

S2369 SAT-AMD-20120913-00148
DIRECTV Enterprises, LLC
DIRECTV 1R

IB2012002125



File # SAT-AMD-20120913-00148

Call Sign S2369 Grant Date 12/21/12

(or other identifier)

Term Dates see

From 12/21/12

To: conditions

Approved:

Stephen J. Duall
Stephen J. Duall
Chief, Satellite Policy Branch

see also
SAT-A/O-20120817-00137
SAT-AMD-20120824-00142

Approved by OMB
3060-0678

Date & Time Filed: Sep 13 2012 11:25:47:430AM
File Number: SAT-AMD-20120913-00148

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:

SAT-AMD-D1R

1-8. Legal Name of 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: Mr Jack M Wengryniuk

Attachment to Grant
IBFS File Nos. SAT-A/O-20120817-00137, SAT-AMD-20120824-00142,
& SAT-AMD-20120913-00148
Call Sign S2369

The application of DIRECTV Enterprises, LLC (DIRECTV), as amended, IBFS File Nos. SAT-A/O-20120817-00137, SAT-AMD-20120824-00142, and SAT-AMD-20120913-00148 is GRANTED.¹ Accordingly, DIRECTV is authorized to operate its DIRECTV 1R space station (S2369) at the 55.8° E.L. orbital location to provide Broadcasting-Satellite Service (BSS) in the 12.2-12.5 GHz (space-to-Earth) and to receive feederlinks in the 17.3-17.6 GHz (Earth-to-space) frequency bands.² In addition, DIRECTV is authorized to conduct Telemetry, Tracking, and Command (TT&C) operations necessary to maintain the DIRECTV 1R space station at the 55.8° E.L. orbital location using the following center frequencies: 17.305 GHz and 17.799 GHz (Earth-to-space); and 12.69825 GHz and 12.69925 GHz (space-to-Earth). Operations under this authorization must be in accordance with the technical parameters set forth in DIRECTV's application and the Commission's rules, and are subject to the following conditions.

1. All operations must be on an unprotected and non-harmful interference basis, *i.e.*, DIRECTV must not cause harmful interference to, and must not claim protection from interference caused to it by, any other lawfully operating radiocommunication system. In the event of any harmful interference to any other lawfully operating radiocommunication system, DIRECTV must cease operations immediately upon notification of such interference and must immediately inform the Commission, in writing, of such an event.
2. DIRECTV must maintain the DIRECTV 1R space station within an east/west longitudinal station-keeping tolerance of ± 0.05 degrees of the 55.8° E.L. orbital location.
3. DIRECTV's request for waivers of Sections 25.114(d)(14)(ii) and 25.283(c) of the Commission's rules, 47 C.F.R. §§ 25.114(d)(14)(ii), 25.283(c), is granted. Sections 25.114(d)(14)(ii) and 25.283(c) specify that space stations must discharge all stored energy sources at end-of-life of the space station. DIRECTV 1R space station is a Boeing 601 model spacecraft and does not completely discharge all stored energy at end of life. DIRECTV states that residual helium pressurant will not be vented at the spacecraft's end of life because the tanks containing this pressurant were sealed shortly after the satellite's launch. Additionally, DIRECTV states that residual xenon propellant cannot be vented at the spacecraft's end of life because the spacecraft's ion propulsion system has failed. DIRECTV further states that each of the two helium pressurant tanks has a volume of approximately 4.3 liters, and that there is a total mass of 0.28 kg of helium in the tanks at end of life, and that each of the two xenon propellant tanks has a volume of approximately 3.25 liters with a total mass of 3.5775 kg and 3.5838 kg, respectively. The information submitted by DIRECTV is not sufficient to support a finding that the underlying purpose of Section 25.283(c) is served by sealing the pressurant tanks without completely venting them. Nevertheless, we grant DIRECTV a partial waiver of Sections 25.114(d)(14)(ii) and 25.283(c). DIRECTV 1R was launched before Section 25.283(c) was adopted. Furthermore, compliance with Section 25.283(c) would require direct retrieval of the spacecraft or launching a servicing mission to the spacecraft, which is not practicable at this time. This action is

¹ The application and amendments were placed on Public Notice as accepted for filing on September 28, 2012. *See Policy Branch Information, Satellite Space Applications Accepted for Filing*, Public Notice, Report No. SAT-00901, (IBFS File Nos. SAT-A/O-20120817-00137, SAT-AMD-20120824-00142, and SAT-AMD-20120913-00148). In response to the Public Notice, comments were filed on October 31, 2012 by New Skies Satellites B.V. (New Skies). On November 11, 2012, DIRECTV filed a response to New Skies' comments. Also on November 11, the Russian Satellite Communications Company filed comments in response to New Skies' comments. On November 26, 2012, New Skies filed a reply to DIRECTV's response. On November 29, Intelsat License LLC filed comments in support of DIRECTV's application.

² DIRECTV's application originally proposed the 56.16° E.L. orbital location, but DIRECTV later amended its application to request the 55.8° E.L. orbital location. *See* IBFS File No. SAT-AMD-20120913-00148.

Attachment to Grant
IBFS File Nos. SAT-A/O-20120817-00137, SAT-AMD-20120824-00142,
& SAT-AMD-20120913-00148
Call Sign S2369

without prejudice to future licensing decisions in connection with other spacecraft of the same manufacturing series.

4. Operations of the DIRECTV 1R space station at the 55.8° E.L. orbital location must conform to the operational agreement reached between DIRECTV and New Skies, dated December 20, 2012.
5. The United States remains the licensing administration of the DIRECTV 1R space station and its communications payloads for purposes of International Telecommunication Union (ITU) Radio Regulation 18.1 and is the administration responsible for the operations of DIRECTV 1R. The U.S. Administration will not object to use of the DIRECTV 1R satellite by the Russian Administration for claiming bringing into use or continuing the use of frequency assignments at 55.8° E.L. This grant does not in any way express a view concerning, or agreement as to, the validity or lack of validity of any ITU filing at or within the vicinity of the 55.8° E.L. orbital location.
6. In connection with the provision of service in any particular country, DIRECTV 1R is obliged to comply with the applicable laws, regulations, rules, and licensing procedures of that country.
7. DIRECTV must maintain full operational control of DIRECTV 1R at all times.
8. Grant of this authorization does not convey to DIRECTV any authority to operate a space station at the 55.8° E.L. orbital location beyond the term granted herein, nor any status in the United States satellite licensing process relative to applications for authority to operate a regularly authorized satellite at this orbital position.
9. The expiration date of the authorization for DIRECTV 1R is July 31, 2014.
10. DIRECTV is afforded 30 days from the date of release of this action to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.
11. 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 of the Commission's rules 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 public notice indicating that this action was taken.



*with conditions

SAT-A/O-20120817-00137
SAT-AMD-20120824-00142
File # SAT-AMD-20120913-00148

Call Sign S2369 **Grant Date** 12/21/12
(or other identifier)

Term Dates see
From 12/21/12 **To:** conditions

Approved: Stephen J. Duall
Stephen J. Duall
Chief, Satellite Policy Branch

9-16. Name of Contact Representative

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:	wwiltshrie@wiltshiregrannis.com
	Suite 1200		
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036-
Attention:	William M Wiltshire	Relationship:	Legal Counsel

CLASSIFICATION OF FILING

<p>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.</p> <p><input type="radio"/> a1. Earth Station</p> <p><input checked="" type="radio"/> a2. Space Station</p>	<p>(N/A) b1. Application for License of New Station</p> <p>(N/A) b2. Application for Registration of New Domestic Receive–Only Station</p> <p><input checked="" type="radio"/> b3. Amendment to a Pending Application</p> <p><input type="radio"/> b4. Modification of License or Registration</p> <p>b5. Assignment of License or Registration</p> <p>b6. Transfer of Control of License or Registration</p> <p><input type="radio"/> b7. Notification of Minor Modification</p> <p>(N/A) b8. Application for License of New Receive–Only Station Using Non–U.S. Licensed Satellite</p> <p>(N/A) b9. Letter of Intent to Use Non–U.S. Licensed Satellite to Provide Service in the United States</p> <p>(N/A) b10. Other (Please specify)</p> <p>(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</p> <p>(N/A) b12. Application for Database Entry</p> <p><input type="radio"/> b13. Amendment to a Pending Database Entry Application</p> <p><input type="radio"/> b14. Modification of Database Entry</p>
<p>17c. Is a fee submitted with this application?</p> <p><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).</p> <p><input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee</p> <p><input type="radio"/> Other(please explain):</p>	
<p>17d.</p> <p>Fee Classification CWY – Space Station Amendment(Geostationary)</p>	

<p>18. If this filing is in reference to an existing station, enter:</p> <p>(a) Call sign of station: S2872</p>	<p>19. If this filing is an amendment to a pending application enter both fields, if this filing is a modification please enter only the file number:</p> <p>(a) Date pending application was filed: 08/17/2012</p> <p>(b) File number: SATA/O2012081700137</p>
---	---

TYPE OF SERVICE

<p>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:</p> <p> <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 type="checkbox"/> e. Direct to Home Fixed Satellite <input type="checkbox"/> f. Digital Audio Radio Service <input checked="" type="checkbox"/> g. Other (please specify) Direct Broadcast Satellite </p>	
<p>21. STATUS: Choose the button next to the applicable status. Choose only one.</p> <p> <input type="radio"/> Common Carrier <input checked="" type="radio"/> Non-Common Carrier </p>	<p>22. If earth station applicant, check all that apply.</p> <p> <input type="checkbox"/> Using U.S. licensed satellites <input type="checkbox"/> Using Non-U.S. licensed satellites </p>
<p>23. If applicant is providing INTERNATIONAL COMMON CARRIER service, see instructions regarding Sec. 214 filings. Choose one. Are these facilities:</p> <p> <input type="radio"/> Connected to a Public Switched Network <input type="radio"/> Not connected to a Public Switched Network <input checked="" type="radio"/> N/A </p>	

24. FREQUENCY BAND(S): Place an 'X' in the box(es) next to all applicable frequency band(s).

☐ a. C-Band (4/6 GHz) ☐ b. Ku-Band (12/14 GHz)

☒ c. Other (Please specify upper and lower frequencies in MHz.)

Frequency Lower: 122000

Frequency Upper: 178000

(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?

☐ Yes ☒ No

30. Is the applicant an alien or the representative of an alien?

☐ Yes ☐ No ☒ N/A

31. Is the applicant a corporation organized under the laws of any foreign government?

☐ Yes ☐ No ☒ 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?

☐ Yes ☐ No ☒ 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?
If Yes, attach as an exhibit, copies of the requests for waivers or exceptions with supporting documents.

☐ Yes ☒ No

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

<p>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.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>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</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>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.</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> No</p>
<p>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.</p>	

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 hereby requests an amendment to its application for authority to operate DIRECTV 1R at 55.8 E.L.

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
Romual Pontual

→

46. 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

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.

SECOND MINOR AMENDMENT TO DIRECTV 1R APPLICATION

DIRECTV Enterprises, LLC (“DIRECTV”) has filed an application for authority to operate DIRECTV 1R, a satellite in the Direct Broadcasting Satellite (“DBS”) service, at the 56.16° E.L. orbital location,¹ as well as a minor amendment to reflect updated information on its plan for drifting the satellite to its new location and the resulting impact on remaining life of the satellite.² For various reasons, including considerations related to international spectrum coordination, DIRECTV has decided that locating the satellite at 55.8° E.L. and slightly re-pointing the beams would be preferable.

Accordingly, in this Application, DIRECTV amends its pending application to request authority to operate at this slightly different orbital location, and submits both revised link budgets and revised antenna gain contours in the attached Schedule S that reflect this change in position. In accordance with Section 25.117(d)(1) of the Commission's rules, DIRECTV identifies in this Application only those items of information that should be changed from its pending application. DIRECTV hereby certifies that the remaining information in its application (as amended) has not changed.

Respectfully submitted,

DIRECTV ENTERPRISES, LLC

By: /s/
Romulo Pontual
Executive Vice President

¹ See IBFS File No. SAT-A/O-20120817-00137.

² See IBFS File No. SAT-AMD-20120824-00142.

ENGINEERING CERTIFICATION

The undersigned hereby certifies to the Federal Communications Commission as follows:

- (i) I am the technically qualified person responsible for the engineering information contained in the foregoing Amendment,
- (ii) I am familiar with Part 25 of the Commission's Rules, and
- (iii) I have either prepared or reviewed the engineering information contained in the foregoing Amendment, and it is complete and accurate to the best of my knowledge and belief.

Signed:

/s/

Jack Wengryniuk

September 13, 2012

Date