

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

FCC Proposed Technical Rules Change

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MM Docket No. 98-93

To: The Commission

REPLY COMMENTS OF REYNOLDS TECHNICAL ASSOCIATES

General

The reply of Reynolds Technical Associates ("RTA") in the FCC technical streamlining is predicated on two compelling arguments. First, current technology has rendered some of the rules in radio broadcasting obsolete. Second, this technology allows broadcasters to more effectively and efficiently utilize the spectrum. If the Commission adopts the streamlining and relaxation proposed by RTA, it would allow existing facilities to provide additional services and create opportunities for a diversity of ownership.

In addition to the two main suppositions advanced by RTA, there have been numerous negative events and occurrences that have placed limits on development of the broadcast spectrum. Presently numerous FM broadcasters are being denied FAA clearance by the development of additional airways and increased aeronautical use. More importantly, the FAA has begun placing determinations of hazards on broadcasters due to its interpretation of potential electromagnetic interference (EMI). RTA currently represents two broadcasters that have no construction options, due to spectrum spacing limitations and FAA EMI limitations. The FAA has taken the position that it is the guardian of the spectrum in both instances. The broadcasters are left with large financial investments and no channels on which to broadcast.

An additional limitation on broadcasters is now occurring from local and county zoning ordinances. These ordinances prohibit the construction of new towers. Therefore, broadcasters must turn to the Commission for relief. The changes in technology allow for channel spacing relaxation and modifications without degrading the integrity of the FM spectrum.

It is with the supposition discussed above that RTA offers reply comments on the following:

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Contingent Applications

RTA strongly supports the contingent application proposal and endorses the Graham Brock, Inc. proposal that the Commission set limits on the number of contingent applications at six rather than four. In addition, RTA feels that the Commission's position that if one portion (package) is denied, the entire scenario is dismissed is excessively harsh. RTA contends that if one station's participation is denied, the remaining packages should be given a period of 30 days in which to "cure." The admissions of counterproposals to the contingency would create an opening for opportunists to file conflicts, in an attempt to create a "block" situation. Therefore, a contingent scenario would, of necessity, have to be given immediate cutoff protection.

An exception to this would be the following circumstance. If a group of stations are involved in a contingent application, a facility that would benefit from that application (without altering it) should be allowed to join the application. This is, of course, provided that the joining party does not increase the total number of facilities involved to more than six. Finally, the concern over white or gray areas created by these contingent applications and/or negotiated interference should be allowed to be proved and/or disproved by supplemental methods, instead of using the present FCC F(50,50) curves.

The contingent application scenario should be applicable to both AM and FM facilities.

Negotiated Interference

In the instant Docket, the Commission proposes to allow stations to enter into agreements that would create new interference and to evaluate applications involving such agreements based on four criteria. RTA is in full agreement with three of those proposals. Due to the advances in technology discussed earlier, RTA feels that the fourth item (new interference over the city of license) should be eliminated or modified. RTA supports the notion that the received interference must be no greater than 5% of the station's area inside its total service contour. We also agree that no more than 5% of the total population within that contour should be receiving negotiated interference. The Commission's concept that areas receiving negotiated interference receive five additional primary services must be provided caveats. Water, national parks, unpopulated areas, or where the population density drops below a certain level should fall under this exception. The Commission should give consideration to using the five-to-one ratio currently in use in the NCE band. RTA objects to the Commission's universal suggestion that the negotiated interference cannot

occur over the boundaries of the community of license. Interference within the community of license can be considered if the interference is caused by a co-channel or first-adjacent channel facility. However, due to the technological advances discussed earlier, RTA contends that present-day, real-world second- and third-adjacent channel interference in FM is marginal or literally does not exist. Previous commenters have said that interference from second- and third-adjacent channels could complicate the FM band's conversion to digital transmission. However, the Commission must consider what is the more important of the two: to provide maximum service, or to detain additional service at the expense of a future, unproven technology. Based on the comments received in the initial comment date, it is obvious that the rank and file broadcaster desires a method of spacing relief in the FM spectrum that can be implemented by negotiated interference. However, second- and third-adjacent channels must be left out of consideration in dealing with negotiated interference occurring inside the boundaries of the community of license. Due to new receiver technology, this interference is undetectable to the average listener.

Point-to-Point Contour Protection Methodology

RTA is in agreement with the AFCCE, et. al., objections to the PTP methodology. RTA instead proposes that the Commission adopt the Longley-Rice method for providing options to the standard F(50,50) curves, especially when considering interference given and received in areas of irregular terrain. Longley-Rice is a Commission-accepted method that reflects a truer picture of signal propagation, since it considers terrain elevations beyond the 16-kilometer limit.

Creation of FM Class C0

RTA endorses the Commission's idea of a class C0. Presently class C facilities with minimum antenna HAAT (300 meters) are given protection for literally half of the technical facility of a maximum, or full-class, C. Many of these stations have limits on antenna height due to financial, zoning, FAA, or other restrictions. If allowed to stay with maximum class C protection, these stations will continue to occupy value spectrum space that could be used by other broadcasters in perpetuity. While the Commission should set the time limit (three years) for stations to upgrade from class C0 to full C status, exceptions must be granted for licensees who encounter unexpected delays due to FAA, zoning, etc. Appropriate documentation must be provided in order to prove due diligence. However, during this three-year grace period, class C stations should be allowed to accept the class C0 downgrade voluntarily when it would

promote a more efficient utilization of the spectrum. Existing class C1 stations should be allowed to seek upgrades to class C0 status via application and/or rulemaking when they meet the spacing requirements. During the three-year period, there is no need for a 16-kilometer buffer zone due to the implementation of §73.215.

Reduced Minimum Separation Requirements for Second- and Third-Adjacent Channels

The Commission proposes to revise the spacing tables for §73.215 to allow all FM stations a minimum of 6-km relief from minimum separation requirements to the second- and third-adjacent channels. However, this proposal is still subject to the protected and interfering contours section of §73.215. In essence, this would allow licensees some additional spacing relief when applied to the second- and third-adjacent channels. However, they would be required either to install a directional antenna or reduce power in order to compensate for this overlap. RTA would like to expound on some ideas submitted by Richard L. Harvey in the initial comment period. Harvey's concept that the second- and third- adjacent be eliminated entirely is too drastic. However, the Commission should request further comments on the elimination of the third-adjacent channel. With respect to the proposed 6-kilometer grace, RTA proposes §73.207 be amended to reflect the spacing requirements to second- and third-adjacent channels. The present spacing requirements are predicated on a 100-dBu F(50,10) contour. RTA proposes that this reflect spacing requirements that are predicated on a 106-dBu F(50,10) contour (6 dB change). This would allow greater flexibility to licensees desiring upgrades and changes in antenna sites, which are often being necessitated by the negative circumstances discussed at the beginning of the instant document.

In any event, the Commission must rethink the separation requirements of class C1 to class C second- and third-adjacent stations. Using maximum facilities as reference, a class C produces a protected 60-dBu contour of 91.8 kilometers. A maximum class C1 produces a second- (and third-) adjacent contour of 10.1 kilometers. This produces a straight-line distance of 101.9 kilometers (102 kilometers). Even under §73.215, stations are allowed no relief, and they must maintain a full 105-kilometer separation. The reverse of the C1-to-C second- and third-adjacent channel separation considers a 72.3-kilometer protected 60-dBu contour, and an interfering class C contour of 13.7 kilometers. This adds to a total straight-line distance of 86.0 kilometers. Neither of these numbers is close to equaling the 105-kilometer requirement.

Perhaps the most important contribution RTA can make to the second- and third-adjacent channel separation scenario is to discuss current real-world operating stations that are operating on second-adjacent channels. Currently RTA is involved with a major metropolitan area that has two class C's licensed that are located with four channels of separation. A third full class C is located exactly 105 kilometers from each of the other class C's. The third class C is second adjacent to the other two. The third station's penetration into the market is sufficient for that station to be considered as the NAB's "Station of the Year" in its format. In other words, the other second-adjacent class C's have minimal to no effect on the subject station. This discussion is included to demonstrate to the Commission that RTA's basic precept that technology has advanced in both transmission and reception to the point that second- and third-adjacent separation requirements must be re-examined. RTA strongly urges the Commission to give consideration to a rule modification that gives consideration to second- and third-adjacent channels at 106 dBu versus 100 dBu. Modifying the spacing of §73.207(b), which would, in turn, allow for more flexibility in the Allocations Branch, should reflect this reduction in spacing requirements.

Conclusion

RTA is in full agreement with Graham Brock, Inc. concerning contingent applications and that the limit be placed at six, instead of the proposed limit of four. RTA also proposes that additional affected stations that could benefit from these scenarios be allowed a period of time in which to join the proceeding. This would be contingent on the additional applicant(s) causing the total number of stations involved to exceed six.

RTA endorses the negotiated interference concept with the modifications discussed earlier. RTA also endorses the concept of a class C0 FM facility, with the limits and modifications proposed. RTA is extremely desirous of a modification of the Rules to permit "First Come-First Serve" status to AM and NCE FM applications.

RTA feels that due to non-broadcast related, adverse limits being placed on present licensees and permittees, the Commission must give relief on second- and third-adjacent channel related spacing by reducing the interfering contour from 100 dBu to 106 dBu. This change should be reflected in the spacing requirements of §73.207. In any event, the Commission should immediately the second- and third-adjacent requirements between a class C and a class C1 to 102 kilometers, instead of the present 105 kilometers.

CERTIFICATION

We, the under signed do hereby certify that the attached Reply Comments in the "FCC Technical Streamlining Proceeding" were prepared by us or under our direct supervision. We further state that we are Associated with Reynolds Technical Associates and our qualifications are known at the Commission and in the industry.

Signed:


Paul Reynolds


Virgle Leon Strickland


Lee S. Reynolds

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This 3rd day of December, 1998