

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

	)	
	)	
In the Matter of	)	File No. SES-STA-20110525-00626
	)	File No. SES-STA-_____ - _____
<b>ECHOSTAR BROADCASTING CORPORATION</b>	)	Call Sign E070015
	)	
Application for Renewal of Special	)	File No. SES-STA-20110525-00625
Temporary Authority to Operate Two Ku-	)	File No. SES-STA-_____ - _____
Band Transmit/Receive Earth Stations with	)	Call Sign E980127
EchoStar 8 at 77.0° W.L.	)	
	)	

**APPLICATION FOR RENEWAL OF SPECIAL TEMPORARY AUTHORITY**

By this Application, and pursuant to Section 25.120(b)(3) of the Commission’s rules,<sup>1</sup> EchoStar Broadcasting Corporation (“EBC”) requests renewal of its special temporary authority (“STA”) for an additional 60 days to operate two “ALSAT” Fixed-Satellite Service (“FSS”) transmit/receive earth stations (Call Signs E070015 and E980127) to transmit command instructions to the EchoStar 8 satellite at 77.0° W.L. using the 14003 MHz frequency. The current STAs expire on June 14, 2011.<sup>2</sup>

**I. BACKGROUND**

As EBC’s parent, EchoStar Corporation (“EchoStar”),<sup>3</sup> has previously reported to the Commission, the EchoStar 8 satellite, which is currently operating under Mexican authority at

---

<sup>1</sup> 47 C.F.R. § 25.120(b)(3).

<sup>2</sup> See Stamp Grant, File Nos. SES-STA-20110525-00625, SES-STA-20110525-00626 (granted May 27, 2011).

<sup>3</sup> On May 26, 2011, the Commission consented to the *pro forma* assignment of the licenses of the transmit/receive earth stations with Call Signs E070015 and E980127, from EchoStar Corporation to EBC. See Stamp Grant, File No. SES-ASG-20110228-00554 (granted

the 77.0° W.L. orbital location, experienced a single event upset (“SEU”) in January 2011.<sup>4</sup> EchoStar has conducted testing to determine whether and how the satellite was affected by the SEU. EchoStar has determined that the SEU did not have a major impact on the health or the longevity of the satellite, and it has not impaired the functionality of the payload. But the SEU did result in the partial disabling of the satellite’s remaining 17 GHz receiver. While that receiver is capable of providing ranging functions, it is not capable of receiving command instructions, which therefore have to be conveyed over the 14003 MHz frequency. EchoStar has been providing these instructions over two FSS transmit/receive earth stations located in Cheyenne, Wyoming, and Gilbert, Arizona, respectively.<sup>5</sup>

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

For the same reasons the original STA granted to EchoStar was in the public interest, so too is this request in the public interest.<sup>6</sup> In short, grant of this STA will ensure the continued safe operation of EchoStar 8 at the 77.0° W.L. orbital location while it continues to provide U.S. consumers direct-to-home satellite television service, including local-into-local programming in certain markets.

---

May 26, 2011). These *pro forma* assignments were consummated on May 26, 2011. See Letter from Pantelis Michalopoulos, Counsel for EchoStar Corporation and EchoStar Broadcasting Corporation, to Marlene H. Dortch, Secretary, FCC, *filed in* File Nos. SES-ASG-20110228-00561, SES-ASG-20110228-00562, SES-ASG-20110228-00554 (June 3, 2011).

<sup>4</sup> See Letter from Petra A. Vorwig, Counsel for EchoStar Corporation, to Marlene H. Dortch, Secretary, FCC, *filed in* File No. SAT-T/C-20090217-00026 (Feb. 1, 2011).

<sup>5</sup> See Stamp Grant, File Nos. SES-STA-20110328-00370, SES-STA-20110328-00371 (granted Apr. 18, 2011). EBC understands that its partner, QuetzSat, S. de R.L. de C.V. (“QuetzSat”), has communicated with the Mexican administration and confirmed that the administration does not object to the temporary use of EchoStar 8’s Ku-band command carrier at the 77° W.L. orbital location.

<sup>6</sup> See Stamp Grant, File Nos. SES-STA-20110328-00370, SES-STA-20110328-00371 (granted Apr. 18, 2011).

Grant of this application also will not cause harmful interference. EBC has surveyed the satellites operating near EchoStar 8 at 77° W.L. and identified the Simón Bolívar satellite, operated by VeneSat and located at 78.0° W.L., as the nearest Ku-band satellite. EBC's Ku-band operations will not cause harmful interference to Simón Bolívar because that satellite's Ku-band service is directed towards South America. Specifically, Simón Bolívar's Ku-band beam covers Cuba and South America and does not cover the United States. Consequently, the VeneSat satellite receive antenna gain contours roll-off over the United States resulting in decreasing receive gain. As a result, Simón Bolívar's receive antenna gain will be sufficiently reduced at EBC's earth station locations in Cheyenne, Wyoming, and Gilbert, Arizona, to ensure the earth stations do not cause harmful interference to the satellite. Furthermore, the technical characteristics of EBC's telemetry, tracking, and control ("TT&C") antennas further reduce the potential interference into VeneSat's satellite. Specifically, EchoStar 8's command carrier transmissions will be performed from these two TT&C antennas, which have a ground transmit antenna gain isolation of at least 32.5 dB towards the VeneSat satellite.

The combined isolation of the Simón Bolívar receive contours, the satellites' spatial separation of one degree and the technical characteristics of EBC's antenna will result in an isolation or C/I level of at least -57 dB. Therefore, the EchoStar 8 command carrier operation over the 14 GHz frequency will not interfere with Simón Bolívar's operations.

The next closest Ku-band satellites are Horizons 2, located at 74.0° W.L., and AMC 2 at 78.9° W.L. EBC's earth stations are operating according to the Commission's two-degree spacing requirements, and therefore will not cause harmful interference into either satellite. Furthermore, EBC is able to change the command carrier's polarization to further protect against interference.

Moreover, EBC will operate the earth stations to conduct TT&C operations while EchoStar 8 is operating at 77.0° W.L. in accordance with the conditions imposed on EchoStar's original STA.<sup>7</sup>

### **III. 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, EBC 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.

### **IV. CONCLUSION**

For the foregoing reasons, EBC respectfully requests the grant of its application for renewal of its STA to operate two ALSAT FSS transmit/receive earth stations (Call Signs E070015 and E980127) to provide TT&C for the EchoStar 8 satellite at 77.0° W.L. for an additional 60 days until August 13, 2011.

Respectfully submitted,

\_\_\_\_\_  
/s/

Pantelis Michalopoulos  
L. Lisa Sandoval  
**Steptoe & Johnson LLP**  
1330 Connecticut Avenue, NW  
Washington, D.C. 20036  
(202) 429-3000  
*Counsel for EchoStar Broadcasting Corporation*

Alison Minea  
Corporate Counsel  
**EchoStar Broadcasting Corporation**  
1110 Vermont Avenue, NW, Suite 750  
Washington, D.C. 20005  
(202) 293-0981

June 9, 2011

---

<sup>7</sup> See *id.*