

RADIO STATION AUTHORIZATION

Name: AT&T Corp.Call Sign: WA33Authorization Type: Modification of LicenseFile Number: SES-MOD-20181017-03677Common CarrierGrant date: 08/04/2020Expiration Date: 06/04/2034

Nature of Service: Fixed 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) 1	311 EARTH STATION ROAD CATAWISSA, COLUMBIA, PA 17820		76°26'20.6"W	295.96	83

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 June 4, 2019 (3 AM Eastern Standard Time) and ending June 4, 2034 (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)	Polarizatio Code	n 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) 585	0.0000-6425.0000	L,R	18M0F8W-	Tx	85.40	61.40	RC1		TV
2)585	0.0000-6425.0000	L,R	36M0F8W	Tx	85.40	61.40	RC1		TV
3)585	0.0000-6425.0000	L,R	1M13F8W-	Tx	71.70	50.10	RC1		FDM/FM
4)585	0.0000-6425.0000	L,R	30M7G7W	Tx	77.00	38.20	RC1		TCS-1 CABLE Restoratio
5)585	0.0000-6425.0000	L,R	66M8G7W	Tx	81.20	39.00	RC1		TAT-8/9 CABLE Restorat
6)585	0.0000-6425.0000	L,R	72M0G7W	Tx	84.80	42.20	RC1		TDMA
7)585	0.0000-6425.0000	L,R	307KG7W	Tx	55.70	36.90	RC1		TDMA
8)585	0.0000-6425.0000	L,R	614KG7W	Tx	55.70	33.80	RC1		TDMA
9)585	0.0000-6425.0000	L,R	1M23G7W	Тx	55.70	30.80	RC1		TDMA

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#	Frequency (MHz)	Polarization Code	n Emission	Tx/Rx Mode	EIRP /Carrier (dBW)	Density /Carrier (dBW/4kHz)	Associated Antenna	Provisions (Refer to Section H)	Modulation/ Services		
10) 5	5850.0000-6425.0000	L,R	38K4G7W	Tx	66.50	56.70	RC1		SCPC		
11) 5	5850.0000-6425.0000	L,R	54K6G7W-	Tx	67.50	56.10	RC1		IDR		
12) 5	5850.0000-6425.0000	L,R	6M84G7W	Tx	85.90	53.60	RC1		IDR		
13) 5	5850.0000-6425.0000	L,R	81K9G7W-	Tx	68.00	54.90	RC1		IBS		
14) 5	5850.0000-6425.0000	L,R	11M2G7W	Tx	88.60	54.10	RC1		IBS		
15) 5	5850.0000-6425.0000	L,R	54K6G7W-	Tx	69.60	58.20	RC1		IBS		
16) 5	5850.0000-6425.0000	L,R	7M44G7W	Tx	90.10	57.40	RC1		IBS		
17) 3	3625.0000-4200.0000	L,R		Rx			RC1		TV, FDM/FM, Restoration, IDR, IBS	TCS-1 TDMA,	CABLE SCPC,
18) 5	5850.0000-6425.0000	H,V,L,R	72M0G7W	Tx	82.58	40.03	11.1		DIGITAL DATA		
19) 5	5850.0000-6425.0000	H,V,L,R	54K6G7W	Tx	64.25	52.90	11.1		DIGITAL DATA		
20) 3	3625.0000-4200.0000	H,V,L,R	72M0G7W	Rx			11.1		DIGITAL DATA		
21) 3	3625.0000-4200.0000	H,V,L,R	54K6G7W	Rx			11.1		DIGITAL DATA		
22) 5	5850.0000-6425.0000	H,V,L,R	54K6G7W	Tx	65.95	54.60	13.1		DIGITAL DATA		
23) 5	5850.0000-6425.0000	H,V,L,R	72M0G7W	Tx	84.28	41.73	13.1		DIGITAL DATA		
24) 3	3625.0000-4200.0000	H,V,L,R	72M0G7W	Rx			13.1		DIGITAL DATA		
25)3	3625.0000-4200.0000	H,V,L,R	54K6G7W	Rx			13.1		DIGITAL DATA		
26) 5	5850.0000-6425.0000	L,R	36M0F8W	Tx	87.90	50.60	RC1		FDM/FM		

C) Frequency Coordination Limits

		Satellite Arc (Deg. Long.)	Elevation (Degrees)	Azimuth (Degrees)	Max EIRP Density toward	
#	Frequency Limits (MHz)	East West Limit Limit	East West Limit Limit	East West Limit Limit	Horizon (dBW/4kHz)	Associated Antenna(s)
1)	5850.0000-6425.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	20	RC1
2)	3625.0000-4200.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	0	RC1



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#	Frequency Limits (MHz)	Satellite Arc (Deg. Long.) East West Limit Limit	Elevation (Degrees) East West Limit Limit	Azimuth (Degrees) East West Limit Limit	Max EIRP Density toward Horizon (dBW/4kHz)	Associated Antenna(s)
3)	5850.0000-6425.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	12.53	11.1
4)	3625.0000-4200.0000	4.6W-148.2W	05.0-05.0	102.0-258.0		11.1
5)	5850.0000-6425.0000	4.6W-148.2W	05.0-05.0	102.0-258.0	12.53	13.1
6)	3625.0000-4200.0000	4.2W-148.2W	05.0-05.0	102.0-258.0		13.1

D) Points of Communications

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

1) 1 to Permitted Space Station List

E) Antenna Facilities

	Site ID	Antenna ID	Units	Diameter (meters)	Manufacturer	Model nu	Site Elevation umber (Meters)	Max Antenna Height (Meters)	Special Provisions (Refer to Section H)
1		11.1	2	11.1	GENERAL DYNAMICS	SATC	COM 295.96	11.1 AGL/ 307.1 AMSL	
	Maxir	=	power	at antenr	3.9500 GHz 55 ha flange (Watts) = hll carriers (dBW) =	50	0.00		
1		13.1	2	13.1	GENERAL DYNAMICSGENERAL DYNAMICS	SATC	COM 295.96	13.1 AGL/ 309.1 AMSL	
	Maxir	=	power	at antenr	3.9500 GHz 57 na flange (Watts) = all carriers (dBW) =	50	6.1750 GHz 0.00 1.28		
1		RC1	1	32	TORONTO IRON WORKS	S SATC	COM 295.96	39.18 AGL/ 335.21 AMSL	
	Maxir	num total input	power	at antenr	4.0000 GHz 64 ha flange (Watts) = hll carriers (dBW) =	9,4	6.0000 GHz 87.00 3.77		



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F) Remote Control Point:

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Call Sign: WA33

G) Antenna Structure marking and lighting requirements:

None unless otherwise specified under Special and General Provisions

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 Bureau Filing System (MyIBFS) using the "Pleadings and Comments" link on the MyIBFS homepage within 10 days of the change.
 - 6 --- Licensee must comply with the license modification and notification requirements of 47 CFR § 25.118 to change the coordinates of its authorized earth station.
 - 8 --- Licensee must notify the Commission when all earth stations operating under this authorization are no longer operational or when they have not been used to provide any service during any 6-month operation.
 - 5021 --- A waiver of Section 25.205 of the Commission's Rules and Regulations is granted for antenna elevation angles below 5 degrees.
 - 5738 --- This authorization is subject to the conditions and terms set forth in the Commission's Order and Authorization, FCC 99-210, released August 6, 1999, and Memorandum Opinion and Order, FCC 01-107, released March 29, 2001, and New Skies Satellites N.V., Petition for Declaratory Ruling, Order, DA 01-513 (Int'l Bureau, Satellite and Radiocommunication Division, released Mar. 29, 2001)
- 90398 --- Changes to previously authorized transmitting facilities, operations and devices regulated by the Commission that may have significant environmental impact, and are not excluded by §1.1306, require the preparation of an Environmental Assessment (EA) by the licensee. (See 47 C.F.R. §§1.1307, 1.1308 and 1.1311)
- 90399 --- The licensee shall, at all times, take all necessary measures to ensure that operation of this (these) authorized earth station(s) does not create potential exposure of humans to radiofrequency radiation in excess of the FCC exposure limits defined in 47 CFR §§ 1.1307(b) and 1.1310. Physical measures must be taken to ensure compliance with limits for both occupational/controlled exposure and for general population/uncontrolled exposure, as defined in these rule sections. Compliance can be accomplished in most cases by appropriate restrictions, such as fencing. Requirements for restrictions can be determined by predictions based on calculations, modeling, or by field measurements. The FCC's OET Bulletin 65 (available on-line at www.fcc.gov/oet/rfsafety) provides information on predicting exposure levels and on methods for ensuring compliance, including the use of warning and alerting signs and protective equipment for workers.
- 90405 --- Operations with PERMITTED LIST satellite must comply with \$25.212 levels and operations above these levels must coordinate with satellite operators prior to operations.



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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:
- 90470 --- The application for this authorization was filed within the 194-day filing window for FSS earth stations operating in the 3700-4200 MHz frequency band as of April 19, 2018, as established by Public Notice DA 18-398 (rel. Apr. 19, 2018) and Public Notice DA-18-639 (rel. Jun. 21, 2018), and Public Notice DA 18-1061 (rel. Oct. 17, 2018).
- 90471 --- The application for this authorization was filed with a coordination report therefore operations of this earth station in the 3700-4200 MHz band are protected within the limits establish by the coordination report filed.
- 900407 --- The Permitted Space Station List (Permitted List) is a list of all geostationary space stations providing fixed-satellite service pursuant to a Commission license or grant of U.S. market access. The Permitted List currently includes the following frequency bands per §25.103 and §25.115(k)(1):

3600-4200 MHz (space-to-Earth) 5850-6725 MHz (Earth-to-space) 10.95-11.2 GHz (space-to-Earth) 11.45-12.2 GHz (space-to-Earth) 13.75-14.5 GHz (Earth-to-space) 18.3-18.8 GHz (space-to-Earth) 19.7-20.2 GHz (space-to-Earth) 24.75-25.25 GHz (Earth-to-space) 28.35-28.6 GHz (Earth-to-space) 29.25-30.0 GHz (Earth-to-space).

Earth stations with "Permitted List" designated as a point of communication may access any space station on the Permitted List, provided the operations comply with the applicable "routine" uplink and downlink limits, are within the specific frequency bands authorized in the earth station license, have completed coordination with terrestrial stations pursuant to §25.203, and otherwise comply with all terms and conditions of both the earth station license and the space station grant.



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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 is not ready for operation by the required date of completion of construction unless an application for modification of authorization to request additional time to complete construction is filed by that date, together with a showing that failure to complete construction 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.