

[6712-01] D20735

Title 47—Telecommunication

CHAPTER I—FEDERAL
COMMUNICATIONS COMMISSION(Docket No. 20735; RM-1974, RM-2655;
FCC 78-384)PART 73—RADIO BROADCAST
SERVICESPART 74—EXPERIMENTAL, AUXILIARY,
AND SPECIAL BROADCAST
AND OTHER PROGRAM DISTRIBUTIONAL
SERVICESNoncommercial Educational FM
Broadcast StationsAGENCY: Federal Communications
Commission.

ACTION: Second report and order.

SUMMARY: The Commission issued a report and order adopting changes in the rules governing the operation of noncommercial educational FM stations. To promote efficient channel use the Commission is requiring Class D (10 watt) stations that do not increase power to change channel thereby making room for a number of new stations and power increases by existing stations. Also, in an effort to increase the service they provide, required all noncommercial educational FM stations, regardless of power, to operate at least 36 hours per week and called for a sharing of frequencies when stations are not operated at least 12 hours per day.

DATE: Effective October 13, 1978.

FOR FURTHER INFORMATION
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SUPPLEMENTARY INFORMATION:

SECOND REPORT AND ORDER

Adopted: June 7, 1978.

Released: September 1, 1978.

In the matter of changes in the rules relating to Noncommercial Educational FM Broadcast Stations, Docket No. 20735, RM-1974, RM-2655.

1. This proceeding was inaugurated on March 17, 1976 (41 FR 16973), stimulated by a petition from the Corporation for Public Broadcasting, to explore various issues relating to the efficient use of the FM radio channels set aside for noncommercial educational purposes.¹ In this document we

¹FM Channels 201 through 220 are set aside for such use in the 48 conterminous States. Because part of the FM band in Alaska is set aside for other (nonbroadcast)

will be resolving many of the issues raised in the *Notice of Proposed Rulemaking* and others may be the subject of future Orders. Some issues do remain, however, particularly relating to CFB's proposal for a Table of Assignments for the noncommercial educational portion of the FM band which cannot be resolved based on the data now on hand. In order to obtain the additional information we need in that regard, we are issuing a *Further Notice* in this proceeding.

2. The issues raised by this proceeding were far ranging, involving technical engineering matters of great complexity as well as legal or policy issues of considerable importance and sensitivity. As will be clear from the discussion below, if we are to act to foster the most effective use of these channels, it is unavoidable that a number of adjustments will have to be made in current approaches to channel usage. Clearly, some of the options would entail changes which could affect the private interests of existing licensees, and we have given careful consideration to the filings of these parties. Nonetheless, we cannot limit ourselves to an exercise of picking and choosing between the sets of views based upon private interests, no matter how legitimate or understandable they may be. Rather, we are charged with finding the best way to serve the public interest. In order to understand how the Commission approached this subject, it will be helpful if we begin with an examination of the history of noncommercial educational FM and the context in which the current proceeding arose.

INTRODUCTION

3. Interest in noncommercial radio is not new but was expressed even before this Commission was established. Thus, in enacting the Communications Act of 1934, the Congress included a provision (sec. 307(c)) which called upon this Commission to study and promptly report back to the Congress on the proposal to allocate by statute a fixed percentage of radio broadcasting facilities to nonprofit programs or entities. In its 1935 report to Congress, the Commission recommended against such an approach, and the idea was never pursued further. At that time, broadcasting was limited to AM radio, which, with a few exceptions, was operated on a commercial basis. Then, some years later, frequencies were set aside for FM radio² and TV broadcast-

use, including channels 201 through 220, they are not available for educational use. That State does not have reserved channels. Instead, the channels normally used for commercial purposes are available for noncommercial educational use. Guam, Puerto Rico, and the Virgin Islands are treated in the same manner as the 48 States.

²At first another frequency band, 42-50 MHz, was set aside for FM but this was later

changed by the Commission to the present band 88 to 106 MHz.

This gave the Commission an opportunity to examine the idea of reserving channels as a means of responding to specific noncommercial needs of an educational nature. The Commission decided in favor of doing so. In 1952, it set aside individual television channel assignments on a community-by-community basis for noncommercial educational use and they were (and are) so designated in the Table of Television Assignments. FM was treated differently, with the lower 20 channels being set aside generally for noncommercial educational use but no city-by-city allocations were made. On July 5, 1961, the Commission issued a *Notice of Inquiry and Notice of Proposed Rulemaking and Memorandum Opinion and Order* in Docket 14185, 26 FR 6130, 21 R.R. 1855, in order to reexamine the allocations policies followed in assignment of both commercial and noncommercial educational FM stations. At the time that proceeding began, all applications for FM stations were treated on a demand basis. This is, the applications were judged strictly on their own engineering terms, not on the basis of the impact on future assignment needs. The only test applied was compliance with the requirements that 1 mV/m interference would not be caused or received. Because of its developing concern that this approach did not make any provision for future need, the Commission decided to establish a Table of (commercial) FM Assignments. This Table, which does not cover the group of channels reserved for noncommercial educational use, was designed to anticipate future need for new stations or enlargements in coverage and make it possible to protect those needs against encroachment. This was done through use of mileage separation criteria that were incorporated into an FM Table. Under the Table, channels were reserved for use in or near particular assigned communities. The protection provided was solely in terms of mileage separations. Proposed stations were no longer obliged to protect another station's 1 mV/m contour.³

5. All the matters in that 1961 *Notice* were disposed of with the exception of certain issues relating to noncommercial educational radio, including the possible establishment of a Table to govern usage of the 20 FM channels, 201 through 220 (88.1 through 91.9 MHz) which are reserved for educational use. That matter was raised in the *First Report and Order* in Docket 14185, 33 FCC 309, 23 R.R. 1801 (1962), and in a later *Notice of In-*

changed by the Commission to the present band 88 to 106 MHz.

³In effect, the separations protect the following contours of Class A, B, and C stations at maximum facilities: A-927 uV/m; B-560 uV/m; and C-944 uV/m.

quiry, FCC 88-1907, 31 FR 14755 (1966). Although that issue remains unresolved, the Commission did take certain other actions relating to the noncommercial educational channels, particularly by placing certain mileage separation restrictions on the use of noncommercial educational FM Channels 218, 219, and 220. Stations on these channels were to be assigned in such a manner as to protect assignments on commercial Channels 221A, 222, and 223. Likewise, the educational stations on Channels 218, 219, and 220 were to receive the same mileage protections. Except for (1) these three channels (218, 219, and 220) in all parts of the country and (2) all channels in the Mexican and Canadian border areas, noncommercial educational FM stations continue to be assigned exclusively on the basis of not causing or receiving interference within their respective 1mV/m contours. (See §73.569 of the Rules.) In the Mexican border areas of the States of Arizona, California, New Mexico, and Texas, noncommercial educational FM radio assignments are governed by an agreement between the Governments of the United States and Mexico, which became effective August 9, 1973. An Educational Table of Assignments pursuant to this agreement was adopted.⁵ Although the Canadians have their own Table which includes noncommercial educational FM radio assignments, we do not have one governing assignments on the U.S. side of the border.

6. The Notice in the present proceeding raised a number of issues relating to channel use. The Commission hoped to continue its examination of the question of whether to establish a Table of Assignments or other means of anticipating future need. Among other things, the Commission raised the possibility of altering the present classes of stations or the facilities which can be used by these classes of stations. We also re-raised the question first raised in Docket No. 14185 of what to do with the low power (normally 10-watt) Class D stations.⁶ We were concerned about the impact these 10 watt stations could have on

channel usage. In the earlier docket, we observed that, "In our view, . . . the time may well be at hand when proper use of the increasingly crowded educational FM band requires restrictions on the future authorization and continuance of 10-watt operations. . . ." 31 FR 14755 at 14756 (1966). Although no action was taken on this issue in Docket 14185, the issue remained an important one. In fact, recent developments have given it a greater sense of urgency. The Corporation for Public Broadcasting ("CPB") filing with the Commission dated May 12, 1972, offered a focus for consideration of various possible ways of responding to that concern.

7. The central question of efficiency in channel use involves many more engineering and policy issues than simply deciding between a Table and a demand system. It can involve a wide range of questions regarding what facilities to be used by what classes of stations. It also involves how much of the time available for use is actually used by a particular licensee. At present there is no specific requirement that a noncommercial educational station in either service, TV or radio, be operated for any minimum period. The only existing rule (§73.561) suggests that the degree of use (or more exactly the lack of full use) of a channel could be considered if other parties sought to supplant the renewal applicant. In our experience, this rule has had little or no effect on the operating schedules of existing stations. Thus, we wished to consider whether to adopt a rule that would deal with the situation more effectively.

8. The passage of time and resulting changes in spectrum needs requires us to examine all these matters anew. Although the noncommercial educational FM channels have long been reserved, it has only been recently that the demand for their use has increased greatly. Because noncommercial FM growth was slow at first, the Commission chose not to impose specific requirements, believing that by avoiding possible burdensome requirements, it was creating an environment fostering establishment of these stations. Gradually noncommercial FM did grow. Even so, in many areas of the country, much spectrum space continued to remain unused. Eventually this changed. The Public Broadcasting Act of 1967 established the Corporation for Public Broadcasting. CPB began to make grants for public radio station operations and initial funding for new public radio stations which operate in the noncommercial educational FM band. Also since 1967, direct facility grants have been made to public radio stations by the Department of Health, Education, and Welfare. Pending legislation would transfer this role

to the Commerce Department's National Telecommunications and Information Administration. Because of the congestion which has developed, demands for noncommercial FM spectrum could not always be accommodated. No longer did the Commission have the luxury of a "hands-off" approach. With congestion came a need to reexamine the nature of channel use, and in the words of section 307(b) of the Communications Act, to take steps to insure a "fair, efficient and equitable distribution of radio service."

9. The present Notice of Proposed Rulemaking raised the following key issues: (1) What changes should be made in the allocations methods used for noncommercial FM? (2) Should there be changes in the classes of noncommercial FM stations or in the facilities available to these classes of stations? (3) How should 10-watt (or other low power) stations be treated? (4) Should a new Channel 200 be established? (5) What standards should be used regarding determining the potential for interference to television Channel 6 reception? (6) Should steps be taken to insure that a noncommercial FM station is operated and programmed in a fashion that is responsive to local needs? and (7) Should steps be taken to improve the efficiency of channel usage through requiring a minimum schedule, time sharing or otherwise?

10. The first two of these issues constituted a central focus of the CPB petition. They received a good deal of attention from it and other parties in their responsive filings. Although we raised the question of whether we should end our practice of operating on a demand system and should switch to a Table of Assignments or some other approach instead, we expressed some doubts about the workability of alternative approaches. Nonetheless, we indicated our willingness to consider use of a Table and to examine possible changes in the classes of stations and their facilities. CPB has, in fact, submitted a proposed Table of Assignments. This Table is based on what, in effect, would be nine classes of stations (three classes with three subcategories each). Arguably, we could act on this part of the proceeding now and decide whether to make such a change in our approach to assignments. We think, however, that important benefits could flow by issuing a *Further Notice*. By setting forth the specific Table and related items in such a document and by inviting comments on it, our deliberative process could gain in-

⁵The Commission in 1976, terminated Docket 14186 and transferred the remaining noncommercial educational FM issues to his proceeding where action could be taken in our updated record.

⁶The Table, which governs use of noncommercial educational FM channels in the border area covered by the United States-Mexico FM Broadcasting Agreement, appears in §73.507 of the FCC Rules (50 FCC d 172 (1974)).

⁷Unlike other stations whose facilities are used on an effective radiated power and a computed figure for height above average terrain, these stations are allowed 10 watts transmitter power output and are assumed to have an antenna height that does not exceed 100 feet.

⁸This is an issue we have decided to sever and to pursue in connection with related issues regarding licensing eligibility. It is treated in a separate Notice of Inquiry in BC Docket No. 78-164 published July 18, 1978, 43 FR 30842.

sights from other perspectives. At the moment we have little more than comment on the abstract issue of a Table. Other comments, directed to a specific proposal, can carry this process further. In any event, changes would have to be made in the CPB Table's Channel 6 protection standards. We hope to be able to adopt such standards soon, but it is clear that those used by CPB in its proposed Table do not provide an adequate degree of protection against interference. Also, the table is based on the current Class D usage of channels. But that too is expected to change as a result of the actions we are taking today. For these reasons the issue of a proposed Table for noncommercial FM channels will not be resolved here. Almost all of the remaining matters, however, lend themselves to at least partial disposition now.

10-WATT OPERATIONS

11. The first issue is what to do about the 10-watt (and other low power) operations. Low power stations (Class D) stations are intended to serve limited areas, as for example, a college campus. CPB suggested treating these as secondary operations. Even before the *Notice* was issued and the comments were received, it was clear to us that there was a sharp divergence between those who focus on the inefficiency they see in devoting a significant amount of spectrum space to Class D operations and those who emphasize the value they see in the service these stations can provide. It was so clear that whatever general statements could be made regarding the current situation, there would be exceptions. Thus, even if permitting many 10-watt operations was inefficient, this did not necessarily mean that a given 10-watt operation was inefficient. Nor did it mean that a limitation on a particular 10-watt station's coverage was necessarily paralleled by a limitation on its service through educational and other programs responsive to local needs. Overall, it did mean that serious questions had arisen generally on both efficiency of spectrum use and breadth of community service, and we proposed steps to deal with this problem.

12. Because of our concern about the impact of future grants of low power station authorizations, we put forward a proposal under which 10-watt operations would have to protect all stations from interference. However, they no longer would be protected themselves from interference except from that which would be caused by another 10-watt station. Moreover, any Class D station would be required to change its channel to accommodate the establishment of a new full-licensed station or an increase in facili-

ties of such a station even if they were to take place after the Class D station went on the air. This could mean that the Class D station would have to change channel or leave the air entirely if a new channel could not be found for it. The choice of a channel to use would not be limited to those in the noncommercial educational portion of the FM band but would include the commercial FM portion as well.

13. This proposal sparked substantial response. A number of parties shared CPB's views of the need for noncommercial FM stations with more substantial facilities to provide effective public radio service throughout the country. Other parties, with different goals in mind, asserted that CPB's proposals regarding 10-watt operations were unacceptable. They argued that often a station can only be started on a small scale² and that it is only after its public acceptance grows that it is realistic to expect that such a station could extend its coverage. Closing the door on future 10-watt stations was seen as putting a halt to this process. Also, some parties claimed that certain operations are best conducted with limited facilities. Limited power, they say, is an appropriate way to reach a small community or a neighborhood which is a part of a larger city of license. According to this view, operation on a greater scale with substantial facilities could even bring about a separation of the station from its more limited community and thereby cause a loss of effective station/community dialogue and involvement. CPB's response is that it has no desire to eliminate these stations but only is pointing out that a comparison between types of stations appears necessary in view of the existing congestion in the noncommercial part of the FM band. Thus, CPB says its purpose is only to deal with the comparative worth of a Class D and a higher power station if a choice must be made between them.

14. There was a third view, expressed by licensees of Channel 6 TV stations and by commercial broadcasters generally, who argued that by virtue of their low power these Class D stations would cause less interference to reception of Channel 6 TV stations than stations operating with greater

²In the *Notice* we referred to this phenomenon. We noted that 40 percent of these stations which began with 10 watts have sought or obtained increased facilities, with 60-70 percent of them at least reaching the equivalent of Class A maximum facilities. A number of others that increased did so to a greater amount (or increased a second time) and obtained Class B or Class C facilities. Although it may be that some of the stations which have not increased their facilities are precluded by engineering considerations from doing so, the record does not show the degree to which this is true.

facilities.³ Commercial broadcasters were also less than enthusiastic about moving Class D stations into the commercial part of the FM band.

15. Responding 10-watt stations said that CPB's suggestions were self-serving. They opposed CPB's focus on using larger stations to offer its public radio programming. Instead, they suggested that CPB and the National Public Radio ("NPR") should drop the limitation on the availability of CPB funds and NPR programming to stations which operate with certain facilities and which have a minimum operating schedule and meet other qualifications. They urge that CPB funds and CPB funded programming over NPR be offered to all noncommercial stations. These are now available only to stations meeting certain criteria in terms of facilities, staff size, etc. CPB replied, quoting 47 U.S.C. 396(a)(5), that its mandate is not to serve all noncommercial radio stations, as the Class D stations claim, but to make noncommercial broadcasting services available to all citizens. According to CPB, dividing the available radio funds among all existing noncommercial educational radio stations would be one of the least effective ways of making the service available. It asserts that the amount available per station would not even cover the salary of a single half-time employee. In fact, CPB contends that the cost to NPR simply to interconnect all the more than 900 noncommercial radio stations would required more than the combined CPB-NPR radio budget.

16. The National Federation of Community Broadcasters ("NFCB") made several studies to determine what the actual effect of the proposed rules would be. It found that were it not for existing Class D stations, at least 40 to 45 new high-power noncommercial FM stations in the top 100 markets could be established and that significant power increases could be obtained for another 25 to 30 existing stations. This theme was taken up by other parties who commented on their difficulty in being able to increase power. One party said that it could not even establish a station due to a Class D's "chattering" of the spectrum around it. As to the effect on Class D stations, NFCB also found that few of them would need to be forced off the air. Their study indicated that it would be possible to locate one or more 10-watt stations in the commercial FM spectrum in all but the three largest markets, and it expected some other 10-watters to apply for higher power and thus get protection. CPB also com-

³Because of their proximity to Channel 6 TV's frequency band, some educational stations have the potential of causing interference to Channel 6 reception, a point taken into account in authorizing these FM stations.

mented that disruption of Class D service in small markets where they are most useful is likely to be minimal, since the present shortage of channels is in large markets. However, the problem was not seen as limited to 10-watt stations, as they also found that in many instances new stations or better facilities also were blocked by low power Class A's.

17. On the specific question of whether displaced Class D's should be allowed in the commercial part of the FM band, the arguments pro and con were sometimes joined in a single pleading. Such was the case with the party that warned us not to consider this step a panacea, but nonetheless observed that it was unlikely that there would be harm in letting Class D's operate in the commercial band. Another party said that the commercial portion of the band is more stable, due to the existence of a Table of Assignments, so that locating a Class D station there would be less likely to produce for existing commercial stations and the Class D stations would be less likely to encounter problems from new commercial facilities. Another party, opposed to allowing Class D's on commercial channels, argued that even if the Class D stations are accorded secondary status, it would create bad will for a new commercial station to push such a Class D off the air. There was concern also that some interference from Class D's might go uncorrected and it was emphasized that several small pockets of interference to one station could add up to a large amount.

18. Three basic arguments were offered in favor of continued protection for 10-watters: (1) They offer truly local service; (2) they provide training; and (3) they represent a stepping stone to larger facilities. A number of 10-watt stations described their programming at some length. Some stressed how their stations had strong local ties and gave truly local service. One station claimed that it had two or three times the audience of a local 50 kW noncommercial station. This it attributed to its close attention to local needs. There was something approaching general agreement that Class D's could be useful in small towns. But there was a dispute over the claim by some stations that they have close ties with a particular neighborhood in a larger city. To the contrary, CPB al-

"The issue of the legitimacy of using 10-watt stations entirely or principally for education for their own staff as distinguished from providing an educational service to the listener was separately raised in this proceeding. The overall issue of community service requirements for noncommercial FM stations, however, will be handled in a related proceeding which we inaugurated to deal with noncommercial radio and television license eligibility.

leged that the service contours of these stations do not usually encompass an identifiable neighborhood but instead are determined by the accident of the transmitter location, most frequently on the campus of some educational institution. In fact, in larger markets, some parties thought that low power would lead to low level of public awareness of a station's existence, thus lessening its potential for involvement with the community. The problem 10-watt stations face in having to compete for funds and listeners with higher power stations was also noted.

19. While on the one hand there was criticism of Class D stations for operating with restricted hours and for failing to involve themselves in the community, other parties felt that training in itself was sufficient reason for the continued existence of Class D stations. This was in contrast to those that felt that it was only through programming that a station could serve the public interest. These parties argued that most Class D's were not providing much program service. Although some commercial broadcasters commented favorably on the training function, one party pointed out that the more complex training needed for TV personnel has been accomplished without using the equivalent of a Class D TV station. Many parties insisted that training could be done equally well on carrier current stations as on Class D stations, but this was not considered a satisfactory alternative by most of the schools that have 10-watt stations. Thus, one university said it needed an over-the-air station as a high percentage of the students live off campus. Also, carrier current operations were said to cost more and to be unpopular with staff and listeners. Finally, one 10-watter said its training program includes a special scholarship for minority students.

20. NFCB strongly disputed the argument that Class D's could be expected to be a stepping stone to higher power facilities. It and other parties argued that it cost only a little more (perhaps as little as \$1,500 more) to build a higher power station and that such stations were easier to support financially from the very beginning because of the wider audience they would reach. Thus, if these stations desired higher power they would have sought it initially. NFCB also thought it unlikely that 10-watt stations would continue to increase facilities. It stated that in the past the applications to in-

"This is to be distinguished from the general question, referred to in the previous footnote, of how stations on reserved non-commercial educational frequencies are to be used. Here, the point is whether such a function particularly relates to 10-watt stations.

crease facilities came mainly from stations licensed to institutions of higher education. It asserted that many past increases could be traced to funding by CPB and HEW of universities that had 10-watt stations. But now that the Class D service has an increasing share of secondary schools and a decreasing share of institutions of higher education, it expected this process to slacken.

21. A number of other points received attention. Few thought that 10-watt stations would have substantive value for enhancing the opportunity for minority ownership. Some even charged that this emphasis could give the appearance of directing minority ownership to inferior facilities. Although there are no reserved educational frequencies in Alaska, the Alaska Broadcasting System ("ABS") requested that we reserve assignments for 10-watters in Alaska. It said that such operations were particularly suitable for Alaska, which ABS notes is characterized by small settlements separated by vast unpopulated territories.

22. Finally, we were offered arguments on what to do if changes are to be ordered. On the one hand we were told that even if we halt further authorizations of Class D's we should protect existing ones. On the other hand, we were told that Class D's should be protected only for 1 year, or until their next license renewal, not longer. Several parties opposed establishing a 100-foot antenna height limit on Class D stations, citing their own situations. They asserted that such a limit would have a harmful effect since their campus was located more than 100 feet above average terrain or their antenna had to be mounted on a high building to be above obstructions. One party said severe power losses in excessively long transmission lines at the 10-watt level would deter abuse of excess height. NAB proposed moving 10-watt stations to the lower channels exclusively so as to minimize interference on Channel 6.

23. In reaching a decision on these difficult issues, we have been forced to recognize that there is no solution that would satisfy all of the conflicting interests involved. The fact that we raised questions about the continuation of 10-watt operations has led some to misunderstand the Commission's view of 10-watt or other low power operations. It was not our view then that these stations have no value, nor do we believe that now. Likewise we have never operated on the belief that these stations do not respond to discrete local needs. Even granting the value these stations can have and the service they can provide, we still must concern ourselves with the question of efficient channel usage. This means

that choices have to be made between worthwhile services. In the allocations area, such choices cannot be resolved entirely on a case-by-case approach, evaluating the operation of individual stations. Only through the adoption of general allocation standards (with appropriate exceptions where the public interest requires) can we provide some measure of certainty, efficiency, and cost-effectiveness in our allocations and licensing of stations.

24. Having balanced the competing equities, it has become clear that these low power operations cannot be permitted to function in a manner which defeats the opportunity for other more efficient operations which could serve larger areas, and bring effective noncommercial educational radio service to many who now lack it. When both types of services can no longer be accommodated, action is required. We think the public interest requires moving these low power operations to other channels where they would not impede the development of new or extended educational radio services. Since the commercial part of the FM band already has a Table of Assignments it is easier to accommodate these low-power stations in a manner which avoids interference concerns and, equally important, helps avoid uncertainty and unpredictability. In our view, doing nothing more than having 10-watt stations move to a different channel in the reserved non-commercial educational portion of the FM band would not be sufficient. At best it would reduce the impact of the inefficiency of an individual assignment. But, it would do little in terms of the cumulative impact of such inefficiencies. In order to deal with that a bolder step involving a move to the commercial part of the FM band is necessary.

25. Theoretically, such a move could be postponed until a request was received for use of the particular channel that a 10-watt station presently occupies. While this seems less harsh than requiring all 10-watt stations to vacate their present channels, it offers little benefit in making frequencies currently available. Instead, uncertainty about such availability could ensue. And, just as important, proceeding in this fashion would only serve to greatly delay inauguration of needed service. In addition, moving low-power stations out of the educational part of the FM band could have advantages beyond just freeing frequency space. It could help avoid Channel 6 TV interference through making a higher frequency available¹² which until then

had been employed by a low power operation. With all of these reasons in mind we believe it is necessary to require all low power operations that are able to do so to move to open places in the commercial part of the FM band.

26. We expect that there will be space in the commercial FM band to accommodate many of the 10-watt stations that will be required to change channel. We recognize that some 10-watt stations, will not be able to find such space, and upon documentation of this fact, such stations may seek to use Channel 200 instead.¹³ If, in turn, that is not possible, they will be required to determine which channel in the reserved noncommercial portion of the FM band poses the least preclusionary impact on other potential stations and will be required to move to that channel. Through the use of these three approaches, we hope to be able to avoid the necessity for terminating any of these low-power operations. However, that may not be possible in all cases, as where a proposal is filed in conflict with a 10-watt renewal application which would more effectively respond to a community's need for expanded educational service. That fact, of course, will be taken into account in choosing between the proposals. Although they still will not be permitted to cause 1 mV/m interference, those 10-watt operations which remain in the educational portion of the band no longer will be afforded protection against such interference except that caused by other 10-watt stations. Continuing to give full protection to 10-watt stations could only lessen otherwise possible gain in spectrum use efficiency.

27. In moving to the commercial part of the FM band, these 10-watt stations will be like FM translators. This is, they will be considered secondary operations.¹⁴ Thus, it is possible that future changes in the FM Table could require the termination of an operation that had moved to a commercial channel, because of its secondary status, or it could mean that the station might have to move a second (or even third) time if this proved necessary as a result of changes in the FM Table. Hopefully, this will be a rare result.

28. We believe that there is no present reason to apply our general policy on 10-watt stations announced here to Alaska. At this time it is clear that 10-watt operations can be accommodated there without great harm. In fact, they seem well designed to serve the small and often isolated settlements of that State. However, if facts change as

to spectrum crowding in Alaska, we can take such additional steps as later prove to be needed. In the meantime, we will allow Class D assignments in the commercial FM Table and will designate them by an asterisk.¹⁵ This arrangement allowing operation with 10 watts will apply to educational stations only. Commercial operations will continue to be governed by the Class A minimum of 100 watts.

29. A second exception is necessary in the border areas where agreements with Canada and Mexico restrict our ability to move the 10-watt stations. We intend to explore possible steps including, if necessary, seeking to amend these agreements to increase our flexibility to do so. Even without including these areas, however, the steps we are taking will help bring about better use of what up to now has been inefficiently used spectrum space.

30. This brings us to the final point: When to apply these new standards, and to whom to apply them. First, no additional 10-watt applications will be accepted for filing. To that end, in a separate *First Report and Order* we amended our rules to impose a "freeze" on the acceptance of any additional 10-watt applications. For those applicants already on file or whose application was filed before the "freeze" was imposed, we will process them under the old rules. However, like all other existing stations, they will become subject to the new requirements. If they prefer, they can anticipate the process and seek to move to a new channel immediately without waiting for this to be triggered by the Commission's requirements. Applicants that do prefer this course, should file an appropriate amendment to their pending applications.

31. Existing stations may also seek to move now if they choose. But the rules will also provide an opportunity for Class D stations to exempt themselves by increasing facilities to at least the minimum Class A level of 100 watts ERP. And, to avoid wholesale disruption, we shall allow all stations until January 1, 1980, to file the necessary application to increase facilities to this level. In the meantime, all Class D license renewals shall be granted on the basis of the secondary status of the station. Then, for all renewal applications which are to be filed January 1, 1980, or later, all 10-watt stations must include (1) a full engineering showing of the commercial channel to which the station would move or (2) if that is not possible, how the station is proceeding with

¹² Although there is disagreement about the degree of the potential for interference from FM frequencies to Channel 6, there is agreement that the further the FM frequency is from Channel 6, the lower the potential.

¹³ Later in this document we discuss our decision to establish a new FM channel 200 and our reasons for so deciding.

¹⁴ Where a 10-watt station conflicts with an FM translator, the translator will have to yield.

¹⁵ As noted, the usual educational frequencies are not available for use in Alaska, and instead are interspersed through the commercial channels which are used in that State.

either of the alternatives discussed above. If its request to change channels is found to be in proper form, a temporary authority to operate on that channel will be granted with the regular renewal on the new channel following upon completion of the change-over and submission of the necessary filings.

32. It may well be that as the process we are adopting is followed, there may be mutually exclusive applications for use of Channel 200 or of a particular commercial or noncommercial frequency. A hearing in such a case could be burdensome, time consuming and costly to the parties, the public, and the Commission. Thus, whenever possible, we hope to avoid this and to urge parties to seek agreements that would avoid such hearings. If necessary we will offer a later policy statement to implement this intent, but its need is not yet clear.

OPERATING SCHEDULE

33. We have examined the degree to which noncommercial radio stations use the time available to them on their frequency. Although noncommercial educational FM stations are licensed for unlimited operation, there is no rule which requires them to operate any minimum number of hours. The only requirement is stated by §73.561 of the Commission's Rules. This indicates that the extent to which the frequency is used is a matter of importance only at renewal time, and even then, only if spectrum space is inadequate to accommodate any additional demand. The rule is not self-enforcing. In fact, it virtually never has been invoked. Even if this rule could function in individual cases where complaints are lodged about the limited hours of a particular station, it certainly lacks any value in bringing about across-the-board changes to insure a fuller use of these frequencies. Also we have observed that many noncommercial stations have operated only rather limited schedules and that many also have been off the air for prolonged periods, as for example when a college-licensed radio station observes the institution's curricular summer vacation. With the growing scarcity of spectrum space, this has caused us concern. Consequently, in issuing the *Notice* we expressed the tentative view that some constructive response to this situation might well be needed. To this end we proposed adoption of a minimum schedule requirement.

34. Tentatively, we proposed to establish a 36 hour per week minimum which would consist of at least 5 hours per day, on at least 6 days per week. These figures were tentative ones which were selected because they had been applied to commercial FM sta-

tions in past years before they were succeeded by more stringent requirements. In addition to inviting comments on the need for a minimum schedule and on the specific proposal of a 36 hour minimum, we offered for comment another suggestion of a possible way to increase efficient channel usage. Under this suggestion: (1) Operating less than 36 hours (or any other minimum figure selected) would not be acceptable; (2) operating between 36 and 72 hours would be acceptable but would not provide protection against proposals for time sharing; and (3) over 72 hours of operation would be considered enough to demonstrate such full use of a frequency as to exempt a station from the necessity for time sharing. Finally, we asked whether special treatment should be afforded those college-licensed and other stations which observe school vacations. One thought was to permit such stations to continue to observe these vacations but to require a sufficient number of additional hours of operation at other times so that averaged over the year, they would reach the minimum level of any minimum operating schedule rule which is adopted.

35. The responses to these proposals varied. Various parties opposed our adopting any minimum operating schedule requirement. Some took the view that even if we allowed a college station to adjust its hours when it is closed for vacation, this still would impose a burden. These parties believed that such a requirement could force some school stations off the air and could have the effect of sacrificing the 9-month value of a station because of a 3-month concern. The costs of year-round operation were also thought to be a problem if we were not to allow vacations to be observed. A number of such stations pointed to their reliance on student staff members, most of whom, they said, would not be available during vacations and holidays. Other costs involved in extending the hours of operation such as maintenance, security, engineering supervision, tape rental costs and utility cost were also mentioned. Some felt that even if stations were not forced off the air, they could be put in the position of having to ask students to withdraw from their other activities if they were required to participate on the level required by a minimum operating schedule. In many cases, stations said volunteers are an important part of their staff and that it would be unrealistic to expect that their time at the station could be increased to meet a minimum schedule.

36. The proposal for a minimum schedule was also attacked as a hardship for high school stations. Since State law typically requires such sta-

tions to be supervised at all times when participating in school activities, a minimum schedule, we were told, would mean a significant increase in cost to provide such supervision. We were warned that in times of severe budget restrictions, the necessary funds might not be available. This concern led one party to suggest exempting elementary and high school stations but not college stations from a minimum schedule requirement. Alternatively, parties argued that it should be left to the listener to determine whether a particular station operates a sufficient number of hours,* or even whether any quantitative requirement should be applied to a station since the limited programming it does offer is particularly desirable.

37. Finally, among the opponents are those who charge that the proposal is really an effort by CPB to force small stations off the air to make way for the powerful, professionally funded, public radio operations it supports. Since CPB already requires a minimum schedule of the stations it supports, they point out that our proposal would not place a burden on these stations even if it would on others. These parties urge us to continue to use the present rule with its focus on renewal time and ask us to consider the hours of operation of a station only in the context of another specific interest in using the channel more fully. In their view, the Commission's present rule already could be taken as inviting challenge to a renewal of a station using little of the time available to it, either by way of petition to deny or a competing application.

38. On the other hand, quite a large number of parties supported the proposal in full or even urged that a more stringent approach be taken than the one we suggested. Some parties spoke harshly about inadequacies they saw in some existing noncommercial FM operations and they expressed the hope that a minimum schedule requirement could encourage serious noncommercial radio operations and discourage those that lack seriousness of purpose and commitment. Others, taking a similar tack, directed their remarks to the limited operating schedules of some stations but did not attempt to correlate this to any overall deficiencies in program operation. Spectrum space, we were told, is far too valuable to waste, so much so that one party suggested that in order to be protected against time sharing, a station should be required to operate 18 hours per day, 7 days per week. Another thought that we should use the

*In effect, they would have us formulate a rule which could take into account the individual circumstances applying to each station.

second step, figure of 72 hours mentioned in the Notice as inviting time sharing as a minimum requirement for all stations, or that we should require all stations to operate at least 10 hours per day on not less than 6 days per week, every week of the year. The party making this latter suggestion urged that it go into force on the first anniversary of a station's going on the air, thus allowing the licensee 1 year to get the station properly established. Another suggestion, not unlike this one, would have the Commission take into account the years the station has been on the air in fashioning a minimum schedule requirement. Likewise, the size of the station's facilities also could be taken into account, so that all stations would have to meet a certain minimum but more powerful ones should have to do more. One suggestion was to combine this with a requirement of a minimum number of weeks of operation during the year (34 weeks was suggested for college-licensed stations).

39. Various other parties simply supported the specific proposal put forward in the Notice and a number more did so with some minor exceptions such as the exact number of hours to be required. The arguments put forward on behalf of this general approach were the traditional ones the Commission has emphasized initially about efficiency of spectrum use, the avoidance of waste and licensee responsibility to serve fully the listener. It was on this latter point that several parties placed particular emphasis. They argued that our decision regarding the question of a minimum operating schedule should be based on a broadcast station's responsibility to serve the public, not on the station's private interest in preferring to operate on a limited basis. Thus, they note, a given station might indeed prefer to operate on a schedule of its own choosing and quite obviously could show that a more extensive schedule involved added costs. Even so, these parties urged us to focus on the need for service and to conclude, in effect, that with the decision to seek a license by any institution or nonprofit group necessarily came its acceptance of public responsibility. The supporters of the minimum schedule requirement urge that it should be that responsibility which governs the Commission's actions in this field.

40. A number of other parties, agreeing that some requirement was called for, suggested variations on our original proposal. One already mentioned was that of allowing compensation for vacations by increasing the number of hours during the weeks the station was on the air. Other suggestions included (1) giving a vacation exemption only during the station's first three

years of operation, (2) permitting a reduction in hours during vacations to 50 percent of normal hours, (3) increasing the hourly minimum by stages, (4) allowing the station to be silent on the weekend so long as the requisite hours are offered during the week, (5) relating the schedule requirements to the size of the market or (6) taking into account whether the station's audience was intended to be or was in fact a general one or was limited to a campus and its immediate environs. A final suggestion was that stations that do not maintain year-round schedules of minimum hours lose their protection against interference.

41. A number of parties thought it might be appropriate to exempt class D (40-watt) stations from any minimum operating schedule. Parties expressing this view argued that these stations lacked the resources to sustain such operations and thus should not be required to meet the requirements applied to other classes of stations. One party thought 10-watt stations should be exempt except when located in metropolitan areas. It asserted that in such cases, such a station could join with another licensee on the channel to meet the requirement. On the other hand, many parties took exception to the idea of exempting 10-watt stations. Among them were the licensees of 10-watt stations that operated full schedules themselves. One 10-watt licensee noted that it operated 133 hours per week (equal to 19 hours per day) and was unable to stay on the air during vacation times at the university. It fully supported the minimum schedule proposal.

42. Finally, we come to the arguments directed to the proposal for time sharing. Many of the comments did little more than offer mere statements of support or opposition without offering much in the way of explanation of the reasons for holding their views and the consequences they anticipated if time sharing were to be required. Some parties did offer points for us to consider in deciding whether time sharing could be instituted on a broad scale. Some doubted whether we would be able to successfully deal with questions of how many organizations would be allowed to share a frequency, how many hours each would be granted, and who should be excluded and for what reasons. Just as some thought that the concept of time sharing could add an element of complication to broadcast procedures, others endorsed the approach and were convinced that the Commission would be able to develop standards that appropriately respond to the situation. In fact, some parties asked us to express support for time sharing (even if we did not feel it was appropriate to man-

date it). Finally, we were warned against thinking that time sharing by itself could be a substitute for applying what otherwise would be a more stringent standard.

43. The comments offer a great deal of insight into the preferences of individual stations and in particular to the desire of a number of them to avoid any requirements regarding the number of hours they need to operate. However, these stations gave little attention to the public's right to expect that a station occupying a frequency would use it to a reasonable degree to provide a service to the public. Spectrum space is scarce and is becoming more so. In fact, in many parts of the country, there is little or no spectrum space available to accommodate additional services. With this in mind, we think it is clear that some action is needed to insure reasonable use of a frequency by those that do occupy it. Most of the parties seemed to accept this fact and understood that some action might well be necessary.

44. There are thus many choices before us in how to proceed, which are not limited to the 36-hour minimum figure mentioned in the Notice.¹⁷ This figure was not used because it necessarily had greater innate merit than other figures that might have been used, but it seemed a good basic measure of minimal service to use. After reviewing the record the 36-hour figure still seems a logical starting point, just as it had been for commercial FM before a more stringent requirement was imposed. While some parties mentioned other numbers we could use, these were but minor variations on the original theme and would have little difference in effect. There also were suggestions for a major increase from the level originally proposed, but we are concerned about the possibly harmful consequences of imposing too severe a requirement too abruptly. In deciding upon a course to follow and attempting to balance the interests involved, we have chosen to follow our original proposal. Although it is a close question whether to mandate this minimum year-round, for the moment it will be applied only during the weeks the station is on the air. No additional hours will be required to compensate for vacation periods.

45. To those who still think this step extreme, we point out that a 36 hour requirement means a station needs to operate only about 21% of the hours available to it. This can hardly be thought of as imposing an onerous burden. Instead, it is only an appropriate beginning point. Even if a more stringent operating requirement is not warranted for across-the-board application now, we cannot ignore the fact that by itself the requirement we have

¹⁷ See para. 34 above.

shown is not sufficient to insure maximum spectrum efficiency. We could go further and require increased hours of more powerful stations, but this could have the effect of discouraging power increases to extend coverage to under-served areas. Other complicated standards could be evolved based on population of the city of license or coverage area. But this also does not offer much more in exchange for the intricacies it would involve. Consequently, we have rejected differing standards based on both these factors. Conceptually, the keying of a minimum schedule obligation to a station's number of years on the air has much to commend it. But it, too, must be rejected as an administrative nightmare. Likewise keying the increases to the passage of years (a certain number of hours for 1979, more in 1980, etc.) is far too inexact a way to proceed. To avoid an excessive burden, we would have to make such increments modest, and therefore they would be unlikely to afford meaningful relief. Moreover, such increments would necessarily be based on conjecture about the future.

45. Since we firmly believe that some additional action is required, we return to the original idea of time sharing. We are convinced that except where the channel is efficiently used, at the level discussed below, time sharing is appropriate. Some have warned that administrative difficulties would ensue. We agree that there could be some initial confusion in the administration of time sharing arrangements. We also recognize the fact that some time sharing agreements might not easily be achieved. Even so, this approach is definitely worth pursuing. We expect that an approach can be structured in such a way as to avoid most anticipated problems. One of the advantages of time sharing is that it can bring real benefits without imposing real burdens. First of all it avoids the necessity for a more stringent across-the-board rule on minimum operating hours. In addition, its primary (and often only) impact would be on hours that the existing licensee is not using.

47. In our view, another prospective licensee should not be prevented from using hours not utilized by the present occupant of the channel. The difficulty in negotiations between the parties would be expected if the second party desired to use some of the hours the first party is already using. Many times this would not be a problem, either because they can agree or because they desire to use different hours. High school stations often do not operate during the very hours in the evening that a community station might most desire. Unavoidably, there will be some disputes between the parties—either in arriving at an agree-

ment or in administering it afterwards. We feel that the issue should be brought to the Commission for our resolution. In addition to advantages in terms of better use of time, if the parties can agree, it is possible for time sharing to be extended to include important cost savings through use of joint studies and/or transmitting equipment. For all these reasons, we welcome such agreements.

46. If a party is interested in sharing time with a licensee now operating a station, it should evidence that fact by filing an application for a construction permit for that channel and specifying that it proposes time sharing. Such applications will be accepted for filing at any time but will be acted upon in connection with a renewal application.

49. With our decision to establish a minimum schedule and a higher schedule level that would avoid time sharing, a number of stations will need to make adjustments in their operations and others may wish to do so. The minimum schedule requirement will go into effect on January 1, 1979. This should provide adequate time to prepare for the minimum schedule obligations itself. Then, commencing with renewal applications due on or after January 1, 1980, time sharing may be proposed by other applicants for the channel unless the existing station (1) is operating at least 12 hours per day and at least 6 days of the week during the entire year or (2) if it observed vacations (of up to 3 months) it operated enough hours to meet the test if averaged over the entire year (the station would be required to file with the Commission and keep on file at the station a compilation of the hours broadcast).

50. The provisions we are adopting to increase the hours of station operation may need to be increased in the future, as even the levels we have chosen fall far short of full channel use. At this time, though, we believe these steps can offer greater opportunity for the public to benefit from the service these stations can offer. Perhaps this rule can also make it possible for a number of entities that are not excluded because there is no available frequency to offer through time sharing arrangements types of programming not now available to their communities. If, so, the rule will bring benefits in diversity as well as efficiency terms.

CHANNEL 200

51. The next issue we turn to is the proposal raised by CFB¹¹ and put forward in the Notice that we establish a new educational FM channel at 87.9 megahertz, to be called Channel 200.

¹¹This proposal was also the subject of RM-2655, which sought the assignment of Channel 200 to Washington, D.C.

As we pointed out when inviting comments on this proposal, this frequency is not part of the band which has been set aside for educational FM use. Actually, it is part of the frequency band of 82-88 MHz which has been assigned to television Channel 6. Pursuant to International Radio Regulations governing the use of this frequency in Region 2 (the area which includes the United States of America) and pursuant to agreements now in force between the United States and Canada,¹² and between the United States of America and the United Mexican States,¹³ frequencies below 88 MHz are not set aside for FM broadcasting. In fact, both agreements specifically identify the FM channels as being those beginning with Channel 201 (88.1 MHz) exactly as does §73.501(a) of the Commission's own Rules. Although treaty restrictions preclude use of this frequency for FM purposes in areas near the border,¹⁴ no such restriction exists elsewhere in the country. However, for the balance of the country there still are serious interference considerations which must be taken into account. In fact, the interference potential is great because the center frequency for the TV Channel 6's FM sound carrier is 87.75 MHz, which is quite close to the proposed FM frequency of 87.9 MHz. However, even taking into account the need to protect Channel 6 television stations from interference and to avoid use of Channel 200 in any location near the border, there still are places where the frequency could be used. The purpose of this part of the Notice was to determine to what degree this was true and to explore whether the frequency 87.9 MHz should be utilized in certain areas of the conterminous United States for noncommercial educational FM purposes. No use other than a noncommercial one was contemplated.

52. In raising this issue we pointed out the relationship between the Channel 200 question and the general problem of Channel 6 interference. This is the case because the frequencies in the lower part of the FM band (the more so the lower they are) have a potential for causing interference to Channel 6 reception. This arises because TV receivers do not reject to a sufficient degree the strong FM signals on frequencies some distance from that of the TV channel. However, this is different from the Channel

¹²North American Regional Broadcast Agreement, 61 Stat. 1726, TIAS 1726, 6 Bevans 447.

¹³Agreement Between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz Band (effective date Aug. 9, 1973). TIAS 2697.

¹⁴The border areas are those within 400 km (250 mi) of Canada or 320 km (199 mi) of Mexico.

200 situation where the desired signal is virtually on the same frequency, and thus the television receiver could not reject it.² Because of the important differences between the Channel 6 interference question and that posed by Channel 200, we can proceed to resolve the latter. The Channel 200 question is the easier one to resolve in that we have only one channel to deal with and have a simpler task in that we only have to find what is left over when Channel 6 service areas are protected in full.³ The general Channel 6 issue is expected to be resolved in a subsequent *Report and Order*.

53. In the *Notice*, we also inquired about the use to which Channel 200 might be put in the event it were established. Should it be reserved for use in such locations as would allow the employment of powerful facilities? Should it be used on a lesser or even on a low power basis? Should we specify the areas where it could be used so as to insure that all or some of the areas which would be served would receive a first educational service?

54. The responses to the *Notice* were mostly along lines that could be anticipated. Most of the TV stations which responded, as well as the NAB, opposed the establishment of Channel 200 as posing an even greater threat to reception of Channel 6 stations than that posed by operations on existing noncommercial FM channels. Storer Broadcasting argued that Channel 200 would cause additional interference to Channel 6 color reception, in addition to the aural interference it says its Channel 6 station presently suffers from educational FM operation. The licensees of various other Channel 6 television stations also opposed the concept. In their view, use of Channel 200 would bring a destructive impact to stations that already face serious problems from stations operating on the educational channels, particularly the lower ones which are closer to the Channel 6 frequency band. These stations expressed serious misgivings in regard to the proposal and doubts about our being able to protect them from any interference that might otherwise be caused by Channel 200 operations. They were particularly troubled by this proposal for additional operations since they did not feel that their operations were now being accorded the full degree of protection from interference by existing operations to which they were entitled.⁴

The Channel 200 proposal was also opposed by those who argued that it was not likely to be of much benefit in the places where it was most needed, namely in metropolitan areas, since that is where Channel 6 stations are found. Elsewhere, we are told, there is little need for Channel 200. Finally, there were those who questioned our being able to develop standards for Channel 200 that would provide the necessary protection to Channel 6. Finally, some doubt was expressed over being able to tune FM receivers to the frequency 87.9 MHz.

55. Even those who supported the proposal recognized the need to insure the absence of interference. However, they differed from the opponents in that they believed that we could find ways in which to protect Channel 6 reception. Although all understood the need to exclude the border areas and areas around Channel 6 operations, not all agreed on how to use the areas that are left. On the one side, there was an argument in favor of reserving this channel for the use of powerful stations that could provide service to wide areas. More parties, however, urged its use for low power operations, principally 10-watt Class D stations. The latter method was seen as one way of accommodating the Class D stations that might be displaced from their current frequencies. One party referred to its study which showed that in many markets it would be possible to accommodate one or more 10-watt stations in the commercial part of the band and indicated that to some extent Channel 200 could be used where commercial space could not be found.

56. We agree that there is at least some basis for doubts which have been expressed about Channel 200. Thus, it is true that we cannot use Channel 200 near the Mexican and Canadian borders. It is also true that it cannot be used anywhere in the vicinity of existing Channel 6 TV operations. Perhaps, too, some FM receivers cannot be tuned to pick up Channel 200 signals. Still, we believe there is at least some merit in establishing Channel 200. Even though there are large portions of the country where the channel could not be used, there are other areas remaining where it could be.⁵ In our view, so long as adequate protective measures are taken, there is nothing to be gained by not using the spectrum space which is available. The demand is there, and this frequency can help meet it.

57. Having decided to put the frequency to use, we need to determine

regarding the potential educational FM stations have for causing interference to television Channel 6.

²Figure 1, attached to this document, depicts with cross-hatching the areas where Channel 200 could be used consistent with applicable restrictions.

how best to use it and still insure full protection to Channel 6. A number of parties hoped that it would be used for the establishment of new powerful stations that would be able to bring service to areas now lacking it. For the most part, this is not possible. Even the areas where it might be used in this fashion, they are so removed from major population centers that other (regular educational) frequencies themselves are likely to be available. Besides that, there would be severe restrictions on establishing stations with even the modest facilities of a Class station (3 kW at 300 ft).

58. With all of this in mind, we are convinced that its best use is for stations with modest, essentially Class D facilities.⁶ Used in this fashion, it can help provide a way to remove the Class D stations which cannot move a commercial channel and are blocking expansion of existing educational stations or the establishment of new full-powered ones. In view of our decision to move the 10-watt stations rather than to simply terminate them, it would be useful indeed if there was another place (besides the commercial band) where they could be shifted.

59. At this point, we are not in a position to assay the extent to which Channel 200 will be needed to accommodate Class D stations moved from their present frequencies. As a consequence, it is not possible at this point to predict what space, if any, may remain for the possible use of any other stations. Therefore, for the time being we will use Channel 200 exclusively in the manner described and will limit stations to their present facilities which will not be allowed to exceed watts effective radiated power and antenna height of 30 meters (100 feet) unless those greater facilities, already in use, would cause no interference.

60. For the purpose of insuring protection to Channel 6, it is necessary to use the more informative figure of effective radiated power. Transmitter power output which is limited to watts is not a reliable indicator of effective radiated power, which varies from case to case. Likewise, we need to include consideration of the actual antenna height above average terrain, not an assumed figure.⁷ The 50 watt/100 ft combination is designed to be a reasonable Class D facilities even those Class D stations that will need to reduce their facilities to this level.

61. As to the standards themselves we have chosen a conservative approach. CPB suggests, and we agree

²In fact, Figure 1 shows that there is rather severe limit even on its use for Class D stations or equivalent. It is based on 50 watts ERP and a height above average terrain of 100 ft.

³This will require affected Class D stations to compete the figure, something many have not yet had to do.

²Since the frequency Channel 200 would use belongs properly to television rather than FM, any such use of it would have to be on a secondary basis, a fact recognized in the standards we are adopting.

³The closeness of the frequencies absolutely precludes any collocation or other location of the FM inside the coverage area.

⁴This issue will be discussed when we deal with the establishment of standards re-

That the Channel 6 stations should be protected not just to the 47 dBu (Grade B) contour but to the 40 dBu contour. This will protect the TV station throughout the area where it is viewed, and do so in a fashion that recognizes its primary status and the secondary status of the FM station. To protect this contour, the FM signal would have to be reduced substantially below this level. CPB urges that it be reduced by 15 dB, that is, the FM signal at the TV 40 dBu contour would not be allowed to exceed 25 dBu. AMST, on the other hand, urges that it be reduced to 25 dB, so that it would be the 15 dBu contour of the FM station which could not overlap the TV's 40 dBu contour.

62. We have chosen to follow the AMST proposal in this regard because it is based on the level at which interference would begin to result. The CPB median figure by definition means that in the worse half of the cases, there would be interference. This is far too much to countenance, especially bearing in mind the fact that except for this special dispensation, this is not intended to be an FM frequency at all. Thus, for Zone I a separation of 212 kilometers (132 mi), 123 kilometers (77 mi) to the 40 dBu contour for the TV and 88 kilometers (55

mi) for the FM's 15 dBu contour. For Zone II the figures are 241 kilometers (150 mi) separation based on a 40 dBu contour extending 153 kilometers (95 mi) and the FM contour 88 kilometers (55 mi). On an attached map (Figure 1) we have depicted the areas where it would be possible to locate a station on Channel 200, taking into account treaty considerations and Channel 6 interference. In a few cases, educational stations on Channels 201, 202 and 203 will also have an impact.

63. For the reasons indicated, we are amending the Commission's rules in the manner already described. We hope soon to follow with other important steps which likewise will help foster the most effective use of these frequencies.

64. Accordingly, it is ordered, That effective October 13, 1978, Part 73, of the Commission's rules and regulations is amended as set forth below. Authority for this action is found in sections 4(i), and 303(r) of the Communications Act of 1934, as amended.

(Secs. 4, 303, 78 stat., as amended, 1066, 1082; 47 U.S.C. 154, 303.)

FEDERAL COMMUNICATIONS
COMMISSION
WILLIAM J. TRICARICO,

Secretary.

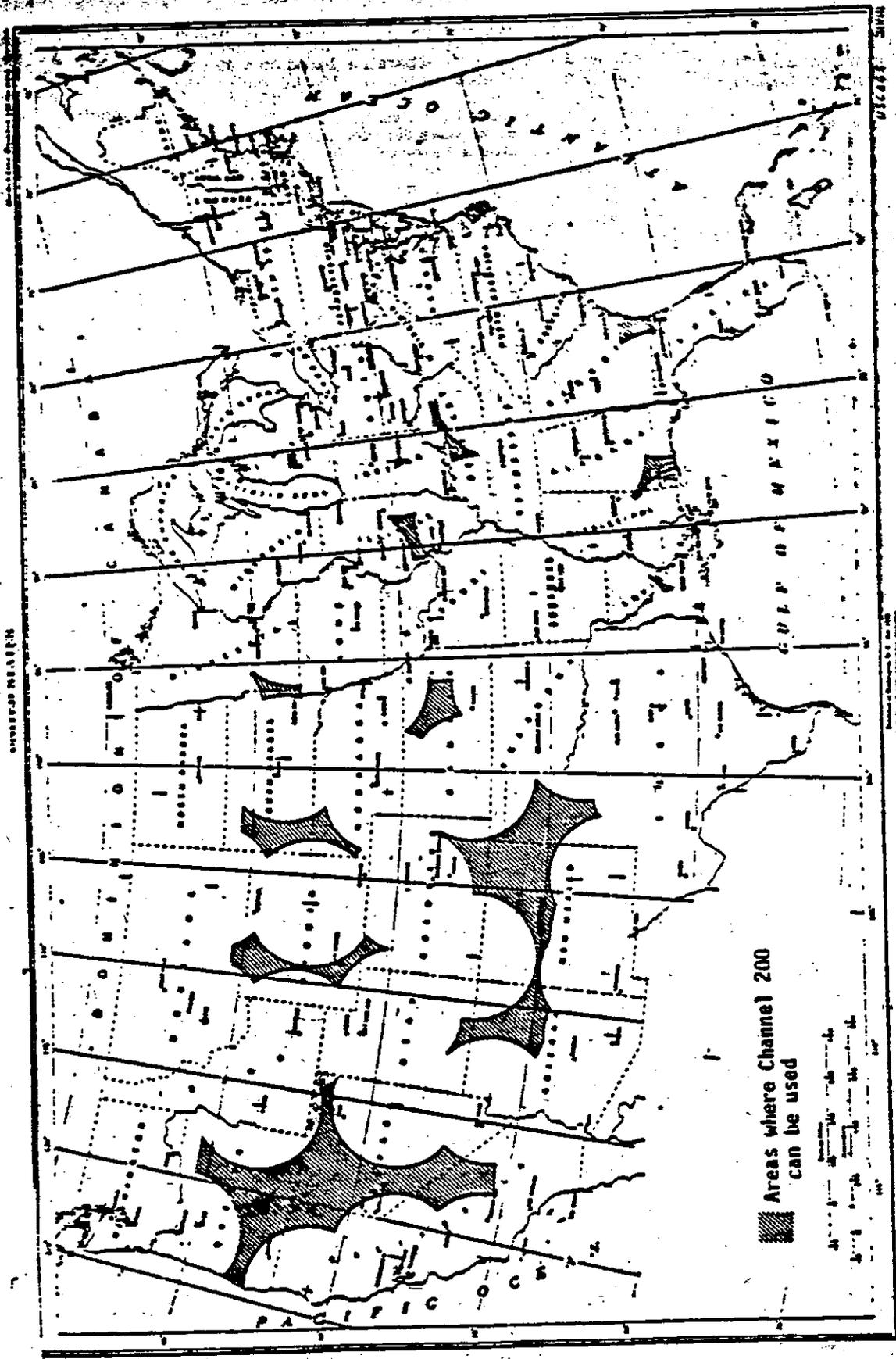


FIGURE 1

Formal and informal comments have been deleted from this second report and order. For information contact: Jonathan David, Broadcast Bureau, FCC 202-632-7792.

1. Section 73.207(a) is amended to read as follows:

§73.207 Minimum mileage separations between co-channel and adjacent-channel stations on commercial channels.

(a) Petitions to amend the Table of Assignments (§73.202(b)) (other than those expressly requesting amendment of this section or §73.205) will be dismissed and no application for a new station, or change in the channel or location or an existing station, other than a class D (secondary) station, will be accepted for filing, unless the proposed facilities will be located at least as far from the transmitter sites of other co-channel and adjacent-channel stations (both existing and proposed) as the distances in miles specified in this paragraph. Proposed stations of the respective classes shown in the left-hand column of the following table shall be located no less than the distance shown from co-channel stations and first adjacent-channel stations (200 kHz removed) and second and third adjacent-channel stations (400 and 600 kHz removed) of the classes shown in the remaining columns of the table. The distances shown between stations of different classes apply regardless of which is the proposed station under consideration (e.g., distances shown from a new Class A station to an existing Class C station are also the distances between a new Class C and an existing Class A station). The distances between Class B and Class C stations apply only across zone lines. The adjacent-channel spacings listed also apply:

antenna heights set forth in this Subpart.

3. Section 73.501 is amended to read as follows:

§73.501 Channels available for assignment.

(a) The following frequencies, except as provided in paragraph (b) of this section, are available for noncommercial educational FM broadcasting:

Frequency (MHz)	Channel no.
87.9	200
88.1	201
88.3	202
88.5	203
88.7	204
88.9	205
89.1	206
89.3	207
89.5	208
89.7	209
89.9	210
90.1	211
90.3	212
90.5	213
90.7	214
90.9	215
91.1	216
91.3	217
91.5	218
91.7	219
91.9	220

The frequency 87.9 MHz, Channel 200, is available only for use of existing Class D stations required to change frequency. It is available only on a noninterference basis with respect to TV Channel 6 stations and adjacent channel noncommercial educational FM stations. It is not available at all within 402 kilometers (250 miles) of Canada and 320 kilometers (199 miles) of Mexico. The specific standards governing its use are contained in §73.512.

The frequency 89.1 MHz, Channel 206, in the New York City metropolitan area, is reserved for the use of the United Nations with the equivalent of an antenna height of 500 feet above average terrain and effective radiated power of 20 kW and the Commission will make no assignments which would cause objectionable interference with such use.

(b) In Alaska, the frequency band 87.9-100 MHz is allocated exclusively to Government radio services and non-Government fixed service. The frequencies 87.9 MHz-91.9 MHz (Channels 200 through 220, exclusive) will not be assigned in Alaska for use by noncommercial educational FM broadcast stations; however, the frequencies 100.1-107.9 MHz (Channels 261 through 300, inclusive) are available for such use under the allocation provisions in Subpart B, §§73.201-73.213. Such noncommercial educational assignments will be designated by an asterisk. Noncommercial educational FM stations using Class A channels in Alaska are exempt from the minimum effective radiated power requirements specified in §73.211(a) and from the "freeze" on the acceptance of applications proposing facilities of less than 100 watts effective radiated power contained in Note 3 to §1.573. (However, they are subject to certain other re-

quirements applicable to stations operating on commercial channels. See §73.513.)

(c) There are specific noncommercial educational FM assignments (Channels 201-220) for various communities in Arizona, California, New Mexico, and Texas. These are set forth in §73.504.

4. Paragraphs (b) and (c) of §73.504 are amended to read as follows:

§73.504 Noncommercial educational channel assignments under the United States-Mexico FM Broadcast Agreement.

(b) Anyone applying for a noncommercial educational FM station in the border area of Arizona, California, New Mexico, or Texas, must propose at least Class A minimum facilities (see §73.211(a)) and apply for a channel set forth in the table in paragraph (a) for use either at the listed community or an unlisted community under the same conditions set forth in §73.203(b) of this chapter; *Provided, however,* That existing Class D noncommercial educational stations may apply to change frequency within the educational portion of the FM band in accordance with the requirements set forth in §73.512.

(c) The minimum mileage separations set forth in §73.207 of this chapter and the Note thereto shall apply to:

(1) A petition for rulemaking to amend the table set forth in paragraph (a) and;

(2) Except for Class D stations changing channel pursuant to §73.512, to an application for any class of noncommercial educational FM channel (new station, or change in channel or transmitter site or increase in facilities of an existing station) within the border area referred to in paragraph (a). Any petition to amend which so conflicts will be dismissed. Any application which does not so conform will not be accepted for filing. No authorization for a commercial educational station will be granted for a station in the United States in the area adjacent to the border area which does not meet the minimum mileage separations set forth in §73.207 to any noncommercial educational allotment or authorization in the border area.

5. Section 73.506 is amended to read as follows:

§73.506 Classes of educational channels, and stations operating thereon.

(a) Noncommercial educational stations operating on the channels speci-

2. Paragraphs (a) and (b) of §73.209 are amended to read as follows:

§73.209 Protection from interference.

(a) Permittees and licensees of FM broadcast stations are not protected from any interference which may be caused by the grant of a new station or of authority to modify the facilities of an existing station, in accordance with the provisions of this Subpart. However, they are protected from interference caused by Class D (secondary) noncommercial educational FM stations. See §73.509.

(b) Except as specified in §73.509, the nature and extent of the protection from interference accorded to FM broadcast stations is limited solely to the protection which results from the minimum assignment and station separation requirements and the rules with respect to maximum powers and

filed in § 73.501 are divided into the following classes:

(1) A Class D educational station is one operating with no more than 10 watts transmitter power output.

(2) A Class D educational (secondary) station is one operating with no more than 10 watts transmitter power output in accordance with the terms of § 73.512 or which has elected to follow these requirements before they become applicable under the terms of § 73.512.

(3) Noncommercial educational stations with more than 10 watts transmitter power output are classified as Class A, Class B, or Class C, depending on the effective radiated power and antenna height above average terrain, and the zone in which the station's transmitter is located, on the same basis as provided in §§ 73.205, 73.206, and 73.211 for stations on the nonreserved FM channels. Where a station is authorized with more than 3 kilowatts (4.8 dBk) effective radiated power, or coverage greater than that obtained by the equivalent of 3 kilowatts effective radiated power and 91.5 meter (300 foot) antenna height above average terrain, it is classified as a Class B station if its transmitter is located in Zone I or Zone I-A, and as a Class C station if its transmitter is located in Zone II. Class A stations may be assigned in all zones.

(b) Class A, B, and C noncommercial educational stations may be assigned to any of the channels set forth in § 73.501. Existing Class D noncommercial educational FM stations may continue to operate on their present channels and pending applications for new Class D stations may be granted to permit operation on the channel proposed, but in both instances such operations shall be subject to the provisions of § 73.512.

6. Paragraph (a) of § 73.507 is amended to read as follows:

§ 73.507 Minimum distance separations between co-channel and adjacent-channel stations.

(a) *Minimum distance separations.* No application for a new station, or change in channel or transmitter site or increase in facilities of an existing station, will be granted unless the proposed facilities will be located so as to meet the adjacent channel distance separations specified in § 73.207(a) for the class of station involved with respect to assignment on Channels 221, 222, and 223 listed in § 73.201 (except where in the case of an existing station the proposed facilities fall within the provisions of § 73.207(b)), or where a Class D station is changing frequency to comply with the requirements of § 73.512.

7. Section 73.509 is amended to read as follows:

§ 73.509 Protection from interference.

(a) No application for a facility on any channel specified in § 73.501 of this Chapter will be accepted if the requested facility either would cause objectionable interference within the 1 mV/m contour of any co-channel or adjacent channel station other than Class D (secondary) or, except in the case of Class D (secondary) proposals, receive interference within the proposal 1 mV/m contour.

(b) No application for use of any commercial FM channel by a Class D (secondary) station will be accepted if the requested facility would cause objectionable interference within the 1 mV/m contour of any co-channel or adjacent-channel station.

(c) No application for FM Channel 200 will be accepted if the requested facility would cause interference within the 1 mV/m contour of any co-channel Class D (secondary) station on Channel 200 or any adjacent-channel station on Channels 201, 202 and 203. The standards set forth in paragraph (a) 1-3 shall be used to determine the existence of objectionable interference.

(d) The following standards shall be used to determine the existence of objectionable interference:

(1) The distance to the 1 mV/m contour shall be determined by the use of Figure 1 of § 73.333 (F(50,50) curve) of this Chapter (see § 73.313(c)(1)).

(2) The distance to the applicable interference contour shall be determined by the use of Figure 1a of § 73.333 (F(50,10) chart) of this Chapter.

(3) Objectionable interference will be considered to exist if, on the basis of the curves referred to in this subparagraph, the ratio of undesired to desired signal exceeds: 1:10 for co-channel; 1:3 for first adjacent channel (200 kHz removed); 10:1 for second adjacent channel (400 kHz removed); and 100:1 for third adjacent channel (600 kHz removed).

(e) No application for FM Channel 200 will be accepted if the requested facility would cause interference to Channel 6 operations, including TV translators on this channel. Such objectionable interference will be considered to exist whenever the 15 dBu contour based on the F 50(10) curves in § 73.333 Figure 1a of the proposal would overlap the 40 dBu contour based on the F 50(50) curves in § 73.509 Figure 2, of the television station.

8. Paragraph (a) of § 73.511 is amended to read as follows:

§ 73.511 Power and antenna height requirements.

(a) Except as provided in § 73.504(b), no provision as to a minimum facility for an FM broadcast station shall apply to a noncommercial educational station operating on a channel specified in § 73.501(a); and no provision as to a maximum facility shall apply to a noncommercial educational station on Channels 201 to 217, inclusive. However, any application other than a Class D (secondary) station application filed pursuant to § 73.512, specifying a facility below the minimum of 100 watts effective radiated power will not be accepted for filing (see Note 3 to § 1.573) and any application exceeding the maximum set forth in § 73.211 will not be necessarily granted; see *Notice of Inquiry* in Docket No. 14185 as concerns educational FM matters (5 FCC 2d 587, 588, fn. 2 (1966); see also 13 FCC 2d 751 (1968) and 17 FCC 2d 496 (1969) and Docket 20736 (41 FR 16973).

9. New § 73.512 is added to read as follows:

§ 73.512 Special procedures applicable to Class D noncommercial educational stations.

(a) All Class D stations seeking renewal of license for any term expiring June 1, 1980, or thereafter shall comply with the requirements set forth below and shall simultaneously file an application on FCC Form 340, containing full information regarding such compliance with the provisions set forth below.

(1) To the extent possible, each applicant shall select a commercial FM channel on which it proposes to operate in lieu of the station's present channel. The station may select any commercial channel provided no objectionable interference, as set forth in § 73.509(b), would be caused. The application should include the same engineering information as is required to change the frequency of an existing station and any other information necessary to establish the fact that objectionable interference would not result. If no commercial channel is available where the station could operate without causing such interference, the application shall set forth the basis upon which this conclusion was reached. This procedure applies throughout the continental United States except that stations in the areas within 402 kilometers (250 miles) of Canada and 320 kilometers (199 miles) of Mexico do not have to comply with this requirement pending completion of negotiations with these countries, in which case such parties should follow the

procedures in paragraph (a)(3) of this section.

(2) If a commercial channel is unavailable, to the extent possible each applicant should propose operation on Channel 200 (87.9 MHz) unless the station would be within 402 kilometers (250 miles) of the Canadian border or 320 kilometers (199 miles) of the Mexican border or would cause interference to an FM station operating on Channels 201, 202, or 203 or to TV Channel 6, as provided in § 73.509.

(3) If a channel is not available under either paragraph (a) (1) or (2) of this section, the renewal applicant shall study all 20 noncommercial educational FM channels and shall propose operation on the channel which would cause the least preclusion to the establishment of new stations or increases in power by existing stations. Full information regarding the basis for the selection should be provided.

(b) At any time before the requirements of paragraph (a) become effective, any existing Class D station may file a construction permit application on FCC Form 340 to change channel in the manner described above which shall be subject to the same requirements. In either case, any license granted shall specify that the station's license is for a Class D (secondary) station.

(c) Except in Alaska, no new Class D applications nor major change applications by existing Class D stations are acceptable for filing except by existing Class D stations seeking to change frequency. Upon the grant of such application, the station shall become a Class D (secondary) station.

(d) Class D educational (secondary) stations (see § 73.506(a)(2)) will be permitted to continue to operate only so long as no interference (as defined in § 73.509) is caused to any FM or TV broadcast station. In the event that the Class D (secondary) station would cause interference to an FM (other than a Class D (secondary)) or TV broadcast station after that Class D (secondary) station is authorized, the Class D (secondary) station must cease operation when program tests for the FM or TV broadcast station are authorized. The Class D (secondary) station may apply for a construction permit (see § 1.533(a)(6)) to change to another frequency or antenna site where it would not cause interference (as defined in § 73.509). If the Class D (secondary) station must cease operation before the construction permit is granted, an application for temporary authorization (pursuant to § 1.542 and 47 U.S.C. 309(f)) to operate with the proposed facilities may be submitted; where appropriate, such temporary authorization can be granted.

10. Section 73.513 is amended to read as follows:

§ 73.513 Noncommercial educational broadcast stations operating on reserved channels.

Noncommercial educational FM stations, other than Class D (secondary) stations, which operate on channels listed in § 73.202 rather than § 73.501(a) but which comply with § 73.503 as to licensing requirements and the nature of the service rendered, shall comply with the provisions of the following sections of Subpart B of this part: §§ 73.201 through 73.213 (Classification of FM Broadcast Stations and Allocation of Frequencies); § 73.254 (Required Transmitter Performance); and such other sections of Subpart B of this Part as are made specifically applicable by the provisions of this Subpart C. In all other respects, such stations shall be governed by the provisions of this subpart and not Subpart B of this part.

11. Section 73.561, including the title, is amended to read as follows:

§ 73.561 Operating schedule; time sharing.

(a) All noncommercial educational FM stations will be licensed for unlimited time operation except those stations operating under a time sharing arrangement. Beginning January 1, 1979, all noncommercial educational FM stations are required to operate at least 36 hours per week, consisting of at least 5 hours of operation per day on at least 6 days of the week; however, stations licensed to educational institutions are not required to observe the minimum operating requirement during those days designated on the official school calendar as vacation or recess periods.

(b) Effective January 1, 1980, all stations, including those meeting the requirements of paragraph (a) of this section, but which do not operate 12 hours per day each day of the year, will be required to share use of the frequency upon the grant of an appropriate application proposing such share time arrangement. Such applications shall set forth the intent to share time and shall be filed in the same manner as are applications for new stations. They may be filed at any time, but in cases where the parties are unable to agree on time sharing, action on the application will be taken only in connection with the renewal of application for the existing station. In order to be considered for this purpose, such an application to share time must be filed no later than the deadline for filing applications in conflict with the renewal application of the existing licensee.

(1) The licensee and the prospective licensee(s) shall endeavor to reach an agreement for a definite schedule of periods of time to be used by each. Such agreement shall be in writing

and shall set forth which licensee is to operate on each of the hours of the day throughout the year. Such agreement shall not include simultaneous operation of the stations. Each licensee shall file the same in triplicate original with each application to the Commission for initial construction permit or renewal of license. Such written agreements shall become part of the terms of each station's license.

NOTE.—For allocations purposes, both (all) stations sharing time will be treated as unlimited time stations.

(2) The Commission desires to facilitate the reaching of agreements on time sharing. However, if the licensees of stations authorized to share time are unable to agree on a division of time, the Commission shall be so notified by statement to that effect filed with the application proposing time sharing. Thereafter the Commission will designate the application for hearing on any qualification issues arising regarding the renewal or new applicants. If no such issues pertain, the Commission will set the matter for expedited hearing limited solely to the issue of the sharing of time. In the event the stations have been operating under a time sharing agreement but cannot agree on its continuation, a hearing will be held, and pending such hearing, the operating schedule previously adhered to shall remain in full force and effect.

(c) A departure from the regular schedule set forth in a time-sharing agreement will be permitted only in cases where an agreement to that effect is reduced to writing, is signed by the licensees of the stations affected thereby and filed in triplicate by each licensee with the Commission 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 written agreement, provided appropriate notice is sent to the Commission in Washington, D.C.

(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) and (b) of this section or to continue operating, the station may limit or discontinue operation for a period of not more than 30 days without further authority from the Commission. Provided, That notification is sent to the Commission in Washington, D.C., no later than the 10th day of limited or discontinued operation. During such period, the permittee or licensee 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 so notify the Commission in

Washington, D.C., of this date. If the causes beyond the control of the permittee or licensee make it impossible to comply within the allowed period, informal written request shall be made to the Commission in Washington, D.C., no later than the 30th day for such additional time as may be deemed necessary.

12. Section 74.1203(a) is amended to read as follows:

§74.1203 Interference.

(a) FM translators will be authorized and permitted to continue to operate only where they cause no interference to the direct reception by the public of

the off-the-air signals of any authorized broadcast station including Class D (secondary) noncommercial educational FM stations. FM translators shall not cause harmful interference to the transmissions of any other authorized radio station nor shall an FM translator cause interference to reception by a television broadcast translator station of its input signals. FM translator stations which may cause any such interference will not be authorized.

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