

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

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)	
)	
Amendment of Parts 21 and 74 to Enable)	
Multipoint Distribution Service and)	MM Docket No. 97-217
Instructional Television Fixed Service)	
Licensees to Engage in Fixed Two-Way)	
Transmissions)	File No. RM-9060

PETITION FOR CLARIFICATION
AND FURTHER RECONSIDERATION

CATHOLIC TELEVISION NETWORK

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Date: December 22, 1999

SUMMARY

The Catholic Television Network (“CTN”) is requesting clarification and/or further reconsideration of four specific issues and is seeking a number of clarifications for and corrections to Appendix D. First, the Commission should mandate that only ITFS eligible entities may be licensed for signal boosters on frequencies licensed for ITFS purposes. ITFS frequencies are intended to be licensed for an educational service. Allowing non-ITFS entities to be licensed on ITFS frequencies is inconsistent with this purpose, and should be eliminated.

Second, if justified for instructional service, ITFS receive sites located outside the 35-mile protected service area should be treated as “registered” receive sites by subsequently filed applicants. An ITFS station serves the community from which the licensee seeks to educate students, and the Commission should waive the 35-mile limitation where justified by an instructional service.

Third, “registered” ITFS receive sites should retain that status if the licensee engages in a channel swap or other technical modification to facilitate two-way services. No matter what technical parameters applicable to the receive site change as a result of modifications for two-way services, the site should still be treated as “registered” as of September 17, 1998. To ensure that parties are clear as to their rights and obligations in two-way facilities, it is important for the Commission to clarify that an ITFS receive site does not lose its status as a “registered” receive site as a result of a channel reconfiguration or any other modification to the station parameters.

Fourth, all ITFS and MDS licensees should be obligated to cooperate in identifying sources of interference and resolving complaints of interference. Sections 74.903(d) and 21.902(a) require applicants and licensees “to cooperate fully and in good faith in attempting to resolve problems of potential interference before bringing the matter to the attention of the Commission.” However, obtaining evidence of interference may require that the interfered-with party seek the cooperation of other licensees in identifying the source of interference. The Commission should, therefore, clarify that all licensees must cooperate in addressing interference even before there is an allegation of interference against their facilities.

Finally, CTN’s engineering consultants have noted a number of inconsistencies and apparent errors in the interference calculating protocols contained in Appendix D. These inconsistencies and errors are detailed in the attached Joint Engineering Exhibit.

CTN recommends that the Commission resolve the issues discussed herein prior to opening the one-week filing window for two-way station applications, so that all interested parties can make the most efficient and effective use of that window. In particular, it is critical for the Commission to correct Appendix D promptly so that interested parties can develop software to implement the new interference protocol prior to preparation of applications for two-way stations.

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**PETITION FOR CLARIFICATION
AND FURTHER RECONSIDERATION**

Pursuant to Section 1.429 of the Commission's Rules, the Catholic Television Network ("CTN") requests that the Commission reconsider and/or clarify several rules adopted in the Report and Order on Reconsideration, FCC 99-178 (released July 29, 1999) ("Recon. Order") in the above-referenced docket.¹

CTN has participated in all phases of this rulemaking proceeding, and appreciates the Commission's efforts to address the concerns that it has previously expressed regarding the regulatory regime for fixed two-way services on Instructional Television Fixed Service ("ITFS") and Multipoint Distribution Service ("MDS") stations. In particular, the rule modifications adopted in the Recon. Order

¹ Public notice of the rules adopted in the Recon. Order appeared in the Federal Register on November 22, 1999. 64 Fed. Reg. 63727 (Nov. 22, 1999). Hence, this petition is timely filed. See 47 C.F.R. § 1.429(d).

resolve most of the concerns that CTN raised in its “Petition for Reconsideration and Clarification” of the Report and Order, 13 FCC Rcd 19112 (1998) (“Two-Way Order”). However, there are several new rules and policies that require further consideration by the Commission.

CTN is requesting clarification and/or further reconsideration of four specific issues, as detailed more specifically below, and is seeking several clarifications for and corrections to Appendix D. First, the Commission should mandate that only ITFS eligible entities may be licensed for signal boosters on frequencies licensed for ITFS purposes. Second, if justified for instructional service, ITFS receive sites located outside the 35-mile protected service area (“PSA”) should be treated as “registered” receive sites by subsequently filed applicants. Third, “registered” ITFS receive sites should retain that status if the licensee engages in a channel swap or other technical modification to facilitate two-way services. Fourth, all ITFS and MDS licensees should be obligated to cooperate in identifying sources of interference and resolving complaints of interference.

Finally, after further study of Appendix D (“Methods for Predicting Interference from Response Station Transmitters and to Response Station Hubs and for Supplying Data on Response Station Systems”), CTN’s engineering consultants have noted a number of inconsistencies and apparent errors in the interference calculating protocols. These inconsistencies and errors are detailed in the attached Joint Engineering Exhibit.

CTN recommends that the Commission resolve the issues discussed herein prior to opening the one-week filing window for two-way station applications, so that all interested parties can make the most efficient and effective use of that window. In particular, it is critical for the Commission to correct Appendix D promptly so that interested parties can develop software to implement the new interference protocol prior to preparation of applications for two-way stations.

I. The Commission Should Retract Rules Permitting Non-ITFS Eligibles to Obtain Booster Licenses on ITFS Frequencies Licensed to an ITFS Operator.

In the Recon. Order, the Commission adopted a policy that permits a non-ITFS entity to be granted a booster license on ITFS frequencies if it obtains the written consent of the ITFS licensee and agrees in the relevant lease to offer to assign the booster license to the ITFS licensee for purely nominal consideration at the end of the lease term. Recon. Order, ¶ 67. This policy is inconsistent with the Commission's spectrum management policies and the instructional purpose of the ITFS spectrum reservation, and should be retracted promptly.

The Commission has long identified the block of ITFS frequencies as a spectrum reservation. The spectrum is designated for instructional use by educational entities, and reserved for licensing to entities that meet certain criteria related to their instructional purpose. The Commission has permitted educational entities to lease time on these channels for commercial purposes, and it has established procedures to license commercial entities on these frequencies when they are not substantially used for instructional purposes. However, the

Commission has never, and should not now, permit an educational entity to decide whether a portion of the spectrum licensed for the purpose of instructional services can be reallocated to strictly commercial services.

The clearly-stated purpose of ITFS frequencies is “to further the educational mission of accredited public and private schools, colleges and universities providing a formal educational and cultural development to enrolled students.”² Allowing non-ITFS entities to be licensed on ITFS frequencies would apparently eliminate the requirement for instructional use in a booster service area. And, since the commercial operator becomes the “licensee,” the community served by the ITFS licensee is not even assured the benefits of leasing excess capacity.

This reassignment of ITFS spectrum can easily become a permanent reallocation. Pursuant to the Commission’s new policy, an individual ITFS licensee can permit a non-ITFS entity to obtain a license on ITFS frequencies, and can decide at the end of a lease not to take the frequencies back under the main station license. As a result, the Commission has established a procedure whereby ITFS frequencies can be reallocated to commercial services by agreement between private parties -- despite a representation at the time of grant that they would be used for instructional purposes.

The Commission has previously properly rejected such a scenario. In response to a request to relax the permissible use provisions for ITFS, the

² 47 C.F.R. § 74.931(a).

Commission noted that such action would encourage entities “not primarily interested in providing ITFS programming to apply for ITFS channels, fundamentally changing the nature of the service without an opportunity for the Commission to balance the various interests.”³ Here, by effectively eliminating the ITFS use requirement on a segment of licensed ITFS frequencies, the Commission has taken the very step it previously rejected and produced the very detriment recognized for the ITFS spectrum reservation. There is nothing in the Commission’s new policy to prevent an ITFS licensee from reducing the licensed instructional area to minimal proportions, and reassigning the rest to commercial service without review by the Commission or comment by, for example, another instructional licensee who might need additional spectrum capacity for instructional use.

While the Commission’s policy in the Recon. Order may have been adopted to maximize frequency usage and efficiency, these benefits can be achieved without reallocating the frequencies to commercial service.⁴ Accordingly, the Commission should retract its rule permitting non-ITFS entities to be licensed for ITFS booster stations.

³ Amendment of Parts 2, 21, 74 and 94 of the Commission’s Rules and Regulations in Regard to Frequency Allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service, and the Private Operation Fixed Microwave Service, 98 FCC 2d 129, 137 (1984).

⁴ At the very least, the Commission should require that the booster facilities revert to the ITFS licensee at the termination of the lease for nominal consideration.

II. The Commission Should Clarify That an ITFS Receive Site May Be Located More Than 35 Miles from a Main Transmitter When the Instructional Service Supports Such a Configuration.

In the Recon. Order, the Commission declined to adopt a request by CTN that it continue to “register” ITFS receive sites. Recon. Order, ¶ 21. In its Petition, CTN had suggested that one reason for registering ITFS receive sites is that an ITFS station can serve receive sites outside the 35-mile radius PSA adopted for ITFS stations in the Two-Way Order.⁵ In declining to continue registration, the Commission stated that locating an ITFS receive site outside the 35-mile radius specified in Section 74.903(a)(5)

is inconsistent with the plain meaning of the rule. Limiting protection to a 35 mile radius provides certainty to co-channel and adjacent channel entities, especially now that booster stations can originate signals.

Recon. Order, ¶ 21. CTN believes that, aside from the receive site registration issue, this new policy of a strict geographic limitation on ITFS receive sites is ill-advised.⁶

ITFS has never been a geographically-limited service. Indeed, a geographic limitation is inconsistent with the very nature of ITFS. ITFS stations transmit instructional services from a specific educational, religious or civic institution. The

⁵ See 47 C.F.R. §§ 21.902(b)(3-4), 74.903(d).

⁶ If the Commission is concerned about ITFS entities unduly extending their service areas beyond 35 miles through use of booster stations, the Commission can address that concern by refusing to waive the 35-mile rule where the facts do not justify protection for the receive site.

community which an ITFS licensee serves cannot be artificially bounded at a 35-mile radius from the transmitter. Rather, the ITFS station serves the community from which the licensee seeks to educate students.

Indeed, the Commission has previously recognized that ITFS is not a geographic-based service.

[A] protected service area is fundamentally incompatible with the specific purpose and unique needs of ITFS. The educational mission of an ITFS station often requires transmission to sites in excess of [the radius of an MDS PSA] from the transmitter, and these sites must be protected consistent with the spectrum allocation.⁷

For this reason, the Commission has previously explained that it would permit waivers of Section 74.903(a)(5) because actual receive sites may be located beyond 35 miles.⁸

The use of a PSA provides protection for leased airtime activity and establishes a consistent method to conduct interference studies for ITFS and MDS systems in the same market. But, those rationales for imposing PSA protection do not support denying to the public an ITFS station's ability to locate receive sites

⁷ Amendment of Parts 21, 43, 74, 78 and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands, 5 FCC Rcd 6410, 6419 (1990).

⁸ While Section 74.903(a)(5) states that no receive site farther than 35 miles from the main transmitter is entitled to protection, the Commission's existing policy permits this rule to be waived if a licensee can demonstrate that a distant receive site actually receives service. Amendment of Part 74 of the Commission's Rules With Regard to the Instructional Television Fixed Service, 10 FCC Rcd 2907, 2917 (1995).

within the natural boundaries of the operator's community of service beyond the 35-mile limit. For example, the Archdiocese of Los Angeles uses its ITFS system to serve an area extending more than 35 miles from its main transmitter and expects to have considerable demand for existing and new instructional and cultural services throughout this area as a result of the adoption of the Commission's regime for fixed two-way services on ITFS and MDS frequencies. Its educational mission could be severely hampered by restrictions on its ability to provide interference-free service to receive sites located more than 35 miles from its transmitter.

Therefore, the Commission should clarify that ITFS stations can request a waiver to serve receive sites outside the 35-mile PSA when appropriately justified by the specific facts. CTN's request in this petition should not be misinterpreted as a suggestion that the Commission should retract the rule adopting the 35-mile PSA for ITFS stations. Rather, CTN requests that the Commission clarify that the 35-mile PSA will be treated as the limit for area-based protection, but, if justified for instructional services, existing and proposed ITFS receive sites located outside the 35-mile PSA will be treated as "registered" receive sites by subsequently filed applicants as though such sites were registered prior to September 17, 1998.

III. The Commission Should Clarify That Registered ITFS Receive Sites Retain That Status Even If the Licensee Proposes Significant Technical Modifications to Its Facilities.

In the Recon. Order, the Commission stated that it will no longer "register" ITFS receive sites. Recon. Order, ¶ 21. Therefore, in all new and major modification applications filed in the future, applicants will be required to

demonstrate interference protection for receive sites registered as of September 17, 1998, and the 35-mile PSA of existing and previously-proposed ITFS stations.⁹

The Commission has also adopted a rule which permits ITFS stations to swap channels with another ITFS or MDS station in the same system.¹⁰ It is, therefore, possible that ITFS receive sites “registered” to one channel group could in the future be served on a different channel group as a result of a channel swap. In addition to potential channel reconfigurations, the rules adopted in this proceeding will likely result in substantial modifications to existing ITFS systems.

Because the Commission has declined to continue “registering” ITFS receive sites, CTN believes that it is important for the Commission to clarify that an ITFS receive site does not lose its status as a “registered” receive site as a result of a channel reconfiguration or any other modification to the station parameters. No matter what technical parameters applicable to the receive site change as a result of modifications for two-way services, the site should still be treated as “registered” as of September 17, 1998.

This clarification is important for several reasons. First, the Commission has adopted a completely new service regime for ITFS and MDS stations. For example, channel-swapping has not previously been permitted. In combination with the decision not to register receive sites in the future, these new rules will create novel

⁹ See 47 C.F.R. § 74.903(d).

¹⁰ 47 C.F.R. § 74.902(f).

situations regarding protection of ITFS receive sites. Rather than resolving the issue of whether existing sites remain “registered” as a result of significant station modifications, the Commission should take the initiative to clarify its policies prior to the filing of applications for two-way systems.

Second, an ITFS licensee may be reluctant to participate in two-way station reconfigurations, and thereby facilitate development of an integrated two-way system, if it is not clear whether it would lose the existing protections for its registered receive sites in the process. Clarifying this issue will help ITFS and MDS applicants better understand their rights and responsibilities in two-way station markets, and assist them in deciding whether to go forward with the necessary modifications.

Third, the Commission has adopted notification procedures applicable to “registered” ITFS receive sites to help operators identify sources of potential interference from brute-force-overload (“BFO”).¹¹ This important protection could be eliminated if response station hub operators were permitted to ignore registered receive sites of reconfigured ITFS stations. In order to preserve this protection, the Commission should clarify that receive sites associated with modified ITFS stations, including stations that participate in channel-swapping, retain any applicable prior status as “registered.”

¹¹ See Two-Way Order, 13 FCC Rcd at 19142; 47 C.F.R. § 21.909(n).

IV. The Commission Should Clarify That All ITFS and MDS Licensees Are Obligated to Help Identify Sources of Harmful Interference Prior to Resolving Complaints of Interference.

In the Recon. Order, the Commission adopted much needed rules specifying the procedures for filing and responding to a “documented complaint” of interference. Recon. Order, ¶¶ 16-19. CTN requested adoption of such rules in its earlier Petition and applauds the Commission’s decision to facilitate this process by establishing rules to resolve complaints of interference. However, the Commission’s guidelines create certain hurdles for a complaining party that may be difficult to meet without the full cooperation of all neighboring licensees. CTN believes that the Commission should clarify one aspect of these guidelines to ensure that the rules operate as intended.

The Commission correctly required that the interfered-with party must demonstrate that it “has contacted the operator of the allegedly offending facility and tried to resolve the situation before filing.” Recon. Order, ¶ 19. The Commission also expects that, “[w]here possible, complainants should submit a videotape or other evidence showing the effects of the interference.” Id. CTN agrees that such an evidentiary demonstration is an important part of the complaint process and that this guideline is necessary.

The potential problem lies in obtaining that evidentiary demonstration. Obviously, to identify the source of interference and to test its effects on a receive site, the licensee of the interfered-with facility must approach one or more ITFS and MDS licensees, for example, to perform on-off tests. Before conducting these tests,

the licensee of the interfered-with facility may not be able to identify the source or sources of interference, and may require the cooperation of several licensees to determine the source of interference.

Sections 74.903(d) and 21.902(a) require applicants and licensees “to cooperate fully and in good faith in attempting to resolve problems of potential interference before bringing the matter to the attention of the Commission.”¹² However, obtaining evidence of interference may require that the interfered-with party seek the cooperation of other licensees in identifying the source of interference as well as resolving an interference situation once that source has been located.

The Commission should, therefore, clarify that all licensees must cooperate in addressing interference even before there is an allegation of interference against their facilities. CTN believes that such cooperation is covered by the existing rules. Nevertheless, in the new environment with limited oversight by the Commission, it is very important that the Commission state on the record that these efforts at resolving interference extend to cooperation before the source of interference is identified.

V. The Commission Should Clarify Inconsistencies in Appendix D.

As detailed in the attached Joint Engineering Exhibit, CTN’s consulting engineers have discovered a number of inconsistencies and apparent errors in Appendix D (“Methods for Predicting Interference from Response Station

¹² 47 C.F.R. § 74.903(c); see 47 C.F.R. § 21.902(a).

Transmitters and To Response Station Hubs and for Supplying Data on Response Station Systems”). The Commission should act promptly to resolve the inconsistencies and correct the errors as explained more fully in the Joint Engineering Exhibit.

VI. CONCLUSION

For the reasons set forth above, CTN requests that the Commission reconsider and/or clarify the rules adopted in the Report and Order on Reconsideration as set forth above and state that:

- Only ITFS eligible entities may be licensed for signal boosters on frequencies licensed for ITFS purposes;
- If justified for instructional services, ITFS receive sites located outside the 35-mile PSA will be treated as “registered” receive sites by subsequently filed applicants;
- “Registered” ITFS receive sites retain that status if the licensee engages in a station reconfiguration to facilitate two-way services; and,
- All ITFS and MDS licensees are obligated to cooperate in identifying sources of interference and resolving complaints of interference.

The Commission should also promptly correct the inconsistencies and errors noted in Appendix D to facilitate preparation of interference analyses associated with applications for two-way services on ITFS and MDS frequencies.

These issues should be resolved substantially before the date on which the Commission opens the first one-week filing window for ITFS and MDS applications to provide two-way services, so that parties can fully understand their rights and obligations in the two-way facilities.

Respectfully submitted,

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Date: December 22, 1999

Catholic Television Network
Joint Engineering Exhibit
in Support of Petition for
Clarification and Further Reconsideration
MM Docket 97-217

December 3, 1999

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HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

Catholic Television Network

Engineering Statement of Dane E. Ericksen, P.E.

The firms of John F.X. Browne and Associates, P.C., Denny & Associates, P.C., and Hammett & Edison, Inc., have been retained jointly on behalf of the Catholic Television Network ("CTN"), representing numerous Instructional Television Fixed Service ("ITFS") stations licensed to, and operated by, the Roman Catholic Archdioceses and Dioceses throughout the United States, to prepare an engineering exhibit in support of a Petition for Clarification and Further Reconsideration to MM Docket 97-217 ("Two-Way, Cellularized, Wireless Cable").

Appendix D Engineering Inconsistencies

1. In further studying Appendix D ("Methods for Predicting Interference from Response Station Transmitters and To Response Station Hubs and for Supplying Data on Response Station Systems") to the July 29, 1999, Report and Order on Reconsideration to MM Docket 97-217, certain technical inconsistencies have been discovered. In order to allow interested parties to develop software that will implement the new and radically different interference calculating protocols mandated by Appendix D, clarifications are needed.

Specified Channels and Channel Sharing Not Defined

- 2A. The specific channels and the channel sharing being used in a system are not defined in the input file, so the Commission needs to explain how these are to be reported.
- 2B. How are response transmitter points sorted into groups that share the same channel?
- 2C. Is the assumption that all points in a given hub sector share a channel, or is it a combination of a specific class and region?
- 2D. Is it possible for the same channel to be used by more than one such group in a system, that is, used by more than one sector or class and region?

Response Transmitter Grid Points Without Line-of-Sight

- 3A. The third full paragraph on Page 5 of Appendix D implies that a response transmitter grid point can be ignored if it does not have line-of-sight to a receiver being studied. Is this correct?
- 3B. If the answer is yes, why does the propagation model include a non-line-of-sight mode?



Catholic Television Network

-73 dBW/m² Requirement

4. Regarding the “-73 dBW/m²” requirement referred to in the last paragraph on Page 7 of Appendix D, why is it necessary to construct a contour from the matrix of computed signal values described in this paragraph? Would it not be sufficient simply to examine all points falling within the protected region to determine if any exceed the signal strength limit?

Errata

5A. Equation (3) combines the summed effective power flux density of interfering signals at a response station hub with an equivalent value representing thermal noise in the response hub. $P_{\text{D/EFF}}$ and P_{THERMAL} are directly summed, with P_{THERMAL} modified by several unitless quantities including cable loss and antenna gain. However $P_{\text{D/EFF}}$ represents power flux density in units of dBW/m², whereas P_{THERMAL} represents power in units of dBW, so the equation is combining “apples and oranges.”

5B. The intent appears to have been to convert the thermal noise power in the receiving system into an “equivalent” power flux density so that it could be summed with the quantity representing the interfering signals. The equation to convert power flux density in dBW/m² to power in dBW at the output of the system downconverter is:

$$P = \text{PFD} + 10\log_{10}\left(\frac{\lambda^2}{4\pi}\right) + G_{\text{ANT}} - L_{\text{C}} + G_{\text{D/C}} \quad (\text{A})$$

where: P = Power at downconverter output, in dBW
 PFD = Power flux density, in dBW/m²
 λ = Wavelength, in meters
 G_{ANT} = Receive antenna gain, in dBi
 L_{C} = Cable loss, in dB
 $G_{\text{D/C}}$ = Downconverter gain, in dB

Reversing this equation yields:

$$\text{PFD} = P - G_{\text{D/C}} + L_{\text{C}} - G_{\text{ANT}} - 10\log_{10}\left(\frac{\lambda^2}{4\pi}\right) \quad (\text{B})$$

The equation for expressing noise power at the output of the system downconverter is:

$$P_{\text{NOISE}} = P_{\text{THERMAL}} + \text{NF} + G_{\text{D/C}} \quad (\text{C})$$

where: P_{NOISE} = Total noise power at downconverter output, in dBW
 P_{THERMAL} = Noise power from thermal sources, in dBW (Appendix D eqn. (2))
 NF = Noise figure of downconverter, in dB
 $G_{\text{D/C}}$ = Downconverter gain, in dB

Catholic Television Network

Substituting P_{NOISE} for P in equation (B) and combining with equation (C) results in:

$$\text{PFD}_{\text{NOISE}} = P_{\text{THERMAL}} + \text{NF} + L_C - G_{\text{ANT}} - 10 \log_{10} \left(\frac{\lambda^2}{4\pi} \right) \quad (\text{D})$$

Therefore, equation (3) in Appendix D should read:

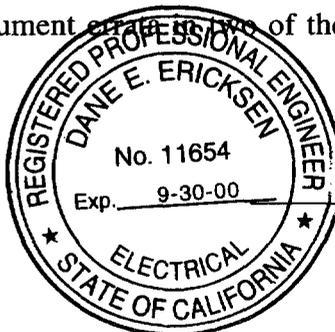
$$\text{PFD}_{\text{EQUIV}} = 10 \log_{10} \left(10^{\frac{\text{PFD}_{\text{EFF}}}{10}} + 10^{\frac{\text{PFD}_{\text{NOISE}}}{10}} \right) \quad (3)$$

with $\text{PFD}_{\text{NOISE}}$ computed per equation (D) above.

6. In the propagation loss model description, Equation (20), used for computing the Fresnel zone radius, has an incorrect constant factor of 549.367, whereas this constant should be 547.533. The constant derives from extracting the multiplied constant values for wavelength at 1 MHz in meters and the conversion from kilometers to meters from the square-root in the equation. The correct values for these constants, 299.792 meters and 1,000 meters/kilometer, lead to a value of 547.533. The value of 549.367 implies a wavelength at 1 MHz of 301.804 meters, which is clearly incorrect.

Summary

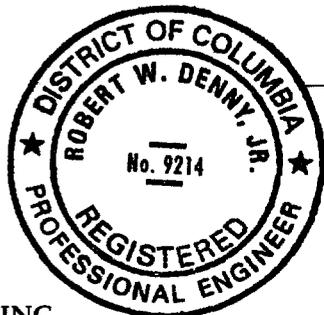
7. Items 2, 3, and 4 address ambiguities in the Appendix D methodologies that need to be resolved before all parties implementing those methodologies can be assured of obtaining the same results. Items 5 and 6 document errors in the Appendix formulas that need to be officially corrected.



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Hammett & Edison, Inc.

John F.X. Browne, P.E.
John F.X. Browne and Associates, P.C.

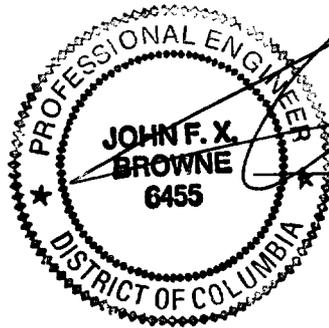
Robert W. Denny, Jr., P.E.
Denny & Associates, P.C.



December 3, 1999



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December 17, 1999

CERTIFICATE OF SERVICE

I, William D. Wallace, hereby certify that I have on this 22nd day of December, 1999, caused copies of the foregoing "Petition for Clarification and Further Reconsideration" to be delivered via hand delivery to the following:

Roy J. Stewart
Mass Media Bureau
Federal Communications Commission
445 12th Street, S.W., Room 2-C347
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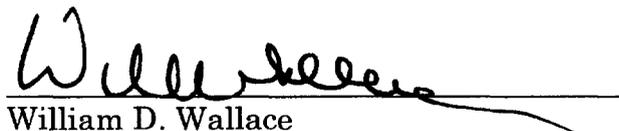
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