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

In the Matter of	)	
1998 Biennial Regulatory Review -- Streamlining of Radio Technical Rules in Parts 73 and 74 of the Commission's Rules	)	MM Docket No. 98-93

NOTICE OF PROPOSED RULE MAKING AND ORDER

Adopted: June 11, 1998 **Released:** June 15, 1998

Comment Date: [60 days from the date of publication in the Federal Register]
Reply Date: [90 days from the date of publication in the Federal Register]

By the Commission: Commissioner Furchtgott-Roth issuing a statement.

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I. Introduction

1. This *Notice of Proposed Rulemaking and Order* continues the Commission's broad-based initiative to streamline Mass Media Bureau rules, policies and licensing procedures. This proceeding, which

is undertaken in conjunction with our 1998 biennial review, is closely tied in goal and philosophy to a number of outstanding rulemakings. These include the recently released *Notice of Proposed Rulemaking* to streamline mass media applications, non-technical rules and processes,[1] the planned expansion of electronic filing capabilities, the forthcoming introduction of automated call sign procedures and numerous staff initiated reforms.[2] These pending proceedings seek comment on ways to speed the introduction of new and improved broadcast services to the public, provide greater flexibility to broadcasters to improve existing services, and reduce regulatory burdens on applicants.

2. The central focus of this proceeding is the FM technical requirements codified in Parts 73 and 74 of the Commission's rules. This *Notice* seeks comment on proposals that would change fundamentally the way the Commission evaluates proposals that would create interference in the FM band. It also seeks comment on whether the contingent application rule should be modified to permit coordinated facility modifications among broadcasters. It proposes a signal propagation methodology that more accurately takes into account terrain effects to better predict where interference would *not* occur; adoption of this methodology would permit certain applicants to obtain greater service improvements. The *Notice* tentatively concludes that the Commission should adopt numerous other changes in our commercial and noncommercial educational ("NCE") FM technical rules to promote greater technical flexibility. It also identifies various changes that may be possible in the technical processing rules, including proposals to expand the definition of "minor" changes and the use of more efficient first come/first served filing procedures, to streamline and expedite the processing of applications to modify existing facilities in several services. Finally, this *Notice* includes an *Order* adopting minor changes to certain technical rules.

II. Negotiated Interference in the FM Service

A. Introduction

3. Increasing congestion in both the reserved and non-reserved portions of the FM band limit options for operating stations to relocate to better transmitter sites and reach additional listeners. Some broadcasters have urged the Commission to permit "negotiated interference" agreements to enhance technical flexibility. In general, the concept "negotiated interference" signifies to many a technical paradigm under which licensees take greater or principal responsibility for determining acceptable levels and areas of interference. In fact, the different kinds of facility modifications that could fall under the rubric of "negotiated interference" can raise substantially different and sometimes difficult technical and policy concerns. Negotiated interference agreements may, but need not, involve facility changes to more than one station. "Negotiated" proposal(s) may, or may not, eliminate interference, create new interference, shift areas of interference, and/or result in the withdrawal or abandonment of service within a station's protected service area. They may, or may not, involve taking a station off the air and cancelling a station license. They may, or may not, involve contingent applications. The breadth of the concept is underscored by the fact that the Commission has both explicitly

[1] *Notice of Proposed Rulemaking, 1998 Biennial Regulatory Review -- Streamlining of Mass Media Applications, Rules, and Processes,* FCC 98-57 (released April 3, 1998).

[2] Staff initiatives include fast-track processing of complete and grantable FM modification applications, new DTV license certification procedures, the introduction of computer generated authorizations for AM stations, and the creation of teams and *ad hoc* working groups to expedite the review of settlement agreements among mutually exclusive broadcast applications, to process immediately certain curative amendments for AM and FM modification applications, and to grant rapidly applications to permit silent stations to resume operations.

rejected negotiated interference agreements[3] and codified procedures to permit certain short-spaced station to undertake mutual facility improvements by agreement.[4] In this *Notice* we seek comment on various "negotiated interference" models, and whether these models would enhance broadcasters' flexibility to relocate transmission facilities and serve desired markets, consistent with our core obligation to preserve the technical integrity of the FM band. We also seek comment on those procedures and policies that may unduly impede the coordinated efforts of broadcasters to improve service.

B. Background

4. The Commission has frequently used the term "negotiated interference" to describe agreements between or among stations to accept new or increased interference within their protected service contours,[5] typically in connection with proposals to expand service by one or several stations. The Commission has generally rejected attempts by applicants to negotiate interference levels on a case-by-case basis, holding that the selection of interference standards is a non-delegable Commission responsibility. Although the Commission drew a sharp distinction between the private interests of broadcasters and the public interest, in a 1961 discussion of negotiated interference rights between AM broadcasters, it also acknowledged that the "acquiescence" of affected station(s) is a factor that the Commission may take into account:

> The allocation of stations *always* invokes the public interest. The acquiescence of existing stations cannot preclude an effective supervision over station distribution. Indeed, the fact that AM allocation is on a case-by-case basis makes it all the more important that the Commission not be hampered by private agreements or apathy. Failure to claim protection for imperiled service areas may buttress a conclusion otherwise reached that the public interest, which is the touchstone of the Commission's actions, will not suffer but is not in itself controlling. (citation omitted). In certain instances it is obvious that stations must be rescued from their own folly in failing to recognize the seriousness of a diminution of service areas threatening their survival or even, through loss of profits, their ability to render meritorious program service.[6]

5. Subsequently, in a comprehensive review of AM technical broadcasting principles, the Commission again considered whether it should permit affected stations to resolve interference issues through private negotiations.[7] Fourteen commenters addressed the question of negotiated interference rights. Of these, nine opposed the concept, expressing concern that such an approach would lead to further degradation of the AM service, contrary to the stated intent of the *Notice of Inquiry*. Five commenters favored permitting private interference negotiations, stating, among other reasons, that this policy: (1) would make it possible for some

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[3] *See, e.g., Board of Education of the City of Atlanta (WABE-FM),* 11 FCC Rcd 7763, 7766-67 (1996); *Educational Information Corporation (WCPE(FM)),* 12 FCC Rcd 6917, 6920-21 (1997).

[4] *See, e.g.*, 47 C.F.R. § 73.213(c)(2), which provides for mutual facility improvements by pairs of grandfathered short-spaced Class A stations.

[5] The protected service contour of an FM station depends on its class. Class B stations are protected to their 54 dBu contour, Class B1 stations to their 57 dBu contour, and all other class stations to their 60 dBu contour.

[6] *Mountain Empire Radio Co.*, 30 FCC 739, 743 (1961) (emphasis added).

[7] *See Review of Technical Assignment Criteria for the AM Broadcast Service, Notice of Inquiry.* 2 FCC Rcd 5014 (1987).

licensees to reduce interference received within their protected service contours; (2) would be particularly helpful where "grandfathered interference rights" have created a level of interference beyond that permitted by the agency's protection standards; and (3) could facilitate new service to underserved areas if the Commission would accept increased interference to other areas. Ultimately, the Commission declined to adopt policies to permit agreement to increase interference.

6. This proceeding eventually led to the adoption of various policies to promote interference reduction strategies in the AM band.[8] The Commission modified the contingent application rule to permit the processing of related applications filed pursuant to interference reduction agreements[9] and its AM processing rules to narrowly limit the filing of competing, mutually exclusive proposals. The Commission also endorsed procedures to permit the deletion of interfering AM facilities provided that an adequate service floor would be maintained in the community losing a local transmission service.

7. The Commission's treatment of interference agreements between FM stations is similar. In 1991, the Commission again found that the "selection of interference standards is properly a function of the Commission" and that voluntary acceptance of interference could preclude future changes by the affected station(s).[10] In response to an application for a new NCE FM station in Chicago, Illinois, the Commission concluded that applicants should not be allowed to negotiate interference.[11] Similarly, the Commission reiterated in *Board of Education of the City of Atlanta (WABE-FM)* its concern that negotiated interference agreements could undermine Section 307(b) of the Communications Act by compromising service to rural areas and permitting the inefficient use of the spectrum.[12]

8. Nonetheless, the Commission has, in certain circumstances, recognized the value of permitting FM broadcasters to resolve interference issues among themselves and amended its rules to facilitate implementation of such agreements. Prior to the recent adoption of a *Report and Order* that eliminated the requirement to obtain the consent of the affected station,[13] those pairs of stations that have remained short-spaced since 1964, when the Section 73.207 minimum separation requirements were adopted, could seek service improvements provided that they entered into an agreement for this purpose and made a public interest

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[8] *Policies to Encourage Interference Reduction Between AM Broadcast Stations, Report and Order*, 5 FCC Rcd 4492 (1990).

[9] *See* 47 C.F.R. § 73.3517(c). As explained in para. 11, *infra*, the contingent application rule prohibits the filing of an application that cannot be granted until a second, pending application is granted.

[10] *See Amendment of Part 73 of the Commission's Rules to Permit Short-Spaced FM Station Assignments by Using Directional Antennas*, 6 FCC Rcd 5356, 5362 (1991).

[11] *Open Media Corporation*, 8 FCC Rcd 4070, 4071 (1993).

[12] 11 FCC Rcd at 7766-67; s*ee also Educational Information Corporation,WCPE (FM)*, 12 FCC Rcd at 6920-21.

[13] *Grandfathered Short-Spaced FM Stations*, 12 FCC Rcd 11840 (1997). Former Section 73.213(a) barred stations from extending their 1 mV/m contour toward any other pre-1964 grandfathered short-spaced station. The *Order* amends Section 73.213(a) to eliminate the former Section 73.213(a) restriction on extending the 1 mV/m contour of pre-1964 grandfathered short-spaced stations. It also eliminates the requirement that the affected stations agree to the extension of the other station's 1 mV/m contour toward it.

showing.[14] The Commission stated with regard to such pre-1964 short-spaced stations that it would take into account: (1) the additional areas and populations that would receive new primary service; (2) the extent of the resulting interference; and (3) the availability of other aural services in these areas.[15] In adopting this policy, the Commission balanced improved service against the possibility of increased interference -- given that interference *already existed* due to the grandfathered short-spacing. Applicants also were required to demonstrate that the public would not be deprived of broadcast service.

9. The Commission also addressed the concept of FM negotiated interference agreements in 1989, when it decided that it would permit upgrades in the facilities of those Class A stations that became short-spaced on October 2, 1989. This class of grandfathered short-spaced stations was created pursuant to the Commission's action increasing maximum authorized effective radiated power for Class A stations from 3 to 6 kilowatts ("kW") and Section 73.207 minimum spacing requirements.[16] Short-spaced Class A stations in this category were allowed to improve their facilities up to Class A maximums provided that a suitable agreement was reached between the short-spaced stations and a copy of the agreement was submitted to the Commission with the construction permit applications.[17]

10. Several key points emerge from the Commission's prior consideration of negotiated interference in the AM and FM services. First, it concluded that the public interest would be served by modifying the contingent application rule and AM cut-off procedures to facilitate coordinated technical changes between AM stations. Second, with the exception of certain grandfathered short-spaced stations, no parallel changes have been adopted for FM applications. Thus, the Commission has condoned the use of agreements to promote service improvements in the technically more difficult AM service as well as agreements between commercial FM stations that operate, axiomatically, at spacings substantially less than current new station requirements while consistently rejecting the use of these same agreements between fully spaced FM stations where interference concerns would generally be less. In short, current Commission policy provides the least flexibility for technical facility improvements in mid-sized major markets where FM broadcasters face the greatest technical constraints to undertake such improvements. Third, the Commission has drawn a sharp distinction between those proposals that would result in new or increased interference and those that would not. We consider each of these issues in turn.

C. Specific Proposals

1. Agreements Involving Applications for Coordinated FM Station Changes

11. *Background*. Section 73.3517 prohibits the filing of contingent applications in the FM

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[14] *See* "Commission Reaffirms Policy With Respect to Agreements Between Short-Spaced FM Stations," *Public Notice*, 57 FCC 2d 1263 (1975).

[15] *Id*. at 1263-64.

[16] *See Notice of Proposed Rule Making* in MM Docket No. 88-375, 3 FCC Rcd 5941 (1988); *First Report and Order*, 4 FCC Rcd 2792 (1989); *Second Report and Order*, 4 FCC Rcd 6375 (1989); *recon. and clarification granted in part*, 6 FCC Rcd 3417 (1991).

[17] *Second Report and Order*, 4 FCC Rcd 6375, at para. 52; *recon. denied in part and granted in part*, 6 FCC Rcd 3417, at paras. 14-20, 23-24.

broadcast services.[18] An application is contingent when it cannot be granted until a second application also pending before the Commission is granted. When an FM technical proposal is contingent on a second technical proposal, the first application remains contingent until the second facility is constructed and a covering license issued.[19] For example, where Station A is granted a construction permit to relocate its licensed facilities to another site, any subsequently filed application must protect Station A's licensed and permitted facilities.[20] In these circumstances, Section 73.3517 precludes the filing of a Station B application that protects the Station A construction permit but not the Station A license. Only after the Commission grants a license to cover the Station A construction permit can Station B file its construction permit application. These procedures protect Station A's ability to continue operations with its initially licensed facilities in the event it did not, for any reason, complete the authorized facility modifications.

12. As noted above, the Commission permits the filing of contingent applications to facilitate interference reduction and service improvements by either separately or commonly owned AM stations. In contrast, the Commission has rejected similar requests from FM stations that have entered into agreements that propose "coordinated" or "interrelated" facility relocations, modifications, and "one-step" upgrades and downgrades.[21] The Commission has been generally unwilling to waive Section 73.3517 on the basis of FM "service improvements." It has also been concerned with the preclusive impact of such proposals. The grant of a covering license for a station to operate on a lower class and/or from a different site may create the opportunity to file a petition for rulemaking for a new station allotment.[22] However, the acceptance of a contingent one-step upgrade application could effectively preclude the opportunity for a third party to file a rulemaking petition for a generally preferred new allotment tied to the coordinated downgrade. The one-step processing rules do not contemplate the filing of impermissible contingent one-step applications as a means of foreclosing other allotment proposals.

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[18] The rule does not differentiate between major and minor changes. *Amendment of Sections 1.517 and 1.520*, 61 FCC 2d 38 (1976). Moreover, it has been longstanding staff practice to apply 47 C.F.R. § 73.3517 to minor change and major change applications for new stations.

[19] *See Contingent Applications in the Broadcast Services*, 22 Rad. Reg. 299, 299 (1961); *see also, Seattle Public Schools*, 103 FCC 2d 862, 864 (1986).

[20] *See* 47 C.F.R. § 73.208, which requires applicants to protect all outstanding authorizations.

[21] The commercial FM "one-step" processing rules were designed to facilitate improvements by eliminating the necessity for a petition for rulemaking in instances where licensees seek upgrades on adjacent and co-channels, modifications to adjacent channels of the same class, and downgrades to adjacent channel. One-step applications are processed as minor change applications. *See Amendment to the Commission's Rules to Permit FM Channel and Class Modifications by Application, Report and Order*, 8 FCC Rcd 4735 (1993).

[22] We take this opportunity to clarify the consequences of the grant of a one-step FM commercial station application to change channel or station class. Such a grant amends the table of allotments and modifies that station license to operate on the new channel and/or class. *See Amendment of the Commission's Rules to Permit FM Channel and Class Modifications by Application, Report and Order*, 8 FCC Rcd 4735 (1993). During the construction permit period, the licensee may continue to operate the previously authorized facilities on an interim or "implied Special Temporary Authority" basis. However, in contrast to our treatment of routine minor modification applications under Section 73.208, the formerly authorized facilities are no longer protected from subsequently filed applications. If the permittee fails to timely construct and lets its permit lapse, the permittee is not relieved of the obligation to change to the channel and class specified in the amended Table of Allotments. A new one-step application revising the prior modification would be required in order to return to the former allotment. This filing would be subject to the first-come, first-served processing rule for minor modifications.

13. *Discussion*. We propose to allow the filing of contingent minor change FM construction applications on a limited basis. We would require that such applications be filed on the same date, and that each include a copy of the agreement covering all related applications.[23] These related minor change applications would be processed and if grantable, granted simultaneously. The construction permits would be conditioned as necessary to allow an orderly implementation of non-interfering service. If any application in the group could not be approved, we propose to dismiss all applications filed as an interrelated group. We would reject any coordinated agreement that, in our determination, would not serve the public interest. We seek comment on each aspect of this proposal.

14. We also propose to permit the filing of contingent proposals that include one-step upgrade and downgrade applications. We seek comment on whether this change is consistent with the rationale underlying the one-step policy. The "opportunity" for filing competing proposals in this context is wholly dependent on two stations reaching agreement on the coordinated facility changes. However, stations are reluctant to pursue coordinated facility changes where there is a possibility that a competing application could be filed. We tentatively conclude that in these circumstances the preclusion of competing allotment and minor change proposals is consistent with the public interest. We seek comment on this conclusion and whether the proposed procedures are consistent with Section 307(b) of the Act.

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15. We tentatively conclude that contingent applications should be limited to four related, simultaneously filed applications. Permitting contingent proposals could result in an increase in the number and complexity of facility application filings. Limited staff resources and the need to continue to perform other equally important tasks in a timely manner support capping the number of related contingent proposals that could be filed. We seek comment on this limitation and whether a different policy should apply where some or all proposals involve stations under common ownership.

16. We propose additional requirements when the coordinated changes include cancelling an NCE FM station license. In 1990, the Commission decided against establishing a specific local transmission service floor with respect to our public interest evaluation of contingent arrangements that propose to terminate AM facilities.[24] Instead we adopted guidelines that permit case-by-case evaluation of such applications. Similar service improvement opportunities exist for NCE FM stations, but not for commercial FM stations because Section 73.208 requires commercial applications to protect vacant allotments. We tentatively conclude that the AM interference reduction principles should apply to NCE FM agreements proposing the cancellation of a NCE FM station license. Thus, proposals could not create white or gray areas.[25] In addition, agreements to terminate a community's only local transmission service would be considered on a case-by-case basis and would take into account the availability of other services and the possibility of restoring local service with either an AM or FM station. We seek comment on whether to establish a "local service floor" to ensure that the granting of contingent applications does not result in a loss of service that would be detrimental to the public interest.

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[23] FM commercial minor change applications are "cut off" as of the date of filing, that is protected from later filed conflicting construction permit applications. *See* discussion *infra* at para. 46 regarding our proposal to extend this process to minor change applications for NCE FM educational stations.

[24] *See In the Matter of Policies to Encourage Interference Reduction Between AM Broadcast Stations*, 5 FCC Rcd at 4494.

[25] A "white" area receives no full-time aural service, a "gray" area receives one full-time aural service. We note that case law suggests that the Commission is precluded from allowing the creation of any white or gray areas. *See, e.g., West Michigan Television v. FCC*, 460 F.2d 883 (D.C. Cir. 1971).

2. Agreements Involving Applications That Would Cause New or Increased Interference

17. *Background.* As explained above, the Commission has been extremely reluctant to permit the creation of interference within a station's protected service contour, particularly where none currently exists. We have been concerned that this policy would lead to further clustering of stations in urban areas in contravention of Section 307(b) of the Act. We also have opposed such proposals on spectrum efficiency grounds and because grant of interference-creating applications could effectively foreclose facility improvements by stations receiving new interference. Moreover, creating areas of co-channel and first adjacent channel interference could result in an overall loss of available signals to affected listeners. Thus, the Commission has consistently maintained that any increase in total caused or received interference is contrary to the public interest.[26] Exceptions to this approach have been grounded on narrow technical or policy considerations.

18. Notwithstanding the Commission's long-standing resistance to negotiated interference, we believe that this technical streamlining initiative provides an opportunity to reconsider our policy options in the context of the technically simpler NCE FM and commercial FM services. We remain cognizant of our obligation to reevaluate regulatory standards over time and to modify policies in response to changes in the broadcast industry.[27] Radio is truly a mature service. Over 10,000 commercial AM and FM stations and nearly 2,000 NCE FM stations compete for listeners. Virtually all major and mid-sized markets, where we anticipate the greatest level of interest in negotiated interference agreements, receive service from five or more radio stations, our traditional measure of a well-served area.[28] Opportunities for new full service or substantial facility improvements in these markets are extremely limited. Congestion in the FM band provides a major technical impediment to the further "urban clustering" of stations. Moreover, a station's core obligation to serve its community of license will continue to limit transmitter relocations and service area modifications. As a result, measures designed to give broadcasters additional flexibility may raise lesser concerns at this time regarding the "fair, efficient, and equitable distribution of radio service . . . . "[29]

19. There are additional reasons to reconsider these policies at this time. The financial and management sophistication of the radio broadcast industry has grown dramatically in recent years, spurred by fundamental changes in local ownership and the elimination of national ownership restrictions. Moreover, both Congress and the Commission are committed to relying to the greatest extent possible on competitive communications markets rather than resource-intensive regulatory policies to safeguard the public interest. The idea that the Commission must stand ready to protect stations "from their own [economic] folly"[30] may not reflect either the realities of the radio industry or the Commission's current regulatory paradigm. In this environment we seek comment on whether it is possible to provide broadcasters some additional flexibility

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[26] Interference caused occurs when one station extends its interfering contour to overlap the protected service contour of a second station. Interference received occurs when one station extends its protected service contour to overlap the interfering contour of a second station.

[27] *E.g., Office of Communication of the United Church of Christ v. FCC,* 707 F.2d 1413, 1425 (1983).

[28] *See, e.g., Table of Allotments, FM Broadcast Stations, Bay City, Texas,* 10 FCC 2d 3337 (1995) (stating the Commission considers areas receiving at least five aural services to be adequate service).

[29] 47 U.S.C. § 307(b).

[30] *Mountain Empire Radio Co.,* 30 FCC at 743.

under our technical rules to expand service while at the same time establishing requirements to ensure that negotiated interference agreements are limited to situations where service gains would outweigh service losses and the creation of new and/or expanded areas of interference.

20. *Discussion.* Section 73.509 establishes contour protection standards for all NCE FM stations and generally prohibits the overlap of the interfering contour of the station and the protected contour of a second station. Section 73.215(a) establishes contour protection standards for commercial FM stations that do not satisfy the minimum distance separation requirements at Section 73.207. A station becomes a Section 73.215 station with respect to a second station upon grant of an application requesting processing under this rule. The applicant must demonstrate no prohibited overlap of protected and interfering contours in accordance with Section 73.215(a) and meet the less stringent separation requirements of Section 73.215(e) with respect to such second station. We seek comment on whether we should amend Sections 73.215(a) and 73.509 to permit applications that would result in prohibited overlap, and therefore, interference,[31] based on the following four criteria:

> (1) Total interference received by any station from all interfering stations must be no greater than five percent of the area and population within each affected station's protected service contour;
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> (2) Total service gain must be at least five times as great as the increase in total interference, in terms of both area and population. Service gain is defined as the difference between the current service contour area and population, and the proposed service contour area and population. Total service gain is the sum of all service gains for all stations included in the agreement. Interference increase is defined as the difference between the current interference area and population, and the proposed interference area and population. Total interference is the sum of all interference increases and decreases received by all affected stations and applicants, in terms of area and population. Interference calculations would include interference received by a proposal even if it occurs beyond that station's current service contour. If interference calculations made in accordance with this criterion establish that total interference would be decreased, an applicant would be exempt from any service gain requirement;
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> (3) No predicted interference can occur within the boundaries of any affected station's community of license; and
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> (4) Any application causing or receiving interference in an area that previously received interference-free service would be required to demonstrate the existence of at least five remaining aural services within each interference area.

We request comment on each of these factors, including whether the interference cap and gain/loss ratio strike an appropriate public interest balance. Should the Commission adopt additional or fewer restrictions? Should the Commission adopt separate service floor requirements for commercial and NCE FM stations?

21. If a rule change is adopted, applicants would be required to file coordinated facility modifications on the same date and clearly cross-reference all associated applications. A copy of the written consent of all stations receiving interference within their protected service contour as a result of proposed

[31] As explained in paragraph 23, *infra*, predicted interference would occur only in a portion of the overlap area.

facility modification(s) would be submitted with the applications. Under this approach, we would propose to amend Form 301 to require applicants to certify compliance with these negotiated interference standards and to submit supporting materials in exhibit form. We believe that careful review of interference creating proposals filed pursuant to novel procedures would be particularly warranted. We seek comment on this conclusion and whether the Commission should rely on applicant certifications without supporting exhibits. All non-reserved band applications would be required to satisfy the less stringent Section 73.215(e) spacing requirements and all construction permits granted to FM non-reserved band applicants would be granted as Section 73.215 proposals. In addition, we would propose to amend Section 73.509 to prohibit second and third-adjacent channel NCE FM stations from proposing transmitter sites within an affected station's 63 dBu contour. This would prevent interference areas deep within a station's service contour, and assure minimum distance separations between stations, thus promoting fair and equitable distribution of stations as required by Section 307(b) of the Communications Act. We seek comment on whether this NCE FM restriction is necessary to prevent a deluge of modification applications that would shift service away from less well served areas. All construction permits granted pursuant to these procedures would be conditioned on the simultaneous implementation of all related proposals. We invite comment on each aspect of this proposal.

22. To the extent that these procedures would result in the favorable consideration of applications that propose new areas of caused interference, they would also support changes in the way we treat interference received. New areas of received interference can result from a station's unilateral proposal to extend its own service contour so that it overlaps the interfering contour of an authorized station. In effect, such a proposal reflects a station's determination that increased potential listenership outweighs a certain amount of interference within its (expanded) service area. Typically, the new area of interference affects potential listeners who were not predicted to receive service previously. We seek comment on whether we should permit such modifications provided that an applicant demonstrates compliance with each of the requirements specified above. However, no consent from any other station would be required where the proposal would not result in interference occurring within the service contour of any reserved band station, any Section 73.215 station, or any station operating with the equivalent of maximum class facilities. However, applicants that propose a short-spacing to any other type of station would have to obtain consent from such affected stations to receive interference. If the affected station chooses not to increase power simultaneously to a full-class facility as part of the agreement with the applicant, the affected station must request reclassification as a Section 73.215 licensee/permittee. This "Section 73.215 condition" on the affected station's authorization would effectively limit that station to its current facilities (with regard to the applicant's proposal) and would prevent subsequent unilateral increases by the affected station resulting in interference caused to the applicant's improved facilities.

23. We seek comment on whether we should follow the methodology adopted in the recent grandfathered short-spaced FM station proceeding to determine areas of interference using the desired-to-undesired signal strength ratio analysis and the standard F(50,50) and F(50,10) propagation curves.[32] As noted therein, contour overlap is an effective method for demonstrating that no interference would occur. In contrast, the ratio method is the most appropriate method for determining areas of interference. We seek comments on this view. Co-channel interference would be predicted to exist at all locations within the desired station's coverage contour where the undesired (interfering) F(50,10) field strength exceeds a value 20 dB below the desired (protected) F(50,50) field strength. First adjacent channel interference would be predicted to exist at all locations within the desired station's coverage contour where the undesired (interfering) F(50,10) field strength exceed a value 6 dB below the desired (protected) F(50,50) field strength. Second and third adjacent channel interference would be predicted to exist at all locations within the desired station's coverage area where the undesired (interfering) F(50,10) field strength exceeds a value 40 dB above the desired (protected) F(50,50)

[32] *Grandfathered Short-Spaced FM Stations, Report and Order*, 12 FCC Rcd 11840 (1997).

field strength.[33] We invite comment on these standards and the use of this methodology.

24. We believe that consideration is warranted in this *Notice* of the standards that would apply to waiver requests of the interference rules proposed herein. The original Section 73.207 mileage separation rules were adopted as "the best means for achieving an orderly, efficient, and effective development of the commercial FM broadcast service."[34] The Commission has long held that "strict enforcement of the mileage separation rules is of paramount importance to the integrity of the entire FM assignment plan."[35] Therefore, Section 73.207 waiver proponents were required to make a "compelling showing." Specifically, an applicant for waiver of Section 73.207 was required to make a three-part threshold showing that (1) the present transmitter site was no longer suitable, (2) non-short-spaced sites were unavailable, and (3) the proposed new site was the least short-spaced site available.[36] In addition, an applicant had to demonstrate that grant of waiver would serve the public interest.[37] Section 73.215, which went into effect in 1989, specifies a procedure by which an applicant may obtain relief from our historic strict enforcement of the mileage separation requirements of Section 73.207.[38] Under Section 73.215, applicants need only demonstrate that no prohibited contour overlap (and hence interference) between short-spaced stations would be created, and that the short-spacing meets the less restrictive spacing requirements of Section 73.215(e).[39]

25. Adoption of Section 73.215 allowed the Commission to discontinue granting waivers of Section 73.207.[40] In its place, some applicants have sought waivers of Section 73.215. Under the *WAIT Radio* doctrine, the Commission is bound to consider waiver requests.[41] Unsurprisingly, waiver proponents have sought to measure the magnitude of short spacing in accordance with the less restrictive distance minimums of Section 73.215. This approach is misguided. Section 73.215 codifies a relief mechanism for applicants to specify sub-standard spacings *provided that certain criteria are met.* If an applicant cannot meet these

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[33] *See* Discussion at Section III E. 1. proposing to change the FM and NCE FM translator station second-adjacent channel NCE FM interfering contour to 100 dBu.

[34] *Greater Media, Inc.*, 59 FCC 2d 796, 797 (1976); *see ECI License Company, L.P. (WYUU)*, 11 FCC Rcd 3545, 3546 (M.M.Bur) ("*WYUU*") (spacing rules "adopted in part to promote a fair distribution of FM service across the country, as required by 307(b) of the Communications Act, avoiding undue concentration of stations in urban areas (particularly major markets).") (citations omitted), *aff'd*, 106 F.3d 442 (D.C.Cir. 1996).

[35] *Boone Biblical College*, 19 FCC 2d 155, 156 (1969); *see WAIT Radio v. FCC*, 418 F.2d 1135, 1159 (D.C.Cir. 1969) ("applicant for waiver faces a high hurdle even at the starting gate.").

[36] *Stoner Broadcasting System, Inc.*, 49 FCC 2d 1011, 1012 (1974); *Townsend Broadcasting Corp.*, 62 FCC 2d 511, 512 (1976).

[37] *Townsend Broadcasting Corp.*, 62 FCC 2d at 511.

[38] 47 C.F.R. § 73.215; *see Amendment of Part 73 of the Commission's Rules to Permit Short-Spaced FM Station Assignments by Using Directional Antennas, Report and Order* in MM Docket 87-121, 4 FCC Rcd 1681, 1682 (1989) ("*Contour Protection Order*"), *recon. granted in part and denied in part*, 6 FCC Rcd 5356 (1991).

[39] *See WYUU*, 11 FCC Rcd at 3546.

[40] *See Reconsideration Order*, 6 FCC Rcd at 5359-60.

[41] *See WAIT Radio v. FCC*, 418 F.2d at 1159.

standards, then Section 73.207 requirements must control. In fact, the Commission's interest in adhering to Section 73.207 minimum distance separations is all the more compelling because Section 73.215 has given applicants additional site selection flexibility.[42] We propose to continue to follow this same procedure with regard to any interference-related rule changes adopted pursuant to this *Notice.* Specifically, in analyzing such a request for waiver of Section 73.215(e), we propose to measure the short spacing in accordance with Section 73.207 and to apply the traditional threshold three-part and public interest tests developed in Section 73.207 jurisprudence.[43] Similarly, with regard to interference-creating proposals between or among consenting broadcasters, the Commission would consider prohibited overlap in accordance with established precedent.[44] In no event would such an applicant be entitled to a presumption that creating any interference -- much less five percent -- within any station's protected service contour would be in the public interest. We seek comment on these protected waiver policies.

26. A broadcaster's obligations to accurately prepare each facility application, to truthfully complete each application certification, to construct and operate facilities in accordance with its authorization, and, generally, to adhere to the Commission's technical rules become particularly significant where stations may create small amounts of interference and where several facility modifications may be mutually interdependent. Our experience is that the vast majority of FM facility proposals, both for new and existing stations, either meet the relevant interference criteria or seek the relevant rule waivers, and truthfully complete all certifications. Moreover, most stations are built in accordance with their construction permits. The Commission, however, has not hesitated to impose severe sanctions where a broadcaster intentionally engages in unauthorized station construction.[45] Moreover, the Commission retains the power to revoke any construction permit or license "because of conditions coming to the attention of the Commission which would warrant it in refusing to grant a license or permit on an original application."[46] We are fully committed to exercising our plenary enforcement powers against applicants that enter into negotiated interference agreements where we find that application showings and/or certifications have fallen short of Commission standards, regardless of the time at which the application errors are brought to the Commission's attention. In the event we adopt negotiated interference procedures for FM stations, we propose to publish, as necessary, decisions that explain or clarify these new procedures. We believe that a program that combines strict enforcement and broad information dissemination would promote full and candid disclosure of material technical information in applications and compliance with

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[42] *See Reconsideration Order,* 6 FCC Rcd. at 5360.

[43] *See WYUU,* 11 FCC Rcd at 3546 n.4 (affirming explicit use of Section 73.207 separation standards for measuring extent of Section 73.215(e) short-spacing and affirming without comment staff application of Section 73.207 threshold test to Section 73.215(e) waiver request). To the extent that one staff decision suggests that Section 73.207 waiver standards are inapplicable to Section 73.215(e) waiver requests, that position is explicitly repudiated. *See WYUU,* 11 FCC Rcd at 1799.

[44] With regard to Section 73.215(a), the Commission acknowledged in the contour protection rulemaking that waiver of prohibited contour overlap may be appropriate in "a very small number of cases . . . to permit greater power in a short-spaced station's direction where it is demonstrated that such a facility is necessary to allow use of a multiplexed transmitting antenna and that its authorization would otherwise serve the public interest, for example, by allowing retention of existing service to an underserved area." *Reconsideration Order,* 6 FCC Rcd. at 5360 n. 27.

[45] *Chameleon Radio Corporation,* FCC 98-73 (released April 22, 1998) (affirming revocation of station license based on applicant misrepresentations and lack of candor regarding STA request, including misrepresentations regarding loss of authorized site and status of proposed tower as an existing structure).

[46] 47 U.S.C. § 312(a)(2).

our rules and policies. We seek comment on this enforcement approach for negotiated interference agreements. We also request that commenters identify specific enforcement procedures that the Commission should follow and the sort of sanctions that it should impose where an applicant provides false or incomplete information in its application or where construction is at variance to an authorization.

27. We seek comment on whether this proposal to permit small amounts of interference in limited circumstances would protect service to a station's community of license and would help preserve an adequate service floor for all listeners. It would be particularly responsive to those situations where factors such as unusual terrain create anomalous service contours that block meaningful service expansions. It would give greater weight to the willingness of a station to accept interference within its protected service contour and would constitute a significant change in our technical regulation of FM broadcast stations. In particular, we invite public comment on the following issues to help develop a better record on the technical and policy issues that these proposals raise.

o Would these negotiated interference procedures sufficiently protect the interests of listeners and licensees not party to an agreement?

o Could this proposal result in service losses to smaller communities and/or less desirable demographic audiences?

o Should negotiated interference agreements between commercial stations be treated differently from agreements between noncommercial educational stations?

o How might this proposal affect the development and implementation of in-band on-channel (IBOC) digital radio systems?

o Is there a danger that negotiated interference agreements over time may lead to less flexibility to make future changes when, for example, a transmitter site is lost and a station must relocate?

o Is there reason to believe that the accumulation of negotiated interference agreements over a period of years could lead to a general degradation of FM service in the United States?

o Is this negotiated interference proposal consistent with Section 307(b) of the Communications Act?

o To what extent should the Commission rely on applicant certifications to ensure compliance with negotiated interference agreement requirements?

o Should the Commission require licensees to maintain negotiated interference agreements in their local public inspection files? Should they be filed with the Commission?

o Should the Commission limit agreements to one or several license terms? Should an agreement be terminable following the transfer of a station that previously consented to interference within its service contour?

o What remedies should the Commission and affected licensees have if a station breaches its negotiated interference agreement?

III. Other Proposals to Give Stations Greater Technical Flexibility

A. Introduction

28. In this section we propose certain rule and policy changes to expand opportunities for enhanced service and reduce regulatory burdens on applicants. We believe these proposals are consistent with our current efforts to streamline our existing rules and eliminate unnecessary or redundant procedural requirements.

B. The Point-To-Point Prediction Methodology

29. *Background.* Interference between FM stations is defined in terms of protected and interfering contours.[47] Contour protection has generally worked well in fostering interference-free service in the FM band. However, it is not perfect. Because of the limited length (3 to 16 kilometers) of the radials used to determine antenna height above average terrain, the Commission's standard propagation methodology does not accurately account for all terrain effects. For example, our standard contour methodology, which is used to calculate both interfering and protected contours, would not take into account a mountain at 25 kilometers from a transmitter site, and thus, would incorrectly predict service (or interference) to areas well beyond this mountain. In 1975, the Commission adopted a limited correction factor to measure "terrain roughness" to overcome the effects of terrain beyond 16 kilometers. This methodology required an analysis of terrain data along the radial(s) of interest, at distances between 6 and 31 miles (10 to 50 kilometers) from the transmitter site.[48] However, the Commission later stayed the general use of the terrain roughness factor (contained in 47 C.F.R § 73.313 (f) through (j) and Figures 4 and 5 of 47 C.F.R. § 73.333) because of difficulties with "atypical terrain configurations."[49]

30. Presently, the Commission does not accept supplemental terrain analyses to determine predicted interference between FM stations. This prohibition has its roots in the concept that applications with such showings are inherently more complicated, and the results more open to interpretation, than results obtained in accordance with the standard contour prediction method in Section 73.313. In addition, the input parameters to many alternative methods have not been standardized and their selection may be a source of dispute, even where the same prediction method is used. Such complications, multiplied over a significant number of applications, could have an adverse impact on our ability to take prompt action on the applications that come before us.[50] Thus, applications proposing new or expanded service may be unreasonably precluded where interference is predicted although, in fact, unlikely.

31. *Discussion.* In Appendix B we set forth a supplemental point-to-point ("PTP") prediction model designed for the purpose of providing a more accurate prediction of interfering contours. It combines a procedure for characterizing terrain obstructions with a well-accepted model of radio wave diffraction. Unlike the standard prediction method, it takes into account terrain beyond 16 kilometers from the transmitting

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[47] These concepts also form the basis for our minimum separation requirements in 47 C.F.R. § 73.207.

[48] *Field Strength Curves, Report and Order,* Dockets 16004 and 18052, 53 FCC 2d 855, 863 (1975).

[49] *Temporary Suspension of Certain Portions of Sections 73.313, 73.333, 73.684, and 73.699,* FCC 75-1226, 56 FCC 2d 749(1975), *stay extended indefinitely,* 40 Rad. Reg. 2d 965 (1977).

[50] We have accepted supplemental showings aimed at demonstrating compliance with the city coverage requirement in 47 C.F.R. § 73.315 and the main studio requirement in 47 C.F.R. § 73.1125, since there can be no interference created to other stations by such use. *See Certain Minor Changes in Broadcast facilities Without a Construction Permit, Report and Order,* MM Docket 96-58, 12 FCC Rcd 12371 at 12401-03.

antenna and would provide certain stations with greater flexibility in locating facilities and obtaining desired power levels. Accordingly, we propose that an applicant may use the PTP method to calculate interfering contours for the purpose of demonstrating compliance with the Commission's various overlap/interference requirements.[51] Such showings would be limited to the relationships between the PTP predicted interfering contours and the affected station's standard F(50,50) curve predicted protected service contour. We also propose to permit the use of PTP methodology to demonstrate compliance with the interference area and population limits set forth above for negotiated interference agreements.

32. We tentatively conclude that applicants should be permitted to use the PTP methodology for certain other purposes. All commercial FM stations must demonstrate compliance with the community of license city grade coverage requirements of Section 73.315. This requires (1) a predicted 3.16 mV/m contour that encompasses the community of license; and (2) the lack of major terrain obstructions between the transmitter site and the community. Since the PTP methodology more accurately incorporates the effects of terrain into the prediction of coverage, we propose to permit the use of PTP calculations by both applicants and objectors to resolve any questions raised regarding compliance with § 73.315 and to treat the PTP calculations as controlling. We propose to require applicants to submit a PTP contour study where terrain between a transmitter site and a community of license could put in issue either the use of the standard methodology or the station's compliance with city grade coverage requirements. Existing stations that currently cover their community based on the standard prediction method, but fail to satisfy the PTP methodology, would be exempt from a PTP determination provided they do not propose to relocate transmission facilities or withdraw coverage towards the community of license. Additionally, we propose to allow PTP methodology in two specific instances that require the calculation of 3.16 mV/m coverage: compliance with main studio requirements of § 73.1125[52] and demonstration that an allotment, when considered at maximum Class facilities, would comply with Section 73.315 with respect to the community of license (if use of a supplemental method is warranted consistent with existing precedents).[53] We seek comment on these proposals.

33. The PTP methodology is proposed in this *Notice* for the primary purpose of demonstrating that the standard prediction method *overstates* the area encompassed by a station's interfering contour. Thus, we propose to prohibit the use of the PTP methodology to extend interfering contours beyond the standard F(50,10) predicted curves for the purpose of demonstrating harmful interference received. Allowing this use of the PTP to extend protection rights, which is specific to a particular site, would in some instances effectively

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[51] Specifically, we refer to interfering contours calculated in association with the Commission's overlap requirements for FM commercial, NCE FM, and FM Translator stations (47 C.F.R. §§ 73.215, 73.509, 73.1204, respectively); overlap of the interfering contours of intermediate frequency (IF) grandfathered short-spaced stations (Section 73.213(b)); and the interfering contours utilized in showings that involve undesired- to-desired (U/D) signal ratios in conjunction with FM to TV Channel Six interference showings (Section 73.525) and public interest showings related to pre-1964 grandfathered short-spaced stations (Section 73.213(a)).

[52] The staff currently entertains alternate prediction methods in the context of main studio locations. However, in order to warrant study, current commercial FM processing policy requires that such showings may be submitted if they alter the 3.16 mV/m contour by at least ten percent when compared to the standard prediction method. In contrast, the staff can efficiently confirm that an applicant has properly used the PTP methodology. Accordingly, we propose to eliminate the ten percent method for PTP contour studies that establish compliance with the Commission's main studio location rule.

[53] *See, e.g.*, *Woodstock, VA*, 3 FCC Rcd 6398 (1988); *Cresswell, OR*, 4 FCC Rcd 7040 (M.M. Bur. 1989); and *Kings Beach, CA* 6 FCC Rcd 4375 (M. M. Bur. 1991).

provide stations with greater protection from interference than that provided by fully-spaced stations because the minimum distance separations are based upon the standard prediction curves. PTP showings are not permitted in any of our international agreements and thus could not be used to demonstrate compliance with international requirements. We also propose not to permit the use of this methodology to calculate protected service contours for the purposes of demonstrating: the lack or existence of overlap; or compliance or non-compliance with contour limitations for boosters, fill-in translators, or auxiliary facilities.

34. We also propose not to consider PTP showings in the context of demonstrating compliance with the multiple ownership requirements of Section 73.3555. In instances involving the major radio markets, multiple ownership studies often involve dozens of stations. Selective application of the PTP method to some, but not all stations in a relevant market would invite disputes where contradictory results could occur. Conversely, in light of the sometimes radical differences between PTP calculations and standard predicted contours, utilizing the PTP method for all stations could affect these ownership studies in ways not anticipated when the current multiple ownership rules were adopted. We believe that, in most instances, the use of the PTP methodology could significantly alter the definition of stations included in a particular market and use of this methodology in this context would serve no useful function in administering our ownership policies. Accordingly, we propose not to accept such studies to determine whether an application complies with our ownership rules and policies. We seek comments on each aspect of this proposal regarding the adoption and use of the PTP methodology.

35. As noted above, we stayed the terrain roughness provision because of difficulties with atypical terrain configuration. We believe that the PTP methodology overcomes these difficulties and would provide a more sophisticated and not unduly burdensome method of assessing the effects of a variety of terrain anomalies. Therefore, we propose to delete the long-stayed terrain roughness provisions from 47 C.F.R. § 73.313(f) though (j) and Figure 4 of 47 C.F.R. § 73.333 from the Commission's Rules as they apply to the FM broadcast stations. We seek comment on these proposals.[54]

C. Commercial FM Technical Requirements: Amendments to Section 73.215

1. Reduced Minimum Separation Requirements in Section 73.215(e) for Second- and Third-Adjacent Channel Stations

36. *Background.* Section 73.207 sets forth the minimum distance separation requirements for FM stations operating on co-and adjacent channels in the non-reserved band and on intermediate frequency (IF) channels. The spacing table in Section 73.207 was adopted in part to ensure interference-free FM service within each commercial station's protected service contour. Applicants that proposed short-spaced transmitter sites were required to demonstrate that (1) the present site was no longer suitable;[55] (2) alternative fully-spaced sites were unavailable;[56] (3) the proposed transmitter site was the least short-spaced site available; and (4) grant of the Section 73.207 waiver would serve the public interest.[57] However, the preparation and processing of

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[54] *See Amendment of Sections 73.333 and 73.699, Field Strength Curves and For Fm and TV Broadcast Stations; Amendment of Part 73 of the Rules Regarding Field Strength Measurements for FM and TV Broadcast Stations,* Dockets 16004 and 18052, 53 FCC 2d 855, 863 (1975).

[55] *See, e.g., John Lamar Hill*, 70 FCC 2d 153 (Rev. Bd. 1978).

[56] *See, e.g., Carroll-Harrison Broadcasting, Inc*., 62 FCC 2d 45 (1976).

[57] *See, e.g., On the Beach Broadcasting,* 8 FCC Rcd 3123 (1993).

requests for waiver of Section 73.207 proved to be increasingly burdensome and time consuming for applicants and the staff. In 1989, the Commission adopted Section 73.215 to afford FM applicants some additional flexibility in locating potential transmitter sites.[58] Applications processed under Section 73.215 must demonstrate that the proposed facilities would not create prohibited overlap to any station that does not satisfy Section 73.207 minimums. In response to concerns of spectrum overcrowding, the Commission retained minimum but lesser spacing requirements for Section 73.215 applicants. *See* 47 C.F.R. § 73.215(e).[59] For second- and third-adjacent channel stations, the contour protection rule generally limits the amount of relief from Section 73.207 spacing requirements to no more than three kilometers and in some cases provides no relief.[60] As a result, stations with second- and third-adjacent channel spacing problems have, in many cases, less flexibility to relocate facilities than under the former Section 73.207 waiver policies that permitted the staff to grant spacing waivers of up to six kilometers.[61] Consequently, the staff has received numerous inquiries concerning the possibility of waivers of Section 73.215(e) for second-and third-adjacent channel stations.

37. *Discussion*. We propose to revise the Section 73.215(e) spacing table to afford all FM commercial stations a minimum of 6 kilometers of relief from the applicable Section 73.207(a) standards. We believe that this change would significantly increase certain licensees' flexibility to identify sites that provide sufficient spacing to second- and third-adjacent channel stations. We propose no change in the contour overlap methodology and requirements of Sections 73.215(a), (b), and (d). We also propose that grants under this proposal would continue to be listed as a contour protection construction permit. We seek comment on these proposals.

2. Additional Flexibility for Stations in Puerto Rico and the U.S. Virgin Islands

38. *Background*. For many years commercial FM stations with Class A, B1 and B allotments in Puerto Rico and the Virgin Islands have been permitted to operate with greater facilities than those permitted for their counterparts in the United States and its territories.[62] On the mainland, the spacing rules in 47 C.F.R. § 73.207 are designed so that two stations operating with maximum class at minimum separation will not cause

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[58] *See* 47. C.F.R. § 73.215.

[59] This Section 73.215(e) table utilized the Section 73.207 required separation for the next lower class of station as the minimum spacing under which a station could qualify for use of the contour protection rule.

[60] Specifically, out of 28 possible combinations between the second-and third-adjacent channel stations, Section 73.215 provides 10 km relief to Class B1 - C stations, and 9 km relief to Class C2-C stations. In addition, four combinations have 3 km of relief, 14 combinations have 2 km of relief, five combinations have 1 km of relief, and three combinations have no relief.

[61] In addition to the limited relief for second and third-adjacent stations, instances in which there is spacing of 6 km or less include Class B stations which employ contour protection under Section 73.215 with respect to cochannel Class C stations, and conversely Class C to Class B stations. Section 73.215 allows these stations to be no more than 4 km closer than the Section 73.207 required separation.

[62] *See Revision of FM Broadcast Rules,* 40 FCC 868 (1964) (addressing Class B stations in Puerto Rico and the Virgin Islands, respectively); *Amendment of Section 73.211(b)(3) of the Rules Concerning maximum power and antenna height for FM Broadcast Stations,* 13 Rad. Reg. 1536 (1968) (Class A stations in Puerto Rico and the Virgin Islands) and *Permitting Increased Antenna Height of Class B1 Commercial FM Broadcast stations in Puerto Rico and the Virgin Islands,* 49 Fed. Reg. 22088 (May 25, 1984).

interference within either station's protected service contour.[63] In Puerto Rico and the Virgin Islands, the protected and interfering contours extend further and often overlap because of the greater antenna heights permitted for these stations. This exception was initiated by the Commission in 1964 to help these stations overcome the effects of rugged island topography and to promote the distribution of radio facilities in these areas. Although these stations may operate with transmission facilities in excess of class height and power maximums, assignments need only meet Section 73.207 spacing requirements. Accordingly, it is possible for two stations to comply with Section 73.207 but have prohibited overlap under Section 73.215. The Commission recognized that as a result of these factors, Section 73.215 would provide less relief to Virgin Island and Puerto Rican stations than to those stations limited to class height and power maximums. To address this matter, in 1991 the Commission adopted Section 73.215(a)(4) which permits stations in Puerto Rico and the Virgin Islands to make an alternative showing that the 1 mV/m contour from the proposed short spaced site would not extend past the present 1 mV/m location. However, stations in Puerto Rico and the Virgin Islands seeking preferred site changes often find it impossible to comply with this contour requirement, especially where the move is from a low coastal location to higher inland locations. Consequently, in certain instances, Section 73.215(a)(4) provides no relief.

39. *Discussion.* In 1993 the staff granted a request for waiver of Section 73.215(a)(1) to permit an alternate method to define the protected and interfering contours of certain stations in the Virgin Islands and Puerto Rico.[64] We propose revising Section 73.215 to incorporate the actual protected and interfering contours for Class A, B1 and B stations set forth in *St Croix Wireless Co*.[65] The proposed modifications take into account the higher HAAT limits specified in the rules for Puerto Rico and the Virgin Islands, while affording stations additional site location flexibility. We believe this revision would protect other stations from interference in excess of that which may occur under our spacing rules. We seek comment on this proposal.

D. New Class C Height Above Average Terrain Requirements

40. *Background*. In 1983, the Commission made a number of changes to the FM allotment scheme, including establishment of three intermediate classes of stations: B1, C1 and C2.[66] Existing Class B and C stations were required to meet minimum facility requirements within three years or be reclassified to

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[63] For Class B stations, 54 dBu, for Class B1 stations 57 dBu, and for all other classes, 60 dBu.

[64] *See St. Croix Wireless Co., Inc*., 8 FCC Rcd 7329 (1993). In *St. Croix Wireless, Co*., the permittee requested a waiver of Section 73.215 as it defined the protected contour of a Class B station as the 54 dBu contour. The permittee demonstrated that use of the 54 dBu contour for Class B stations in Puerto Rico and the Virgin Islands produced an anomalous result, affording vastly more protection than the spacings provide. Instead, the permittee showed that given the spacings and maximum facilities permitted in this region, the normally protected contour of such stations is the 63 dBu contour, and the use of this contour for Caribbean stations produces a result equivalent to that on the mainland.

[65] *Id.* at 7331. The actual protected and interfering contours under 47 C.F.R. § 73.207 in Puerto Rico and the U.S. Virgin Islands are set forth in Appendix C.

[66] *Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments, Report and Order* in BC Docket 80-90, 94 FCC 2d 152, 155-56 (1983) ("*Docket 80-90 R&O*"), *modified, Memorandum Opinion and Order*, 97 FCC 2d 279 (1984) ("*Docket 80-90 MO&O*").

an intermediate station class based on their actual operating facilities.[67] The Commission's purpose in adding the station classes was to minimize overprotection of stations and thereby increase the availability of FM station assignments:

> [A] significant number of Class B and C stations were operating with facilities that were substantially below those permitted by the rules. Nevertheless, the Commission's spacing requirements protected those stations to the same extent as a full facility licensee. The result of protecting all Class B and C stations at the maximum facility level was the preclusion of new, otherwise permissible services.[68]

41. For Class C stations, the Commission adopted a 100 kW power requirement and minimum antenna height requirement of 300 meters height above average terrain ("HAAT"), one-half the existing maximum antenna height limitation for Class C stations of 600 meters.[69] Following the three-year transition period, Class C stations that did not meet the required minimum values were reclassified as Class C1 or C2 stations. Thus, Class C stations presently operate with antennas between 300 and 600 meters HAAT.[70]

42. A recent staff study reveals that many Class C stations continue to operate with facilities that are significantly less than maximum. Specifically, the study reveals that 519 of the 863 FM stations presently occupying Class C assignments, or approximately 60 percent, operate with facilities less than 450 meters HAAT. The fact that such a large percentage of Class C stations are operating more than 150 meters below the maximum antenna height limitation of 600 meters HAAT indicates that the Commission's present allotment structure overprotects a substantial number of Class C stations and, therefore, may unnecessarily preclude proposals to introduce new and/or expand existing services.[71]

43. *Discussion*. We propose to create an additional intermediate class of stations between Class C and Class C1, to be designated Class C0 (Class C zero). Class C0 stations would have a maximum height limitation of 450 meters HAAT and a minimum antenna height requirement of 300 meters HAAT. Both classes of stations would be required to maintain a power level of 100 kw, the present value for Class C stations. Under this proposal, Class C stations would be required to operate at a minimum antenna height of no less than 451 meters HAAT. We would amend the FM distance separation tables to include the reduced spacing requirements for the new station class.[72] In order to provide a reasonable opportunity for existing

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67 *Docket 80-90 R&O*, 94 FCC 2d at 156.

68 *Docket 80-90 MO&O*, 97 FCC 2d at 281; *see Notice of Proposed Rule Making* in BC Docket 80-90, 78 FCC 2d 1235, 1240-41 (1980) ("*Docket 80-90 Notice*").

69 *Docket 80-90 R&O*, 94 FCC 2d at 183-84. Only Class C stations have a minimum HAAT requirement to exceed the next lower class (Class C1) maximum of 300 meters. *Id.*

70 *Id.*; *see* 47 C.F.R. § 73.211

71 *See Docket 80-90 Notice*, 78 FCC 2d at 1241 ("The separation requirements are based upon the assumption that each assigned station is, or at some time in the future will be, operating at the maximum power and antenna height for its particular class.").

72 *See* 47 U.S.C. §§ 73.207, 73.213, 73.215, 73.507. A preliminary staff analysis of the proposed Class C0 category has determined that co-channel spacing requirements would be reduced from Class C minimum distances by

Class C stations not operating at the proposed antenna height minimum to maintain their full Class C status, we propose a three-year transition period to obtain a construction permit specifying an antenna HAAT of at least 451 meters. During the three-year period, each such station would be renewed on a conditional basis. If the station has not obtained the necessary authorization within the three-year period, then the station would be reclassified as a Class C0 station.

44. We believe that these changes would increase the efficiency of FM broadcast band licensing while permitting existing Class C stations to provide service equivalent to that embodied in the present allotment rules. We seek comments regarding this proposal, including comments that may shed light on the additional service the proposed additional station class could create, the effect of the loss of primary service areas for reclassified Class C0 stations, and whether creation of a temporary "buffer zone" to protect the ability of existing Class C stations to upgrade during the three-year transition period would be appropriate.[73]

E. Streamlined Application Processing Changes

1. Introduction.

45. In this section, we propose a number of application processing changes that we believe would eliminate unnecessary administrative burdens and shorten processing time frames for certain applications. As discussed in detail below, we propose to extend our first come/first served procedures to AM, NCE FM and FM translator minor change applications. We also propose to expand the definition of "minor change" for the AM, NCE FM and FM translator services to conform to the commercial FM minor change definition. Furthermore, we propose to replace the current two-step application process for coordinate corrections and FM translator power reductions with single-step application procedures.

2. Extending First Come/First Served Processing to AM, NCE FM and FM Translator Minor Change Applications

46. *Background.* Under our present rules, minor change applications for non-reserved FM band broadcast stations are subject to "first come/first served" processing, whereby a first-filed application cuts off the filing rights of subsequent, mutually exclusive proposals.[74] Minor changes for AM, reserved FM band and FM translator stations do not receive such cut-off protection, but remain subject to competing proposals until the staff disposes of the applications.[75] This policy imposes significant uncertainty and delay on minor change

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approximately 11 kilometers and first-adjacent channel spacing requirements by between 12 and 21 kilometers.

[73] *See Docket 80-90 MO&O*, 97 FCC 2d at 285 (adopting "16 kilometer buffer, in addition to the normal distance separation requirements, to existing Class C stations currently operating with an HAAT of less than 300 meters.").

[74] 47 C.F.R. § 73.3573(g)(3); *see Amendment of Sections 73.3572 and 73.3573 Relating to Processing of FM and TV Broadcast Applications, Report and Order* in MM Docket 84-750, 50 Fed. Reg. 19936, 19941-42, *recon. den.*, 50 Fed.Reg. 43157 (1985); *see also Amendment of the Commission's Rules to Permit FM Channel and Class Modifications by Application, Report and Order* in MM Docket 92-159, 8 FCC Rcd 4735, 4738-39 (1993) (minor change applications protected against subsequently-filed, conflicting rulemaking petitions).

[75] *See* 47 C.F.R. §§ 73.3571 (Processing of AM broadcast station applications), 73.3573 (NCE FM), and 74.1233 (FM translator).

applicants in these services: at any time during the pendency of an application, a conflicting proposal may be filed that could halt further processing of the application and necessitate a technical amendment, settlement between the parties or designation of the mutually exclusive applications for comparative hearing.[76] The uncertainty persists through the entire application process. The prospect of expending significant resources to prosecute an application without any certainty of grant may substantially deter applicants from seeking to improve service.

47. *Discussion*. We propose to extend application of the first come/first served processing system to AM, NCE FM and FM translator minor change applications. We believe that the unlimited exposure to conflicting applications and the concomitant expense and delay under the current policy is both inequitable and inconsistent with our treatment of minor changes for FM commercial band stations. We anticipate that this proposal would effectively remedy the uncertainty and delay presently associated with AM, NCE FM and FM translator minor change applications.[77] We also believe that cut-off protection would serve the public interest by encouraging potential applicants to file for enhanced facilities while minimizing the resources expended by the Commission and applicants in resolving conflicts between minor change applications. We are mindful that adoption of this proposal may restrict the ability of other parties to file competing proposals that would be precluded by grant of the first-filed application. We believe that the certainty and protection from delay that the proposed procedures would provide are sufficient to offset the lessened opportunity for the filing of competing applications. We invite comment on this proposal.

3. Revisions to the Definition of "Minor" Change in AM, NCE FM, and FM Translator Services

48. *Background.* Under our present rules, a proposed change in the facilities of an existing commercial FM band station is classified as a major change only if it involves a change in community of license and/or certain changes in frequency and/or class.[78] For AM, NCE FM and FM translator stations, however, various other facility changes also are classified as major changes: (1) for AM stations, most proposed increases in power;[79] (2) for NCE FM stations, any proposed change of 50 percent or more in the station's

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[76] *See Auction NPRM*, 12 FCC Rcd 22363, 22364-67 (1997), regarding delays in resolving comparative broadcast proceedings. The Commission asked for comment in the *Auction NPRM* on whether conflicting major and minor modification applications should be treated as subject to auctions under Section 309(j) of the Communications Act. *See Auction NPRM*, 12 FCC Rcd at 22382.

[77] *See Conflicts Between Applications and Petitions for Rulemaking to Amend the FM Table of Allotments, Report and Order* in MM Docket No. 91-348, 7 FCC Rcd 4917, 4919 (1992) (cut-off procedures in rulemaking petition and commercial FM band application proceedings "have proven effective in providing certainty to parties and avoiding unnecessary delays in processing").

[78] 47 C.F.R. § 73.3573(a)(1) classifies certain class and channel changes as minor. These include proposals filed by licensees and permittees for a higher or lower class allotment on a co- or adjacent channel or on an intermediate frequency.

[79] *Id.* at § 73.3571(a)(1). The rule establishes an exception where the station's radiation levels in all directions remain the same due to a reduction of antenna efficiency. *Id.* Changes in hours of operation also are classified as major changes for AM stations due to the complex propagation characteristics of AM signals. *Id.* Finally, a Class D station proposing a night-time power increase up to 250 watts (141 mV/m at 1 kilometer equivalent) is treated as a minor change. *Id.*

predicted 1 mV/m (60 dBu) coverage area;[80] and (3) for FM translators, any proposed change or increase of over 10 percent in the 1 mV/m coverage area.[81] Accordingly, facility modification applications in these services may be subject to additional administrative procedures. These include the statutory requirements that the Commission provide a thirty-day public notice period following the acceptance of a major change application and the opportunity to file petitions to deny and competing applications within the thirty-day period.[82]

49. We perceive no compelling reason to impose these burdens and delays on proposals that are fundamentally technical and minor in nature. Staff review for major and minor change applications is essentially the same, and is primarily an engineering function.[83] If the Commission decides to expand the definition of "minor change" as proposed in this *Notice*, it would continue to provide public notice of the tendering of the applications and the public would continue to have an opportunity to file informal objections and seek reconsideration of staff actions.[84] We believe that these procedures provide adequate safeguards for public participation. We are aware that such treatment, as set forth more fully below, together with our above-stated proposal to provide cut-off protection for minor change applications, would enable AM, NCE FM and FM translator stations to make certain facility changes without being subject to competing applications.[85] We do not believe, however, that other prospective applicants would be unfairly prejudiced by this policy because prospective applicants have the ability to predict whether other area stations have the potential to seek facilities increases based on applicable contour protection requirements and to file first for enhanced facilities.[86] Thus, the process would be designed to favor the party that is most prompt in submitting its request to the Commission. Furthermore, regardless of whether classified as a major or a minor change, the potential preclusive impact of a proposed facilities increase in the AM, NCE FM or FM translator service is necessarily limited by applicable contour protection requirements.

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[80] *Id.* at 73.3573(a)(1). This standard formerly was applied to commercial FM band stations as well. *See Matter of Revision of Sections 73.3571, 73.3572 and 73.3573 of the Commission's Rules, First Report and Order* in MM Docket 83-1377, 56 RR 2d 941, 943 (1984).

[81] *Id.* at § 74.1233.

[82] *See* 47 U.S.C. § 309(b); 47 C.F.R. §§ 73.3573(e), 73.3580.

[83] *See First Report and Order,* 56 RR 2d at 943.

[84] 47 U.S.C. § 405; 47 C.F.R. §§ 1.106, 73.3564, 73.3587; *see First Report and Order*, 56 Rad. Reg. 2d at 943-44 (employing similar analysis in classifying commercial FM band station facilities increases as minor changes).

[85] *See, e.g., Report and Order,* 8 FCC Rcd at 4738 (acknowledging that adopting cut-off protection for minor change applications could foreclose prospective petitioners' opportunities to request modifications); *Amendment of Part 74 of the Commission's Rules Concerning Translator Stations, Report and Order* in MM Docket 88-140, 5 FCC Rcd 7212, 7224 (1990) (rejecting suggestions that changes in FM translator coverage areas greater than 10 percent be classified as minor changes based on concern over enabling translators to increase coverage significantly without being subject to competing applications).

[86] *See* 47 C.F.R. §§ 73.37(a) (AM daytime contour protection requirements); 73.182(q) (AM nighttime contour protection requirements); 73.509 (NCE FM stations must protect 1 mV/m contour of NCE FM stations); 74.1204 (FM translators must protect primary service contours of existing FM and FM translator stations); *see also Report and Order,* 8 FCC Rcd at 4738 (employing similar reasoning in adopting cut-off protection for minor change applications against rulemaking petitions)

50. Accordingly, we propose to expand the definition of minor change for the AM, NCE FM and FM translator services to conform to the commercial FM "minor change" definition. Thus, only applications to change community of license and to change to a non-mutually exclusive channel and class would be classified as "major" changes.[87] To prevent NCE FM and FM translator stations from abandoning their present service areas, however, we propose to require these stations to continue to provide 1 mV/m service to some portion of their presently authorized 1 mV/m service areas in order for their applications to be classified as minor changes.[88] We tentatively conclude that this proposal would eliminate the present inconsistent treatment of proposed facilities increases for different radio services without undermining the administration of any Commission rule or policy. In addition, we anticipate that this proposal would expedite the application process for certain applications and, thus, speed the introduction of improved service to the public. We invite comment on this proposal.

4. Coordinate Corrections by Single Application for Licensed Stations

51. *Background.* Presently, broadcast stations seeking to correct coordinates must file a construction permit application, and after grant, a license application.[89] Coordinate corrections, however, are generally considered to be minor changes to broadcast facilities because they do not involve physical changes to the facilities or a change in licensed parameters. It has been our experience that minor coordinate corrections do not cause conflicts with other stations. Accordingly, we believe that for many coordinate corrections the two-application procedure is unduly burdensome. We also believe that eliminating the separate license application requirement will reduce the burden on applicants as well as the Commission, and reduce the time necessary to license the coordinate correction.

52. *Discussion.* We propose to adopt new provisions in Parts 73 and 74 to allow corrections of coordinates for broadcast facilities, where no other licensed parameters are changed, via a single license application. We also propose to require the applicant to certify that all licensed parameters not altered in the license application would remain unchanged. Under our proposal, the applicant would not be required to file a separate construction permit. We propose to make this procedure available where the correction would be less than 3 seconds latitude and 3 seconds longitude, provided that the applicant has sought FAA clearance and antenna structure registration.[90] We seek comment on this proposal and whether an alternative standard should

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[87] We propose to continue to treat AM applications to change from Class B to Class D as "minor" changes.

[88] Commercial FM and AM stations presently are required to maintain 3.16 mV/m and 5 mV/m contours, respectively, over their communities of license. *See* 47 C.F.R. §§ 73.24(i), 73.315(a).

[89] *See* 47 C.F.R. § § 73.1690(b)(2) and 73.3536. Applications for construction permits must be filed on FCC Form 301 for commercial stations, Form 340 for noncommercial educational stations and Form 349 for FM translator and booster stations. License applications are filed on FCC Form 302 or 350 as appropriate

[90] In 1996, the Commission received comments in response to the *Notice of Proposed Rulemaking* in MM Docket 96-58 requesting that a rule be adopted to allow a coordinate correction in a modification of license application, thereby eliminating the requirement for a construction permit. *See Certain Minor Changes in Broadcast Facilities Without a Construction Permit, Notice of Proposed Rulemaking*, 11 FCC Rcd 8800 (1996). The Commission denied the request stating that the proposed one-step procedure could invite abuse by applicants "correcting" coordinates to a short-spaced transmitter site or a site involving prohibited contour overlap. By retaining the construction permit process, the Commission indicated that the safeguards against abuse inherent in the construction permit process would be not be lost. *See Certain Minor Changes in Broadcast Facilities without a Construction Permit, Report and Order*, 12 FCC Rcd 12371 (1997). We now believe that limiting one-step license application coordinate corrections to

be adopted. We also propose to continue our policy of issuing public notices announcing the receipt of the application, and the processing of the coordinate correction as if it were a routine minor change application. However, in the event the coordinate correction establishes a violation of our technical rules, the Commission would retain a full range of options including the designation of the license application for hearing[91] and the issuance of an order to show cause why the construction permit should not be revoked.[92] We propose to require any permittee that discovers an antenna structure coordinate error to file an application to modify its outstanding construction permit. We tentatively conclude that the Commission may adopt this change in licensing procedures pursuant to Section 319(d) of the Communications Act.[93] We believe that this process would permit full staff review and a meaningful opportunity to file informal objections. We seek comment on these proposals.

5. FM Translator and Booster Station Power Reductions by Single Application

53. *Background.* Currently, FM translator and booster station licensees seeking to decrease power must comply with a two-step application process. First, an application must be filed requesting a construction permit authorizing the proposed decrease in effective radiated power (ERP).[94] Second, prior to commencing operations, a license application must be filed for a license for the modified facilities.[95] *See* 47 U.S.C. § 319(d). We have found, however, when reviewing license renewals that many FM translator and booster stations are actually operating at a power less than that specified in their license. In order to authorize the reduced power operation, we now require licensees to go through the two-step process. In addition, FM translator licensees may resolve an interference complaint by a reduction in power. In this instance, the two-step process delays the resolution of the interference problem.

54. *Discussion.* In order to expedite FM station license modifications in these circumstances, we propose to eliminate the two-step application process for FM translator and booster stations seeking to decrease ERP. We tentatively conclude that recent changes in Section 319 of the Communications Act permit the Commission to adopt this one step licensing procedure.[96] We seek comment on this view. In these instances, we would permit licensees to decrease their ERP after the filing of a license application proposing the power decrease. Initial construction permits for these secondary facilities are reviewed for compliance with border agreements, overlap with any authorized facilities, and overlap with channel 6 television reception. A proposal to decrease the authorized ERP of such a station would not require a further review of these issues. In addition,

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situations involving less than 3 seconds of longitude and latitude would provide adequate safeguards. We seek comment on this tentative conclusion.

[91] *See* 47 U.S.C. § 319(c).

[92] *See* 47 U.S.C. §§ 312(a)(2), 319(c).

[93] *See Telecommunications Act of 1996,* Pub. L. No. 104-104, § 403(m), 110 Stat. 56 (1996).

[94] FCC Form 349.

[95] FCC Form 350.

[96] In 1996, Congress amended Section 319 of the Act to authorize the Commission to waive the requirement for a construction permit for minor changes in the facilities of authorized broadcast stations. *Telecommunications Act of 1996,* Pub. L. No. 104-104, § 403(m), 110 Stat. 56 (1996).

there are no minimum coverage requirements which would necessitate prior approval of reductions in power.[97] Accordingly, we tentatively conclude that the adoption of a one-step licensing procedure for these applications would be appropriate. We seek comment on this proposal.[98]

F. Relaxed Noncommercial Educational FM and Translator Technical Requirements

1. Second-Adjacent Channel Interference Ratios for Predicting Prohibited Overlap in the Reserved Band

55. *Background*. The Commission's commercial FM station interference protection standards require stations operating on the same channel or any of the first three adjacent channels to meet certain minimum distance standards.[99] These minimum distances were derived by computing predicted interfering and predicted service contours of stations operating at class maximums. Thus, no prohibited overlap can occur if stations meet the full spacing requirements of Section 73.207. Noncommercial educational FM stations also are protected from interference by stations operating on co-and the first three adjacent channels under the rules, which generally prohibit the overlap of one station's protected service contour and a second stations interfering contour.[100] Analytically, where no overlap occurs, no interference is predicted. The noncommercial rules do not specify minimum distance separation requirements. Actual, rather than maximum class facilities are used to calculate whether prohibited overlap would occur. Thus, the location of a station's service and interfering contours determines the preclusionary impact of such stations on other potential cochannel and adjacent channel facilities. Pursuant to these requirements, a second-adjacent channel FM educational station operating on Channels 201 through 220 (88.1 MHz through 91.9 MHz) may not place its interfering contour over the protected contour of a station operating on a second-adjacent frequency. Similarly, an FM translator applicant must avoid overlap of its 80 dBu interfering contour with the protected contour of any other station operating on a second adjacent channel.[101] Although both commercial and noncommercial FM interference standards are derived from a common methodology, the commercial rules use a less preclusive 100 dBu interfering contour to calculate minimum distance separations for stations operating on second-adjacent frequencies.[102]

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97 *See Ted Tucker and Jan Tucker*, 4 FCC Rcd 2816, 2817 (1989).

98 In *Amendments of Parts 73 and 74 of the Commission's Rules to Permit Certain Minor Changes in Broadcast Facilities without a Construction Permit,* 12 FCC Rcd 12371 (1997) the Commission adopted a similar one-step license process for eligible FM commercial stations to decrease power.

99 *See* 47 C.F.R. § § 73.207 and 73.215.

100 *See* 47 C.F.R. § 73.509 (defining prohibited overlap contours for station operating on the same channel or any of the first three adjacent channels).

101 A second-adjacent translator must avoid overlap of its 77 and 74 dBu interfering contours with the protected contour of class B1 and B stations in the reserved band, respectively.

102 This inconsistency can be traced to 1962 when the Commission modified the spacing requirements to require the transmitter site of any interfering second and third-adjacent channel station be located outside the protected station's service area. *See Revision of FM Rules,* 23 Rad. Reg. 1801 (1962). This modification eliminated any distinction between second and third-adjacent channel commercial stations for Section 73.207 purposes. No parallel modification was adopted for noncommercial educational stations or FM translators stations.

56. *Discussion.* We propose to eliminate the inconsistency between the commercial and noncommercial station interference protection standards. Specifically, we propose to modify Sections 73.509 and 74.1204(a) to specify a 100 dBu interfering contour for second-adjacent channel noncommercial educational and FM translator stations.[103] Based on our licensing experience in the commercial FM band, we believe that this preclusive standard better identifies areas of potentially degraded or lost service within a station's protected service area caused by another station operating on a second adjacent channel. We also believe it would afford certain FM educational and translator stations an opportunity to increase power and service, and provide flexibility to relocate facilities. In addition, the proposed change would permit some stations the opportunity to increase effective radiated power and, therefore, coverage at a relatively low cost. We find no reason for FM translators covered by 47 C.F.R. § 74.1204(a) to be held to more stringent requirements than full service FM commercial and noncommercial educational stations. We seek comment on this proposed rule change.

2. Minimum Coverage of the Community of License by NCE FM Stations

57. *Background.* The Commission's rules do not require NCE FM stations operating in the reserved band (Channels 201 to 220) to place a minimum field strength signal over their communities of license, unlike their commercial counterparts.[104] The Commission enacted this policy based on the fact that many NCE FM stations operate at low power levels and simply could not provide coverage to the entire area within the legal boundaries of its community of license.[105] The Commission also recognized that NCE FM stations are generally dependent on listener support, and may not have the financial resources to construct facilities that serve the entire community of license. In addition, a NCE FM station's programming is often oriented toward a particular audience (*e.g.*, a college campus). However, public interest concerns are raised where an NCE FM station covers *no* portion of its community of license with its 60 dBu contour. The association of a broadcast station with a community of license is a basic tenet of the Commission's allocation scheme for broadcast stations.[106] The 60 dBu contour defines the area within which a station provides a generally listenable signal and which the Commission's rules protect from interference. Where no part of the community of license lies within the 60 dBu protected service contour, the community is at risk of losing all service from the station licensed to it should a second station obtain an authorization for new or modified facilities that precludes the ability of the first station to place its 60 dBu contour over the community of license.

58. *Discussion*. We propose to delete the note to Section 73.315(a) and to add a provision requiring FM noncommercial educational stations to provide 60 dBu (1 mV/m) service to at least a portion of the community of license. We recognize that many noncommercial educational stations cannot cover their entire community of license with a 60 dBu strength signal. We believe this proposal would give NCE FM applicants significant flexibility to locate technical facilities, consistent with the Commission's statutory licensing requirements. We seek comment on this proposal and on the percent of the population and/or area

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[103] The 97 and 94 dBu interfering contours will be specified for second-adjacent channel FM translator stations protecting class B1 and B stations in the reserved band, respectively.

[104] 47 C.F.R. § 73.315(a) requires commercial FM stations to place the 70 dBu F(50,50) contour over the community of license. The "Note" to this rule section specifically exempts noncommercial educational stations operating in the reserved band from this requirement.

[105] *See Amendments to Parts 73 and 74 of the Commission's Rules to Permit Certain Minor Changes in Broadcast Facilities Without a Construction Permit,* 12 FCC Rcd 12371, 12380 n. 11 (1997).

[106] *See* 47 U.S.C. § 307(b).

of the community that should be covered. In the event that an NCE FM community coverage standard is adopted, we propose to apply the rule only to new station and modification applications filed after the effective date of this new rule. We seek comment on these tentative conclusions.

3. Revisions to Class D Rules

59. *Background.* The Commission created a low power NCE FM Class D service in 1948, as an inexpensive means of encouraging the FM broadcasting service and as a substitute for the "campus broadcasting systems" then in use.[107] By 1976, however, the demand for NCE FM licenses had increased dramatically, prompting the Commission to initiate a rule making proceeding to determine how to foster the most effective use of NCE FM spectrum.[108] The Commission concluded that Class D stations constituted an inefficient use of spectrum, and adopted measures to minimize their negative impact on the development of the NCE FM radio service. Specifically, the Commission encouraged Class D stations to upgrade to Class A status. It required Class D stations that did not upgrade to migrate to a commercial FM channel or Channel 200, where they would have secondary status. Those stations unable to migrate would be required to move to the reserved band channel with "the least preclusionary impact on other potential stations[.]" In addition, the Commission ended Class D stations' protection against interference and imposed a permanent freeze on applications for new Class D stations.[109] These measures and others adopted in the same proceeding have fostered a more efficient use of the NCE FM spectrum.[110]

60. The Commission remains committed to promoting the full use of the NCE FM channels. Congestion in the reserved band has increased during the past twenty years, and demand for NCE FM licenses remains high.[111] Furthermore, a recent staff study reveals that a number of the remaining Class D stations with reserved band authorizations are causing interference to full service NCE FM stations.[112] We believe, therefore, that certain modifications to our Class D policies are appropriate. We anticipate that the changes proposed herein would serve the Commission's original objective while avoiding the unnecessary cancellation of Class D licenses. In addition, we believe that the proposed changes would simplify and expedite Class D

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[107] *Memorandum Opinion and Order*, 16 FCC 2d 429, 429-430 (1969) (rejecting proposed increase in permissible transmitter output power for Class D stations).

[108] *See Changes in the Rules Relating to Noncommercial Educational FM Broadcast Stations, Second Report and Order* in Docket No. 20735, 44 RR 2d 235, 236-39 (1978) ("*Second Report and Order*"), *modified, Memorandum Opinion and Order*, 70 FCC 2d 972, 974 (1979) ("*MO&O*").

[109] *See Second Report and Order*, 44 RR 2d at 244-47; *see also MO&O* at 977, n. 11. This notice neither makes nor proposes any change to this permanent freeze policy. We note that the Commission has requested public comment on two rulemaking petitions to establish a low power or microbroadcasting service. *See Public Notice*, Report No. 2254 (released February 5, 1998) (RM # 9208); *Public Notice*, Report No. 2262 (released March 12, 1998) (RM # 9242) (erratum).

[110] For example, whereas there were 314 authorized NCE FM stations in 1966, when the issue of what to do with Class D stations first arose, *see Notice of Inquiry* in Docket 14185, 5 FCC 2d 587, 588-89 (1966), there are now 1,947 authorized NCE FM stations.

[111] *See, e.g., Educational Information Corp.*, 6 FCC Rcd 2207, 2208 (1991).

[112] The study reveals that 38 of the 70 Class D stations with reserved band licenses are causing interference.

station licensing and renewal procedures.

61. *Discussion.* Under Section 73.512(a), Class D stations are required with each renewal cycle to migrate to an available commercial channel or Channel 200, or demonstrate the unavailability of such channels.[113] We do not believe the administrative burdens these requirements impose on both licensees and the Commission staff are warranted where an existing Class D station is operating on an NCE FM channel without objectionable interference. Accordingly, we propose to permit Class D stations to operate on any channel where no interference (as defined by Section 73.509(b)) would be caused to any broadcast station, and to eliminate the requirement that Class D licensees with reserved band authorizations demonstrate the unavailability of any commercial FM channel or Channel 200 in their license renewal applications. Under this proposal, the staff would handle channel location issues as they arise rather than addressing them as license renewal issues. In addition to reducing unnecessary administrative burdens, we anticipate that this proposal would simplify and expedite the renewal process for Class D stations. We also anticipate that this proposal would facilitate improved service by Class D stations. Whereas the current rules require Class D stations to migrate to available commercial channels or Channel 200 and contain no provision for such stations to move back to the reserved band, the proposed new rules would allow existing Class D stations to relocate to any available interference-free reserved or nonreserved channel in order to avoid receiving interference from full power FM stations, or for any other reason.

62. With regard to Class D stations that are causing or are predicted to cause interference (as defined by Section 73.509(b)) on their current channel, we propose to apply the following standards: first, stations would be required to move to an available interference-free channel; second, if no interference-free channel is available, stations would be required to move to an NCE FM channel that would result in only second- and/or third-adjacent channel contour overlap;[114] and third, if no channel is available that would be either interference-free or create only second- and/or third-adjacent channel interference, the station would be required to obtain the consent of each affected NCE FM station subject to co- or first-adjacent channel interference as a condition for continued operation. The Commission has observed that co- or first-adjacent channel overlap is a more serious matter than second or third adjacent channel overlap because "the interference that may occur results in the loss of service over a wide area."[115] "Second or third adjacent channel overlap may result in the replacement of one signal by another (not the complete loss of service) and is confined to a very small area around the transmitter of the interfering station."[116] In the case of low power Class D stations, the potential interference area would be exceedingly small.[117] Accordingly, we believe that second- and third-

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[113] 47 C.F.R. § 73.512(a); *see Letter to Jerry A Kimbro*, Ref. No. 1800B3-BJB/KDY at 5, n. 11 (Chief, Audio Services Division Oct. 6, 1994) ("The Commission staff will determine a Class D station's compliance with 47 C.F.R. § 73.512(a) with every renewal cycle.").

[114] The current rules define Class D stations operating in the non-reserved band as "secondary," and we propose no change in this definition. *See* 47 C.F.R. § 73.506(a). Thus, under both the current rules and our proposal, no Class D station may be licensed to operate on a commercial FM channel with predicted interference to a full power station. For purposes of this Class D channel displacement discussion, Channel 200 is treated as an NCE FM channel.

[115] *Educational Information Corp.*, 6 FCC Rcd at 2208.

[116] *Id.* (In addition, the potential for such interference to occur depends to a great extent on the quality of the receivers used within the affected area.").

[117] *See id.*

adjacent NCE FM channel overlap should be permitted where there is no available interference-free channel for a Class D station. Should there be a number of potential channels for an existing Class D station in this situation to choose from, we propose to require applicants to adhere to the following frequency selection criteria: first, we would prefer overlap beyond an affected station's community of license to overlap within the licensed community; second, we would prefer third to second adjacent channel overlap; and third, we would prefer overlap involving the smallest percentage of population in a station's coverage area, so that there would be the least possible adverse impact on the affected station. In conjunction with these changes, we also propose to eliminate the "least preclusion" requirement, which is inadequately defined in the existing rules and has proved impracticable. *See* 47 C.F.R. § 73.512(a)(3). With regard to Class D stations presently causing second or third adjacent channel overlap in the NCE FM band, we invite comment as to whether such stations should be allowed to remain on their present channels absent actual complaints of interference or required to move in accordance with the standards proposed herein.[118]

63. A recent staff study reveals that every Class D station authorized to operate on a reserved band frequency has available at the present time an NCE FM channel on which it could operate free of co- or first-adjacent channel contour overlap. However, in the event that changes in NCE FM authorizations create a situation where no channel free of co- and first-adjacent channel interference is available, we propose to require the Class D station to obtain the consent of the affected NCE FM station(s) as a condition for continued operation.[119] In the event that no agreement is reached, the Class D station would be required to cease operation when program tests for the affected station commence,[120] and would have up to one year to obtain the required consent.[121] We anticipate that such situations would arise only very rarely, and encourage affected stations to cooperate fully with each other. Nevertheless, we are mindful of the possibility that the proposed rules could result in the cancellation of some Class D licenses in the future. The Commission recognized the same possibility when it adopted the transitional Class D measures of the *Second Report and Order*.[122] Having balanced its competing concerns of inefficiency and fairness to Class D stations, however, it concluded that the potential public interest benefits involved warranted its action.[123] We tentatively reach the same conclusion here.

64. *Revise Class D Definition Based on Transmitter Power Output.* The current rules define Class D stations as stations with transmitter power output ("TPO") of 10 watts or less.[124] Higher class NCE FM stations, however, are defined by their predicted 1 mV/m (60 dBu) contour distances, as determined by

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[118] There is no present "actual interference" standard in the rules governing Class D stations. Rather, interference is determined based on predicted contour overlap. *See* 47 C.F.R. § 73.509(b). An "actual interference" standard is applied to FM translator and booster stations. *See id.* at § 74.1203.

[119] We would allow Class D licensees to obtain such consent not only for the channel they are currently operating on but for any NCE FM channel or Channel 200.

[120] *Cf.* 47 C.F.R. § 73.512(d).

[121] *See* 47 U.S.C. § 312(g) (station license expires at the end of consecutive 12-month period of silence).

[122] *Second Report and Order*, 44 RR 2d at 245; *see MO&O* at 980.

[123] *Id.*

[124] *See* 47 C.F.R. § 73.506(a).

power and antenna height in accordance with Section 73.211(b).[125] We propose to conform the definition of Class D stations to that of higher class NCE FM stations, by eliminating the TPO restriction and instead defining Class D stations as stations with predicted 60 dBu contour distances not exceeding five kilometers, as determined in accordance with Section 73.211(b). Because this standard would provide Class D stations with greater flexibility in choosing power and antenna height combinations, we anticipate that it would enable Class D stations to improve service without increasing their interference potential. We are aware of five Class D stations with predicted 60 dBu contour distances exceeding the proposed five kilometer restriction. We propose to grandfather such "superpowered" Class D facilities, permitting them to continue to operate as Class D stations at their present power and antenna height and to modify their facilities provided they do not extend their predicted 60 dBu contour distances. In this regard, we also propose to grandfather "underpowered" Class A facilities. These stations were authorized prior to the adoption of the Class A minimum power and antenna height requirements and do not currently meet such requirements. 47 C.F.R. § 73.211(a)(3). In practice, such stations currently are treated as Class A facilities.

65. *Classify Construction Permit Applications as Minor Changes.* As noted above, the Commission imposed a permanent freeze in 1978 on the filing of applications for new Class D stations. Certain Class D construction permit applications, including those proposing operation on a new channel, are treated as major change applications. We propose to consider all Class D facility applications as minor change applications that would be processed under our more efficient "first come/first served" procedures.[126] In light of the unprotected status of Class D stations, only other Class D applications would be affected by this proposal,[127] and mutually exclusive Class D applications are extremely unlikely due to the low power and relatively small number of Class D stations.[128] By eliminating the 30-day public notice period for Class D permit applications, we anticipate that this proposal would expedite processing of such applications, conferring an important benefit on displaced Class D stations. We invite comment as to whether an application by a Class D station proposing to upgrade to Class A status, a modification that would confer protected status on such station, should be classified as a major change.

66. Consistent with the above, we propose to permit Class D stations to propose changes of licensed community or of 50 percent or more of the area within their predicted 1 mV/m contour areas provided their applications demonstrate that they would maintain continuity of service to their core audience. The present rules prohibit such changes in order to prevent the establishment of "new" Class D stations.[129] We believe this proposal would better effectuate the purpose of the present rules while providing Class D stations with greater flexibility to propose service improvements. We seek comment on these proposals.

67. *Revise Contour Protection Requirements for Class B and B1 Stations.* Section 73.509(b) requires Class D stations to protect the 1 mV/m (60 dBu) contour of all other broadcast stations, regardless

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125 47 C.F.R. § 73.211(b); *see id.* at § 73.511.

126 47 C.F.R. §§ 73.3573, 73.3580.

127 47 C.F.R. § 73.509(b); *see Second Report and Order* at 246-47.

128 We are unaware of any mutually exclusive Class D applications during the past decade.

129 47 C.F.R. §§ 73.512(c), 73.3573(a)(1); *see supra*, n. 104 and accompanying text.

of class or location on the FM band.[130] Commercial Class B and B1 FM stations, however, traditionally have received greater protection to their 0.5 mV/m (54 dBu) and 0.7 mV/m (57 dBu) contours, respectively.[131] Accordingly, we propose to modify Section 73.509(b) to require Class D stations to protect commercial Class B and B1 stations, as well as NCE FM Class B and B1 stations operating on commercial channels, to their respective 54 dBu and 57 dBu contours. We invite comment as to whether
Class D stations that currently are required to protect the 60 dBu contours of Class B or B1 stations but would not comply with the proposed new standard should be permitted to continue to operate at their present powers and antenna heights absent actual interference complaints.

68. We invite comment on these Class D station proposals. Are they warranted in the interest of improved NCE FM channel use? Would they promote more efficient use of NCE FM channels? Should we apply to Class D stations the "actual interference" standard applicable to FM translators?[132] Would the proposed changes sufficiently protect the ability of Class D stations to continue to operate?

IV. Minor Rule Changes

69. The following revisions are being made in this proceeding in order to clarify and correct existing rule sections. Because these revisions are non-controversial and will have no adverse effect on any party, we find that notice and comment procedures are unnecessary and need not be followed prior to their adoption.[133] Rule revisions are set forth in Appendix D to this *Notice.* We explain these revisions briefly below.

70. Numerous rule sections that require the submission of informal letters to the Commission for various types of notifications or requests state erroneous addresses where the submissions should be sent. Accordingly, we shall amend the following rule sections to include the proper address within the Commission to which the submission should be sent: Sections 73.45, 73.54, 73.58, 73.68, 73.258, 73.561, 73.1350, 73.1560, 73.1580, 73.1750, 73.3542, 73.3544, 73.3549, 74.734, 74.751, 74.763, 74.784, 74.1231, and 74.1234.

71. We shall adopt revisions to 47 C.F.R. § 74.1235 of the Commission's rules with respect to the protection that must be afforded to and received from FM translator stations within 320 kilometers of the Canadian and Mexican borders. These revised protection requirements were promulgated in the Agreement Between the Government of the United States of America and the Government of the United Mexican States Relating to the FM Broadcasting Service in the Band 88-108 MHz, dated August 11, 1992 and a separate exchange of Diplomatic Notes that modified provisions of the existing Agreement between the Government of the United States of America and the Government of Canada concerning the use of the 88 to 108 MHz

130 47 C.F.R. § 73.509(b).

131 *See Amendment of Part 73 of the Commission's Rules to Permit Short-Spaced FM Station Assignments by Using Directional Antennas, Report and Order* in MM Docket 87-121, 4 FCC Rcd 1681, 1687 (1989).

132 *See* 47 C.F.R. § 74.1203.

133 *See* 5 U.S.C. § 553(a)(1), (b)(3)(B); 47 C.F.R. § 1.412(c).

frequency band for frequency modulation broadcasting (FM), dated February 25, 1991.[134] The rule revisions conform the rule to the Agreements. These changes will have no adverse effect on any existing or presently proposed FM translator station: in all cases, the revised protection requirements are less restrictive than the requirements presently specified in the rule.

72. We shall delete 47 C.F.R. § 73.33 ("Antenna systems; showing required") of the Commission's rules, which duplicates Section 73.45(a) ("AM antenna systems"). We also shall delete the reference to Section 73.1130 ("Station program origination") contained in the table of rule sections at the beginning of Part 73, subpart H of the Commission's rules. Section 73.1130 was eliminated by the *Report and Order* in MM Docket 86-406, 2 FCC Rcd 3215 (1987). In addition, we shall add references to Section 73.1692 of the Commission's rules, which was adopted in the *Report and Order* in MM Docket 96-58, 12 FCC Rcd 12371 (1997), to the index of rule sections at the end of Part 73. Furthermore, we shall correct a typographical error in Section 73.312(b) ("Topographic data"), an error in the instructions for use of the F(50,50) field strength chart in Section 73.313(c)(2) ("Prediction of coverage"), and convert the English unit measurements to metric units in Section 73.151 ("Field strength measurements to establish performance of directional antennas"), consistent with the rest of the Commission's rules.

73. In *Grandfathered Short-Spaced FM Stations*, 12 FCC Rcd 11840 (1997), the Commission clarified and revised the rules for pre-1964 grandfathered short-spaced FM radio broadcast stations to streamline the method of proposing modifications to existing facilities. The order adopted rules allowing grandfathered stations to modify facilities based on the ratio method of interference calculation. We specifically rejected a commenter's suggestion that the Commission should ignore interference received beyond the current service contour.[135] Recognizing the need for flexibility in selecting tower sites, we acknowledged that applicants could increase interference received in conjunction with a corresponding decrease in interference caused. However, as written, the rule can be interpreted as permitting such an increase in interference received without a corresponding reduction in interference caused. Therefore, we are amending 47 C.F.R. Section 73.213(a) to conform it to the actions taken in that order.

74. Finally, we add two new rule sections, 47 C.F.R. §§ 73.3617 and 74.1290, that will refer interested parties to the information contained on the Mass Media Bureau's World Wide Web site.

V. Administrative Matters

75. *Comments and Reply Comments.* Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415 and 1.419, interested persons shall file comments within sixty (60) days of the date of publication of this Notice in the Federal Register and reply comments within ninety (90) days of the date of publication of this Notice in the Federal Register. To file formally in this proceeding, you must file an original plus six copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you must

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[134] *See U.S.-Canada FM Agreement Modified to Permit Added Flexibility for FM Translators in 97-22, Public Notice*, DA 97-1595 (July 28, 1997); *cf. In the Matter of Amendment of Section 73.207(b) of the Commission's Rules Regarding Minimum Distance Separations to Mexican Broadcast Stations, Order*, FCC 97-272 (August 13, 1997).

[135] *See Grandfathered Short-Spaced FM Stations*, 12 FCC Rcd at 11844 ("we do not prohibit an increase in interference received, *provided it is offset by a decrease in interference caused*") (emphasis in original).

file an original plus eleven copies. You should send comments and reply comments to the Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, Room 239, Federal Communications Commission, 1919 M Street, N.W., Washington, D.C.

76. *Initial Paperwork Reduction Act of 1995 Analysis*. This Notice proposes rule and procedural revisions that may contain information collection requirements. As part of our continuing effort to reduce paperwork burdens, we invite the general public and OMB to take this opportunity to comment on the information collection contained in this Notice, as required by the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public and agency comments are due at the same time as other comments in this Notice; OMB comments are due 60 days from the date of publication of this Notice in the Federal Register. Comments should address: (a) whether the proposed collection of data is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition to filing comments with the Secretary, a copy of any comments on the information collections contained herein should be submitted to Judy Boley, Federal Communications Commission, Room 234, 1919 M Street, N.W., Washington, DC 20554, or via the Internet to jboley@fcc.gov and to Timothy Fain, OMB Desk Officer, 10236 NEOB, 725 - 17th Street, N.W., Washington, DC 20503 or via the Internet to fain_t@al.eop.gov.

77. *Ex Parte Rules.* This proceeding will be treated as a "permit-but-disclose" proceeding subject to the "permit-but-disclose" requirements under Section 1.1206(b) of the rules. 47 C.F.R. § 1.1206(b), as revised. *Ex parte* presentations are permissible if disclosed in accordance with Commission rules, except during the Sunshine Agenda period when presentations, ex parte or otherwise, are generally prohibited. Persons making oral *ex parte* presentations are reminded that a memorandum summarizing a presentation must contain a summary of the substance of the presentation and not merely a listing of the subjects discussed. More than a one- or two-sentence description of the views and arguments presented is generally required. See 47 C.F.R. § 1.1206(b)(2), as revised. Additional rules pertaining to oral and written presentations are set forth in Section 1.1206(b).

78. *Initial Regulatory Flexibility Analysis.* With respect to this Notice, an Initial Regulatory Flexibility Analysis ("IRFA") is contained in Appendix A. As required by the Regulatory Flexibility Act,[136] the Commission has prepared an IRFA of the expected significant economic impact on small entities by the policies and rules proposed in this Notice. Written public comments are requested on the IRFA. We ask a number of questions in our IRFA regarding the prevalence of small businesses in the industries covered by this Notice. Comments on the IRFA must be filed in accordance with the same filing deadlines as comments on the Notice and must have a distinct heading designating them as responses to the IRFA.

79. Accordingly, IT IS ORDERED, That pursuant to the authority contained in Sections 4(i), 4(j), 303, 308, 309 and 310 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303, 308, 309, 310, and 319 this Notice of Proposed Rule Making IS ADOPTED.

80. IT IS FURTHER ORDERED, That the minor rule changes set forth in paragraphs 69 to 74 ARE ADOPTED and shall become effective thirty days after publication in the Federal Register. This action

[136] Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. § 601 *et seq.* (1981), as amended.

is taken pursuant to Section 4(1) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. § § 154(i) and 303(r).

81. IT IS FURTHER ORDERED, That the Commission's Office of Public Affairs, Reference Operations Division, SHALL SEND a copy of this Notice, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

82. Additional Information. For additional information on this proceeding, please contact Peter Doyle or Dale Bickel, Audio Services Division, Mass Media Bureau (202) 418-2780.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

APPENDIX A
Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act ("RFA"),[135] the Commission has prepared this present Initial Flexibility Analysis ("IRFA") of the possible significant economic impact on small entities by the policies and rules proposed in this Notice of Proposed Rule Making ("Notice"). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments of the Notice provided above in ¶ 74. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration. *See* 5 U.S.C. § 603(a). In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register. *See id*.

I. Need For and Objectives of the Proposed Rules:

2. This rulemaking proceeding is initiated to obtain comments concerning the Commission's proposed amendment of certain technical rules and policies governing the radio broadcast services-- in order to enhance opportunities for improvement of facilities and service and eliminate unnecessary administrative burdens and delays, while maintaining the technical integrity of the radio broadcast services. This review is taken in conjunction with the Commission's current efforts to streamline its existing rules and eliminate unnecessary or redundant procedural requirements.

II. Legal Basis:

3. Authority for the actions proposed in this *Notice* may be found in Sections 4(i), 4(j), 303, 308, 309, 310 and 319 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303, 308, 309, 310 and 319.

III. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply:

4. RFA generally defines the term "small entity " as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[136] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[137] A

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[135] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et. seq.*, has been amended by the Contract with America Advancement Act of 1996, Pub. L. No. 194-12, 110 Stat. 848 (1996) ("CWAA"). Title II of the CWAA is the Small Business Regulatory Enforcement Fairness Act of 1996 ("SBREFA").

[136] *Id*. § 601(6).

[137] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3). While we tentatively believe that the SBA's definition of "small business" greatly overstates the number of radio broadcast stations that are small businesses and is not suitable for purposes of determining the impact of the proposals on small radio stations, for purposes of this *Notice*, we utilize the SBA's

small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[138] A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[139] Nationwide, as of 1992, there were approximately 275,801 small organizations.[140] "Small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."[141] As of 1992, there were approximately 85,006 such jurisdictions in the United States.[142] This number includes 38,978 counties, cities, and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.[143] The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, we estimate that 81,600 (91 percent) are small entities.

5. The proposed rules and policies will apply to radio broadcasting licensees and potential licensees. The Small Business Administration defines a radio broadcasting station that has no more than $5 million in annual receipts as a small business.[144] A radio broadcasting station is an establishment primarily engaged in broadcasting aural programs by radio to the public.[145] Included in this industry are commercial religious, educational, and other radio stations.[146] Radio broadcasting stations which primarily are engaged in radio broadcasting and which produce radio program materials are similarly included.[147] However, radio stations which are separate establishments and are primarily engaged in producing radio program material

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definition in determining the number of small businesses to which the proposed rules would apply, but we reserve the right to adopt a more suitable definition of "small business" as applied to radio broadcast stations subject to the proposed rules in this *Notice* and to consider further the issue of the number of small entities that are radio broadcasters or other small media entities in the future. *See Report and Order* in MM Docket No. 93-48 (*Children's Television Programming*), 11 FCC Rcd 10660, 10737-38 (1996), *citing* 5 U.S.C. § 601(3).

138 Small Business Act, 15 U.S.C. § 632 (1996).

139 5 U.S.C. § 601(4).

140 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to Office of Advocacy of the U.S. Small Business Administration).

141 5 U.S.C. § 601(5).

142 U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

143 *Id*.

144 13 C.F.R. § 121.201, SIC 4832.

145 Executive Office of the President, Office of Management and Budget, Standard Industrial Classification Manual (1987), SIC 4832.

146 *Id*.

147 *Id*.

are classified under another SIC number.[148] The 1992 Census indicates that 96 percent (5,861 of 6,127) radio station establishments produced less than $5 million in revenue in 1992.[149] Official Commission records indicate that 11,334 individual radio stations were operating in 1992.[150] As of January 31, 1998, official Commission records indicate that 12,241 radio stations were operating, of which 7,488 were FM stations.[151]

6. Thus, the proposed rules will affect some of the 12,241 radio stations, approximately 11,751 of which are small businesses.[152] These estimates may overstate the number of small entities since the revenue figures on which they are based do not include or aggregate revenues from non-radio affiliated companies.

7. In addition to owners of operating radio stations, any entity who seeks or desires to obtain a radio broadcast license may be affected by the proposals contained in this item. The number of entities that may seek to obtain a radio broadcast license is unknown. We invite comment as to such number.

IV. Description of Projected Recording, Recordkeeping, and Other Compliance Requirements:

8. In addition to enhancing opportunities for improvement of radio broadcast technical facilities and service, a number of the measures proposed in this *Notice* would reduce the reporting requirements of prospective and current applicants, permittees and licensees. Among other things, we propose to eliminate the requirement that low power noncommercial educational FM ("NCE FM") Class D stations with reserved band authorizations migrate to available commercial FM channels or Channel 200 or demonstrate the unavailability of any such channel in their license renewal applications, and to replace the current two-step application process for coordinate corrections and FM translator power reductions with single-step application procedures. We also propose to extend our first come/first served procedures to AM, NCE FM and FM translator minor change applications and to expand the definition of "minor change" for these services. These measures are designed to reduce the overall administrative burdens of the Commission's rules on both regulatees and the Commission staff and shorten processing time frames for certain applications.

V. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered:

9. This *Notice* solicits comment on a variety of alternatives discussed herein. These alternatives are intended to enhance opportunities for improvement of technical facilities and service and eliminate unnecessary administrative burdens and delays associated with our radio broadcast licensing processes.

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[148] *Id*.

[149] The Census Bureau counts radio stations located at the same facility as one establishment. Therefore, each co-located AM/FM combination counts as one establishment.

[150] FCC News Release No. 31327, Jan. 13, 1993.

[151] FCC News Release "Broadcast Station Totals as of January 31, 1998."

[152] We use the 96% figure of radio station establishments with less than $5 million revenue from the Census data and apply it to the 12,241 individual station count to arrive at 11,751 individual stations as small businesses.

With regard to the proposed modifications of our low power NCE FM Class D station policies, the Commission has taken steps to avoid the unnecessary cancellation of Class D licenses while promoting the most efficient use of the NCE FM channels.[153] Any significant alternatives presented in the comments will be considered.

VI. Federal Rules that Overlap, Duplicate, or Conflict with the Proposed Rules:

10. None.

[153] *See supra*, para. 58-65.

Appendix B
Point-to-Point Contour Prediction Model

Introduction. This rulemaking proceeding proposes the use, in limited instances (see Paragraphs 28 to 34 of the *NPRM)*, of an alternate method of contour prediction in the FM broadcast services which takes into account the effects of terrain not considered under the standard contour prediction method in 47 C.F.R. §§ 73.313 and 73.333. While the standard method only considers terrain lying between 3 km and 16 km from the transmitter site, the PTP model can consider the effects of terrain as close as 1 km from the transmitter site and as distant as 100 km (or more). The model produces output in terms of a contour, allowing use of the contour protection rules already in place in the FM broadcast service.

In the following sections, we explain the point-to-point contour prediction model developed by the Office of Engineering Technology and Mass Media Bureau to better incorporate the effects of terrain on contour prediction calculations. We also summarize the Fortran 77 code implementing the model and show some sample results.

Criteria Used to Design the Model. The FCC's staff set the following requirements in designing the model. These were:

(1) The output from the model must be in terms of a *contour*, not small cells defining service or lack of service as employed for digital television. Contours are well understood by the broadcast industry, and have been generally effective for many years in preventing interference between FM stations. Use of contours also avoids the arduous task of rewriting the FM broadcast rules to redefine service and interference.

(2) The method employed must be sufficiently automatic so that all parties can achieve the same output, given the same input data. Program variables which require user judgement as to their applicability and value preclude consistent results and engender disputes between parties. "Judgment variables" also can be manipulated to produce a desired but not necessarily correct result. Consequently, we require that any method must automatically determine the program variables to be used.

The PTP model meets these requirements.

Input data. The program requires only data which is readily available to applicants and their engineering consultants. Input parameters are coordinates, height of the antenna radiation center above mean sea level, the effective radiated power, frequency, the contour value sought and the choice of service or interfering contours.

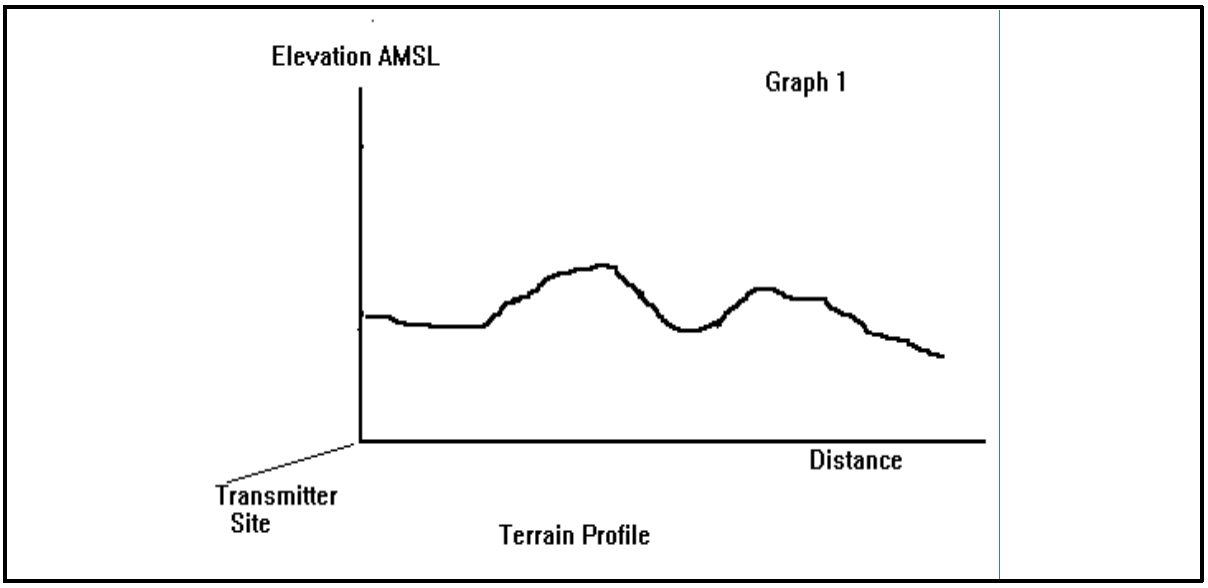
The model requires access to a 3 second or 30 second terrain database. In its present form, the Fortran program code is shown with references to the FCC's 30 second terrain database. These references must be modified to refer to the user's terrain database before the program can be used.

Output. The program is designed to generate a contour as an output as opposed to a cluster of square cells denoting service or lack of it (as is used in digital television). Contour output allows use of the existing Commission rules for contour protection of stations.

Because terrain effects are more accurately represented, the contour produced generally varies more than the same contour predicted by the standard contour prediction method in 47 C.F.R. § 73.313. The effects of terrain on contours will be most noticeable in mountainous terrain.

How the Program Works. In this section, we provide a brief explanation of the PTP program. We start by considering the analysis for an individual radial, since the combined results of a number of radials define the contour.

Create Terrain Profile. Using the terrain database, the PTP program locates a point 0.4 km (0.25 mile) distant from the transmitter site along the radial being considered, and computes the coordinates of that point. The program then finds the coordinates of the four nearest elevation points in the terrain database, and interpolates between these points to determine the elevation of the point under study. The program then repeats this process for the next point located 0.4 km (0.25 mi) further out along the radial. The process continues out to the maximum distance set by the program. These pairs of points and elevations are then used to generate a profile of the terrain along the radial. The terrain profile extends well beyond the location of the contour of interest. *See* Graph 1.



Calculate Field Strength for Points on the Radial. The field strength is then calculated for each point, beginning at the point on the radial located 1 km from the transmitter site and continuing outward at intervals of 0.4 km (0.25 mile). Each field strength value will correspond to a point on the terrain profile. The field strength in dB at any given point is computed by the formula

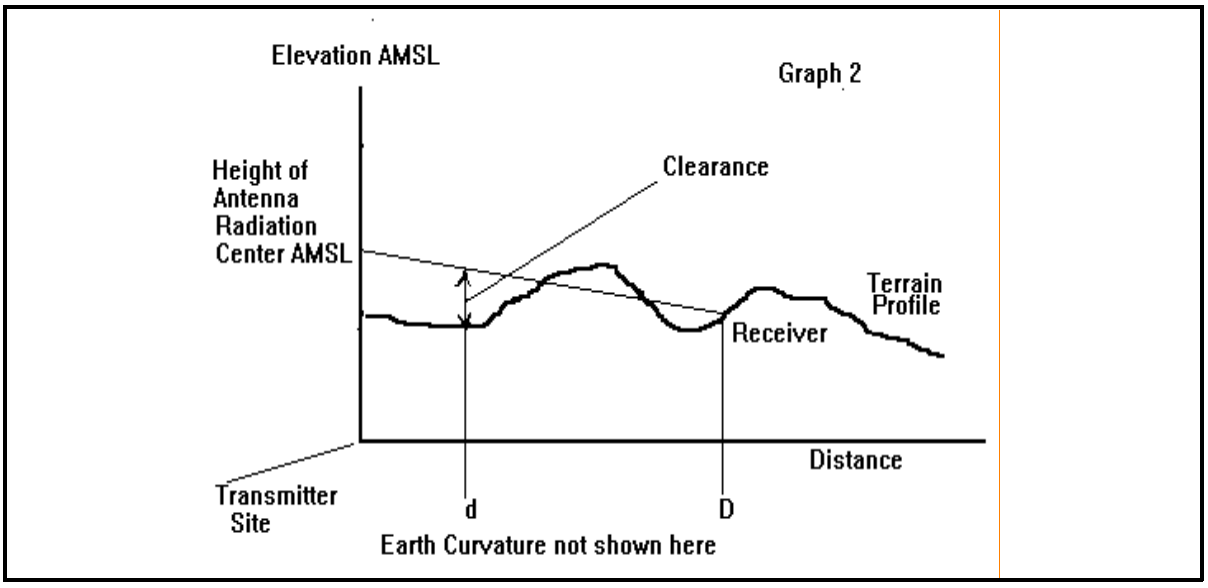
Field strength = Freespace + Diffraction Loss + Clutter Loss

where

Freespace (dB) = 106.9 - 20 $\log_{10}$ (distance) + ERP

where the ERP is in dBk (not kW) and the distance is in kilometers.[154] The freespace term assumes no other losses and its value decreases with the square of the distance from the transmitter.

Diffraction Loss. To find the diffraction loss at the point being studied, the program first calculates the straight line path between the transmitting antenna radiation center to the receiving antenna, ignoring for the moment any obstacle which may intervene in this path. At any distance d between the transmitter site and the receiving antenna site (located at a distance D from the transmitter site), the height of the straight line path above the elevation of the terrain (including earth bulge or curvature[155]) is defined as "clearance." *See* Graph 2.



At each incremental distance d, a clearance ratio R is computed using the formula

R = Clearance Ratio = Clearance / Fresnel Radius

[154] *See IEEE Transactions on Vehicular Technology*, VT-26, No. 4 November 1977, where the freespace field equation is listed as $E_0=(30gP)^{0.5}/d$, where P is in watts, d is in meters, and E_0 is in V/m. Converting units to kilowatts, kilometers, and µV/m, and recognizing that g is the gain referenced to an isotropic radiator in that document while FM typically is referenced to a halfwave dipole (2.15 dB gain), results in the Freespace equation shown here.

[155] The model assumes a 4/3 earth, which accounts for standard atmospheric conditions as well as earth curvature.

where the first Fresnel radius is

$$\text{Fresnel Radius} = 548 * \sqrt{(d * (D-d) / (D * \text{Frequency})}$$

"D" is the total path length from the antenna radiation center to the point under study.[156] Frequency is the frequency in megahertz. The distance "d" relates to the point being examined, which lies between (but not including) the transmitter site and "D". Each "d" point is separated by 0.4 km (0.25 mile) intervals from the next or previous "d" point.

The clearance ratio for each d point is then examined to find the minimum value. The minimum clearance ratio locates the primary terrain obstacle between the transmitter and the point of study.[157]

We then calculate a Δh factor[158] based on the terrain data points within 10 km of either side of this obstacle.[159] This is done initially by finding the best linear fit of the elevation points within this 20 km range. Assuming a normal distribution for these elevation points, 80% of the terrain elevations will fall within 1.282 standard deviations of the mean. The program then calculates the standard deviation of the elevation points in the 20 km interval, relative to the fitted line. Δh is then computed using the formula

$$\Delta h = 2 * 1.282 * (\text{standard deviation})$$

where the factor 2 accounts for both the upper and lower terrain deviations from the mean. The roundness of the obstacle is modelled by

$$\text{Roundness} = 75 / (\Delta h + 75)$$

For flat terrain, Δh is very small and the roundness approaches a value of 1.0. For varying terrain, Δh will be larger and the roundness will be smaller.

Two additional variables are required to be calculated before the diffraction loss can be calculated. The knife edge and smooth earth diffraction losses form the outer bounds for the range of possible diffraction loss values. The knife edge diffraction loss is modelled (with R = Clearance ratio) as:

$$\text{For } R \geq -0.5 \quad \text{Knife edge (dB)} = (-1.377 * R^2) + (11 * R) - 6$$
$$\text{For } R < -0.5 \quad \text{Knife edge (dB)} = [50.4 / (1.6 - R)] -36$$

The Knife edge value will always be restricted to be less than or equal to zero. The Smooth earth diffraction

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[156] The total path length D corresponds to $(d_1 + d_2)$ in the CCITT/CCIR Report *Propagation,* Appendix to Section B.IV.3 of the handbook *Economic and Technical Aspects of the Choice of Transmission Systems,* ITU, 1971.

[157] If the clearance is negative at some points, then the program searches for the most negative value.

[158] This Δh factor is neither the Δh used in Longley-Rice calculations nor the Δh factor in 47 CFR Sections 73.313 and 73.684. Therefore, this Δh cannot be combined with those prediction methods.

[159] Where the obstacle is located less than 10 km from the transmitter site (e.g., 5 km), the distance between the obstacle and antenna site is used in lieu of the 10 km terrain segment. However, on the side of the obstacle away from the antenna site, the full 10 km is used. Thus, the length of that segment is not 20 km but something less (e.g., 15 km).

loss is modelled as

Smooth earth (dB) = (38.68 * R) - 21.66

The Smooth earth diffraction value is restricted to be less than or equal to zero, and will also be less than or equal to the knife edge diffraction loss.

The program calculates the diffraction loss from the clearance ratio, the roundness, and an approximation of the diffraction losses which would occur for (1) knife-edge diffraction and (2) smooth edge diffraction.[160] Thus the diffraction loss between the antenna radiation center and the specified point becomes

Diffraction Loss = Knife Edge + (Roundness * (Smooth Earth - Knife Edge))

Clutter Loss. Clutter loss, which accounts for the effects of vegetation, man-made structures, etc. on the received signal, is modelled by the following equations (R is the clearance ratio explained above):

Clutter loss (in dB) = ((C -1)(R - 0.4)^2)/ 0.16 - C

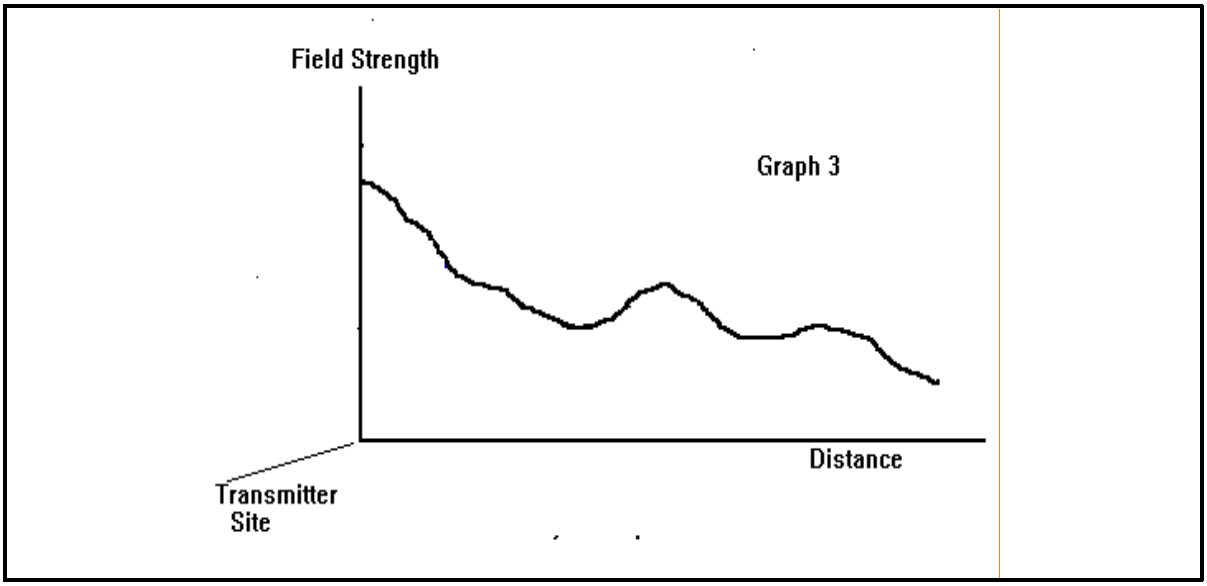
The clutter loss is restricted to values of zero or less. The value for C is here set at 5 dB and represents the median clutter loss in average suburban areas in the United States.

Find the Field Strength. Now that all of the terms have been defined, the computed field strength at the point under study can be computed using the equation

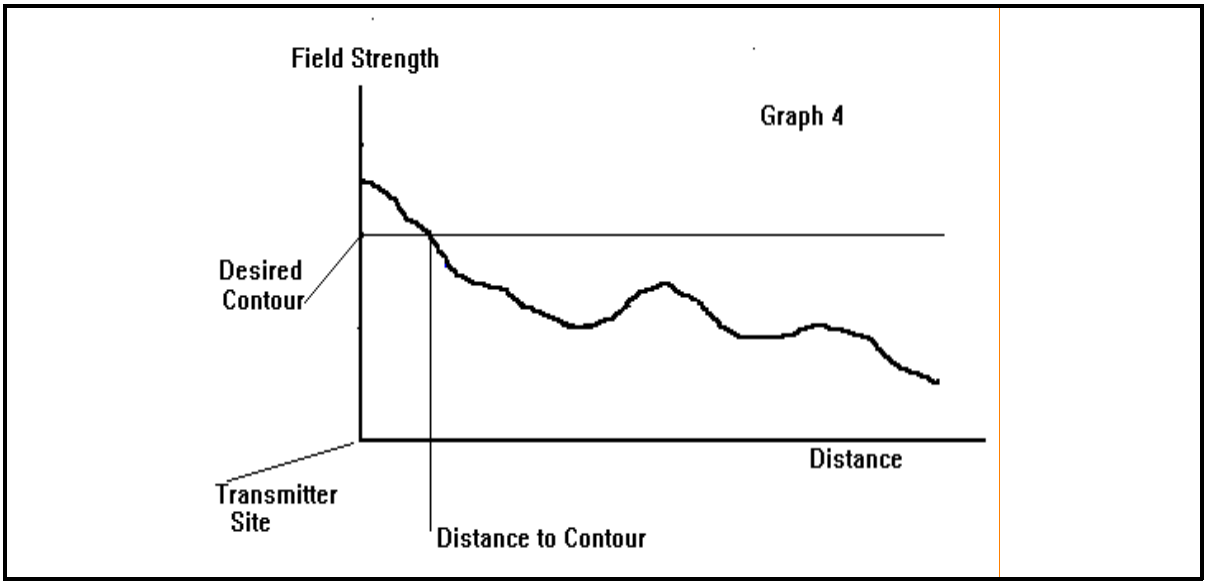
Field strength = Freespace + Diffraction Loss + Clutter Loss

as set forth above. The process is repeated for each point, out to the maximum distance specified as input or the default value specified by the program. The result is a distribution of points similar to that shown in Graph 3.

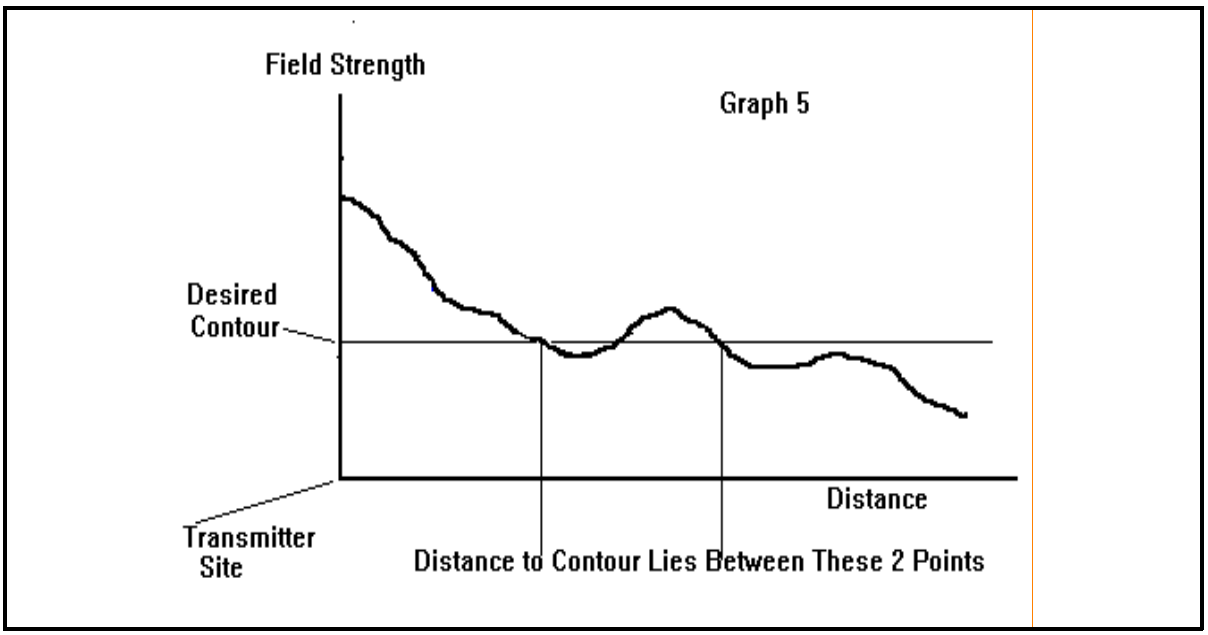
[160] This model of the loss is a simple fit of the diffraction loss curves for a knife edge and smooth earth as found in CCITT/CCIR Report *Propagation,* Appendix to Section B.IV.3 of the handbook *Economic and Technical Aspects of the Choice of Transmission Systems,* ITU, 1971.



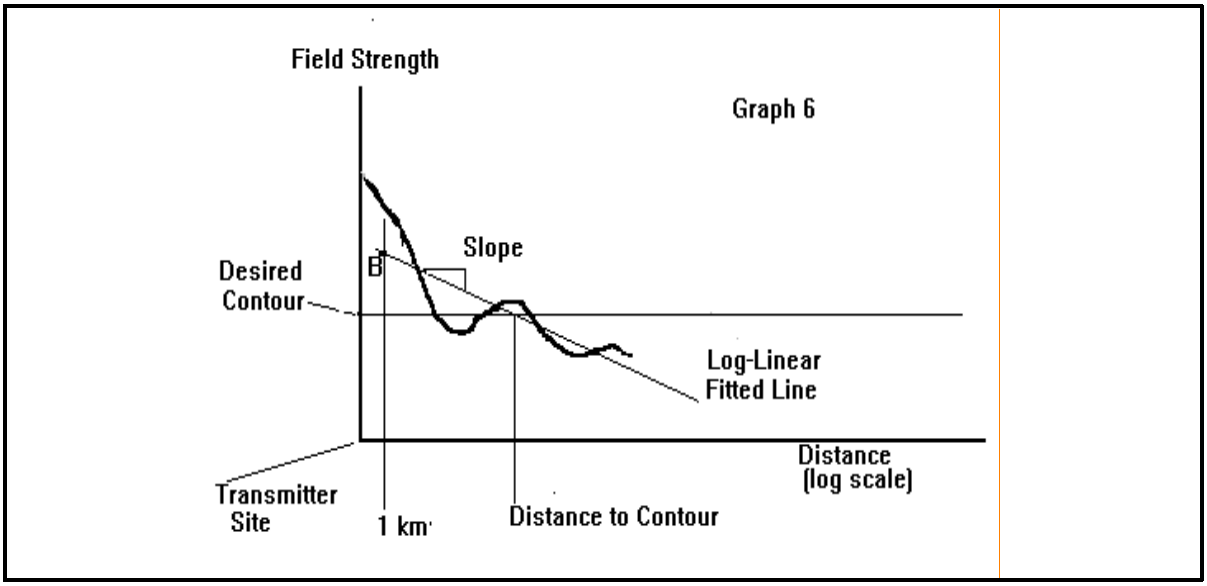
Locate the Contour Distance. The program identifies the locations along the radial at which the field strength values correspond to the desired contour value. In the simplest case, where the signal strength gradually falls off with increasing distance, there is only one point at which the predicted field strength corresponds to the desired contour. That crossing-point will be defined as the distance to the desired contour along that radial. See Graph 4.



If the field strength value dips below the desired contour value at some point, and later rises above the desired contour value for some distance, then multiple crossing points will exist. The contour lies between the first point at which the signal strength dips below the contour value and the last point at which the signal strength drops below the contour value. *See* Graph 5.



To locate the actual distance in this range, the program determines a log-linear fit of the field strength values.[161] *See* Graph 6.



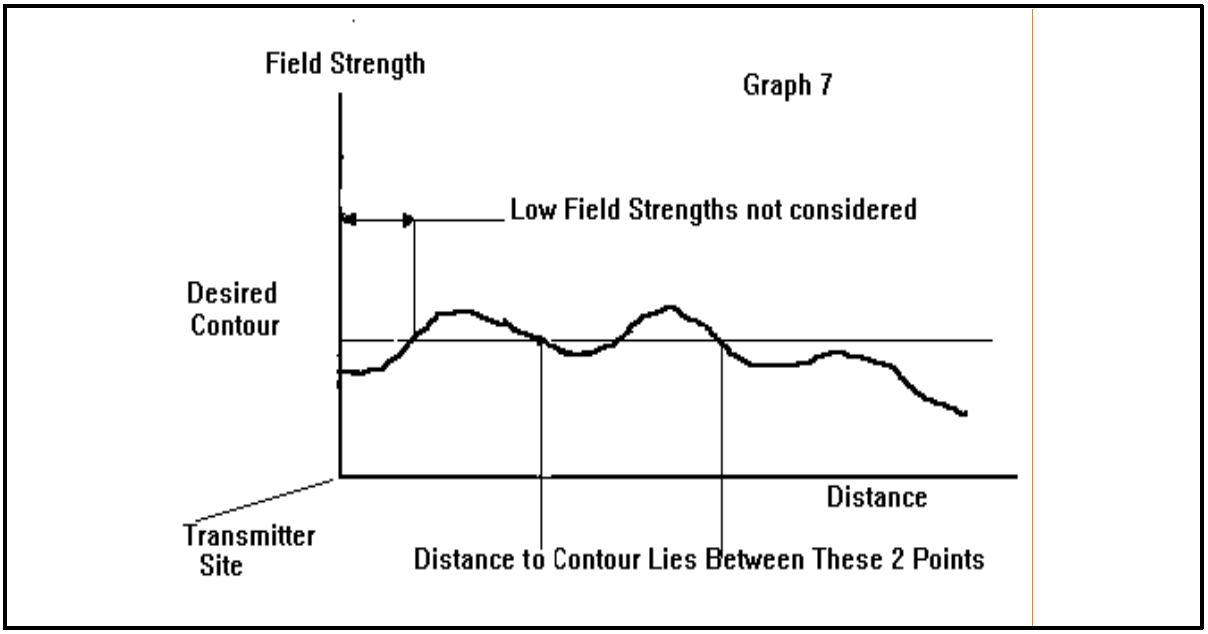
The distance to the contour is

$$\text{Contour Distance} = 10^{[\text{(Desired Field Strength Contour - B) / Slope}]}$$

B corresponds to that field strength value of the fitted curve extrapolated back to a distance of 1 km ($\log_{10}$ 47l km = 0) from the transmitter site. Slope refers to the slope of the fitted line. This provides a unique value or the distance to the contour along the specified radial.

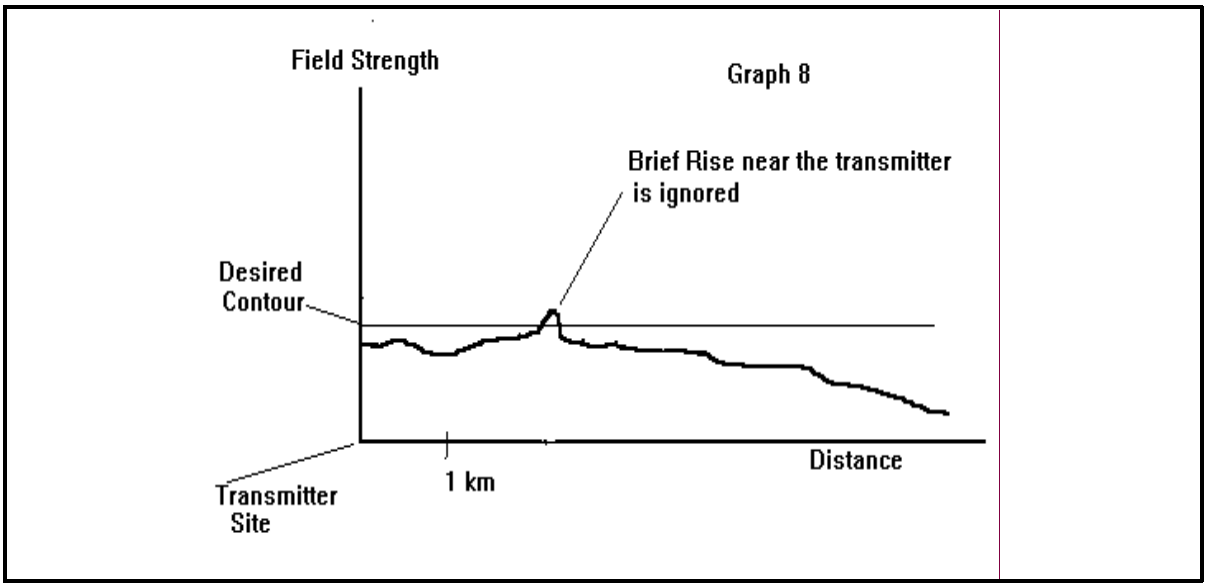
[161] The field strength values included in the calculation include those from the transmitter site out to 1.6 km (4 points) beyond the distance at which the calculated field strength value falls below the desired contour value for the last time.

In a few rare instances, an obstruction close to the transmitter site may cause some low signal values near the transmitter site, but the signal strength at greater distances will rise above the desired contour level. If the signal strength remains above the desired contour value for some distance, the low close-in field strengths will be ignored, since they represent only a small portion of the station's service area. The distance to the contour will be calculated as discussed above. *See* Graph 7.



If the calculated field strength is low near the transmitter site but later briefly rises above the desired contour value, we ignore the higher field strengths since the region receiving those field strengths is very small.[162] In this case, the distance to the contour will be less than 1 km from the transmitter site. *See* Graph 8.

Two other situations can occur, which generally represent incorrect data input. First of all, the



predicted field strength may never fall below the desired contour value. This indicates that either the length of the radial is not long enough, or that a very low field strength value has been selected. Generally, the default value for the length of the radial should avoid this problem for desired contour values of 34 dBu or greater.

The second situation is that the field strength along the radial never exceeds the desired field strength value. This indicates that the field strength value chosen is abnormally high for contour prediction (well in excess of 100 dBu) or that a large terrain obstruction exists immediately adjacent to the transmitter site.

To produce an actual contour, this process is iterated over a number of evenly spaced radials at different azimuths. The distances to the contours for the various radials are then joined by a smooth curve to represent the location of the contour.

Additional Step Required to Locate the Interfering Contour. The preceding discussion will locate the service contours of a station. To find the interfering contour, a time fading adjustment is required. Specifically, once the field strength for a particular point is located (see the section *Find the Field Strength* above), an

[162] The "brief rise" is ignored if the *number of field strength points*, located between the transmitter site and the distance at which the calculated field strength first rises up to the desired contour value, is greater than half of the total number of points between the transmitter site and that distance at which the field strength dips below the desired contour value for the last time. These "brief rise" points are ignored because the median field strength would be less than the contour level.

adjustment is made using the difference between the standard F(50,50) and F(50,10) propagation curves at the station's ERP, HAAT, and distance from the transmitter site. This adjustment accounts for attenuation caused by long-term time fading effects. Thus, the field strength formula becomes

Field strength = Freespace + Diffraction Loss + Clutter Loss + [F(50,10) FS - F(50,50) FS]

where FS is the field strength value obtained from the F(50,50) or F(50,10) propagation curves.

Where to obtain the source code. The Fortran 77 source code for this computer program is available through the Internet at http://www.fcc.gov/mmb/asd/ptp.html. This code contains all of the necessary subroutines. It does not include access to the FCC's 30 second terrain database, and some modifications to the program will be necessary to retrieve data from a local version of a terrain database.

Questions. Questions on the point-to-point method set forth above may be referred to Harry Wong, Office of Engineering Technology, at 202-418-2437. Questions on the Fortran program may be referred to Jorden Brinn at 202-418-2664.

APPENDIX C
Actual Protected and Interfering Contours in Puerto Rico and the U.S. Virgin Islands

Stations in Puerto Rico and the U.S. Virgin Islands are permitted to increase antenna height above average terrain (HAAT) well above the maximum values permitted elsewhere in the United States. In effect, stations fully spaced under Section 73.107 in these areas receive protection from interference using different contours than Section 73.207 was designed for. These contours are shown in the table below. An example of how to use the table has also been provided.

Actual protected and interfering contours under 47 C.F.R. Section 73.207 in Puerto Rico and the Virgin Islands

STATION WITH INTERFERING CONTOUR		STATION WITH PROTECTED CONTOUR					
		Class A		Class B1		Class B	
		Interfering	Protected	Interfering	Protected	Interfering	Protected
Co-Channel	Class A	46	66	41	61	40	60
	Class B1	43	63	39	59	38	58
	Class B	45	65	41	61	41	61
		Interfering	Protected	Interfering	Protected	Interfering	Protected
1st Adj. Channel	Class A	61	67	56	62	59	65
	Class B1	57	63	54	60	54	60
	Class B	62	68	56	62	57	63
		Interfering	Protected	Interfering	Protected	Interfering	Protected
2nd-3rd Adj. Ch.	Class A	107	67	100	60	104	64
	Class B1	99	59	100	60	104	64
	Class B	94	54	94	54	104	64

Maximum permitted facilities assumed for each station pursuant to 47 C.F.R. Section 73.211(b)(3):

6 kW ERP/240 meters HAAT – Class A
25 kW ERP/150 meters HAAT – Class B1
50 kW ERP/472 meters HAAT – Class B

Example using the contour protection table. Assume Station X is a Class A station, and that Station Y is a Class B station, and that these two stations are on first-adjacent channels. Station X proposes contour protection to Station Y. Station X would apply the table above as follows.

(i) *Station X's F(50,50) protected contour vs. Station Y's F(50,10) interfering contour.* Under the "Station with Protected Contour" heading, Station X would go to the column marked "Class A". Proceed downward on the left side to "1st Adj, Channel" (under the heading "Station with Interfering Contour"). Since Station Y is a Class B station, the bottom row of this box is read. As a result, Station X's 68 dBu F(50,50) protected contour must not overlap the 62 dBu F(50,10) interfering contour of Station Y.

(ii) *Station X's F(50,10) interfering contour vs. Station Y's F(50,50) protected contour.* Since Station Y is now the protected station, go to "Class B" under the "Station with Protected Contour" heading. Proceeding downward on the left side, stop again at the row marked "1st Adj. Channel" Because Station X is Class A, the top row in that box is read. As a result, Station X's 59 dBu F(50,10) interfering contour must not overlap the 65 dBu F(50,50) protected contour of Station Y.

If no contour overlap would be created under both (i) and (ii), then the application would provide the same protection as two stations located at the minimum required separation under 47 CFR § 73.207, with both stations operating at the reference facilities allowed for the station class pursuant to 47 CFR § 73.211(b)(3).

APPENDIX D
Minor Rule Changes Adopted by the Commission

47 CFR Part 73 is revised as follows:

Part 73 - Radio Broadcast Services

1. The authority citation for Part 73 continues to read as follows:

Authority: 47 U.S.C. § § 154, 303

2. A reference to a new informational rule section, **Section 73.3617, Broadcast Information Available on the Internet**, is added to the listing of rule sections by section number, at the beginning of Part 73.

3. A reference to a new informational rule section, **Section 73.3617, Broadcast Information Available on the Internet**, to the Alphabetical Index at the end of Part 73, in alphabetical order as follows:

* * * * *

Information available on the Internet.....73.3617

* * * * *

4. References to **Section 73.1692, Broadcast Station Construction Near or Installation On an AM Broadcast Tower** are added to the Alphabetical Index at the end of Part 73, in alphabetical order as follows:

* * * * *

Construction Near or Installation On an AM Tower 73.1692

* * * * *

Installation On or Construction Near an AM Tower.....73.1692

* * * * *

5. Section 73.45, paragraph (c) is amended to read as follows:

§ 73.45 AM antenna systems.

* * * * *

(c) Should any changes be made or otherwise occur which would possibly alter the resistance of the antenna system, the licensee must commence the determination of the operating power by a method described in § 73.51(a)(1) or (d). (If the changes are due to the construction of FM or TV transmitting

facilities, see §§ 73.316, 73.685, and 73.1692.) Upon completion of any necessary repairs or adjustments, or upon completion of authorized construction or modifications, the licensee must make a new determination of the antenna resistance using the procedures described in § 73.54. Operating power should then be determined by a direct method as described in § 73.51. Notification of the value of resistance of the antenna system must be filed with the FCC in Washington, DC as follows:

(1) * * *

(2) Whenever AM stations use direct reading power meters pursuant to § 73.51, a letter notification to the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, must be filed in accordance with § 73.54(e).

6. Section 73.54 paragraph (d) is amended to read as follows:

§ 73.54 Antenna resistance and reactance measurements.

* * * * *

(d) A letter of notification must be filed with the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, when determining power by the direct method pursuant to § 73.51 and must specify the antenna or common point resistance at the operating frequency. The following information must also be kept on file at the station:

* * * * *

7. Section 73.58 paragraph (f) is amended to read as follows:

§ 73.58 Indicating instruments.

* * * * *

(f) If conditions beyond the control of the licensee prevent the restoration of the meter to service within the above allowed period, information requested in accordance with § 73.3549 may be filed by letter with the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, to request additional time as may be required to complete repairs of the defective instrument.

8. Section 73.68 paragraphs (b) and (d)(1) are amended as follows:

§ 73.68 Sampling systems for antenna monitors.

* * * * *

(b) A station having an antenna sampling system constructed according to the specifications given in paragraph (a) of this section may obtain approval of that system by submitting an informal letter request to the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau. The request for approval, signed by the licensee or authorized representative, must contain sufficient information to show that the sampling system is in compliance with all requirements of paragraph (a) of this section.

NOTE: A public notice dated December 9, 1985 giving additional information on approval of antenna sampling systems is available through the Internet at http://www.fcc.gov/mmb/asd/decdoc/letter/1985--12--09--sample.html.

* * * * *

(d) * * *

(1) Special Temporary Authority (*see* § 73.1635) shall be requested and obtained from the Commission's Audio Services Division, Mass Media Bureau in Washington to operate with parameters at variance with licensed values pending issuance of a modified license specifying parameters subsequent to modification or replacement of components.

* * * * *

9. Section 73.69 paragraphs (c) and (d)(5) are amended to read as follows:

§ 73.69 Antenna monitors.

* * * * *

(c) If conditions beyond the control of the licensee prevent the restoration of the monitor to service within the allowed period, an informal letter request in accordance with § 73.3549 of the Commission's rules must be filed with the FCC, Attention: Audio Services Division, Mass Media Bureau in Washington, DC for such additional time as may be required to complete repairs of the defective instrument.

(d) * * *

(5) An informal letter request for modification of license shall be submitted to the FCC, Attention: Audio Services Division, Mass Media Bureau in Washington, DC within 30 days of the date of monitor replacement. Such request shall specify the make, type, and serial number of the replacement monitor, phase and sample current indications, and other data obtained pursuant to paragraph (d) of this section.

* * * * *

10. Section 73.151 paragraphs (a) and (a)(1) are amended to read as follows:

§ 73.151 Field strength measurements to establish performance of directional antennas.

(a) In addition to the information required by the license application form, the following showing must be submitted to establish, for each mode of directional operation, that the effective measured field strength (RMS) at 1 kilometer (km) is not less than 85 percent of the effective measured field strength (RMS) specified for the standard radiation pattern, or less than that specified in § 73.189(b) for the class of station involved, whichever is the higher value, and that the measured field strength at 1 km in any direction does not exceed the field shown in that direction on the standard radiation pattern for that mode of

directional operation:

(1) A tabulation of inverse field strengths in the horizontal plane at 1 km, as determined from field strength measurements taken and analyzed in accordance with § 73.186, and a statement of the effective measured field strength (RMS). Measurements shall be made in at least the following directions:

(i) * * *

* * * * *

11. Section 73.213, paragraph (a) is amended to read as follows:

§ 73.213 Grandfathered short-spaced stations.

(a) Stations at locations authorized prior to November 16, 1964, that did not meet the separation distances required by §73.207 and have remained continuously short-spaced since that time may be modified or relocated with respect to such short-spaced stations, provided that (i) any area predicted to receive interference lies completely within any area currently predicted to receive co-channel or first-adjacent channel interference as calculated in accordance with paragraph (a)(1) of this section, or that (ii) a showing is provided pursuant to paragraph (a)(2) of this section that demonstrates that the public interest would be served by the proposed changes.

* * * * *

12. Section 73.258 paragraph (d) is amended to read as follows:

§ 73.258 Indicating instruments.

* * * * *

(d) If conditions beyond the control of the licensee prevent the restoration of the meter to service within the above allowed period, an informal letter request in accordance with § 73.3549 may be filed with the FCC, Attention: Audio Services Division, Mass Media Bureau, in Washington, DC for such additional time as may be required to complete repairs of the defective instrument.

13. Section 73.312 paragraph (b) is amended to read as follows:

§ 73.312 Topographic data.

* * * * *

(b) The Commission will not ordinarily require the submission of topographical maps for areas beyond 24 km (15 miles) from the antenna site, but the maps must include the principal city or cities to be served. If it appears necessary, additional data may be requested.

* * * * *

14. Section 73.313 paragraphs (c)(2) and (d)(2) are amended to read as follows:

§ 73.313 Prediction of coverage

* * * * *

(c) * * *

(2) To use the chart for other ERP values, convert the ordinate scale by the appropriate adjustment in dB. For example, the ordinate scale for an ERP of 50 kW should be adjusted by 17 dB [10 log (50 kW) = 17 dBk], and therefore a field strength of 60 dBu would correspond to the field strength value at (60 - 17 =) 44 dBu on the chart. When predicting the distance to field strength contours, use the maximum ERP of the main radiated lobe in the pertinent azimuthal direction (do not account for beam tilt). When predicting field strengths over areas not in the plane of the maximum main lobe, use the ERP in the direction of such areas, determined by considering the appropriate vertical radiation pattern.

(d) * * *

(2) Where the 3 to 16 kilometers portion of a radial extends in whole or in part over a large body of water or extends over foreign territory but the 50 uV/m (34 dBu) contour encompasses land area within the United States beyond the 16 kilometers portion of the radial, the entire 3 to 16 kilometers portion of the radial must be included in the computation of antenna height above average terrain. However, where the 50 uV/m (34 dBu) contour does not so encompass United States land area, and (i) the entire 3 to 16 kilometers portion of the radial extends over large bodies of water or over foreign territory, such radial must be completely omitted from the computation of antenna height above average terrain, and (ii) where a part of the 3 to 16 kilometers portion of a radial extends over large bodies of water or foreign territory, only that part of the radial extending from 3 kilometers to the outermost portion of land in the United States covered by the radial used must be used in the computation of antenna height above average terrain.

* * * * *

15. The note at the end of Section 73.503 is amended to include an additional source of information, as follows:

§ 73.503 Licensing requirements and service.

*** * * * ***

*** * * * ***

(d) * * * * *

Note: Commission interpretation on this rule, including the acceptable form of acknowledgements, may be found in the Second Report and Order in Docket No. 21136 (Commission Policy Concerning the Noncommercial Nature of Educational Broadcast Stations), 86 FCC 2d 141 (1981); the Memorandum Opinion and Order in Docket No. 21136, 90 FCC 2d 895 (1982), and the Memorandum Opinion and Order

in Docket 21136, 97 FCC 2d 255 (1984). See also, "Commission Policy Concerning the Noncommercial Nature of Educational Broadcast Stations," Public Notice, 7 FCC Rcd 827 (1992), which can be retrieved through the Internet at http://www.fcc.gov/mmb/asd/nature.html.

*** * * * ***

16. Section 73.561 paragraphs (c) and (d) are amended to read as follows:

§ 73.561 Operating schedule; time sharing.

* * * * *

(c) A departure from the regular schedule set forth in a time-sharing agreement will be permitted only in cases where a written agreement to that effect is reduced to writing, is signed by the licensees of the stations affected thereby, and is filed in triplicate by each licensee with the Commission, Attention: Audio Services Division, Mass Media Bureau, prior to the time of the proposed change. If time is of the essence, the actual departure in operating schedule may precede the actual filing of the written agreement, provided that appropriate notice is sent to the Commission in Washington, DC, Attention: Audio Services Division, Mass Media Bureau.

(d) In the event that causes beyond the control of a permittee or licensee make it impossible to adhere to the operating schedule in paragraphs (a) or (b) of this section or to continue operating, the station may limit or discontinue operation for a period not exceeding 30 days without further authority from the Commission, *Provided*, That notification is sent to the Commission in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, no later than the 10th day of limited or discontinued operation. During such period, the permittee shall continue to adhere to the requirements of the station license pertaining to the lighting of antenna structures. In the event normal operation is restored prior to the expiration of the 30 day period, the permittee or licensee will notify the FCC, Attention: Audio Services Division of the date that normal operations resumed. If causes beyond the control of the permittee or licensee make it impossible to comply within the allowed period, Special Temporary Authority (see § 73.1635) must be requested to remain silent for such additional time as deemed necessary. The license of a broadcasting station that fails to transmit broadcast signals for any consecutive 12 month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of license to the contrary.

17. Section 73.1350 paragraph (g) is amended to read as follows:

§ 73.1350 Transmission system operation.

* * * * *

(g) Whenever a transmission system control point is established at a location other than the main studio or transmitter, a letter of notification of that location must be sent to the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, within 3 days of the initial use of that point. The letter should include a list of all control points in use, for clarity. This notification is not required if responsible station personnel can be contacted at the transmitter or studio site during hours of operation.

* * * * *

18. Section 73.1560 paragraph (d) is amended to read as follows:

§ 73.1560 Operating power and mode tolerances.

* * * * *

(d) *Reduced power operation.* In the event it becomes technically impossible to operate at authorized power, a broadcast station may operate at reduced power for a period of not more than 30 days without specific authority from the FCC. If operation at reduced power will exceed 10 consecutive days, notification must be made to the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, not later than the 10th day of the lower power operation. In the event that normal power is restored within the 30 day period, the licensee must notify the FCC of the date that normal operation was restored. If causes beyond the control of the licensee prevent restoration of the authorized power within 30 days, a request for Special Temporary Authority (*see* §73.1635) must be made to the FCC in Washington, DC for additional time as may be necessary.

19. Section 73.1680 paragraph (b) is amended to read as follows:

§ 73.1680 Emergency antennas.

* * * * *

(b) Prior authority from the FCC is not required by licensees and permittees to erect and commence operations using an emergency antenna to restore program service to the public. However, an informal letter request to continue operation with the emergency antenna must be made within 24 hours to the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, within 24 hours after commencement of its use. The request is to include a description of the damage to the authorized antenna, a description of the emergency antenna, and the station operating power with the emergency antenna.

(1) * * *

* * * * *

20. Section 73.1750 is amended to read as follows:

§ 73.1750 Discontinuance of operation.

The licensee of each station shall notify by letter the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, of the permanent discontinuance of operation at least two days before operation is discontinued. Immediately after discontinuance of operation, the licensee shall forward the station license and other instruments of authorization to the FCC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau, for cancellation. The license of any station that fails to transmit broadcast signals for any consecutive 12 month period expires as a matter of law at the end of that period, notwithstanding any provision, term, or condition of the license to the contrary. If a licensee surrenders its license pursuant to an interference reduction agreement, and its surrender is contingent on the grant of another application, the licensee must identify in its notification to the FCC the contingencies involved.

21. Section 73.3542 paragraph (b) is amended to read as follows:

§ 73.3542 Application for emergency authorization.

* * * * *

(b) Emergency operating authority issued under this section may be cancelled or modified by the FCC without prior notice or right to hearing. See also § 73.1250, Broadcasting Emergency Information, for situations in which emergency operation may be conducted without prior authorization, and § 73.1635, Special Temporary Authorization (STA), for temporary operating authorizations necessitated by circumstances not within the ambit of this section.

22. Section 73.3544 paragraph (b) is amended to read as follows:

§ 73.3544 Application to obtain a modified station license.

* * * * *

(b) An informal application, see §73.3511(b), may be filed with the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media

Bureau, to cover the following changes:

(1) * * *

* * * * *

23. Section 73.3549 is amended to read as follows:

§ 73.3549 Requests for extension of time to operate without required monitors, indicating instruments, and EAS encoders and decoders.

Requests for extension of authority to operate without required monitors, transmission system indicating instruments, or encoders and decoders for monitoring and generating the EAS codes and Attention Signal should be made to the FCC in Washington, DC, Attention: Audio Services Division (radio) or Video Services Division (television), Mass Media Bureau. Such requests must contain information as to when and what steps were taken to repair or replace the defective equipment and a brief description of the alternative procedures being used while the equipment is out of service.

24. A new informational Section 73.3617 is added as follows:

§ 73.3617 Broadcast Information Available on the Internet.

The Mass Media Bureau and each of its Divisions provide information on the Internet regarding broadcast rules and policies, pending and completed rulemakings, and pending applications. These sites also include copies of public notices and texts of recent decisions. The Mass Media Bureau Internet address is http://www.fcc.gov/mmb/; the Audio Services Division address is http://www.fcc.gov/mmb/asd/; the Video Services Division address is http://www.fcc.gov/mmb/vsd/; the Policy and Rules Division address is http://www.fcc.gov/mmb/prd/; and the Enforcement Division address is http://www.fcc.gov/mmb/enf/.

47 CFR Part 74 is revised as follows:

Part 74 - Experimental Radio, Auxiliary, Special Broadcast and Other Program Distributional Services

25. The authority citation for Part 74 continues to read as follows:

Authority: 47 U.S.C. § § 154, 303

26. A reference to a new rule section, **Section 74.1290, Broadcast Information Available on the Internet**, is added to the listing of rule sections by section number, at the beginning of Part 74.

27. A reference to **Section 74.1290, Broadcast Information Available on the Internet**, is added to the Alphabetical Index at the end of Part 74, in alphabetical order as follows:

* * * * *

Information on the Internet, FM translator and booster stations.....74.1290

* * * * *

28. Section 74.734 paragraph (a)(4) is amended to read as follows:

§ 74.734 Attended and unattended operation.

* * * * *

(a) * * *

(4) A letter notification must be filed with the FCC in Washington, DC, Attention: Video Services Division, Mass Media Bureau, providing the name, address, and telephone number of a person or persons who may be called to secure suspension of operation of the transmitter promptly should such action be deemed necessary by the FCC. Such information shall be kept current by the licensee.

* * * * *

29. Section 74.751 paragraph (c) is amended to read as follows:

§ 74.751 Modification of transmission systems.

* * * * *

(c) Other equipment changes not specifically referred to in paragraphs (a) and (b) may be made at the discretion of the licensee, provided that the FCC in Washington, DC, Attention: Video Services Division, Mass Media Bureau, is notified in writing upon the completion of such changes.

* * * * *

30. Section 74.763 paragraph (b) is amended to read as follows:

§ 74.763 Time of operation.

* * * * *

(b) In the event that causes beyond the control of the low power TV or TV translator station licensee make it impossible to continue operating, the licensee may discontinue operation for a period of not more than 30 days without further authority from the FCC. Notification must be sent to the FCC in Washington, DC, Attention: Video Services Division, Mass Media Bureau, not later than the 10th day of discontinued operation. During such period, the licensee shall continue to adhere to the requirements in the station license pertaining to the lighting of antenna structures. In the event normal operation is restored prior to the expiration of the 30 day period, the FCC in Washington, DC, Attention: Video Services Division, Mass Media Bureau, shall be notified in writing of the date normal operations resumed. If causes beyond the control of the licensee make it impossible to comply within the allowed period, a request for Special Temporary Authority (see §73.1635 of this chapter) shall be made to the FCC no later than the 30th day for such additional time as may be deemed necessary.

* * * * *

31. Section 74.784 paragraph (b) is amended to read as follows:

§ 74.784 Rebroadcasts.

* * * * *

(b) The licensee of a low power TV or TV translator station shall not rebroadcast the programs of any other TV broadcast station or other station authorized under the provisions of this Subpart without obtaining prior consent of the station whose signals or programs are proposed to be retransmitted. The FCC, Attention: Video Services Division, Mass Media Bureau, shall be notified of the call letters of each station rebroadcast, and the licensee of the low power TV or TV broadcast translator station shall certify it has obtained written consent from the licensee of the station whose programs are being retransmitted.

* * * * *

32. Section 74.1231 paragraph (b) is amended to read as follows:

§ 74.1231 Purpose and permissible service.

* * * * *

(b) An FM translator may be used for the purpose of retransmitting the signals of a primary FM radio broadcast station or another translator station the signal of which is received directly through space, converted, and suitably amplified. However, an FM translator providing fill-in service may use any terrestrial facilities to receive the signal that is being rebroadcast. An FM booster station or a noncommercial educational FM translator station that is operating on a reserved channel (Channels 201 -- 220) and is owned and operated by the licensee of the primary noncommercial educational station it rebroadcasts may use alternative signal delivery means, including, but not limited to, satellite and terrestrial microwave facilities. *Provided*, however, that an applicant for a noncommercial educational translator operating on a reserved channel (Channel 201 -- 220) and owned and operated by the licensee of the primary noncommercial educational FM station it rebroadcasts complies with either paragraph (b)(1) or (b)(2) of this section:

(1) * * *

* * * * *

33. Section 74.1234 paragraph (a)(4) is amended to read as follows:

§ 74.1234 Unattended operation.

* * * * *

(a) * * *

(4) The FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, shall be notified by letter with the name, address, and telephone number of a person or persons who may be contacted to secure suspension of operation of the translator promptly should such action be deemed necessary by the Commission. Such information shall be kept current by the licensee.

* * * * *

34. Section 74.1235, paragraphs (d)(1), (d)(2), and d(3) are added to read as follows, and sections (c)(1) and (c)(2) are removed:

§ 74.1235 Power limitations and antenna systems.

* * * * *

(c) The effective radiated power of FM booster stations shall be limited such that the predicted service contour of the booster station, computed in accordance with §73.313 paragraphs (a) through (d) of this chapter, may not extend beyond the corresponding service contour of the primary FM station that the booster rebroadcasts. In no event shall the ERP of the booster station exceed 20% of the maximum allowable ERP for the primary station's class.

(d) * * *

(1) Translator stations located within 125 kilometers of the Mexican border may operate with an ERP up to 50 watts (0.050 kW) ERP. A booster station may not produce a 34 dBu interfering contour in excess of 32 km from the transmitter site in the direction of the Mexican border, nor may the 60 dBu service contour of the booster station exceed 8.7 km from the transmitter site in the direction of the Mexican border.

(2) Translator stations located between 125 kilometers and 320 kilometers from the Mexican border may operate with an ERP in excess of 50 watts, up to the maximum permitted ERP of 250 watts per § 74.1235(b)(2). However, in no event shall the location of the 60 dBu contour lie within 116.3 km of the Mexican border.

(3) Applications for translator or booster stations within 320 km of the Canadian border may employ an ERP up to a maximum of 250 watts, as specified in §74.1235(a) and (b). The distance to the 34 dBu interfering contour may not exceed 60 km in any direction.

35. Section 74.1251 paragraph (b)(6) is amended to read as follows, and the reference at the end of the rule section is amended to correct a date.

§ 74.1251 Technical and equipment modifications.

* * * * *

(b) * * *

(6) Any change in the output frequency of a translator.

* * * * *

[35 FR 15388, Oct. 2, 1970, as amended at 45 FR 26068, Apr. 17, 1980; 47 FR 24580, June 7, 1982; 50 FR 3525, Jan 25, 1985; 50 FR 23710, June 5, 1985; 55 FR 50968, Dec. 10, 1990; 61 FR 4368, Feb. 6, 1996]

36. A new informational Section 74.1290 is added as follows:

§ 74.1290 FM Translator and Booster Station Information Available on the Internet.

The Mass Media Bureau's Audio Services Division provides information on the Internet regarding FM translator and booster stations, rules, and policies at http://www.fcc.gov/mmb/asd/.

-- FCC --