

0292-EX-ST-1999

**ORIGINAL**

**Diversified Communications Engineering, Inc.  
111 Congress Avenue  
Suite 2530  
Austin, TX 78701  
Telephone: (512) 478-3400**

**Federal Communications Commission  
Experimental Radio Services  
P. O. Box 358320  
Pittsburgh, PA 15251-5320**

**Re: Request to Modify Special Temporary Authorization**

**To the Commission:**

Diversified Communications Engineering, Inc. ("DCE"), hereby requests a modification of its Special Temporary Authorization ("STA") for WA2XMY, File No. 0094-EX-ST-1999. DCE seeks this modification to comply with a request from Commission staff regarding the testing of the Northpoint technology in the Washington, D.C. area. DCE is currently testing the Northpoint technology in the Washington, D.C. area and is authorized to operate at three different transmit sites. DCE would like to begin testing from a fourth site identified below beginning September 21, 1999. FCC staff requested that DCE add additional test sites in order to have an experimental test that more closely replicates a fully deployed Northpoint system.

In accordance with Section 5.56, 5.57 and 5.202 of the Commission's Rules, the following information is provided in support of this request:

**1) Name and Address of the Applicant:**

**Diversified Communications Engineering, Inc.  
111 Congress Avenue  
Suite 2530**

Austin, TX 78701  
Telephone: (512) 478-3400

**Technical Contact**

Salcem Tawil P.E.  
President  
Diversified Communications Engineering, Inc.  
111 Congress Avenue  
Suite 2530  
Austin, TX 78701  
Telephone: (512) 478-3400

2) **Need for Special Action**

The Commission currently has a pending Notice of Proposed Rule Making (ET Docket No. 98-206) concerning operations in the Ku band and these tests should provide raw data to supplement the record concerning the Northpoint Technology. Based upon meetings with various members of the Commission's staff, DCE was asked to add additional test sites to collect additional data. Without immediate authority, DCE would not be able to provide such technical data in a timely manner.

3) **Type of Operation**

Continuous.

4) **Purpose of Operation:**

The program of research and experimentation proposed in this instant application seeks to build upon the experimental test results established in two separate test locations in Texas. These experimental operations were conducted under FCC call sign WA2XMY, File No. 6001-EX-MR-1998. The experiments in Texas have demonstrated the viability of the Northpoint Technology to transmit terrestrially in a southerly

direction on the same frequencies as used by the DBS service. The proposed STA will enable continued testing and demonstration of the Northpoint Technology to FCC staff, congressional staffers, DBS service providers and any other interested party.

5) **Dates of Operation:**

The current STA is valid through November 26, 1999 and DCE would operate the modified STA pursuant to the time specified in the original grant.

6) **Class of Station:**

Experimental.

7) **Location of Operation:**

The base stations will be located at the following sites:

- 1) Fort Lincoln Building: N 38-55-27; W 76-57-46  
Ground Elev.: 110' AMSL  
Building Hgt: 120' AGL (Approximate)
- 2) USA Today Building: N 38-53-39; W 77-04-11  
Address: 1100 Wilson Boulevard, Rosslyn, VA  
Ground Elev.: 62' AMSL  
Building Hgt: 391- AGL (Approximate)
- 3) 1100 Connecticut Avenue, N.W.: N 38-54-14; W 77-02-27  
Ground Elev.: 55' AMSL  
Building Hgt.: 150' AGL (Approximate)
- 4) Motten Elementary School Building: N 38-51-23; W 76-59-00  
Ground Elev.: 260' (792m) AMSL  
Building Hgt.: 60' (18.28m) AGL (Approximate)

8) **Equipment to be Used:**

The equipment utilized for this STA will consist of a LNR 1 watt transmitter with a digital encoder, QPSK modulation and power level control, a Seavey Engineering custom transmit antenna with a gain of 10 dBi, and a MPEG2-DVB receiver/decoder. The transmit antenna used for this system is directional, with a horizontal beamwidth of 110 degrees.

DCE recognizes that the operation of any unapproved device under experimentation must not cause harmful interference to authorize facilities. Should interference occur, DCE will take reasonable steps to resolve the interference, including if necessary arranging for the discontinuance of operation.

9) **Frequencies Desired:**

12.2 - 12.7 GHz for base station operations.

10) **Maximum Power:**

The base stations will operate at a transmitter power output not greater than 30 dBm and an EIRP not greater than 37.5 dBm.

11) **Type of Emission:**

The primary emission designator will be G7W. Other emission modes may be utilized, but in no event with the missions extend beyond the frequencies set forth under Item 9.

12) **Overall Heights of Antennas Above Ground:**

DCE will comply with all FCC and FAA antenna requirements. The antennas will be mounted either: (1) not higher than 20 feet above ground or 20 feet above a building; (2) on an FAA-approved structure in a manner that will not exceed the approved height (e.g., side

mounted below the approved height; or (3) a manner that does not require FAA approval.

13) **47 C.F.R. § 1.2002 Certification:**


Applicant hereby certifies that it, its officers and directors, and any party with five percent or greater interest in this request for special temporary authorization is not subject to a denial of the Federal benefits requested herein pursuant to Section 5301 of the Anti Drug Abuse Act of 1988, 21 U.S.C. § 862.

DCB submits that issuance of an STA is in the public interest, convenience, and necessity as it will permit DCB to simulate real-world operation of its services and provide needed technical data in support of the commission rule making proceedings.

Enclosed is a check for \$45 to cover the filing fee (Fec Type Code "EAE"), along with a completed Form 159.

Should you have questions, please call our FCC counsel Toni Cook Bush or Eric Broyles at Skadden, Arps, Slate, Meagher & Flom L.L.P. at (202) 371-7700.

Respectfully submitted,



Carmen A. Tawil, P.E.  
Vice President  
Diversified Communication  
Engineering, Inc.

Date:

**ORIGINAL**

**SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP**

1440 NEW YORK AVENUE, N.W.  
WASHINGTON, D.C. 20005-2111

TEL: (202) 371-7000  
FAX: (202) 393-5760

**FIRM/AFFILIATE OFFICES**

BOSTON  
CHICAGO  
HOUSTON  
LOS ANGELES  
NEWARK  
NEW YORK  
PALO ALTO  
SAN FRANCISCO  
WILMINGTON

BEIJING  
BRUSSELS  
FRANKFURT  
HONG KONG  
LONDON  
MOSCOW  
PARIS  
SINGAPORE  
SYDNEY  
TOKYO  
TORONTO

DIRECT DIAL  
(202) 371-7700  
DIRECT FAX  
(202) 371-7989

September 13, 1999

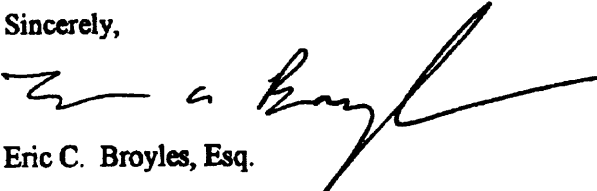
Federal Communications Commission  
Office of Engineering and Technology  
Experimental Radio Services  
445 Twelfth Street, S.W.  
Washington, D.C. 20554

Re: Modification of Special Temporary Authority for  
Callsign WA2XMY, File No. 0094-EX-ST-1999

To the Commission:

Please associate the enclosed, original signature page with the above-referenced filing submitted to the Commission on September 10, 1999, as reflected on the included, date-stamped copy.

Sincerely,



Eric C. Broyles, Esq.

Attachments (2)

**ORIGINAL**

mounted below the approved height; or (3) a manner that does not require FAA approval.

13) **47 C.F.R. § 1.2002 Certification:**

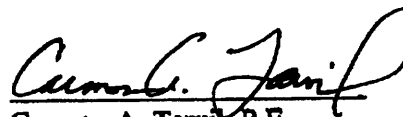
Applicant hereby certifies that it, its officers and directors, and any party with five percent or greater interest in this request for special temporary authorization is not subject to a denial of the Federal benefits requested herein pursuant to Section 5301 of the Anti Drug Abuse Act of 1988, 21 U.S.C. § 862.

DCE submits that issuance of an STA is in the public interest, convenience, and necessity as it will permit DCE to simulate real-world operation of its services and provide needed technical data in support of the commission rule making proceedings.

Enclosed is a check for \$45 to cover the filing fee (Fee Type Code "EAE"), along with a completed Form 159.

Should you have questions, please call our FCC counsel Toni Cook Bush or Eric Broyles at Skadden, Arps, Slate, Meagher & Flom L.L.P. at (202) 371-7700.

Respectfully submitted,



Carmen A. Tawil, P.E.

Vice President

Diversified Communication  
Engineering, Inc.

Date: 9/10/99