

REPORT

OF THE

ROYAL COMMISSION

ON

RADIO BROADCASTING

HE8689.9

.C2 C29

OTTAWA
F. A. ACLAND
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1929

The Royal Commission on Radio Broadcasting

Sir John Aird,

President, Canadian Bank of Commerce (Chairman), Toronto, Ontario.

CHARLES A. BOWMAN, Esq., Editor, "Citizen", Ottawa, Ontario.

Augustin Frigon, D.Sc.,

Director, "Ecole Polytechnique", Montreal, Quebec; Director-General, Technical Education, Province of Quebec, Montreal, Quebec.

Secretary:

Donald Manson, Esq.,
Chief Inspector of Radio,
Department of Marine,
Ottawa, Ontario.

TERMS OF REFERENCE

"To examine into the broadcasting situation in the Dominion of Canada and to make recommendations to the Government as to the future administration, management, control and financing thereof."

CONTENTS

	PAGE
Terms of Reference	2
Object of Commission	5
Methods in Other Countries	5
Situation in Canada	5
Proposed Organization.	6
Personnel	7
The Company	7
Provincial Control	7
Provincial Advisory Councils	7
Broadcasting Stations	7
Stations under Proposed Organization	7 8
:	_
Finance.	8
Cost of Establishing Stations in Proposed Organization	8 9
Revenue	9
License Fees	9
Rental of Time for Programs employing Indirect Advertising	10
Subsidy from Dominion Government	10
Programs.	10
General	10
Chain broadcasting	10
Programs from Other Countries.	10
Programs employing Indirect Advertising	11
Education	11
Religion	
Politics	
Wavelengths	
Announcers	11
Interference	11
Control	11
Summary of Recommendations	12
Appendix I—Broadcasting in Other Countries	14
Appendix II—List of persons making statements at public hearings and particulars of written views	18
Appendix III—Statements received from Provincial Governments	
Appendix IV—Broadcasting in Canada	26

RECOMMENDATIONS

A Summary of the Principal Recommendations will be found on pages 12 and 13

The Royal Commission on Radio Broadcasting

REPORT

THE HONOURABLE P. J. A. CARDIN, MINISTER OF MARINE AND FISHERIES, OTTAWA, ONTARIO.

SIR,—We have the honour to submit the following report on the subject of Radio Broadcasting, in accordance with the requirements of Order in Council P.C. 2108:

OBJECT OF COMMISSION

The Royal Commission on Radio Broadcasting was appointed by the Government to inquire into the existing situation in Canada and to examine the different methods adopted in other countries.

The purpose of the inquiry was to determine how radio broadcasting in Canada could be most effectively carried on in the interests of Canadian listeners

and in the national interests of Canada.

According to the terms of reference of the Order in Council appointing the Commission, it was required:—

"to examine into the broadcasting situation in the Dominion of Canada and to make recommendations to the Government as to the future administration, management, control and financing thereof."

METHODS IN OTHER COUNTRIES

Before setting out to hold meetings in Canada, we considered it wise to visit some of the countries abroad where broadcasting is well organized or is in process of organization, so that we would be in a position, if necessary, to discuss with the provincial authorities in Canada and others, the relative merits of the different methods employed. We found broadcasting especially well organized in Great Britain under the British Broadcasting Corporation, and in Germany where the radio service is also under a form of public ownership, control and operation. In France the situation has been studied by a government commission. No definite statement, however, can be made at the present time as to the recommendations of the Commission. Everywhere in Europe we found inquiries being conducted under government auspices for the purpose of organizing broadcasting on a nation-wide basis in the public interest. addition to London, Berlin, Paris and Lille, we visited the Hague, Brussels, Geneva, Dublin and Belfast. A visit was also made to New York, where methods followed by the National Broadcasting Company were observed. We have also received information from "Union Internationale de Radiophonie" at Geneva, and other sources concerning broadcasting in countries which were not visited.

A statement of methods followed in other countries is shown in Appendix I.

SITUATION IN CANADA

We have held public sessions in twenty-five (25) Canadian cities, including the capitals of the nine provinces. One hundred and sixty-four persons submitted verbal statements at these sessions; in addition we have received 124 written statements (see Appendix II).

Conferences were held with the authorities of the nine provinces, who gave every assistance to the Commission and promised their co-operation in the organization of broadcasting. Written statements giving this assurance have

been received from them (see Appendix III). Resolutions have also been received from numerous representative bodies, the large majority favouring the

placing of broadcasting on a basis of public service.

In our survey of conditions in Canada, we have heard the present radio situation discussed from many angles with considerable diversity of opinion. There has, however, been unanimity on one fundamental question—Canadian radio listeners want Canadian broadcasting. This service is at present provided by stations owned by private enterprise and with the exception of two, owned by the Government of the province of Manitoba, are operated by the licensees for purposes of gain or for publicity in connection with the licensees' business. We believe that private enterprise is to be commended for its effort to provide entertainment for the benefit of the public with no direct return of revenue. This lack of revenue has, however, tended more and more to force too much advertising upon the listener. It also would appear to result in the crowding of stations into urban centres and the consequent duplication of services in such places, leaving other large populated areas ineffectively served.

The potentialities of broadcasting as an instrument of education have been impressed upon us; education in the broad sense, not only as it is conducted in the schools and colleges, but in providing entertainment and of informing the public on questions of national interest. Many persons appearing before us have expressed the view that they would like to have an exchange of pro-

grams with the different parts of the country.

At present the majority of programs heard are from sources outside of Canada. It has been emphasized to us that the continued reception of these has a tendency to mould the minds of the young people in the home to ideals and opinions that are not Canadian. In a country of the vast geographical dimensions of Canada, broadcasting will undoubtedly become a great force in

fostering a national spirit and interpreting national citizenship.

At the conclusion of our inquiries, it is our task, the importance of which we are deeply conscious, to suggest the means as to how broadcasting can be carried on in the interests of Canadian listeners and in the national interests of Canada. The Order in Council appointing us to undertake this work contains the suggestion that the desired end might be achieved in several ways provided funds are available, viz:—

- (a) the establishment of one or more groups of stations operated by private enterprise in receipt of a subsidy from the Government;
- (b) the establishment and operation of stations by a Government-owned and financed company;
- (c) the establishment and operation of stations by Provincial Governments.

We have examined and considered the facts and circumstances as they have come before us. As our foremost duty, we have concentrated our attention on the broader consideration of the interests of the listening public and of the nation. From what we have learned in our investigations and studies, we are impelled to the conclusion that these interests can be adequately served only by some form of public ownership, operation and control behind which is the national power and prestige of the whole public of the Dominion of Canada.

PROPOSED ORGANIZATION

The system which we propose does not fall within the exact category of any of those suggested in the Order in Council, but is one which might be regarded as a modification of (b), i.e., "the establishment and operation of stations by a Government-owned and financed company." As a fundamental principle, we believe that any broadcasting organization must be operated on a basis of public service. The stations providing a service of this kind should be owned and operated by one national company. Such a company should be

vested with the full powers and authority of any private enterprise, its status and duties corresponding to those of a public utility. It is desirable, however, that provincial authorities should be in a position to exercise full control over the programs of the station or stations in their respective areas. Any recommendation which we offer is primarily made with this object in view. As to what extent the provinces should participate in effecting this control, of course, is a matter which could be decided between themselves and the Dominion Government authorities.

In order satisfactorily to meet these requirements which we have outlined, we recommend the following organization:—

- (1) A national company which will own and operate all radio broadcasting stations located in the Dominion of Canada, the company to be called the Canadian Radio Broadcasting Company (C.R.B.C.);
- (2) A Provincial Radio Broadcasting Director for each province, who will have full control of the programs broadcast by the station or stations located within the boundaries of the province for which he is responsible. Some provinces might consider it desirable to place the control of broadcasting under a provincial commission. This is a matter to be determined by the provinces concerned;
- (3) A Provincial Advisory Council on radio broadcasting for each province to act in an advisory capacity through the provincial authority.

PERSONNEL

The Company.—It is important that the board or governing body of the company should be fully representative of the Dominion and provincial interests so that the closest co-operation among different parts of the country may be maintained. In order that this may be accomplished we would recommend that the governing body or board of the company should be composed of twelve members, three more particularly representing the Dominion and one representing each of the provinces; the mode of appointment of the provincial directors to be decided upon by agreement between the Dominion and provincial authorities.

Provincial Control.—The representative of the province on the Board of the National Company would be the Provincial Director. In the event of any province appointing a provincial commission, the Provincial Director should be the chairman of such commission.

Provincial Advisory Councils.—We would suggest that each council should be composed of members representative of the responsible bodies interested in radio broadcasting.

BROADCASTING STATIONS

Stations under Proposed Organization.—It is to be hoped that the system will eventually cover effectively and consistently that vast northern territory of Canada which at present has comparatively few inhabitants at remote and scattered points but which may come to be as densely populated as some European countries in the same latitude. The Company's immediate objective should be, however, to provide good reception over the entire settled region of the country during daylight or dark under normal conditions on a five-tube receiving set. How this requirement can best be met will be a question with which the experts entrusted with the responsibility will have to deal. However, from our own observations and from information we have received, we believe it has been fairly well established in practice that high-power stations are needed to reach consistently with good results the maximum number of people. We would like, therefore, to recommend as a matter for consideration, the establishment of

Receiving sets employing less than five tubes are, in general, tending to go out of use.

seven (7) stations, each having an aerial input of say 50,000 watts; one station to be suitably located in each province, except in New Brunswick, Nova Scotia, and Prince Edward Island, where one station could be centrally located to serve these three provinces. The proposed high-power stations could form the nucleus of the system and as each unit were brought into operation it could be ascertained what local areas, if any, were ineffectively served and stations of smaller power could accordingly be established to serve these places.

We would also suggest that the high-power stations might be so designed as to permit, in time, an increase of power to an economic maximum and of being so modelled as ultimately to provide for two programs being broadcast

simultaneously on different wavelengths.

It is well, perhaps, to point out here the necessity of locating broadcasting stations at suitable distances from centres of population to obviate blanketing of reception from outside points. The need for this has been amply demonstrated to us.

We think it is important that, to provide the fullest scope for the proposed system and in the interests of the whole country, all facilities necessary for chain broadcasting be made available in order to permit simultaneous broadcasting by the entire group of stations from coast to coast or by such grouping in dif-

ferent regions as may be considered desirable from time to time.

We are of opinion that the question of the development of broadcasting far beyond its present state, which may include television, is one of great importance and should be closely kept pace with so that the service in Canada would continue equal to that in any other country.

Provisional Broadcasting Service.—While we believe that the proposed organization should be adopted and establishment of the high-power stations proceeded with as soon as possible, it seems necessary that provisional service be furnished. To do this, we recommend that one existing station in each area be taken over from private enterprise and continued in operation by the Canadian Radio Broadcasting Company until such time as the larger stations in the proposed scheme are placed in operation. The existing stations carrying on

The stations selected for the provisional service should be so chosen from those at present in existence as to provide maximum possible coverage. All remaining stations located or giving a duplication of service in the same area should be closed down. We understand that under the provisions of the Radio-telegraph Act, the licenses now in effect may be allowed to expire at the end of the fiscal year or they may be terminated at any time at the pleasure of the licensing authority without legal obligation to pay compensation. We would recommend, nevertheless, that reasonable compensation be allowed such of the broadcasting stations at present in active operation for apparatus as may be decided by the Minister of Marine and Fisheries, the licensing authority.

The apparatus for which compensation is paid should, we think, become the property of the Canadian Radio Broadcasting Company. The more modern and efficient sets of such apparatus could then become available for re-erection

as might be deemed necessary by the company.

FINANCE

Cost of Establishing Stations in Proposed Organization.—The stations forming the system in the proposed organization should be well and fully equipped. The cost of installing the seven high-power units would probably approximate \$3,000,000. There would, however, be considerable salvage value in the plants taken over. Assuming that four smaller stations, three 5,000 watt and one 500 watt, would be needed to furnish a supplementary service in local areas not effectively reached by the high-power units, an additional amount of possibly

\$225,000 would have to be spent in re-erecting apparatus taken over from present station owners. These expenses would represent a capital expenditure of \$3,225,000.

In addition to this, compensation would have to be paid to owners of existing stations which we think should be met out of an appropriation made by Parliament.

Cost of Operation.—The service provided would necessarily have to be of a high order. A total annual expenditure for operation of the entire organization proposed, including supplementary stations, would seem to require a minimum of approximately \$2,500,000. In addition, the question of interest on capital and sinking fund would have to be considered.

Revenue.—Various methods have been suggested to us as to how revenue might be raised fully to meet the cost of a broadcasting system. If the general public as a whole were listeners, there might be no just reason why the full cost of carrying on a broadcasting service could not be met out of an appropriation made by Parliament from public funds. It is conceivable that that time will come, but under existing conditions, we would not feel justified in suggesting that the general public should be required to pay for the whole of the service which only those possessing radio receiving sets can enjoy. On the other hand, however, radio broadcasting is becoming more and more a public service and in view of its educative value, on broad lines and its importance as a medium for promoting national unity, it appears to us reasonable that a proportion of the expenses of the system should be met out of public funds.

Three sources from which revenue could be derived are suggested, viz:-

- (1) License fees;
- (2) Rental of time on broadcasting stations for programs employing indirect advertising;
- (3) Subsidy from the Dominion Government.

License Fees.—A fee of \$1 is at present charged for a receiving license. Fifty per cent of all license fees collected in Manitoba is paid over to the Government of that province towards the maintenance of the provincial-owned broadcasting stations at Winnipeg and Brandon. With this exception, no contribution to the cost of broadcast programs in Canada is made from fees collected, which revert to the revenue fund of the Dominion Government.

It should be pointed out, however, that the Marine Department, through its Radio Branch, maintains a service to broadcast listeners in suppressing extraneous noises interfering with radio reception, at an expenditure in proportion to the amount of revenue received from license fees.

The information we have received seems to indicate that listeners would not be averse to an increase in the license fee, if an improved Canadian broadcasting service could be provided. In Great Britain the fee is ten shillings (10/) per annum. In Germany and Japan, an amount approximating six dollars (\$6) a year is collected. In Australia, the annual fee is twenty-four shillings (24/). We are of opinion, however, that while the present fee should be increased, the amount should not be so high as to prove burdensome for those of limited means. A fee of three dollars (\$3) per year would seem reasonable and would at the same time yield a fair amount of revenue. We recommend that the fee be fixed at this amount.

On the basis of the number of licenses now in effect, approximately 300,000, a gross revenue of \$900,000 per annum would be available from this source. The number of licenses may be expected to increase from year to year. We think that radio dealers should be required to collect the license fee whenever a receiving set is sold.

91624-34

Rental of Time for Programs Employing Indirect Advertising.—The ideal program should probably have advertising, both direct and indirect, entirely eliminated. Direct advertising is used to considerable extent by broadcasting stations at the present time as a means of raising revenue to meet the expense of operation. In our survey of the situation in Canada, we have heard much criticism of this class of advertising. We think it should be entirely eliminated in any national scheme. Direct advertising is defined as extolling the merits of some particular article of merchandise or commercial service. Manufacturers and others interested in advertising have expressed the opinion that they should be allowed to continue advertising through the medium of broadcasting to meet the competition coming from the United States. We think that this can be satisfactorily met by allowing indirect advertising which properly handled has no very objectionable features, at the same time resulting in the collection of much revenue. An example of indirect advertising would be an announcement before and after a program that it was being given by a specified firm. Programs of this kind are often referred to as sponsored programs. Until such time as broadcasting can be put on a self-supporting basis, we would recommend that the stations' time be made available for programs employing a limited amount of indirect advertising at so much per hour per station.

It is rather difficult to estimate what revenue would be collected for rental of time, but we think that an amount of approximately \$700,000 annually could

be expected at the beginning.

Subsidy from the Dominion Government.—As compared with many of the European countries where the responsibility of broadcasting has been assumed by the Government, Canada has a comparatively small population, scattered over a vast tract of country. The large territory requires a greater number of stations while the relatively small population makes it obviously impossible to finance the entire scheme from license fees, if the same are to be kept at a moderate figure. Revenue from programs employing indirect advertising will, we believe, supplement the deficiency in license fees to a considerable extent. The most desirable means of meeting the additional expenditure required would seem to be by a subsidy from the Dominion Government. We would recommend that the proposed company be subsidized to the amount of \$1,000,000 a year for a period of say five years renewable, subject to review, for a further period of five years after expiry of the first.

We believe that broadcasting should be considered of such importance in promoting the unity of the nation that a subsidy by the Dominion Government should be regarded as an essential aid to the general advantage of Canada rather than as an expedient to meet any deficit in the cost of maintenance of the

service.

PROGRAMS

General.—The question of programs, we have no doubt, will be in capable hands if and when they come within the control of the representative bodies which we have suggested. The general composition of programs will need careful study.

Chain Broadcasting.—Chain broadcasting has been stressed as an important feature. We think that an interchange of programs among different parts of the country should be provided as often as may seem desirable, with coast to coast broadcasts of events or features of national interest, from time to time.

Programs from Other Countries. The possibility of taking programs from Great Britain has already been demonstrated. While the primary purpose of the service would be to give Canadian programs through Canadian Stations, we think that every avenue should be vigorously explored to give Canadian listeners the best programs available from sources at home and abroad.

Programs employing Indirect Advertising. Time should be made available on the various stations singly or for chain broadcasting for firms desiring to put on programs employing indirect advertising. We think that it is important that all such programs should be carefully checked to see that no direct advertising or any objectionable feature would be put on the air. We are strongly against any form of broadcasting employing direct advertising.

Education.—Certain specified hours should be made available for educational work both in connection with the schools and the general public as well as the so-called "adult education," under Provincial auspices.

Religion.—The representative bodies which we have suggested to advise upon the question of programs would be called upon to deal with the matter of religious services, and it would be for them to decide whatever course might be deemed expedient in this respect. We would emphasize, however, the importance of applying some regulation which would prohibit statements of a controversial nature and debar a speaker making an attack upon the leaders or doctrine of another religion.

Politics.—While we are of opinion that broadcasting of political matters should not be altogether banned, nevertheless, we consider that it should be very carefully restricted under arrangements mutually agreed upon by all political parties concerned.

Wavelengths.—We are aware that the question of wavelengths is not one with which we are called upon to deal. But in our survey of the situation in Canada, the inadequacy of wavelengths at present available for broadcasting in this country, namely six "exclusive" and eleven "shared" channels, has been persistently pointed out to us. This has been emphasized as one reason for the present unsatisfactory conditions of broadcasting in Canada. Many have expressed the feeling, with which we fully concur, that Canada's insistence upon a more equitable division of the broadcast band with the United States should not be relinquished.

Announcers.—It has been stressed to us and we strongly recommend the importance of having competent and cultured announcers (French and English) and the desirability of having special training and tests of capability for such persons.

INTERFERENCE

Complaints of interference with radio reception, from electrical distribution lines, machinery and apparatus, have been brought to our attention in different parts of the country. It has been gratifying at public sessions to hear spontaneous tribute paid by disinterested persons to the efficient work of the Marine Department radio inspectors in removing much of the trouble caused in this way. Their work appears to be made more difficult, however, in that there is no law in effect compelling the users of interfering apparatus to correct faults which interfere with radio reception once such are pointed out by the inspector. The desirability of having legislation to meet such cases has been suggested to us. We recommend the earnest consideration of this suggestion.

CONTROL

The Minister of Marine and Fisheries under the Radiotelegraph Act is the licensing authority for all classes of Radio Stations, which includes Radio Broadcasting Stations and receiving sets. Direct control over such technical questions as wavelengths, power of stations and the collection of license fees should, we consider, remain with this authority. In order to promote good reception conditions, it is most desirable that the radio activities of other

departments of the Government should conform to the regulations and be subject to the authority of the Radiotelegraph Act. We are also of the opinion that the Radio Branch of the Marine Department should continue to carry on the service to broadcast listeners, which includes the suppression of inductive interference.

SUMMARY OF RECOMMENDATIONS

The following is a summary of our principal recommendations, viz:—

- (a) That broadcasting should be placed on a basis of public service and that the stations providing a service of this kind should be owned and operated by one national company; that provincial authorities should have full control over the programs of the station or stations in their respective areas;
- (b) That the company should be known as the Canadian Radio Broadcasting Company; that it should be vested with all the powers of private enterprise and that its status and duties should correspond to those of a public utility;
- (c) That a Provincial Radio Broadcasting Director should be appointed for each province to have full control of the programs broadcast by the station or stations located within the boundaries of the province for which he is responsible;
- (d) That a Provincial Advisory Council on radio broadcasting should be appointed for each province, to act in an advisory capacity through the provincial authority;
- (e) That the Board of the company should be composed of twelve members, three more particularly representing the Dominion and one representing each of the provinces;
- (f) That high-power stations should be erected across Canada to give good reception over the entire settled area of the country during daylight; that the nucleus of the system should possibly be seven 50,000 watt stations; that supplementary stations of lower power should be erected in local areas, not effectively covered by the main stations, if found necessary and as experience indicates;
- (g) That pending the inauguration and completion of the proposed system, a provisional service should be provided through certain of the existing stations which should be continued in operation by the Canadian Radio Broadcasting Company; that the stations chosen for this provisional service should be those which will give the maximum coverage without duplication; that all remaining stations not so needed should be closed down;
- (h) That compensation should be allowed owners of existing stations for apparatus in use as may be decided by the Minister of Marine and Fisheries; that such apparatus should become the property of the Canadian Radio Broadcasting Company; that the more modern and efficient of these sets of apparatus should be held available for reerection in local areas not effectively served by the high-power stations; that the cost of compensation should be met out of an appropriation made by Parliament;
- (i) That expenditure necessary for the operation and maintenance of the proposed broadcasting service should be met out of revenue produced by license fees, rental of time on stations for programs employing indirect advertising, and a subsidy from the Dominion Government;

- (j) That all facilities should be made to permit of chain broadcasting by all the stations or in groups; that while the primary purpose should be to produce programs of high standard from Canadian sources, programs of similar order should also be sought from other sources;
- (k) That time should be made available for firms or others desiring to put on programs employing indirect advertising; that no direct advertising should be allowed; that specified time should be made available for educational work; that where religious broadcasting is allowed, there should be regulations prohibiting statements of a controversial nature or one religion making an attack upon the leaders or doctrine of another; that the broadcasting of political matters should be carefully restricted under arrangements mutually agreed upon by all political parties concerned; that competent and cultured announcers only should be employed.
- (1) That consideration should be given to the question of introducing legislation which would compel users of electrical apparatus causing interference with broadcast reception to suppress or eliminate the same at their own expense;
- (m) That the licensing of stations and such other matters prescribed in the Radiotelegraph Act and Regulations issued thereunder for the control of radio stations in general should remain within the jurisdiction of the Minister of Marine and Fisheries; that that authority should continue to be responsible for the collection of license fees and the suppression of inductive interference causing difficulties with radio reception.

This report would be incomplete without an expression of appreciation of the many courtesies extended to the commission in Canada and abroad. In Great Britain all the authorities concerned, and especially the executive officers of the British Broadcasting Corporation, were unremitting in responding to the requests of the commission for information and enlightenment. The national radio authorities in France, Germany, Belgium, Holland, the Irish Free State and the National Broadcasting Company of the United States similarly received the commission most cordially and helpfully. At Geneva, the commission met the officers of the Union Internationale de Radiophonie.

It has been greatly to the advantage of the commission that the Department of Marine has extended all available facilities for the gathering of information regarding the present radio situation in Canada.

The department most considerately acceded to the request of the commission to be allowed to have the service of the Chief Inspector of Radio, Mr. Donald Manson, as Secretary; his intimate knowledge of radio activities in Canada and abroad, combined with unremitting industry and foresight, has contributed much toward the satisfactory organization of the commission's tour.

JOHN AIRD (Chairman). CHARLES A. BOWMAN. AUGUSTIN FRIGON.

DONALD MANSON (Secretary). September 11, 1929.

APPENDIX I

BROADCASTING IN OTHER COUNTRIES

AUSTRALIA

Australia has twenty-four broadcasting stations. They are divided into two categories: Class "A"—those of high power and Class "B" of low power. Arrangements have been made for Class "A" stations to be taken over by the Commonwealth Government. The Post Office Department will control and operate the stations and studio equipment, a conrost Office Department will control and operate the stations and studio equipment, a contract being made with a private company for the rendering of programs throughout the Commonwealth. The cost of maintaining these services will be borne from the revenue derived from the listeners' license fee, which has been fixed at twenty-four shillings (24/) per annum.

Class "B" stations will be operated by private companies and will be maintained from

revenue to be derived from publicity programs.

Licensed receivers numbered 301,199 in June, 1929.

AUSTRIA

A license has been granted to a private organization known as "Oesterreichische Radio-Verkehrs A.G." which has six stations.

The revenue is derived from licenses issued by the Post Office. The annual fee is from 24 to 72 Austrian shillings, according to the type of apparatus, of which the broadcasting organization receives 90 per cent.

The number of licensed listeners at the end of December, 1928, was 325,200.

BELGIUM

Provisional Broadcasting licenses have been granted to two organizations in Belgium. The Government has been considering the question of broadcasting and has practically decided upon corporation ownership with control by the State. It is proposed to have 10 members form a permanent commission with the minister of the responsible department as chairman of the body.

The stations will be operated by a company to be subsidized by the Government. Subsidies will be paid out of license fees collected from listeners and a tax placed on valves sold for receiving sets.

The collection of license fees from listeners is not at present enforced. If and when the new arrangement goes into effect, the fees imposed will be 60 Belgian francs, 80 per cent or 90 per cent of which will be paid to the company.

The new scheme will provide for the use of two stations—one for the French language and one for the Flemish. Later a small station using the German language may be erected. On December 31, 1928, the number of registered listeners was 36,000.

CZECHOSLOVAKIA

The broadcasting is conducted by an organization known as Radiojournal in which the State holds a considerable financial interest. There are five transmitting stations, but a considerable program of development is just being commenced which includes a central high power station. All the stations but that of Prague are operated technically by the State. The revenue is obtained from license fees, this being one of 10 Czechoslovakian crowns per month.

The number of licensed listeners on December 31, 1928, was 236,861.

DENMARK

The broadcasting here is almost entirely in the hands of the State, being conducted by one organization termed "Radioraadet" which is under the joint control of the Ministers of Education and Public Works. There is, however, an Advisory Council containing representatives of all the principal groups of Danish social life. There are two stations only: a long wave station at Kalundborg of 7.5 k.w. antenna input and a short wave in Copenhague of 0.75 k.w. antenna input. Revenue is obtained exclusively from license fees ranging between 10 and 15 Danish crowns per annum.

The number of listeners on January 8, 1929, was 252,200.

ESTHONIA

A transmitting license has been granted to one organization known as "Radio-Ringääling" which is in close contact with the Government. There is at present only one station at Tallinn-1.5 k.w. antenna input. Revenue is obtained through receiving licenses, which range in cost from 600 to 6,000 Esthonian marks according to the nature of the apparatus. No figures are yet available as to number of listeners.

FINLAND

The serious broadcasting has been entrusted by the Government to an organization known as "OsakeyhtiöSuomen Ylais-radio," the stations being built and operated by the Government. The principal station is a long wave station of 40 k.w. antenna input at Lahti. The revenue is derived from licenses costing 100 Finnish marks per year.

On January 1, 1928, there were 36,900 licensed listeners, but this number increased to 73,800 licenses at December 31, 1928.

FRANCE

The broadcasting stations in France are owned and operated partly by the Government and partly by private enterprise. The French Government has just completed a survey of the methods followed in other countries. They are of opinion that the German system is more suited for France, i.e., Regional control with regard to the arrangement of programs and final control and distribution of funds by the State. There exists a small license fee for receiving sets, but only a negligible percentage of listeners are believed to pay the fee. It is proposed to charge 20 francs per year for crystal receiving sets and 40 francs per year for valve sets with a tax on all valves applied at point of manufacture. The new scheme would provide for 8 stations each of 30 k.w.

GERMANY

The German Government, through the Post Office Department, operate the technical equipment of the broadcasting stations in Germany. Each state in Germany, however, has a broadcasting company which is responsible for arranging the programs broadcast through the stations located in its own territory. There is a Program Committee of three persons for the State, two appointed by the State and one by the German Federal Government.

These State companies pay to the Post Office Department a license fee for using the broadcasting installation. Under this license the companies must fulfil certain requirements laid down by the German Government with regard to the matter broadcast. In addition to paying the cost of providing the programs the companies must also meet the cost of the operation of the stations, including staff salaries, maintenance of equipment, etc., as well as interest on and amounts for amortising capital expenditure.

The State Broadcasting Companies are controlled by a holding company called the Reichs-Rundfunk-Gesellschaft. The German Government hold 51 per cent of the Reichs-Rundfunk-Gesellschaft shares by virtue of which the Government may exercise final control of the management of the different state companies, through the holding company.

Broadcast listeners in Germany are required to pay 2 Reich-Marks a month (approximately 50 cents) for a license. Fifty per cent or sixty per cent of these fees are distributed to the Broadcasting Companies. If, after meeting expenses there is a profit a company may pay its shareholders dividends, but not in excess of 10 per cent. The surplus profit exceeding this percentage must be paid to the holding company, the Reichs-Rundfunk-Gesellschaft. The latter in turn is required to apply 35 per cent of these surplus profits to the enlargement of the technical installations and for the general development of broadcasting and 10 per cent to the formation of a reserve fund.

On December 31, 1928, there were 2,635,567 licensed listeners.

GREAT BRITAIN

Broadcasting is carried on by the Government, through an organization known as the British Broadcasting Corporation which has a Board of Governors appointed by the State. This corporation has been granted a monopoly for ten years. It owns 21 stations of which one is a long-wave station of 25 k.w. antenna input. The revenue is derived from a percentage of the license fees and from profits on publications. The annual license fee is ten shillings (10/) and the number of listeners on June 30, 1929, was 2,791,717.

HOLLAND

Broadcasting in Holland is carried on by five political and religious societies through two privately owned stations. The Government has just appointed a Commission with a view to putting broadcasting on a more satisfactory basis, possibly through some sort of Government control. No license fee is collected from listeners in Holland.

91624-3

HUNGARY

The Government has granted a license to an organization known as "Magyar Telefon Hirmondo es Radio R.T." The transmitting station, one of 20 k.w. antenna input is, however, the property of the State and operated by the Department of Posts and Telegraphs. The revenue is derived exclusively from license fees, there being a monthly tax of 2.4 pengös.

The number of licensed listeners on June 1, 1928, was 102,760, and on Novmber 30,

1928, 148,780.

INDIA

There are six broadcasting stations in India operated by various interests. A company which is to have a monopoly on broadcasting is, however, being organized. The receiving license fee is 10 rupees (\$3.65) per year.

IRISH FREE STATE

Broadcasting in the Irish Free State is a state service operated through the Department of Posts and Telegraphs. There are two stations, one at Dublin and the other at Cork. Revenue is derived from license fees and customs tax on all radio apparatus imported. The license fee is ten shillings (10/) per annum.

In December, 1928, there were 26,406 licensed listeners.

ITALY

The sole right to broadcast in Italy has been granted to an organization known as "Ente Italiano per le Audizioni Radiofoniche" (E.I.A.R.), but over this there has been created a Commission of Control consisting of leaders in Italian politics, arts, literature and science. The transmitters are erected and operated by the broadcasting organization and the program of development provides eventually seven stations. Revenue is obtained from taxes on apparatus sold and license fees. The annual license fee is 12 lires. A recent Italian decree places at the service of the Italian broadcasting organization (at fees to be mutually agreed upon) all stage and other performances of musical and literary works after they have been performed three times in public. On November 30, 1928, there were 53,000 licensed listeners (which figure is but a small percentage of the actual number).

LATVIA

The State has retained charge until now of the broadcasting activities in this country. Some revenue is obtained from license fees. At the end of May, 1928, there were 19,685 licensed listeners.

NORWAY

Two main groups have been licensed to broadcast in Norway. A fusion is anticipated shortly. The technical work, however, is under the control of the State which will shortly supplement the existing stations with one of 60 k.w. antenna input in the neighbourhood of Oslo. The broadcasting organizations receive 80 per cent of the license fees which are individually 20 Norwegian crowns per annum. The total number of licensed listeners on December 31, 1928, was 59,996.

POLAND

The monopoly in broadcasting has been granted to an organization known as Polskie Radjo S.A. The transmitters are built and operated by the engineers of this organization. A considerable program of development is contemplated, including the construction at Warsaw of a high-power station of 150 k.w. antenna input. The number of licensed listeners grew from 117,236 in June to 189,481 listeners at December 31, 1928.

RUMANIA

A monopoly has recently been granted for a limited number of years to a private organization known as Societatea de Difuziune Radiotelephonica din Romania. This organization is building a station of 12 k.w. antenna input at Bucarest. Revenue will come exclusively from license fees.

SPAIN

There exist in Spain two main groups possessing licenses from the Government and a few individual stations also privately owned which are gradually disappearing. The whole tendency is to centralize activities in a single group. There is a system of license fees (5 pesetas per annum) not strictly enforced. The revenue is obtained partly by voluntary contributions, and partly from the broadcasting of advertisement.

SWEDEN

Broadcasting is in the hands of an organization known as Aktiebolaget Radiotjänst in which the press of the country is largely interested. The transmitters are owned and operated by the State. They are about 30 in number, including one of 40 k.w. antenna input at Motala working on a long wave. Radiotjänst has about 4,000 miles of telephonic circuits connecting its Stockholm studio with the various stations. The revenue comes exclusively from license fees, 50 per cent being available for the programs' organization. The number of licensed listeners on December 31, 1928, was 380,863 or one receiver for each 16 persons.

SWITZERLAND

Five separate organizations have been granted licenses to transmit, the State holding a place on each Board of Directors. The stations are the property of the companies. A fusion of interests is taking place which will probably result in the establishment of two high-power stations—one for French-speaking Switzerland and the other for Germanspeaking Switzerland. The only source of revenue is the license fees (14 Swiss francs per annum).

The number of licensed listeners at the end of December, 1928, was 70,183.

TURKEY

One company has been given a monopoly for both Turkey in Europe and Turkey in Asia. Two high-power stations have been built, one at Angora, the other at Stamboul. The source of revenue is not known to us, nor the number of listeners. The growth of interest is believed, however, to be but small.

UNION OF SOUTH AFRICA

Broadcasting in the Union of South Africa is a regional monopoly, each station being licensed to operate exclusively within a certain territory for a period of five years. There are four stations. Receiving set owners are required to pay both license fees and broadcast subscriptions. The licenses cost five shillings per year, while the subscriptions vary from six shillings, sixpence to thirty-five shillings, depending upon the distance from the broadcasting stations. Higher scales are in in effect for sets to be used for commercial purposes.

UNITED STATES OF AMERICA

Broadcasting in the United States is carried on by private enterprise under license of the Federal Radio Commission. There are 604 stations so licensed. There is no license fee for listeners.

YUGOSLAVIA

Two organizations have definitely received permission to broadcast; a third is expected shortly. Some revenue is obtained from listeners, but the greater part from subsidies. The number of listeners is not definitely known. There are understood to be about 10,000 in the neighbourhood of Liubjiana.

Date and Place of Hearing	Name of Person	Organization Represented
April 17, VICTORIA, B.C	<u>}</u>	Victoria Radio Club. "" Kiwanis Club, Int'l Committee on Public Affairs for Canada.
April 18, VANCOUVER, B.C	W. Clarke J. Stanfield M. Lister G. W. Hubbard W. Workman Norman Hill R. Burgess H. A. Hooper F. G. T. Lucas, K.C. W. H. Thornburg R. J. Sprott Geo. Chandler	Private Broadcasting Stations and Advertisers. Vancouver Radio Trades Association New Westminster & District Radio Association. Vancouver Radio Listeners' Association.
April 23, EDMONTON, ALTA	W. Tinney C. M. Defieux P. J. Giffen John Blue J. G. Pearson Peter B. Biggins Dr. H. J. MacLeod	Canada). International Bible Students' Association of Vancouver. Station "CJCA" (Edmonton Journal). Edmonton Chamber of Commerce. Edmonton Broadcast Listeners' Association. Christian Science Committee on Publications. Station "CKUA" (University of Alberta).
April 25, CALGARY, ALTA	B. A. Choppen	Station "CKLC" (Alberta Pacific Grain Co.); Station "CJCJ" (Al- bertan Pub. Co.); Station "CF- CN" (Western Broadcasting Co., Ltd.); Station "CJOC" (Leth- bridge Breadcasting Station). United Farmers of Alberta. Calgary Herald, Station "CFAC" Red Deer Board of Trade.

LIST OF PERSONS MAKING STATEMENTS AT PUBLIC HEARINGS-Continued

Date and Place of Hearing	Name of Person	Organization Represented
	E. H. Williams	United Farmers of Canada (Saskat- chewan Section). "Western Producer". Station "CJHS" (J. H. Speers, Com- pany).
April 29, SASKATOON, SASK	Canon Armitage	Ministerial Association of Saskatoon.
	W. D. Slocombe D. F. Streb	Saskatoon Radio Service Club. Station "CFQC" (Electric Shop, Limited).
•	H. R. Worden	Saskatoon "Star-Phœnix.
April 30, PRINCE ALBERT, SASK	J. Smart. J. A. Foerster. E. C. Osborne. J. A. Klein.	
May 2.	H. W. Davy	Central Collegiate Institute.
REGINA, SASK	W. J. Wilson. Rev. R. McElroy Thompson Dr. W. Waddell. E. Swain. Wm. Ward	Regina Ministerial Association. Native Sons of Canada. Moose Jaw Radio Association J. Richardson & Sons
May 3, MOOSE JAW, SASK	F. J. Workman A. J. Wickens Dr. S. A. Merkley	of Trade, Jr. Board of Trade, Lions Club and Rotary Club.
	Rev. W. WardA. P. AtkinsR. H. Kitchen	of Women. Ministerial Association. Saskatchewan Teachers' Alliance.
May 4, BRANDON, MAN	Mayor Cater Dr. P. C. Hughes (Alderman). R. G. Buckingham J. A. Keddy:	Brandon Board of Trade.
	C. R. Heise	Manitoba Telephone System. Independent Labour Party of Manitoba.
May 7, WINNIPEG, MAN	C. S. Booth	Men's Section. Manitoba Teachers' Federation. Manitoba Department of Education. University of Manitoba.
	V. W. Jackson	Amalgamated Radio Dealers' Association. J. Richardson & Sons.
	(manife content	

LIST OF PERSONS MAKING STATEMENTS AT PUBLIC HEARINGS-Continued

Date and Place of Hearing	Name of Person	Organisation Represented
May 8, PORT ARTHUR, ONT	A. A. Anderson B. G. Smalley I. N. Geary	Fort William City Council. Fort William Board of Trade
May 13, WINDSOR, ONT	Mayor Jackson E. B. Winter J. Y. Wesley C. W. Kirby Justus Miller H. A. Graybiel	Radio Dealers' Association. Border Cities Broadcasting Company. Chamber of Commerce.
May 14, LONDON, ONT	H. Link C. H. Langford E. S. Crawford	Langford Radio Company
May 15, HAMILTON, ONT		Station "CHML" (Maple Leaf Radio Co.). Station "CKOC" (Wentworth Radio Co.).
May 17, TORONTO, ONT	A. H. K. Russell G. Clark W. S. Campbell Alex. Marshall A. MacKenzie	Station "CFRB" (Standard Radio Mfg. Corp.). American Radio Relay League. Station "CFCA" (Toronto Star). Canadian Manufacturers Association. Station "CKNC" (Canadian National Carbon Co.); Radio Manufacturers.
May 28, SHERBROOKE, QUE	Mayor TetreaultJ. W. McKee	Board of Trade.
May 29, MONTREAL, QUE	A. T. Durnford	Canadian Handicrafts Guild.
May 31, CHICOUTIMI, QUE	A. Viau. J. E. R. Tremblay. R. E. Joron. L. Madier. J. E. A. McConville.	

LIST OF PERSONS MAKING STATEMENTS AT PUBLIC HEARINGS—Concluded

Date and Place of Hearing	Name of Person	Organization Represented
June 5, QUEBEC, QUE	A. Lariviere	
June 13, FREDERICTON, N.B	Dr. W. C. KiersteadG. W. BrownJ. Stewart Neill	
June 14, ST. JOHN, N.B	F. P. Vaughan, M.Sc C. A. Munro	St. John Radio Listeners. Station "CFBO" (Owner).
June 17, HALIFAX, N.S	Mayor Castinguay	Halifax County Radio Association.
June 18, SYDNEY, N.S	Hon. Finlay MacDonald, M.P. R. F. Young G. H. Wheeler N. Nathanson R. Ingraham Frank Nolan	Station "CJCB" (Owner).
June 20, CHARLOTTETOWN P.EI	J. A. Gesner	Company). Station "CHCK" (W. E. Burke). Station "CHGS" (R. T. Holman, Ltd.).
July 3, OTTAWA, ONT	W. T. Burford	All-Canadian Congress of Labour. Canadian Legion of the B.E.S.L.

In addition to spoken statements made by persons named in the above list, written views have been received from the following persons and organizations:

BRITISH COLUMBIA

Svend A. Blangsted, Vancouver.
The Vancouver Band and Orchestral Institute, Vancouver.
Sparks Company, Vancouver.
The Salmon Arm Radio Club, Salmon Arm.
Frank DeGrey, New Westminster.
The Penticton Herald, Penticton.
Kelowna, Radio, Association, Kelowna. Kelowna Radio Association, Kelowna. B. W. Crowther, Nelson. C. J. Cherry, Victoria. H. M. Diggon, Kiwanis Committee on Public Affairs for Canada, Victoria. Lieut.-Col. J. DeB. Cowan, Crawford Bay. George H. Keyes, Nakusp.

Mrs. R. S. Goodwin, Vancouver. George H. Bird, Port Alberni. Pitman's Music Store, Prince George. E. H. Sweeney, Bamberton, Tod Inlet.

ALBERTA

T. A. Crowe, Calgary.
The Red Deer Advocate, Ltd., Red Deer.
Mrs. Bland, Calgary.
S. E. Andrews, Calgary.
G. F. Stooke, Drumheller.
H. S. Craig, Edmonton.
French-Canadian Association of Alberta, Edmonton.
Dr. C. C. Tatham, Edmonton.
C. Hunt, Edmonton.
Mis. F. C. Watts, Carstairs.
Western Grocers, Ltd., Edmonton.
J. F. Hodson, Hobbema.
F. Ranson, New Hill.
J. A. Mitchell, Pakan.
A. Rudford, Edmonton.

SASKATCHEWAN

W. A. Johnston, Gap View.
Mrs. D. A. Rodgers, Middle Lake.
Rev. W. J. Wilson, Brora.
Kiwanis International, Saskatoon.
David T. Dick, Ridgedale.
J. E. Wilks, Forest Gate.
J. W. Truman, Biggar.
W. W. Lindley, Semans.
Canora Radio Association, Canora.
H. Turner, Wilson Lake.
Geo. Lumley, Alida.
Chas. H. Marchant, Saskatoon.
Chas. Peterson, Wadena.
John W. Fowler, Quill Hill.
G. W. S. Bowlby, Loverna.
Wilber Ennis, Tisdale.
W. Harold Child, St. Denis P.O.
F. Wilhelm, Saskatoon.

MANITOBA

Association d'Education des Canadiens-Français, Saint-Boniface.
The Film and Slide Co. of Canada, Winnipeg.
A. R. Willson, Kirkella.
A. Grimshaw, Winnipeg.
K. D. Ewart, Winnipeg.
F. F. Cottrell, Winnipeg.
J. E. Lowry, Winnipeg.

ONTARIO

The Royal Society of Canada, Ottawa. Professional Institute of the Civil Service, Ottawa. Harry Belcher, Waterloo.
Universities Conference, Ottawa.
L. C. Servos, Toronto.
The Dominion Battery Co. Ltd., Toronto.
Ralph W. Ashcroft, Toronto.
Trans-Canada Broadcasting Co., Toronto.
Norman Cole, Ottawa.
Gooderham & Worts, Ltd., Toronto.
Samuel Redmonds, Meaford.
J. O. Thorn, Toronto.
Mrs. Frank Strickland, Hamilton.

Rev. Canon A. J. Fidler, Toronto. A. G. Ewens, Hamilton. University of Western Ontario, London. Western Ontario "Better Radio" Club, Chatham. The Canadian Red Cross Society, Toronto. James McHardy, Toronto. Board of Education, Windsor. The Trades & Labour Congress of Canada, Ottawa. Canadian Postmasters' Assoc., Aurora. Telephone City Radio Assoc., Brantford. R. H. Combs, Toronto. Canadian Legion of the B.E.S.L., Ottawa. Lord's Day Alliance of Canada, Toronto. The Girl Guides Assoc., Toronto. Wm. Watt, Orangeville. Canadian Automobile Assoc., Toronto. Classic City Radio Club, Stratford. Aviation League of Canada, Hamilton. Bowmanville Radio Club, Bowmanville. Ernest Barlen, Kitchener. Walter Peters, Peterboro. E. Westhook, Galt. D. R. Thomas, Toronto. John Harris, Preston. Geo. O. Hubert, Galt. F. A. Burlingham, Wellington. A. H. Allen, Toronto. W. H. Cross, Bolton. Canadian Association of Broadcasters, Toronto.

QUEBEC

The Province of Quebec Radio Trades Assoc., Montreal.
Jean Riddes, Montreal.
D. H. Barclay, Quebec.
"La Presse", Montreal.
Canadian National Railways, Montreal.
Beveridge Supply Co., Montreal.
Radio Club of Quebec, Quebec.
A. Leger, Montreal.
The Engineering Institute of Canada, Montreal.
Cardinal Rouleau, Quebec.
Canadian Pacific Railways, Montreal.
Grand Lodge, Knights of Pythias, Montreal.
The Jas. Buckley Co., Montreal.
Leo. S. Kirshben, Montreal.
Leo. S. Kirshben, Montreal.
Austin R. MacKay, Grand Cascapedia.
A. J. E. Catto, Dorval.
Prof. J. Arthur Villeneuve, Montreal.
E. J. L'Esperance, Montreal.

NEW BRUNSWICK

H. Roberts, Westfield. The Telephone Assoc. of Canada, St. John.

NOVA SCOTIA

Harold O. Hoganson, Halifax.
W. S. Abbott, Clementsport.
Federated Women's Institute of Canada, Wolfville.
C. S. Taylor, Stewiacke.
Halifax County Radio Assoc., Halifax.

PRINCE EDWARD ISLAND

United Baptist Convention of the Maritime Province, Charlottetown.

APPENDIX III

STATEMENTS RECEIVED FROM PROVINCIAL GOVERNMENTS

April 17, 1929,

VICTORIA, BRITISH COLUMBIA

".... The Government of British Columbia is ready and willing to enter into negotiations with the Government of Canada and the Governments of the various Canadian provinces, with a view to the organization of radio broadcasting on a basis of public service, by some method that may be mutually agreed upon by the said Governments. . . ."

April 23, 1929,

EDMONTON, ALBERTA

"..... The Government of Alberta is ready and willing to enter into negotiations with the Government of Canada and the Governments of the various provinces of Canada, with a view to the organization of radio broadcasting on a basis of public service, by some method that may be mutually agreed upon by the said Governments. . . ."

May 1, 1929,

REGINA, SASKATCHEWAN

".... The Government of the province of Saskatchewan is ready and willing to enter into negotiations with the Government of Canada and the Governments of the various Provinces of Canada, with a view to the organization of radio broadcasting on a basis of public service, by such method as may be mutually agreed upon by the said Governments. . . "

June 15, 1929,

ST. JOHN, NEW BRUNSWICK

".... The Government of New Brunswick, while insisting that constitutionally the Provinces are not subject to any legislative or executive interference in dealing with the subject of broadcasting, except in time of war, is of opinion that co-operation between the Provinces and the Dominion would be beneficial in promoting national mutual understanding and education, and the Government is willing to enter into conference to ascertain the best method by which these objects may be attained. . . ."

June 28, 1929.

TORONTO, ONTARIO

".... The Government of Ontario is ready and willing to enter into negotiations with the Government of Canada and the Governments of the various Canadian provinces, with a view to the organisation of radio broadcasting on a basis of public service, by some method that may be mutually agreed upon by the said Governments. . . ."

July 2, 1929,

WINNIPEG, MANITOBA

"... The Government of Manitoba is ready and willing to enter into negotiations with the Government of Canada and the Governments of the various Canadian provinces with a view to organization of radio broadcasting on a basis of public service by some method that may be mutually agreed upon. . ."

July 6, 1929,

HALIFAX, NOVA SCOTIA

"... The Government of Nova Scotia is ready and willing to enter into negotiations with the Government of Canada and the Governments of the various provinces of Canada with a view to the organization of radio broadcasting on a basis of public service, by such method as may be mutually agreed upon by the said Governments..."

July 18, 1929,

CHARLOTTETOWN, PRINCE EDWARD ISLAND

".... The Government of Prince Edward Island is ready and willing to enter into negotiations with the Government of Canada and the Governments of the various Canadian provinces, with a view to the organization of radio broadcasting on a basis of public service, by some method that may be mutually agreed upon by the said Governments. . . ."

August 28, 1929,

QUEBEC, QUEBEC (Translation)

". . . The Government of the province of Quebec will be glad to collaborate as fully as possible and to give to the Government of the Dominion of Canada its support in order to solve the difficulties which exist at present in relation to broad-

casting in Canada, as well as abroad.

"However, while collaborating with the Government of Canada, as mentioned above, the Government of the province of Quebec does not intend to waive its rights of jurisdiction which have been granted to it by the British North America Act and this in so far as radio broadcasting is concerned. Although making this reservation, I am convinced that a definite policy could be established under common agreement between the Government of Canada and the various provincial Governments in the general interest of the country. . . ."

APPENDIX IV

BROADCASTING IN CANADA

Broadcasting in Canada is at present carried on by private enterprise except in the province of Manitoba where the stations are owned and operated by the provincial Government.

Full jurisdiction over the administration of all radio matters in the Dominion, including the licensing and control of broadcasting stations, is vested in the Minister of the Department of Marine and Fisheries, and is exercised in accordance with the Radiotelegraph Act (Canada) and Regulations issued thereunder (R.S. Canada, 1927, Chapter 195).

Two classes of broadcasting license are granted by the department—namely, Private Commercial and Amateur, the fees for same being \$50 and \$10 respectively per fiscal year.

Licenses for broadcasting stations are issued only to British subjects or to companies incorporated under the laws of the Dominion of Canada or any of the provinces thereof. In addition the issue of Amateur Broadcasting Licenses is restricted to recognized radio associations; they are not granted to individuals. An association licensed to operate an amateur broadcasting station may, however, subject to the approval of the Minister, authorize a station belonging to one of its members to broadcast on its behalf.

Receiving Licenses are granted by the Department to any person in the Dominion irrespective of nationality, the fee for this class of license being one dollar (\$1) per annum.

For the purpose of dealing with preventable interference in its various forms, the Department maintains throughout the Dominion a free inspection service, including a number of specially equipped cars for the purpose of tracing and dealing with interference caused by faulty power systems and associated electrical apparatus of various kinds.

The amount of revenue collected from receiving license fees is taken into consideration by the Department each year when preparing its estimates to provide for this free service accorded

the listening public.

While the subsidizing by the Department of private commercial broadcasting stations deemed worthy of financial assistance is provided for in the legislation out of the receiving license fees collected, this provision has been given effect only in the case of the Province of Manitoba. In that Province where the broadcasting stations at Winnipeg and Brandon are operated by the Provincial Government Telephone System, 50% of all radio receiving license fees collected reverts to the Provincial authorities.

A statement showing the number of broadcasting and receiving licenses issued by the Department at various dates appears below, together with a list of Broadcasting stations at present licensed.

I. BROADCASTING LICENSES

Fiscal Year	Private Commercial	Amateur	Total
1922-23. 1923-24. 1924-25. 1925-26. 1926-27. 1927-28. 1928-29. 1929-30.	46 63 55 73 84 79	8 22 17 16 23 15 12 9	70 68 80 71 96 99 91 87*

^{*}This includes 16 licenses for "phantom" stations.

RADIO BROADCASTING

II. RECEIVING LICENSES

	1922-23	1923-24	1924-25	1925-26	1926-27	1927-28	1928-29
Northwest Territories		2,769 1,994 2,655 1,722 11,677 9,250 430 970	5,843 9,303 6,553 41,347 18,211 1,240 2,772	9,494 7,152 15,944 14,503 60,110 21,141 2,612 3,288	14,776 10,588 22,238 18,005 102,504 39,207 2,968 4,998	14,936 26,635 19,288 125,012 51,347 4,475 7,106	23,407 14,957 27,358 20,450 145,263 49,751 6,285 8,587
Total	9,954	31,609	91,996	134,486	215,650	268,055	296,926

Note.—The periods shown above are from 1st April to 31st March the following year. (The Dominion Government fiscal year).

III. BROADCASTING STATIONS

PRIVATE COMMERCIAL

ALBERTA:		
Calgary-434.8 M (690 K/C)		
CFAC Calgary Herald	500	
CFCN Western Broadcasting Co	500	
*CNRC Can. National Railways	500	
CJCJ The Albertan Pub. Co	500	• •
*CHCA The Western Farmer, Ltd	500	W
Red Deer-\$57.1 M (840 K/C)		
CKLC Alberta Pacific Grain Company	1000	
*CHCT G. F. Tull & Arden, Limited.	1000	W
Edmonton-517.2 M (580 K/C)		
CJCA Edmonton Journal	500	W
CHMA Christian & Missionary Alliance	250	W
CKUA University of Alberta	500	\mathbf{w}
*CNRE Can. National Railways.	500	W
Lathbridge_ 967.9 M (1190 K/C)		
CJOC Harold R. Carson	50	W
British Columbia:		
Chilliwack-247.9 M (1210 K/C)		
CHWK Chilliwack Broadcasting Company	5	W
Kamloons—267.9 M (1120 K/C)		
CFJC N. S. Dalgleish & Sons and Weller and Weller	15	W
Vancouper—411 M (730 K/C)		
CKCD Vancouver Daily Province	50	W
*CHLS W. G. Hassell.	50	W
CKWX A. Holstead & Wm. Hanlon	100	W
CKMO Sprott-Shaw Radio Co	50	W
CKFC United Church of Canada	50	W
Vancouper District—291.3 M (1030 K/C)		
CJOR G. C. Chandler (Sea Island)	50	W
CNRV Can. National Railways (Lulu Island)	500	W
Victoria		
CFCT Victoria Broadcasting Association	500	W
0101		
MANITOBA:		
Winnipeg—384·6 M (780 K/C) CKY Manitoba Telephone System		
CKY Manitoba Telephone System.	5000	W
*CNRW Can National Railways	500	W
CJRX J. Richardson & Sons (Short Wave 25.6 M—11720 K/C)	2000	W
Brandon—655.6 M (540 K/C)		. •
CKX Manitoba Telephone System	500	W
Value and and Amphonic of American Control of the C		•••

New Brunswick:		
Fredericton—247.9 M (1210 K/C) CFNB James S. Neill & Sons	50	w
St. John—997.1 M (890 K /C)	•	
CFBO C. A. Munro, Limited	50	
CNRA Can. National Railways	500	W
Nova Scotia:		
Halifax—322·6 M (930 K/C) CHNS Halifax Herald, Limited	500	w
Wolfville—322.5 M (930 K C) CKIC Acadia University	50	w
Sudney-\$40.9 M (880 K/C)		
GJCB N. Nathanson	50	W
ONTARIO:		
Brantford—297 M (1010 K/C) CKCR John Patterson	50 \	W
Chatham217.9 M (1210 K /C)	25	387
CFCO Western Ontario "Better Radio" Club		
CKMC R. L. MacAdam	15	W
Hamilton—340.9 M (880 K /C) CHCS Hamilton Spectator	10	\mathbf{w}
CKOC Wentworth Radio & Auto Supply Co., Limited	50 50	
CHML Maple Leaf Radio Co	30	**
CFCH Abit bit Power & Paper Co	250	W
Kingston—267·9 M (1120 K/C) CFRC Queen's University	500	\mathbf{w}
London—329 · 7 M (910 K/C) CJGC London Free Press and Printing Company, Limited	500	w
*CNRL Can. National Railways	500	
Midland—267.9 M (1120 K/C) CKPR Midland Broadcasting Corp	50	w
Ottapa—434·8 M (690 K/C)		
CNRO Can. National Railways. CKCO Dr. G. M. Geldert.	500 100	
Prescutt - 907 M (1010 K /C)		
CFLC Radio Assoc. of Prescott	50	W
CKPC Wallace Russ	50	W
Toronto—517.2 M (580 K/C) CKNC Can. National Carbon Co	500	w
*CJSC Evening Telegram	500	
CKCL Dominion Battery Co	500	**
CFCA Star Publishing Co	500 500	
*CKOW Nestle's Food Co *CNRT Can. National Railways	500	
Toronto District—\$12.5 M (960 K C)	4000	117
CFRB Standard Radio Corp. Ltd	5000	
(Bowmanville)		
Toronto and District waves *CJBC Jarvis Street Baptist Church		
Prince Edward Island:-		
Charlottetown-312.5 M (960 K IC)	050	337
CFCY Island Radio Co	250 30	
Summereide-967 · 9 M (1190 K C)	O.F	TX7
CHGS R. T. Holman, Ltd	25	W
QUEBEC:-		
Montreal-411 M (730 K/C) CHYC Northern Electric Co	500	
CKAC. La Presse Publishing Co	5000 -5000	
*CNRM Can. National Railways		
CFCF Canadian Marconi Co	1650	W

RADIO BROADCASTING

QUEBEC-Concluded		
Quebec — 340.9 M (880 K /C) CKCI Le "Soleil", Ltd	221	W
CKCI Le "Soleil", Ltd	25	
CHRC E. Fontaine	50	
CKCV G. A. Vandry		w
*CNRQ Can. National Railways	•	**
St. Hyacinthe—297 M (1010 K/C)	EΛ	W
CKSH City of St. Hyacinthe	<i>5</i> 0	**
SASKATCHEWAN:		
Fleming-500 M (600 K/C)	500	w
CJRW J. Richardson & Sons	300	**
Moose Jaw-500 M (600 K/C)	500	1007
CJRM J. Richardson & Sons	500	**
Remina 312 · 5 M (960 K /C)	500	W
CHWC R H Williams & Sons	500	
CKCK Leader Publishing Co		
*CIRR Sask Co-Operative Wheat Producers, Limited	500	
*CNRR Can. National Railways	500	, W
Saskatoon 990.7 M (910 K/C)	~^^	
CFGC Electric Shop, Limited		W
*CNRS Can National Railways		\mathbf{w}
CJHS Radio Service, Limited	250) W
V-nlien 178.0 W (680 K (C)		
CJGX Winnipeg Grain Exchange	500	\mathbf{w}
CACIV Attituted cream securing.		

AMATEUR

(250 M-1200 K/C)

10 AB 10 AE 10 AE 10 AK 10 AK 10 AY 10 BI 10 BU 10 BU 10 CAS 10 BU 10 CAS 10 CA
--

Norm.

* "Phantom" Stations. A "phantom" station is defined as one which owns no physical equipment, but is allotted a distinctive call signal and is licensed to operate over a station having physical equipment.

M = Metres. K/C = Kilocycles. W = Watts.