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FEDERAL COMMUNICATIONS COMMISSION
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October 17, 2000

EX PARTE OR LATE FILED

Magalie Roman Salas, Secretary
Federal Communications Commission
Counter TW-A325
The Portals, 445 12th Street, S.W.
Washington, D.C. 20554

Re: Ex Parte Submission of Northpoint Technology, Ltd.
ET Docket No. 98-206, RM-9147, RM-9245

Dear Ms. Salas:

In accordance with Section 1.206 of the Commission's rules, 47 CFR § 1.1206, this letter is written to notify you that on October 16, 2000, Sophia Collier and Antoinette C. Bush of Northpoint Technology, Ltd. and BroadwaveUSA sent the enclosed letter and its appendices to Adam Krinsky, Legal Advisor to Commissioner Tristani.

An original and six copies of this letter and its attachments are submitted for inclusion in the public record for the above-captioned proceedings. Please direct any questions concerning this submission to the undersigned.

Respectfully submitted,

David H. Pawlik
Counsel for Northpoint Technology, Ltd.

No. of Copies rec'd 0+6
List ABCDE

BroadwaveUSA™
Creating Cable Competition with Northpoint Technology

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October 16, 2000

BY HAND

Adam Krinsky, Esq.
Legal Advisor
Office of Commissioner Gloria Tristani
445 12th Street, S.W.
8th Floor
Washington, D.C. 20554

Dear Adam:

Thank you for meeting with Sophia Collier and me on Thursday. As promised, we are enclosing copies of the Commission's orders of February 4, 2000 and October 6, 1999. Please do not hesitate to contact us should you have any further questions.

Sincerely,

Antoinette Cook Bush

Antoinette Cook Bush
Executive Vice President

Enclosures

FCC Report Confirms Lack of Harmful Interference in Northpoint Technology's Washington Testing

Northpoint Technology conducted a highly successful trial of its innovative spectrum sharing technology in Washington DC during August and September of 1999. This was the latest demonstration in Northpoint's experimental program that began in 1995 with an application for an experimental license in Austin, Texas.

Lucent Technologies also participated in the Washington test and issued a concurring report of the success of Northpoint's demonstration.

Now the Federal Communications Commission's Compliance and Information Bureau ("CIB") has also released a Report that confirms that Northpoint's Washington testing did not cause harmful interference to DBS. The report details CIB's own independent testing of the Northpoint system.

ROUTING AND TRANSMITTAL SLIP

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REMARKS

Attached is CIB's final report regarding the test conducted on Diversified's system.

DO NOT use this form as a RECORD of approvals,concurrences,disposals clearances, and similar actions

FROM: *(Name, org. symbol, Agency/Post)*	Room
George R. Dillon	Phone

5041-102

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FEDERAL COMMUNICATIONS COMMISSION

COMPLIANCE AND INFORMATION BUREAU

BACKGROUND

On September 28, 1999, the Compliance and Information Bureau received a request from the Office of Engineering and Technology to investigate an allegation that Diversified Communications Engineering (licensee of experimental station WA2XMY), Northpoint Communications, and Broadwave Communications, hereafter Diversified, was causing harmful interference to the operation of EchoStar and DirectTV.

Harmful interference is defined in the Commission's Rules as interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with the (international) Radio Regulations. 47 C.F.R. § 2.1.

OET noted that Diversified was testing its system in the Washington D.C. area and that DirecTV and EchoStar have alleged that the test is causing harmful interference to their operations. Further, according to OET, DirecTV and EchoStar have submitted test results showing that harmful interference exists. According to OET, Diversified has set up a test at the same site used by DirecTV and EchoStar and they have concluded that no harmful interference exists.

OET stated that a condition attached to the Diversified grant provides that the FCC shall determine if harmful interference exists in the case of a dispute and requested assistance from CIB to resolve the issue.

TEST procedure

On September 29, 1999, George Dillon, James Higgins and James Walker met with Dr. Darrell Word, Saleem Tawil, Sofia Collier, Katherine Reynolds and others representing Diversified.

The test was conducted at a traffic circle at the entrance to West Potomac Park (river side) southwest of intersection of Ohio Drive SW and Independence Ave SW, Washington, DC. The testing took place from approximately 10:00 a.m. to 12:00 noon. The test consisted of turning the Diversified transmitter on and off while observing television monitors tuned to EchoStar's and DirecTV's programming. The location was selected by Diversified and Diversified stated that it was the same location at which EchoStar and Direct TV reported the interference.

Mr. James T. Higgins accompanied Ms. Reynolds to the transmitter site, which was located on the rooftop of the USA Today building in Rosslyn, VA. Also at the transmitter was operator Floyd Nelson.

Mr. Dillon and Mr. Walker observed Diversified's monitors at Potomac Park. Diversified's transmitter was switched on and off while observations were made at the Potomac Park receive site of; a receiver "s-meter"; and of the TV picture.

Power levels at the transmitter during this testing were observed to be in the range (-0.5 dBm to -1.61 dBm), as indicated by a Hewlett Packard Power meter connected to the drop side of a directional coupler at the output of the transmitter. The transmitter operator in most cases adjusted levels to keep them nominally around -1.1 to -1.3 dBm range. Mr. Tawil stated that a reading of –1.5 dBm at the drop side of the directional coupler corresponds to an effective radiated power of +12.5 dBm. Testing was conducted on 12.47 GHz, then repeated on 12.4135 GHz. According to Mr. Tawil, the modulating signal was digital video with a 24 MHz bandwidth.

The results of the "s-meter" observations are shown in the following tables. Table 1 shows the predominant "s-meter" readings. Table 2 shows the number of samples, the average value of the samples and the standard deviation of the samples. We recognize that the sample size is small.

Table 1.

Diversified transmitter	EchoStar 61.5° (transponder 18)	EchoStar 61.5° (transponder 14)	EchoStar 119° (transponder 18)	Direct TV 101° (transponder 18)
	"s-meter" readings	"s-meter" readings	"s-meter" readings	"s-meter" readings
off	91 to 92	89 to 90	86 to 87	84 to 87
on	87 to 88	87 to 89	86 to 87	83 to 87.

Table 2

EchoStar 119 Transponder 18 channel 171		Echostar 61.5 Transponder 14 Channel 218		DirecTV Transponder 18 Channel 371	
Average "s-meter" reading when Diversified transmitter was on. Ten samples.	86.30	Average "s-meter" reading when Diversified transmitter was on. Twenty-nine samples.	88.34	Average "s-meter" reading when Diversified transmitter was on. Fifteen samples.	84.47
Average "s-meter" reading when Diversified transmitter was off. Fourteen samples.	86.21	Average "s-meter" reading when Diversified transmitter was off. Twenty-nine samples.	89.52	Average "s-meter" readings when Diversified transmitter was off. Twenty-five samples.	84.88
Standard deviation of "s-meter" readings when Diversified transmitter was on	0.48	Standard deviation of "s-meter" readings when Diversified transmitter was on.	0.86	Standard deviation of "s-meter" readings when Diversified transmitter was on.	1.92
Standard deviation of "s-meter" readings when Diversified transmitter was off	0.43	Standard deviation of "s-meter" readings when Diversified transmitter was off.	0.83	Standard deviation of "s-meter" readings when Diversified transmitter was off.	1.67

Test Results.

Diversified contends that the receiver "s-meter" is a relative indication of the signal or carrier to noise ratio and ranges from "0" to "100", "100" being the most desirable. We do not know what the variation in "s-meter" readings is between different receivers. We do know, however, that for the values of "s-meter" reading that we observed that we had a very good TV picture, TASO Grade 5.

Observations of TV programming showed no detectable degradation of the picture on EchoStar 119° channel 171 or Direct TV channel 317 when Diversified turned its transmitter on. As programming was not accessible on any EchoStar 61.5° channel operating on transponder 18, the tests were repeated on transponder 14 (channel 218) and again no degradation of the picture was noted.

We did not observe any harmful interference as defined in § 2.1 during this testing.

Federal Communication Commission Order
Affirms Benefit of Northpoint Technology's Experimental Program
and Lack of Harmful Interference to DBS

In a detailed nine page Memorandum Opinion and Order the full Commission denied a number of opposition filings of the DBS providers to Northpoint testing stating:

- "Based upon our review of the record, we find that DirecTV has not provided any evidence to support its claims."[1]
- "...no reports of any DBS subscriber complaints of harmful interference have been filed with the Commission."[2]
- Regarding Washington testing: "With regard to the issues first raised by DirecTV in its Petition for Reconsideration..., we found them to be without merit in the context of the Austin experimentation. There is no record evidence indicating than any different conclusion for the Washington area experimentation is warranted."[3]

The FCC also noted a number of potential benefits to the Northpoint Technology:

- Retransmission of local television signals[4]
- Cable competition[5]

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[1] See, *Memorandum and Order, In the Matter of Diversified Communications Engineering, Inc., Experimental Radio Station WA2XMY, Modification of License Austin, TX and King Ranch, TX, special Temporary Authority Washington, D.C.*, FCC 00-30, File Nos. 6001-EX-MR-1998 and 0094-EX-ST-1999 (February 4, 2000) at page 4.
[2] Id. at page 4.
[3] Id. at page 7-8.
[4] Id. at page 2.
[5] Id. at page 2.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
Diversified Communications Engineering, Inc.	)	
Experimental Radio Station WA2XMY	)	
Modification of License Austin, TX and King Ranch, TX	)	File No. 6001-EX-MR-1998
Special Temporary Authority Washington, DC	)	File No. 0094-EX-ST-1999

MEMORANDUM OPINION AND ORDER

Adopted: February 2, 2000 **Released: February 4, 2000**

By the Commission:

1. On July 20, 1998, the Office of Engineering and Technology ("OET"), pursuant to delegated authority, granted Diversified Communications Engineering, Inc.'s ("Diversified") above-captioned application (File No. 6001-EX-MR-1998) for modification of its Experimental Radio license for Station WA2XMY (King Ranch, Texas) to authorize the addition of a new transmitter antenna location in Austin, Texas. On May, 26, 1999, OET granted Diversified's above-captioned application (File No. 0094-EX-ST-1999) for Special Temporary Authority ("STA") for that station to also conduct certain experiments in Washington, D.C. These experimental operations are governed by Part 5 of the Commission's Rules, 47 C.F.R. Part 5.

2. Currently pending before the Commission are the: (a) Petition for Reconsideration, filed on August 19, 1998 by DirecTV, Inc. ("DirecTV"), against the grant of the modification of license for Station WA2XMY, authorizing the Austin site; (b) "Application for Expedited Review and Request for Immediate Suspension of Testing," filed on June 25, 1999 by DirecTV, directed against the grant of Station WA2XMY's STA for Washington, D.C.; and (c) "Emergency Petition for Cease and Desist Order," filed July 26, 1999 by EchoStar Satellite Corporation and EchoStar 110 Corporation (collectively, "EchoStar"), also directed at Station WA2XMY's STA for Washington, D.C. For reasons that follow, we deny the application for review and petitions for reconsideration and for cease and desist order.[1]

[1] Similar to the *ex parte* status in two other pending proceedings which raise similar issues, see *infra* note 3, this proceeding has been accorded "permit-but-disclose" *ex parte* status pursuant to Section 1.1200(a) of the Commission's Rules, 47 C.F.R. § 1.1200(a). *Public Notice*, DA 99-1838, released September 9, 1999 (OET).

BACKGROUND

3. The 12.2 - 12.7 GHz band is allocated to the fixed service and the broadcasting-satellite service on a co-primary basis, but the fixed service allocation is designated for use only by point-to-point microwave systems that, after September 9, 1983, must operate on a non-interference basis with respect to broadcast-satellite systems.[2] Use of the band is licensed under Part 100, the Direct Broadcast Satellite ("DBS") rules, and Part 101, the Fixed Microwave Services rules. Diversified and related companies[3] seek to show that a fixed point-to-multipoint wireless terrestrial multichannel video delivery system can co-exist on a secondary basis with DBS service on the same frequencies.[4] We note that the technology that Diversified is testing may potentially enable television subscribers to receive retransmitted local television broadcast signals and other services, and thus may enhance competition with the cable television industry. Therefore, Diversified has sought Experimental Radio authorizations to conduct tests that would demonstrate whether such a terrestrial service is technically viable. On July 8, 1997, the initial Experimental Radio license for Station WA2XMY was granted, authorizing Diversified to conduct tests from a transmitting antenna location at King Ranch, Texas.

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[2] *See* 47 C.F.R. § 2.106 & footnote 844. *See also* 47 C.F.R. § 101.147(p) (Fixed Microwave Service rule stating that "[p]rivate operational fixed point-to-point microwave stations authorized after September 9, 1983, will be licensed on a noninterference basis and are required to make any and all adjustments necessary to prevent interference to operating domestic broadcasting-satellite systems"); *Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band; and Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2 - 12.7 GHz Band by DBS Licensees and Their Affiliates,* ET Docket No. 98-206, *Notice of Proposed Rulemaking,* FCC 98-310, released November 28, 1998, at ¶¶ 91-98 ("*12.2-12.7 GHz Band NPRM*").

[3] One related company, Northpoint Technology, has filed a petition for rulemaking (RM 9245), proposing that terrestrial retransmission of local TV signals and provision of one-way data services be permitted on a secondary basis in the 12.2 -12.7 GHz band. The Commission is actively considering comments filed on this rulemaking proposal. *See 12.2-12.7 GHz Band NPRM, supra* note 2. Another group of related companies, Broadwave Albany, L.L.C., *et al.*, which seeks licenses that would enable them to provide these services, has filed applications for licenses and waivers under Part 101 of the Commission's Rules. *See Corrected Public Notice,* DA 99-494, released March 11, 1999 (Wireless Telecommunications Bureau).

[4] According to Diversified and its related companies, because DBS receiving antennas point southward toward transmitting antennas aboard geostationary satellites orbiting the earth in the equatorial plane, it is theoretically possible to transmit video signals terrestrially that can be received by antennas pointing northward and co-located with the DBS receiving antenna, without causing harmful interference to DBS reception. Such a system could complement DBS service by enabling terrestrial retransmission of local TV channels, or could compete independently with DBS and cable television systems. *See, e.g.,* Diversified Opp. to Emerg. Pet. for Cease & Desist Order, filed July 30, 1999, at 3, 4 & Exh. I at 3-4 ("Washington, D.C. Test Plan," at 1-2); Diversified Amendment to File No. 5020-EX-PL-95 (original license application for King Ranch, Texas), filed March 26, 1997, at ¶ 4.

4. On January 8, 1998, Diversified filed the above-captioned application for modification of license for Station WA2XMY, seeking authorization to add a new transmitting antenna location at Austin, Texas.[5] On April 13, 1998, DirecTV filed a letter objecting to grant of this application, stating that the proposed experimental operations would likely cause interference to its licensed DBS operations in the Austin area. On July 20, 1998, OET granted the application and imposed conditions on the authorization designed to ensure against the occurrence of harmful interference. On August 19, 1998, DirecTV filed a petition for reconsideration of this action,[6] which we address below.

5. In addition, on March 12, 1999, Diversified filed the above-captioned application for Special Temporary Authority ("STA") for Station WA2XMY to conduct tests and to demonstrate its technology in Washington, D.C. By letters filed March 25 and 31, 1999, respectively, DirecTV and EchoStar objected to grant of the STA, alleging that the proposed experimental operations would likely cause interference to their Washington-area DBS operations. On April 5, 1999, Diversified filed a supplement to its application for STA.[7] By letter of May 26, 1999, the Chief, Experimental Licensing Branch, denied the objections of DirecTV and EchoStar, finding that they had not persuasively shown that the proposed experimental operations carry a substantial risk of harmful interference, and, on May 27, issued an STA to Diversified containing conditions designed to ensure against the occurrence of harmful interference. On June 25, 1999, DirecTV filed an "Application for Expedited Review and Request for Immediate Suspension of Testing," directed against those staff actions.[8]

6. In an effort to discuss the issues raised by the parties and to mediate the entire dispute, on July 21 and August 2, 1999, Commission staff met with representatives of all parties in this proceeding. In the interim, on July 26, 1999, EchoStar filed an "Emergency Petition for Cease and Desist Order," requesting the immediate cessation of Diversified's experimentation.[9] On August 6, 1999, OET issued to Diversified a revised STA containing additional conditions designed to assure that no harmful interference would occur.

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[5] Also on January 8, 1998, Diversified submitted a Progress Report on its previous experiments, and filed an application for license renewal of Station WA2XMY. The renewal application, which was not contested, was granted, extending the station's license term to August 1, 1999. On May 28, 1999, Diversified filed a renewal application for WA2XMY (File No. 0203-EX-RR-1999), which is pending and which has not been contested.

[6] On August 31, 1998, the SBCA filed comments in support of, and Diversified filed an opposition to, the petition for reconsideration. On September 8, 1998, DirecTV filed a reply to the opposition.

[7] Also, by letter filed April 5, 1999, Diversified opposed the DirecTV and EchoStar objections to its application for STA.

[8] On July 9, 1999, Diversified filed an opposition to the DirecTV application for review.

[9] On July 30, 1999, Diversified filed an opposition to the EchoStar petition for cease and desist order, and, on August 10, 1999, EchoStar filed a reply.

DISCUSSION

7. *Petition for Reconsideration.* In its petition for reconsideration, DirecTV challenges the staff's grant of the modification application, which authorized Diversified to conduct experimental operations from a transmitting antenna location at Austin, Texas.[10] Generally, DirecTV expresses concern that the proposed experimentation would cause interference to its licensed DBS service in the Austin area. Specifically, DirecTV argues that the authorized transmit power (EIRP) of Station WA2XMY should be decreased; that Diversified has underestimated the number of DBS subscribers who would be affected by the experiments; that Diversified's public notice to Austin DBS subscribers should be "clarified" (DirecTV seeks "editorial privileges" with respect to the notice; it does not want Diversified to address potential interference reports and mitigation directly with DirecTV's subscribers); that Diversified's experimental license should contain more conditions detailing how it would handle reports of interference to DBS reception; and that DirecTV should have access to Diversified's test sites.

8. We deny the petition for reconsideration. We initially observe that, in the original license for Station WA2XMY, OET staff placed some but not all of the conditions which DirecTV sought.[11] Based on our review of the record, we find that DirecTV has not provided any evidence to support its claims. In particular, given the limited time period and temporary nature of the experimentation, the limited number of transmit sites authorized, the collaborative efforts put forth by the three parties, and especially the conditions that govern Diversified's obligations in the event of any harmful interference, we see no reason to modify the staff's action. Moreover, Diversified's operating history supports the staff's judgment as to the necessary conditions for the experimental license. In the Texas experimentation, which is now about one year old, no reports of any DBS subscriber complaints of harmful interference have been filed with the Commission.[12]

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[10] DirecTV, observing that the modification license authorizes experimental operations at *both Austin, Texas and King Ranch, Texas*, states that the frequencies proposed by Diversified "are used presently by DirecTV . . . to downlink [DBS] programming to thousands of DirecTV subscribers residing in *those geographic areas.*" Pet. Recon. at 1 (emphasis added). To the extent the petition may be read to challenge Diversified's authorization to conduct experiments at King Ranch, we note that the petition was filed on August 19, 1998, some thirteen months after Diversified was granted its authorization for King Ranch on July 8, 1997 (File No. 5020-EX-PL-95). Accordingly, pursuant to Section 1.106 of the Commission's Rules, we dismiss the petition as untimely with respect to Station WA2XMY's experimental operations at King Ranch. 47 C.F.R. § 1.106. We also note that no instances of harmful interference to DBS reception caused by the King Ranch experiments have been reported.

[11] These conditions include a limitation on the occupied bandwidth that Diversified is permitted to use, a requirement that Diversified file a progress report every six months from date of grant, and requirements that Diversified (a) publish a notice in the newspaper circulated in the area of the test that describes the test, the dates and times of testing, the potential for interference to be caused to DBS subscribers, and provides a phone number for DBS subscribers to call in case of interference; (b) provide timely copies of the notice via certified mail to all DBS licensees with operations covering the United States in the 12.2 - 12.7 GHz band; and (c) suspend testing immediately, if a DBS subscriber complains of interference because of the testing, until the complaint can be investigated and resolved, and immediately notify the Commission and the DBS licensee of the complaint; if the complaint cannot be satisfactorily resolved, testing shall not continue.

[12] In the application for review, DirecTV states that it has "pointed out that the . . . technology Diversified proposes to operate is the subject of a pending rulemaking proceeding, ET Docket No. 98-206, in which DirecTV has demonstrated that the . . . technology will in fact cause harmful interference to DBS operations" and, citing its reply

Nor has DirecTV shown that Diversified's public notices were unclear or ineffective, or that grant of its requests for "editorial privileges" over Diversified's public notices -- and for a requirement that the public notices list DirecTV personnel, rather than Diversified's, as contact point for complaints -- is necessary. Also, there is no evidence in the record indicating that the conditions imposed by the staff on the authorization were inadequate to protect DBS operations if interference were to occur, or that there is a legitimate need explicitly to condition the authorization to require that DirecTV be given access to Diversified's test sites. We note that our Part 5 rules contemplate that experimental licenses will cooperate in good faith with service licensees to prevent harmful interference to the affected services, to investigate any complaints of interference, and to take appropriate measures to mitigate interference; in the event of unmitigable harmful interference, experimental operations must cease immediately.[13] Diversified has explicitly affirmed its willingness to cooperate in this fashion.[14] For all these reasons, we deny the petition for reconsideration.

9. *The Washington, D.C. STA.* In its application for review, DirecTV challenges the staff's grant of the STA which authorized Diversified to conduct experimental operations at Washington, D.C. Generally, DirecTV expresses concern that the proposed experimentation would cause interference to its licensed DBS service in the Washington area. Specifically, DirecTV raises the same issues it had raised in the petition for reconsideration directed to the Austin experiment. That is, it once again argues that the authorized transmit power should be decreased; that the terms of the authorization should expressly state that Diversified must protect DBS reception over an enlarged area (in this case, "all subscribers residing within a 10-mile radius of each field test site")[15]; that Diversified's public notice to Washington-area DBS subscribers should be clarified in precisely the same manner; that Diversified's STA should contain the same additional conditions, and DirecTV should be given the same access to test sites, that DirecTV had suggested in its petition for reconsideration regarding the Austin experimentation. Additionally, DirecTV claims that Diversified's proposed tests in the Washington area are "unnecessary," are designed only for "lobbying" purposes, and put DBS subscribers at needless risk of interference. DirecTV further argues that Diversified should be required to proffer a test plan; should be prohibited from adjusting DBS receivers as an interference mitigation technique; should be required to use multiple cell sites to test its bandwidth, to use the particular operating

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comments filed in that docket, that it "showed, using Diversified's own questionable data, that DBS subscribers experienced unacceptable, harmful interference to their DBS service that emanated from *every single test* site save one." DirecTV App. for Rev. at 2-3, 6-7 (emphasis in original) & n.14 (citing Reply Comments of DirecTV, ET Docket No. 98-206 (April 14, 1999), at 27-29). The substance of DirecTV's claim relates to the extent of degradation of signal strength margin, *see also* DirecTV Pet. for Recon. at 3 (concerning "minimum margin acceptable to DirecTV"), which is an issue raised in ET Docket No. 98-206 that will address the sharing viability of a terrestrial fixed service such as Diversified's with incumbent DBS operations.

[13] *Cf.* Section 5.111(a)(2) of the Rules, 47 C.F.R. § 5.111(a)(2) (1999) (formerly § 5.151(a)(2)) (experiments must cease if harmful interference occurs and cannot be resumed until it is certain that harmful interference will not resume). The rule, on its face, places the burden on the experimenter, not the incumbent licensee, to make adjustments to avoid interference.

[14] *See* Diversified Opposition to Pet. for Recon., at 1 and *passim*.

[15] DirecTV App. for Review, at 9.

configuration that is intended for ultimate licensed use, and to use dynamic power control; and should be required to include certain particulars on verification and notification of downtime to DirecTV. Finally, DirecTV argues that Diversified has the burden to prove non-interference to DBS and that a degradation of margin of desired-DBS-to-undesired signal strength should count as interference regardless of whether or not a subscriber complains of degraded reception quality.

10. In its petition for a cease and desist order, EchoStar argues that it should be reimbursed for its costs in monitoring Diversified's tests. EchoStar also raises some of the same issues raised by the DirecTV application for review and listed above: (1) the necessity and purpose of the experiments and (2) whether Diversified should be permitted to mitigate any harmful interference by visiting the DBS subscriber and modifying the DBS receiver (such as by installing shielding).

11. We observe that, as a result of the July 21 and August 2, 1999 meetings held by Commission staff with representatives of all the parties, OET staff decided to retain the same conditions it originally imposed on the STA grant of May 26, 1999,[16] and to add certain others. Accordingly, on August 6, 1999, pursuant to Section 5.83(b) of the Rules, 47 C.F.R. § 5.83(b) (1999) (formerly, § 5.68(b)), OET added the following five conditions on the STA for Station WA2XMY:[17]

> Diversified . . . will deliver a detailed two-week test plan at least one week in advance to [DirecTV], EchoStar and OET. The first plan will be delivered on Wednesday, August 4, 1999, and will include operations from August 5, 1999 to August 19, 1999. The next plan will be submitted August 11, 1999 and will cover operations from August 19 to September 8. Subsequent test plans will be provided every two weeks thereafter. The plans will include:
>
> 1. Which antenna sites will be operational.
> 2. Periods of time the sites will be transmitting.
> 3. Orientation of the transmitting antenna(s), including beam tilt if appropriate.
> 4. Center frequencies and bandwidths.
> 5. Periods of time that specific frequencies will be used.
>
> Bandwidth and power information is already contained in this authorization. Any deviation from the specified bandwidth and power will be communicated in advance to [DirecTV] and EchoStar. Significant advance notice is not required for occasional schedule changes resulting from

[16] These conditions were also included on the Texas experimental license authorization. *See supra* note 11.

[17] The August 6, 1999 STA authorization also contained the following condition:

> During Phases I and II of the test plan, no tests will be conducted during local rain conditions. Test transmitters will be turned off during these periods. If rain tests are planned during Phase III, they will be conducted under controlled conditions. Technical details of the rain tests will be submitted to OET at least 1 week prior to beginning such tests.

Subsequently, on September 14, 1999, the STA was modified to allow for rain testing in Phase III. By letter of September 22, 1999, the Chief, Experimental Licensing Branch, OET, imposed certain conditions upon the rain testing.

unanticipated testing requirements except when Diversified has scheduled a period during which it will not be conducting tests. Advance notice of one week is required before testing may begin during that period.

Special Conditions:
(iii) If a complaint of harmful interference is received by [DirecTV] or EchoStar, the party receiving the complaint will notify Diversified. Both parties will make arrangements to visit the [DirecTV] or EchoStar customer together for the purpose of determining if Diversified's tests are the source of the complaint. When at the customer's residence, on-off tests will be performed. If it is discovered that the Diversified tests are the source of the harmful interference, Diversified will also cease testing immediately if harmful interference is detected by [DirecTV] or EchoStar during their monitoring of Diversified's tests and confirmed by Diversified or by the Commission staff in the case of a dispute. Testing may not resume until Diversified has resolved the interference problem. No visit to a [DirecTV] or EchoStar customer for the purpose of attempting to cure interference will be made by Diversified without prior notification by Diversified and a reasonable opportunity provided for [DirecTV] or EchoStar to attend.

Diversified will notify [OET's] Experimental Licensing Branch if it receives a harmful interference complaint.

(iv) This authorization does not provide authority to operate from additional sites. A specific, additional prior authorization will be required from the FCC prior to commencement of operation from additional sites.

(v) This [authorization] SUPERSEDES the previously issued [authorization] with the same call sign and file number: adds special conditions [(i) - (iv)].

12. Based upon our review, we find that the STA, as conditioned above, is sufficient to allow Diversified to conduct its proposed experiments and that the Diversified application for STA complies with Section 303(g) of the Communications Act of 1934, as amended, 47 U.S.C. § 303(g), and Part 5 of the Commission's Rules. In the event that harmful interference is alleged, the special conditions, included above, set forth procedures to be followed to determine the source of the interference and allows for mitigation of the interference and resumption of experimentation.[18] All parties are expected to cooperate in good faith to permit the experimentation to proceed. The DBS petitioners may monitor Diversified's testing in accordance with the conditions set forth on the STA. However, contrary to the argument of the DBS licensees, they are not entitled to any reimbursement from the experimenting station for their monitoring costs. Monitoring is simply a voluntary choice for the DBS licensees; they are not required to engage in monitoring if they do not wish to do so. With regard to the issues first raised by DirecTV in its petition for reconsideration and reiterated in the application for review, as explained above,[19] we found them to be without merit in the context of the Austin experimentation. There is no record evidence indicating that any

[18] We note that these conditions are consistent with the Commission's rules that apply if experiments cause harmful interference to licensed services. *See supra* note 13.

[19] *Supra* ¶ 8.

different conclusion for the Washington area experimentation is warranted.[20] Nor has EchoStar, which has pointed out that its subscribers, unlike DirecTV's subscribers, receive DBS signals from *multiple satellites*,[21] explained with particularity how this distinction warrants the imposition of different or new conditions upon the STA.

13. We also find that Diversified's intentions to test its technology within the Washington, D.C. area and to conduct a demonstration at which government officials and staff may attend does not constitute an impermissible purpose and does not render its proposed experimentation "unnecessary." The DBS licensees have not shown that the interference environment in the Washington area is so substantially identical to that in Austin that the proposed testing would serve no useful purpose. Indeed, unlike the Austin experiment, the Washington tests include the use of multiple locations simultaneously to create some signal overlap and thus better model real-world conditions. This indicates that the proposed testing could indeed produce new useful data concerning the ability of the proposed terrestrial service and DBS to share spectrum. Also, given the current focus in Congress and before the Commission on the issue of the "local-into-local" TV retransmission responsibility of DBS licensees,[22] and its relationship to competition in the multi-channel video delivery market, as well as the pendency of the 12.2 - 12.7 GHz reallocation proceeding, ET Docket No. 98-206,[23] a demonstration of the Diversified technology seems particularly timely and appropriate. The rulemaking decisions of the Commission and the legislative process are well served by considering the best relevant technical data available.

14. Experimental Radio is a success because it "encourage[s] the larger and more effective use of radio in the public interest." Section 303(g) of the Communications Act of 1934, as amended, 47 U.S.C. § 303(g). The data generated by experimentation is expected to provide the Commission with information needed in determining more broadly whether the type of radio service envisioned by the experimenter -- in this case, Diversified -- should be allowed.[24] In sum, we affirm the staff's action in granting Diversified an experimental STA for Washington, D.C.

15. Accordingly, IT IS ORDERED that, pursuant to Section 303 of the Communications Act of 1934, as amended, 47 U.S.C. § 303, and Sections 1.106, 1.115, and 1.117 of the Rules, 47 C.F.R. §§ 1.106,

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[20] Indeed, we note that in the Application for Review, DirecTV argues that, on the one hand, the authorized transmit power of Station WA2XMY should be reduced but, on the other hand, Diversified's tests "should approximate how the . . . system will actually be deployed. . . ." *Compare* DirecTV App. for Review at 7-8 *with id.* at 12. We find that these arguments are patently inconsistent.

[21] EchoStar Petition at i & 1.

[22] *See* Satellite Home Viewer Improvement Act, Title I of Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501 (1999).

[23] *See supra* notes 2 & 3.

[24] *See 12.2 - 12.7 GHz Band NPRM* at ¶¶ 91-98 (discussing RM-9245, proposal of Northpoint Technology to establish type of terrestrial service envisioned by Diversified), *supra* notes 2 & 3.

1.115, and 1.117, the Petition for Reconsideration filed on August 19, 1998 by DirecTV, Inc., the "Application for Expedited Review and Request for Immediate Suspension of Testing" filed on June 25, 1999 by DirecTV, Inc., and the "Emergency Petition for Cease and Desist Order" filed July 26, 1999 by EchoStar Satellite Corporation and EchoStar 110 Corporation ARE DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary