

E160134 SES-MOD-20191015-01323 IB2019003578
Telesat Network Services, Inc.
8209 Valley Pike
Middletown, VA Fredrick

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM	FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
E160134 Mod for additional extension of construction date

1-8. Legal Name of Applicant

Name: Telesat Network Services, Inc. Phone Number: 613-748-8700
DBA Name:
Fax Number:
Street: 135 Routes 202/206 E-Mail: eneamsmith@telesat.com
City: Bedminster State: NJ
Country: USA Zipcode: 07921 -1538
Attention: Ms Elisabeth Neasmith

“EXTENSION OF TIME”



File # SES-mod-20191015-01323

Call Sign E160134 Grant Date 12/03/2019
(or other identifier)

Term Dates
From: 12/10/2019 To: 03/19/2020

Approved: [Signature]



UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION
RADIO STATION AUTHORIZATION

Name: Telesat Network Services, Inc.

Call Sign: E160134

Authorization Type: Modification of License

File Number: SES-MOD-20191015-01323

Non Common Carrier

Grant date: 12/03/2019

Expiration Date: 11/08/2031

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	8209 Valley Pike Middletown, Fredrick, VA 22645	39°1'1.0"N	78°17'28.8"W	217.92	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 November 8, 2016 (3 AM Eastern Standard Time) and ending November 8, 2031 (3 AM Eastern Standard Time) . The required date of completion of construction and commencement of operation is March 10, 2020 (3 AM Eastern Standard Time) . 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)	29300.0000-30000.0000	H, V	112MG7D	Tx	90.00	45.50	1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
2)	29300.0000-30000.0000	H, V	500KG7D	Tx	66.50	45.50	1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
3)	29300.0000-30000.0000	H, V	56M0G7D	Tx	87.00	45.50	1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
4)	27600.0000-28600.0000	H, V	112MG7D	Tx	90.00	45.50	1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
5)	27600.0000-28600.0000	H, V	500KG7D	Tx	66.50	45.50	1		Variable modulation with a maximum of 32 APSK and minimum of QPSK



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6)	27600.0000-28600.0000	H, V	56M0G7D	Tx	87.00	45.50	1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
7)	19700.0000-20200.0000	H, V	112MG7D	Rx			1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
8)	19700.0000-20200.0000	H, V	500KG7D	Rx			1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
9)	19700.0000-20200.0000	H, V	56M0G7D	Rx			1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
10)	18300.0000-18800.0000	H, V	112MG7D	Rx			1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
11)	18300.0000-18800.0000	H, V	500KG7D	Rx			1		Variable modulation with a maximum of 32 APSK and minimum of QPSK
12)	18300.0000-18800.0000	H, V	56M0G7D	Rx			1		Variable modulation with a maximum of 32 APSK and minimum of QPSK

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)	18300.0000-18800.0000	63.0W	63.0W	42.1	42.1	156.5	156.5	0	1
2)	19700.0000-20200.0000	63.0W	63.0W	42.1	42.1	156.5	156.5	0	1
3)	27600.0000-28600.0000	63.0W	63.0W	42.1	42.1	156.5	156.5	-32.6	1
4)	29300.0000-30000.0000	63.0W	63.0W	42.1	42.1	156.5	156.5	-32.6	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 TELSTAR 19 V (S2955) @ 63 W.L. (UK-Licensed)



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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)
1	1	1	9.4	ASC Signal	9.4	217.92	10.2 AGL/ 228.12 AMSL	
Max Gains(s): 63.0 dBi @ 18.7000 GHz 66.5 dBi @ 29.2500 GHz								
Maximum total input power at antenna flange (Watts) =					280.00			
Maximum aggregate output EIRP for all carriers (dBW) =					91.00			

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.

5 --- Licensee must notify the Commission when this earth station is no longer operational or when it has not been used to provide any service during any 6-month operation.

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.

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.



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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.

REQUEST FOR EXTENSION OF TIME

Pursuant to Section 25.117(d) of the Commission's rules, Telesat Network Services, Inc. ("Telesat") hereby requests that the Commission modify its license for Telesat's fixed satellite service earth station (Call Sign E160134) in Middletown, Virginia ("Middletown Earth Station"), by extending by three months, until March 10, 2020, the date by which the Middletown Earth Station must, following construction, be placed into operation by communicating with the earth station's sole authorized point of communication, Telesat's Telstar 19 VANTAGE satellite ("T19V").

The extension is necessitated by circumstances beyond Telesat's control that delayed the Middletown Earth Station's construction and placement into operation, as follows: Telesat has had on order two of the same type antennas, one to be installed at one of its Canadian earth station facilities, the other at Middletown. The antenna destined for Telesat's Canadian facility was delivered first. Upon inspection, on or about September 25, 2019, Telesat discovered that the antenna's waveguide had been manufactured improperly, which meant a proper connection could not be established. Telesat confirmed that the same error affected the antenna destined to be installed at Middletown.

A remanufacture of the waveguides is underway and construction of the Middletown Earth Station is now scheduled for completion in late December 2019. Additional time, however, through March 10, 2020, is herein requested to allow sufficient time for adequate integration and testing of the Middletown Earth Station as well as to allow some margin for potential delays due to winter weather; heretofore unexpected construction activities by the site's new owner/landlord that could present site access issues; and any other unanticipated events.

The Middletown Earth Station will serve as a back-up gateway for the Ka-band payload on T19V, supporting high capacity links to customers in the Caribbean. A

back-up gateway facility is a diversity requirement of these customers. The diversity or back-up site must be a sufficient distance from the primary gateway site for T19V, already constructed and placed into operation at Mount Jackson, to ensure that rain events at the primary and back-up site are not correlated. The back-up site also has to be within the maximum range of the RF over fiber system that connects the two sites. The maximum distance with the existing system is approximately 50 miles (70 km). These criteria make Middletown an ideal location for a back-up facility. Grant of the requested extension will ensure that Telesat can complete construction at this location and provide back-up capabilities required by its customers.

Accordingly, and in light of the public interest benefits the Middletown Earth Station will serve, Telesat's request for additional time to complete the construction of the Earth Station and place it into operation should be granted.

DECLARATION

I, Leslie Milton, Senior Counsel, Regulatory Affairs, Telesat, hereby declare under penalty of perjury that the statements of fact made in the foregoing Request for Extension of Time, in particular as to Telesat's ability to place the referenced earth station in operation within the time permitted under its current license, are true and correct to the best of my knowledge, information and belief.

/s/_____

Signature

October 15, 2019

Date