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(File No.) 021992-0049

EX PARTE OR LATE FILED

March 15, 2000

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MAR 15 2000

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARYDavid Solomon, Chief
Enforcement Bureau
Federal Communications Commission
The Portals - 445 12th Street, S.W.
Washington, DC 20554

Re: *Correction of CIB Conclusion; ET Docket No. 98-206; DA 99-494;*
Diversified Communication Engineering, Inc., File Nos. 6001-EX-MR-
1998, 0094-EX-ST-1999; Call Sign WA2XMY; EX PARTE

Dear Mr. Solomon:

By this letter, DIRECTV seeks clarification of the findings and reversal of the conclusion of the Compliance and Information Bureau ("CIB") with regard to a demonstration conducted by Diversified Communications Engineering ("DCE") of Northpoint technology in the Washington D.C. area in the third quarter of 1999.¹

As recounted in the *CIB Report*, the CIB received a request from the Commission's Office of Engineering and Technology ("OET") on September 28, 1999, to investigate an allegation by Echostar that DCE's testing of Northpoint technology under the above-referenced experimental license had caused harmful interference to the operation of the Echostar and DIRECTV DBS systems. The CIB went into the field on September 29, 1999. The results of the

¹ See Compliance and Information Bureau Final Report Submitted to James Burtle, OET (Oct. 10, 1999) ("CIB Report"), attached as Exhibit A to Northpoint Technology Technical Response to Comments of Pegasus Communications Corp. (Feb. 2, 2000). DIRECTV was unaware of this report until it appeared as an Exhibit to the Northpoint Pegasus *ex parte* filing.

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fieldwork by CIB were documented with the conclusion that no harmful interference from Northpoint technology, as defined in Section 2.1 of the Commission's rules,² was observed.

Having reviewed the *CIB Report*, DIRECTV respectfully requests the CIB to reconsider its findings and conclusion. The results gathered by DCE for the CIB in fact support the position that DIRECTV has maintained consistently throughout these proceedings: that Northpoint technology does indeed produce harmful interference into DBS systems.

The *CIB Report* begins by reciting the definition of harmful interference in the Commission's rules, *i.e.*, "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."³ On this point, DIRECTV has clearly demonstrated through *ex parte* presentations and filings that, based on the interference limits agreed to for non-geosynchronous orbit (NGSO) systems at the International Telecommunications Union ("ITU"), Northpoint operations will seriously degrade, obstruct and repeatedly interrupt DBS service. The *CIB Report* results provide an independent verification of DIRECTV's assertions. Unfortunately, however, CIB has misinterpreted the data.

Preliminarily, DIRECTV notes that DCE appears to have led the CIB astray almost immediately by selecting the wrong test location relative to the Echostar interference complaint. Even though Echostar had precisely identified where the readings that formed the basis of the complaint were taken, DCE established a test site for the CIB approximately 0.4 miles away. However, as shown in the analytical predictions submitted by DIRECTV in its *ex parte* filing of January 27, 2000, that location selected by DCE is predicted to have roughly the same interference as the test location indicated by Echostar.⁴ So, despite the selection of the wrong location, the CIB data nevertheless evidence the harmful interference phenomenon to about the same degree, and also comport well with the analytical model set forth in the *DIRECTV January Study*.

Referring to Table 1 of the *CIB Report*, the last two columns of data do not indicate a high level of interference, exactly as predicted by the DIRECTV test results and analytical model, because the geometry of these situations is favorable to DCE.⁵ However, the first two

² 47 C.F.R. § 2.1.

³ *CIB Report* at 1 (quoting 47 C.F.R. § 2.1).

⁴ Conclusions to Date Regarding Harmful Interference From a Proposes Northpoint Technology Terrestrial System Operating in the DBS Downlink Band, 12.2-12.7 GHz (Jan. 27, 2000) ("DIRECTV January Study"), at 47, Figure 5.5-1.

⁵ A full explanation of the impact of this geometry can be found in the *DIRECTV January Study*.

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columns demonstrate the *precise* interference phenomenon described by DIRECTV. In the first column, the average of the "off" readings is 91.5 and the average of the "on" readings is 87.5, the difference being 4 counts. This interference level results in an increase in unavailability of the DBS signal greater than that allowed by *all NGSO systems combined* under protection criteria that have been agreed upon at the ITU.⁶ Hence, it constitutes harmful interference.⁷

It is difficult to make sense of the data presented in Table 2 of the *CIB Report*, which purports to provide some statistical backing for the data collection. However, without an understanding of how the data was gathered (*e.g.*, time intervals, recording method) the statistics are not particularly useful. Since DIRECTV has explained to DCE on several occasions the importance of a defined and documented methodology, DIRECTV can only assume that DCE was too rushed to document the results. However, for the purpose of this request for clarification, the data ranges noted in Table 1 are sufficiently indicative to support DIRECTV's position that there was indeed harmful interference manifested when the CIB was present.

The CIB, perhaps again led astray by DCE, completely ignores the data in Table 1 (and Table 2) and relies on a picture quality metric intended for analog over-the-air television service to determine the level of harmful interference. It is commonly accepted by those familiar with digital television broadcasting that interference levels into a digital system cannot be determined by viewing the analog output on a television monitor. The error correction codes inherent in a digital system keep the picture nearly pristine until just before complete loss of picture even though there is a significant level of interference. This effect was clearly demonstrated in the rain tests conducted by DIRECTV in Spring Creek, New York and documented in the *DIRECTV January Study*.⁸ The fact that the CIB saw no interference on the television monitor simply does not mean that harmful interference was not present.

Based on the discussion above, DIRECTV respectfully requests that the CIB re-file its report and use the signal level meter readings associated with the test to determine whether harmful interference was present during its September 1999 investigation. The only objective criteria available at this time on which to base that assessment are the interference protection levels agreed upon at the ITU relative to NGSO sharing. DIRECTV believes that the re-filed report will either show that there is harmful interference based on the NGSO levels or will defer judgment on this issue until the Commission completes its inquiry with respect to sharing the BSS band.

Thank you for your consideration.

⁶ See, *e.g.*, *DIRECTV January Study* at 14-33.

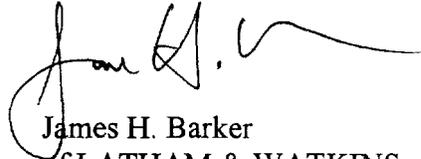
⁷ The second column shows a similar, but smaller, level of interference of 1.5 counts.

⁸ *DIRECTV January Study* at 21-27.

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Very truly yours,

A handwritten signature in black ink, appearing to read "James H. Barker", with a long, sweeping horizontal line extending to the right.

James H. Barker
of LATHAM & WATKINS

Counsel for DIRECTV, Inc.

cc: Magalie Roman Salas, Secretary, FCC
Antoinette Cook Bush, Esq.