Summary of Technical Information
For Coordination with NTIA

Applicant: Skynet Satellite Corporation
File No.: SAT-STA-20160617-00056
Call Sign: S2462

START DATE: 7/8/2016 END DATE:1/8/2017

Purpose of operation: Intelsat requests authority to conduct commercial operations with the Telstar 12 space station (Call Sign S2462) at the 109.2° W.L. orbital location in the 10.95-11.2 GHz (space-to-Earth), 11.45-11.7 GHz (space-to-Earth), and 13.75–14.5 GHz (Earth-to-space) frequency bands. The Earth Station has been previously coordinated.

Orbital Location: 109.2 W.L.

Transmit frequency: 10.95-11.2 GHz (space-to-Earth)
11.45-12.2 GHz (space-to-Earth)

Receive frequency: 13.75-14.0 GHz (Earth-to-space)
14.0-14.5 GHz (Earth-to-space)

Polarization: Left and Right Circular

DRAFT GRANT:

IBFS File No(s):	SAT-STA-20160617-00056	**G R A N T E D – With Conditions**  **International Bureau Satellite Division**
Licensee/Grantee:	Skynet Satellite Corporation	
Call Sign:	S2462	
Satellite Name:	Telstar 12	
Orbital Location: (required station-keeping tolerance)	109.2° W.L. (± 0.05 degrees east/west)	
Administration:	United States	
Nature of Service:	Fixed-Satellite Service (FSS)	
Scope of Grant:	Skynet is granted special temporary, authority for 30 days, to operate the Telstar 12 space station at the 109.2° W.L. orbital location pursuant to the parameters set forth in IBFS File No. SAT-MOD-20160513-00050, as supplemented.	
Service Area(s):	United States, Caribbean, Central America, South America. See Schedule S and accompanying .gxt files.	

Frequencies:	10.95-11.2 GHz (space-to-Earth) 11.45-12.2 GHz (space-to-Earth) 13.75-14.0 GHz (Earth-to-space) 14.0-14.5 GHz (Earth-to-space)

Operations under this grant must comport with the legal and technical specifications set forth by the applicant or petitioner and with Federal Communication Commission's rules not waived herein. This grant is also subject to the following conditions:

1. Skynet must operate in accordance with the beam configuration ___, as specified in its supplemental filing. See Letter to Jose P. Albuquerque, Chief, Satellite Division, from Joseph Godles, Counsel to Skynet Satellite Corp, June ____.
2. Skynet's use of the 10.95-11.2 GHz and 11.45-11.7 GHz frequency bands is limited to international operations in accordance with footnote NG52 to the United States Table of Frequency Allocations, 47 CFR 2.106, NG52.
3. Sky Skynet's use of the 10.95-11.2 GHz and 11.45-11.7 GHz (space-to-Earth) frequency bands is subject to footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges applicants for airborne or space station assignments to take all practicable steps to protect radio astronomy observations in the adjacent bands from harmful interference, consistent with footnote US74.
4. In the 13.75-14.0 GHz band (Earth-to-space), receiving space stations in the FSS must not claim protection from radiolocation transmitting stations operating in accordance with the United States Table of Frequency Allocations. Pursuant to footnote US337 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US337, any earth station in the United States and its possessions communicating with the Telstar 12 space station in the 13.75-13.8 GHz band (Earth-to-space) is required to coordinate earth stations in the fixed-satellite service with the National Telecommunications and Information Administration (NTIA) on a case-by-case basis in order to minimize harmful interference to the Tracking and Data Relay Satellite System's forward space-to-space link (TDRSS forward link-to-LEO).
5. Operations of any earth station in the United States and its possessions communicating with the Telstar 12 space station in the 13.75-14.0 GHz band (Earth-to-space) must comply with footnote US356 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US356, which specifies a mandatory minimum antenna diameter of 4.5 meters and the maximum equivalent isotropically radiated powers (EIRP) of any emission should be at least 68 dBW and should not exceed 85 dBW. Operations of any earth station located outside the United States and its possessions communicating with the Telstar 12 space station in the 13.75-14.0 GHz band (Earth-to-space) must be consistent with footnote 5.502 to the ITU Radio Regulations, which allows a minimum antenna diameter of 1.2 meters for earth stations of a geostationary satellite orbit network and specifies mandatory power limits.
6. Operations of any earth station in the United States and its possessions communicating with the Telstar 12 space station in the 13.77-13.78 GHz band (Earth-to-space) must comply with footnote US357 to United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US357, which specifies a maximum EIRP density of emissions of 71 dBW in any 6 MHz band for communications with a space station in geostationary-satellite orbit.[1] Operations of any earth station located outside the United States and its possessions communicating with the Telstar 12 space station in the 13.77-13.78 GHz band (Earth-to-space) must comply with footnote 5.503 to the ITU Radio Regulations, which specifies a maximum EIRP

[1] Footnote US357 places a restriction on FSS earth station operations in order to protect government operations in the band, including manned space flight. 47 C.F.R. § 2.106, US357.

density of emissions, based on the antenna diameter, for communications with a space station in geostationary-satellite orbit.

7. Skynet's request for a waiver of Section 25.114(c)(4)(vi)(A) of the Commission's rules is GRANTED. Section 25.114(c)(4)(vi)(A) requires predicted space station antenna gain contour(s) for each transmit and each receive antenna beam and nominal orbital location requested. Skynet states that it is unable to provide antenna gain contours for the Telstar 12 telemetry, tracking, and command beams because neither Skynet nor the satellite's manufacturer, Space Systems/Loral could locate copies of the information due to the age of the satellite, which was launched in 1999. Under the circumstances, we find that other parts of the application (Tables 6 and 7) provide sufficient information to evaluate the potential for harmful interference from the operation of Telstar 12.
8. Skynet must operate its telemetry, tracking, and control operations from its facility at Mt. Jackson, Virginia.
9. This grant is without prejudice to the Commission's action in IBFS File No. SAT-MOD-2016051300050.[2]
10. Any action taken and expense incurred as a result of operations pursuant to this grant of special authority is at Skynet's own risk.

Licensee/grantee is afforded thirty (30) days from the date of release of this action to decline the grant as conditioned. Failure to respond within this period will constitute formal acceptance of the grant as conditioned.

This action is taken pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective upon release.

Station licenses are subject to the conditions specified in Section 309(h) of the Communications Act of 1934, as amended, 47 U.S.C. § 309(h).

Action Date:		
Term Dates	**From:**	**To:**

Approved:

Stephen J. Duall
Chief, Satellite Policy Branch

[2] Skynet intends to operate Telstar 12 at 109.2°W.L. pursuant to an exchange of letters between the United States and Canada.