

Approved by OMB
3060-0678

Date & Time Filed: Oct 18 2005 5:01:15:400PM
File Number: SAT-STA-20051018-00201
Callsign: 52630

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:
DIRECTV Enterprises DIRECTV 2 migration request to 91 WL

1. Applicant

Name:	DIRECTV Enterprises, LLC	Phone Number:	310-726-4993
DBA Name:		Fax Number:	310-535-5323
Street:	2230 E. Imperial Hwy	E-Mail:	dapattillo@directv.com
City:	El Segundo	State:	CA
Country:	USA	Zipcode:	90245
Attention:	David A. Pattillo		



File # SAT-STA-20051018-00201
Call Sign 52630 Grant Date 1/20/06
(or other identifier)
Term Dates
From 1/20/06 To +180 days
Approved: [Signature] Policy Branch Chief

Conditions of Authorization
File No. SAT-STA-20051018-00201
January 20, 2006

DIRECTV Enterprises, LLC's (DIRECTV) request for special temporary authority (STA), IBFS File No. SAT-STA-20051018-00201, IS GRANTED. Accordingly, DIRECTV is authorized to conduct telemetry, tracking, and control communications related to the relocation of the DIRECTV 2 satellite from the 100.6° W.L.¹ orbital location to the 91° W.L. orbital location in accordance with the terms, conditions, and technical specifications set forth in the Commission's rules and this document.

- 1) This authorization is for 180 days commencing on the date of grant.
- 2) During the drift of the DIRECTV 2 satellite to the 91° W.L. orbital location, DIRECTV shall not operate the main communications payload of the satellite.
- 3) DIRECTV shall coordinate all drift orbit telemetry, tracking, and control operations with other potentially affected in-orbit operators.
- 4) During the relocation of the DIRECTV 2 satellite, operations must be on a non-harmful interference basis, that is, DIRECTV shall not cause interference to, and shall not claim protection from interference caused to it by any other lawfully operating satellites or radio communications systems.
- 5) In the event that any harmful interference is caused as a result of operations during the relocation of the DIRECTV 2 satellite, DIRECTV shall cease operations immediately upon notification of such an event, and shall inform the Commission immediately, in writing, of the event.
- 6) DIRECTV shall notify the Commission, by letter to the Chief, Satellite Division, International Bureau, 30 days prior to commencement of use of Telesat Canada's earth stations to provide the earth station segment of telemetry, tracking, and control communications.
- 7) Effective upon the date the DIRECTV 2 satellite reaches the 91° W.L. orbital location, the U.S. license for that satellite (Call Sign: S2630) is terminated. DIRECTV shall notify the Commission, by letter to the Chief, Satellite Division, International Bureau, within five business days following the date on which the DIRECTV 2 satellite reaches the 91° W.L. orbital location.
- 8) The Commission has exchanged letters with the Canadian Department of Industry to ensure a mutual understanding regarding the operations of the DIRECTV 2 satellite. The understandings and factual basis for these understandings are

¹ The DIRECTV 2 satellite has been operating at the 100.6° W.L. orbital location pursuant to an STA. IBFS File Nos. SAT-STA-20051019-00203 and SAT-STA-20050914-00178.

attached in Annex A and are material considerations for the grant of this special temporary authority.



w/conditions

File # SAT-STA-20051018-00201

Call Sign SZ630 Grant Date 1/20/06
(or other identifier)

Term Dates
From 1/20/06 To: +180 days

Approved: Arthur J. Kelly
Policy Branch Chief

ANNEX A

File No. SAT-STA-20051018-00201

January 20, 2006



International Bureau

Federal Communications Commission
Washington, DC 20554

January 20, 2006

Ms. Chantal Beaumier
Director, Space and International Regulatory Activities
Radiocommunications and Broadcasting Regulatory Branch
Industry Canada
15th Floor, 300 Slater Street
Ottawa, Ontario
Canada K1A 0C8

Re: Operations of the DIRECTV 2 Space Station

Dear Ms. Beaumier:

This letter is to confirm the informal understandings of the Canadian Department of Industry (Industry Canada) and the Federal Communications Commission (FCC) concerning certain technical issues involving the operation of a broadcasting-satellite service (BSS) satellite, DIRECTV 2, by DIRECTV Enterprises, LLC (DIRECTV) and by Telesat Canada (Telesat). DIRECTV and Telesat have entered into a satellite relocation and lease agreement.

Transaction between DIRECTV and Telesat

DIRECTV currently operates the DIRECTV 2 satellite at the 100.6° W.L. orbital location subject to FCC authority. Under the contract between DIRECTV and Telesat, DIRECTV has agreed to move the DIRECTV 2 satellite to either the 82° W.L. or 91° W.L. orbital location (designated orbital location) following the placement into service of DIRECTV 8 at the 101° W.L. orbital location, and obtaining the necessary governmental approvals.¹ The agreement grants Telesat the exclusive right to use the capacity, and direct and control DIRECTV 2 at the 82° W.L. and 91° W.L. orbital locations. The agreement contemplates that Telesat will use the satellite to augment or provide back up capacity for any of its NIMIQ1, NIMIQ 2, or NIMIQ 3 satellites at the 82° W.L. or 91° W.L. orbital locations for use solely in Canada.

While DIRECTV 2 is at either the 82° W.L. or 91° W.L. orbital locations, or while moving in between these locations, Telesat will exercise direction and control over the satellite. DIRECTV, through PanAmSat, will perform telemetry, tracking, and control functions (TT&C) until Telesat can take over these functions. Telesat may not sublease or subcontract operational control to a third party without DIRECTV's prior written approval. The lease agreement terminates when the satellite is taken out of commercial operation or the date it is removed from its designated orbital location.

On December 20, 2005, Industry Canada authorized Telesat to operate DIRECTV 2 at 91° W.L., subject to conditions. DIRECTV has filed a request with the FCC for Special Temporary Authority to drift DIRECTV 2 from its current orbit location at 100.6° W.L. to 91° W.L.

¹ DIRECTV 8 was launched in May 2005, and is currently operating at the 100.75 W.L. orbit location. DIRECTV Enterprises, LLC, *Order*, DA 05-2671 (Sat. Div., Int'l Bur. Oct. 2005).

Informal Understandings between Industry Canada and the FCC on certain technical issues concerning operation of DIRECTV 2

The FCC and Industry Canada have concurred on the following technical issues concerning the operation of DIRECTV 2:

1. At the 82° W.L. and 91° W.L. orbital locations, DIRECTV 2 operations will be subject to Canadian authority. Because these locations are Canadian entries to the Region 2 Plan of Appendix 30/30A of the ITU Radio Regulations, the Canadian administration will have responsibility for compliance with the ITU Radio Regulations (including the requirement for licensing as specified in Article 18.1 of the Radio Regulations, and any applicable agreement-seeking procedures) in connection with operation of the DIRECTV 2 satellite at the 82° W.L. or 91° W.L. orbital locations, and in connection with any intentional relocation of the satellite from one of the two orbital locations to the other.
2. The following operations of the DIRECTV 2 satellite will be subject to licensing by the FCC:
 - a. Any operations of the satellite other than at the i) 82° W.L. orbital location, ii) at the 91° W.L. orbital location, or iii) while it is moving between those orbital locations.
 - b. Any operations as a result of equipment failure in the satellite that results in the inability to maintain the satellite within ± 0.1 degrees of its assigned position at either the 82° W.L. or 91° W.L. orbital location.
 - c. Any operations after the termination of the lease agreement.
3. Industry Canada, through the Director, Space and International Regulatory Activities, will provide the FCC with 4 (four) days advance written notice (email with confirmed receipt from the FCC's Chief, International Bureau, Satellite Division, will be considered sufficient) of any planned termination or expiration of the Canadian Licence for the DIRECTV 2 satellite.
4. Industry Canada will condition the DIRECTV 2 license to require Telesat to maintain, barring catastrophic failure of satellite components, the capability to deorbit the DIRECTV 1 spacecraft consistent with ITU Recommendation S.1003-1, Environmental Protection of the Geostationary-Satellite Orbit.

The informal understandings set forth above in this letter concerning operation of the DIRECTV 2 satellite is not a concurrence by the FCC or the U.S. Administration with any Canadian filings with the ITU Radiocommunication Bureau or any future Canadian filings at the 82° W.L. or 91° W.L. orbital locations, under Appendices 30 or 30A of the ITU Radio Regulations. The FCC and Industry Canada will, separately, and as part of the agreement-seeking process applicable under ITU Regulations, work in good faith to complete that process, insofar as necessary, in connection with the operation of the DIRECTV 2 satellite.

The FCC has not presently issued any of the authorizations necessary to move the DIRECTV 2 satellite to either the 82° or 91° W.L. orbital locations. The FCC has received applications for Special Temporary Authority to relocate DIRECTV 2 to the 91° W.L. orbital location, and to provide telemetry, tracking, and control operations during the move and until

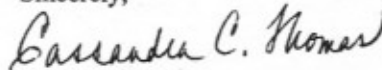
Chantal Beaumier
January 20, 2006
Page 3

Telesat takes over these functions using its own facilities. These applications require separate action by the FCC. This exchange of letters does not constitute approval of these applications.

All notices, inquiries, and correspondence from Industry Canada concerning these matters should be directed to the Chief, Satellite Division, International Bureau (phone number 202.418.0719) (email: Cassandra.Thomas@fcc.gov, with a copy to Karl.Kensinger@fcc.gov). The FCC will forward all notices, inquiries, and correspondence concerning these matters to the Director, Space and International Regulatory Activities (phone number 613.998.3819) (email beaumier.chantal@ic.gc.ca), on the part of Industry Canada. Please let us know if this address subsequently changes.

If the foregoing corresponds to your understanding of the informal arrangements between our two agencies concerning the various technical issues involved in the operation of DIRECTV 2, please confirm by return letter.

Sincerely,



Cassandra C. Thomas
Acting Chief
Satellite Division

cc: Paul Bush
Vice President, Corporate Development
Telesat Canada

William Wiltshire
Harris, Wiltshire & Grannis, LLP
Counsel for DIRECTV Enterprises, LLC.



Industry Canada Industrie Canada

300 Slater Street
Ottawa, ON K1A 0C8

JAN 20 2006

Our File: 05943-1
(EDRMS# 49844)

Cassandra Thomas
Acting Chief, Satellite Division
International Bureau
Federal Communications Commission
Washington, D.C. 20554

Dear Ms. Thomas:

Thank you for your letter of January 20, 2006 setting out our informal common understandings concerning certain technical issues involved in the operation of a broadcasting-satellite service satellite known by Telesat Canada and DIRECTV Enterprises, LLC as DIRECTV 2.

I am pleased to provide my confirmation of our informal understandings and acknowledgement of the other views expressed in your letter.

Once again, I want to express my appreciation for the support your administration is giving to this kind of commercial arrangement to facilitate the delivery of important and valuable satellite services.

Sincerely,

Chantal Beaumier
Director, Space and International
Regulatory Activities

cc: Robert Power, Telesat Canada

Canada

2. Contact

Name:	William M. Wiltshire	Phone Number:	202-730-1350
Company:	Harris, Wiltshire & Grannis, LLP	Fax Number:	202-730-1301
Street:	1200 Eighteenth Street, NW	E-Mail:	wwiltshire@harriswiltshire.com
	12th Floor		
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036 -
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 CRY - Space Station (Geostationary)

5. Type Request

- ☒ Change Station Location ☐ Extend Expiration Date ☐ Other

6. Temporary Orbit Location
91 WL

7. Requested Extended Expiration Date

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.)

DIRECTV Enterprises, LLC requests special temporary authority to relocate DIRECTV 2 to the 91 WL orbital location allocated to Canada under the Region 2 BSS Plan, and to perform TT&C operations for an indefinite period.

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 "party to the application" for these purposes. ☒ Yes ☐ No

10. Name of Person Signing
James Butterworth

11. Title of Person Signing
Senior Vice President

12. Please supply any need attachments.

Attachment 1: STA Request

Attachment 2: Exhibits

Attachment 3:

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-PER, 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 jboley@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.

² See *DIRECTV, Inc.*, 19 FCC Rcd. 11055 (Int'l Bur. 2004) (“D3 STA Order”).

that this STA will serve the public interest and requests that the STA be granted for the statutory maximum of 180 days.

* * *

Until very recently, DIRECTV provided service to U.S. consumers from the nominal 101° W.L. orbital location using three satellites – DIRECTV 1R, DIRECTV 2, and DIRECTV 4S. The oldest of these, DIRECTV 2, was launched in 1994 and has sufficient fuel remaining for approximately 18 more months of useful life. Accordingly, DIRECTV recently launched the DIRECTV 8 satellite as a replacement. DIRECTV 8 has now been fully tested and some of DIRECTV 2's traffic has been transferred to it. Once that process is complete,³ DIRECTV 2 will be placed in a storage orbit at 100.6° W.L. with its communications payload turned off pending the Commission's decision on the instant application.

As the Commission knows, DIRECTV and Telesat have entered into a series of agreements that have allowed them to make more productive and intensive use of valuable BSS orbital/spectrum resources.⁴ For example, last June, the Commission granted DIRECTV an STA similar to the one requested herein, authorizing the relocation of the DIRECTV 3 satellite to the Canadian BSS slot at either 82° W.L. or 91° W.L. pursuant to a December 2003 Memorandum of Agreement ("Original MOA") with Telesat.⁵ That satellite was to be used both to provide back-up capacity that had been lost

³ DIRECTV currently intends to complete traffic transfer on or about November 15, 2005.

⁴ Under these agreements, the parties have, for example, moved DIRECTV 3 to the Canadian BSS slot at 91° W.L. for service into Canada and moved DIRECTV 1 to the Canadian BSS slot at 72.5° W.L. for local-into-local service into the U.S.

⁵ See *D3 STA Order*, *supra*.

as a result of the malfunction of a Telesat BSS satellite (Nimiq 2 at 82° W.L.), as well as to improve the quality of the service Telesat provides to Canadian consumers by allowing the operation of the transponders on another Telesat BSS satellite (Nimiq 1 at 91° W.L.) at a higher power level.⁶ The Commission found that grant of that STA would serve the public interest by helping to assure continuity of service to Canadian consumers, consistent with the practice of cooperation between U.S. and Canadian satellite providers in times of emergency or capacity need.⁷ Telesat has been operating DIRECTV 3 from the 91° W.L. orbital location to provide service into Canada without incident since August 2004.

As part of this ongoing process, Telesat has sought access to the soon-to-be-replaced DIRECTV 2 satellite, to further enhance the capacity and redundancy capabilities of Telesat's BSS fleet. Accordingly, on October 6, 2005, DIRECTV and Telesat entered into three agreements that, among other things, would effectuate this plan for DIRECTV 2, subject to receiving the requisite regulatory authorizations from both the U.S. and Canadian regulatory authorities. These agreements are: (1) a further revision to the Amended and Restated Memorandum of Agreement ("Revised MOA"); (2) a Satellite Relocation & Lease Agreement for DIRECTV 2 ("D2 Lease"); and (3) an Amending Agreement No. 2 to the Satellite Relocation and Lease Agreement related to the DIRECTV 3 satellite ("Revised D3 Lease").⁸ Under these agreements, DIRECTV will lease all of the capacity on DIRECTV 2 to Telesat for operation of that satellite at 91°

⁶ *Id.* at 11056.

⁷ *Id.* at 11059.

⁸ A redacted copy of each agreement is attached hereto as Exhibits 1, 2, and 3, respectively. The complete text of each agreement will be filed with the International Bureau staff with a request for confidential treatment pursuant to Sections 0.457 and 0.459 of the Commission's rules.

W.L. The STA requested herein is a critical requirement for the parties to implement these agreements.

Telesat intends to use DIRECTV 2 to perform the function now being served by DIRECTV 3 at 91° W.L. – *i.e.*, providing increased and better service to Canadian BSS customers as a result of the improvement in satellite capacity. DIRECTV 3, in turn, will move to 82° W.L. where it is required to supplement capacity to the Nimiq 2 satellite whose capacity is slowly diminishing as a result of the failure of a portion of its power system in early 2002. DIRECTV 3 will also provide additional capacity for new video services for Canadian BSS customers, including high-definition programming, while also ensuring back-up capacity for Nimiq 2.⁹ A timely approval by the Commission will help to ensure that no existing signals need to be turned down, as well as allowing DIRECTV 2 to provide service at the 91° W.L position for as much of its short remaining life as possible. Accordingly, for the reasons recognized by the Commission in the *D3 STA Order*, grant of an STA in this proceeding will serve the public interest.¹⁰

Nor are there offsetting public interest concerns. As of mid-November, DIRECTV 2 will provide no service to U.S. subscribers, although it would be available as a back-up in case of a problem with any other DIRECTV satellite. This extra redundancy is unnecessary for several reasons. First, DIRECTV 2 has been replaced by a brand new satellite (DIRECTV 8) that has just completed in-orbit testing and can be expected to operate at full capability for years to come. Second, DIRECTV will soon augment its in-orbit satellite assets upon the launch of DIRECTV 9S, currently expected

⁹ Relocating DIRECTV 2 to 91° W.L. rather than 82° W.L. will save fuel and therefore preserve as much of the satellite's useful life as possible.

¹⁰ See *D3 STA Order*, 19 FCC Rcd. at 11059.

in the second quarter of 2006.¹¹ Third, in the unlikely event that DIRECTV 8 were to experience a failure prior to launch of DIRECTV 9S, DIRECTV has the right to terminate the Revised D3 Lease upon five days' written notice and recall DIRECTV 3 for its own use in case of the failure of any DIRECTV satellite.¹² Accordingly, DIRECTV does not believe that the quality and reliability of its operations would be compromised by relocation of DIRECTV 2.

Grant of the requested STA will not present any significant risk of interference to other satellites. During the relocation of DIRECTV 2, the satellite's communications payload will remain inactive and only the TT&C payload will operate.¹³ Under the terms of the D2 Lease, Telesat ultimately will assume full TT&C responsibility for DIRECTV 2, with DIRECTV continuing to provide interim TT&C operations for the satellite from a DIRECTV-licensed earth station until the necessary ground equipment is operational at Telesat's facilities.¹⁴ Thus, as it has done with DIRECTV 3, Telesat will operate the satellite at 91° W.L. under an authorization from Industry Canada and in conformance with the parameters of ITU regulations and coordination obligations.

¹¹ DIRECTV has applied for authority to launch and operate DIRECTV 9S at the nominal 101° W.L. orbital location. See FCC File No. SAT-RPL-20050322-00070. In addition to other capabilities, this satellite will provide redundancy for both of DIRECTV's existing spot beam satellites, DIRECTV 4S and DIRECTV 7S.

¹² See Revised D3 Lease at Section 2.0. Prior to this revision, DIRECTV's right to reclaim this satellite could only be triggered after the failure of *two* DIRECTV satellites. See Revised MOA, Exhibit C at Section 5.1. In addition, there are two other DIRECTV satellites at the 101° W.L. slot that could be used to carry much of the traffic in the event of a failure on DIRECTV 8. Both of these satellites have many years of useful life remaining and have operated normally for years.

¹³ DIRECTV requests authority to operate on the following TT&C frequencies: 17303.0 MHz (uplink) and 12201.0 and 12202.25 MHz (downlink). DIRECTV will coordinate with potentially affected satellite operators in accordance with industry practice, and will operate on a non-interference basis. Since TT&C for DIRECTV 3 is conducted using different frequencies (17300.5 MHz (uplink) and 12201.5 and 12202.75 MHz (downlink)), there is no risk of interference between these two satellites during their brief period of collocation at the 91° W.L. position.

¹⁴ See D2 Lease at Section 1.4.

For the foregoing reasons, and to maximize the limited remaining usefulness of the DIRECTV 2 satellite, DIRECTV urges the Commission to grant the requested STA as expeditiously as possible.

Respectfully submitted,

/s/
James R. Butterworth
Senior Vice President
DIRECTV Enterprises, LLC

October 18, 2005