

S2796 SAT-STA-20091202-00136
DIRECTV Enterprises, LLC

IE2009007836

File # SAT-STA-20091202-00136

Call Sign S2796 Grant Date 01/21/10

(or other identifier) see attached Term Dates Period of conditions To: 30 days

Approved by OMB
3060-0678

Date & Time Filed: Dec 2 2009 11:43:24:363AM
File Number: SAT-STA-20091202-00136
Callsign:

Approved: Stephen Duall

Stephen J. Duall
Chief, Satellite Policy Branch



FEDERAL COMMUNICATIONS COMMISSION
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

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APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Request for Special Temporary Authority for In-Orbit Testing of RB-2A (S2796) at 76 WL

I. Applicant

Name:	DIRECTV Enterprises, LLC	Phone Number:	301-663-0053
DBA Name:		Fax Number:	240-358-0569
Street:	2230 E. Imperial Hwy CA/LAI/N340	E-Mail:	jwengryniuk@directv.com
City:	El Segundo	State:	CA
Country:	USA	Zipcode:	90245 -
Attention:	Jack Wengryniuk		

ATTACHMENT
Conditions of Authorization
IBFS File No. SAT-STA-20091202-00136
Call Sign S2796
Grant Date: January 21, 2010

The request of DIRECTV Enterprises, LLC (DIRECTV) for special temporary authority (STA), IBFS File No. SAT-STA-20091202-00136, IS GRANTED. Accordingly, for a period of 30 days commencing on the date that the RB-2A space station (Call Sign S2796) arrives at the 76° W.L. orbital location, DIRECTV is authorized to conduct in-orbit testing using the 17.3-17.8 GHz (space-to-Earth) and 24.75-25.15 GHz (Earth-to-space) frequency bands. This authorization is granted in accordance with the terms, conditions, and technical specifications set forth in DIRECTV's application and supplement, the conditions set forth in this Attachment, and the Commission's rules.

1. Authority to conduct telemetry, tracking, and telecommand (TT&C) for the DIRECTV 12/RB-2A satellite at the 76° W.L. orbital location is authorized under IBFS File No. SAT-STA-20091201-00132, Call Sign S2797 (granting with conditions TT&C operations on the 29255.00 MHz and 29497.00 MHz command uplinks and the 18302.25 MHz and 18302.75 MHz telemetry and beacon downlinks).

2. All operations shall be on an unprotected and non-harmful interference basis, *i.e.*, DIRECTV shall not cause harmful interference to, and shall not claim protection from interference caused to it, by any other lawfully operating radiocommunication system.

3. In the event of any harmful interference as a result of the operations of the RB-2A space station during in-orbit testing at the 76° W.L. orbital location, DIRECTV shall cease operations immediately upon notification of such interference and shall immediately inform the Commission, in writing, of such an event.

4. DIRECTV shall notify the Chief of the Satellite Division, International Bureau, Federal Communications Commission, in writing, on the date that the DIRECTV 12/RB-2A satellite arrives at the 76° W.L. orbital location. This letter shall indicate the date and time that DIRECTV intends to commence in-orbit-testing of the RB-2A space station, (Call Sign S2796). Courtesy copies of this filing shall be sent via email to Chip.Fleming@fcc.gov and Mark.Young@fcc.gov.

5. During in-orbit testing, DIRECTV shall maintain the DIRECTV 12/RB-2A satellite within an east/west longitudinal station-keeping tolerance of ± 0.05 degrees of the 76° W.L. orbital location.

6. Operations of the RB-2A space station at the 76° W.L. orbital location are limited to in-orbit testing, and shall not include any provision of commercial services.

7. DIRECTV IS GRANTED, with conditions, a waiver of Section 25.208(w) of the Commission's rules, 47 C.F.R. § 25.208(w). This section states that the power flux density at the Earth's surface produced by emissions from a 17/24 GHz BSS space station operating in the 17.3-17.7 GHz band for all conditions, including clear sky, and for all methods of modulation shall not exceed a power flux density level of -121 dBW/m²/MHz in the region of the contiguous United States located west of 100° W.L., and shall not exceed a regional power flux density level of -115 dBW/m²/MHz for all regions outside of the contiguous United States including Alaska. In its application for special temporary authority for in-orbit testing, DIRECTV states that it will exceed the power levels stated in its application

for launch and operation authority by up to 12 dB for short periods of time during transponder gain transfer testing. The underlying purpose of Section 25.208(w) is to protect 17/24 GHz BSS consumer antennas from unforeseen levels of interference from 17/24 GHz space stations adjacent to the space station toward which the consumer antenna is pointed.¹ Currently, there are no 17/24 GHz BSS consumer antennas deployed in the U.S. that would be susceptible to such interference, nor are there any other operational 17/24 GHz BSS space stations serving the U.S. within ± 20 degrees of 76° W.L. Thus, granting a waiver of Section 25.208(w) in this instance will not undermine the purpose of the rule and serves the public interest by allowing DIRECTV to gather test data on its RB-2A space station.

8. Consistent with the requirements of Section 25.273 of the Commission's rules, 47 C.F.R. § 25.273, DIRECTV shall notify EchoStar Corporation of the frequencies and the dates and times at which it intends to conduct transponder gain transfer testing on the RB-2A space station as described in paragraph 7. This notification shall be transmitted to EchoStar by email to David Bair, david.bair@echostar.com, with a courtesy copy to Linda Kinney, linda.kinney@echostar.com, at least 24 hours prior to each instance of such testing.

9. In 2009, the Commission granted DIRECTV authority to construct, launch, and operate a 17/24 GHz BSS space station at the 102.825° W.L. orbital location. DA 09-1624 (Int'l Bur. 2009) (granting IBFS File Nos. SAT-LOA-20060908-00100, SAT-AMD-20080114-00014, and SAT-AMD-20080321-00077, Call Sign S2712). Spectrum Five LLC (Spectrum Five) has filed a petition for reconsideration relating to DA 09-1624. Subsequently, the Commission granted DIRECTV authority to construct, launch, and operate a 17/24 GHz BSS space station at the 102.765° W.L. orbital location. DA Nos. 09-2607, DA 10-89 (granting IBFS File No. SAT-LOA-20090807-00085, Call Sign S2796). On January 19, 2010, Spectrum Five filed a petition for reconsideration relating to grant of IBFS File No. SAT-LOA-20090807-00085. Our grant of IBFS File No. SAT-STA-20091202-00136 (Call Sign S2796) authorizing DIRECTV to conduct in-orbit testing of the DIRECTV RB-2A space station is without prejudice to any action relating to Spectrum Five's pending petitions for reconsideration.

10. Any action taken or expense incurred as a result of operations pursuant to this STA is at DIRECTV's own risk.

11. DIRECTV is afforded 30 days from the date of release of this authorization to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.

12. 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. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of the public notice indicating that this action was taken.

*subject to conditions



File # SAT-STA-20091202-00136

Call Sign S2796 Grant Date 01/21/10

(or other identifier)

see attached Term Dates period of
Conditions 30 days

From _____ To: _____
Approved: Stephen J. Duall

Stephen J. Duall
Chief, Satellite Policy
Branch

¹ The Establishment of Policies and Service Rules for the Broadcasting-Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75- 25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band, *Report and Order*, 22 FCC Rcd. 8842, 8882, paras. 97-101 (2007).

2. Contact	
Name: William M. Wiltshire	Phone Number: 202-730-1350
Company: Wiltshire & Grannis LLP	Fax Number: 202-730-1301
Street: 1200 18th Street, NW	E-Mail: wwiltshire@wiltshiregrannis.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 SATLOA2009080700085 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).	
<input checked="" type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee Other (please explain):	
4b. Fee Classification CRY – Space Station (Geostationary)	
5. Type Request	
Change Station Location	<input type="radio"/> Extend Expiration Date <input checked="" type="radio"/> Other
6. Temporary Orbit Location 76 W.L.	7. Requested Extended Expiration Date

<p>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.)</p> <div style="border: 1px solid black; padding: 5px;"> <p>DIRECTV Enterprises, LLC requests Special Temporary Authority to locate the RB-2A satellite at the 76 degree W.L. orbital location toconduct in-orbit testing for up to 30 days.</p> </div>					
<p>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 &quot;party to the application&quot;; for these purposes.</p> <p style="text-align: right;">Yes <input type="radio"/> No <input checked="" type="radio"/></p>					
<p>10. Name of Person Signing James Butterworth</p>	<p>11. Title of Person Signing Senior Vice President</p>				
<p>12. Please supply any need attachments.</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;">Attachment 1: STA Request</td> <td style="width: 50%;">Attachment 2:</td> </tr> <tr> <td></td> <td>Attachment 3:</td> </tr> </table>		Attachment 1: STA Request	Attachment 2:		Attachment 3:
Attachment 1: STA Request	Attachment 2:				
	Attachment 3:				
<p>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).</p>					

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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.

December 2, 2009

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 RB-2A at 76° W.L.***

Dear Ms. Dortch:

DIRECTV Enterprises, LLC (“DIRECTV”) hereby requests Special Temporary Authority (“STA”) to conduct in-orbit testing of DIRECTV RB-2A (call sign S2796) at the 76° W.L. orbital location. As described in the underlying application,¹ DIRECTV RB-2A is a 17/24 GHz BSS payload that is part of the DIRECTV 12 satellite. As such, DIRECTV desires to conduct in-orbit testing (“IOT”) of this payload while DIRECTV 12 is located at 76° W.L. for its Ka-band payload IOT. DIRECTV 12 is currently scheduled for launch in late December 2009. This STA will cover a period of approximately 30 days, which DIRECTV requests be keyed to become effective upon DIRECTV 12’s arrival at 76° W.L.

DIRECTV 12, with the DIRECTV RB-2A payload, is currently at the launch site being readied for launch later this month. 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 12 (with the DIRECTV RB-2A payload) will be located at 76° W.L. [no earlier than about February 15, 2010].

¹ See IBFS File No. SAT-LOA-20090807-00085.

WILTSHIRE & GRANNIS LLP

Marlene H. Dortch
December 2, 2009
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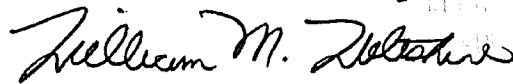
- After the satellite reaches 76° W.L., DIRECTV will then integrate IOT of the DIRECTV RB-2A payload with that of the DIRECTV 12 Ka-band payload during the approximately 4 weeks that the satellite will remain at this location.
- After all IOT is completed, DIRECTV 12 will then be drifted to its assigned location over the course of approximately 20 days [reaching that orbital position no later than about May 5, 2010].

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 12 at 76° W.L.

Operation and testing of DIRECTV RB-2A during IOT will consist of performance verification testing of the transponders and antenna pattern verification testing. During this testing, unmodulated CW carriers will be used to generate swept frequency response and gain transfer characteristics of the tested transponders. The maximum value of transmit power used during this testing will be consistent with the DIRECTV RB-2A application, except for short periods of time during gain transfer when the maximum transmit power could exceed that value by up to 12 dB. This testing will not result in harmful interference to other satellite systems as there are no other co-frequency satellites operating in this frequency band. 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 RB-2A payload 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. Accordingly, and in light of the impending launch date, DIRECTV requests the expeditious grant of special temporary authority.

Respectfully submitted,



William M. Wiltshire
Counsel to DIRECTV Enterprises, LLC