

File # SAT-STA-20120109-00002

Grant Date 01/31/12 Call Sign S2401

(or other identifier)

period of Term Dates 30 days Approved by OMB 3060-0678

From 01/15/12

Approved:

Satellite Policy Branch

### FEDERAL COMMUNICATIONS COMMISSION APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

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### APPLICANT INFORMATION

Date & Time Filed: Jan 9 2012 4:52:20:776PM

File Number: SAT-STA-20120109-00002

Enter a description of this application to identify it on the main menu:

Request for Further Extension of Special Temporary Authority to Operate Intelsat 706, Call Sign S2401

1. Applicant

Callsign:

Name:

Intelsat License LLC

**Phone Number:** 

202-944-7848

**DBA Name:** 

Fax Number:

202-944-7870

Street:

c/o Intelsat Corporation

E-Mail:

susan.crandall@intelsat.com

-3006

3400 International Drive, N.W.

City:

Washington

State:

DC

**Country:** 

**USA** 

Zipcode:

20008

Attention:

Susan H. Crandall

# Attachment to Grant IBFS File No. SAT-STA-20120109-00002 Call Sign S2401

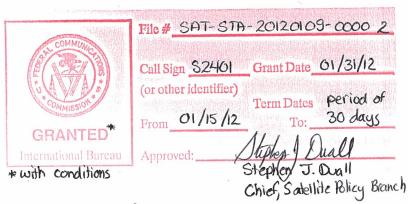
The application of Intelsat License LLC (Intelsat), IBFS File No. SAT-STA-20120109-00002, is granted. Accordingly, Intelsat is authorized for a period of 30 days, commencing January 15, 2012, to continue to operate Telemetry, Tracking, and Telecommand (TT&C) operations with the Intelsat 706 space station (Call Sign S2401) necessary to maintain Intelsat 706 at the 72.0° E.L. orbital location, using the following frequencies: 6173.7 MHz and 6176.3 MHz (left-hand circular polarization/Earth-to-space); 3947.5 MHz, 3948.0 MHz, 3952.5 MHz, and 3952.0 MHz (right-hand circular polarization/space-to-Earth). Additionally, Intelsat is granted authority to continue to provide Fixed-Satellite Service (FSS) while located at the 72.0° E.L. orbital location on a temporary basis using the 3700-4200 MHz (space-to-Earth), 5925-6425 MHz (Earth-to-space), 10.95-11.2 GHz (space-to-Earth), 11.45-11.70 GHz, (space-to-Earth), 12.50-12.75 GHz (space-to-Earth), and 14.0-14.5 GHz (Earth-to-space) frequency bands. This authorization shall be in accordance with the technical specifications set forth in Intelsat's application, Federal Communications Commission (Commission) rules, and the following conditions:

- 1. All operations of Intelsat 706 at the 72.0° E.L. orbital location shall be on an unprotected and non-harmful interference basis, *i.e.*, Intelsat shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating station.
- 2. In the event of any harmful interference during Intelsat 706's operations at the 72.0° E.L. orbital location, Intelsat shall cease operations immediately upon notification of such interference, and shall inform the Commission, in writing, immediately of such an event.
  - 3. Intelsat shall maintain full operational control of Intelsat 706 at all times.
- 4. Intelsat shall operate Intelsat 706 at the 72.0° E.L. orbital location in accordance with any existing coordination agreements for this location.
- 5. In connection with the provision of service in any particular country, Intelsat is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
- 6. While at the 72.0° E.L. orbital location, Intelsat shall maintain the Intelsat 706 space station with an east/west longitudinal station-keeping tolerance of +/- 0.05 degrees.
- 7. Grant of this authorization is based on Intelsat's representation that it will dispose of the Intelsat 706 spacecraft at end of life to a minimum altitude of 150 kilometers (perigee) above the geostationary arc, that it has reserved 32.97 kilograms of fuel for this purpose, and that fuel gauging uncertainty has been and will be taken into account in these calculations, using the methods set forth in Intelsat's application.
- 8. Intelsat's request that the Part 25 technical waivers previously granted to the Intelsat 706 space station continue to apply to the temporary operations at the 72.0° E.L. orbital location is granted. *See* Intelsat LLC, Memorandum Opinion and Order, 15 FCC Rcd 15460 (2000), *recon. denied*, 15 FCC Rcd 25234 (2000).
- 9. Intelsat's use of the 10.95-11.2 GHz and 11.45-11.7 GHz bands is subject to footnote US211 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, US211, which urges

# Attachment to Grant IBFS File No. SAT-STA-20120109-00002 Call Sign S2401

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.

- 10. Intelsat's operation of the Intelsat 706 space station in the 10.95-11.2 GHz and 11.45-11.7 GHz bands is limited to international operations in accordance with footnote NG 104 to the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, NG 104, and footnote 2 of Section 25.202(a)(1) of the Commission's rules, 47 C.F.R. § 25.202(a)(1).
- 11. Use of the 12.5-12.75 GHz frequency bands is not permitted for Fixed-Satellite Service in the space-to-Earth direction in Region 2.
- 12. Pursuant to footnote US342 of the United States Table of Frequency Allocations, 47 C.F.R. § 2.106, services operating in the 14.47-14.50 GHz band shall take all practicable steps to protect the radio astronomy service from harmful interference.
- 13. Intelsat shall comply with the power levels specified in Section 25.212 of the Commission's rules, unless it coordinates any operations using power levels exceeding the levels in Section 25.212 with all potentially affected adjacent satellites within 6 degrees orbital separation off the 72.1° E. L. orbital location. Intelsat shall inform the Commission of the power levels it has coordinated. In addition, Intelsat must inform all affected earth station operators that Section 25.220 of the Commission's rules applies to operations that exceed the power levels specified in Section 25.212. In no event shall the uplink input power spectral density level of Intelsat 706's digital carriers exceed -38.7 dBW/Hz into the antenna and the downlink EIRP density of such carriers exceed -34.2 dBW/Hz for the C-band. Further, in no event shall the uplink input power spectral density of Intelsat 706's digital carriers exceed -45 dBW/Hz into the antenna and the downlink EIRP density of such carriers exceed -20.4 dBW/Hz for the Ku-band.
- 14. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at Intelsat's own risk.
- 15. This grant of special temporary authority is without prejudice (1) to any decision with respect to any replacement expectancy at the 72.1° E.L. orbital location, or (2) any action on the Petition for Specific Authority Under Section 25.161(c) filed by PanAmSat Licensee Corp. on April 5, 2010, to retain authority to use C- and Ku-band frequencies at the nominal 72° E.L. orbital location.
- 16. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and is effective immediately.



2. Contac	t						
	Name: Susan H. Crandall		Phone Number:		202	202-944-7848	
	Company:	Intelsat Corporation	Fax Number:	ber:	202	202-944-7870	
	Street:	3400 International Drive, N.W.	E-Mail:		sus	san.crandall@intelsat.com	
	City:	Washington	State:		DO	C	
	Country:	USA	Zipcode:		200	008 -3006	
	Attention:	Susan H. Crandall	Relations	hip:	Leg	gal Counsel	
application	n. Please enter				r the file numb	er or the IB Submission ID of the relate	d
If Yes	, complete and	with this application? attach FCC Form 159. If No, ind  Noncommercial educational		for fee exemption	on (see 47 C.F.	R.Section 1.1114).	
	(please explain		Hechsee				
		CRY – Space Station (Geostationary	y) 				
5. Type Re	equest						
O Chan	ge Station Loc	ation Extend	1 Expiration 1	Date	0	Other	
6. Temporary Orbit Location				7. Requested Extended Expiration Date 2012–02–13 00:00:00.0			

O. D		1.01.0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.							
8. Description (If the complete description does not appear in this box, please go to the end of the form to view it in its entirety.)									
Intelsat License LLC herein requests an additional 30-day extension, from January 15, 2012 through February 13, 2012, of the Special Temporary Authority previously granted Intelsat									
to drift Intelsat 706 (call sign S2401) from 72.10 E.L. to 72.0 E.L. and to operate at									
72.0 E.L. in the C- and Ku-bands.									
9. By checking Yes, the undersigned certifies that neither applicant nor any other party to the application is subject to a denial of Federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti–Drug Act of 1988, 21 U.S.C. Section 862, because of a conviction for possession or distribution of a controlled substance. See 47 CFR 1.2002(b) for the meaning of " party to the application" for these purposes.  10. Name of Person Signing  11. Title of Person Signing									
Susan H. Crandall	ASST. C	Asst. General Counsel, Intelsat Corporation							
12. Please supply any need attachments.									
Attachment 1: STA Request	Attachment 2:	Attachment 3:	Attachment 3:						
(U.S. Code, Title 18, Secti	on 1001), AND/OR REVOCATION	JNISHABLE BY FINE AND / OR IMPRISONMENT ON OF ANY STATION AUTHORIZATION EITURE (U.S. Code, Title 47, Section 503).							

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THE FOREGOING NOTICE IS REQUIRED BY THE PAPERWORK REDUCTION ACT OF 1995, PUBLIC LAW 104–13, OCTOBER 1, 1995, 44 U.S.C. SECTION 3507.

January 9, 2012

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Washington, DC 20554



Re: Request for Further Extension of Special Temporary Authority to

Operate Intelsat 706 Call Sign S2401

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests an additional 30-day extension -- from January 15, 2012, through February 13, 2012 -- of the Special Temporary Authority ("STA") previously granted Intelsat to drift Intelsat 706 (call sign S2401) from 72.10° E.L. to 72.0° E.L. and to operate at 72.0° E.L. in the C- and Ku-bands. Intelsat has filed a 180-day STA request to operate the satellite at this location. In the meantime, however, the proposed extension will permit Intelsat to continue operating Intelsat 706 at 72.0° E.L. in the frequencies below.

The specific TT&C frequencies are as follows:

Uplink:

6173.7 (LHCP) 6176.3 (LHCP)

<sup>&</sup>lt;sup>1</sup> Intelsat has filed this STA extension request, an FCC Form 159 and an \$860.00 filing fee electronically via the International Bureau's Filing System.

<sup>&</sup>lt;sup>2</sup> See Policy Branch Information; Actions Taken, Report No. SAT-00829, SAT-STA-20111209-00237 (Dec. 16, 2011) (Public Notice); Policy Branch Information; Actions Taken, Report No. SAT-00826, File No. SAT-STA-20111107-00214 (Dec. 2, 2011) (Public Notice); Policy Branch Information; Actions Taken, Report No. SAT-00816, File No. SAT-STA-20111010-00196 (Oct. 21, 2011) (Public Notice); Policy Branch Information; Actions Taken, Report No. SAT-00813, File No. SAT-STA-20110912-00177 (Oct. 7, 2011) (Public Notice); Policy Branch Information; Actions Taken, Report No. SAT-00802, File No. SAT-STA-20110810-00159 (Aug. 19, 2011) (Public Notice).

<sup>3</sup> See Intelsat License LLC Request for Further Extension of Special Temporary Authority, File No. SAT-STA-20111230-00253 (Dec. 30, 2011).

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#### Downlink:

3947.5 (RHCP) 3948.0 (RHCP) 3952.5 (RHCP) 3952.0 (RHCP)

The communications frequencies are as follows:

3700 – 4200 MHz (space-to-Earth) 5925 – 6425 MHz (Earth-to-space) 10950 – 11200 MHz (space-to-Earth) 11450 – 11700 MHz (space-to-Earth) 12500 – 12750 MHz (space-to-Earth) 14000 – 14500 MHz (Earth-to-space)

Grant of this STA further extension request is in the public interest because it will allow Intelsat to continue operating Intelsat 706 at 72.0° E.L. This will allow Intelsat to continue to ensure safe E/W station-keeping of the Intelsat 706 satellite vis-à-vis the Intelsat 709 satellite at 72.10° E.L.<sup>4</sup> following the former satellite's commencement of inclined orbit operations.<sup>5</sup>

Grant of this STA further extension request will not result in increased risk of harmful interference. Intelsat will continue to operate the Intelsat 706 communications payload in conformance with Intelsat's coordination agreements related to the 72.0° E.L. location.

Intelsat has assessed and limited the probability of the space station becoming a source of debris as a result of collision with large debris or other operational space stations. Intelsat 706 will not be located at the same orbital location as another satellite or at an orbital location that has an overlapping station-keeping volume with another satellite. Further, Intelsat is not aware of any other FCC licensed system, or any other system applied for and under consideration by the FCC, having an overlapping station-keeping volume with Intelsat 706 at 72.0° E.L.

<sup>&</sup>lt;sup>4</sup> See Policy Branch Information; Actions Taken, Report No. 00796, File No. SAT-MOD-20110428-00081 (July 29, 2011) (Public Notice).
<sup>5</sup> See Letter from Susan H. Crandoll, Intelest, to Marlone H. Dortch

<sup>&</sup>lt;sup>5</sup> See Letter from Susan H. Crandall, Intelsat, to Marlene H. Dortch, FCC, Call Sign S2401 (filed July 20, 2011).

Ms. Marlene H. Dortch January 9, 2012 Page 3

Finally, Intelsat is not aware of any system with an overlapping station-keeping volume with Intelsat 706 at 72.0° E.L. that is the subject of an ITU filing and that is either in orbit or progressing towards launch.

Intelsat understands and accepts that the conditions applied to the operation of Intelsat 706 at 72.1° E.L. will continue to apply at 72.0° E.L.<sup>6</sup>

For the reasons set forth herein, Intelsat respectfully requests that the Commission expeditiously grant this further extension request.

Sincerely,

Susan H. Crandall

Assistant General Counsel

**Intelsat Corporation** 

cc:

Stephen Duall

Jay Whaley

<sup>&</sup>lt;sup>6</sup> See supra n. 2.