

1934.
NEW ZEALAND.

SECOND ANNUAL REPORT

OF THE

NEW ZEALAND BROADCASTING BOARD.

(FOR THE YEAR ENDED 31ST DECEMBER, 1933.)

Presented to both Houses of the General Assembly in pursuance of Section 21 of the Broadcasting Act, 1931.

REPORT.

To the HONOURABLE ADAM HAMILTON, MINISTER OF TELEGRAPHS, Wellington.

SIR,—

The members of the New Zealand Broadcasting Board present their second annual report relating to the year ended 31st December, 1933.

The outstanding event of the year was the opening of a modern transmitter at Gebbie's Pass, near Christchurch, this being the first important step in the Board's coverage scheme.

That 1933 has been a year of progress is borne out by an increase of 27 per cent. in the number of radio receiving licenses.

GENERAL.

HOURS OF TRANSMISSION.

The following table shows the increase in the hours of transmission from the Board's stations since taking over control of the service on the 1st January, 1932:—

	Hours of Transmission.			
	(Rate per Annum.)			
At 1st January, 1932 10,612 hours.
At 1st January, 1933 16,484 hours.
At 1st January, 1934 23,036 hours.

From the foregoing it will be seen that in two years the Board has increased the hours of transmission by 117 per cent.

During 1933 fifteen hours of transmitting-time were lost as a result of power failures and technical failures.

PROGRAMMES.

Throughout the year efforts to improve the standard of programmes were maintained, and it is beyond doubt that considerable improvement has been effected, more particularly in recent months. Formerly it was necessary, in preparing programmes, to pay due regard to the fact that most listeners could receive only one station. To-day, however, the Board's programme-builders have far more scope, and are able to group items in a more logical and orderly sequence. This greater liberty and consequent improvement followed from the introduction of alternative services and from the opening of the new 3YA transmitter, for as a result of these innovations most listeners have now a choice of two or more programmes. Except under unusual circumstances, items broadcast simultaneously from the four main transmitters now differ in type, and, as the programmes from the alternative stations contrast with those broadcast from the principal stations, in most localities listeners possessing modern receivers have a very wide choice.

Ten recorded British programmes were obtained from the British Broadcasting Corporation, and the broadcasting of these during the year evoked many appreciative letters from listeners. Arrangements are in train to secure regular supplies of similar programmes, which will afford listeners an opportunity of hearing the best British artists.

Complete grand operas, in the form of recordings, are now regular features in the programmes, and the enthusiasm with which these broadcasts have been received has encouraged the Board to explore every avenue in an endeavour to add to a repertoire that is already extensive.

During the year 1,427 different local artists were heard from the Board's stations, and forty-seven performances by musical societies and choirs were broadcast.

Following on the Board's policy of securing the services of artists and companies touring the Dominion, listeners had the opportunity during the year of hearing, amongst others, the Dame Sybil Thorndike Shakesperian Co., John Brownlee, Ernest McKinley, Peter Dawson, Anderson Tyrer, the Spivakovsky-Kurtz Trio, Ronald Chamberlain, and Madame Nanette de Lornay.

Talks (Educative).

Two hundred and ninety-six talks, covering a wide range of subjects, were delivered under the auspices of the Workers' Educational Association. During the year educational talks for schools were given from 1YA, 2YA, and 3YA, but the decision to close the training colleges at Auckland and Christchurch has interfered temporarily with arrangements at those places. The Board, however, is desirous of making a permanent feature of school broadcasts, and is hopeful of attaining that end shortly.

Talks (General).

Talks on matters of general interest have increased considerably in popularity, and during the years listeners had the opportunity of hearing many speakers from overseas. Amongst these were—Dr. Torrance, well-known research worker in tropical medicine; Sir Charles Kingsford-Smith, famous aviator; Mr. Pelham Warner, ex test cricketer; Mr. F. W. Doidge, overseas journalist; Mr. Henry Mason, English film critic; Lieutenant-Commander L. E. Porter, Australian Navy; Mr. T. Baxter, National Farmers' Union of England and Wales; Rear-Admiral Byrd, Antarctic Expedition; Mr. F. J. Perry, English tennis-player.

Plays and Sketches.

Over two hundred plays and sketches were presented from the four main stations during the year. "The Merchant of Venice," played by the Dame Sybil Thorndike Shakesperian Co., was an outstanding performance, and other plays worthy of special mention were—"Waterloo," "The Splendid Hour," and "Sir Christopher Wren."

Overseas Rebroadcasts.

Reception from the Empire Short-wave Station has not fulfilled expectations. At times speech is received satisfactorily, but because of the uncertainty the broadcasts have not any great value from the programme-building point of view. Nevertheless, through the medium of the Empire Station, many noteworthy broadcasts have been made available to our listeners. Included in the overseas rebroadcasts undertaken during the year were—Speeches by His Majesty the King and the Right Hon. Ramsay MacDonald at the opening of the Monetary and Economic Conference; speeches by His Royal Highness the Prince of Wales and Sir Thomas Wilford at the New Zealand Day celebration in London; the "Southern Seas" broadcast on Empire Day; the Armistice Day service at the Cenotaph, Whitehall, London; special Christmas Day programme arranged by the British Broadcasting Corporation, including a Christmas message to the Empire from His Majesty the King.

Outside Broadcasts and Sporting Broadcasts.

Among the numerous outside broadcasts arranged during the year were those dealing with the trans-Tasman flights made in the aeroplanes "Southern Cross" and "Faith in Australia"; the Military parade on the King's Birthday at Auckland; the programme arranged by the Rotary Club and relayed from the Hospital Gardens, Christchurch. Sporting broadcasts were numerous, and included descriptions of—Matches played by the United States of America Tennis team (Allison, Vines, Gledhill, and Van Ryn) and New Zealand players; the races for the Sanders Cup; M.C.C. Cricket Team's matches against New Zealand and against Wellington; the Test matches played between the Australian Universities' Rugby team and the New Zealand Universities' representatives; tennis-matches between England (Perry, Wilde, and Lee) and New Zealand (Malfroy, Bartleet, and Sturt); tennis-matches played by Crawford and McGrath (Australia) against New Zealand players; the finals of the Amateur Boxing Championships (relayed from Blenheim); the final of the New Zealand Amateur Golf Championship; descriptions of twenty-four representative and sixty-six inter-club Rugby football matches were broadcast; racing broadcasts were given on ninety-nine days during the year; many of the more important events being relayed to and broadcast from the Board's four main stations; descriptions of fifty professional wrestling matches and of several professional boxing contests were broadcast.

Special Services.

Talks on agricultural matters, gardening, and cookery were increased during the year. In addition to the ordinary daily weather reports and forecasts, special reports were broadcast for the information of farmers throughout the lambing and shearing seasons. A new feature introduced during the year was a special daily weather forecast for aviators. Wool-growers were specially catered for by the frequent broadcasting of prices realized at all the wool sales.

There were broadcast during the year 406 appeals for information regarding missing persons or persons whose whereabouts were required on account of the serious illness of relatives, and over three hundred inquiries for missing motor-vehicles were broadcast.

The Mayors' Relief Funds at the four main centres were considerably augmented by the response to frequent broadcast appeals and by the returns from entertainments arranged by the Board. In addition, appeals were sponsored for many other worthy charitable objects.

Religious Services.

Towards the end of the year broadcasts of morning Church services were inaugurated at Auckland, Wellington, and Christchurch, and it is hoped to make similar arrangements in the near future at Dunedin.

Children's Hour.

No substantial changes were made during the year in the arrangement of the children's hour, but it is evident that as time goes on it will be necessary to impose some limit on the broadcasting of birthday greetings to children. The Board is loth, however, until some such action becomes absolutely necessary, to follow the examples of many other countries and charge for the transmission of greetings.

News.

The continued courtesy of the daily newspapers in the four main centres has made possible the maintenance of a news service of considerable value, particularly to country dwellers. Market reports, cattle sales, and other matters of interest to primary producers are regular features of this service.

ADVISORY COUNCIL.

Members of the Advisory Council are appointed by His Excellency the Governor-General in accordance with section 4 of the Broadcasting Act, 1931, and the names of those who served throughout 1933 are as follow :—

Mr. J. H. Owen, Wellington (Chairman),	Mr. W. A. Waters, Palmerston North,
Mr. A. B. Chappell, Auckland,	Mr. C. R. Russell, Christchurch,
Mr. J. S. Anchor, Hamilton,	Mr. H. Booth, Dunedin,
Mr. F. T. Davis, New Plymouth,	Mr. A. W. Jones, Invercargill.

Three meetings of the Council were held during the year, the last taking place at Christchurch in order to afford members the opportunity of inspecting the new transmitter and buildings at Gebbie's Pass.

All the members of the Council took an active part in listeners' organizations or radio clubs prior to their appointments, and this experience has been responsible for much useful advice tendered to the Board. The Council has been in thorough agreement with the Board in all major policy matters.

RECEIVING LICENSES.

The following table shows the increases in radio receiving licenses during the past four years in the Dominion :—

	Number of Licenses.	Percentage of Increase.
31st December, 1929	50,273	..
31st December, 1930	60,162	19·6
31st December, 1931	71,453	18·7
31st December, 1932	88,993	24·5
31st December, 1933	113,053	27·0

Percentages of Licenses to Population.

New Zealand now has 7·5 licenses per hundred of population, and is, in this respect, about equal to Australia.

Following is a comparative list based on the latest available information :—

Country.	Licenses per Hundred of Population.	Country.	Licenses per Hundred of Population.
Denmark	14·7	Switzerland	6·3
Great Britain	12·3	Norway	4·7
Sweden	10·3	Belgium	4·7
New Zealand and Australia	7·5	Hungary	3·7
Austria	7·2	South African Union	2·9
Germany	7·0	Japan	1·6

New Zealand towns (as at 30th November, 1933) :—

Town.	Licenses per Hundred of Population.	Town.	Licenses per Hundred of Population.
Blenheim	16·7	Greymouth	8·6
Wellington	13·6	Hastings	8·5
Masterton	12·9	Wanganui	8·4
Ashburton	12·6	Whangarei	8·2
Oamaru	12·0	Bluff	8·0
Palmerston North	11·7	Dunedin	8·0
New Plymouth	10·4	Auckland	7·9
Christchurch	9·7	Gisborne	7·2
Hamilton	9·0	Rotorua	7·0
Nelson	9·0	Invercargill	6·6
Napier	8·7	Timaru	6·4

TECHNICAL.

Early in the year a self-contained emergency transmitter manufactured by Amalgamated Wireless (Australasia), Ltd., was installed at Wellington, and under the call-sign 2YC is providing an alternative service for four hours daily. This transmitter is of modern design, has a power of 200 watts aerial energy, and can be operated independently of the city power-supply.

The opening of the new 3YA transmitter situated at Gebbie's Pass, near Christchurch, was the outstanding event of the year in broadcasting. The coverage given by the station has exceeded expectations. Installed primarily to give reliable service to the Canterbury District, the transmitter is, in addition, affording an alternative service of good quality over a much wider field. The performance of the station conforms in every respect to modern practice, having a flat frequency response over a band of frequencies extending from 30 cycles to 10,000 cycles per second, and a modulation capability of 100 per cent. These factors account for the faithfulness of reproduction which has been the subject of favourable comment by many listeners, musically inclined. Although some licensees using crystal reception in Christchurch had difficulty at first in receiving the new station, it has been clearly demonstrated that such sets, with minor alterations, are capable of giving high-grade reception. One of the main reasons for placing modern high-power transmitters out of city areas is to avoid "wiping out" reception of outside stations. Had the new transmitter been erected in the city, many listeners would have found it impossible to receive other stations without an undesirable background of the transmissions from the new 3YA.

It is interesting to note that measurements taken with a modern field-strength measuring set prove that the strength of signals from the new station exceeds to a remarkable degree that given by the old 3YA station. For example, at Timaru the strength is now sixteen times, at Geraldine thirteen times, and at Ashburton eight times greater than formerly.

During the year great improvement was effected in the 2YA transmitter and associated equipment, the frequency response and depth of modulation having both been considerably extended.

The Board's engineering staff spent a good deal of time in determining the best location for a new transmitter to serve the Auckland area. Full use was made of the Board's portable testing transmitter and the field-strength measuring equipment, and having regard to the areas and population to be served, there is no doubt that the site selected near Henderson could not be improved upon. Amalgamated Wireless (Australasia), Ltd., were the successful tenderers for this transmitter, which will have a power of 10 kilowatts aerial energy, and, like the new 3YA apparatus, will be of modern design. The aerial system to be used is that known as the British Broadcasting Corporation's half-wave umbrella type, which requires only one mast approximately 500 ft. high. Full investigation leaves no doubt that this type of aerial structure affords maximum ground-wave radiation, this being the first consideration where a non-fading service is to be given over an extended area. The new transmitter will be brought into use this year.

Work has commenced on the new studio and office premises in Shortland Street, Auckland, and these are to be completed in approximately eight months. Modern practice has been followed in designing the studios, particular attention having been devoted to acoustical requirements and to sound insulation, both external and internal. All the materials being used have been chosen in order to get the optimum reverberation period, a necessary condition for faithful musical reproduction. In order to prevent the leakage of street and other noises, no external windows will be provided in any of the studios, and consequently artificial ventilation is essential. Special apparatus is being installed for this purpose, the contractors being A. and T. Burt, Ltd. The successful tenderers for the building were C. W. Ravenhall, Ltd., of Auckland.

The operation in Auckland, Wellington, and Christchurch of three alternative or subsidiary stations was inaugurated smoothly. These are being worked in conjunction with the main stations, and very little extra expense in the way of staff costs has been incurred.

During the year all the main stations were equipped with modern microphones of the velocity or ribbon type, and the result has been a marked improvement in musical reproduction. Until quite recently, the development of the microphone had lagged behind the studio and transmitter equipment, but this has been remedied by the introduction of the velocity type of microphone.

The studio and subsidiary equipment, such as relay amplifiers, has received attention at each station, with a view to bringing the overall transmission up to the highest possible point of efficiency.

The old 3YA transmitter now being operated as an alternative station at Christchurch under the call-sign 3YL, was overhauled and modernized before being reopened.

The transmitter formerly used at Station 2ZW, Wellington, is being overhauled, and will be brought into use as soon as possible as an alternative to 4YA, Dunedin.

At an early date the Board's engineers will undertake an investigation with a view to determining the most suitable location for a new transmitter to serve the Otago area. The portable test transmitter and field-strength measuring-equipment will be used for this purpose, and no time will be lost in calling for tenders when the appropriate site has been selected.

On the 1st December changes in the wave-lengths of the Board's transmitters took effect and aroused considerable interest and some criticism. These changes were the outcome of conferences between the Board's engineers, the Post and Telegraph Department, and the Commonwealth authorities, and were made for the purpose of securing the best condition of reception for a majority of listeners in this country. The full beneficial effect of the changes will not be apparent until the completion of the Board's coverage programme, but already in many areas there is definite evidence of

improved coverage. In determining the best frequencies to be used in New Zealand due heed had to be given to the programme of new stations contemplated by the Commonwealth authorities, who co-operated fully in making the best use of the wave-lengths available. It is true that some listeners are now unable to receive certain distant stations, but it must be borne in mind that every technical advance in broadcasting, whatever its nature, will adversely affect some listeners.

SUBSIDIZED PRIVATE BROADCASTING STATIONS.

The Board has continued to pay regular monthly subsidies to the following private broadcasting stations: 1ZH Hamilton, 2YB New Plymouth, 2ZF Palmerston North, 2ZD Masterton, 2ZJ Gisborne, 2ZH Napier, 4ZP Invercargill, 3ZR Greymouth.

Relays of programmes from the Board's main stations are regularly arranged to 2ZF Palmerston North, 2ZD Masterton, and 1ZH Hamilton, and further assistance is being given to the subsidized stations in the way of circulating programmes of gramophone recordings.

FINANCIAL REPORT.

At the end of this report appears the Board's second balance-sheet certified by the Audit Department, together with the relative Revenue Account. During the year the sum of £5,000 was paid off the amount owing for the assets of the Radio Broadcasting Co. of New Zealand, Ltd., which were acquired from the Minister when the Board commenced operations, making a total reduction in two years of £10,039 17s. 2d.

The expenditure in connection with the new 3YA transmitting-station will total £23,272 14s. 6d.; this includes cost of land, roading, buildings, and transmitter equipment.

BALANCE-SHEETS.

The cost of the arbitration proceedings between the Minister of Telegraphs and the Radio Broadcasting Co. of New Zealand, Ltd., which was a charge against the Board, has now been completely written off.

The Board has appropriated from the Revenue Account to Accumulated Fund the sum of £38,000 towards meeting capital expenditure. The Board's undertakings at Auckland, which include the erection of studio buildings and the installation of a high-power transmitter, will involve an expenditure of £76,000 approximately. The cost of land acquired at Auckland for sites for the studio building and the transmitting-station is included in the assets shown at 31st December, 1933.

The same rates of depreciation as were provided last year have been applied to the transmitting equipment and associated apparatus taken over by the Board. This also applies to such assets as office and studio equipment, &c.

Included in the assets is £3,800, the amount being paid by the Board for the transmitting-plant, furniture, recordings, &c., purchased by Government from the owners of Stations 1ZR (Auckland), 2ZW (Wellington), and 3ZC (Christchurch).

REVENUE ACCOUNT.

After transferring £38,000 to Accumulated Fund towards meeting capital expenditure, and providing for depreciation of assets, the excess of income over expenditure for the year ended 31st December, 1933, is £2,393 2s. 2d.

In addition to the sum of £2,619 10s. paid by way of subsidies to private broadcasting-stations, a further amount of £1,547 0s. 10d. was expended in providing relay lines, equipment, and gramophone recordings for the eight subsidized stations.

As predicted in our last report, the expenditure on programmes was considerably higher than during the preceding year, and the tendency will be for a steady increase in this class of expenditure.

H. D. VICKERY, Chairman.
 GEO. R. HUTCHINSON, }
 LESLIE MACFARLANE, } Members of the Board.

THE NEW ZEALAND BROADCASTING BOARD.

REVENUE ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER, 1933.

<i>Expenditure.</i>		<i>Income.</i>	
	£	s. d.	£ s. d.
To Expenditure on programmes, including payments to artists, performing rights, relay lines, music, salaries and expenses of programme staff, records, stationery, and sundry miscellaneous items	39,450	4 9	.. .. .
Maintenance of plant, power, salaries of engineering and operating staffs	7,796	12 7	.. .. .
General expenses, including rent, rates, insurance, lighting, heating, legal, audit, printing, stationery, salaries and wages, telephones, travelling-expenses, repairs and maintenance of buildings, and sundry miscellaneous charges	10,875	16 8	.. .. .
Administration salaries and expenses, including expenses of Advisory Council	6,037	0 9	.. .. .
Subsidies to "B" stations	2,619	10 0	.. .. .
Arbitration expenses (written off)	567	7 6	.. .. .
Depreciation of assets	17,889	3 2	.. .. .
Appropriation towards meeting capital expenditure	38,000	0 0	.. .. .
Balance	2,393	2 2	.. .. .
	<u>£125,628</u>	<u>17 7</u>	<u>124,942 1 4</u>
			<u>686 16 3</u>

F. 3.

BALANCE-SHEET AS AT 31ST DECEMBER, 1933.

<i>Liabilities.</i>		<i>Assets.</i>	
	£	s. d.	£ s. d.
Accumulated Fund—			
Balance of Revenue Account at 31st December, 1932	2,357	0 0	.. .. .
Appropriation from Revenue Account towards meeting capital expenditure	38,000	0 0	.. .. .
Reserve for renewals and replacements .. .. .	..	..	.. .. .
Liability to Post and Telegraph Department, fixed by Minister of Telegraphs as price of assets acquired	59,839	17 2	.. .. .
Less repayments, as per agreement	10,039	17 2	.. .. .
Sundry creditors .. .. .	..	..	.. .. .
Revenue Account: Balance at 31st December, 1933 .. .. .	..	..	.. .. .
	<u>£125,628</u>	<u>17 7</u>	<u>24,370 13 0</u>
			<u>27,353 4 9</u>
			<u>7,994 1 7</u>
			<u>3,800 0 0</u>
			<u>288 3 11</u>
			<u>1,098 3 1</u>
			<u>51,442 1 4</u>
			<u>6,018 12 11</u>
			<u>£122,365 0 7</u>
			<u>2,065 4 5</u>
			<u>22,305 8 7</u>
			<u>15,393 2 9</u>
			<u>11,960 2 0</u>
			<u>7,188 8 8</u>
			<u>805 12 11</u>
			<u>28,442 1 4</u>
			<u>23,000 0 0</u>
			<u>5,933 12 11</u>
			<u>85 0 0</u>

H. D. VICKERY, Chairman.
 GEO. R. HUTCHINSON, }
 LESLIE MACFARLANE, } Members of the Board.
 E. C. HANDS, General Manager.

I hereby certify that the Revenue Account and Balance-sheet have been duly examined and compared with the relative books and documents submitted for audit, and correctly state the position as disclosed thereby.—G. F. C. CAMPBELL, Controller and Auditor-General.

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