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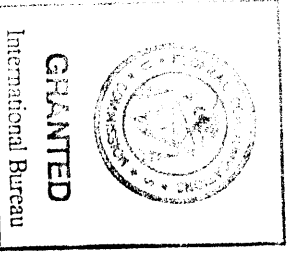
FCC APPLICATION FOR SPACE AND EARTH STATION:MOD OR AMD - MAIN FORM	FCC Use Only
FCC 312 MAIN FORM FOR OFFICIAL USE ONLY	

APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:
Amendment in Response to June 22, 2006 Letter from International Bureau

1-8. Legal Name of Applicant

Name:	EchoStar Satellite Operating Corporation	Phone Number:	303-723-1000
DBA Name:		Fax Number:	303-723-1699
Street:	9601 South Meridian Boulevard	E-Mail:	
City:	Englewood	State:	CO
Country:	USA	Zipcode:	80112
Attention:	David K Moskowitz		



File # SAT-AMD-20060724-00081 *See also File Nos.*
with effective dates
Call Sign S2636 Grant Date 10/19/2006
(or other identifier)
See SAT-204- Term Dates
From 20040803-00154 To: _____
Approved: [Signature] Chief Satellite Division
Robert E. Nelson
SAT-Mod-20051007-00198
SAT-AMD-20051118-00248

EchoStar Satellite Operating Corporation
Attachment - Conditions of Authorization
File Nos. SAT-MOD-20051007-00198, SAT-AMD-20051118-00248,
and SAT-AMD-20060724-00081
Call Sign: S2636

October 19, 2006

EchoStar Satellite Operating Corporation's (EchoStar) applications to modify its authorization to operate a Ka-band satellite, EchoStar-113, at 113° W.L., File No. SAT-MOD-20051007-00198, as amended by SAT-AMD-20051118-00248 and SAT-AMD-20060724-00081 are GRANTED, subject to the terms of its authorization in File No. SAT-LOA-20040803-00154, the technical specifications set forth in its applications, and the conditions set forth below.¹ Accordingly, EchoStar is authorized to operate telemetry, tracking, and command (TT&C) frequencies for its Ka-band satellite at 113° W.L. using 28.352 GHz and 28.598 GHz as the command frequencies, and 18.302 GHz and 18.798 GHz as the telemetry frequencies.

In addition, EchoStar's request for a waiver of section 25.202(g) of the Commission's rules is granted to allow EchoStar to operate TT&C launch and transfer orbit operations in the 13.752 GHz, 13.998 GHz, 11.452 GHz and 11.698 GHz frequency bands.² We find EchoStar has demonstrated good cause for a waiver in this instance.³ First, as EchoStar states, there is no worldwide ground network in the Ka-band frequencies to support TT&C functions during launch and transfer orbit operations, while there is an extensive network of Ku-band frequencies. Further, EchoStar maintains that it will only use small amounts of spectrum for a very limited time during the launch and transfer orbit operations and will coordinate with other authorized users of the bands. EchoStar also states it will operate on a non-harmful interference basis. The International Bureau previously granted a waiver of section 25.202(g) to EchoStar for its Ka-band satellite at 117° W.L. based on similar facts.⁴ The International Bureau has also previously granted the use of the 13.75-14.0 GHz frequency band for TT&C, both for launch and transfer orbit operations, and for on-station operations.⁵ We anticipate, however, that as more Ka-band satellite systems with TT&C links located within band are authorized, the Ka-band TT&C earth station network will be sufficiently developed and thus there will be no need for operators to request waivers of section 25.202(g) for out-of-band transfer orbit TT&C operations.

1. Pursuant to footnote US337 of the U.S. Table of Allocations, 47 C.F.R. 2.106, any earth station in the United States and its possessions communicating with

¹ EchoStar Satellite LLC, SAT-LOA-20040803-00154, grant stamped on October 8, 2004 with conditions.

² 47 C.F.R. § 25.202(g). Section 25.202(g) requires that TT&C functions for U.S.-licensed satellites be conducted at either or both ends of the allocated bands for the service.

³ 47 C.F.R. § 1.3.

⁴ See EchoStar Satellite LLC, Modification of License to Select TT&C Frequencies for its Ka-band Satellite at 117° W.L., *Order and Authorization*, 20 FCC Rcd 4281 (Int'l Bur. 2005).

⁵ See EchoStar Satellite LLC, Application for Authority to Construct, Launch and Operate a Geostationary Satellite Using the Extended Ku-band Frequencies in the Fixed-Satellite Service at the 109° W.L. Orbital Location, *Order and Authorization*, 20 FCC Rcd 930 (Int'l Bur. 2004); EchoStar Satellite LLC, SAT-MOD-20050930-00195, grant stamped on December 21, 2005 with conditions.

EchoStar-113 in the 13.75-14.0 GHz frequency band is required to coordinate with the National Telecommunications and Information Administration's (NTIA) Interdepartment Radio Advisory Committee's (IRAC) Frequency Assignment Subcommittee.⁶

2. Operations of any earth station in the United States and its possessions communicating with EchoStar-113 in the 13.75-14.0 GHz frequency band shall comply with footnotes US356 and US357 of the U.S. Table of Allocations which specify a minimum antenna diameter of 4.5 meters and a minimum equivalent isotropically radiated power (e.i.r.p.).⁷ Operations of any earth station located outside the United States and its possessions communicating with EchoStar-113 in the 13.75-14.0 GHz frequency band shall be consistent with footnotes 5.502 and 5.503 to the International Telecommunication Union (ITU) Radio Regulations, which allow minimum antenna diameter as small as 1.2 meters for earth stations of a GSO network.⁸
3. The 11.452 GHz and 11.698 GHz frequency bands in which EchoStar proposes to operate are allocated to terrestrial services and to the fixed-satellite service (FSS) on a co-primary basis.⁹ However, under footnote NG104 of section 2.106 and footnote 2 of section 25.202(a)(1) of our rules, FSS operations in these bands are limited to international service in order to limit the number of FSS earth stations with which the terrestrial wireless fixed-service would be required to coordinate.¹⁰ Accordingly, a U.S.-licensed

⁶ Footnote US337 requires that earth stations operating in the 13.75-13.8 GHz band be coordinated through NTIA's IRAC Frequency Assignment Subcommittee to minimize interference to the forward space-to-space link of the National Aeronautics and Space Administration Tracking and Data Relay Satellite System. 47 C.F.R. § 2.106, US337.

⁷ These footnotes place certain restrictions on FSS operations in order to protect government operations in the band, including manned space flight. Footnote US356 places a restriction on a minimum antenna size of 4.5 meters for earth stations operating in the 13.75-14.0 GHz band and indicates a minimum e.i.r.p. that should be used. Footnote US357 limits earth station e.i.r.p. spectral density in the 13.77-13.78 GHz band until those geostationary space stations in the space research service for which advance publication information was received by the ITU prior to January 31, 1992 cease to operate in this band. 47 C.F.R. § 2.106, Footnote US357.

⁸ Footnote 5.502 to the ITU Radio Regulations establishes minimum antenna diameters for earth stations of geostationary and non-geostationary satellite networks, and places certain restrictions on either the minimum equivalent isotropically radiated power (e.i.r.p.) or the power flux density (p.f.d.) levels produced by earth stations operating in the 13.75-14.0 GHz band. Footnote 5.503 limits FSS earth station e.i.r.p. spectral density in the 13.770-13.780 GHz band for earth stations in the FSS operating with geostationary-orbit space stations, until those geostationary space stations in the space research service for which advance publication information was received by the ITU prior to January 31, 1992 cease to operate in this band.

⁹ 47 C.F.R. § 2.106 and 25.202(a)(1). Allocation of a given frequency band to a particular service on a primary basis entitles operators to protection against harmful interference from stations of "secondary" services. Further, secondary services cannot claim protection from harmful interference caused by stations of a primary service. See 47 C.F.R. §§ 2.104(d) and 2.105(c).

¹⁰ 47 C.F.R. § 2.106 footnote NG104 states "[t]he use of the bands 10.7- 11.7 GHz (space-to-Earth) and 12.75-13.25 GHz (Earth-to-space) by the fixed-satellite service in the geostationary-satellite orbit shall be limited to international systems, i.e. other than domestic systems." 47 C.F.R. § 25.202(a)(1) footnote 2

satellite may provide downlink service into the United States and its Possessions in the 10.7 -11.7 GHz frequency band only if the uplink originates outside of the United States and its Possessions. Therefore, if EchoStar wants to use any of these frequencies to provide domestic service, including telemetry and tracking services for a U.S.-licensed satellite, an earth station license application or modification, including a request for waiver of NG104 and footnote 2 of Section 25.202(a)(1), must be filed for the earth station(s) which will access the EchoStar-113 satellite in this band.

4. EchoStar must file a modification to this authorization specifying the precise orbital location for the EchoStar-113 satellite.¹¹ EchoStar must file this modification within 60 days of this grant.
5. EchoStar has 30 days from the date of this grant to decline the authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.
6. This grant is issued pursuant to 47 C.F.R. § 0.261 of the Commission's rules on delegated authority and is effective upon adoption. Petitions for reconsideration or Applications for Review under the Commission's rules, 47 C.F.R. 1.106 and 1.115, may be filed within 30 days of the date of the public notice indicating this action was taken.



File # SAT-AMD-20060724-00081
With attached conditions
 Call Sign S2636 Grant Date 10/19/2006
 (or other identifier)
 see SAT-LOA- Term Dates
 From 20040803-00154 To: _____

See also File Nos.

SAT-MOD-20051007-00198
SAT-AMD-20051118-00248

Approved: [Signature] *Chief Satellite*
Robert G. Nelson *Director*

states "[u]se of this band by geostationary satellite orbit satellite systems in the fixed-satellite service is limited to international systems, i.e. other than domestic systems." See also Assignment of Orbital Location to Space Stations in the Domestic Fixed Satellite Service and the Application of GE American Communications, Inc., Order and Authorization, 15 FCC Rcd 3385 (Int'l Bur. 1999).

¹¹ Pursuant to 47 C.F.R. § 25.114(d)(14), EchoStar submitted an application specifying its orbital debris mitigation plans for the 113° W.L. orbital location. In its application, File No. SAT-AMD-20060724-00081, EchoStar states that the in-orbit Satmex-6 satellite operated by Satelites Mexicanos S.A. DE C.V. (Satmex) is the only satellite that will be operated at or close to the EchoStar-113 satellite. EchoStar asserts that it has reached an agreement in principle, with Satmex, that each will operate their respective satellites at an off set from the nominal 113° W.L. orbital location, but failed to specify the offset.

9-16. Name of Contact Representative

Name:	Pantelis Michalopoulos	Phone Number:	202-429-6494
Company:	Steptoe & Johnson LLP	Fax Number:	202-429-3902
Street:	1330 Connecticut Avenue, NW	E-Mail:	pmichalo@steptoe.com
City:	Washington	State:	DC
Country:	USA	Zipcode:	20036-1795
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 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: S2636</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: 10/07/2005</p> <p>(b) File number: SATMOD2005100700198</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 checked="" type="checkbox"/> a. Fixed Satellite <input type="checkbox"/> b. Mobile Satellite <input type="checkbox"/> c. Radiodetermination Satellite <input type="checkbox"/> d. Earth Exploration Satellite <input checked="" type="checkbox"/> e. Direct to Home Fixed Satellite <input type="checkbox"/> f. Digital Audio Radio Service <input type="checkbox"/> g. Other (please specify)	
21. STATUS: Choose the button next to the applicable status. Choose only one. <input 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: 18300 Frequency Upper: 30000 (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

Q36

<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. Q40</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?N/A

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.)

EchoStar Satellite Operating Corporation hereby responds to the June 22, 2006 Letter from Cassandra Thomas, Deputy Chief, Satellite Division, FCC to David K. Moskowitz, Executive Vice President and General Counsel, EchoStar Satellite Operating Corporation concerning File Nos. SAT-MOD-20051007-00198, SAT-AMD-20051118-00248; Call Sign S2636.

Attachment A

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
David K. Moskowitz

→

46. Title of Person Signing
Executive Vice President and General Counsel

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND / OR IMPRISONMENT
(U.S. Code, Title 18, Section 1001), AND/OR REVOCATION OF ANY STATION AUTHORIZATION
(U.S. Code, Title 47, Section 312(a)(1)), AND/OR FORFEITURE (U.S. Code, Title 47, Section 503).

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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.

ATTACHMENT A

(File Nos. SAT-MOD-20051007-00198, SAT-AMD-20051118-00248; Call Sign: S 2636)

EchoStar Satellite Operating Corporation (“EchoStar”) hereby responds to the June 22, 2006 Letter from Cassandra Thomas, Deputy Chief, Satellite Division, FCC to David K. Moskowitz, Executive Vice President and General Counsel, EchoStar Satellite Operating Corporation (“Letter”) concerning the above-captioned applications. In that letter, the International Bureau directed EchoStar to “amend its applications to provide detailed information regarding the specific technical means (*e.g.*, eccentricity offset) by which . . . coordination [to avoid in-orbit collisions] will be effected including a discussion of whether EchoStar has assessed the feasibility of a coordination plan based on these technical means.” *See* Letter at 1-2.

The in-orbit SATMEX-6 satellite is the only satellite that will be located at or close to the ECHOSTAR-113W satellite at the 113° W.L. orbital location. Over the last month, EchoStar and Satmex have discussed the physical coordination of the two satellites to avoid in-orbit collisions when both satellites are at the 113° W.L. orbital location. The parties have agreed in principle that the SATMEX-6 satellite and the ECHOSTAR-113W satellite will be located and operated at an offset from the nominal 113.0° W.L. orbital location. The respective offsets will result in at least a 0.1° separation between the orbital positions of the two satellites. Because the east-west station-keeping of each satellite will be $\pm 0.05^\circ$, a separation of 0.1° will ensure that the station-keeping volumes of the two satellites will not overlap. EchoStar has assessed the feasibility of this approach and believe that it can be feasibly implemented. Satmex agrees with EchoStar’s view. EchoStar will advise the Commission when the final offsets are agreed between the parties and will apply to the Commission to make a further conforming modification to the ECHOSTAR-113W authorization at the appropriate time.