

SAT-STA-20080229-00054  
EchoStar Corporation

IB2008000463

Approved by OMB  
3060-0678

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Callsign: **52796**

**10T @ 56.5**

FEDERAL COMMUNICATIONS COMMISSION  
APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY

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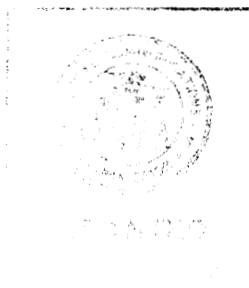
APPLICANT INFORMATION

Enter a description of this application to identify it on the main menu:  
Amendment to Launch and Test Authority STA for EchoStar AMC-14 satellite

I. Applicant

<b>Name:</b>	EchoStar Corporation	<b>Phone Number:</b>	303-723-1000
<b>DBA Name:</b>		<b>Fax Number:</b>	
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<b>City:</b>	Englewood	<b>State:</b>	CO
<b>Country:</b>	USA	<b>Zipcode:</b>	80112 -
<b>Attention:</b>	Linda Kinney - (202)293-0981		

1



w/conditions

File # **SAT-STA-20080229-00054**

Call Sign **52796** Grant Date **March 12, 2008**  
(or other identifier)

Term Dates  
From **March 14, 2008** To **+ 60 days**

Approved

**A. L. Keeg**  
Policy Branch Chief

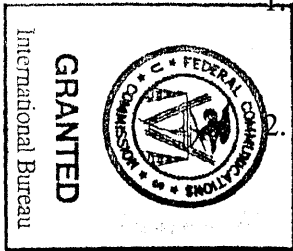
**Attachment**  
**Conditions of Authorization**  
**IBFS File Nos. SAT-LOA-20071221-00183, SAT-STA-20080219-00048,**  
**SAT-STA-20080229-00054**  
**Call Sign: S2746**  
**March 12, 2008**

EchoStar Corporation's (EchoStar's) application for authority to launch and operate a Direct Broadcast Service (DBS) satellite, AMC-14, IBFS File No. SAT-LOA-20071221-00183 (Call Sign: S2746), IS GRANTED. Accordingly, EchoStar is authorized to launch and operate the AMC-14 space station at the 61.5° W.L orbital location using the 17.3-17.8 (Earth-to-space) and 12.2-12.7 GHz (space-to-Earth) frequency bands on channels 1-22 and 25-32,<sup>1</sup> in accordance with the technical specifications set forth in its application, this Attachment, and the Commission's Rules and subject to the following conditions:

1. EchoStar shall operate the AMC-14 space station at the 61.5° W.L orbital location in compliance with all existing or future coordination agreements for that location.

2. EchoStar shall provide the Commission with all information it requires in order to modify the Appendix 30 Broadcasting-Satellite Service Plans and associated Appendix 30A feeder-link Plans to incorporate the characteristics of USABSS-28, in accordance with the International Telecommunication Union (ITU) radio regulations. EchoStar shall be held responsible for all cost recovery fees associated with these ITU filings. We also note that no protection from interference caused by radio stations authorized by other Administrations is guaranteed unless coordination and other procedures are timely completed or, with respect to individual Administrations, by successfully completing coordination agreements. 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)

EchoStar's request for waiver of Section 25.210(i), of the Commission's rules, 47 C.F.R. § 25.210(i), IS GRANTED as conditioned. Section 25.210(i) states that "[S]pace station antennas in the Fixed-Satellite Service must be designed to



Approved: *[Signature]*  
 From: *[Signature]*  
 To: + 10 yrs.  
 Call Sign: S2746 Grant Date: March 12, 2008  
 (or other identifier) Term Dates  
 File # SAT-LOA-20071221-00183  
 SAT-STA-20080219-00048  
 SAT-STA-20080229-00054

<sup>1</sup> Application of Direct Broadcasting Satellite Corporation For Assignment of Direct Broadcast Satellite Orbital Positions and Channels, *Memorandum Opinion And Order*, 8 FCC Rcd. 7959,7961 (para. 12) (1993) (even numbered channels 2-22); Application of Direct Broadcasting Satellite Corporation For Assignment of Direct Broadcast Satellite Orbital Positions and Channels, *Order*, 11 FCC Rcd 10494 (Int'l Bur. 1996); Rainbow DBS Company LLC, Assignor and EchoStar Satellite L.L.C., Assignee, Consolidated Application for Consent to Assignment of Space Station and Earth Station Licenses, and Related Special Temporary Authorization, IB Docket No. 05-72, *Memorandum Opinion and Order*, 20 FCC Rcd 16868 (2005) (assigning 11 odd numbered channels from 1-21); Application for consent to assign Dominion's 8 DBS channels at 61.5 W.L. to EchoStar, IBFS File No. SAT-ASG-2007060840081, Grant (September 27, 2007) (assigning channels 25-32 from Dominion Video Satellite, Inc. to EchoStar).

provide a cross-polarization isolation such that the ratio of the on axis co-polar gain to the cross-polar gain of the antenna in the assigned frequency band shall be at least 30 dB within its primary coverage area.” EchoStar indicates that, over its primary service area, the minimum cross-polarization isolation ratio for AMC-14’s fixed-satellite service (FSS) feeder-link receive antennas is at least 27 dB within their primary coverage area.<sup>2</sup> EchoStar indicates that the lower cross-polarization isolation ratio for these FSS feeder-link antennas will not affect any other satellite and that the small additional uplink interference into the AMC-14 satellite has already been taken into account in the satellite’s link design.<sup>3</sup> We find that this shortfall will not produce a significant increase in interference, except to the applicant itself, and will not adversely affect any other operator. As a condition of the waiver, EchoStar shall claim no more protection from interference from other licensed radiocommunication systems operating in accordance with the Commission’s rules than if its FSS feeder-link receiving antennas had met Section 25.210(i) of the rules. Grant of this waiver request is consistent with our precedent.<sup>4</sup>

4. EchoStar’s request for a partial waiver of Section 25.283(c) of the Commission’s rules, 47 C.F.R. 25.283(c), IS GRANTED. Section 25.283(c) specifies that space stations must discharge all stored energy sources at end-of-life of the space station. EchoStar indicates that due to its design, AMC-14’s oxidizer tanks cannot be completely depleted but will retain approximately 3% of the tank volume at the end of life of the satellite. EchoStar states that the oxidizer tanks are designed to leak rather than burst to in the case of a flaw in the materials. This waiver is granted because modification of the spacecraft would present an undue hardship, given the late stage of satellite construction. In making this determination, we note that the information submitted in the application is not sufficient to support a finding: a) that oxidizer is the equivalent of an inert gas such as xenon for purposes of assessing whether the intent of the rule would be satisfied; or b) that the intent of the rule would be satisfied by sealing the oxidizer tank or by the design of the oxidizer tanks themselves.
5. The license term for the space station is 10 years and will begin on the date EchoStar certifies to the Commission that the satellite has been successfully placed into orbit and its operation fully conforms to the terms and conditions of this authorization. 47 C.F.R. § 25.121(d)(1). EchoStar shall file its certification

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<sup>2</sup> See EchoStar Satellite Operating Corporation Application for Modification of Authority to Launch and Operate the new AMC-14 DBS Satellite at 61.5° W.L., SAT-LOA-20071221-00183 (Call Sign: S2746), Narrative at 9 (AMC-14 Application). We note that EchoStar requested waivers of both Sections 25.210(i) and 25.215 of the Commission’s rules, 47 CFR §§ 25.210(i), 25.215. In its application, however, EchoStar indicates that only the feeder-link receive antennas do not meet 30 dB requirement. Accordingly, we dismiss the request for waiver of section 25.215 of our rules as moot.

<sup>3</sup> AMC-14 Application Narrative at 9-10.

<sup>4</sup> Star One S.A.; Petition for Declaratory Ruling to Add The Star One C1 Satellite at 65° W.L. to the Permitted Space Station List, *Order*, 19 FCC Rcd 16334 (Int’l Bur., Sat. Div. 2004) (finding that the impact on neighboring satellite systems of a 3-5dB difference from the required cross polarization isolation ratio would be negligible).

with the Chief, Satellite Division, International Bureau within 5 business days of the satellite being placed into operation at the 61.5° W.L. orbital location.

6. EchoStar is afforded thirty days from the date of release of this grant and authorization to decline this authorization as conditioned. Failure to respond within this period will constitute formal acceptance of the authorization as conditioned.
7. EchoStar's request for special temporary authority to conduct in-orbit testing of the AMC-14 satellite at the 56.5° W.L. orbital location for a period of 60 days prior to AMC-14's installation at the 61.5° W.L. orbital location, File No. SAT-STA-20080219-00048, as amended by SAT-STA-20080229-00054, IS GRANTED. Accordingly, EchoStar is authorized to conduct space station Telemetry, Tracking, and Control operations on AMC-14 necessary to effect operation at the 56.5° W.L. orbital location and testing of the 17.3-17.8 (Earth-to-space) and the 12.2-12.7 GHz (Earth-to-space) frequency bands using channels 1-32 for a period of 60 days commencing March 14, 2008, subject to the following conditions:
  - a. All operations shall be on an unprotected and non-harmful interference basis, *i.e.*, EchoStar shall not cause harmful interference to, and shall not claim protection from interference caused to it by, any other lawfully operating radiocommunication system.
  - b. In the event of any harmful interference as a result of EchoStar's operations at the 56.5° W.L. orbital location, EchoStar shall cease operations immediately upon notification of such interference and shall inform the FCC, in writing, immediately of such an event.
  - c. While at the 56.5° W.L. orbital location, EchoStar shall maintain the AMC-14 spacecraft with an east/west longitudinal station-keeping tolerance of 0.05 degrees.
  - d. Any actions taken as a result of operation of AMC-14 at 56.5° W.L. orbital location are solely at EchoStar's own risk.
8. EchoStar does not seek and this action does not provide EchoStar with authority to operate AMC-14 on channels 23 and 24 at the 61.5° W.L orbital location.<sup>5</sup>
9. These actions are issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. § 0.261, and are effective immediately. Petitions for reconsideration under Section 1.106 or applications for review under Section 1.115 of the Commission's rules, 47 C.F.R. §§ 1.106, 1.115, may be filed within 30 days of the date of the public notice indicating that these actions were taken.

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<sup>5</sup> EchoStar indicated that at some time in the future it may file a request for special temporary authority to operate AMC-14 using channels 23 and 24 at the 61.5° W.L orbital location

2. Contact	
<b>Name:</b> Pantelis Michalopoulos	<b>Phone Number:</b> 202-429-6494
<b>Company:</b> Steptoe & Johnson LLP	<b>Fax Number:</b> 202-429-3902
<b>Street:</b> 1330 Connecticut Ave. NW	<b>E-Mail:</b> pmichalopoulos@steptoe.com
<b>City:</b> Washington	<b>State:</b> DC
<b>Country:</b> USA	<b>Zipcode:</b> 20036 -1795
<b>Attention:</b>	<b>Relationship:</b> 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 SATSTA2008021900048 or Submission ID	
4a. Is a fee submitted with this application?	
<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). <input type="radio"/> Governmental Entity <input type="radio"/> Noncommercial educational licensee <input type="radio"/> Other (please explain):	
4b. Fee Classification	
5. Type Request	
<input checked="" type="radio"/> Change Station Location <input type="radio"/> Extend Expiration Date <input type="radio"/> Other	
6. Temporary Orbit Location 56.5 W	7. Requested Extended Expiration Date

<p>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.)</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Amendment to pending STA request to conduct in-orbit testing of the AMC-14 satellite at 56.5W instead of 56.0W. See attached narrative.</p> </div>					
<p>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.</p> <p style="text-align: right;"> <input checked="" type="radio"/> Yes      <input type="radio"/> No         </p>					
<p>10. Name of Person Signing Linda Kinney</p>	<p>11. Title of Person Signing Vice President, Law and Regulation</p>				
<p>12. Please supply any need attachments.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Attachment 1: Amendment</td> <td style="width: 33%;">Attachment 2:</td> <td style="width: 33%;">Attachment 3:</td> </tr> </table>			Attachment 1: Amendment	Attachment 2:	Attachment 3:
Attachment 1: Amendment	Attachment 2:	Attachment 3:			
<p><b>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).</b></p>					

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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.**

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
ECHOSTAR CORPORATION	)	File No. SAT-_____
	)	File No. SAT-STA-20080219-00048
	)	Call Sign S2746
Amendment to Application for Special Temporary	)	
Authority to Launch the AMC-14 Satellite and to	)	
Test AMC-14 at 56° W.L.	)	

**EXPEDITED ACTION REQUESTED**

**AMENDMENT TO  
APPLICATION FOR SPECIAL TEMPORARY AUTHORITY**

EchoStar Corporation (“EchoStar”) hereby amends its pending application for special temporary authority (“STA”) to launch and test the AMC-14 satellite at the 56° W.L. orbital location.<sup>1</sup> Specifically, EchoStar is seeking to adjust the orbital location for in-orbit testing by 0.5 degrees to 56.5° W.L. to facilitate coordination of the testing with Intelsat, which is operating the IS-805 satellite at 55.5° W.L. on frequencies that overlap partially with the frequencies on which AMC-14 will be tested. EchoStar, SES Americom and Intelsat have reached an understanding in principle regarding coordination of the AMC-14 testing at 56.5, ° W.L. and expect to finalize their agreement shortly.

As noted in its STA application, EchoStar (in conjunction with SES Americom) has been in coordination discussions with Intelsat to establish the test conditions for the AMC-14 satellite. As a result of these discussions, the parties have reached an understanding in principle to conduct in-orbit testing of AMC-14 at 56.5° W.L. (instead of 56.0° W.L.) in order to better protect earth

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<sup>1</sup> See File No. SAT-STA-20080219-00048 (filed Feb. 19, 2008).



stations in Central America operating with the IS-805 satellite. This increased orbital separation, combined with the geographic isolation between the downlink beams of the two satellites in the overlapping frequencies, will ensure no harmful interference into the operations of the IS-805 network.

No other change to the STA application is being made or requested. This amendment will not diminish in any way the public interest benefits to be derived from grant of the STA application. In fact, this amendment would reduce the potential for harmful interference from AMC-14 into IS-805 during in-orbit testing.

As noted in the STA application, AMC-14 is currently scheduled to launch in mid-March 2008. EchoStar therefore respectfully requests expedited action on this STA request (as amended) for the event that EchoStar's pending application for regular authority to launch and operate AMC-14<sup>2</sup> is not acted upon in time to meet that launch date.

Respectfully submitted,

**EchoStar Corporation**

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*Counsel for EchoStar Corporation*  
  
February 29, 2008

\_\_\_\_\_  
/s/  
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Director and Senior Corporate Counsel  
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<sup>2</sup> See File No. SAT-LOA-20071221-00183.