

FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON, D. C.

DECISION AND ORDER

In re application of
THE CROSLY RADIO CORPORATION (WLW),
CINCINNATI, OHIO
For Extension of Special Temporary Experimental Authorization,

File No. B2-SA-78

Application for extension of special temporary experimental authorization granted, in part, when, *inter alia*:

It was determined from an examination of the application that the granting thereof in part would serve public convenience, interest, and necessity.

Application for extension of special temporary experimental authorization denied, in part, without a hearing when, *inter alia*:

(1) Granting the part eliminated would have caused serious interference with a broadcasting station operating on an exclusive Canadian frequency, in violation of the International Telecommunication Convention, December 9, 1932;

(2) Applicant failed to meet requirements of the Commission as set forth in the notice which promulgated the conditions on which the Commission would consider extending the authorization.

BY THE COMMISSION:

Decision of the above entitled matter involves the application of International treaties and agreements to which the United States is a party. While there is involved as applicant the licensee of one of the largest broadcasting stations of the United States, the Broadcast Division of the Commission properly referred the matter to the entire Commission for decision. Wherever in this report reference is made to "Commission" there is meant thereby either the Federal Radio Commission, if the date involved is prior to July 11, 1934, or the Federal Communications Commission if subsequent to that date.

On January 14, 1935, The Crosley Radio Corporation of Cincinnati, Ohio, filed its application (B2-SA-78) for extension of its Special Temporary Experimental Authority to operate broadcast

station WLW with power of 500 kilowatts, upon the frequency of 700 kilocycles, unlimited time.

On said date, The Crosley Radio Corporation was the licensee of two stations, (1) a regular broadcast station licensed to operate under the call letters WLW, with 50 kilowatts power, unlimited hours of operation, on the regular broadcast frequency of 700 kilocycles, and (2) a special experimental station licensed to use the call letters W8XO, with hours of operation from 1:00 A. M. to 6:00 A. M. daily, upon the broadcast frequency of 700 kilocycles with power from 100 to 500 kilowatts. The location of these stations is at a point about $\frac{3}{4}$ mile southwest of Mason, Ohio, near the City of Cincinnati, Ohio. In addition to the two licenses above named, The Crosley Radio Corporation on the same date held a *Special Temporary Experimental Authorization* to operate its broadcast station WLW with power of 500 kilowatts (or 450 kw. in addition to the regular license), using the transmitter of station W8XO, for the period beginning August 1, 1934, and *ending in no event later than February 1, 1935*. It is for a renewal or extension of this Special Temporary Experimental Authority that the above application is filed.

It is necessary in considering this application briefly to review the facts concerning the operation of station WLW and W8XO and the operation of WLW under the Special Temporary Experimental Authority. It should be borne in mind that the question of extending the Special Temporary Experimental Authority is the only matter here involved. There is not before the Commission in this case any question as to the renewal of the regular licenses held by The Crosley Radio Corporation to operate broadcast station WLW and Special Experimental Station W8XO.

Broadcast station WLW has been regularly operated by The Crosley Radio Corporation for some time, the license having been renewed from time to time. On June 7, 1932, the Commission granted to the applicant a construction permit authorizing the construction of a Special Experimental station, and, after extending the completion date of this construction on three occasions the Commission, on February 9, 1934, granted a license following the construction. This license authorized the *experimental station* to operate with power of 100 to 500 kilowatts, from 1:00 to 6:00 A. M. daily, upon the broadcast frequency of 700 kilocycles and under the call W8XO. This license was renewed on August 21, 1934, to expire November 21, 1934, and on the latter date again renewed to expire February 21, 1935. The Special Temporary Experimental Authority (herein involved) to operate *broadcast station WLW* with 500 kilowatts power was *first* granted by the Commission April 17, 1934, as

the result of an application therefor filed with the Commission April 3, 1934. This Special Temporary Experimental Authority was to expire on August 1, 1934, but prior thereto, or on July 31, 1934, the Commission granted an extension thereof to expire February 1, 1935.

At Toronto, Canada, there is a broadcast station operating with the call letters CFRB, licensed by the Canadian Radio Broadcasting Commission to operate full time on the broadcast frequency of 690 kilocycles with power, at present, of 10 kilowatts. On July 14, 1932, the Department of State forwarded to the Commission a note from the Canadian Legation in Washington calling attention to the fact that station CFRB, Toronto, Canada, was licensed to operate on the frequency of 690 kilocycles (10 kilocycles removed from the frequency designated for use of WLW) and that the Toronto station, because of increasing its power to 8000 watts, at that time, had succeeded in diminishing interference between it and WLW. However, the note from the Canadian Government expressed the fear that if the experimental operation of station W8XO on 700 kilocycles with 500 kilowatts power were successful, the experimental restriction might be removed with the result that interference would be caused to CFRB. This note also stated:

"It is considered that the increase in power of station WLW will tend to aggravate the situation and may prove detrimental to broadcasting in Canada. I therefore have been instructed to request that the appropriate authorities of the Government of the United States may be moved to transfer Station WLW to a channel at least 50 kilocycles away from 690 and from any other channel used in the Province of Ontario."

The Commission thereupon advised the Secretary of State that it had authorized experimental operation only and that regular operation of WLW during broadcast hours will not be authorized without full investigation. The Canadian note of May 1932, obviously referred to the operation of W8XO, the experimental station, from 1:00 A. M. to 6:00 A. M., on 700 kilocycles, with 100-500 kilowatts power.

On December 13, 1934, two and one-half years later, the Department of State forwarded a further communication from the Canadian Legation at Washington relating directly to the WLW operation. It should be noted at this point that the Commission had issued the *Special Temporary Experimental Authority* in the preceding month of April, had renewed it in July, and that this Authority for the first time permitted 500 kilowatt operation during broadcast hours under certain very definite conditions to be hereafter discussed. This second Canadian note contained the following:

"Transmitting conditions were very bad during the spring and summer and no conclusive results could be obtained.

"During the latter part of September, with the return of normal fall and winter conditions, the interference (between WLW and CFRB) became very serious * * *. These results showed conclusively that with station WLW operating with 500 kilowatts, the service area of the Toronto station was reduced to little more than the City of Toronto itself, and 50 miles out the signals from Toronto were completely obliterated * * *. I have been instructed by the Secretary of State for External Affairs of Canada, in bringing this matter to your attention, to request that appropriate steps be taken by the Government of the United States to clear the interference thus caused to Station CFRB in Toronto by Station WLW in Cincinnati."

On December 21, 1934, the Chairman of the Commission acknowledged the communication of the Secretary of State and referred therein to action taken by the Commission, minute of which appears in the Commission's Minutes of that date as follows:

Upon consideration of the protest of the Government of Canada, the Commission, pursuant to the provisions of the Special Temporary Experimental Authorization to The Crosley Radio Corporation, file No. B2-SA-2, directed the Secretary to notify The Crosley Radio Corporation by letter that said Special Temporary Experimental Authorization will be cancelled, upon its termination, in accordance with its express provisions, at 3 a. m., Eastern Standard Time, February 1, 1935.

The Secretary is hereby further instructed to notify The Crosley Radio Corporation, Station WLW, that any application for like additional Special Experimental Authority, to receive the consideration of the Commission, shall contain the following specifications:

"To operate with a power of 500 kilowatts daytime and 50 kilowatts nighttime, or 500 kilowatts nighttime, provided such a radiating system is employed that the effective signal delivered in the area between Niagara Falls, N. Y., Lockport, N. Y., and Lake Ontario, does not exceed the effective signal delivered in that area when operating with 50 kilowatts.

"To determine that the signal has been so restricted, measurement shall be taken within the area above, operating first with 50 kilowatts and conventional antenna and then with the directional antenna for alternate 15-minute periods and continuous field intensity recordings made. These measurements shall be made on two nights between 12:00 midnight and 4:00 a. m. and supplied to the Commission before February 1, 1935, for approval."

On December 21, 1934, or the same day the above minute was entered, The Crosley Radio Corporation was mailed a copy thereof. It will be noted, therefore, that forty days prior to expiration of the Special Temporary Experimental Authority, The Crosley Radio Corporation was fully advised that due to protest from the Government of Canada the Authority would be cancelled upon its termination in accordance with its provisions, and further that any application for renewal or extension thereof would be considered only in the event that the application therefor specified certain very definite things. In substance, the applicant was advised that if it desired to operate with 500 kilowatts power during night broadcast hours, that is the period of time specified by Commission regulations as

local sunset to 12 midnight, the application for extension, to receive consideration, must specify the use of a directional antenna having certain effects. The applicant, however, filed its application in such form as to request 500 kilowatt operation day and night, that is, from 6 A. M. to 12 midnight, and ignored entirely the advance notice that the application would be considered only if it proposed the use of directional antenna at night.

On June 27, 1934, the President issued a statement proclaiming the ratification of The International Telecommunication Convention signed at Madrid, Spain, December 9, 1932, and participated in by the major countries of the world. Chapter IV, Article 35, of this convention provides as follows:

INTERFERENCE

PAR. 1. All stations, regardless of their purpose, must, so far as possible, be established and operated in such a manner as not to interfere with the radio services or communications of either the other contracting governments, or the private operating agencies recognized by these contracting governments and of other duly authorized operating agencies which carry on radio-communication service.

PAR. 2. Each contracting government which does not operate the radio facilities itself undertakes to require the private operating agencies recognized by it and the other operating agencies duly authorized for this purpose, to observe the provisions of par. 1 above.

The Dominion of Canada, as well as the United States, has ratified and is bound by the terms of this Convention and the General Radio Regulations annexed thereto.

Article 7, sec. 5, paragraph 3 (b) of the General Radio Regulations is in part as follows:

The administrations of any region may, in accordance with Article 13 of the Convention, conclude regional arrangements regarding the allocation either of frequency bands to the services of the participating countries or of frequencies to stations of these countries, and concerning the conditions for the use of the waves so assigned.

By exchange of notes signed May 5, 1932 (Executive Agreement Series No. 34), the Governments of the United States and Canada entered into an agreement by which the frequency of 690 kilocycles was allocated exclusively for the use of a Canadian radio broadcasting station to be located at Toronto, with the right reserved to Canada to increase the power thereof to 50 kilowatts. The conclusion to be reached from the Treaties and Agreement mentioned is that the United States Government is legally bound to see that stations in this country are established and operated in such manner as not to interfere with the radio service of the Canadian station CFRB.

In the Fifth Annual Report of the Federal Radio Commission, at page 36, Table IXA, 805 miles is given as the recommended *night-*

time separation between broadcast stations of 10 kilowatts and 50 kilowatts, respectively, 10 kilocycles removed from each other in frequency. In the Seventh Annual Report, at page 21, Table VII, the recommended nighttime separation between such stations was slightly reduced, to 750 miles. Figures are not given concerning the recommended separation between stations 10 kilocycles removed from each other when operating with powers of 10 kilowatts and 500 kilowatts, respectively, but it is the common and quite generally accepted engineering principle that as the power of a station is increased the required separation between it and other stations with which it might interfere is also increased. A mere glance at the figures given in the Annual Reports will immediately disclose this well recognized principle. The actual separation in miles between stations WLW and CFRB is 400 miles. The conclusion cannot be escaped, therefore, that interference will be caused between stations WLW and CFRB if the instant application to use 500 kilowatts is granted, because the actual separation is about one-half (or less) of that required by the Commission's own published Annual Reports.

The original Special Temporary Experimental Authority issued to The Crosley Radio Corporation on April 17, 1934, as above stated, authorized the operation of broadcast station WLW with 500 kilowatts power, unlimited time, on 700 kilocycles, using the 500-kilowatt transmitter of station W8XO. This authorization contained the following:

This Special Temporary Experimental Authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises.

The renewal of this authority on July 31, 1934, contained the same express condition. It should be noted here that the applicant has operated its station under this authorization. This is indicated by the application to renew the authority filed in July, 1934, and the application now in question. It must be assumed that the applicant was fully aware of the conditions in the authority issued and of the Treaty obligations of the United States Government. Notwithstanding the conditions contained in the authority and the announcement made by the Commission on December 21, 1934, the applicant filed the instant application on January 14, 1935, requesting an extension of the same Special Temporary Experimental Authority.

Because of the provisions of treaties and agreement mentioned and in the light of all circumstances appearing it must be concluded:

(1) That the Commission is without legal authority to grant the

application insofar as it requests an extension of the nighttime use, between local sunset and 12 midnight of 500 kilowatts power;

(2) That the instant application, insofar as nighttime operation is concerned, involves only a question of law to be determined by application of the Treaties and Agreement now in force;

(3) That no purpose would be served by conducting a hearing on the application as it is incumbent upon the Commission to deny a part of the authority requested in the application, and this duty could not be altered by any facts which the applicant might attempt to establish at a hearing. That the law does not require the holding of a hearing where, as in the instant case, it would be entirely futile and of no avail whatsoever to applicant.

(4) That the express condition contained in the authority issued coupled with applicant's acquiescence therein by operating thereunder, especially in view of the notice given on December 21, 1934, reserves to the Commission the authority to dismiss or deny that portion of the application which the Commission is of the opinion cannot be legally granted;

ORDER OF THE COMMISSION

In the matter of the application of The Crosley Radio Corporation, File No. B2-SA-78, the Commission granted said application, in part, so as to authorize daytime operation only in the manner requested in said application. The Commission dismissed the application insofar as it requested Special Temporary Experimental Authorization to operate nighttime hours.

The Secretary is hereby instructed to issue a Special Temporary Experimental Authorization in conformity to this order.

By the Commission.

Adopted January 25, 1935.