



File # SAT-MOD-20030205-00032 K e
 Call Sign S2369 *with attached conditions*
 (or other identifier) Grant Date MAY 25, 2002
 From FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554
 Approved: M.C. N...

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 DIRECTV, Inc.
 DIRECTV 3
 FEDERAL COMMUNICATIONS COMMISSION
 SECRETARY
 SAT-MOD-20030205-00032

In the Matter of Robert G. Nader)
 Application of DIRECTV, Inc.)
 for Minor Modification of its DBS System)
 and for Authorization to Relocate its)
 DIRECTV 3 Satellite to a Storage Orbit)

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APPLICATION FOR MINOR MODIFICATION

DIRECTV Enterprises, LLC ("DIRECTV") hereby requests a minor modification of its relevant Direct Broadcast Satellite ("DBS") system authorizations to reflect the relocation of the DIRECTV 3 satellite into a storage orbit.

I. INTRODUCTION

DIRECTV currently provides service to U.S. consumers from a constellation of DBS satellites that use 32 DBS frequencies at 101° W.L., 3 DBS frequencies at 110° W.L., and 11 DBS frequencies at 119° W.L.¹ DIRECTV, together with certain independent distributors, now has approximately 11.2 million subscribers in the United States.

DIRECTV 3 is a Boeing 601-model DBS spacecraft that was originally clustered with several other DIRECTV DBS satellites at the 101° W.L. orbital position. As set forth below, a spacecraft control processor ("SCP") on board the DIRECTV 3 satellite became disabled and was shut down on May 4, 2002. Because there was no longer SCP redundancy aboard DIRECTV 3, DIRECTV was concerned that, if the second SCP were to fail, DIRECTV could have effectively lost control of DIRECTV 3, thereby creating a hazard to other satellites in

¹ DIRECTV voluntarily surrendered the DBS channels previously allocated to it at the 157° W.L. orbital location in May 1998. See Public Notice, Rep. No. SPB-127 (rel. June 10, 1998).

Attachment
Conditions of Authorization
5/25/2004

1. DIRECTV Enterprises, LLC's Application for Modification, SAT-MOD-20030205-00032, as amended by letter from James R. Butterworth, Senior Vice President, Communications Systems, DIRECTV, Inc., to Marlene Dortch, Secretary, F.C.C., dated March 9, 2003, IS GRANTED, and the authorization for DIRECTV Enterprises, LLC's DIRECTV 1R satellite, Call Sign S2369, is modified to specify operations at the 100.85° W.L. orbital location, with $\pm 0.05^\circ$ longitudinal stationkeeping, in accordance with the terms, representations, and technical specifications set forth in its application, as amended, and this Attachment.

2. DIRECTV Enterprises, LLC shall coordinate all transfer orbit Telemetry, Tracking, and Control operations with other potentially affected in-orbit DBS or Fixed-Satellite Service operators.

3. This grant is subject to the following conditions: (1) until the Plan for the Broadcasting-Satellite Service in the Band 12.2-12.7 GHz in Region 2 contained in Appendix 30 of the ITU Radio Regulations (the "Region 2 Plan"), and the associated Plan for the feeder-links in the frequency band 17.3-17.8 GHz for the broadcasting-satellite service in Region 2 contained in Appendix 30A of the ITU Radio Regulations (the "Region 2 feeder link Plan") are modified to include the technical parameters of DIRECTV 1R and its associated feeder links, this satellite system shall not cause greater interference than that which would occur from the current U.S. frequency assignments in the Region 2 Plan and the Region 2 feeder link Plan at $101^\circ \pm 0.2^\circ$ W.L. to other BSS or feeder link assignments, or to other services or satellite systems operating in accordance with the ITU Radio Regulations; and (2) no protection from interference caused by radio stations authorized by other Administrations is guaranteed to DIRECTV 1R unless and until the modification procedures in Appendices 30 and 30A of the ITU Radio Regulations are successfully and timely completed.

4. DIRECTV Enterprises, LLC must provide the Commission with all information it requires in order to modify the ITU Region 2 Plan and the associated Region 2 feeder link Plan. DIRECTV Enterprises, LLC shall be held responsible for all cost recovery fees associated with these ITU filings. Any radio station authorization for which coordination has not been completed and/or for which the necessary agreements under Appendices 30 and 30A have not been obtained may be subject to additional terms and conditions as required to effect coordination or obtain the agreement of other Administrations. See 47 C.F.R. § 25.111(c).

5. DIRECTV Enterprises, LLC must provide a written statement to the Commission within 60 days of the date of this grant that identifies any known satellites located at, or planned to be located at DIRECTV Enterprises, LLC's assigned orbit location, or assigned in the vicinity of that location such that the station-keeping volume of the respective satellites might overlap, and that states the measures that will be taken to prevent in-orbit collisions with such satellites. This statement should address any systems licensed by the FCC, and any systems applied for and under consideration by the FCC. The statement need not address every filing with the ITU that meets these criteria, but should assess and address any systems reflected in ITU filings that are in operation or that DIRECTV believes may be progressing toward launch, e.g. by the appearance of the system on a launch vehicle manifest. If DIRECTV Enterprises, LLC elects to rely on coordination with other operators to prevent in-orbit collisions, it shall provide a statement as to the manner in which such coordination will be effected.

6. DIRECTV Enterprises, LLC has 30 days from the date of the release of this grant to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.

7. This grant is issued pursuant to Section 0.261 of the Commission's rules on delegations of authority, 47 C.F.R. § 0.261, and is effective upon release.

geostationary orbit. DIRECTV therefore applied for and received from the Commission a grant of Special Temporary Authority (the "STA") in September 2002 to move the DIRECTV 3 satellite out of geostationary orbit.² Pursuant to the STA, DIRECTV 3 was relocated from 101° W.L. and moved into a storage orbit 308 kilometers above the geostationary orbital arc. Accompanying adjustments were made to the positions of certain other DIRECTV satellites collocated at 101° W.L. in order to ensure continuity of service to DIRECTV's DBS subscribers.

By this application, DIRECTV seeks to formally modify its relevant system authorizations to reflect these changes, which are in the public interest.

II. MINOR MODIFICATION REQUESTED

DIRECTV seeks a minor modification of its relevant system authorizations to reflect the relocation and reassignment of the DIRECTV 3 satellite to a storage orbit 308 kilometers above the geostationary arc, where it will come into view of Hughes's satellite control facilities once every three months. The DIRECTV 3 satellite has now been finally positioned in the storage orbit, the satellite communications payload has been turned off, and the satellite has ceased radiating.

DIRECTV notes that placing the DIRECTV 3 satellite into a storage orbit will extend the satellite's useful life by many years. While DIRECTV has no plans to re-introduce DIRECTV 3 into geostationary orbit due to the lack of SCP redundancy, the satellite could conceivably be utilized in the future as a source of emergency backup capacity. For this reason, satellite housekeeping hardware and telemetry (non-radiating elements only), tracking and control ("TT&C") functions remain on, so that the satellite can continue to be controlled and re-

² See Report No. SAT-00123, File NO. SAT-STA-20020910-00172 (rel. Sept. 27, 2002). DIRECTV received an oral grant of special temporary authority and initiated the process of relocating DIRECTV 3 to the storage orbit on September 21, 2002, in accordance with the description provided in the STA.

engaged as an in-orbit spare in such an emergency scenario. DIRECTV would of course request Special Temporary Authority from the Commission in the unlikely event that such a move would be required.

Finally, in order to maintain the traffic previously directed to DIRECTV 3, pursuant to the STA, DIRECTV has relocated the position of the DIRECTV 1R satellite slightly to the 100.85° W.L. orbital position. DIRECTV requests that this system modification also be approved

III. GENERAL TECHNICAL INFORMATION AND INTERFERENCE ANALYSIS

The technical parameters for DIRECTV 3 are already on file with the Commission and are a matter of public record.

As mentioned, once the DIRECTV 3 satellite was positioned in the storage orbit, its satellite communications payload was turned off, and the satellite ceased radiating. It thus will not pose any interference risk to other satellites while in storage orbit and does not need to be coordinated with other satellites.

Also as mentioned, satellite housekeeping hardware and TT&C functions remain on, so that the satellite can continue to be controlled and possibly re-engaged as an in-orbit spare in an emergency scenario. Stationkeeping will be North-South only, to within two degrees inclination, and the satellite will not be vented for relief of pressure tanks. DIRECTV notes that the pressure tanks on DIRECTV 3 do not pose a material risk of hazard or explosion because they are in "blow down" mode, meaning that they are no longer back-filled with helium, such that pressure is constantly decreasing.

While in the storage orbit, the DIRECTV 3 spacecraft will come into view of Hughes's satellite control facilities once every three months.

IV. APPLICANT QUALIFICATIONS

DIRECTV is a wholly-owned subsidiary of Hughes Electronics Corporation, which is wholly-owned by General Motors Corporation. DIRECTV is a fully qualified DBS licensee, and its legal qualifications are a matter of public record. For DBS systems, the Commission has not required a prior demonstration of financial qualifications, but has instead relied on the applicant meeting due diligence milestones once a system is authorized.³ Nevertheless, DIRECTV has sufficient financial resources available to cover the costs of relocating DIRECTV 3 to the storage orbit.

V. TYPE OF OPERATIONS

DIRECTV ceased operations of DIRECTV 3 once it was positioned in the storage orbit. The DIRECTV 3 satellite communications payload was turned off, and the satellite ceased radiating. As described in Section III above, TT&C functions remain on, so that the satellite can continue to be controlled or re-engaged if necessary.

VI. SCHEDULE

DIRECTV initiated the relocation of DIRECTV 3 to the storage orbit on September 21, 2002, and that relocation has been completed.

VII. PUBLIC INTEREST CONSIDERATIONS

On May 14, 2002, DIRECTV announced that a SCP on board the DIRECTV 3 satellite had become disabled and was shut down by DIRECTV on May 4, 2002. The SCP failure did not cause any problem for DIRECTV's subscribers; DIRECTV 3 was designed such that control was automatically transferred to a spare SCP located on board the spacecraft, which allowed the satellite to continue operating normally. Nevertheless, because there was no longer

³ See File No. SAT-LOA-19840112-00024.

SCP redundancy on the DIRECTV 3 spacecraft, as a precautionary measure, DIRECTV decided to remove the DIRECTV 3 satellite from the geostationary orbital arc. If the second SCP on DIRECTV 3 were to fail, DIRECTV could have effectively lost control of DIRECTV 3, meaning that the satellite could drift back and forth across the orbital arc, and thereby would have created a hazard not only for the other satellites clustered at the 101° W.L. orbital position, but also for satellites located across a broader span of orbital slots in the geosynchronous arc. Moreover, DIRECTV 1R, as repositioned, was capable of assuming, and now has fully assumed, the traffic from DIRECTV 3.

All of these moves have been manifestly in the public interest. As a responsible satellite operator, DIRECTV was able to remove a possible threat to other satellites in the geostationary arc; preserve continuity of service to millions of DBS subscribers; preserve the DIRECTV 3 satellite asset in a fashion that still provides emergency backup capability; and effect all of these steps in a fashion that has not and will not pose any technical or interference threat to other satellite operators. For these reasons, DIRECTV requests a grant of this minor modification application as in the public interest.

VIII. SECTION 304 WAIVER

In accordance with Section 304 of the Communications Act,⁴ DIRECTV hereby waives any claim to the use of any particular frequency of the electromagnetic spectrum as against any regulatory power of the United States because of the previous use of the same, whether by license or otherwise.

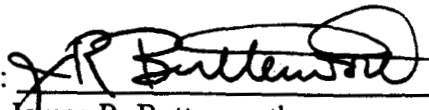
⁴ 47 U.S.C. § 304

IX. CONCLUSION

For the foregoing reasons, DIRECTV respectfully requests that the Commission promptly grant this application to modify its DBS system by relocating DIRECTV 3 to a storage orbit and DIRECTV 1R satellite to 100.85° W.L.

Respectfully submitted,

DIRECTV Enterprises, LLC

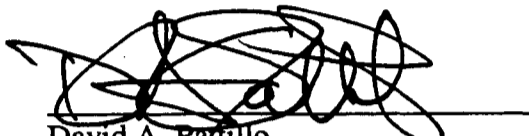
By: 
James R. Butterworth

DECLARATION OF DAVID A. PATTILLO

I, David A. Pattillo, hereby declare as follows:

1. I am employed by DIRECTV, Inc. I am an engineer by training and am familiar with the technical and interference characteristics of DIRECTV's Direct Broadcast Satellite system, the technical requirements of Federal Communications Commission and International Telecommunications Union rules, and the interference and technical issues referenced in the foregoing filing.

2. I have reviewed the foregoing application from a technical perspective, and the information found therein is true and accurate to the best of my knowledge, information and belief.



David A. Pattillo
DIRECTV, Inc.

February 5, 2003

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Ms. Marlene Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, D.C. 20554

Re: *DIRECTV Enterprises, LLC, Application for Minor Modification, SAT-MOD-20030205-00032; Amendment*

Dear Ms. Dortch:

On February 5, 2003, DIRECTV Enterprises, LLC ("DIRECTV") formally requested a minor modification of its relevant Direct Broadcast Satellite ("DBS") system authorizations to reflect the relocation of its DIRECTV 3 satellite into a storage orbit.¹ DIRECTV also requested a minor modification to reflect the slight relocation of its DIRECTV 1R satellite to the 100.85° W.L. orbital position, in order to maintain traffic previously directed to DIRECTV 3.

DIRECTV has since requested special temporary authority from the Commission to relocate the DIRECTV 3 satellite from its storage orbit to the 82° W.L. orbital position,² rendering this aspect of the above-referenced minor modification application moot. Accordingly, DIRECTV hereby amends its application to withdraw all portions of its minor modification application related to the relocation of DIRECTV 3. DIRECTV continues to request a minor modification of its DBS system authorizations to the extent necessary to recognize the relocation of DIRECTV 1R to 100.85° W.L.

Thank you for your assistance.

Very truly yours,

James R. Butterworth
Senior Vice President, Communications Systems
DIRECTV, Inc.

cc: James H. Barker, Esq.

¹ The relocation of DIRECTV 3 had been previously authorized via a grant of special temporary authority by the Commission. See Report No. SAT-00123, File No. SAT-STA-20020910-00172 (rel. Sept. 27, 2002).

² See File No. SAT-STA-20030903-00300.