

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
Request for 30-day Grant of Special Temporary Authority to Use Castle Rock, Colorado Earth Station KL92 to Provide TT&C for the HISPASAT 143W-1 Drift and On-station at 143 W.L.

1. Applicant

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

30 days "with conditions"
File # SES-STA-20191218-01758

Call Sign KL92 Grant Date 01/15/2020
(or other identifier)

Term Dates
From: 01/15/2020 To: 02/14/2020

Approved: [Signature]



2. Contact

Name: Cynthia J. Grady **Phone Number:** 703-559-6949
Company: Intelsat US LLC **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 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 with this application?

If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).

Governmental Entity Noncommercial educational licensee

Other (please explain):

4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station

5. Type Request

Use Prior to Grant Change Station Location Other

6. Requested Use Prior Date

7. City/Castle Rock

8. Latitude
(dd mm ss.s h) 39 16 35.0 N

9. State CO	10. Longitude (dd mm ss.s h) 104 48 23.0 W
11. Please supply any need attachments. Attachment 1: STA Request Attachment 2: Exhibit A Attachment 3:	
12. 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.) <div style="border: 1px solid black; padding: 5px;"> <p>Intelsat License LLC herein requests 30 days of Special Temporary Authority, commencing January 23, 2020, to use its Castle Rock, Colorado Ku-band earth station (Call Sign KL92) to provide telemetry, tracking, and command services for HISPASAT 143W-1 during its drift to and at 143 W.I.</p> </div>	
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. <p style="text-align: center;">Yes <input checked="" type="radio"/> No <input type="radio"/></p>	
14. Name of Person Signing Cynthia J. Grady	15. Title of Person Signing Senior Counsel, Intelsat US LLC
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

The public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the required data, and completing and reviewing the collection of information. If you have any comments on this burden estimate, or how we can improve the collection and reduce the burden it causes you, please write to the Federal Communications Commission, AMD-PERM, Paperwork Reduction Project (3060-0678), Washington, DC 20554. We will also accept your comments regarding the Paperwork Reduction Act aspects of this collection via the Internet if you send them to PRA@fcc.gov. PLEASE DO NOT SEND COMPLETED FORMS TO THIS ADDRESS.

Remember – You are not required to respond to a collection of information sponsored by the Federal government, and the government may not conduct or sponsor this collection, unless it displays a currently valid OMB control number or if we fail to provide you with this notice. This collection has been assigned an OMB control number of 3060-0678.

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.

Applicant: Intelsat License LLC
Call Sign: KL92
File No.: SES-STA-20191218-01758
Special Temporary Authority ("STA")

Intelsat License LLC ("Intelsat") is granted special temporary authority for 30 days, beginning January 15, 2019, to operate its Castle Rock, Colorado Ku-band earth station to provide telemetry, tracking, and command ("TT&C") services for HISPASAT 143W-1 administered by Spain during the satellite's drift to, and on-station at the 143° W.L. orbital location using center frequencies: 14498.7 MHz (Earth-to-space); and 12749.75 MHz (space-to-Earth) under the following conditions.

1. All operations shall be on an unprotected and non-harmful interference basis, Intelsat 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 and must inform the Commission, in writing, immediately of such an event.
2. All operators of satellites in that path will be provided with an emergency phone number where the licensee can be reached when harmful interference occurs. Currently the 24x7 contact information for the drift 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. Grant of this STA is without prejudice to any determination that the Commission may make regarding pending application SAT-PPL-20191205-00143 or any future Intelsat applications.
4. Any action taken or expense incurred as a result of operations pursuant to this STA is solely at Intelsat's risk.

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 upon release.



"with conditions"

File # SES-STA-20191218-01758

Call Sign KL 92 Grant Date 01/15/2020
(or other identifier)

Term Dates
From: 01/15/2020 To: 02/14/2020

Approved: Paul E. Baker



December 18, 2019

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 30 days of Special Temporary Authority ("STA"),¹ commencing January 23, 2019, to use its Castle Rock, Colorado Ku-band earth station (Call Sign KL92) to provide telemetry, tracking, and command ("TT&C") services for HISPASAT 143W-1² during the satellite's drift to, and on-station at 143° W.L. HISPASAT 143W-1 is currently drifting from 30° W.L. to 143° W.L. and will need drift support from KL92 beginning approximately January 23, 2019. Intelsat will be seeking permanent authority for KL92 to provide TT&C services to HISPASAT 143W-1 at 143° W.L.

HISPASAT 143W-1 TT&C operations will be performed in the following center frequencies: 14498.7 MHz in the uplink and 12749.75 MHz in the downlink. The drift operations will be coordinated with all operators of satellites that use the same frequency bands and are in the drift path.³

The 24x7 contact information for the drift of HISPASAT 143W-1 is as follows:

¹ Intelsat has filed its STA request, an FCC Form 159, a \$210.00 filing fee, and this supporting letter electronically via the International Bureau's Filing System ("IBFS").

² See *Policy Branch Information, Actions Taken*, Report No. SAT-01044, File No. SAT-PPL-20140717-00086 (Oct. 3, 2014) (Public Notice) ("*HISPASAT-1D Market Access Grant*"). HISPASAT 143W-1 was previously known as HISPASAT 30W-4 and HISPASAT-1D. Intelsat is seeking authorization to add HISPASAT 143W-1 to the Approved Space Station List. See Intelsat License LLC Petition for Declaratory Ruling to Add HISPASAT 143W-1 to the Permitted Space Station List for Ku- and S-band Operations at 143° W.L., File No. SAT-PPL-20191205-00143 (filed Dec. 5, 2019) ("*Intelsat Petition*").

³ Hispasat, the manager of the HISPASAT 143W-1 drift, will handle the coordination.

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 support of this request, Intelsat respectfully requests waivers of the U.S. Table of Frequency Allocations⁴ for the 12.7-12.75 GHz frequency band and, to the extent necessary, Section 25.137 of the Federal Communications Commission's ("Commission") rules regarding requests for U.S. market access through non-U.S.-licensed space stations.⁵

Under Section 1.3 of the Commission's rules, the Commission has authority to waive its rules "for good cause shown."⁶ Good cause exists if "special circumstances warrant a deviation from the general rule and such deviation will serve the public interest" better than adherence to the general rule.⁷ In determining whether waiver is appropriate, the Commission should "take into account considerations of hardship, equity, or more effective implementation of overall policy."⁸

Waiver of the U.S. Table of Frequency Allocations

Good cause exists to grant waiver to allow downlink operations in the 12.7-12.75 GHz frequency band. While this band is allocated for Fixed Satellite Service use in the United States, the allocation is for Earth-to-space transmissions. The HISPASAT 143W-1 satellite is designed with its telemetry at 12749.75 MHz, as is consistent with the FSS allocation of ITU Region 1, where the satellite previously operated. As the spacecraft is now in orbit, it is not possible to change the telemetry frequency. Further, Intelsat will conduct telemetry operations in the United States and its territories only on a non-interference/non-protected basis.

Waiver of 47 C.F.R. § 25.137

Per Section 25.137, earth station applicants "requesting authority to communicate with a non-U.S. licensed space station" to serve the United States must demonstrate that U.S.-licensed satellite systems have effective competitive opportunities to provide analogues services in certain countries and must provide the same legal and technical information for the non-U.S.-licensed space station as required

⁴ See 47 C.F.R. § 2.106.

⁵ 47 C.F.R. § 25.137.

⁶ 47 C.F.R. § 1.3; *WAIT Radio v. FCC*, 418 F.2d 1153, 1159 (D.C. Cir. 1969).

⁷ *Northeast Cellular Telephone Co. v. FCC*, 897 F.2d 1164, 1166 (D.C. Cir. 1990).

⁸ *WAIT Radio*, 418 F.2d at 1159.

by Section 25.114 for U.S.-licensed space stations.⁹ Intelsat herein seeks authority to provide TT&C services—not commercial services—to the United States, and thus believes that Section 25.137 does not apply.¹⁰ Furthermore, the Commission previously determined under the DISCO II framework¹¹ that the HISPASAT 143W-1 satellite offers services in furtherance of competition in the United States at the 30° W.L. orbital location.¹²

However, to the extent the Commission determines that Intelsat's request for authority to provide TT&C services on a special temporary basis is a request to serve the United States with a non-U.S.-licensed satellite, good cause exists to grant waiver of Section 25.137 Commission's rules.¹³ Section 25.137 is designed to ensure that "U.S.-licensed satellite systems have effective competitive opportunities to provide analogous services" in other countries. Pursuant to this STA request, there will be no service being provided by the satellite; it is simply being drifted and station-kept. Thus, the purpose of Section 25.137 would not be served by applying these rules to TT&C services.

Moreover, HISPASAT 143W-1 is licensed by the Spain, which is a member country of the World Trade Organization, and the satellite has U.S. market access from its recently vacated location, 30° W.L.¹⁴ Additionally, Intelsat has a pending petition seeking authorization for HISPASAT 143W-1 to serve the United States from the 143° W.L. orbital location.¹⁵ Given these facts, the purpose of Section 25.137, to ensure that U.S. satellite operators enjoy "effective competitive

⁹ 47 C.F.R. § 25.137.

¹⁰ 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*, Order and Authorization, 28 FCC Rcd. 4229 (2013) (noting that operating TT&C earth stations in the United States with a foreign-licensed satellite does not constitute "DBS service").

¹¹ *Amendment of the Commission's Regulatory Policies to Allow Non-U.S.-Licensed Space Stations to Provide Domestic and International Satellite Service in the United States*, Report and Order, 12 FCC Rcd 24094, ¶ 39 (1997) ("DISCO II").

¹² See *HISPASAT 143W-1 Market Access Grant*.

¹³ Section 25.137 also requires that earth station applicants "provide the same legal and technical information for the non-U.S.-licensed space station as required by Section 25.114 for U.S.-licensed space stations." 47 C.F.R. § 25.137. Intelsat has provided this information in its pending petition to add HISPASAT 143W-1 to the U.S. Approved Space Station List, and incorporates the information provided in that petition by reference. See *Intelsat Petition*.

¹⁴ See *HISPASAT-1D Market Access Grant*.

¹⁵ See *Intelsat Petition*.

Ms. Marlene H. Dortch
December 18, 2019
Page 4

opportunities” to serve certain foreign markets, will not be undermined by grant of this waiver request.

In light of the particular facts described above, the waivers sought herein are plainly appropriate.

In further support of this request, Intelsat herewith attaches Exhibit A, which contains technical information that demonstrates that the operation of the earth station will be compatible with its electromagnetic environment and will not cause harmful interference into any lawfully operating commercial terrestrial facility. 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.

Grant of this STA request will allow Intelsat to ensure safe redeployment and station-keeping of the HISPASAT 143W-1 satellite, and thereby promotes the public interest.

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

Respectfully submitted,

/s/ Cynthia J. Grady

Cynthia J. Grady
Senior Counsel
Intelsat US LLC

cc: Paul Blais

FREQUENCY COORDINATION AND INTERFERENCE ANALYSIS REPORT

Prepared for
Intelsat License LLC
CASTLE ROCK, CO
Satellite Earth Station

Prepared By:
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147
December 06, 2019

TABLE OF CONTENTS

1. CONCLUSIONS.....	3
2. SUMMARY OF RESULTS	4
3. SUPPLEMENTAL SHOWING.....	5
4. EARTH STATION COORDINATION DATA.....	6
5. CERTIFICATION.....	10

1. CONCLUSIONS

An interference study considering all existing, proposed and prior coordinated microwave facilities within the coordination contours of the proposed earth station demonstrates that this site will operate satisfactorily with the common carrier microwave environment. Further, there will be no restrictions of its operation due to interference considerations.

2. SUMMARY OF RESULTS

A number of great circle interference cases were identified during the interference study of the proposed earth station. Each of the cases, which exceeded the interference objective on a line-of-sight basis, was profiled and the propagation losses estimated using NBS TN101 (Revised) techniques. The losses were found to be sufficient to reduce the signal levels to acceptable magnitudes in every case.

3. SUPPLEMENTAL SHOWING

Pursuant to Part 25.203(c) of the FCC Rules and Regulations, the satellite earth station proposed in this application was coordinated by Comsearch using computer techniques and in accordance with Part 25 of the FCC Rules and Regulations.

Coordination data for this earth station was sent to the below listed carriers with a letter dated 11/20/2019.

Company

CBS Television Stations
Colorado Public TV - KBDI
Entravision Holdings, LLC
Gray Television Licensee LLC (Gray TV)
Gray Television Licensee, LLC
Ion Media Denver License, Inc.
KWGN, LLC
Mainstreet Broadcasting Co.,
Multimedia Holdings Corporation
NEXSTAR BROADCASTING, INC.
Pikes Peak Television, Inc.
Rocky Mountain Public Media Inc
SBE coordinator
SIMCHAT TORAH BEIT MIDRASH
Scripps Broadcasting Holdings, LLC
Scripps Media, Inc. - KMGH TV
Syncom Media Group, Inc
Tribune Broadcasting Denver License, LLC
Word of God Fellowship, Inc.

4. EARTH STATION COORDINATION DATA

This section presents the data pertinent to frequency coordination of the proposed earth station that was circulated to all carriers within its coordination contours.

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Date: 12/06/2019
Job Number: 191120COMSGE07

Administrative Information

Status ENGINEER PROPOSAL
Call Sign KL92
Licensee Code INTELS
Licensee Name Intelsat License LLC

Site Information

Venue Name **CASTLE ROCK, CO**
Latitude (NAD 83) 39° 16' 36.2" N
Longitude (NAD 83) 104° 48' 26.1" W
Climate Zone A
Rain Zone 2
Ground Elevation (AMSL) 2087.49 m / 6848.7 ft

Link Information

Satellite Type Geostationary
Mode RO - Receive-Only
Modulation Analog and Digital
Satellite Arc 33° W to 177° West Longitude
Azimuth Range 101.8° to 258.5°
Corresponding Elevation Angles 5.3° / 5.0°
Antenna Centerline (AGL) 7.74 m / 25.4 ft

Antenna Information

Manufacturer NEC
Model 12.5 meter
Gain / Diameter 62.0 dBi / 12.5 m
3-dB / 15-dB Beamwidth 0.14° / 0.26°

Receive - FCC32

Interference Objectives: Long Term -156.0 dBW/MHz 20%
Short Term -146.0 dBW/MHz 0.01%

Frequency Information

Emission / Frequency Range (MHz) **Receive 13.0 GHz**
440KG2D / 12749.75

Max Great Circle Coordination Distance 680.7 km / 422.9 mi
Precipitation Scatter Contour Radius 596.8 km / 370.8 mi

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

Coordination Values	CASTLE ROCK, CO
Licensee Name	Intelsat License LLC
Latitude (NAD 83)	39° 16' 36.2" N
Longitude (NAD 83)	104° 48' 26.1" W
Ground Elevation (AMSL)	2087.49 m / 6848.7 ft
Antenna Centerline (AGL)	7.74 m / 25.4 ft
Antenna Model	NEC 12.5 meter
Antenna Mode	Receive 13.0 GHz
Interference Objectives: Long Term	-156.0 dBW/MHz 20%
Short Term	-146.0 dBW/MHz 0.01%

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 13.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
0	4.68	101.50	-10.00	100.00
5	4.58	96.75	-10.00	100.00
10	5.40	91.76	-10.00	100.00
15	5.36	86.76	-10.00	100.00
20	5.29	81.76	-10.00	100.00
25	5.67	76.76	-10.00	100.00
30	4.99	71.76	-10.00	100.00
35	4.03	66.76	-10.00	105.00
40	2.77	61.79	-10.00	126.37
45	2.80	56.79	-10.00	125.72
50	2.84	51.80	-10.00	125.07
55	2.37	46.83	-9.76	133.80
60	1.30	41.91	-8.56	169.40
65	1.25	36.95	-7.19	177.31
70	0.59	32.07	-5.65	209.55
75	0.00	27.24	-3.88	251.16
80	0.00	22.37	-1.74	261.92
85	0.00	17.56	0.89	275.81
90	0.00	12.89	4.24	292.66
95	0.25	8.44	8.84	316.48
100	0.22	5.40	13.70	661.49
105	0.00	6.23	12.13	447.19
110	0.00	9.71	7.32	311.80
115	0.27	13.22	3.97	285.75
120	0.32	16.82	1.35	265.23
125	0.28	20.39	-0.73	258.41
130	0.57	23.62	-2.33	225.34
135	0.41	27.03	-3.79	230.68
140	0.47	30.11	-4.97	220.16
145	0.42	33.07	-5.99	219.89
150	0.63	35.58	-6.78	202.81
155	0.83	37.80	-7.44	192.00
160	0.93	39.75	-7.98	184.72
165	0.99	41.34	-8.41	179.72
170	1.10	42.45	-8.70	175.11
175	0.88	43.41	-8.94	183.23
180	0.85	43.69	-9.01	184.61
185	0.74	43.55	-8.97	190.36

COMSEARCH

Earth Station Data Sheet

19700 Janelia Farm Boulevard, Ashburn, VA 20147
(703)726-5500 <http://www.comsearch.com>

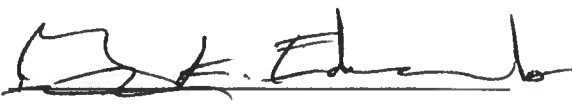
Coordination Values	CASTLE ROCK, CO
Licensee Name	Intelsat License LLC
Latitude (NAD 83)	39° 16' 36.2" N
Longitude (NAD 83)	104° 48' 26.1" W
Ground Elevation (AMSL)	2087.49 m / 6848.7 ft
Antenna Centerline (AGL)	7.74 m / 25.4 ft
Antenna Model	NEC 12.5 meter
Antenna Mode	Receive 13.0 GHz
Interference Objectives: Long Term	-156.0 dBW/MHz 20%
Short Term	-146.0 dBW/MHz 0.01%

Azimuth (°)	Horizon Elevation (°)	Antenna Discrimination (°)	Receive 13.0 GHz	
			Horizon Gain (dBi)	Coordination Distance (km)
190	1.35	42.21	-8.63	167.33
195	0.90	41.43	-8.43	184.55
200	1.35	39.38	-7.88	171.01
205	1.23	37.46	-7.34	177.23
210	1.28	35.05	-6.62	178.86
215	1.67	32.09	-5.66	171.63
220	1.93	29.01	-4.56	169.25
225	2.60	25.42	-3.13	157.87
230	2.52	22.22	-1.67	169.02
235	2.69	18.71	0.20	174.54
240	2.67	15.21	2.44	186.04
245	2.71	11.58	5.41	199.18
250	2.86	7.80	9.70	215.51
255	2.90	4.05	16.80	410.63
260	2.92	2.59	21.69	680.74
265	2.99	6.81	11.18	220.64
270	3.14	11.65	5.34	190.10
275	4.06	16.52	1.55	149.08
280	3.96	21.52	-1.32	137.78
285	3.99	26.52	-3.59	128.84
290	4.12	31.51	-5.46	119.94
295	4.30	36.50	-7.06	111.78
300	4.30	41.50	-8.45	106.82
305	4.02	46.50	-9.69	106.22
310	4.73	51.50	-10.00	100.00
315	5.32	56.50	-10.00	100.00
320	5.54	61.50	-10.00	100.00
325	5.43	66.50	-10.00	100.00
330	5.37	71.50	-10.00	100.00
335	5.00	76.50	-10.00	100.00
340	4.63	81.50	-10.00	100.00
345	4.63	86.50	-10.00	100.00
350	4.66	91.50	-10.00	100.00
355	4.66	96.50	-10.00	100.00

5. CERTIFICATION

I HEREBY CERTIFY THAT I AM THE TECHNICALLY QUALIFIED PERSON RESPONSIBLE FOR THE PREPARATION OF THE FREQUENCY COORDINATION DATA CONTAINED IN THIS APPLICATION, THAT I AM FAMILIAR WITH PARTS 101 AND 25 OF THE FCC RULES AND REGULATIONS, THAT I HAVE EITHER PREPARED OR REVIEWED THE FREQUENCY COORDINATION DATA SUBMITTED WITH THIS APPLICATION, AND THAT IT IS COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

BY: _____


Gary K. Edwards
Senior Manager
COMSEARCH
19700 Janelia Farm Boulevard
Ashburn, VA 20147

DATED: December 06, 2019