

E050017 SES-STA-20121015-00927 IB2012002404  
EchoStar Broadcasting Corporation

Approved by OMB  
3060-0678

APPLICATION FOR EARLY STATION SPECIAL TEMPORARY AUTHORITY

APPLICANT INFORMATION Enter a description of this application to identify it on the main menu:  
30-day STA Request to Use E050017 to Provide TT&C and Feeder-Link Operations with QuetzSat-1 at 61.5 W.L.

1. Applicant

<b>Name:</b>	EchoStar Broadcasting Corporation	<b>Phone Number:</b>	202-293-0981
<b>DBA Name:</b>		<b>Fax Number:</b>	
<b>Street:</b>	100 Inverness Terrace East	<b>E-Mail:</b>	
<b>City:</b>	Englewood	<b>State:</b>	CO
<b>Country:</b>	USA	<b>Zipcode:</b>	80112 -
<b>Attention:</b>	Ms. Alison Minea		



*with conditions*  
File # SES-STA-20121015-00927

Call Sign E050017 Grant Date 10/31/2012  
(or other identifier)

Term Dates  
From 10/27/2012 To: 11/25/2012

Approved: Paul E. Mack

Applicant: EchoStar Broadcasting Corporation  
Call Sign: E050017  
File No.: SES-STA-20121015-00927  
Special Temporary Authority (STA)

EchoStar Broadcasting Corporation is granted, under the following conditions, STA from October 27, 2012, through November 25, 2012, to use its Gilbert, AZ, earth station, call sign E050017, to communicate with the foreign-licensed QuetzSat-1 spacecraft, a U.K. registered and licensed space object. The earth station will be used to perform tracking, telemetry and command (TT&C) functions in the 17.3-17.8 GHz (Earth-to-space) and 12.2-12.7 GHz (space-to-Earth) frequency bands for additional in-orbit testing of the satellite at 67.1 W.L. during and after a planned move of the spacecraft to 61.5 W.L. TT&C and feeder link operations at 61.5 W.L. are also authorized.

1. This authorization is limited to:

**TT&C Emissions**

Emission Designator: 1M00G7W

Max EIRP: 86.5 dBW

Max EIRP Density: 62.5 dBW/4kHz

Tx Frequency Range: 17300-17800 MHz

Rx Frequency Range: 12200-12700 MHz

Polarization: Left and Right Circular

**IOT Emissions and Feeder link Emissions**

Emission Designator: 1K00K3N

Max EIRP: 86.5 dBW

Max EIRP Density: 92.5 dBW/4kHz

Tx Frequency Range: 17300-17800 MHz

Rx Frequency Range: 12200-12700 MHz

Polarization: Left and Right Circular

Emission Designator: N0N

Max EIRP: 86.5 dBW

Max EIRP Density: 92.5 dBW/4kHz

Tx Frequency Range: 17300-17800 MHz

Rx Frequency Range: 12200-12700 MHz

Polarization: Left and Right Circular

Emission Designator: 24M0G7W

Max EIRP: 86.5 dBW

Max EIRP Density: 48.7 dBW/4kHz

Tx Frequency Range: 17300-17800 MHz

Rx Frequency Range: 12200-12700 MHz

Polarization: Left and Right Circular

Emission Designator: 24M0F3D

Max EIRP: 86.5 dBW

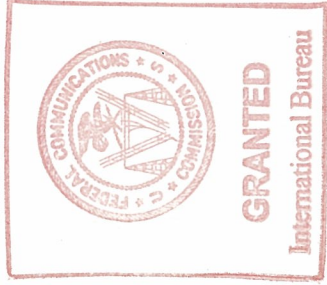
Max EIRP Density: 48.7 dBW/4kHz

Tx Frequency Range: 17300-17800 MHz

Rx Frequency Range: 12200-12700 MHz

Polarization: Left and Right Circular

2. All operations shall be on an unprotected and non-harmful interference basis, EchoStar Broadcasting Corporation, E050017, shall not cause harmful interference to, and shall not claim protection from, interference caused to it by any other lawfully operating station and it shall cease transmission(s) immediately upon notice of such interference.
3. In the event that any harmful interference is caused as a result of operations of the Quetzat-1 satellite, EchoStar shall cease operations immediately upon notification of such an event, and shall inform the Commission immediately, in writing, of the event.
4. Any action taken or expense incurred as a result of operations pursuant to this special temporary authority is solely at EchoStar's own risk.
5. This action is issued pursuant to Section 0.261 of the Commission's rules on delegated authority, 47 C.F.R. §0.261, and is effective immediately.



*"with conditions"*

File # SES-STA-20121015-00927

Call Sign E050017 Grant Date 10/31/2012  
(or other identifier)

Term Dates  
From 10/27/2012 To: 11/25/2012

Approved: Paul E. Hobb

**2. Contact**

<b>Name:</b>	Stephanie A. Roy	<b>Phone Number:</b>	202-429-6278
<b>Company:</b>	Steptoe & Johnson LLP	<b>Fax Number:</b>	
<b>Street:</b>	1330 Connecticut Ave NW	<b>E-Mail:</b>	sroy@steptoe.com
<b>City:</b>	Washington	<b>State:</b>	DC
<b>Country:</b>	USA	<b>Zipcode:</b>	20036 -
<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 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    CGX – Fixed Satellite Transmit/Receive Earth Station

**5. Type Request**

- Use Prior to Grant                       Change Station Location                       Other

6. Requested Use Prior Date

7. City Gilbert

8. Latitude  
(dd mm ss.s h) 33 21 55.9 N



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

In the Matter of	)	
)	)	
)	)	File Nos. SES-STA-20120918-00839
<b>ECHOSTAR BROADCASTING CORPORATION</b>	)	SES-STA-2012 - - - -
)	)	Call Sign E070014
Application for Renewal of Its Special	)	
Temporary Authority to Use One Earth	)	File No. SES-STA-2012 - - - -
Station for TT&C During QuetzSat-1's	)	Call Sign E050017
Relocation to, and Operation at, 61.5° W.L.,	)	
and New Special Temporary Authority to	)	File No. SES-STA-2012 - - - -
Operate Three Earth Stations for TT&C and	)	Call Sign E060003
Feeder Link Operations with QuetzSat-1 at	)	
61.5° W.L.	)	
)	)	
)	)	

**APPLICATION FOR SPECIAL TEMPORARY AUTHORITY**

EchoStar Broadcasting Corporation (“EBC,” and collectively with its affiliates, “EchoStar”) respectfully requests renewal of its special temporary authority (“STA”) for an additional 30 days so that it can continue using its earth station (Call Sign E070014) to performing Tracking, Telemetry, and Command (“TT&C”) for the UK-licensed QuetzSat-1 Direct Broadcast Satellite (“DBS”) service satellite during its relocation to 61.5° W.L.<sup>1</sup> In addition, EBC requests new STA for 30 days to provide TT&C and feeder-link operations with QuetzSat-1 while the satellite is operating at 61.5° W.L. using three earth stations (Call Signs E050017, E060003, and E070014).<sup>2</sup> EBC requests that the new STA begin upon the date of renewal of its existing STA authority for E070014—October 24, 2012. For the reasons set forth

<sup>1</sup> *Stamp Grant*, SES-STA-20120918-00839 (granted Sept. 24, 2012). EBC requests authority to perform TT&C operations over the same frequencies previously authorized in the referenced *Stamp Grant* for TT&C during in-orbit testing of QuetzSat-1. *Id.*

<sup>2</sup> EBC requests authority to perform feeder link operations over the same frequencies authorized in the referenced *Stamp Grant* for in orbit testing of QuetzSat-1. *Id.*

herein, the grant of this application is in the public interest and will not cause harmful interference to any authorized user of the spectrum.

## I. BACKGROUND

After its successful launch on September 29, 2011, QuetzSat-1 completed operational testing at 67.1° W.L. An affiliate of SES has been holding QuetzSat-1 at that orbital location pending direction from EchoStar, which has contracted for the entire DBS service capacity of QuetzSat-1. EchoStar understands that QuetzSat-1 is currently operating under a U.K. Outer Space Act license and will be registered as a UK space object.<sup>3</sup> EchoStar understands that the U.K. Space Agency has indicated that it has no objection to the proposed temporary operation of QuetzSat-1 at 61.5° W.L.

Because of the delay in the EchoStar 16 launch (due to the Proton M/Briz M launch vehicle failure) and the need to continue service to U.S. customers from 61.5° W.L. while inaugurating EchoStar 15's service from 45° W.L., EchoStar filed an STA request to test QuetzSat-1 at 67.1° W.L. and then to relocate it to 61.5° W.L.<sup>4</sup> EchoStar now expects QuetzSat-1 to begin its move from 67.1° W.L. in mid-October and arrive at 61.5° W.L. near the end of the month. Once at 61.5° W.L., EchoStar expects that it will take approximately two weeks for QuetzSat-1 to take over duties in the cluster from EchoStar 15.<sup>5</sup> Once all traffic is transferred to

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<sup>3</sup> See SES Americom, Inc., File No. SES-STA-20120917-00826, at 1 n.1 (filed Sept. 17, 2012); Letter from Stephanie A. Roy, Counsel for EchoStar Broadcasting Corporation, and Daniel Mah, Regulatory Counsel, SES Americom, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission (Aug. 24, 2012), *filed in* File Nos. SES-STA-20120412-00360, SES-STA-20110815-00955, SES-STA-20111021-01250, SES-MFS-20110926-01138, SES-MFS-20110926-01140, SES-MFS-20110926-01139, SES-STA-20110815-00956, SES-STA-20111021-01251, SES-AMD-20110809-00938, SES-MFS-20110707-00792, SES-AMD-20110809-00937, SES-MFS-20110707-00793, SES-STA-20120413-00364.

<sup>4</sup> File No. SES-STA-20120918-00839 (filed Sept. 18, 2012).

<sup>5</sup> QuetzSat-1's capacity is the same as that of EchoStar 15, and QuetzSat-1 will operate only under the frequencies authorized to EchoStar.



QuetzSat-1, EchoStar 15 will be free to move to the nominal 45° W.L. orbital location.<sup>6</sup> After EchoStar 16 is launched and tested, EchoStar expects QuetzSat-1 to be moved to 61.65° W.L. and EchoStar 16 to 61.5° W.L. This will allow for the traffic on QuetzSat-1 to be transferred to EchoStar 16 and, ultimately, for QuetzSat-1 to be moved to its permanent operating location in the 77° W.L. orbital cluster.

## **II. GRANT OF THIS APPLICATION IS IN THE PUBLIC INTEREST**

The Commission has a long-standing policy of granting STA where such authorization will serve the public interest, convenience, and necessity and does not cause harmful interference.<sup>7</sup> The requested operations meet both of these tests.

The requested STA serves the public interest because it will ensure a smooth transition of QuetzSat-1 from 67.1° W.L. to 61.5° W.L. and uninterrupted service to EchoStar's customers from 61.5° W.L. while EchoStar moves the EchoStar 15 satellite to 44.9° W.L. Moreover, the requested authority will allow earlier productive use of an additional slot (44.9° W.L.)—a use that will include a new potential avenue for U.S. programming service to reach a large South American audience.

While the satellite is at 61.5° W.L., EchoStar will ensure that operations do not cause harmful interference to any other satellite.

## **III. OPERATIONAL PARAMETERS**

During the relocation of QuetzSat-1 to 61.5° W.L., all transponders other than the TT&C transponders will be switched off, and EBC will operate its earth stations subject to the following conditions:

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<sup>6</sup> See File No. SAT-MOD-20120814-00130 (filed Aug. 14, 2012).

<sup>7</sup> See, e.g., Newcomb Communications, Inc., *Order and Authorization*, 8 FCC Rcd. 3631, 3633 (1993); Columbia Communications Corp., *Order*, 11 FCC Rcd. 8639, 8640 (1996); American Telephone & Telegraph Co., *Order*, 8 FCC Rcd. 8742 (1993).

1. No harmful interference will be caused to any lawfully operating satellite network or radio communication system, and EBC's operations will cease immediately upon notification of harmful interference. Furthermore, EBC shall notify the Commission immediately, in writing, of any such event.
2. EBC will accept interference from any lawfully operating satellite network or radio communication system.

In addition, during operation of QuetzSat-1 at 61.5° W.L., EBC will communicate with QuetzSat-1 at 61.5° W.L. subject to the following conditions:

1. TT&C and feeder link operations at 61.5° W.L. shall be on a non-harmful interference basis, meaning that QuetzSat-1 shall not cause interference to, and shall not claim protections from, interference caused to it by any other lawfully operating satellites.
2. In the event that any harmful interference is caused as a result of TT&C or feeder link operations while the satellite is at 61.5° W.L., QuetzSat-1 shall cease operations immediately upon notification of such interference and the Commission will be informed immediately, in writing, of such event.

#### **IV. WAIVER PURSUANT TO SECTION 304 OF THE ACT**

In accordance with Section 304 of the Communications Act of 1934, as amended, 47 U.S.C. § 304, EchoStar hereby 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.

#### **V. CONCLUSION**

For the foregoing reasons, EBC seeks renewal of its STA for its earth station (Call Sign E070014) for a period of 30 days to perform TT&C for QuetzSat-1 during its relocation to, and operation at, 61.5° W.L. In addition, EBC requests new STA for 30 days from October 24, 2012, to perform feeder link operations using three earth stations (Call Signs E050017, E060003, and E070014) while QuetzSat-1 is at 61.5° W.L. This request will serve the public interest and not cause harmful interference to any satellite operator.

Respectfully submitted,

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/s/

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October 15, 2012