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

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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 skyway" 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 preeminence 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

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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 skywave 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]

[4] That 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-