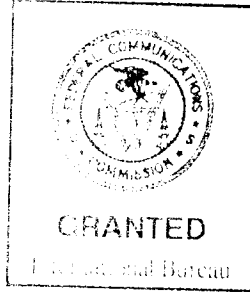


See DA 04-1145
19 FCC Rcd 7754



File # SAT-MOD-20060616-00065

WITH ATTACHED CONDITIONS

Call Sign S2455 Grant Date 8/31/2006

(or other identifier)

Term Dates

Approved by OMB

From Sec Conditions To: Sec Conditions 3060-0678

Approved: *[Signature]* Chief Satellite Division
Robert B Nelson

Date & Time Filed: Jun 16 2006 2:49:58:750PM
File Number: SAT-MOD-20060616-00065

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:

DIRECTV Enterprises LLC, MOD for D7S to move to 119.05

1-8. Legal Name of 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		

S2455 SAT-MOD-20060616-00065 IB200600159
DIRECTV Enterprises, LLC
DIRECTV 7S

SAT-MOD-20060616-00065
Conditions of Grant
August 31, 2006

The modification request of DIRECTV Enterprises, LLC ("DIRECTV"), IBFS File No. SAT-MOD-20060616-00065 (Call Sign: S2455),¹ to change the orbital location of the DIRECTV 7S space station from the 119.2° W.L. orbital location to the 119.05° W.L. orbital location IS GRANTED in accordance with the terms, conditions, and technical specifications set forth in its application, the Federal Communication Commission's (Commission) rules, and the conditions below.

1. All terms and conditions of the Order and Authorization DA 04-1145 not affected by this grant remain in effect.²
2. DIRECTV Enterprises, LLC shall coordinate all drift orbit DBS and Telemetry, Tracking, and Control operations with other potentially affected in-orbit operators.
3. During the relocation of the DIRECTV 7S satellite, operations shall be on a non-harmful interference basis, meaning that DIRECTV Enterprises, LLC shall not cause interference to, and shall not claim protection from interference caused to it by any other lawfully operating satellites.
4. In the event that any harmful interference is caused as a result of operations during and after the relocation of the DIRECTV 7S satellite, DIRECTV Enterprises, LLC, shall cease operations immediately upon notification of such interference and shall inform the Commission immediately, in writing, of such an event.
5. DIRECTV has 30 days from the date of the release of this order to decline this authorization as conditioned. Failure to respond within that period will constitute formal acceptance of the authorization as conditioned.
6. This order 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.

¹ The application was placed on Public Notice on June 30, 2006. Satellite Space Applications Accepted for Filing, Policy Branch Information, *Public Notice*, Report No. SAT-00373 (rel. June 30, 2006). No comments were filed.

² See DIRECTV Enterprises, LLC Application for Authority to Launch and Operate DIRECTV 7S (USABSS-18), *Order and Authorization*, 19 FCC Rcd 7754 (Sat. Div., Int'l Bur. 2004).

9-16. Name of Contact Representative

Name:	William M. Wiltshire	Phone Number:	202-730-1350
Company:	Harris, Wiltshire & Grannis, LLP	Fax Number:	202-730-1301
Street:	1200 Eighteenth Street, NW 12th Floor	E-Mail:	wwiltshire@harriswiltshire.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036-
Attention:		Relationship:	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
- (N/A) b3. Amendment to a Pending Application
- (N/A) b4. Modification of License or Registration
- b5. Assignment of License or Registration
- b6. Transfer of Control of License or Registration
- (N/A) 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)

<p>17c. Is a fee submitted with this application?</p> <p><input 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 checked="" type="radio"/> Other (please explain): There is no fee for a minor modification for a DBS license. The 'BFY' code has been used as a placeholder for the electronic form.</p>	
<p>17d.</p> <p>Fee Classification BFY – Space Station Modification (Geostationary)</p>	
<p>18. If this filing is in reference to an existing station, enter:</p> <p>(a) Call sign of station: S2455</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: (b) File number: SATLOA2003061100115</p>

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 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	
21. STATUS: Choose the button next to the applicable status. Choose only one. <input 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 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: 12200 Frequency Upper: 17800 (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 type="radio"/> No <input checked="" type="radio"/> N/A
31. Is the applicant a corporation organized under the laws of any foreign government?	<input type="radio"/> Yes <input type="radio"/> No <input checked="" 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 type="radio"/> No <input checked="" 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. Exhibit A

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

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

Exhibit C

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.)

See Exhibit B

Exhibit B

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
Romulo 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-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.

OWNERSHIP, DIRECTORS, AND OFFICERS

1. ENTITY OWNERSHIP

Information relating to the stockholders that own of record and/or vote 10% or more of DIRECTV Enterprises, LLC's stock is as follows:

DIRECTV Enterprises, LLC

State of Organization: Delaware

Principal Place of Business: 2230 E. Imperial Highway
El Segundo, CA 90245

Primary Business Activities: Provides digital television entertainment services.

Principal Shareholders:

DIRECTV Enterprises, LLC ("DIRECTV Enterprises") is a wholly owned subsidiary of DIRECTV Holdings LLC, which is a wholly owned subsidiary of The DIRECTV Group, Inc. ("DIRECTV Group"). The address of DIRECTV Holdings LLC is: 2230 E. Imperial Highway, El Segundo, CA 90245. The address of DIRECTV Group is: 2250 E. Imperial Highway, El Segundo, CA 90245.

Fox Entertainment Group, Inc. ("FEG"), a Delaware corporation, owns 38.2% of the equity and voting stock of DIRECTV Group. FEG is a wholly owned subsidiary of News Corporation ("News").¹ The address of FEG and News is: 1211 Avenue of the Americas, New York, NY 10036. Additional information regarding News is set forth below.

News Corporation

State of Incorporation: Delaware

Principal Place of Business: 1211 Avenue of the Americas
New York, NY 10036

Primary Business Activities: Diversified international media and entertainment company with operations in a number of industry segments, including: filmed entertainment;

¹ The Commission has found that News has a *de facto* controlling interest over DIRECTV Group and its subsidiaries, including DIRECTV Enterprises, for purposes of the Communications Act of 1934. See *General Motors Corporation, Hughes Electronics Corporation, and The News Corporation Limited*, 19 FCC Rcd. 473 (¶ 14) (2004). News disclaims any beneficial ownership of the voting securities of DIRECTV Enterprises held by subsidiaries of DIRECTV Group and does not concede, by this filing, that DIRECTV Enterprises is controlled by News or its subsidiaries.

television; cable network programming; magazines and inserts; newspapers; and book publishing.

Principal Shareholders:

Interests associated with Mr. K. Rupert Murdoch, a United States citizen and the Chief Executive of News, directly and indirectly control an approximately 11.8% equity and 31.1% voting interest in News.² Mr. Murdoch's address is: 1211 Avenue of the Americas, New York, NY 10036.

Liberty Media Corporation, a Delaware corporation, holds an approximately 16% equity and 19% voting interest in News according to its Form 10K filing with the Securities and Exchange Commission on March 7, 2006. The address of Liberty Media Corporation is: 12300 Liberty Boulevard, Englewood, CO 80112.

2. DIRECTORS

Chase Carey, a U.S. citizen, is the sole director of DIRECTV Enterprises. He can be contacted at the following address: DIRECTV Enterprises, LLC, 2230 E. Imperial Highway, El Segundo, CA 90245.

3. OFFICERS

The officers of DIRECTV Enterprises are listed below:

Chase Carey – President and Chief Executive Officer
Michael Benson – Executive Vice President and Chief Information Officer
Daniel M. Fawcett – Executive Vice President
Paul J. Guyardo – Executive Vice President
David Hill – Executive Vice President
Larry D. Hunter – Executive Vice President, General Counsel and Secretary
Michael W. Palkovic - Executive Vice President and Chief Financial Officer
Romulo G. Pontual – Executive Vice President and Chief Technology Officer
David E. Shanks – Executive Vice President
John B. Suranyi – Executive Vice President
Keith A. Causey – Senior Vice President and Controller
Patrick T. Doyle – Senior Vice President, Treasurer and Chief Accounting Officer

² As of March 31, 2006, as a result of Mr. Murdoch's ability to appoint certain members of the board of directors of the corporate trustee of the A.E. Harris Trust, which beneficially owns 2.8% of News' Class A Common Stock and 30.0% of its Class B Common Stock, Mr. Murdoch may be deemed to be a beneficial owner of the shares beneficially owned by the A.E. Harris Trust. Mr. Murdoch, however, disclaims any beneficial ownership of such shares. Also Mr. Murdoch beneficially owns an additional 0.8% of News' Class A Common Stock and 1.1% of its Class B Common Stock. Thus, Mr. Murdoch may be deemed to beneficially own in the aggregate 3.5% of News' Class A Common Stock and 31.1% of its Class B Common Stock.

Jon T. Gieselman - Senior Vice President
Robin N. Rogers – Senior Vice President and Assistant Corporate Secretary
Paul A. James – Senior Vice President
Michael G. Krenik – Senior Vice President
Giles S. Lundberg – Senior Vice President
Linden Serbousek – Senior Vice President
April L. Ammeter – Assistant Corporate Secretary
Hilary J. Hatch – Assistant Corporate Secretary
Todd W. Mathers – Assistant Corporate Secretary
Christopher A. Murphy – Assistant Corporate Secretary
Stevie Pyon – Assistant Corporate Secretary
Brian M. Regan – Assistant Corporate Secretary
Takehiko Suzuki – Assistant Corporate Secretary
Janet L. Williamson – Assistant Corporate Secretary

Each officer is a U.S. citizen³ and can be contacted at the following address: DIRECTV Enterprises, LLC, 2230 E. Imperial Highway, El Segundo, CA 90245.

³ David Hill also has dual citizenship in Australia.

DIRECTV 7S MODIFICATION

DIRECTV Enterprises, LLC ("DIRECTV") proposes to relocate the DIRECTV 7S satellite from its current location at 119.2° W.L. to 119.05° W.L., an unoccupied location within the same orbital cluster, and requests that its space station license be modified accordingly. DIRECTV hereby certifies that no other aspect of the satellite's operations will change. The proposed relocation will serve the public interest by improving signal reception for millions of DIRECTV subscribers.

In support of this application, DIRECTV includes herewith an orbital debris mitigation statement for the new location, and updated information on the ownership and management structure of DIRECTV.

ORBITAL DEBRIS MITIGATION STATEMENT FOR DIRECTV 7S

DIRECTV Enterprises, LLC (“DIRECTV”) files this Orbital Debris Mitigation Statement in support of its request for modification of its license to operate the DIRECTV 7S satellite at 119.05° W.L.

Spacecraft Hardware Design

DIRECTV has assessed and limited the amount of debris released in a planned manner during normal operations. DIRECTV 7S has already been launched without creating debris, and no debris will be released by the satellite during its planned course of operations. DIRECTV has also considered the possibility of DIRECTV 7S becoming a source of debris by collisions with small debris or meteoroids that could cause loss of control of the spacecraft and prevent post-mission disposal. As such, DIRECTV has taken steps to address this possibility by incorporating redundancy, shielding, separation of components, and other physical characteristics into the satellite’s design. For example, omni-directional antennas are mounted on opposite sides of the spacecraft, and either is sufficient to support de-orbiting maneuvers. The command receivers and decoders, telemetry encoders and transmitters, and the bus control electronics are fully redundant, physically separated, and located within a shielded area to minimize the probability of the spacecraft becoming a source of debris due to a collision.

Minimizing Accidental Explosions

DIRECTV has reviewed the overall design of the spacecraft in terms of the risk of accidental explosion. The key areas reviewed for this purpose include leakage of propellant and mixing of fuel and oxidizer as well as NiH pressure vessels. The basic propulsion design (including component and functional redundancy, and the

placement of fuel tanks inside a central cylinder which provides a high level of shielding), propulsion subsystem component construction, preflight verification through both proof testing and analysis, and quality standards ensure a very low risk of propellant leakage and fuel and oxidizer mixing that can result in subsequent explosions. Space Systems/Loral, which constructed this satellite, has launched over 198 spacecraft since 1966 with over 1150 years of operational service with no known explosive failure of any kind. Although the NiH battery cell is a pressure vessel, its basic construction is such that by demonstration it is a "leak before burst" design. After the deorbiting maneuver, the batteries will be fully discharged which further ensures a low internal pressure within the cells. During the mission, batteries and various critical areas of the propulsion subsystem (for both pressure and temperature) will be continually monitored to preclude conditions that could result in the remote possibility of explosion and subsequent generation of debris.

After the DIRECTV 7S spacecraft reaches its final disposal orbit, all on-board sources of stored energy will be depleted, all fuel line valves will be left "open," any pressurized system will be vented, and all batteries will be left in a permanent discharge state. The solar cells will be slewed away from the sun to minimize power generation.

Safe Flight Profiles

DIRECTV has assessed and limited the probability of DIRECTV 7S becoming a source of debris by collisions with large debris or other operational space stations through detailed and conscientious mission planning. DIRECTV has reviewed the list of licensed systems and systems that are under consideration by the Commission for the 119.05° W.L. orbital location it has requested. In addition, in order to address non-U.S. licensed

systems, DIRECTV has reviewed the list of satellite networks in the vicinity of 119.05° W.L. for which a request for coordination has been submitted to the ITU. Only those networks that are operating, or are planned to be operating, within $\pm 0.2^\circ$ have been taken into account in this review.

As a consequence of this review, DIRECTV has determined that only one other system has been licensed by the Commission for, and is currently operating at, the nominal 119° W.L. location: EchoStar 7, which operates at 118.9° W.L. $\pm 0.05^\circ$. In addition, (1) EchoStar has an application pending for a satellite at 119° W.L. in the BSS expansion spectrum when it becomes available in 2007, and (2) Northrop Grumman has an application pending for a hybrid Ka- and V-band satellite at this orbital position.¹ If and when either of these applications is granted by the Commission, DIRECTV will enter into coordination discussions with the operator to establish operational procedures that will ensure no possibility of collision between their respective satellites.

Internationally, only Australia has filed coordination requests with the ITU for satellite networks at this orbital location. We can find no evidence that satellite construction contracts have been awarded for any of these networks, and we note that the FAA Commercial Space Station First Quarter 2006 Report shows no pending launch for any of these networks.

DIRECTV therefore concludes that physical coordination of DIRECTV 7S with the another operator will not be required at the present time, as operation of DIRECTV 7S at the requested location would avoid station-keeping volume overlap with all spacecraft located at the nominal 119° W.L. location.

¹ See FCC File Nos. SAT-LOA-20020328-00050 (EchoStar); SAT-LOA-19970904-00080 (Northrop Grumman).

Post-Mission Disposal

Consistent with the requirements of Section 25.283(a) of the Commission's rules, at the end of the operational life of DIRECTV 7S, DIRECTV will maneuver the spacecraft into a disposal orbit with an altitude no less than that calculated using the IADC formula:

$$36,021 \text{ km} + (1000 \cdot C_R \cdot A/m).$$

The calculated value of $C_R A/m$ in this instance is based on the following parameters:

$$C_R = \text{Solar Pressure Radiation Coefficient} = 1.16$$

$$A = \text{Total Solar Pressure Area} = 94.5 \text{ m}^2$$

$$M = \text{Dry Mass of Satellite} = 2360 \text{ kg}$$

Using these values in the IADC formula results in a minimum de-orbit altitude of 36,068 km, or approximately 282 km above geosynchronous altitude. To provide adequate margin, the nominal disposal orbit will be increased above this calculated value of 282 km to a value of 285 km. Approximately 10.2 kg of propellant will be allocated and reserved for final orbit raising maneuvers to this altitude. This value was determined through a detailed Ariane 5 ECA propellant budget analysis. In addition, DIRECTV has assessed fuel gauging uncertainty and this budgeted propellant provides an adequate margin of fuel reserve to ensure that the disposal orbit will be achieved despite such uncertainty.