

CLEAR CHANNEL BROADCASTING IN THE STANDARD BROADCAST BAND, DOCKET NO. 6741:

Amendment of section 3.25 of the rules, and other sections relating thereto, concerning use of class I-A clear channels.

Rules governing 13 class I-A clear channels (hitherto used by only one station at night) amended to permit one unlimited-time class II station to operate on each, in addition to the dominant class I-A station.

Of the 13 new unlimited-time class II assignments, two (Anchorage, Alaska, and San Diego, Calif.) specified for stations required to change frequency under the U.S.-Mexican broadcasting agreement. The remaining 11 (known as class II-A stations) to be located in a designated State or States where they could furnish needed service to areas not now having nighttime primary (groundwave) service. The 13 new class II assignments are located at great distances from the cochannel class I-A stations.

Rules adopted providing that the new class II-A stations: (1) must protect the cochannel class I-A station to its 0.5-mv/m 50-percent skywave contour (roughly 700 miles from that station); and (2) must serve areas or populations now without nighttime primary service to the extent of at least 25 percent of the service area or population.

The frequency 1030 kc reclassified as a class I-A clear channel, making a total of 25 such frequencies.

The remaining 12 class I-A clear channels are left in status quo for the present.

The question of whether class I-A stations should be permitted to operate with more than 50 kw power, left for further study.

For the present, a bar on any new grants of daytime stations on the class I-A clear channels (with dismissal of pending applications for such facilities).

Repeal of the present "freeze" on all applications for certain class I-B channels (sec. 1.351 of the rules). Instead, on 33 frequencies adjacent to (i.e., 10, 20, or 30 kc removed from) the class I-A clear channels, specified restrictions will apply to processing of applications, and grants will not be made which might have an adverse impact on future use of the channel. Where the adjacency is to one of the 12 channels now left in status quo, no application for a new station will be granted for the present.

New skywave and angle of departure curves (those contained in the North American Regional Broadcasting Agreement) made applicable to the class I-A clear channels.

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION**

WASHINGTON 25, D.C.

In the Matter of
CLEAR CHANNEL BROADCASTING IN THE STANDARD BROADCAST BAND } Docket No. 6741

REPORT AND ORDER

(Adopted September 13, 1961)

BY THE COMMISSION: COMMISSIONER LEE DISSENTING AND ISSUING A STATEMENT; COMMISSIONER CROSS CONCURRING IN PART AND DISSENTING IN PART AND ISSUING A STATEMENT

31 F.C.C.

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Introduction

1. The basic question in this proceeding is whether and in what manner it would serve the public interest to amend the rules governing the use of the standard broadcast frequencies designated as "clear channels." The proceeding was instituted by the Commission on February 20, 1945, largely as a result of insistent claims that the clear-channel concept of permitting only one station to operate at night on 24 of the 107 channels available for standard broadcasting is wasteful of valuable spectrum space and otherwise not in the best interests of efficient utilization of the frequencies involved. Resolution of the matter has been complicated during the intervening years by changing treaty obligations, the necessity for disposing of precedent collateral problems, themselves difficult of settlement, and by marked changes in the socioeconomic climate for a standard broadcast medium beset by the emergence of television as a vigorous competitor for audience, program material, and advertiser support. Proposals for settlement have been narrowed by the Commission's further notice of April 15, 1958, and a third notice adopted September 18, 1959. The course we take today marks our best judgment of the most practicable manner in which the clear channels can, at this stage, be better utilized to improve service in the standard broadcast band.

History of the Proceeding

2. Pursuant to longstanding practice and international agreement for the North American region, all U.S. standard broadcast stations are assigned to 107 channels, each 10 kc wide, in the frequency range 535-1605 kc. Unlike television, where channels were from the outset tied to specific cities, the practice of assigning standard broadcast stations to meet random demand emerged early in the development of the medium. Fixed by usage, the practice has been perpetuated under rules later developed to direct, along general lines and without reference to specific localities, the placement of stations on the 107 available frequencies in a manner designed to achieve as fully as possible the continuing objectives of providing: (a) some service of satisfactory signal strength to all areas of the country, (b) as many program choices to as many listeners as possible, and (c) service of local origin to as many communities as possible.

3. However, the compatibility of the objectives is confounded by the physical behavior of radio signals. Part of the energy radiated from the transmitting antenna of a broadcast station is called a groundwave and travels closely along the earth's surface where its intensity, although diminishing rapidly with distance, remains relatively constant at any location day and night and from season to season. The portion of the energy which travels upward and outward from the transmitter into the upper atmosphere from which it is reflected back to earth at distances much greater than the reach of groundwave signals is called a skywave signal. Skywave propagation is effective chiefly during the hours between sunset and sunrise and is present, to a lesser degree, during a 2-3 hour presunset buildup and a similar postsunrise period of waning intensity. Less constant in intensity than groundwave signals, skywave signals are nevertheless capable of providing service wherever they have sufficient average field intensity above noise levels and are free from excessive interference by other stations on the same or adjacent channels. While power output and other factors affect the range of useful signals, one of the principal restrictions on a station's service area at night is the number of stations on the same frequency. It follows that a duplication of stations on the same channel to meet demands for local and multiple services dilutes the effective range of nighttime skywave propagation to distant rural areas where it may not be economically feasible to provide local transmitters.

4. The circumstance that any plan for allocating the use of a standard broadcast channel must accommodate divergent purposes led at an early stage of radio regulation to the classification of standard broadcast frequencies into several categories, each primarily directed to the achievement of one or another of the conflicting objectives. An early action of the then newly created Federal Radio Commission was the institution in 1928 of a division of the standard broadcast spectrum into clear, regional, and local channels. Although the description "clear" was not officially applied to the unduplicated channels until the Radio Commission's 1932 allocations rules, the clear-channel concept is recognizable as early as 1923 when 40 frequencies were set

aside by the Secretary of Commerce for the exclusive use of single stations. The channel classification technique survived and was perpetuated in the Federal Communications Commission's 1938 allocations plan which has endured and become the touchstone of the entire standard broadcast structure.

5. The existing classification of channels specifies three groups of frequencies, each with different rules for the assignment of stations depending upon the purpose for which each class of channel was established. The three groups are clear channels, which are the subject of this proceeding; regional channels on which stations are assignable under conditions permitting service to large metropolitan areas; and local channels for the assignment of large numbers of stations serving as local outlets for numerous smaller communities. In the case of regional (class III) stations and local (class IV) stations, which broadcast on frequencies shared with other class III and IV stations operating in other cities and communities, protection of service is confined to their groundwave signals. Skywave or secondary service free from objectionable interference is provided only by class I stations assigned to the clear channels, and this service is made possible only by rigid restrictions on the number of stations which may be assigned to the clear channels at night and by limitations on the radiations of the secondary stations assigned to those channels. Twenty-four U.S. clear channels are now reserved for the exclusive use at night of a single class I-A station. On the remaining 23 U.S. clear channels 1 or 2 U.S. class I-B stations are assigned under conditions requiring mutual protection through the use of directional antennas. The assignment of secondary, class II, stations is permitted on the clear channels under conditions and restrictions which recognize that the primary purpose to be served by the frequencies is the widespread service provided by the class I station occupying the channel. Class II stations are expected to provide only a groundwave service and are required, by use of a directional antenna, limitations on antenna height and power, or other means, to protect the wide area service of the class I station. The scheme for tailoring a station's facilities to conform to the purpose of its class is carried out in a variety of restrictions imposed on the class. These restrictions include maximum power limitations of 1 kw for local stations, 5 kw for regionals, and 50 kw for class I and II stations.

6. A persistently plaguing deficiency in the allocation plan that has otherwise provided a plentitude of signals to populous centers has been the scarcity of service in the sparsely settled areas of the country. In the face of a 50-percent increase in the total number of full-time stations in operation during the 10-year period 1947-57, the extent of land area and population receiving no nighttime groundwave service from any stations was only insubstantially altered. More than half the total land area of the United States and perhaps as many as 25 million people principally in northern New England, the more mountainous regions of the Middle Atlantic States, much of the South, the northernmost part of the Great Lakes area, within the Great Plains and the mountainous areas of the West, and in Alaska are estimated to be outside the range of usable nighttime groundwave service.

7. Since domestic and international use of other frequencies precludes any realistic prospect for increasing the size of the standard broadcast band of frequencies, improvement in rural service must be sought from existing or newly assigned stations within the present band. Little improvement may be expected from class III or IV stations because of unavoidable limitations on their nighttime interference-free service range. Thus, such improvement as may be achieved must be provided on the clear channels.

The Basic Conflict

8. Two basically divergent views have persisted as to the measures best calculated to make more efficient use of the clear-channel frequencies. On one side, it has been urged that the principal objective of providing satisfactory nighttime service to areas lacking such service is most likely to be attained by improvement in the capacity of the clear-channel stations, particularly the class I-A stations, to provide a good skywave signal to wide areas, this to be accomplished by permitting those stations to operate at substantially increased power and by limiting, and at night excluding, cochannel stations. The conflicting view has contended for an increase in the number of unlimited-time stations on the clear channels. The clear-channel inquiry was instituted against this background of conflict between the basic alternatives of higher power versus duplication.

9. The Commission's order of February 20, 1945, instituting this proceeding, was so extensive as to open the way for consideration of solutions ranging all the way between the extremes of exclusive nighttime use of selected clear channels by single stations operating at substantially higher power than the present maximum of 50 kw and the reclassification of selected clear channels to local channels on which it would be possible to assign over 150 stations each, at a maximum power of 250 w. Testimony was taken during extended hearings during 1946 and 1947 and a voluminous record compiled. At the same time, orders were issued freezing action on certain types of applications, grant of which appeared likely to conflict with reasonable settlement of the proceeding. In late 1947, the "daytime skywave" proceeding (docket 8333), which had earlier that year been separately initiated to determine whether and the extent to which limitations should be imposed upon daytime skywave radiations toward class I-A and I-B stations, was joined with the clear-channel proceeding, and extensive oral argument before the Commission was held early in 1948 on the consolidated record. The daytime skywave phase was severed in 1953 and terminated in 1959 with the issuance of a report and order which adopted limits of permissible radiation toward class I clear-channel stations which were to be protected against objectionable skywave interference from further grants for daytime or limited time stations authorized to operate on those channels. Immediately prior to this decision, however, the Commission on April 15, 1958, reopened the clear-channel record and narrowed the proceeding for its second phase.

The Further Notice

10. The further notice of proposed rulemaking of April 15, 1958, invited comments on proposals to open 12 specified class I-A channels for additional unlimited-time assignments, to reserve for later determination proposals to increase power on the remaining class I-A channels, and to leave undisturbed the class I-B channels. On 5 of the 12 channels suggested for additional assignments it was proposed that there be placed a new directionalized class I station and that the existing class I station be required to directionalize, with the result that each station would afford mutual protection from interference to the areas served by the other. On the other 7 channels, unlimited-time class II stations were proposed to be assigned in underserved areas. Comments in response to the notice persuaded the Commission that its proposal for the licensing of such stations, because of the requirement that certain existing class I stations directionalize their operations, would be accomplished only at the inordinate expense of substantial dislocations of existing skywave service and the unwarranted creation of new white areas. The Commission then decided to seek additional comments on a proposal to duplicate all the class I-A channels without the objectionable requirement of directionalization by the class I stations. The proceeding entered its third phase, thereafter, with the release on September 22, 1959, of the Commission's redefined proposal for settlement.¹

The Third Notice

11. The third notice of further proposed rulemaking, released September 22, 1959, invited comments on a proposal to provide for the assignment of new class II stations on 23 clear channels,² the new stations to be located in certain selected and designated states. The existing class I-A stations would continue to operate with 50 kw of power, but each would share operation with one new class II station which would be located in a designated area and would operate directionally with not less than 10 kw of power in order to secure maximum coverage. Although not persuaded on the state of the record at that point that higher power would be in the public interest, the Commission also provided opportunity in the third notice for parties to update the record on proposals to increase the maximum power for class I-A stations.

12. Many parties took advantage of this invitation and in the more than 100 comments and more than 40 replies filed pursuant to the third notice, the basic dispute continues to be whether the additional needed service can better be supplied by permitting clear channels to operate at higher power or by permitting operation of an addi-

¹ To restate in detail the considerations which have led up to the third notice would unduly lengthen this report and order. Persons desiring additional details of the historical progression of this proceeding, and who are not already familiar with the record, may consult the further notice of proposed rulemaking adopted Apr. 15, 1958 (FCC 58-350), and the third notice of further proposed rulemaking adopted Sept. 18, 1959 (FCC 59-972).

² This includes 22 of the 24 class I-A frequencies, excluding 660 and 770 kc, and also includes 1030 kc, presently an I-B frequency.

tional unlimited time station or stations on the clear-channel frequencies. Recognizing that half the land area of the United States (excluding Alaska and Hawaii) remains nighttime white area, dependent upon skywave service, with little prospect of large-scale improvement in primary service, one view holds that much needed improvement in standard broadcast service to these areas can be achieved only through improved and increased skywave service and that this, in turn, requires an increase in maximum power for clear-channel stations to 500 or 750 kw. Others contend that since many class I-A clear-channel stations are clustered in the eastern portion of the country (a natural result of the greater population density and the superior capacity of such communities to provide economic support for such stations), with 50-kw power and a nighttime skywave service range of about 700 miles, the needed improvement should come from the assignment of unlimited-time stations on the class I-A clear-channel frequencies which now have only one station operating nighttime. We will direct our attention to this basic dispute after noting briefly one preliminary matter.

Shortcomings of Present Clear-Channel Allocations

13. As noted in our opening paragraph, we are concerned with whether and in what manner to amend the rules governing clear channels. Whether to amend them is comparatively simple to resolve. The proceeding was instituted because of insistent demands that present utilization is not adequate. That assumption underlies the entire proceeding. However, we must now look to the validity of that assumption, and in doing so we conclude it has not only stood the test of time but that the situation has, if anything, become worse. We have noted that a great increase in the number of stations has only insubstantially reduced nighttime white area. Moreover, with our population growth, the number of people in white areas is growing.³ There is substantial support in the comments for a conclusion that the exclusive nighttime use of a channel by a single station limited to 50 kw is less justifiable now than it was when clear channels were first allocated in this way. Since that time, techniques have been established and highly developed for directional transmission of signals, with a high degree of suppression now possible to protect the service areas of cochannel stations. In addition, heterodyne interference resulting from uncontrolled deviations from the assigned frequency has been substantially eliminated. Thus, it is now possible, particularly in the case of I-A stations located in or near the northeast portion of the country, to assign additional cochannel unlimited-time stations to provide needed service at distant locations, while preserving the capacity of the present station to provide a usable signal over wide primary and secondary service areas. In these circumstances there is serious question whether the most efficient use of the class I-A clear channels can be achieved under the longstanding rules

³ Based on the 1940 census, a population of 23,252,000 lived in white areas. By 1957, the white-area population had grown to an estimated 25,630,000.

which, on the one hand, preclude power above 50 kw, and, on the other hand, bar cochannel unlimited-time assignments in distant areas which the present station cannot effectively serve, and where a new station could be operated so as to afford reasonable protection to the areas the present station does effectively serve at 50 kw. Almost without exception the commenting parties either note the need for additional service or at least do not attack the underlying assumption of such need. There were, however, a few comments to the effect that maintenance of the status quo would be preferable to adopting the alternative which the commenting party opposed.

Resolution of the Issues

14. Our review of the record and our analysis of the numerous substantive, procedural, and administrative questions which it raises make it convincingly clear that it would be undesirable to set in motion the simultaneous reallocation of all the class I-A clear channels. The enormity of the consequent administrative burden alone would further glut our license processing and hearing resources and delay not only the achievement of improved service on the clear channels, but additionally delay our strenuous efforts to reduce the excessive and persistent backlog of pending standard broadcast applications.

15. Quite apart from these considerations, which in our considered judgment would alone warrant progressive rather than simultaneous approaches to reallocating the class I-A clear channels, we find compelling reasons for avoiding a course which would precipitate changed modes of utilizing the class I-A clear channels without opportunity to review and evaluate, as we go along, the effectiveness of such reallocations as we herein adopt for some of the channels.

16. Both in the further notice of April 15, 1958, and in the third notice of September 18, 1959, the Commission invited comments on proposals to remove the heretofore total exclusivity of nighttime use of the class I-A channels by a single station. The third notice contemplated additional unlimited-time station assignments on substantially all of the class I-A channels. The earlier further notice had looked toward this step on half of them. The underlying justification, in each case, was the compelling need to go as far as possible toward reducing the vast areas which lack any nighttime primary service. The record is replete with data demonstrating that, to an extent, this can be done with resultant increments of nighttime primary service to persons now lacking it without undue interference to the wide area service rendered by the class I-A stations. This possibility derives from a combination of factors including directionalization of new unlimited time stations on these channels, the long distances between their prescribed locations and the transmitter sites of the existing cochannel I-A stations and the numbers of other services available in limited areas where interference from the new station may to a limited extent interfere with present reception of skywave service from the existing class I-A station. Moreover, the limited amount of skywave service which would be so subjected to interference is of a low order since new unlimited-time stations will be

required to protect the 0.5-mv/m 50 percent skywave contour of the class I-A station—generally located approximately 700 miles from its transmitter.

17. These basic considerations, in our considered view, strongly underscore the desirability of permitting the establishment of new unlimited time stations on at least some of the class I-A channels, and we make appropriate provision therefor, in the accompanying rule amendments, on 13 of the class I-A channels; i.e., 670, 720, 750, 760, 780, 880, 890, 1020, 1030, 1100, 1120, 1180, and 1210 kc.

18. There is support, recognized in our third notice in this proceeding, for the similar treatment of additional class I-A clear channels. To pursue that course at this time would, however, be subject to the grave objections already noted. It would, moreover, in one stroke crystallize a particular pattern of clear-channel usage which would at least limit and at worst frustrate the future possibilities for employing other techniques of clear-channel utilization. One of these is the use of higher power to improve the nighttime range of, and, within existing service areas, the quality of, skywave service reaching into the vast land areas where this is the only available technique for improving service since much of those areas lie beyond the foreseeable range of the primary service of any new stations which could be fitted into the crowded standard broadcast spectrum. Whether the public interest would be served by the authorization of higher power; whether, on the channels at this time left in status quo, duplication in the manner here adopted for 13 channels would serve the public interest; or whether any other alternatives including possible combinations of these techniques would best serve to improve service on these channels, we do not now decide.

19. At earlier stages of this proceeding strong objection to the authorization of higher power was expressed not only by interested parties but also by Congress. It is evident that in considering a question of the consequence of higher power, which would in any case be necessarily limited to a relatively few stations, the policy of the Congress should be accorded due recognition. The Senate of the United States on June 7, 1938, adopted a resolution (S. Res. 294, 75th Cong., 3d sess.) characterizing the use of power in excess of 50 kw by standard broadcast stations as "definitely against the public interest" and expressing the sense of the Senate that the Commission "should not adopt or promulgate rules to permit or otherwise allow any station operating on a frequency in the standard broadcast band * * * to operate on a regular or other basis with power in excess of 50 kw."

20. Some parties have throughout the long history of this proceeding forcefully urged strenuous objection against the use of higher power which, it is asserted, would give vastly undue competitive pre-eminence to the very few stations to whom in any case powers on the order of 500 to 750 kw could conceivably be authorized. The Commission, while aware of the strength of these contentions, cannot, on the other hand ignore the potential for significant additions to service which the employment of higher power on even a few stations could make possible. Our close scrutiny of the portions of the record going to the issue of higher power fails to persuade

us that, whatever the merits of the pending proposals for higher power, the objections listed against it have been sufficiently met. Upon careful consideration of the question, we conclude that there is insufficient basis before us for a finding that the public interest would be served by authorizing higher power, but that at the same time the question warrants further consideration in the light of such improvements and changes in service as may result from the action we now take to authorize additional unlimited-time stations on 13 of the class I-A clear channels.

21. We thus leave open and unprejudiced the question of whether, and, if so, how, the public interest would be served by changing the rules affecting the use of the 12 class I-A channels now left in status quo. At such time as further developments, including progress under the changes we now adopt, provide needed additional light on the question we will give further consideration to how best to utilize the 12 clear channels not now disturbed. It is manifestly desirable to do so on the basis of then current data and not to hold the instant proceeding open for the purpose. Much of the record herein was compiled years ago under different circumstances which have since changed markedly, and which may be expected to undergo further change. However, in any subsequent proceedings which may be held on the disposition of the 12 channels now left in status quo, parties will be permitted to incorporate by reference specifically designated pleadings herein, or designate portions thereof, as may be relevant to matters then under consideration.

22. In pursuing this course we follow certain basic features of the pattern proposed in our further notice, while departing from some elements of that proposal to which objection, which we find meritorious, was advanced. We follow that pattern to the extent that it envisaged the establishment of additional unlimited-time stations, capable of providing primary service in white areas, on about half the channels, while leaving open for future consideration and decision action on the remaining class I-A channels.

23. The primary feature of the further notice which evoked critical comment from the industry, and which was a factor in our determination to consider in the third notice a somewhat different allocations plan, was the suggestion that certain class I stations be required to directionalize. This factor, in the language of the third notice:

would result in substantial reduction of the existing groundwave and sky-wave service, with the result that substantial new "white areas" would be created in which no groundwave service would remain available from any station and that other areas would be reduced in the number of services received from four, three or two groundwave services to a single groundwave service. In addition, substantial dislocations would obtain of present skywave service which would not be fully compensated by new operations.

In the approach we adopt herein the requirement of directionalization by the class I stations has been eliminated and the undesirable results noted above would not occur.⁴

⁴That we do not follow the further notice approach generally does not alter the validity of our conclusion that in case of one particular I-A channel—770 kc—directionalization of the existing class I station so as to afford mutual protection to a similar operation in New Mexico would best serve the public interest. We note herein the special circumstances pertaining to that channel.

24. We now have the benefit of updated comments directed to the two approaches of the further notice and the third notice. The course we take is consistent with both of these proposals in the basic sense that both proposals envisage the nighttime sharing of at least 12 of the class I-A clear channels by more than 1 station. In addition, the further notice would reserve for future determination the use to be made of the remaining I-A channels. The method of duplication we adopt is that proposed in the third notice for 23 channels and proposed in the further notice for 7 channels. As noted, we have (except on 770 kc) removed the directionalization requirement for class I stations. Since the two approaches do contemplate duplication of up to 12 frequencies, we have reexamined each of the 24 class I-A channels, plus 1030 kc which is reclassified herein as a I-A clear channel. We discuss later our reasons for selecting the 13 channels which we earmark in this proceeding for duplication by a class II unlimited-time station. Channel sharing on the selected 13 clear-channel frequencies, as has been amply demonstrated in the comments, will not frustrate the achievement of the primary objective of clear-channel allocation; i.e., to render wide area service to the residents of less densely populated portions of the country which are beyond the effective reach of interference-free nighttime service from other classes of stations. The conditions projected in the third notice for the operation of additional stations afford a high degree of protection to the 50-kw class I-A stations now occupying these channels; i.e., to their 0.5-mv/m, 50-percent skywave contour. Such interference as our action herein would permit to minor, fringe reception beyond the 0.5-mv/m, 50-percent skywave contour of those stations is, in our judgment, acceptable in view of the additional services which are thereby made possible from new stations in underserved areas.

25. While we do not now reach a decision either for or against the use of higher power, and while we thus leave entirely open the question of what station-assignment plans would best serve the public interest on the 12 class I-A clear channels left in status quo at this time, we recognize the critical importance of so tailoring the partial reallocation as to avoid undue prejudice to practical latitude for future decision. Our review of the comments persuades us that such undue restriction would have resulted from adoption of the proposal in the third notice to place additional unlimited-time stations on virtually all of the class I-A clear channels.

26. Implementation of our judgment that we should at this time refrain from permitting shared nighttime use of all the class I-A channels poses the problem of selecting, on a suitable basis, those channels on which we open the way to additional unlimited-time stations and those reserved for future decision. Numerous considerations bear on such a selection. The basic determinant is the question of whether, taking into account the numerous circumstances affecting each channel and the resultant overall pattern of service, it is best suited to shared use or to the preservation of possibilities of wider service from the existing class I-A station through utilization of higher power. Key factors having a bearing on this judgment include:

a. Location of needful white areas.

b. The possibilities for providing a primary nighttime service in those white areas at sufficient distance from the class I-A station to permit requisite protection of the generally usable portion of the existing station's skywave service—i.e., the service area within its 0.5-mv/m, 50-percent skywave contour.

c. Due protection to existing cochannel U.S. daytime stations and to U.S. stations on adjacent channels.

d. Consideration of adjacent-channel interference to stations located in neighboring countries, and to foreign cochannel stations to which the United States is committed, under international agreements, to afford a stated degree of protection.

e. Avoidance of adjacent-channel interference among new unlimited-time stations assigned to the class I-A clear channels.

f. The location of white areas apparently beyond the reach of foreseeable new stations which could provide a nighttime primary service.

g. Existing skywave services in the foregoing areas and the consequent benefits from improved additional skywave services.

h. The location of class I-A stations so situated—with reference to geographic relationships to the needful areas and cochannel and adjacent-channel domestic and foreign interference considerations—as to indicate that they would be best adapted to the provision of additional and improved skywave services to the needful areas.

27. In the case of no single channel would all of the foregoing determinants uniformly indicate that it be earmarked for additional unlimited-time assignment or that it be held in status quo for future consideration of alternative action. In each case we have arrived at our judgment by the painstaking process of determining and evaluating all the pertinent factors and deciding, on net balance, which course would best serve the public interest both in usage of the individual channel and in terms of the resultant assembled pattern of additional nighttime primary services, on the one hand, and the potential for additional and improved skywave services in needful areas, on the other hand. In weighing our choices of channels to be left at this time in status quo we have taken into account the desirability of endeavoring to preserve the potential of at least four reasonably reliable and satisfactory skywave services throughout all white areas.

28. In arriving at the selection of class I-A clear channels for duplication and for status quo, we have scrutinized with great care the entire record of this proceeding, including testimony, exhibits, briefs, oral argument, comments, and other pleadings which, as we have noted, have included diverse alternatives and counter proposals.

29. Considering all pertinent factors and submissions, and taking into account the skywave services presently received, we have determined that the public interest will be served by deferring action at this time on the following frequencies: 640, 650, 660, 700, 770, 820, 830, 840, 870, 1040, 1160, and 1200 kc. The potential for widespread improvement in skywave service is thus preserved for future evaluation.

30. In selecting 640, 820, 1160, and 1200 kc for inclusion in this group, we have noted that these are the only I-A channels (other than 1040 and 1120 kc discussed below) serving the West; that the West is characterized by vast regions of low population density where skywave signals afford the only nighttime broadcast service; that a choice among skywave signals is not generally available to a substan-

tial part of the West; and that acceptable locations for assignment of new unlimited-time stations on these channels would, in general, be limited to eastern areas already receiving abundant service. Accordingly, at this stage, we preserve the potential for improving skywave service which these channels afford.

31. On 660 and 770 kc, unlimited-time assignments, in addition to the class I-A stations, are already operating. For this reason, as we state in the third notice, no additional assignments on these channels is deemed warranted at this time. Similarly, we do not at this time take any action with respect to 830 kc because of the pendency of an adjudicatory proceeding involving WNYC's use of that frequency during nighttime hours.

32. The potential for improved skywave service which arises from the location of 650 kc at Nashville, 700 kc at Cincinnati, 840 kc at Louisville, and 870 kc at New Orleans warrants inclusion of these channels in the group as to which no action is to be taken at this time. We have examined the feasibility of duplication on these channels and, while we recognize that duplication on these channels is possible, we are reluctant to take any action at this time which would limit the potential of these stations for providing improved skywave service in underserved areas of the Southeast.

33. Of the group on which action is deferred, there remains only 1040 kc to be discussed. The class I-A station on 1040 kc is located at Des Moines, Iowa. Both 1040 and 1120 kc, on which KMOX, St. Louis, Mo., is the class I-A station, are somewhat centrally located, and those channels could be used either to provide nighttime ground-wave service to white areas in the West or to provide some improved skywave service. We have concluded that, in attempting to achieve a proper balance between the immediate benefits of duplication and retaining a potential for improved skywave service, it is preferable to defer action on 1040 kc, but to permit an additional station on 1120 kc. An important factor in making this choice was a realization that the potential of 1120 kc for providing improved skywave service is considerably limited in all directions by adjacent-channel operations at Omaha, Nebr., Charlotte, N.C., Shreveport, La., Minneapolis, Minn., and New York, N.Y.

34. Turning now to the remaining class I-A channels, we have determined that they can best be utilized by permitting operation of an unlimited-time class II station on each, thereby serving the important and immediate objective of providing nighttime primary service to white areas. This is not to indicate that other channels, among the group not presently duplicated, could not be duplicated, and provide valuable service to white areas. As we have indicated, our action here leaves to future determination, in the light of future developments, the decision as to what use should be made of those channels on which the status quo is presently retained.

35. We conclude that the proper balance between immediate objectives and possible future goals is best achieved by deferring action on the channels noted above and by permitting one new unlimited-time operation on the following: 670, 720, 780, 880, 1020, 1030, 1100, 1120, 1180, and 1210 kc. In addition, 750 and 760 kc will be duplicated, but

in a way designed to meet special situations arising out of the entry into force of the United States-Mexican Broadcasting Agreement.

36. Class I-A stations on 880, 1020, 1030, 1100, 1180, and 1210 kc are located at or near the northern or eastern boundaries of the country, thereby affording maximum opportunity for assignment of unlimited-time stations in the West where serious deficiencies in present service exist and the corresponding need for improvement is great. Such location permits flexibility in meeting the required spacing between cochannel class I-A and unlimited-time class II stations. Moreover, the impact of the new unlimited-time class II stations on the present skywave service of these class I-A stations will be at a minimum because the useful skywave service these stations render is generally confined to the extreme northeastern portion of the country.

37. The class I-A stations on 670, 720, 780, and 890 kc are located in Chicago and, while they are, of course, west of the group just discussed, they still offer useful opportunity for assignment of unlimited-time stations in the far West. Several Western States will meet spacing requirements and, additionally, the useful skywave service provided by the Chicago I-A stations is confined to the region of the Great Lakes, which insures a minimum impact by the new cochannel, unlimited-time, class II stations to their skywave service. An added consideration in selecting the Chicago I-A frequencies for duplication is the limited potential which they have for improving skywave service in areas which need it. Adjacent-channel class I operations in New York would limit radiation to the East and requirements of protection to stations in Cuba and Mexico would limit radiation to the South. Their potential for improving skywave service to the West, moreover, is not so great as that of the class I-A channels on which we are presently retaining the status quo.

38. We have already discussed 1120 kc. The special considerations concerning 750 and 760 kc are treated separately in subsequent paragraphs of this report and order.

39. Our decision to permit nighttime sharing of 13 of the class I-A clear channels could be implemented in several ways. If we were to follow the practice heretofore established in assigning new standard broadcast stations, applications meeting announced interference criteria and other technical standards would be accepted and processed without confining such applications to designated areas. This would not be practicable here. The acceptability of any location proposed for new unlimited stations on clear channels depends not only upon requisite protection to existing stations, but also upon avoidance of undue interference among the new stations so assigned. This means that if we followed the general basis for standard broadcast station assignments we could expect to receive considerable numbers of mutually exclusive applications which conflict either because they propose mutually inconsistent uses of the same frequency or because they propose conflicts as to acceptable locations of new adjacent-channel assignments on channels 10, 20, and 30 kc removed from the channel applied for. For these reasons the hitherto customary approach to new station assignments could be expected to require

numerous complicated and interrelated hearings which would be vastly and unnecessarily time consuming.

40. Much of this impediment and delay can be avoided by the system we here adopt—of designating the particular State or States within which each of the I-A channels to be duplicated will be available for an additional unlimited-time station. The States so designated have been selected with a view to making the most fair, equitable, and efficient use of the frequency, taking into account limitations imposed by the need to protect existing cochannel and adjacent-channel stations, the areas of greatest need for additional nighttime primary service, and the avoidance of undue mutual interference among the new stations themselves. Due regard has additionally been given requisite protection to stations in neighboring countries.

41. In the interests of fulfilling to the greatest possible extent the prime objective of the new unlimited-time stations on the class I-A clear channels—i.e., to create new primary services in white areas—we propose, as detailed below, to give preference to those applications which most fully serve this objective, and we will not consider any application for a new unlimited-time station on one of the class I-A channels unless it meets a specified minimum criterion for new primary service to white areas.

42. For the foregoing reasons we reject proposals that we fix by rule the specific communities in which these frequencies may be so used. It would not be possible to anticipate, in advance of the filing of specific station assignments, the finite circumstances of principal city and radiation pattern which could best serve the objective of clear-channel duplication. We leave this for decision on the basis of applications to be submitted in accordance with the rules herein adopted.

43. As to the suggestion that more than one unlimited-time class II station be authorized on the same class I-A channel, we deem it preferable at this time to permit only one unlimited-time class II station on the channels selected for such use. After we have the benefit of the manner in which the new unlimited-time class II stations are utilized, and details of actual performance, interference, etc., become available, we will be in a position to determine whether the public interest warrants assignment of additional unlimited-time facilities on these channels, and, if so, to determine under what conditions they should be permitted. We are convinced, however, that such a decision should await further developments and that extension of the plan adopted herein to include such multiple use is not warranted at this time.⁵

⁵ In this connection, Argonaut Broadcasting Co., Standard Broadcasting Co., and Seattle, Portland, and Spokane Radio filed a joint petition for acceptance of supplemental comments on July 7, 1961, seeking consideration of multiple nighttime use of the channels on which they operate limited-time stations. The comments were filed more than 1 year after the record in the proceeding had been closed. Moreover, they came after public announcement of instructions by the Commission to its staff. The orderly processes of rulemaking required that petitions so filed be denied. In any event, as noted in the text, it has been decided that multiple use (i.e., nighttime sharing of the frequency by more than the class I and a single class II station) is not warranted at this time, but should await further developments. The petition for acceptance of late comments filed by John Poole Broadcasting Co., Inc., is also denied. That petition was also filed more than a year late and is an attempted reargument of matters already presented in timely comments and considered by the Commission. Several oppositions were filed to each petition.

44. The record also reveals that many of the comments requesting class II facilities come from parties seeking to improve their existing service—which is all too often in the areas of concentrated population where little white area would be served. We have emphasized our aim of securing standard broadcast radio service to those areas which lack nighttime primary service. The standards we adopt herein are directed toward the achievement of that end and represent our considered judgment of the best way to fill these gaps in service at this time. In considering applications for class II facilities on these clear channels we shall look closely at the applicants' plans for serving such white area. The extent to which the facilities thus made available are ultimately utilized is, and necessarily so under our free competitive system, dependent upon the business judgment of prospective applicants and licensees. The fact that the theoretical optimum of service is unlikely of practical attainment due to such considerations as population distribution does not preclude our adopting a solution which more nearly achieves the objectives of broadcasting in the standard band than does the present utilization of class I-A clear channels at night by only one station. The net result of the action we take today is to open the way for additional nighttime primary service to the public, especially in those areas where such service is needed, while at the same time holding to a minimum any loss of existing service to the listening public.

45. Moreover, it is expected that, upon final resolution of this proceeding, applications may be forthcoming from parties who have not commented in this proceeding, and that additional sites within the States selected will be proposed. We can in a comparative hearing consider, *inter alia*, the white-area population expected to be served under the various proposals. Indeed, prospective applicants should be aware that we intend, absent decisive countervailing circumstances, that, as between fully qualified applicants complying with all our rules, the one who will serve the largest white-area population will receive the grant. Parties are thus forewarned that white-area population served rather than total population served is of prime importance herein. We can foresee at this time only one kind of circumstance in which it may be anticipated that the grant should not necessarily go to the qualified competing applicant proposing the first primary service to the largest number of people. Under section 3.182(g) of the rules, primary service is not considered to exist in towns with a population from 2,500 to 10,000 if available groundwave service has a field intensity of less than 2 mv/m. It is possible that one applicant for an unlimited-time class II station may be in a position to show that he would provide a first nighttime primary service to more people than a competing applicant, in reliance upon his provision of groundwave service with a field intensity of 2 mv/m or better to persons living near enough to an existing unlimited-time station, so that they now receive service of 0.5 mv/m or better, although less than 2 mv/m. Some usable groundwave signals, although not of the standard contemplated in section 3.182(g), are thus available to persons so situated. A competing applicant, on the other hand, may be in a position to demonstrate that he proposes a first ground-

wave service to a larger number of people who do not now have an 0.5-mv/m groundwave signal or better available to them. Considering the objectives of our rule changes herein, it would be appropriate, in reaching our decision in such case, to take this circumstance into account and not necessarily to grant perfunctorily an application which reflects a first primary service to the largest number of people by virtue of including in the count persons who, although they do not receive the 2-mv/m signal prescribed in section 3.182(g), are nevertheless able to receive a signal of at least 0.5 mv/m.

Standards Governing New Station Assignments

46. In light of the fundamental concepts which we have enunciated above—and considering that the I-A channels are those which must be primarily looked to for the improvement of overall standard broadcast service—we adopt the following allocation standards, looking toward the assignment of unlimited-time stations herein classified as II-A stations. The class I stations now licensed to operate exclusively in the United States on these channels, listed in the table in section 3.22 of the Commission's rules, will continue to operate with 50 kw of power, but will share operation on the channel with one newly licensed station located in the designated area. These additional assignments are those which, from a careful analysis of the entire allocation picture, we have determined will go furthest toward achievement of our objective, provided they meet certain standards as to power and service to white areas. The applicable standards are:

(1) The application must be for assignment to a community within the State or States specified in the table in new section 3.22 of the rules.

(2) The application must be for unlimited-time operation with no less than 10 kw nighttime power. A few parties have suggested that lower power should be considered. Minimum power as herein specified is necessary if a substantial amount of badly needed nighttime primary service is to be provided, and we affirm our earlier judgment in this respect. While it is anticipated that these stations would also operate ordinarily with at least 10 kw power daytime, in some cases requirements of protecting existing nearby daytime stations may require that the new station operate with lower power daytime, and, accordingly, to provide more flexibility with respect to the new assignments, we do not impose such minimum requirement as to daytime power.

(3) At least 25 percent of the area or 25 percent of the population within the station's nighttime interference-free service contour must not receive nighttime interference-free primary service from any other station.

Applications not meeting all of these standards will not be in compliance with our rules and will not be accepted, but will, if tendered, be returned.

47. Additionally, the new class II-A stations will be required to observe the following protection requirements:

(1) Daytime protection standards for existing class I-A stations will be as prescribed in the present rules.

(2) Nighttime standards will require that the existing class I-A station normally be protected to its 0.5-mv/m, 50-percent skywave

field strength contour.⁶ The location of this contour will be determined in accordance with procedures specified in the present rules for class I-B stations and the 10-percent skywave signal from an interfering station on the same channel shall normally not exceed 25 uv/m at this contour.

(3) In addition to providing protection to the existing class I-A stations, the new class II-A stations will be required to afford protection to existing stations of other classes, as prescribed for class II stations in accordance with present rules, except to facilities granted after October 30, 1961.

Determination of Service and Interference With Respect to Class I-A Stations

48. In order to implement the assignment plan and to insure that the class II-A stations provide needed service while imposing a minimum impact on the service of the existing class I-A stations, the Commission, in its second supplement to the third notice, released February 19, 1960, sought comments concerning proposed engineering standards for the limitation of nighttime cochannel interference to class I-A stations. Almost without exception, the comments and engineering statements which have been submitted proposed adoption of standards which are based either on the definitions of service given in exhibit 109 of this proceeding or on the present Commission rules relating to operation of stations on class I-B frequencies.

49. The Commission has previously recognized exhibit 109 as "the most comprehensive and realistic tool yet devised for evaluation of standard broadcast service." [Emphasis added.] A number of comments noted, however, and we agree, that adoption of standards based upon definitions of service given in this exhibit would not lend themselves to convenient administration. We are disposed to assign considerable weight to the requirement that standards be susceptible of practical administration in order to facilitate implementation of the allocation plan we adopt with minimum procedural delays. Observing this criterion, and giving due consideration to all comments filed, we have determined that the new assignments on class I-A channels provided for herein shall be based on somewhat simpler concepts along the lines presently embodied in our rules—i.e., protection of the class I-A stations normally to their 0.5-mv/m, 50-percent skywave contours. However, location of 50- and 10-percent-time skywave contours will be determined by a method slightly different from that now used on clear channels—i.e., by use of skywave curves contained in a new figure 1a of section 3.190, which are the same as those contained in appendix E to annex 2 of NARBA, and, as to pertinent angle of departure, use of present figure 6a of section 3.190, which is now used for frequencies other than clear channels (as to which fig. 6 is used), and which is the same in pertinent part as appendix F to annex 2 of NARBA. The location of the 50-percent-time contour will be de-

⁶ We recognize the importance of clear-channel service to national defense communications and in emergencies, and find substantial support in the comments to the effect that, if there is to be duplication, the existing class I-A stations should be protected to their 0.5-mv/m, 50-percent skywave contour.

terminated by the use of curve number 1 of figure 6a, with the title of that figure modified accordingly. For the time being, assignments on class I-B channels will continue to be based on figures 1 and 6 of that section.^{6a}

50. Use of the new figures 1a and 6a, the NARBA curves, instead of present figures 1 and 6, has several advantages. First, it makes more uniform the treatment of applications from a domestic and from an international standpoint. Second, as a step toward elimination of figures 1 and 6, it works toward simplifying the Commission's rules by providing for only two standards instead of the present three. Third, use of the NARBA skywave curves and the more refined figure 6a, angle-of-departure curves, will give somewhat more realistic results in terms of extent of service, interference, and protection. Fourth, the computation process involved in using new figures 1a and 6a is somewhat simpler. Lastly, use of these figures—especially 6a instead of 6—will result in more complete protection of the I-A station to its 0.5-mv/m, 50-percent skywave contour, the desired objective. We have also considered the use of the latitude-corrected curves contained in figure 2 of section 3.190, which are the same as the 10-percent-time curve contained in exhibit 109, but we conclude that the considerations of simplicity mentioned above make preferable the use of the standards adopted here.

Service to Nighttime "White Areas"

51. We have set forth above a minimum standard which the proposed new class II-A assignments must meet in order to be entitled to consideration under our new rules—that at least 25 percent of the area or population within its nighttime interference-free service contour must not now receive any nighttime interference-free primary service from another station. We adopt this minimum criterion because, obviously, a proposed operation which would not add this much service to present white areas would not greatly serve to fulfill our objective, and at the same time would, probably, if not certainly, block a later operation which would be of more value in this connection. We believe that prospective applicants in each case can and should be expected to pick locations and design operations which will meet this criterion.

Application Processing

52. Applications for class II-A assignments will not be placed in our normal processing line, but will be processed immediately. This is necessary if our objective, which these are the chief and first means of fulfilling, is to be attained with reasonable promptness. We disfavor exceptional priorities in license processing except where the most compelling circumstances call for them. It is unquestionable,

^{6a} Because of the large distances involved between cochannel stations, the use of the frequencies 660 (New York City and Fairbanks, Alaska) and 770 kc (New York City and Albuquerque) will not be affected by the substitution of figs. 1a and 6a for figs. 1 and 6. This is primarily because at the distances between one station and the 0.5-mv/m, 50-percent skywave contour of the other (more than 1,400 miles) the pertinent angle of departure is virtually zero under either fig. 6 or 6a.

in our considered judgment, that the public interest in improved and increased AM broadcast services will be far better served by proceeding with the least possible delay to deal with class II-A assignments than by requiring them to wait until many hundreds of more routine applications which were previously filed have first been disposed of.

53. We will, however, allow a period of 90 days after the effective date of the rule amendments herein for the filing of applications for class II-A stations before acting upon any of them, in order to afford reasonable opportunity for the submission of other applications which may more effectively serve the major objective of reducing nighttime white areas. Where more than one application for an assignment provided for herein is filed, a comparative hearing will, of course, be required.

Prohibition of New Daytime Assignments on Class I-A Channels

54. For a number of years, we have been concerned with the crowding, and indeed overcrowding, of the daytime standard broadcast spectrum, which has not brought a corresponding gain in service. Not only has such intensive crowding of stations into the spectrum not brought the amount of needed additional service which had been hoped for, but it has been argued that economic limitations on programming for very limited audiences in very small interference-free service areas have prevented individual stations from rendering the quality of broadcast service which they might otherwise provide. It is the I-A channels to which we must look primarily for achievement of our overall allocations objectives. Therefore, for these and related reasons, we have concluded that the I-A channels should not be opened for the assignment of stations on the same uncontrolled basis prevailing in the AM service generally, where each application is considered separately except with respect to conflicting applications or objectionable interference to specific existing stations. Further assignments on the I-A channels should be made in accordance with an overall plan which will achieve our various objectives, including provision of maximum service to underserved areas, provision of local outlets for the maximum number of communities, and others.

55. We have achieved such plan with respect to the making of the class II assignments provided for herein. After the specific location and facilities of the class II stations have become established, the way would be open for consideration, in subsequent rulemaking proceedings, of any further proposals which may be submitted for additional unlimited-time class II assignments on the class I-A channels in question. As in the case of the class II-A assignments for which we now provide, any such rulemaking proposals would be examined in the light of the prime objective of further reducing nighttime white areas while at the same time affording due protection to the cochannel class I-A station.

56. In the circumstances, we are amending the rules to remove provision for new daytime stations on the 25 class I-A clear channels. Pending applications therefor will be dismissed. It is evident that the assignment of new daytime stations on the class I-A channels

could in many instances frustrate the future optimum use of these channels for additional unlimited-time stations. Considering the potential reach of cochannel interference, the making of numerous daytime assignments on these channels could seriously impair the value of the new class II-A assignments through extensive daytime interference to the new class II-A station and by imposing protection requirements which the new class II-A station would have to meet. Moreover, new daytime stations on the 12 class I-A channels now held in status quo could hinder or obstruct whatever further use of the channels—higher power and/or additional unlimited-time assignments—may later be found appropriate in furtherance of our objective of improved overall radio service.

Adjacent Channels

57. Our rules take into account objectionable groundwave interference not only between cochannel stations but also between stations 10 and 20 kc removed. As to skywave interference, the rules (sec. 3.182) take into account objectionable skywave-to-groundwave interference cochannel and between stations 10 kc removed.⁷ The rules (sec. 3.37) also provide that two stations will not be authorized 10 or 20 kc removed when the 2-mv/m groundwave contour of one would overlap the 25-mv/m contour of the other, or 30 kc removed where the 25-mv/m groundwave contours would overlap.

58. Aside from some of the class I-A channels themselves (as to which, since there will for the time being be no further applications other than those specifically provided for herein, no further consideration need be given in this connection), there are a total of 33 frequencies which are located adjacent to—i.e., within 30 kc of—one or more class I-A channels. These include 14 I-B channels (other than 1030 kc, herein reclassified as I-A), 10 channels on which Canada or Mexico has priority for class I-A use, 7 regional channels, and the 2 local channels 1230 and 1240 kc. In our judgment, it is obvious that we should not proceed to grant applications for these frequencies where the operation proposed would have a substantial impact on future optimum use of the class I-A channels, either the specific use provided herein for 13 of them, or possible future uses of the other 12 which are to be the subject of continuing study.

59. The problem of protecting against such adverse impact from adjacent-channel operations has two parts:

(1) Protection of the new unlimited-time class II assignments on 13 class I-A channels from new or changed operations on adjacent channels which would thwart such new class II assignments or jeopardize their value because of interference caused or received, or involve prohibited contour overlap;

(2) Protection of the future use to be decided upon for the remaining 12 class I-A channels upon which the status quo is retained for the present.

⁷ Objectionable interference exists where the ratio between desired and undesired groundwave signals is less than: (1) cochannel, 20 to 1; (2) 10 kc apart, 1 to 1; (3) 20 kc apart, 1 to 30 (sec. 3.182(w)). Adjacent-channel (10 kc removed) skywave-groundwave interference exists where the ratio is less than 1 to 5. The rules also recognize adjacent-channel (10 kc removed) groundwave-to-skywave interference, but, since only Class I stations are generally regarded as rendering skywave service, this problem does not arise here.

Different kinds of restrictions are necessary with respect to frequencies adjacent to the two groups of class I-A channels involved in (1) and (2) above. Since some frequencies are adjacent to class I-A channels in *both* groups, it will be necessary (with the exceptions noted below) to impose both kinds of restrictions as to the adjacent frequencies so situated.

Protection With Respect to New Class II Unlimited-Time Stations

60. The frequencies which are adjacent to the class I-A channels on which we now permit new class II unlimited-time assignments are:

680, 690, 710, 730, 740, 790, 800, 810, 850, 860, 900, 910, 920, 990, 1000, 1010, 1050, 1060, 1070, 1080, 1090, 1110, 1130, 1140, 1150, 1170, 1190, 1220, 1230, and 1240 kc.

We find that in order to avoid undue risk of mutual interference or prohibited overlap between stations on these frequencies and the new unlimited-time class II stations, which would seriously impair the value of the latter, it will be necessary to process applications on the above-listed frequencies in accordance with the provisions of paragraph (a) of the appended revision of section 1.351 of the rules. When it appears that the adjacent-channel facilities requested would involve undue risk of objectionable daytime or nighttime interference to, prohibitive daytime or nighttime interference from, or prohibited overlap with a possible class II assignment as provided herein, the possibly conflicting application will not be granted but will be held pending until the location of the new class II station and its mode of operation are determined. If a hearing on the possibly conflicting application is in progress or is ordered for other reasons, the hearing will include an issue as to effect to or from the new class II assignment. When the location and facilities of the new class II station are determined, the other application will be (1) granted (or otherwise acted upon independently of the new class II assignment), if it appears that interference or overlap conditions as mentioned would not exist; or (2) designated for hearing, where it appears that such conditions would exist. The hearing will not be comparative, but will be upon the issue of whether, with the class II station operating as proposed, grant of the other application would serve the public interest, taking into account the extent of interference or overlap between the two operations.

61. In giving the foregoing priority to class II assignments over conflicting assignments on adjacent channels we depart from long-established bases for comparative consideration in such cases. We do so with full awareness of the requirements under section 307(b) of the Communications Act for fair, efficient, and equitable distribution of radio facilities. After the most painstaking consideration we conclude that, in view of the paramount importance of enabling the new class II-A stations to achieve—to the greatest extent possible—the primary objective of reducing nighttime white areas, for which class I-A frequencies are best suited, it could only frustrate the effective implementation of section 307(b) and invoke wasteful hearing processes to no useful end, to apply here the long-established route

of the comparative routines which have hitherto been generally followed. In our judgment, the public interest will be much better served by giving the class II-A stations the protection discussed above. Such action, although not conforming with past routines, is not unprecedented. It is basically similar to the precedence given class I-A assignments over conflicting applications in the interest of service to areas which it is impracticable to reach with other classes of stations. Similar precedence in the case of the Anchorage and San Diego assignments is required in order to effectuate adjustments necessary to meet this Nation's international obligations.

62. It is apparent from the foregoing that we do not contemplate grant of any applications for facilities which would prevent making the new unlimited-time class II assignments established herein, or which could not coexist with them. It is possible, however, that some assignments on adjacent frequencies may receive interference from these subsequently authorized class II stations. Therefore, in order to provide the greatest opportunity for these new class II assignments in furtherance of our objectives, and in order that, where appropriate, such assignments may be implemented without the cumbersome and time-consuming adjudicatory processes often involved in new AM assignments, we will impose, as a condition on any grant of an application for new or changed facilities on one of the frequencies listed in paragraph 60, the condition that the grant is subject to whatever objectionable interference may be received from any of the new class II unlimited-time stations provided for herein. Our rules are amended so as to provide that all grants involved are so subject, and every authorization on any of the indicated frequencies will carry this condition.

Protection With Respect to Class I-A Channels Left in Status Quo

63. The following frequencies are adjacent to the 12 class I-A channels which, for the time being, we leave in status quo:

610, 620, 630, 680, 690, 710, 730, 790, 800, 810, 850, 860, 900, 1010, 1050, 1060, 1070, 1130, 1140, 1150, 1170, 1190, and 1220 kc.

We find that in order to avoid undue risk of frustrating future improvements to service on the 12 class I-A channels now left in status quo (whether by possible future authorization of higher power, by possible future class II unlimited-time assignments, or by possible combinations of these techniques) it is necessary to apply to applications on the above-listed adjacent frequencies the restrictions set out in paragraphs (b) and (c) of section 1.351, as herein amended. We have omitted from the foregoing list two frequencies (740 and 1230 kc), notwithstanding the fact that, like those listed, they also are adjacent to class I-A channels now held in status quo.⁸

⁸ Despite these adjacencies, it is not appropriate to subject 740 and 1230 kc to the same restrictions which are applied to the other frequencies listed in this paragraph. 740 kc is adjacent to 770 kc. The limits of future use of 770 kc are sufficiently defined by previous Commission decisions as to establish the degree of protection required to be provided to stations assigned to this channel. The special circumstances pertinent to 1230 kc are noted below in par. 67.

64. The restrictions we impose on the adjacent frequencies listed in paragraph 63 will be maintained until September 1, 1964, by which time it is expected that we will be able to decide the future use of the 12 class I-A channels now left in status quo. Should earlier decision be reached, it will be possible to shorten this period. In the interim we deem it necessary to defer the processing of all applications for new facilities on the listed frequencies, or for the change of existing stations to these frequencies. Only by this means is it possible to safeguard effectively against the assignment of new stations which could obstruct the possibilities for meaningful improvement of service by whichever of the techniques it may be found best to employ in improving service on the class I-A channels now left in status quo. Additionally, as provided in the appended amendment to section 1.351, we will examine requests for modifications of outstanding authorizations on the frequencies listed in paragraph 63, with a view to insuring that those which propose increases of power, or which seek authorization to operate existing stations during nighttime hours not now authorized, will not prejudice the effectuation of service improvements on the 12 reserved class I-A channels. Action will be deferred until September 1, 1964, on applications which we find would jeopardize such improvements.

65. It is because of the relative degree of possible impact that, in the restrictions summarized in paragraph 64, we have made a distinction between applications for new facilities and those for certain major changes. The effect of a change in facilities (without change of frequency) is more predictable in terms of possible impact on adjacent class I-A channels, if for no other reason than that the station whose facilities are to be changed is already in existence, radiating, and entitled to protection, and therefore—whatever may ultimately be determined as the optimum use for the class I-A channel—the inhibiting effect on such use from the proposed change in facilities will often be inconsequential. In the case of a new station, on the other hand, the facilities would represent, almost by definition, a substantial new factor on the frequency which would have to be reckoned with in deciding the ultimate use of the adjacent class I-A channel. This is true both because of the interference potential of the new operation, involving radiation in an area of the country where usually it did not exist before on that frequency, and because the new operation would be entitled to some degree of protection and would thus impose a limitation on use of the adjacent I-A channel in that area. Thus, until final decisions are reached as to the future uses of these class I-A channels, any new station on an adjacent channel is quite likely to have a damaging adverse impact. We must, therefore, defer action on all such applications for the 3-year period mentioned; i.e., until September 1, 1964, unless appropriate overall decisions can be made earlier.

Protection With Respect to Adjacent Class IV Channels

66. We recognize the need for exceptional treatment of 1230 and 1240 kc, which are class IV channels. Both are adjacent to 1210 kc

on which a new class II-A station is proposed. Under separate rule amendments previously adopted the Commission has increased the daytime maximum power of class IV stations from 250 w to 1 kw. There is strong reason for keeping the way open to the prompt processing of applications for such daytime power increases, in order that, insofar as possible, class IV stations still operating with less than 1 kw daytime may have the opportunity to offset the interference effects of power increases by other class IV stations. Since the power increase is confined to daytime hours, since there is a maximum limit of 1 kw, and, further, in view of the fact that the adjacencies here involved are 20 and 30 kc removed from the pertinent class I-A channel, the regular processing and grant of these applications may not be expected to interfere unduly with the assignment of a class II-A station on 1210 kc. Applications on 1230 and 1240 kc other than for daytime power increase will be considered in the light of possible impact on the class II-A assignment, as provided in the revised section 1.351 of the rules.

67. For similar reasons, we refrain from imposing further restrictions on the use of 1230 kc, notwithstanding the fact that it is additionally adjacent to 1200 kc, one of the class I-A channels on which we now preserve the status quo. Owing to the remoteness of the adjacency involved (30 kc removed), and the limitations otherwise imposed by our rules on the use of class IV frequencies, we find that no useful purpose would be served by barring new class IV assignments on 1230 kc, or by otherwise limiting the use of this channel.

Resultant Revision of Freeze Rule

68. Hitherto, under a blanket freeze imposed by section 1.351 of the rules, the processing of all applications of designated types on all class I-B channels within 30 kc of class I-A channels has been deferred. Under section 1.351 as herein amended, the processing of applications on frequencies adjacent to the class I-A channels will, with one exception, no longer be deferred. Instead (with the one exception of applications for new stations on designated adjacent frequencies), processing of applications will proceed in the normal course. Only where it is determined that the grant of an application would jeopardize improvement of service on class I-A channels as contemplated herein will we defer action on the adjacent-channel application until further developments make it possible to evaluate the matter definitively.

69. While we thus moderate the former freeze, we at the same time have found it necessary, for reasons already stated in some detail, to extend to additional adjacent frequencies the remaining restrictions applied to preserve due latitude in making the most fair, efficient, and equitable possible use of the class I-A channels. Specifically, we now bring within the purview of the amended section 1.351 frequencies which, like those formerly included, are within 10, 20, or 30 kc of a class I-A channel. Although the rule had formerly applied only to class I-B channels so situated, it has frequently been pointed out that, so limited, the rule hazarded damaging

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assignments on other classes of similarly adjacent channels. Since the only "freeze" (i.e., deferment of application processing) now retained has been narrowed to new assignments on channels adjacent to 12 of the class I-A channels, section 1.351, as amended to include additional adjacent channels, will have less restrictive effect than if these channels had been so included when the freeze provisions applied to frequencies adjacent to all of the class I-A channels. The fact that, animated by the desire to restrict the freeze, we formerly confined it to adjacent class I-B channels, did result in assignments on similarly adjacent frequencies of other classes which to an extent have hampered and limited our efforts to make optimum use of the class I-A channels on which we have found it desirable to permit new unlimited-time class II stations. This experience has demonstrated that continued omission of some adjacent frequencies from the restrictions imposed under section 1.351 is bound to create progressively serious jeopardy to the realization of the vital and basic objectives of the best utilization of the class I-A clear channels. We thus have found it imperative to adjust section 1.351 in the manner described above. We do so with regret that it will create some delays, and only after reaching the considered judgment that, taking all pertinent factors into account, the public interest will be best served by the course here adopted.

Some Specific Problems

70. A few specific problems and areas of comment should be noted at this point. As we noted in our third notice, the operations of KFAR, Fairbanks, Alaska, on 660 kc and of KOB, Albuquerque, N. Mex., on 770 kc, have caused us to conclude that no additional assignments on these two channels are warranted at this time.

71. One specific proposal for use of 770 kc was received, but it was a proposal for multiple use of the frequency. We have already denied requests for multiple use at this time. Meredith Engineering Co., National Weekly, Inc., and Sky Broadcasting Service all sought multiple use of 660 kc in various diverse locations.

72. One other related proposal is the suggestion by WJR, the Goodwill Station, Inc., Detroit, the I-A station on 760 kc, that the use of 760 kc by KGU, Honolulu, Hawaii, should be considered as the duplication of that frequency and no further assignments made thereon. We cannot agree. In the case of 660 kc, we have recognized that, because of the paucity of radio facilities operating in Alaska, it would be inadvisable to permit the same amount of interference to reach that area as we do in the remaining States where some 3,400 radio stations are in operation. Alaska, with its vast remote area, is highly dependent upon its radio services. KFAR can serve most of Alaska, which obviously does not receive services from other States, but could not do so if we authorized another station on 660 kc somewhere in the Southwest. We are motivated in this regard by the need for protection against the potential interference which would be caused to the Alaska station by a new class II station so located that it would protect the dominant station and also comply with restrictions caused

by operation of a cochannel station in Cuba. There is no similar need to protect 760 kc in Honolulu, several thousand miles from the mainland. Moreover, it is WJR, the I-A station on the frequency, which makes the suggestion—and not KGU. WJR, along with all other class I-A stations, will be protected to its 0.5-mv/m, 50-percent skywave contour.

640 kc and 830 kc

73. While neither 640 kc, on which KFI operates as the I-A station at Los Angeles, nor 830 kc, on which WCCO operates as the I-A station at Minneapolis, is authorized for use by a class II-A station, both of these frequencies should be given special attention here because of pending hearings which involve the question of additional use of those frequencies.

74. On 640 kc, station WOI, Ames, Iowa (which is regularly licensed to operate on this frequency daytime with 5 kw nondirectionally), operates with 1 kw power from 6 a.m. (c.s.t.) to sunrise at Ames, which is during nighttime hours when sunrise is later than 6. Notwithstanding the fact that this operation does not meet the conditions of section 3.78 of the rules concerning presunrise operation of daytime stations on clear channels, the Commission has, since 1944, authorized such presunrise operations by WOI under a series of special service authorizations (and more recently under other temporary authority), a type of authorization employed in exceptional circumstances to permit uses of AM frequencies for which provision is not made in the general rules. There is currently pending an adjudicatory proceeding, docket No. 11290, in which there is at issue the basic question of whether the public interest would be served by continuing to authorize WOI's presunrise operation.

75. Since 1943, WNYC, a municipally owned and operated station at New York City, has been permitted under a series of temporary authorizations to operate on 830 kc during certain nighttime hours: 6 a.m. (e.s.t.) to local sunrise and from sunset at Minneapolis to 10 p.m. (e.s.t.), with power of 1 kw. (WNYC's regularly licensed limited-time operation on 830 kc is at 1 kw power, with a different directional antenna.) Notwithstanding the directional antenna employed, WNYC's operation during nighttime hours causes interference within the secondary service area of WCCO at Minneapolis. In a pending adjudicatory proceeding (docket No. 11227) consideration is being given to the question of whether, balancing the interference caused to WCCO against the service WNYC renders during nighttime hours, the public interest would be served by continuing to permit WNYC's nighttime operation, for which no provision is made in the AM rules governing the use of class I-A frequencies.

76. We do not here decide upon or prejudice the decision in those adjudicatory proceedings. In one pertinent respect, however, it is appropriate to take action in this proceeding by way of amending the clear-channel rules to establish the basis for the regular licensing of WOI's presunrise operations and WNYC's nighttime operations so that in the event it is decided in the adjudicatory proceedings that such operations are in the public interest the way will be clear pro-

cedurally for applications to be filed for such operations on a regular basis.

750 kc and 760 kc

77. In two instances we have provided for a solution to special problems arising by virtue of the entry into force of the United States-Mexican Broadcasting Agreement, by allocating 750 kc to Anchorage, Alaska, for use by station KFQD, and 760 kc to San Diego, Calif., for use by station KFMB.

78. The agreement between the United States of America and the United Mexican States concerning broadcasting in the standard broadcast band signed in January 1957 gives Mexico a class I-A priority on 540 kc and thus precludes its continued use at San Diego. While discontinuance of this particular use of 540 kc in the United States is offset by advantages deriving from the provisions of the agreement for reciprocal protection on all AM broadcast frequencies, the problem remains of finding a suitable frequency on which the service heretofore provided by KFMB at San Diego may continue to be rendered to that community and adjacent areas. It is appropriate that use be made of the relatively uncluttered spectrum space still open on the class I-A clear channels, and that provision be made in this proceeding—which embraces the allocation questions pertaining to all class I-A frequencies—for a substituted assignment to San Diego. A painstakingly careful review of all the availabilities persuades us that 760 kc is the preferable choice, taking into account requirements of protection to Mexican stations on other class I-A channels, the availabilities of some other class I-A clear channels for new class II-A stations at other places in the United States, domestic and Canadian cochannel and adjacent-channel limitations on the allocation of individual class I-A clear channels, and related considerations. We accordingly herein assign 760 kc for use for a class II unlimited-time operation at San Diego. Exceptionally, in this instance, we confine the assignment to a specific city instead of making it available generally throughout one or more States in conformity with the general pattern of clear-channel reallocations adopted herein.

79. In reaching this decision, we have given consideration to all comments relating to KFMB's request for shift to 760 kc or other frequency, and to possible alternative solutions. These include comments by stations KFSD, San Diego, WJR, Detroit, and other comments bearing on this problem. We note the interest of KFSD, a station operating at San Diego on 600 kc, in shifting to a class I-A frequency if any should be made available. Parties interested in securing a class II-A operation in California may apply for 1120 kc, which is herein made available for application in California or Oregon. The interests of any other parties in the use of 760 kc at San Diego can, of course, be considered in connection with renewal of KFMB's license on that frequency. We are not, however, using 760 kc to solve the main issues of the clear-channel proceeding, but for this special limited purpose. Therefore, it will not be available under the criteria governing class II-A stations, but will be authorized to operate with 5 kw of power, the power presently used by KFMB on 540 kc.

Finally, we recognize that an authorization under this rule will require waiver of section 3.37 of our rules because of a 2- and 25-mv/m overlap with station KBIG, Avalon, Calif. (740 kc).

80. In like manner, we are reserving 750 kc, herein assigned to Alaska, for use at Anchorage by KFQD, which must vacate 730 kc under the terms of the Mexican agreement. This special need results in the use of 750 kc in Alaska, rather than in Arizona as proposed by the third notice. Moreover, our careful search has disclosed no other frequency which, under the general allocation plan we adopt, could be allocated to Arizona. However, the comments received under the third notice show that 750 kc would have been "unworkable" in Arizona in any event. Use of 750 kc in Arizona is undesirable because it would present serious adjacent-channel problems and the assignment could not be used in wide areas of the State. The necessity of avoiding interference to KUEQ (740 kc, Phoenix), coupled with its central location in Arizona, constitutes a formidable bar to the flexible use of the frequency within the State. Other substantially limiting factors to such assignment would be the necessity of protecting cochannel station KMMJ, Grand Island, Nebr., and an adjacent-channel station (740 kc) at Cortez, Colo. These stations would probably forever limit an Arizona station on 750 kc to a power of 10 kw and would seriously restrict its location. We note, in passing, that no specific proposals were received requesting 750 kc for Arizona. We have given the parties' comments and proposals careful consideration and agree that 750 kc is not a desirable assignment for Arizona. Because of the special use made of 750 kc, it will not be governed by the criteria applying to class II-A stations. Its use at Anchorage will be limited to 10 kw, the power presently used by station KFQD on 730 kc.

81. We note, with respect to both the Anchorage and San Diego assignments made herein on 750 kc and 760 kc, that neither serves the primary objective of the clear-channel reallocations adopted in the appended rule amendments; i.e., the provision of primary service to white areas. Were it not for the special and compelling circumstances which justify the exceptional use of these frequencies as herein provided for, we would have preferred to allocate them for stations which would provide a first primary service in white areas. We nevertheless conclude, after a painstaking balancing of all pertinent considerations, that it is appropriate and desirable to make the exceptional provisions for 750 and 760 kc which we here adopt. As to both, we impose a requirement that they protect the 0.5-mv/m, 50-percent skywave contour of the class I-A station operating on the same channel. In addition, they will, of course, be required to meet the daytime protection standards presently contained in the rules.

KOB (770 kc)

82. The special circumstances relating to 770 and 1030 kc relate largely to the "KOB problem."⁹ In 1940, as in prior years, stations

⁹ For a more complete history of this matter, see the Commission's decision, in Albuquerque Broadcasting Co., app. A, 25 FCC 683, 794; 16 R.R. 765, 883, affirmed 280 F. 2d 631, 20 R.R. 2001 (1960).

WJZ, New York City (now WABC), WBZ, Boston, and KOB, Albuquerque, operated as class I stations on the clear channels 760, 990, and 1180 kc, respectively, section 3.25 (a) of our rules then providing that 760 and 990 kc were I-A clear channels, and 1180 kc was a I-B clear channel. Under the reallocations effected in late 1940 and early 1941 to implement the first North American regional broadcasting agreement, all of these stations were required to change frequency. WABC (WJZ) was shifted to 770 kc, and, under the rule amendments effective March 29, 1941, that frequency became a I-A clear channel. As part of the overall reallocation (in which many stations were moved to higher frequencies) it was necessary to remove KOB from 1180 kc, and no frequency could be found on which that station could retain its I-B status. Accordingly, WBZ and KOB were both assigned to 1030 kc, WBZ as a class I-B station and KOB as a class II station, and began operation on this frequency March 29, 1941. The rule amendments effective the same date made 1030 kc a class I-B frequency. Because of the limited service KOB could render on 1030 kc, efforts were made to find a frequency on which its service area would be larger. Accordingly, in October 1941, KOB received a special service authorization to operate on 770 kc with 50 kw day and 25 kw night, nondirectionally. Since October 1941, KOB has operated on 770 kc, under a series of SSA's and most recently under temporary authority.¹⁰

83. Early in 1944 KOB applied for modification of construction permit and license to operate on 770 kc with 50 kw power, unlimited time and nondirectionally. It was the hearing proceeding on this application (dockets 6584 and 6585) which ultimately resulted in our decision of September 1958 (25 FCC 683, 16 R.R. 765), in the "KOB case." This hearing, after an extensive inquiry into 10 possible modes of operation by KOB (4 on 770 kc and 6 on 1030 kc), resulted in a determination that the public interest would best be served by KOB and WABC both operating on 770 kc as class I stations, affording each other mutual protection by directionalizing their operations at night. The Commission accordingly amended its rules to permit assignment of two class I stations on 770 kc. Of great importance in reaching this conclusion was the fact that KOB would render a much larger nighttime primary service¹¹ under this mode than under any other mode, as well as some secondary service, including secondary service to an area in the West which receives only two other secondary services and has no nighttime primary service. (See 25 FCC 771-782, 16 R.R. 859-873.)

The decision took into account the loss of service from WABC which would be entailed by requiring that station to directionalize (which would occur largely in the East, where service is substantially more abundant), and there was specific comparison of the mode finally selected with operation by KOB as a class II station protecting

¹⁰ In 1957, pursuant to an Order of the Commission following a mandate of the Court of Appeals for the District of Columbia, KOB's nighttime operation was directionalized so as to substantially protect WABC from objectionable interference within that station's 0.5 mv/m 50 percent skywave contour, and it presently operates on that basis. However, KOB has continued to be licensed for operation on 1030 kc, presently holding a renewal of license until 1962 on that frequency, even though it does not operate thereon.

¹¹ Under this mode of operation KOB can provide a nighttime primary service to 156,275 persons who lack any such service from other stations as compared to only 37,483 persons who would be so benefited if KOB should operate as a class II station protecting WABC.

WABC's present service. (See 25 FCC 778, 16 R.R. 866-867.) The decision outlined various procedural steps designed to implement this conclusion; KOB, as permitted by the decision filed an amendment to its 770 kc application looking toward the operation decided upon. Pending action on this application, KOB continues to operate on 770 kc under its temporary authority, with 50 kw daytime and 25 kw, directionalized to protect WABC, at night. WABC has consistently opposed KOB's assignment to 770 kc, and in its presently pending application for renewal of license indicated that it does not acquiesce in our conclusion that its nighttime operation should be directionalized to afford KOB mutual class I protection. Since the rule amendment is phrased in permissive rather than mandatory terms, WABC's renewal application is not technically in conflict with the amended rules. KSTP, Inc., the licensee of KOB, has filed an application for facilities on 770 kc at New York City, directionalized as set forth in our KOB decision, obviously in conflict with WABC's renewal application.

84. ABC appealed our decision to the U.S. Court of Appeals for the District of Columbia, which in May 1960 affirmed the Commission. (*American Broadcasting Company v. FCC*, 280 F. 2d 631, 20 R.R. 2001.) However, the Court added:

At the same time, we do not think that the position of ABC as a network should be permanently prejudiced by forcing it to share a channel if other networks are given full use of clear channels. This inequity, if it exists or is permitted to exist, should be cognizable by the Commission in a proper proceeding brought before it by ABC, even though the assignment of KOB to 770 kc is permitted to continue. In other words, the Commission should seek to provide channel facilities to the ABC network on a basis which is fair and equitable in comparison with other networks. Whether this is to be done by permitting ABC to intervene in the clear-channel proceedings now pending, or through some other means, is not for us to say. It may be that ABC can raise its claims in this regard by filing competitive applications when present licensees on other frequencies seek renewal or by seeking modification of existing licenses held by others. Perhaps the Commission will afford, *sua sponte*, some other procedural remedy. Thus, we do not believe that ABC has been or should be precluded from a hearing on its claim that the public interest requires that the loss of service in the East, which class I broadcasting from Albuquerque produces, be absorbed by some eastern broadcaster other than WABC. Any failure by the Commission to give due consideration to ABC's claim for treatment comparable to that accorded to other networks, when raised in an appropriate manner, may be brought to the courts for review.

85. In view of the above language of the court of appeals and the need for further hearings concerning some or all of the three pending applications mentioned above, it is not appropriate here to determine finally the exact form of operations which will be permitted on the channel 770 kc. However, we have in our deliberations herein reviewed the disposition to be made of all of the clear channels, including that frequency, and certain conclusions as to the "KOB problem" and 770 kc are required and appropriate at this point. These, which are discussed in more detail below, are as follows:

(a) For reasons stated at length in the KOB decision, and in line with our general conclusions reached herein concerning the need for using I-A channels to provide a first nighttime primary service in underserved areas, the public interest requires the establishment of a major unlimited time facility

in New Mexico. This is particularly true in the unique KOB case, where the area once had class I service and was deprived of it because of the reallocations required in 1941 in connection with the first NARBA.

(b) The frequency 1030 kc, being greatly inferior to 770 kc for such operation for reasons stated in the KOB decision, can no longer be regarded as involved in the KOB problem, and is available for other use. Its utilization is discussed below.

(c) The frequency 770 kc is the one most suitable and appropriate for such operation by KOB. We did not consider alternative frequencies other than 770 and 1030 kc in the KOB proceeding, and we should not and, indeed, cannot consider them further—e.g., on the basis of an evidentiary record as requested by ABC—either here or in whatever hearings may take place with respect to the 770 kc applications mentioned above.

(d) Whatever may be the ultimate decision as to operation by New York and Albuquerque stations on 770 kc, we conclude with respect to this channel, for the same reasons discussed above with respect to the I-A channels generally, that multiple breakdown thereof, with more than two stations operating at night, is not in the public interest at this time. Therefore, pending applications for unlimited-time operations by other stations on this frequency will be dismissed.

86. The only one of these points requiring further discussion is the selection of 770 kc as the frequency for the New Mexico unlimited-time assignment, without further consideration of other frequencies on the basis of an evidentiary hearing as requested by ABC. This channel was selected in the KOB case as one of two for consideration, because of the historical association of that frequency with the KOB problem. Of the two channels so studied, 770 was selected as greatly preferable to 1030 kc. The court of appeals affirmed our actions in both respects. Upon further examination of all of the channels, we find 770 kc to be the appropriate one for use in New Mexico. It must be borne in mind that the overall allocation scheme adopted herein was carefully worked out, as it had to be, to take into account the numerous problems involved in making the new assignments on the I-A channels—protection of Canadian and Mexican stations, protection of our own cochannel and adjacent-channel assignments, placing the new stations far enough from the cochannel class I-A stations so that the former can render a reasonable amount of service, and avoidance wherever possible of having the new unlimited-time stations in adjacent States on channels only 10 kc apart. The assignment of 770 kc for use in New Mexico meets these requirements, and permits the rendition of a large amount of much-needed service in that area. Our decision affirming that assignment is based upon what we deem best for the public with due regard for present and potential service in the standard broadcast medium. Whatever significance considerations relating to “networking” and network competition may have in other contexts—a matter we do not decide here—we cannot conclude that the public interest would be served by attempting to redesign the entire nationwide allocation of frequencies adopted here solely in order to alleviate whatever adverse situation may confront ABC in these respects.¹² Considerations of this char-

¹² There is no one other frequency which could be considered as an obvious alternative to 770 kc for class I use at Albuquerque, even aside from the other disposition of the various I-A channels made herein. Of the three proposed by ABC—660, 680, and 1180 kc—880 and 1180 kc would not provide as much needed primary service in the Southwest as does 770 kc. As to 660 kc, while this frequency might afford somewhat more of such service in the Southwest, this channel has long been used by station KFAR, Fair-

acter, which are subject to frequent change, cannot be of great consequence in deciding wide-ranging, basic, and relatively permanent allocations questions such as those involved here.

87. For these reasons, ABC's request for evidentiary hearing on alternative frequencies for the New Mexico assignment must be denied. Moreover, it would make a complete travesty of our efforts to resolve the many and fundamental clear-channel allocation problems, involving hundreds of stations all over the country, if we were to proceed to consider other alternative frequencies on the basis of an evidentiary record. As mentioned above, there is no one single obvious alternative. Even if limited to three, as proposed by ABC, such an inquiry would obviously take a vast additional amount of time, and there is no reason why licensees of stations affected by inquiry into these frequencies could not suggest still further alternatives which we would be compelled to consider. While such a proceeding, doubtless of several years' duration, would be going on, not only would resolution of the KOB problem be delayed, but we could not proceed finally with any substantial reallocation of clear channels anywhere, because we would not know what frequency would finally be selected for this important use. A blanket freeze on a substantial portion of the broadcast spectrum, affecting many applications, would have to be maintained for the same indefinitely long period.

88-89. Whatever disposition is finally made as to operation on 770 kc, the use of this frequency will harmonize with uses herein made of class I-A channels for the provision of much needed nighttime primary service in areas otherwise lacking it. The class I-A channels formerly reserved for the exclusive nighttime use of a single station, on which we now permit two unlimited-time stations, include all those occupied by network-owned stations.

90. In view of the foregoing considerations, we here affirm our KOB decision insofar as it determined that a major unlimited-time facility should be assigned to New Mexico on 770 kc and amended rules to permit the assignment of two class I stations on that frequency.

KOA

91. Metropolitan Television Co., licensee of KOA, Denver, Colo., admits that, since the I-A channels, rather than the I-B channels, form the basis for our overall allocation plan, KOA is not directly affected. However, it urges that KOA be restored to class I-A facilities. It does not suggest what to do with the 10 full-time stations now sharing its frequency. The KOA request goes beyond anything adopted herein and must be denied.

1030 kc

92. Since 1030 kc is no longer involved in the KOB problem, we proposed in our third notice to permit a class II unlimited-time assignment on that frequency in Montana or Wyoming.¹⁸ That notice

banks, Alaska, in addition to the class I-A station at New York City. Such use we have concluded herein to be consistent with our allocation plan. Additional use at Albuquerque would raise slightly the nighttime limit to KFAR in Alaska, and thus prevent that station to some extent from rendering widespread and needed service.

¹⁸ In view of KOB's operation on 770 kc, the fact that KOB has a license on 1030 kc is not an impediment to assignment of a new 1030 kc station elsewhere.

also contemplated the use of 650 kc in Montana and 1180 kc in Wyoming. We have seen that 650 kc is not one of the frequencies on which duplication will now be permitted. As to 1030 and 1180 kc, further examination has revealed that by utilizing 1030 kc in Wyoming and 1180 kc in Montana greater protection can be afforded to the I-A operation at Salt Lake City which provides the only I-A service to vast regions of Idaho, Utah, Wyoming, Nevada, Arizona, New Mexico, and Colorado. The change involves only the Montana and Wyoming assignments, and each of these States still receives one class II-A assignment. No proposals were received pursuant to the third notice with respect to either of these frequencies. Moreover, assignment of 1030 to any portion of Wyoming and 1180 to any portion of Montana is not precluded by the location of the I-A stations on those channels.

93. Such use of 1030 kc is, of course, similar to that now adopted for those I-A channels on which duplication will be permitted. 1030 kc is now an I-B channel under our rules, though assigned to the United States for priority of use as an I-A channel under the 1950 North American regional broadcasting agreement, and the 1957 agreement between the United States of America and the United Mexican States concerning radio broadcasting in the standard broadcast band. The question is whether this frequency should be reclassified as a I-A channel in our rules. In the pending file (because of the freeze)¹⁴ are some six applications for use of this frequency on an unlimited-time, class II basis in the continental United States, none of which is for Wyoming. If 1030 kc becomes a I-A channel, these applications, of course, cannot be granted under the rules we adopt herein as to the use of these channels.

94. We conclude that 1030 kc should be utilized by a class II-A station in Wyoming and that it should be reclassified as an I-A channel. The reason why it was made an I-B channel in 1941—to afford an assignment for KOB in New Mexico—no longer exists, and therefore it is appropriate to give this frequency the status accorded it under international agreements. It must be borne in mind that an I-A channel—on which the United States or any other country having I-A priority is afforded protection to its borders rather than merely with respect to particular existing operations—is a national asset. We should not suffer a loss by default of such an asset to which we are entitled under international agreements. These considerations outweigh the restriction on unlimited-time assignments which is entailed if 1030 kc is made an I-A channel. Moreover, the class I-A assignment which is provided on that frequency is an integral part of the plan which we have adopted for achievement of the primary objective of improving service to white areas. We could not consider, in any event, the making of other unlimited-time assignments which would impair the value of this new class II-A allocation. The reclassification of 1030 kc is consistent with our decision, mentioned above, not to permit, for the present, use of the channels duplicated in this proceeding by more than one unlimited-time class II-A station.

¹⁴ Sec. 1.351 of our rules, the "freeze" rule, provided that, pending the decision in docket No. 6741, action would be withheld on applications for facilities on the I-A channels and on 1030 kc and 14 other I-B channels.

Accordingly, section 3.25 of our rules is amended herein to make 1030 kc an I-A channel, and the pending applications for unlimited-time operation thereon within the continental United States will be dismissed.

Denial of Educational Reservations

95. Comments pursuant to the third notice were filed by about 30 educational groups which requested that some or all of the proposed new class II stations be reserved for educational use. Of this group, nine gave some indication that the commenting party itself is interested in obtaining the use of a clear-channel frequency. One such party stated it has the necessary funds available to it.

96. The Commission has never reserved frequencies for educational use in the standard broadcast band. When television came to the fore as a new medium, we recognized the high costs of establishing a television station and the necessity, if educators were to be given sufficient opportunity to utilize the medium, that some channels be reserved for noncommercial use in the establishment of the table of assignments to give the educational community time to evaluate the uses of the medium, and to raise the huge sums required for the construction and operation of stations. This decision was necessitated in part by the limited number of channels available.

97. In AM radio, however, the situation has been somewhat different. Construction costs are substantially less than they are for television stations. Radio as a medium has existed for many years, and it is not necessary that educators be given time, as was required in the new medium of television, to study possible uses and the impact of the medium. We see no need in the public interest for the reservation requested. Our objective of securing nighttime primary service to areas which presently lack such service has been made clear. Detailed requirements that successful applicants for such stations must meet are enumerated herein. Moreover, as we noted in our sixth report and order setting up the table of television assignments, the potential of television for education is much greater and more readily apparent than that of aural broadcasting and the interest of the educational community in the field is much greater than it was in aural broadcasting. Nothing we are adopting herein forecloses additional educational AM radio. Educational applications for the class II-A stations hereby made available will be accepted on the same basis as are commercial applications. Those mutually exclusive applications complying with our rules will be given comparative consideration.

The I-B Channels

98. In our consideration of the clear-channel proceeding in recent years, we have not contemplated breakdown of the I-B channels any further than at present. Because of the relatively complicated conditions and requirements which already obtain on these channels and which would have to be taken into account in any new allocation plan—requirements of protecting usually two cochannel U.S. I-B

stations and a number of cochannel unlimited-time U.S. class II stations, foreign protection requirements, the fact that the United States receives protection on these channels only with respect to existing operations and not to the borders of the country, and similar factors—the class I-B channels do not lend themselves to use in an overall allocation plan, and we must look primarily to the I-A channels for an allocation pattern designed to improve overall radio service.

99. Accordingly, we adopt herein no change in the established principles and standards governing the assignment of stations to class I-B channels. Further, consistently with the changed mode of protecting future uses of class I-A channels, we remove the blanket freeze hitherto applicable to 15 class I-B channels and retain only the restrictions already discussed, which are adapted to and necessitated by our decisions concerning the utilization of the class I-A channels.

Concluding Observations

100. This proceeding, which was initiated in 1945 on 11 issues of wide scope, and pursued further under subsequent notices issued in 1958 and 1959, has embraced an encyclopedic variety of approaches and proposals going to the basic question of how best to utilize almost half the spectrum space devoted to standard broadcasting. While the sheer volume of the record and the fact that it has spanned a period of consequential change in standard broadcasting have added difficulty to the task of deciding upon the most desirable course, the Commission has been vastly assisted by numerous helpful contributions made in submissions on the record through testimony, exhibits, briefs, oral arguments, comments and other pleadings.

101. In the hard-fought, head-on conflict between the two basic approaches of extending the reach of major stations on clear channels or increasing the numbers of stations permitted on these channels, much valuable data and analysis have been placed before us by the proponents of both approaches. Recognition is due to the fact that some merit attaches to very many of the proposals which have been urged upon us, including some of those which we herein reject. Our essential task in this proceeding has been to select among the myriad solutions offered those which, on net balance, taking into account the many pertinent considerations, would best serve the public interest. The opposed factors bearing upon our judgments in some instances are closely balanced. While recognizing that much can be said for numerous alternative approaches, we now conclude that the course laid out herein, both as reflected in the rule changes now adopted and in the preservation for the time being of the status quo on 12 class I-A clear channels, represents the best solution available at this time.

102. Authority for adoption of the rule amendments herein is contained in sections 4 (i) and (j) ; 303 (a), (b), (c), (d), (f), (g), (h), and (r) ; and 307(b) of the Communications Act of 1934, as amended.

103. In view of the foregoing, *It is ordered*, That, effective October 30, 1961, the Commission's rules *Are amended* as set forth in the appendix hereto; and

104. *It is further ordered*, That all pleadings, petitions, comments, and reply comments, requesting other changes in our rules relating to clear channels; requesting that no changes be made; requesting further hearing, oral argument, or evidentiary hearing; or requesting other relief not adopted herein *Are denied*; and

105. *It is further ordered*, That this proceeding, docket No. 6741 *Is terminated*.

APPENDIX

PART I

1. Section 1.351 is amended to read as follows :

§ 1.351 Applications for frequencies adjacent to class I-A channels.

Notwithstanding the provisions of any other rules of the Commission, all applications (regardless of when they were or may be filed) for frequencies located within 30 kc of a class I-A channel listed in § 3.25(a) of this chapter will be subject to the provisions of this section. The provisions of paragraph (a) of this section apply to the frequencies listed therein, which are within 30 kc of a class I-A channel on which an unlimited-time class II assignment is specifically provided for in § 3.22 or 3.25(a) of this chapter. The provisions of paragraphs (b) and (c) of this section apply to the frequencies listed in paragraph (b), which are within 30 kc of the remaining class I-A channels. Where a frequency is listed both in paragraphs (a) and (b), applications for facilities on such frequency are subject to the provisions and restrictions contained in both of said paragraphs.

(a) (1) The provisions of this paragraph apply to the following frequencies:

680, 690, 710, 730, 740, 790, 800, 810, 850, 860, 900, 910, 920, 990, 1000, 1010, 1050, 1060, 1070, 1080, 1090, 1110, 1130, 1140, 1150, 1170, 1190, 1220, 1230, and 1240 kc.

(2) Where it appears that the facilities requested in any application for one of the designated frequencies (other than an application by an existing class IV station to increase daytime power on 1230 or 1240 kc) involves undue risk of objectionable interference to, prohibitive interference from, or prohibited overlap with, a possible new class II-A assignment specified in § 3.22 of this chapter or a new unlimited-time class II assignment at Anchorage, Alaska, or San Diego, Calif., specified in § 3.25(a) of this chapter, such application will not be granted until the location and operating facilities of such new class II station are established. Assignments of such new class II stations will be made without regard to the pendency of applications on adjacent frequencies. Any hearing which may be held on such an application for an adjacent frequency will not be comparative with respect to the class II facility, and any issues pertaining to the mutual impact of the class II and adjacent-channel operations concerned will be confined to the question of whether, with a class II station operating as proposed, the public interest would be served by a grant of the adjacent channel application.

(b) (1) Until September 1, 1964, or such earlier date as may be announced, the provisions of this paragraph and of paragraph (c) of this section will apply to all applications for the following frequencies:

610, 620, 630, 680, 690, 710, 730, 790, 800, 810, 850, 860, 900, 1010, 1050, 1060, 1070, 1130, 1140, 1150, 1170, 1190, and 1220 kc.

(2) Applications for new stations on, or for change of existing stations to, one of the designated frequencies will not be granted, and, except as provided in paragraph (c) of this section, will be placed in the pending file without further processing or consideration. Where before October 30, 1961, such applications had attained protected status under § 1.354 or by designation for hearing, they will retain such status to the extent so established. Additionally, such applications will be protected, as provided elsewhere in the rules, through designation for hearing. They will not be otherwise protected.

(3) Applications for increase in power or operation during nighttime hours not previously authorized will be processed in normal course, but will be

considered in the light of the effect that grant thereof might have upon possible future uses of the class I-A channel or channels located within 30 kc of the frequency involved (e.g., authorization of power greater than 50 kw for class I-A stations, or additional unlimited-time cochannel assignments). Such applications will not be granted if it appears that they risk prejudice to such possible future uses of the class I-A channels concerned, because of interference caused or received, or prohibited overlap. In these situations the application involved, if otherwise ready for grant (after hearing or otherwise), will be placed in the pending file. Where it appears that because of these considerations an application cannot be granted in due course, the applicant will be so notified and, notwithstanding the provisions of §§ 1.311 and 1.354, will be permitted to amend his application within 45 days of such notice, without change in position in hearing or on the processing line, in order to remove the circumstances which stand in the way of a grant. Applications will acquire and retain protected status as they would in normal course.

(4) Applications for other changes in facilities on the designated frequencies will be processed and acted upon in normal course.

(5) Action will not be withheld under this paragraph on applications for facilities in Alaska, Hawaii, Puerto Rico, or the Virgin Islands.

(c) (1) After October 30, 1961, hearings will not be designated on applications falling under paragraph (b) (2) unless they conflict with applications not falling under paragraph (b) (2).

(2) If the decision in a hearing looks toward grant of an application which, under paragraph (b) (2) or (b) (3), cannot be made immediately, such application and all applications conflicting with it will be placed in the pending file, and will retain protected status.

2. In § 1.354, paragraphs (a) and (c) are amended, paragraphs (d) through (j), inclusive, are redesignated paragraphs (f) through (l), inclusive, and new paragraphs (d) and (e) are added, as follows:

§ 1.354 Processing of standard broadcast applications.

(a) Applications for standard broadcast facilities are divided into three groups.

(1) In the first group are applications for new stations (except applications for new class II-A stations) or for major changes in the facilities of authorized stations; i.e., any change in frequency, power, hours of operation, or station location: *Provided, however*, That the Commission may, within 15 days after the tender for filing of any application for other modification of facilities, advise the applicant that such application is considered to be one for a major change and therefore is subject to the provisions of § 1.359.

(2) The second group consists of applications for licenses and all other changes in the facilities of authorized stations.

(3) The third group consists of applications for new class II-A stations.

* * * * *

(c) Applications for new stations (except new class II-A stations) or for major changes in the facilities of authorized stations are processed as nearly as possible in the order in which they are filed. Such applications will be placed in the processing line in numerical sequence, and are drawn by the staff for study, the lowest file number first. Thus, the file number determines the order in which the staff's work is begun on a particular application. There are two exceptions thereto: The Broadcast Bureau is authorized to (1) group together for processing applications which involve interference conflicts where it appears that the applications must be designated for hearing in a consolidated proceeding, and (2) to group together for processing and simultaneous consideration, without designation for hearing, all applications filed by existing class IV stations requesting an increase in daytime power which involve interlinking interference problems only, regardless of their respective dates of filing. In order that those applications which are entitled to be grouped for processing may be fixed prior to the time processing of the earliest filed application is begun, the Commission will periodically publish in the Federal Register a public notice listing applications which are near the top of the processing line and announcing a date (not less than 30 days after publication) on which the listed applications will be considered available and ready for processing and by which all applications excepting those specified

in exception (2) in this paragraph must be filed if they are to be grouped with any of the listed applications.

(d) Applications for new class II-A stations are placed at the head of the processing line and processed as quickly as possible. Action on such applications may be at any time (1) more than 30 days after public notice is given of acceptance of the application for filing, or (2) after January 30, 1962, whichever is later.

(e) The processing and consideration of applications for new stations or major changes on those frequencies specified in § 1.351 are subject to certain restrictions, as set forth therein.

PART 3

3. Section 3.21 is amended to read as follows:

§ 3.21 Classes of standard broadcast channels and stations.

(a) *Clear channel*.—A clear channel is one on which the dominant station or stations render service over wide areas, and which are cleared of objectionable interference within their primary service areas and over all or a substantial portion of their secondary service areas. Stations operating on these channels are classified as follows:

(1) *Class I station*.—A class I station is a dominant station operating on a clear channel and designed to render primary and secondary service over an extended area and at relatively long distances. Its primary service area is free from objectionable interference from other stations on the same and adjacent channels, and its secondary service area free from interference except from stations on adjacent channels, and from stations on the same channel in accordance with the channel designation in § 3.25 or 3.182. The operating power shall not be less than 10 kw nor more than 50 kw. (Also see § 3.25(a) for further power limitation.)

(2) *Class II station*.—A class II station is a secondary station which operates on a clear channel (see § 3.25) and is designed to render service over a primary service area which is limited by and subject to such interference as may be received from class I stations. Whenever necessary a class II station shall use a directional antenna or other means to avoid interference with class I stations and with other class II stations, in accordance with § 3.182 (and § 3.22 in the case of class II-A stations). Class II stations are divided into three groups:

(i) *Class II-A station*.—A class II-A station is an unlimited-time class II station operating on one of the clear channels listed in § 3.22 and assigned to a community within a State specified in the table contained in that section. A class II-A station shall operate with power of not less than 10 kw nighttime nor more than 50 kw at any time.

(ii) *Class II-B station*.—A class II-B station is an unlimited-time class II station other than those included in class II-A. A class II-B station shall operate with power not less than 0.25 kw nor more than 50 kw.

NOTE.—The class II station operating unlimited time on 760 kc at San Diego, Calif., shall be limited to a power of 5 kw, and the class II station operating unlimited time on 750 kc at Anchorage, Alaska, shall be limited to a power of 10 kw. Both stations shall protect the I-A station on the same frequency to its 0.5-mv/m, 50 percent skywave contour.

(iii) *Class II-D station*.—A class II-D station is a class II station operating daytime or limited time. A class II-D station shall operate with power not less than 0.25 kw nor more than 50 kw.

(b) *Regional channel*.—A regional channel is one on which several stations may operate with powers not in excess of 5 kw. The primary service area of a station operating on any such channel may be limited to a given field intensity contour as a consequence of interference.

(1) *Class III station*.—A class III station is a station which operates on a regional channel and is designed to render service primarily to a principal center of population and the rural area contiguous thereto. Class III stations are subdivided into two classes.

(i) *Class III-A station*.—A class III-A station is a class III station which operates with power not less than 1 kw nor more than 5 kw and the service area of which is subject to interference in accordance with § 3.182.

(ii) *Class III-B station.*—A class III-B station is a class III station which operates with power not less than 0.5 kw, nor more than 1 kw night and 5 kw daytime, and the service area of which is subject to interference in accordance with § 3.182.

(c) *Local channel.*—A local channel is one on which several stations operate with powers no greater than provided in this paragraph. The primary service area of a station operating on any such channel may be limited to a given field intensity contour as a consequence of interference. Such stations operate with power no greater than 250 w nighttime, and power daytime no greater than:

(1) 250 w if the station is located 100 km (62 miles) or closer to the Mexican border, or in the area of the State of Florida south of 28° north latitude and between 80° and 82° west longitude; or

(2) 1 kw if the station is located elsewhere.

(3) *Class IV station.*—A class IV station is a station operating on a local channel and designed to render service primarily to a city or town and the suburban and rural areas contiguous thereto. The power of a station of this class shall not be less than 0.1 kw, and not more than 0.25 kw nighttime and 1 kw daytime, and its service area is subject to interference in accordance with § 3.182.

NOTE 1.—Under NARBA, the power ceiling for class IV stations is 250 w daytime as well as nighttime. The United States-Mexican agreement permits such stations to operate with up to 1 kw power daytime if they are located further than 100 km (62 miles) from the Mexican border. Pursuant to the United States-Mexican agreement and informal coordination with the other NARBA signatories, the Commission will consider applications for class IV stations on local channels with daytime powers more than 250 w, up to 1 kw, if such station is to be located outside of the areas specified in paragraph (c) (1) of this section, and if no objectionable interference would be caused (under the standards set forth in the pertinent international agreement) to a duly notified station in Mexico, Haiti, or any foreign country signatory to NARBA.

NOTE 2.—All authorizations of new or changed class I-B, II-B, II-D, III, or IV facilities after October 30, 1961, are subject to whatever interference may be received from, or whatever overlap of 2-mv/m and 25-mv/m groundwave contours or overlap of 25-mv/m groundwave contours may be involved with, previously or subsequently authorized class II-A facilities.

4. Section 3.22 is amended to read as follows:

§ 3.22 Assignment of Class II-A stations.

(a) *Table of assignments.*—One class II-A station may be assigned on each channel listed in the following table within the designated State or States:

Channel (kc)	Existing class I station	State(s) in which class II-A assignment may be applied for
670	WMAQ, Chicago	Idaho.
720	WGN, Chicago	Nevada or Idaho.
780	WBBM, Chicago	Nevada.
880	WCBS, New York	North Dakota, South Dakota, or Nebraska.
890	WLS, Chicago	Utah.
1020	KDKA, Pittsburgh	New Mexico.
1030	WBZ, Boston	Wyoming.
1100	KYW, Cleveland	Colorado.
1120	KMOX, St. Louis	California or Oregon.
1180	WHAM, Rochester	Montana.
1210	WCAU, Philadelphia	Kansas, Nebraska, or Oklahoma.

(b) *Minimum service to "white" areas.*—No class II-A station shall be assigned unless at least 25 percent of its nighttime interference-free service area or at least 25 percent of the population residing therein receives no other interference-free nighttime primary service.

(c) *Power.*—Class II-A stations shall operate with not less than 10 kw power nighttime.

(d) *Protection.*—(1) *Protection by class II-A stations to other stations.* The cochannel class I-A station shall be protected by the class II-A station to its 0.1-mv/m contour daytime and its 0.5-mv/m, 50-percent skywave contour nighttime. All other stations of any class authorized on or before October 30, 1961, shall normally receive protection from objectionable interference from class II-A stations as provided in § 3.182.

(2) *Protection to class II-A stations.* A class II-A station shall normally receive daytime protection to its 0.5-mv/m groundwave contour and nighttime protection to the contour to which it is limited by the cochannel class I-A station.

(e) *Applications not complying with this section.*—Applications for class II-A stations which do not meet the requirements of paragraphs (b) and (c) of this section will be returned without further consideration.

5. In § 3.24, paragraph (b) is amended, present paragraph (i) is redesignated paragraph (j), and new paragraph (i) is added, as follows:

§ 3.24 Broadcast facilities; showing required.

* * * * *

(b) That objectionable interference will not be caused to existing stations or that if interference will be caused, the need for the proposed service outweighs the need for the service which will be lost by reason of such interference. (For special provisions concerning interference from class II-A stations to stations of other classes authorized after October 30, 1961, see note 2 to §§ 3.21 and 3.22(d).) That the proposed station will not suffer interference to such an extent that its service would be reduced to an unsatisfactory degree. (For determining objectionable interference, see §§ 3.182 and 3.186.)

* * * * *

(1) That, in the case of an application for a class II-A station (see § 3.22), 25 percent or more of the area or population within the nighttime interference-free service contour of the proposed station receives no nighttime interference-free primary service from another station.

6. In § 3.25, paragraphs (a) and (b) are amended to read as follows:

§ 3.25 Clear channels; classes I and II stations.

* * * * *

(a) On each of the following channels, one class I station will be assigned, operating with power of 50 kw: 640, 650, 660, 670, 700, 720, 750, 760, 780, 820, 830, 840, 870, 880, 890, 1020, 1030, 1040, 1100, 1120, 1160, 1180, 1200, and 1210 kc. In addition, on the channels listed in this paragraph, class II stations may be assigned as follows:

(1) On 670, 720, 780, 880, 890, 1020, 1030, 1100, 1120, 1180, and 1210 kc, one class II-A unlimited-time station, assigned and located pursuant to the provisions of § 3.22.

(2) On the channel 750 kc, an unlimited-time class II station located at Anchorage, Alaska.

(3) On the channel 760 kc, an unlimited-time class II station located at San Diego, Calif.

(4) On any of the channels listed in this paragraph (to the extent consistent with the assignments provided in subpars. (1), (2), and (3) of this paragraph), unlimited-time class II stations located in Alaska, Hawaii, Virgin Islands, or Puerto Rico, which will not deliver more than 5 mv/m groundwave day or night or 25 mv/m 10-percent time skywave at night at any point within the continental limits of the United States, excluding Alaska.

(5) On any of the channels listed in this paragraph (to the extent consistent with the class I, class II-A, and Anchorage and San Diego class II assignments provided in this paragraph, and, in the case of limited-time stations, subject to the restrictions contained in § 3.38), limited-time and daytime-only stations, as follows:

(1) In Alaska, Hawaii, Puerto Rico, and Virgin Islands.

(ii) Within the continental United States, excluding Alaska, where the station would operate with facilities authorized as of October 30, 1961.

NOTE 1.—In view of special circumstances arising from the provision of presunrise broadcast service on 640 kc at Ames, Iowa, applications will be accepted for broadcast operations on 640 kc between 6 a.m. central standard time and local sunrise at Ames, Iowa, with not to exceed 1 kw power: *Provided*, That such applications will be acted upon only after and in light of the decision reached in docket No. 11290.

NOTE 2.—In view of special circumstances arising from the provision of a service during some nighttime hours by a class II station operating on 530 kc at New York, N.Y. (i.e., from 6 a.m. to local sunrise and from sunset at Minneapolis to 10 p.m., e.s.t.), applica-

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tions will be accepted for such operation: *Provided*, That they will be acted upon only after and in light of the decision reached in docket No. 11227.

NOTE 3.—On the frequency 770 kc, two class I stations may be assigned.

NOTE 4.—See NARBA concerning priority for Canadian class I-B and Cuban class I-C assignments on 640 kc.

NOTE 5.—See NARBA concerning Cuban class II-E assignments on 660, 670, 760, 780, 830, 1020, 1030, and 1120 kc.

NOTE 6.—See United States-Mexican agreement concerning Mexican use of 660, 760, and 830 kc.

(b) To each of the following channels there may be assigned class I and II stations: 680, 710, 810, 850, 940, 1000, 1060, 1070, 1080, 1090, 1110, 1130, 1140, 1170, 1190, 1500, 1510, 1520, 1530, 1540, 1550, and 1560 kc.

NOTE 1.—See NARBA and the United States-Mexican agreement concerning a Cuban class II-E assignment on, and Mexican use of, 1030 kc.

NOTE 2.—Class I and II stations on 1540 kc shall deliver not over 5 mv/m groundwave or 25 mv/m, 10-percent-time skywave at any point of land in the Bahama Islands, and such stations operating nighttime (i.e., sunset to sunrise at the location of the class II station) shall be located not less than 650 miles from the nearest point of land in the Bahama Islands.

7. Section 3.28(a) is amended to read as follows:

§ 3.28 Assignment of stations to channels.

(a) The individual assignments of stations to channels which may cause interference to other U.S. stations only shall be made in accordance with the provisions of this part for the respective classes of stations involved. (For determining objectionable interference, see §§ 3.22, 3.182, and 3.186.)

8. In § 3.182, the introductory text and subparagraphs (1)(i) and (2) of paragraph (a) are amended; paragraph (c) is added; and paragraphs (s), (t), and (v) are amended, as follows:

§ 3.182 Engineering standards of allocation.

(a) Sections 3.21 to 3.34, inclusive, govern allocation of facilities in the standard broadcast band of 535 to 1605 kc. § 3.21 establishes three classes of channels in this band; namely, clear channels for the use of high-powered stations, regional channels for the use of medium-powered stations, and local channels for the use of low-powered stations. The classes and power of standard broadcast stations which will be assigned to the various channels are set forth in § 3.21. The classification of the standard broadcast stations are as follows:

(1) * * *

(i) The class I stations in group I-A are those assigned to the channels allocated by § 3.25(a), on which, except to the extent provided by that section and by § 3.22, duplicate nighttime operation is not permitted. The power of these stations shall not be less than 50 kw. The class I stations in this group are afforded protection as follows:

Daytime: To the 0.1-mv/m groundwave contour from stations on the same channel, and to the 0.5-mv/m groundwave contour from stations on adjacent channels.

Nighttime: To the 0.5-mv/m, 50-percent skywave contour from stations on the same channel, and to the 0.5-mv/m groundwave contour from stations on adjacent channels.

* * * * *

(2) Class II stations are secondary stations which operate on clear channels with powers not less than 0.25 kw nor more than 50 kw, except that class II-A stations shall not operate nighttime with less than 10 kw. Class II stations are required to use a directional antenna or other means to avoid causing interference within the normally protected service areas of class I stations or other class II stations. (For special rules and standards concerning class II-A stations, see § 3.22.) These stations normally render primary service only, the area of which depends on the geographical location, power, and frequency. This may be relatively large, but is limited by and subject to such interference as may be received from class I stations. However, it is recommended that class II stations be so located that the interference received from other stations will not limit the service area to greater than the 2.5-mv/m groundwave contour nighttime and 0.5-mv/m groundwave contour daytime, which are the values for the mutual protection of this class of stations with other stations of the same class

(except that class II-A stations are normally protected to their 0.5-mv/m groundwave contour daytime, and nighttime to the limit imposed by the co-channel class I-A station).

* * * * *

(s) The existence or absence of objectionable groundwave interference from stations on the same or adjacent channels shall be determined by actual measurements made according to the method hereinafter described, or, in the absence of such measurements, by reference to the propagation curves of § 3.184. The existence or absence of objectionable interference due to skywave propagation shall be determined by reference to the appropriate propagation curves in figure 1, 1a, or 2 of § 3.190.

(t) In computing the 50- and the 10-percent skywave field intensity values of a station operating on a clear channel specified in § 3.25(a), use shall be made of the appropriate curve set forth in figure 1a of § 3.190, "Skywave Signals for 10 Percent and 50 Percent of the Time." In computing the 50- and 10-percent skywave field intensity values of a station operating on a clear channel specified in § 3.25(b), use shall be made of the appropriate curve set forth in figure 1 of § 3.190, entitled "Average Skywave Field Intensity (corresponding to the second hour after sunset at the recording station)." In computing the 10-percent skywave field intensity values of a regional channel station, use shall be made of the appropriate curve in figure 2 of § 3.190, entitled "10-Percent Skywave Signal Range." The curves in figure 1 of § 3.190 are drawn for a radiated field of 100 mv/m at 1 mile in the horizontal plane from an 0.311 wavelength antenna. The curves in figures 1a and 2 of § 3.190 are drawn for a radiated field of 100 mv/m at 1 mile at the vertical angle pertinent to transmission by one reflection. In computations based on figure 1, the pertinent vertical angle shall be determined by use of figure 6 of § 3.190. In computations based on figure 1a or 2 of § 3.190, the pertinent vertical angle shall be determined by use of figure 6a of § 3.190.

* * * * *

(v) Protected-service contours and permissible interference signals for broadcast stations are as follows (for class I and II-A stations, see § 3.182(a)):

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Class of station	Class of channel used	Permissible power	Signal intensity contour of area protected from objectionable interference ¹		Permissible interfering signal on same channel ²	
			Day ³	Night	Day ³	Night ⁴
I-A.....	Clear.....	50 kw.....	{SC—100 uv/m..... AC—500 uv/m.....}	SC—500 uv/m (50-percent skywave) ⁷ AC—500 uv/m ³	} 5 uv/m.....	25 uv/m. ⁵
I-B.....	do.....	10 to 50 kw.....	{SC—100 uv/m..... AC—500 uv/m.....}	SC—500 uv/m (50 percent skywave)..... AC—500 uv/m ³	} 5 uv/m.....	25 uv/m.
II-A.....	do.....	0.25 to 50 kw (daytime); 10 to 50 kw (nighttime).	500 uv/m.....	500 uv/m ³	25 uv/m.....	25 uv/m.
II-B and II-D.....	do.....	0.25 to 50 kw.....	500 uv/m.....	2,500 uv/m ³ ⁴	25 uv/m.....	125 uv/m.
III-A.....	Regional.....	1 to 5 kw.....	500 uv/m.....	2,500 uv/m ³	25 uv/m.....	125 uv/m.
III-B.....	do.....	0.5 to 1 kw night and 5 kw day.....	500 uv/m.....	4,000 uv/m ³	25 uv/m.....	200 uv/m.
IV.....	Local.....	0.1 to 0.25 kw night and 0.1 to 1 kw day.....	500 uv/m.....	Not prescribed ⁶	25 uv/m.....	Not prescribed. ⁴

¹ When a station is already limited by interference from other stations to a contour of higher value than that normally protected for its class, this contour shall be the established standard for such station with respect to interference from all other stations.

² For adjacent channel, see par. (w) of this section.

³ Groundwave.

⁴ Skywave field intensity for 10 percent or more of the time.

⁵ These values are with respect to interference from all stations except class I-B, which stations may cause interference to a field intensity contour of higher value. However, it is recommended that class II stations be so located that the interference received from class I-B stations will not exceed these values. If the class II stations are limited by class I-B stations to higher values, then such values shall be the established standard with respect to protection from all other stations.

⁶ See par. (a) (4) of this section.

⁷ Class I-A stations on channels reserved for the exclusive use of 1 station during nighttime hours are protected from cochannel interference on that basis. On the frequency 770 kc, 2 class I stations may be assigned.

SC = Same channel.

AC = Adjacent channel.

Clear Channel Broadcasting

9. In § 3.185, paragraph (b) and the introductory text of paragraph (d) are amended, and new paragraph (k) is added, as follows:

§ 3.185 Computation of interfering signal from a directional antenna.

* * * * *

(b) For signals from stations operating on class I-B clear channels (those specified in § 3.25(b)), in case of determining skywave interference from an antenna with a vertical pattern different from that on which figure 1 of § 3.190 is predicated (the basis of the night mileage separation tables), it is necessary to compare the appropriate vectors in the vertical plane.

* * * * *

(d) Examples of the use of skywave curves on class I-B clear channels:

* * * * *

(k) For signals from stations operating on class I-A clear channels (those specified in § 3.25(a)), skywave interference is determined by using the 10-percent curve of figure 1a of § 3.190, entitled "Skywave Signals for 10 percent and 50 percent of the Time." The pertinent angle of departure is to be determined by use of figure 6a of § 3.190, in a manner similar to that described in paragraph (g) of this section for regional stations. An example of the determination of skywave interference in this situation is as follows: Assume a class I-A station and a proposed class II-A station, operating on the same channel, are separated 1,450 miles and that the 0.5-mv/m, 50-percent skywave contour of the class I-A station is located 740 miles from the station. The distance from the class II-A station to the protected contour of the class I-A station is 710 miles and from figure 6a the critical angles of radiation are 5° to 9°. If the vertical pattern of the antenna of the proposed class II-A station is such that between these angles the maximum radiation is 34 mv/m at 1 mile, the value of the 10-percent field as read from figure 1a is multiplied by 34/100 to determine the interfering 10-percent field intensity at the 0.5-mv/m, 50-percent skywave contour of the I-A station, which would be 0.025 mv/m.

10. Section 3.190 is revised by adding new figure 1a, and modifying the legend to the title on figure 6a, and amending the text to read as follows:

§ 3.190 Engineering Charts.

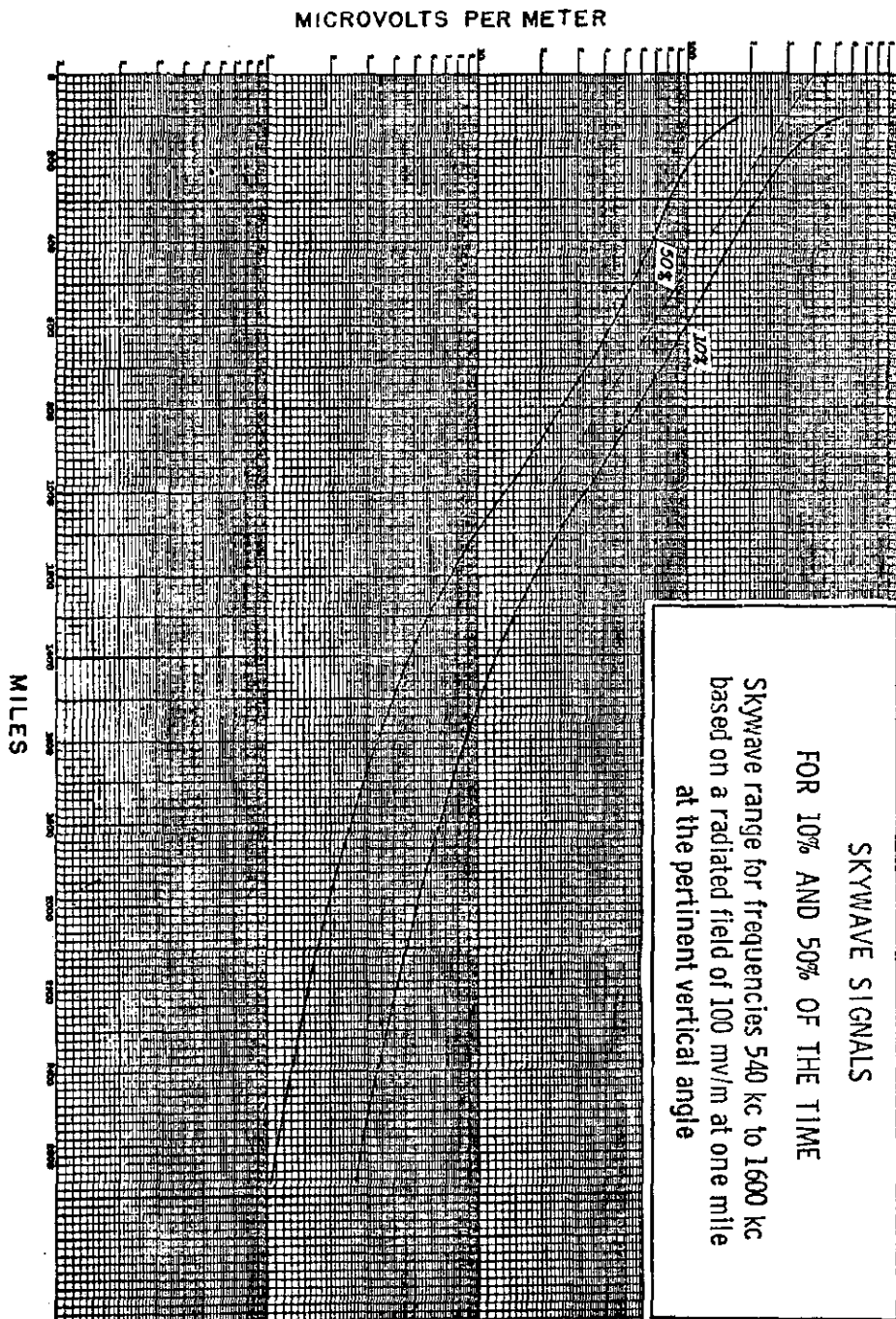
This section consists of the following figures: 1, 1a, 2, R3, 5, 6, 6a, 7, 8, 9, 10, and 11.

DISSENTING STATEMENT OF COMMISSIONER ROBERT E. LEE
(DOCKET NO. 6741)

I dissent to the decision adopted by the majority in this proceeding.

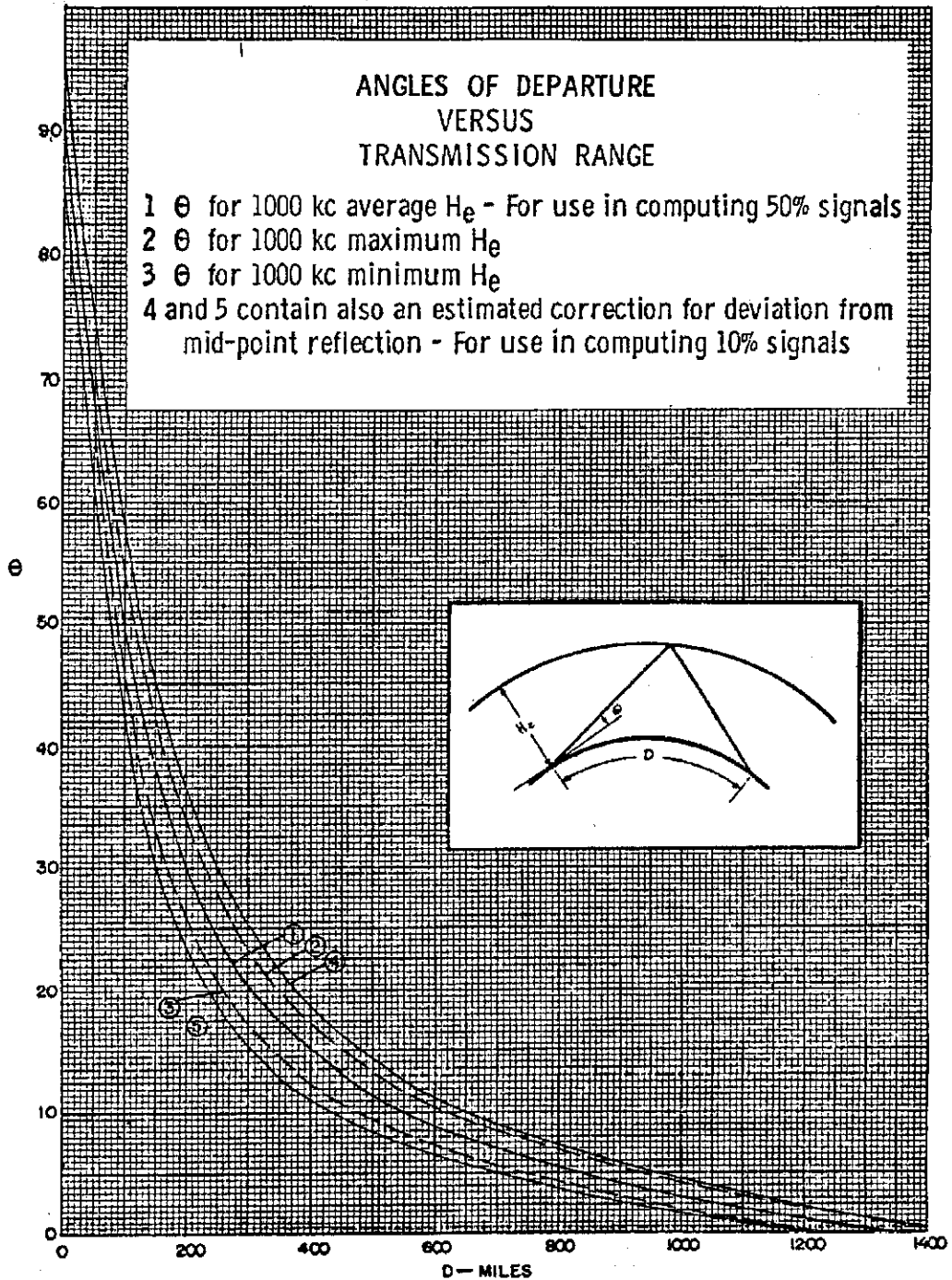
After 16 years of spasmodic consideration it has now been decided to cut the baby in half by breaking down half of the clear channels and by putting aside a consideration of greater power for class IA stations to an indefinite date.

The majority states that it has given "due recognition" to a resolution passed by the U.S. Senate in 1938, which resolution was intended to inhibit our freedom to permit class IA stations to operate with powers greater than 50 kw. I submit that a resolution passed 23 years ago, by Members no longer in the Senate, should not be given the effect of law, particularly since no other country in the world places such a restriction on station operating power. To penalize the American public by depriving it of more reliable radio service is, to my mind, highly unwarranted. It is to be noted that the majority is postponing consideration of this matter with the hope that it will be settled by 1964. Since the Commission finds it appropriate to give "due recognition" to the Senate resolution today, I find it difficult to expect that the resolution will not be accorded the same recognition in the future.



FCC § 3.190, FIGURE 1a

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FCC § 3.190, FIGURE 6a

I formally proposed, to my fellow Commissioners, a plan for settlement of this proceeding, which proposal was rejected. My plan, while being in the nature of a compromise between the private interests of the parties in the proceeding, did not take on the aspects of a compromise of the public interest as does the majority's decision.

I proposed that the rules be amended to permit each class I-A station to increase power up to 750 kw, and that these stations be given a period of 1 year to file appropriate applications. I proposed that at the end of the year period each channel be duplicated by the assignment of unlimited-time class II stations which would protect either the class I-A stations' 50-kw secondary service area or, in the alternative, the secondary service area resulting from their newly authorized or proposed secondary service with increased powers.

By following this course I believe that a substantial improvement in secondary service could be accomplished and that new class II facilities could be authorized in deserving areas without the undue administrative procedures adopted herein. This solution appears to me to offer the most substantive improvement in standard broadcast service with a minimum of gimmicks and causes for delay.

Permit me to analyze what the majority's decision accomplishes in the light of the objectives of the proceeding. The purpose of the hearing has been to bring more and better radio service to vast areas which are without a dependable service. It is estimated that one-half the total land area of the United States (excluding Hawaii and Alaska), consisting of 3.5 million square miles, is without nighttime primary service. How does the majority intend to remedy the situation? It is going to impose a freeze on 53 channels to permit the expedited consideration of 11 prospective applications for special class II-A stations, each one being so highly limited by interference that it can be expected to render nighttime primary service to but scant populations. Evidence in this record indicates that a total of approximately 50,000 square miles will be the recipient of this new service. Since the decision requires that at least 25 percent of the areas (to be served by prospective class II-A stations) be without primary service, it can be expected that with full implementation of the plan 12,500 square miles which are not now receiving ground-wave service would receive such service. This presumes that there would be applicants willing to build 10-kw stations employing expensive directional antennas serving remote and not too remunerative areas. I submit that the Commission's offer of special processing rules to bring new service to less than 1 percent of the area in the United States which is without such service is hardly the decision the country has been waiting for the last 16 years. Had the Commis-

sion deliberately swept the clear-channel proceeding under the rug, it could not have done so more effectively.

The majority's method of determining which channel is to be duplicated and which channel is to remain in status quo for further consideration is strained. As an example, 1120 kc is to be duplicated and not considered for higher power because of adjacent-channel interference considerations. The Commission has no standards for sky-wave interference to adjacent-channel skywave service, yet adjacent-channel interference is the precise reason given for failure to consider station KMOX, St. Louis, for higher power. On the other hand, the majority is willing to consider 700 kc eligible for higher power while the frequencies on either side of 700 kc are virtually saturated with stations that operate at night. This inconsistency is not explained. Moreover, the majority declines to put a class II-A station on 660 kc because of possible interference to a station in Alaska. In this day of directional antennas, this reason, like others given for the manner of disposition of the clear channels, is of little or no substance. The Alaska station is entitled to no greater protection than any other class II station. But, fundamentally, I consider it inappropriate to pick and choose between the I-A stations on a quasi-engineering basis. Each class I-A station could employ greater power and by the use of directional antennas protect all foreign stations as required by treaty obligations.

My proposal to permit class I-A stations to increase powers to 750 kw would eliminate daytime "white areas" and would increase the quality of skywave serve at night. These stations, by extending their daytime primary coverage and nighttime skywave services to points $1\frac{1}{2}$ times more distant than they are presently serving, would substantially overcome some of the deficiencies which presently exist in the standard broadcast band. Moreover, my suggested allocation would permit our domestic stations to overcome interference from foreign stations without derogating any of our treaty commitments.

I lack the confidence of the majority that its decision will result in any substantive consequence. I submit that it imposes an unwarranted freeze to foster 11 peanut whistles which may never be constructed. Little else is accomplished.

STATEMENT OF COMMISSIONER JOHN S. CROSS, CONCURRING IN PART
AND DISSENTING IN PART

After having this proceeding pending before it for over 16 years (since February 20, 1945), I consider it unfortunate that the majority of this Commission has finally offered the public what, in my opinion, is only a half solution.

The United States has 25 class I-A clear channels by virtue of international agreements. Under the majority decision, 13 of these class I-A clear channels are to be duplicated on a controlled basis while action on the other 12 is to be deferred. I doubt that the basis for selecting which channels go into the one category and which in the other will ever be understood fully by the public, thereby subjecting the Commission to possible criticism that it acted arbitrarily in this regard.

In my opinion, the reasons of the majority for duplicating 13 of the 25 class I-A clear channels on a controlled basis are sound and sufficient. However, I consider these reasons just as valid for those 12 channels on which action is deferred as they are for those 13 channels that are to be duplicated. Accordingly, I would treat all of them alike and duplicate them all on a controlled basis. This, in my opinion, would not only be fairer, but would also obviate any possible criticism of arbitrariness. In addition, it would strengthen our defense of these channels from foreign infringement. Moreover, it would eliminate the necessity for deferring the processing of applications for new stations on any frequencies within 30 kc of the 12 class I-A clear channels that are not being duplicated—a matter of considerable consequence since 23 (of the 107 available) frequencies are thereby involved.

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