

S2861 SAT-AMD-20150818-00058 IB2015001522  
DIRECTV Enterprises, LLC  
DIRECTV RB-79W



\*with conditions

File # SAT-AMD-20150818-00058 \*\*

\*\*see also  
SAT-MOD-20150428-00031

Call Sign S2861 Grant Date 02/11/16  
(or other identifier)

Term Dates

From 02/11/16 To 06/23/30

Approved by OMB  
3060-0678

Approved: Stephen J. Duall

Stephen J. Duall  
Chief, Satellite Policy Branch

Date & Time Filed: Aug 18 2015 1:29:56:266PM  
File Number: SAT-AMD-20150818-00058

FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD – MAIN FORM	FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:  
Amendment to DIRECTV RB-79W, Call Sign S2861

1-8. Legal Name of Applicant			
<b>Name:</b>	DIRECTV Enterprises, LLC	<b>Phone Number:</b>	301-663-0053
<b>DBA Name:</b>		<b>Fax Number:</b>	240-358-0569
<b>Street:</b>	2230 E. Imperial Hwy CA/LAI/N340	<b>E-Mail:</b>	jwengryniuk@directv.com
<b>City:</b>	El Segundo	<b>State:</b>	CA
<b>Country:</b>	USA	<b>Zipcode:</b>	90245 -
<b>Attention:</b>	Jack Wengryniuk		

Attachment to Grant  
IBFS File Nos. SAT-MOD-20150428-00031, SAT-AMD-20150818-00058  
Call Sign S2861

The application of DIRECTV Enterprises, LLC (DIRECTV), IBFS File Nos. SAT-MOD-20150428-00031 and SAT-AMD-20150818-00058, to operate in the 17.3-17.8 GHz (space-to-Earth) and 24.75-25.25 GHz (Earth-to-space) frequency bands at the 78.8° W.L. orbital location IS GRANTED.<sup>1</sup> DIRECTV will provide direct-to-home satellite service, including high-definition video, to Mexico. DIRECTV's request to operate in the 17.3-17.8 GHz (space-to-Earth) and 24.75-25.25 GHz (Earth-to-space) frequency bands at an orbital location offset by 0.2 degrees from an Appendix F location with full power and full interference protection in accordance with Section 25.262(b) IS GRANTED. DIRECTV's operations must be in accordance with the terms, conditions, and technical specifications set forth in DIRECTV's application and the Federal Communications Commission's rules, and are subject to the following conditions:

1. DIRECTV must prepare the necessary information, as may be required for submission to the International Telecommunication Union (ITU), to initiate and complete the advance publication, international coordination, due diligence, and notification process for this space station, in accordance with the ITU Radio Regulations. DIRECTV shall be responsible for all cost-recovery fees associated with ITU filings. No protection from interference caused by radio stations authorized by other administrations is guaranteed unless coordination and notification procedures are timely completed or, with respect to individual administrations, by successfully completing coordination agreements. Any radio station authorization for which coordination has not been completed may be subject to additional terms and conditions as required to effect coordination of the frequency assignments with other administrations. *See* 47 C.F.R. § 25.111(b).
2. In connection with the provision of service in any particular country, DIRECTV is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
3. DIRECTV must operate at the 78.8° W.L. orbital location in compliance with all existing and future coordination agreements.

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<sup>1</sup> This application was placed on public notice as acceptable for filing. *Policy Branch Information Satellite Space Applications Accepted for Filing*, Public Notice, Report No. SAT-01106 (Sept. 18, 2015). No comments were filed. DIRECTV was previously authorized to construct and launch the DIRECTV KU-79W space station (S2861) with the capability of operating in the 17.3-17.8 GHz (space-to-Earth) and the 24.75-25.25 GHz (Earth-to-space) frequency bands. *See* IBFS File No. SAT-LOA-20120316-00051, SAT-AMD-20120420-00071, and SAT-MOD-20130718-00096. Although DIRECTV originally filed the present application as a request for launch and operational authority for a separate space station, the application was subsequently changed to a request to modify the license for DIRECTV KU-79W. The IBFS file number was accordingly changed from SAT-LOA-20150428-00031 to SAT-MOD-20150428-00031. DIRECTV KU-79W is currently in orbit at 78.8° WL and commenced operations in the Ku-band on June 23, 2015. Letter from William M. Wiltshire, Counsel for DIRECTV Enterprises, LLC, to Marlene H. Dortch, FCC Secretary (July 17, 2015)(on file in IBFS File No. SAT-LOA-20120316-00051).

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4. DIRECTV's request for a waiver of Section 25.264 of the Commission's rules, 47 C.F.R. § 25.264, IS GRANTED. Section 25.264 requires each 17/24 GHz Broadcasting Satellite Service (BSS) space station licensee to provide predicted and measured antenna off-axis gain information and associated power flux density calculations to show that the proposed operations of the space station will not exceed the applicable coordination trigger at the orbital location of any prior-filed U.S. Direct Broadcast Satellite (DBS) space station. Sections 25.264(a)-(b) are designed to mitigate the potential for space path interference to DBS operations, and sections 25.264(c)-(d) require that the satellite licensee provide to the Commission nine months or earlier prior to launch certain information relevant to Sections 25.264(a)-(b). In the present case, DIRECTV filed this request for launch and operation authority slightly less than one month prior to the launch of DIRECTV KU-79W; thus, it could not comply with the nine month due date specified in Sections 25.264(c)-(d). We note, however, that in lieu of providing measured antenna off-axis data and associated pfd calculations as required by Sections 25.264(c)-(d), DIRECTV instead provided performance data that was derived by using the actual measured performance of the transmit feed, the known characteristics of the transmit antenna, and the known characteristics of the east side spacecraft panel, as inputs to a detailed scattering model.<sup>2</sup> Accordingly, the grant of waiver of Section 25.264(c)-(d) of the Commission's rules is based upon the following factors:

a. Upon review of DIRECTV's analysis, as supplemented, and noting the close agreement between the predicted and analytic data, we believe that this approach likely provides a sufficiently accurate representation of the off-axis antenna performance over the measurement ranges described in Sections 25.264(c)-(d). However, in the event that a U.S.-licensed DBS operator located at an orbital position more than 0.2 degrees from 78.8° W.L. experiences unacceptable interference from DIRECTV's transmissions, DIRECTV will be required to coordinate with that operator to resolve the interference complaint. DIRECTV may also be required to take additional steps to confirm the accuracy of its technical analysis;

b. This waiver is limited to operation at the 78.8° W.L. orbital location. If DIRECTV moves from this location, it must request a new waiver of Sections 25.264(c)-(d).

5. The license term for operations in the 17.3-17.8 GHz (space-to-Earth) and 24.75-25.25 GHz (Earth-to-space) frequency bands is the same as the license term for the DIRECTV KU 79W space station, Call Sign 2861, and expires on June 23, 2030.

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


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<sup>2</sup> DIRECTV supplemented the record with an analysis of off-axis performance on February 5, 2016. Letter from Jennifer D. Hindin, Counsel for DIRECTV Enterprises, LLC, to Marlene H. Dortch, FCC Secretary (Feb. 5, 2016).

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7. 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 from the date of the public notice indicating that this action was taken.

SAT-MOD-20150428-00031  
File # SAT-AMD-20150818-00058  
Call Sign S2861 Grant Date 02/11/16  
(or other identifier)  
Term Dates  
From 02/11/16 To: 06/23/30  
Approved: *Stephen J. Duall*  
Stephen J. Duall  
Chief, Satellite Policy Branch



GRANTED\*  
International Bureau  
\*with conditions

9-16. Name of Contact Representative

<b>Name:</b>	Jennifer Hindin	<b>Phone Number:</b>	202-719-4975
<b>Company:</b>	Wiley Rein LLP	<b>Fax Number:</b>	202-719-7049
<b>Street:</b>	1776 K Street NW	<b>E-Mail:</b>	jhindin@wileyrein.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20006-
<b>Attention:</b>		<b>Relationship:</b>	Legal Counsel

CLASSIFICATION OF FILING

17. Choose the button next to the classification that applies to this filing for both questions a. and b. Choose only one for 17a and only one for 17b.

- a1. Earth Station
- a2. Space Station

- (N/A) b1. Application for License of New Station
- (N/A) b2. Application for Registration of New Domestic Receive-Only Station
- b3. Amendment to a Pending Application
- b4. Modification of License or Registration
- b5. Assignment of License or Registration
- b6. Transfer of Control of License or Registration
- b7. Notification of Minor Modification
- (N/A) b8. Application for License of New Receive-Only Station Using Non-U.S. Licensed Satellite
- (N/A) b9. Letter of Intent to Use Non-U.S. Licensed Satellite to Provide Service in the United States
- (N/A) b10. Other (Please specify)
- (N/A) b11. Application for Earth Station to Access a Non-U.S. satellite Not Currently Authorized to Provide the Proposed Service in the Proposed Frequencies in the United States
- (N/A) b12. Application for Database Entry
- b13. Amendment to a Pending Database Entry Application
- b14. Modification of Database Entry



TYPE OF SERVICE

20. NATURE OF SERVICE: This filing is for an authorization to provide or use the following type(s) of service(s): Select all that apply:	
<input type="checkbox"/> a. Fixed Satellite <input type="checkbox"/> b. Mobile Satellite <input type="checkbox"/> c. Radiodetermination Satellite <input type="checkbox"/> d. Earth Exploration Satellite <input checked="" type="checkbox"/> e. Direct to Home Fixed Satellite <input type="checkbox"/> f. Digital Audio Radio Service <input type="checkbox"/> g. Other (please specify)	
21. STATUS: Choose the button next to the applicable status. Choose only one. <input checked="" type="radio"/> Common Carrier <input checked="" type="radio"/> Non-Common Carrier	22. If earth station applicant, check all that apply. <input type="checkbox"/> Using U.S. licensed satellites <input type="checkbox"/> Using Non-U.S. licensed satellites
23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities: <input checked="" type="radio"/> Connected to a Public Switched Network <input type="radio"/> Not connected to a Public Switched Network <input checked="" type="radio"/> N/A	
24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s). <input type="checkbox"/> a. C-Band (4/6 GHz) <input type="checkbox"/> b. Ku-Band (12/14 GHz) <input checked="" type="checkbox"/> c. Other (Please specify upper and lower frequencies in MHz.) Frequency Lower: 17300                      Frequency Upper: 25250                      (Please specify additional frequencies in an attachment)	

TYPE OF STATION

25. CLASS OF STATION: Choose the button next to the class of station that applies. Choose only one.

- a. Fixed Earth Station
- b. Temporary-Fixed Earth Station
- c. 12/14 GHz VSAT Network
- d. Mobile Earth Station
- e. Geostationary Space Station
- f. Non-Geostationary Space Station
- g. Other (please specify)

26. TYPE OF EARTH STATION FACILITY:

- Transmit/Receive     Transmit-Only     Receive-Only     N/A

"For Space Station applications, select N/A."



PURPOSE OF MODIFICATION

27. The purpose of this proposed modification is to: (Place an 'X' in the box(es) next to all that apply.)

- a -- authorization to add new emission designator and related service
- b -- authorization to change emission designator and related service
- c -- authorization to increase EIRP and EIRP density
- d -- authorization to replace antenna
- e -- authorization to add antenna
- f -- authorization to relocate fixed station
- g -- authorization to change frequency(ies)
- h -- authorization to add frequency
- i -- authorization to add Points of Communication (satellites & countries)
- j -- authorization to change Points of Communication (satellites & countries)
- k -- authorization for facilities for which environmental assessment and radiation hazard reporting is required
- l -- authorization to change orbit location
- m -- authorization to perform fleet management
- n -- authorization to extend milestones
- o -- Other (Please specify)

ENVIRONMENTAL POLICY

28. Would a Commission grant of any proposal in this application or amendment have a significant environmental impact as defined by 47 CFR 1.1307? If YES, submit the statement as required by Sections 1.1308 and 1.1311 of the Commission's rules, 47 C.F.R. 1.1308 and 1.1311, as an exhibit to this application. A Radiation Hazard Study must accompany all applications for new transmitting facilities, major modifications, or major amendments.  Yes  No

ALIEN OWNERSHIP Earth station applicants not proposing to provide broadcast, common carrier, aeronautical en route or aeronautical fixed radio station services are not required to respond to Items 30–34.

29. Is the applicant a foreign government or the representative of any foreign government?	<input type="radio"/> Yes <input checked="" type="radio"/> No
30. Is the applicant an alien or the representative of an alien?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A
32. Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> N/A

33. Is the applicant a corporation directly or indirectly controlled by any other corporation of which more than one-fourth of the capital stock is owned of record or voted by aliens, their representatives, or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?  Yes  No  N/A

34. If any answer to questions 29, 30, 31, 32 and/or 33 is Yes, attach as an exhibit an identification of the aliens or foreign entities, their nationality, their relationship to the applicant, and the percentage of stock they own or vote.

#### BASIC QUALIFICATIONS

35. Does the Applicant request any waivers or exemptions from any of the Commission's Rules?  Yes  No  
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

36. Has the applicant or any party to this application or amendment had any FCC station authorization or license revoked or had any application for an initial, modification or renewal of FCC station authorization, license, or construction permit denied by the Commission? If Yes, attach as an exhibit, an explanation of circumstances.  Yes  No

37. Has the applicant, or any party to this application or amendment, or any party directly or indirectly controlling the applicant ever been convicted of a felony by any state or federal court? If Yes, attach as an exhibit, an explanation of circumstances.

Yes  No

38. Has any court finally adjudged the applicant, or any person directly or indirectly controlling the applicant, guilty of unlawfully monopolizing or attempting unlawfully to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive traffic arrangement or any other means or unfair methods of competition? If Yes, attach as an exhibit, an explanation of circumstances

Yes  No

39. Is the applicant, or any person directly or indirectly controlling the applicant, currently a party in any pending matter referred to in the preceding two items? If yes, attach as an exhibit, an explanation of the circumstances.

Yes  No

40. If the applicant is a corporation and is applying for a space station license, attach as an exhibit the names, address, and citizenship of those stockholders owning a record and/or voting 10 percent or more of the Filer's voting stock and the percentages so held. In the case of fiduciary control, indicate the beneficiary(ies) or class of beneficiaries. Also list the names and addresses of the officers and directors of the Filer.

41. 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.

Yes  No

42a. Does the applicant intend to use a non-U.S. licensed satellite to provide service in the United States? If Yes, answer 42b and attach an exhibit providing the information specified in 47 C.F.R. 25.137, as appropriate. If No, proceed to question 43.

Yes  No

42b. What administration has licensed or is in the process of licensing the space station? If no license will be issued, what administration has coordinated or is in the process of coordinating the space station?

43. Description. (Summarize the nature of the application and the services to be provided). (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 hereby submits the eccentricity orbital value and max saturation flux density for DIRECTV RB-79W.

Narrative

43a. Geographic Service Rule Certification

By selecting A, the undersigned certifies that the applicant is not subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25.

A

By selecting B, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will comply with such requirements.

B

By selecting C, the undersigned certifies that the applicant is subject to the geographic service or geographic coverage requirements specified in 47 C.F.R. Part 25 and will not comply with such requirements because it is not feasible as a technical matter to do so, or that, while technically feasible, such services would require so many compromises in satellite design and operation as to make it economically unreasonable. A narrative description and technical analysis demonstrating this claim are attached.

C

CERTIFICATION

The Applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The applicant certifies that grant of this application would not cause the applicant to be in violation of the spectrum aggregation limit in 47 CFR Part 20. All statements made in exhibits are a material part hereof and are incorporated herein as if set out in full in this application. The undersigned, individually and for the applicant, hereby certifies that all statements made in this application and in all attached exhibits are true, complete and correct to the best of his or her knowledge and belief, and are made in good faith.

44. Applicant is a (an): (Choose the button next to applicable response.)

- Individual
- Unincorporated Association
- Partnership
- Corporation
- Governmental Entity
- Other (please specify)

45. Name of Person Signing  
Phil Goswitz

—>

46. Title of Person Signing  
Senior Vice President, Video, Space and Comm.

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).

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