L. (S2694) of the Direct Broadcast satellite system (U.S.-licensed)
- 3) T3 and T4 to CIEL 2 satellite @ 128.85 degrees W.L. (CANADIAN-licensed satellite)
- 4) T3 and T4 to ECHOSTAR 11 @ 110 degrees W.L. satellite (U.S.-licensed)
- 5) T3 and T4 to US LICENSED Echostar and Dish satellites at 61.5, 110, and 119 WL clusters

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)
T3 and T4	1	2	13.2	TIW	LMATT 13.2 KU	1808.4	14.1 AGL/ 1822.5 AMSL	
Max Gains(s):		62.0 dBi @	12.0000 GHz	65.0 dBi @	18.0000 GHz			
Maximum total input power at antenna flange (Watts) =					1,400.00			
Maximum aggregate output EIRP for all carriers (dBW) =					96.40			

F) Remote Control Point:

T3 and T4

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G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions



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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.