

E070027 SES-STA-20141119-00860 IB2014002283
DIRECTV Enterprises, LLC

Approved by OMB
3060-0678

APPLICATION FOR EARTH STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:
STA E070027 11.19.14

1. Applicant

Name:	DIRECTV Enterprises, LLC	Phone Number:	301-663-0053
DBA Name:		Fax Number:	240-358-0569
Street:	6050 Elmer Derr Rd	E-Mail:	jwengryniuk@directv.com
City:	Frederick	State:	MD
Country:	USA	Zipcode:	21703
Attention:	Jack Wengryniuk		


File # SES-STA-20141119-00860
E070027 Grant Date 1-9-15
Call Sign (or other Identifier)
From 1-9-15 Term Dates To 2-8-15
Approver's [Signature]
International Bureau
GRANTED

Applicant: DIRECTV Enterprises, LLC
Call Sign: E070027
File No.: SES-STA-20141119-00860

Operations under this STA 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.

Any action taken or expense incurred as a result of operations pursuant to this STA is solely at operator'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 immediately.

 GRANTED International Bureau	File # SES-STA-20141119-00860
	Call Sign E070027 Grant Date 1-9-15 (or other identifier)
	From 1-9-15 Term Dates To: 2-8-15
	Approved: <i>Paul E. Blakes</i>

2. Contact	
Name: William M. Wiltshire	Phone Number: 202-730-1350
Company: Harris, Wiltshire & Grannis LLP	Fax Number: 202-730-1301
Street: 1919 M Street NW Suite 800	E-Mail: wwiltshire@hwglaw.com
City: Washington	State: DC
Country: USA	Zipcode: 20036
Attention: William M. Wiltshire	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 SESMOD2012121201095 or Submission ID	
4a. Is a fee submitted with this application?	
<input checked="" type="radio"/> If Yes, complete and attach FCC Form 159. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114).	
<input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee	
<input type="radio"/> Other (please explain):	
4b. Fee Classification CGX – Fixed Satellite Transmit/Receive Earth Station	
5. Type Request	
<input type="radio"/> Use Prior to Grant <input type="radio"/> Change Station Location <input checked="" type="radio"/> Other	
6. Requested Use Prior Date	
7. City Castle 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 31.7 W
11. Please supply any need attachments. Attachment 1: Narrative Attachment 2: 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.) DIRECTV Enterprises, LLC seeks special temporary authority for in-orbit testing of the DIRECTV 14/RB-1 spacecraft at the 76 WL orbital location.	
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"; party to the application; for these purposes. <input checked="" type="radio"/> Yes <input type="radio"/> No	
14. Name of Person Signing Romulo Pontual	15. Title of Person Signing Executive Vice President
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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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.

REQUEST FOR SPECIAL TEMPORARY AUTHORITY

Call Sign: E070027

DIRECTV Enterprises, LLC (“DIRECTV”) hereby requests Special Temporary Authority (“STA”) for up to 30 days to conduct in-orbit testing (IOT) for the DIRECTV 14/DIRECTV RB-1 satellites (call signs 2869 and S2711, respectively) while at the 76° W.L. orbital location, from its Castle Rock, Colorado earth station (call sign E070027). This earth station is licensed to operate in the Ka-band FSS and the 24750-25050 MHz BSS feeder link frequency bands but 76° W.L. is not listed as a point of communication. In this application, DIRECTV makes two requests for STA. First, that the earth station be authorized to communicate with DIRECTV 14/DIRECTV RB-1 at 76° W.L. for the duration of the IOT; and second, that the earth station be temporarily authorized to operate across the 24750-25130 MHz frequency band at that location during this IOT. DIRECTV requests that the STA be structured to begin upon arrival of the satellite at 76° W.L.

DIRECTV RB-1 is a fully capable 17/24 GHz BSS payload on the DIRECTV 14 satellite. That satellite is currently at the launch site and is scheduled for launch on December 4, 2014. DIRECTV has requested temporary authority to conduct IOT of the Ka-band and 17/24 GHz BSS payloads at 76° W.L. before moving the satellite to its licensed orbital location.¹ The STA requested herein will support the IOT phase of the DIRECTV 14/RB-1 mission. DIRECTV notes that the earth station in question lies in the Denver-Boulder-Greeley, CO-KS-NE BEA141, and that FiberTower holds a 24 GHz Service license for this BEA (call sign WQCJ304). DIRECTV notes, however, that the WQCJ304 license only authorizes use of the two 40 MHz channels extending from 24330-24370 MHz and 25130-25170 MHz. As such, there is no frequency overlap between these channels and DIRECTV’s request, and therefore no possibility for interference to this 24 GHz Service licensee. DIRECTV will coordinate with potentially affected satellite operators in accordance with industry practice, and will operate on a non-interference basis during this IOT.

The requested STA will serve the public interest by ensuring that the DIRECTV 14/RB-1 satellite is properly tested to assure that it will operate safely and is in good working order so that it can make productive use of valuable spectrum/orbital resources as soon as possible. Accordingly, DIRECTV respectfully requests that the Commission grant this STA request as expeditiously as possible.

¹ See FCC File No. SAT-STA-20141118-00122.



November 18, 2014

BY ELECTRONIC FILING

Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

Re: *Request for Special Temporary Authority for In-Orbit Testing of
DIRECTV 14 and DIRECTV RB-1 at 76° W.L.*

Dear Ms. Dortch:

DIRECTV Enterprises, LLC (“DIRECTV”) hereby requests Special Temporary Authority (“STA”) to locate the DIRECTV 14 satellite (call sign S2869) along with the DIRECTV RB-1 payload (call sign S2711) at the 76° W.L. orbital location for in-orbit testing (“IOT”) after launch of the satellite, which is currently scheduled for December 4, 2014. This STA will cover a period of approximately 30 days within a 60 day window, which DIRECTV requests be keyed to become effective upon the satellite’s arrival at 76° W.L.

DIRECTV 14 is currently at the launch site being readied for launch. DIRECTV desires to conduct IOT for approximately four weeks before moving the satellite to its licensed position to begin commercial operations. Specifically, DIRECTV contemplates the following schedule [with approximate dates indicated in brackets]:

- After launch and orbit raising maneuvers, DIRECTV 14 will be located at 76° W.L. [no earlier than about December 14, 2014].
- After DIRECTV 14 reaches 76° W.L., DIRECTV will then commence IOT of the satellite for approximately 4 weeks.¹
- After IOT is completed, DIRECTV 14 will then be drifted to its assigned location at 99° W.L. (nominal) over the course of approximately 23 days [reaching that orbital position on or about February 5, 2015].

¹ During the period covered by this STA, DIRECTV will use 28351.0 and 28353.0 MHz for its command uplinks and 18799.0 and 18799.5 MHz for its telemetry downlinks.

Marlene H. Dortch
November 18, 2014
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In order to address the timing uncertainties normally associated with positioning a spacecraft after launch, DIRECTV requests that the STA become effective upon the arrival of DIRECTV 14 at 76° W.L.

Operation and testing of DIRECTV 14 and DIRECTV RB-1 during IOT will consist of performance verification testing of all transponders and antenna pattern verification testing of all antenna beams. During this testing, unmodulated CW carriers will be used to generate swept frequency response and gain transfer characteristics of each transponder. The maximum value of transmit power used during this testing will be consistent with the DIRECTV 14 and DIRECTV RB-1 applications,² except for short periods of time during gain transfer when the maximum transmit power for DIRECTV 14 could exceed that value by up to 10 dB during some tests.³ This testing will not result in harmful interference to other Ka-band satellite systems as the closest co-frequency operational satellite is located 9° away. Nor will this testing result in harmful interference to any DBS satellite system as the closest co-frequency operational DBS satellite is located 1° away and, as demonstrated in the measured transmit antenna gain submission for DIRECTV RB-1, the 17/24 GHz BSS payload on DIRECTV 14 will not exceed the -117 dBW/m²/100kHz PFD coordination trigger beyond 0.12°.⁴ DIRECTV will also coordinate its TT&C operations with all other potentially affected operators to ensure that no harmful interference results. Furthermore, DIRECTV is prepared to terminate all testing operations immediately upon notification from the Commission that its operations cause harmful interference to any authorized user of the spectrum.

Grant of this STA request will serve the public interest by allowing DIRECTV to test the DIRECTV 14/RB-1 satellite to ensure that it is fully operational and ready to begin providing service to millions of DIRECTV subscribers from the satellite's licensed orbital location. Allowing DIRECTV to test the satellite at 76° W.L. will serve the public interest by minimizing the risk of interference.

² See IBFS File Nos. SAT-LOA-20120518-00085 (DIRECTV 14) and SAT-LOA-20060908-00099, SAT-MOD-20110727-00135, SAT-MOD-20111128-00230 (DIRECTV RB-1).

³ Note that, as with IOT testing of DIRECTV 10, 11 and 12, all DIRECTV 14 IOT testing will be closely coordinated with U.S. government systems under FN US334.

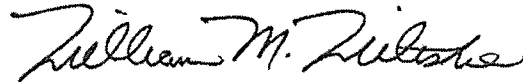
⁴ See IBFS File No. SAT-MOD-20141103-00119.

HARRIS, WILTSHIRE & GRANNIS LLP

Marlene H. Dortch
November 18, 2014
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Accordingly, and in light of the impending launch date, DIRECTV requests the expeditious grant of special temporary authority.

Respectfully submitted,

A handwritten signature in black ink that reads "William M. Wiltshire". The signature is written in a cursive, flowing style.

William M. Wiltshire
Counsel to DIRECTV Enterprises, LLC