3060-0678 Approved by OMB

# APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

Request for STA Using Castle Rock, Colorado Earth Station KL92 to Provide LEOP Services for HispaSat-AG1 Satellite APPLICANT INFORMATIONEnter a description of this application to identify it on the main menu:

Name:	Intelsat License LLC	Phone Number:	703-559-7848
DBA Name:		Fax Number:	703-559-8539
Street:	c/o Intelsat Corporation	E-Mail:	susan.crandall@intelsat.com
	7900 Tysons One Place		
City:	McLean	State:	VA
Country:	USA	Zipcode:	22102 —5972
Attention:	Susan H. Crandall		



Application: Intelsat License LLC

File No.: SES-STA-20170105-00014

Call Sign: KL92

Special Temporary Authority

Intelsat License LLC is granted a special temporary authority (STA), for 30 days, beginning January 27, 2017, to operate its Ku-band earth station, call sign KL92, in Castle Rock, Colorado, to provide launch and early orbit phase (LEOP) services for the HispaSat-AG1 satellite licensed by Spain on the center frequencies: 14003.80 MHz and 14494.50 MHz (Earth-to-space) and 11452.00 MHz and 12749.00 MHz (space-to-Earth) under the following conditions;

- 1. All operations must be within the coordinated emission and power limits.
- 2. The LEOP operations must be coordinated with all operators of satellites that use the same frequency bands and are in the LEOP path. All operators of satellites in that path will be provided with an emergency phone number where the licensee can be reached in the event that harmful interference occurs. Currently the 24x7 contact information for the HispaSat-AG1 satellite LEOP mission is as follows: Ph.: (703) 559-7701 -East Coast Operations Center (primary); (310) 525-5591- West Coast Operations Center (back-up). Request to speak with Harry Burnham or Kevin Bell.
- 3. All operations shall be on an unprotected and non-harmful interference basis, Intelsat License LLC, KL92, shall not cause harmful interference to, and shall not claim protection from interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference.
- 4. Grant of this authorization is without prejudice to any determination that the Commission may make regarding pending or future Intelsat License LLC applications.
- 5. This STA can only be used to provide launch and early orbit phase ("LEOP') services for the HispaSat-AG1 satellite.
- 6. 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.

GRANTED
International Bureau

Call Sign Grant Dat

(or other identifier)

From: Lerm Dates

Approved:

2. Contact			
Name:	Cynthia J. Grady	Phone Number:	703-559-6949
Company:	Intelsat Corporation	Fax Number:	703-559-8539
Street:	7900 Tysons One Place	E-Mail:	cynthia.grady@intelsat.com
City:	McLean	State:	VA
Country:	USA	Zipcode:	22102 -5972
Attention:		Relationship:	Legal Counsel
(If your application is related to an application application. Please enter only one.)  3. Reference File Number or Submission ID	lated to an application filed with only one.)	the Commission, enter either t	(If your application is related to an application filed with the Commission, enter either the file number or the IB Submission ID of the related application. Please enter only one.)  3. Reference File Number or Submission ID
4a. Is a fee submitted w  ■ If Yes, complete and at  Governmental Entity	4a. Is a fee submitted with this application?  If Yes, complete and attach FCC Form 159. If No, indicate reas Governmental Entity Annountail educational licensee	ndicate reason for fee exempti	4a. Is a fee submitted with this application?  If No, indicate reason for fee exemption (see 47 C.F.R.Section 1.1114).  Governmental Entity A Noncommercial educational licenses
Other(please explain):			
4b. Fee Classification	CGX - Fixed Satellite Transmit/Receive Earth Station	Receive Earth Station	
5. Type Request			
Use Prior to Grant	O Cha	O Change Station Location	Other
6. Requested Use Prior Date	Date		
7. CityCastle Rock		8. Latitude (dd mm ss.s h)	39 16 38.0 N

9. State CO	10. Longitude (dd mm ss.s h) 104 48 25.0 W
11. Please supply any need attachments. Attachment 1: STA Request Attachment 2: Exhibit A	t A Attachment 3: Exhibit B
12. Description. (If the complete description does not appear in this l	(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 a grant commencing January 27, 2017, to use its Cast sign KL92, to provide launch and early orbit satellite. HispaSat-AG1 is expected to be la	Intelsat License LLC herein requests a grant of Special Temporary Authority for 30 days, commencing January 27, 2017, to use its Castle Rock, Colorado Ku-band earth station, call sign KL92, to provide launch and early orbit phase services for the HispaSat-AG1 satellite. HispaSat-AG1 is expected to be launched on January 27, 2017.
13. 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.	ies that neither applicant nor any other party to the application is of Yes O No neludes FCC benefits pursuant to Section 5301 of the Anti–Drug Act a conviction for possession or distribution of a controlled substance.
14. Name of Person Signing Cynthia J. Grady	15. Title of Person Signing Regulatory Counsel, Intelsat Corporation
WILLFUL FALSE STATEMENTS MADE ON THIS FORN (U.S. Code, Title 18, Section 1001), AND/OR RE (U.S. Code, Title 47, Section 312(a)(1)), AND/O	WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT (U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION (U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

## FCC NOTICE REQUIRED BY THE PAPERWORK REDUCTION ACT

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January 5, 2017

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re:

Request for Special Temporary Authority Castle Rock, Colorado Earth Station KL92

Dear Ms. Dortch:

Intelsat License LLC ("Intelsat") herein requests a grant of Special Temporary Authority ("STA") for 30 days, commencing January 27, 2017, to use its Castle Rock, Colorado Ku-band earth station—call sign KL92—to provide launch and early orbit phase ("LEOP") services for the HispaSat-AG1 satellite. HispaSat-AG1 is expected to be launched on January 27, 2017. The LEOP period is expected to last approximately 30 days. 3

The HispaSat-AG1 LEOP operations will be performed at the following frequencies: 14003.8 MHz and 14494.5 MHz in the uplink (linear and circular polarizations), and 11452.0 MHz and 12749.0 MHz in the downlink (linear and circular polarizations). The LEOP operations will be coordinated with all operators of satellites that use the same frequency bands and are in the LEOP path.<sup>4</sup> All operators of satellites in that path will be provided with an emergency phone number where the licensee can be reached in the event that harmful interference occurs.

The 24x7 contact information for the HispaSat-AG1 LEOP mission is as follows:

Ph.: (703) 559-7701 – East Coast Operations Center (primary) (310) 525-5591 – West Coast Operations Center (back-up)

Request to speak with Harry Burnham or Kevin Bell.

In further support of this request, Intelsat hereby attaches Exhibits A and B, which contain waiver requests. In the extremely unlikely event that harmful interference should occur due to transmissions to or from its earth station, Intelsat will take all reasonable steps to eliminate the interference.

<sup>&</sup>lt;sup>1</sup> Intelsat has filed its STA request, an FCC Form 159, a \$200.00 filing fee, and this supporting letter electronically via the International Bureau's Filing System ("IBFS").

<sup>&</sup>lt;sup>2</sup> The in-orbit testing location for HispaSat-AG1, which Intelsat understands is licensed by Spain, will be at 26.0° W.L. The final location of HispaSat-AG1 will be at 36.0° W.L.

<sup>&</sup>lt;sup>3</sup> Intelsat is concurrently seeking authority for 30 days to accommodate a possible launch delay.

<sup>&</sup>lt;sup>4</sup> OBH Systems, the manager of the HispaSat-AG1 mission, will handle the coordination.

Ms. Marlene H. Dortch January 5, 2017 Page 2

Finally, Intelsat clarifies that during the HispaSat-AG1 LEOP mission, OBH Systems will serve as the mission manager. OBH Systems will build and send the commands to the Intelsat antenna, which will process and execute the commands. Telemetry received by Intelsat will be forwarded to OBH Systems. Intelsat will perform the ranging sessions by sending a tone to the spacecraft periodically. Intelsat will remain in control of the baseband unit, RF equipment, and antenna.

Grant of this STA request will allow Intelsat to help launch the HispaSat-AG1 satellite. This, in turn, will help provide additional capacity at the 36.0° W.L. orbital location and thereby promotes the public interest.

Please direct any questions regarding this STA request to the undersigned at (703) 559-6949.

Respectfully submitted,

Cynthia J. Franky

Cynthia J. Grady Regulatory Counsel

Intelsat Corporation

cc: Paul Blais

### Exhibit A

### PETITION FOR WAIVER OF SECTIONS 25.137 AND 25.114

Pursuant to Section 25.137 of the Federal Communications Commission's ("Commission" or "FCC") rules, earth station applicants "requesting authority to operate with a non-U.S. licensed space station *to serve the United States*" must demonstrate that effective competitive opportunities exist and must provide the same technical information required by Section 25.114 for U.S.-licensed space stations. Intelsat License LLC ("Intelsat") herein seeks authority to provide launch and early orbit phase ("LEOP") services—not commercial services—to the United States, and thus believes that Section 25.137 does not apply.<sup>2</sup>

To the extent the Commission determines, however, that Intelsat's request for authority to provide LEOP services on a special temporary basis is a request to serve the United States with a non U.S.-licensed satellite, Intelsat respectfully requests a waiver of Sections 25.137 and 25.114 of the Commission's rules.<sup>3</sup> The Commission may grant a waiver for good cause shown.<sup>4</sup> The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.<sup>5</sup> In granting a waiver, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.<sup>6</sup> Waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest.

In this case, good cause exists for a waiver of both Section 25.137 and Section 25.114. With respect to Section 25.114, Intelsat seeks authority only to provide LEOP services for the HispaSat-AG1 satellite. The information sought by Section 25.114 is not relevant to LEOP services. Moreover, Intelsat does not have—and would not easily be able to obtain—such information because Intelsat is not the operator of the HispaSat-AG1 satellite, nor is Intelsat in contractual privity with that operator. Rather, an affiliate of Intelsat has a contract with the OHB Systems, the manufacturer of the HispaSat-AG1 satellite, to conduct LEOP services for the satellite.

<sup>&</sup>lt;sup>1</sup> 47 C.F.R. § 25.137 (emphasis added).

<sup>&</sup>lt;sup>2</sup> See EchoStar Satellite Operating Company Application for Special Temporary Authority Related to Moving the EchoStar 6 Satellite from the 77° W.L. Orbital Location to the 96.2° W.L. Orbital Location, and to Operate at the 96.2° W.L. Orbital Location, DA 13-593, File No. SAT-STA-20130220-00023 (released Apr. 1, 2013) (noting that operating TT&C earth stations in the United States with a foreign-licensed satellite does not constitute "DBS service").

<sup>&</sup>lt;sup>3</sup> 47 C.F.R. §§ 25.137 and 25.114.

<sup>&</sup>lt;sup>4</sup> 47 C.F.R. §1.3.

<sup>&</sup>lt;sup>5</sup> N.E. Cellular Tel. Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("Northeast Cellular").

<sup>&</sup>lt;sup>6</sup> WAIT Radio v. FCC, 419 F.2d 1153, 1159 (D.C. Cir. 1969); Northeast Cellular, 897 F.2d at 1166.

The information that Intelsat is not including is not required to determine potential harmful interference. The Schedule S information for this satellite would pertain to the operation of the HispaSat-AG1 satellite at its final orbital location. However, the present application for LEOP services involves communications *prior* to the satellite attaining its final location in the geostationary orbit. In other words, during the LEOP mission, the earth station will not be communicating with a satellite located in the geostationary orbit. Rather, it will be transmitting to a satellite traveling on its "transfer orbit" or "LEOP path," which starts immediately following its separation from a launch vehicle, and ends when the satellite reaches its geostationary orbital location. Moreover, as with any STA, Intelsat will perform the LEOP services on a non-interference basis.

Because it is not relevant to the service for which Intelsat seeks authorization, and because obtaining the information would be a hardship, Intelsat seeks a waiver of all the information required by Section 25.114. Intelsat has provided in this STA request the required technical information that is relevant to the LEOP services for which Intelsat seeks authorization.

Good cause also exists to waive Section 25.137. Section 25.137 is designed to ensure that "U.S.-licensed satellite systems have effective competitive opportunities to provide analogous services" in other countries. Here, there is no service being provided by the satellite; it is simply being placed in its orbital location after separating from the launch vehicle. Thus, the purpose of the information required by Section 25.137 is not implicated here. For example, Section 25.137(d) requires earth station applicants requesting authority to operate with a non-U.S.-licensed space station that is not in orbit and operating to post a bond. The underlying purpose in having to post a bond—*i.e.*, to prevent warehousing of orbital locations by operators seeking to serve the United States—would not be served by requiring Intelsat to post a bond in order to provide approximately ten days of LEOP services to the HispaSat-AG1 satellite.

It is Intelsat's understanding that HispaSat-AG1 is licensed by Spain, which is a WTO-member country. Thus, the purposes of Section 25.137—to ensure that U.S. satellite operators enjoy "effective competitive opportunities" to serve foreign markets and to prevent warehousing of orbital locations serving the United States—will not be undermined by grant of this waiver request.

Finally, Intelsat notes that it expects to operate with the HispaSat-AG1 satellite using its U.S. earth station for a period of approximately 30 days. Requiring Intelsat to obtain copious technical and legal information from an unrelated party, where there is no risk of harmful interference and the operations will cease after approximately 30 days, would pose undue hardship without serving underlying policy objectives. Given these particular facts, the waiver sought herein is plainly appropriate.

<sup>&</sup>lt;sup>7</sup> See 47 C.F.R. §25.137(d)(4).

### Exhibit B

## Request for Waiver of Footnote NG52 of Section 25.202(a)(1) of the U.S. Table of Allocations

To the extent necessary, Intelsat requests a waiver of the footnote NG52 to the U.S. Table of Frequency Allocations, which limits the use of the HispaSat-AG1 MHz frequency band to "international systems." Intelsat seeks waiver to permit the Castle Rock, Colorado earth station KL92 to communicate with the HispaSat-AG1 satellite during its launch and early orbit phase ("LEOP") mission.

The Commission may grant a waiver for good cause shown.<sup>2</sup> The Commission typically grants a waiver where the particular facts make strict compliance inconsistent with the public interest.<sup>3</sup> In granting a waiver, the Commission may take into account considerations of hardship, equity, or more effective implementation of overall policy on an individual basis.<sup>4</sup> Waiver is therefore appropriate if special circumstances warrant a deviation from the general rule, and such a deviation will serve the public interest. As shown below, good cause exists here to grant a waiver allowing KL92 to provide telemetry, tracking, and control ("TT&C") services to the HispaSat-AG1 satellite using frequencies in the 10700-11700 MHz band.

Good cause exists to waive the international only requirements for the 10700-11700 MHz frequency band. The purpose of NG52 is to limit the number of the FSS service earth stations with which the co-primary fixed service would need to coordinate. The requested frequencies in the 10700-11700 MHz band is used only for downlink and therefore will not cause harmful interference to fixed service stations and will not need to coordinate with fixed service stations. Moreover, no service being provided by the satellite; it is simply being placed in its orbital location after separating from the launch vehicle.

Grant of this waiver is consistent with the Commission's precedent. A waiver of the Table of Allocations is generally granted "when there is little potential interference into any service authorized under the Table of Frequency allocations and when the nonconforming operator accepts any interference from authorized services." The International Bureau has found that

<sup>&</sup>lt;sup>1</sup> See 47 C.F.R. § 2.106 fn. NG52.

<sup>&</sup>lt;sup>2</sup> 47 C.F.R. §1.3.

<sup>&</sup>lt;sup>3</sup> N.E. Cellular Tel. Co. v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990) ("Northeast Cellular").

<sup>&</sup>lt;sup>4</sup> WAIT Radio v. FCC, 418 F.2d 1153, 1159 (D.C. Cir. 1969); Northeast Cellular, 897 F.2d at 1166.

<sup>&</sup>lt;sup>5</sup> See Satellite Services, 26 RR 2d 1257, 1263-65 (1973). See also EchoStar KuX Corporation Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 83° W.L. Orbital Location, Order and Authorization, DA 04-3162, 9 (Int'l Bur., Sept. 30, 2004) ("EchoStar 83° Waiver").

<sup>&</sup>lt;sup>6</sup> See The Boeing Company, Order and Authorization, 16 FCC Rcd 22645, 22651 (Int'l Bur. & OET 2001); Application of Fugro-Chance, Inc. for Blanket Authority to Construct and Operate a Private Network of Receive-Only Mobile Earth Stations, Order and Authorization, 10 FCC Rcd 2860 (Int'l Bur. 1995) (authorizing MSS in the C-band); see also Application of Motorola Satellite Communications, Inc.

waiving the international only requirement would not undermine the purpose of the rules if the party seeking a waiver will be utilizing earth stations that are receive-only in these bands and thus "not capable of causing interference into FS stations" operating in the bands. KL92 will not transmit in the 10700-11700 MHz frequency band and Intelsat agrees to accept any level of interference into those earth stations from fixed service stations in the band. Accordingly, the KL92 providing LEOP services in the 10700-11700 MHz band poses no interference concerns with respect to co-frequency fixed service stations.

Given these particular facts, the waiver sought herein is plainly appropriate.

for Modification of License, Order and Authorization, 11 FCC Rcd 13952-13956 (Int'l Bur. 1996) (authorizing service to fixed terminals in bands allocated the mobile satellite service).

<sup>&</sup>lt;sup>7</sup> EchoStar 83° Waiver, ¶ 13.