

1935.
NEW ZEALAND.

THIRD ANNUAL REPORT
OF THE
NEW ZEALAND BROADCASTING BOARD
(FOR THE YEAR ENDED 31ST DECEMBER, 1934).

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 third annual report—for the year ended 31st December, 1934.
The past year has been one of marked progress, as is witnessed by an increase of 31 per cent. in the number of radio-receiving licenses.
The bringing into operation of a modern transmitter at Henderson, Auckland, having a power of 10 kilowatts aerial energy and the erection of modern studio buildings in Auckland City were the most important events of the year.

GENERAL.

HOURS OF TRANSMISSION.

The progressive increase in the hours of transmission since the Board took over control of the service on the 1st January, 1932, is shown in the following table :—

	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.
At 1st January, 1935	..	..	..	.. 25,700 hours.

During 1934, owing to power-failures and technical faults, twenty-six hours of transmitting-time were lost out of a total of 25,794 hours.

PROGRAMMES.

The Board has supplied throughout the year programmes from the eight national stations, namely :—

Station.				Aerial Energy.	Frequency (Kilocycles).	Wave-lengths (Metres).
				Kw.		
1YA Auckland	..	..	..	10·00	650	462
1YX Auckland	..	..	..	0·15	880	341
2YA Wellington	..	..	..	5·00	570	526
2YC Wellington	..	..	..	0·20	840	357
3YA Christchurch	..	..	..	2·50	720	416
3YL Christchurch	..	..	..	0·50	1,200	250
4YA Dunedin	..	..	..	0·50	790	380
4YO Dunedin	..	..	..	0·15	1,140	263

No effort was spared to afford listeners the best entertainment obtainable. At each of the four main cities the Board's stations are transmitting for seventeen hours every week-day, and the provision of suitable programme-matter necessitates the careful exploration of all available sources of supply.

Ten new recorded British programmes obtained from the British Broadcasting Corporation were broadcast and met with widespread appreciation.

The Board's repertoire of recorded grand operas was added to, and twenty-eight different operas were broadcast during the year.

After lengthy negotiations with the owners of the copyright, the Board was able to make Gilbert and Sullivan's works available to listeners, and the popularity of this music is undoubted.

During the year 1,419 different local artists were heard from the Board's stations and forty-five performances by different musical societies and choirs were broadcast.

The Board's policy of securing the services of artists and companies touring the Dominion enabled listeners to hear, amongst others, Mr. Anderson Tyrer, Miss Nora Delmarr, Mr. Gordon Bryan, the Raratongan Mixed Choir, J. C. Williamson's New Opera Company.

Not only did the Board secure the services of many artists and companies visiting the Dominion, but it also acted as entrepreneur in arranging tours of the national stations by a number of eminent artists, including Mr. L. Godfrey Smith, Senia Chostiakoff, Mr. Barend Harris, Mr. Alexander Browne, Mr. Raymond Beatty, Madame Elsa Stralia, Madame Goossens-Viceroy.

Talks (Educative).

With the ready co-operation of the Education Department, marked progress was made in the matter of educational talks for schools. The Board printed and distributed free to scholars 21,000 booklets explanatory of the subject-matter of these talks. The increase of interest in school broadcasts can be illustrated by the following example. At the beginning of 1934 ninety-eight schools and 5,083 scholars were recorded as listening to 1YA Auckland. At the end of the year there were 162 schools and 8,410 children, or an increase during the year of 65 per cent.

As an experiment the Board arranged for the delivery, by expert teachers, of ten talks designed to assist candidates for the Matriculation Examination. So successful were these broadcasts that it is intended to go further in the matter this year.

Under the auspices of the Workers' Educational Association numerous talks were delivered on a wide variety of subjects.

Talks (General).

Listeners heard, either direct from the Board's stations or by rebroadcasts from overseas, talks by many notable and interesting persons. The speakers included His Majesty the King, H.R.H. the Prince of Wales, H.R.H. the Duke of Gloucester, Mr. Bernard Shaw, Sir Ian Fraser, M.P., C.B.E., Dr. Sydney Nicholson, Mr. Malcolm MacDonald, Sir Fabian Ware, The Hon. F. S. Malan, P.C., Sir Hubert Wilkins, Mr. Crombie Allen, Captain Taprell Dorling, D.S.O. ("Taffrail").

Of special interest to the sporting section of the community were talks by Mr. Don Bradman, Mr. M. A. Noble, Mr. Gene Sarazen, Mr. F. J. Perry, Dr. A. J. Harrop, Mr. J. R. Metcalfe, Mr. T. E. Hampson, Mr. E. Barwick.

Plays and Sketches.

During the year three hundred and thirty-seven plays and sketches were presented from the four main stations. Worthy of special mention were—"The School for Scandal," "Everyman," "Joan of Arc." Amongst the recorded plays heard were—"Sir Christopher Wren," "Flags on the Matterhorn," and "Chopin."

Overseas Rebroadcasts.

Reception from the Empire Short-wave Station is still uncertain, and it has not been found possible to undertake frequent rebroadcasts. A number of notable speeches and events broadcast from the Empire station were, however, made available to listeners. Included in this category were—A description of the wedding of H.R.H. the Duke of Kent and Princess Marina; the Armistice Day service from the London Cenotaph; the commemoration Service from St. Clement Dane's Church; the launching of the Cunard liner "Queen Mary"; a description of the opening of the England-Australia air-mail service (from Croydon); an appeal by Lord Moynihan on behalf of the British Empire Cancer Society.

Other interesting overseas rebroadcasts were—Descriptions of the arrival at Melbourne of several competitors in the Centenary Air Race, and speeches by them; running commentaries of matches played by the New Zealand representative Rugby team in Australia; a description of the race for the Melbourne Cup.

Outside Broadcasts and Sporting Broadcasts.

Numerous outside broadcasts were arranged during the year. Amongst these may be mentioned: Description of the arrival in New Zealand of H.R.H. the Duke of Gloucester and speeches at a number of the civic receptions tendered to His Royal Highness; the opening of the Waitaki hydro-electric works; the laying of the foundation stone of the National Art Gallery and the Dominion Museum.

Broadcasts of sporting events were numerous and varied; ninety-one Rugby football matches were dealt with; racing broadcasts were given on 102 days during the year; sixty-two wrestling matches were described; descriptions of twenty-four yacht races were broadcast; boxing was dealt with on twelve occasions; athletic meetings on nine; and swimming on nine occasions.

Special Services.

In addition to the frequent broadcasting of prices realized at the wool sales, wool-growers were given the opportunity of hearing broadcasts of the bidding at auction from several of the sale-rooms.

Special weather reports for farmers were given throughout the lambing and shearing seasons, and talks of special interest to the agricultural community were still further increased in number.

Regular book reviews and talks for motorists were given throughout the year.

Talks on gardening are now regular features of the programmes and lead to ever-increasing correspondence.

During the year 417 appeals were broadcast for information regarding missing persons or persons whose whereabouts were required on account of the serious illness of relatives.

Several successful concerts were arranged by the Board's staffs in aid of the Mayors' Relief Funds, and appeals for many other worthy charitable objects were sponsored.

Religious Services.

Church services, morning and evening, are now being broadcast every Sunday at the four main centres, while short devotional services are broadcast regularly on week-days.

News.

By courtesy of the daily newspapers in the four main centres, a news service of considerable value to country dwellers has been maintained. Special care is taken to make the news of value to primary producers, and to that end full reports of cattle-sales and of prices of produce are broadcast regularly.

Programme Analysis.

The following analysis indicates the proportion of programme time occupied by various types of items broadcast during the year.

Item.	Percentage of Programme Time.
Music—	
Serious	17.26
Light	42.88
Modern dance	9.00
Old-time dance	0.99
Plays and sketches	3.38
Sporting commentaries and sporting talks	2.73
Talks : General, educative, including school broadcasts	7.65
News, weather and market reports, announcements, &c.	7.25
Church and devotional services	3.76
Children's sessions	5.10
	100.00

ADVISORY COUNCIL.

The following gentlemen were appointed to the Advisory Council by His Excellency the Governor-General to serve throughout 1934 :—

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.

Since the Board's last report, four meetings of the Council were held and many matters of importance to the Service were discussed.

RECEIVING LICENSES.

The increases in the number of radio-receiving licenses during the past five years in the Dominion are shown hereunder :—

	Number of Licenses.	Percentage 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
31st December, 1934	148,284	31.0

Percentages of Licenses to Population.

There are now 9·6 licenses per hundred of population in the Dominion. For comparative purposes a list is appended showing the position in a number of other countries :—

Country.	Date to which Percentage refers.	Percentage of Licenses to Population.
Denmark	30th June, 1934	15·06
Great Britain	30th June, 1934	14·23
Sweden	30th June, 1934	11·48
Netherlands	30th June, 1934	10·56
New Zealand	31st December, 1934	9·60
Australia	30th June, 1934	9·00
Germany	30th June, 1934	8·20
Switzerland	30th June, 1934	7·92
Austria	30th June, 1934	7·51
Canada	31st January, 1934	6·57
Belgium	30th June, 1934	6·55
Norway	30th June, 1934	5·11
Czecho-Slovakia	30th June, 1934	4·21
France	30th June, 1934	3·83
Union of South Africa	31st December, 1933	3·67
Japan	31st May, 1934	1·88

New Zealand towns (as at 30th November, 1934) :—

Town.	Percentage of Licenses to Population.	Percentage Increase since 30th November, 1933.
Blenheim	16·70	Nil
Masterton	15·74	2·84
Wellington	14·53	0·90
Hamilton	13·21	4·21
Ashburton	12·86	0·20
Oamaru	12·79	0·79
Whangarei	12·74	4·54
Christchurch	12·12	2·50
New Plymouth	11·97	1·57
Palmerston North	11·29	0·59
Wanganui	11·17	2·77
Hastings	11·03	2·53
Napier	10·68	1·98
Dunedin	10·51	2·51
Bluff	10·35	2·35
Auckland	10·31	2·41
Greymouth	10·14	1·54
Nelson	10·08	1·08
Rotorua	10·00	3·00
Gisborne	9·51	2·31
Timaru	9·48	3·08
Invercargill	9·18	2·58

TECHNICAL.

Steady progress has been made during the year in furtherance of the Board's policy to provide a high-grade service to listeners throughout the Dominion. Microphones of known excellence have replaced the older types, and numerous improvements have been effected to amplifying units and to studio equipment.

The recent opening of the new 1YA transmitter, the most powerful and best-equipped station in Australasia, was the important event of the year. The transmitting equipment is housed in a commodious new building on the main North Road about two miles north of Henderson, and provision has been made in the building for future extensions. The contractors for the equipment were Amalgamated Wireless (Australasia), Ltd. The whole equipment is in every way of modern design, excellently fabricated, and will afford a service of high quality over a wide area. The aerial system is of novel design for this part of the world and takes the form of three ribs of an umbrella supported by a single mast 500 ft. high. The three aerial wires or ribs are spaced 120° around the mast, and the special feature of the system is that maximum radiation along the ground is obtained with a comparatively small expenditure on towers.

Transmissions from the new plant for several weeks after opening were of an experimental nature, the testing and final adjustment of such equipment being a fairly lengthy process.

In order to bring into use the studio apparatus associated with the new transmitter, a part of the new studio building in Shortland Street, Auckland, was made available on the day the new transmitting equipment commenced operations. This new building contains four completed studios provided for different purposes. The dimensions of the largest one are 60 ft. by 40 ft. by 25 ft. It is used for performances by orchestras, bands, choirs, and other large combinations. Number 2 studio is 40 ft. long, 25 ft. wide, and 15 ft. high, and is used for smaller groups of instrumentalists or vocalists. Number 3 is 28 ft. long, 22 ft. wide, and 15 ft. high, and is intended, primarily, for children's sessions.

Number 4 is a small studio 16 ft. by 10 ft. and 10 ft. high, and is used for talks and similar purposes. The building is thoroughly up to date and was specially designed to ensure efficient transmission from the studio end of the transmitting chain. Provision has been made for additional studio accommodation, and space provided for other extensions. Special heating equipment and air-conditioning plant are interesting features of the building.

Amalgamated Wireless (Australasia), Ltd., were also the successful tenderers for the new transmitter to be erected at Highcliff, near Dunedin, which is to have a power of 10 kilowatts aerial energy, the same as the new 1YA transmitter. Plans and specifications are in course of preparation for the necessary buildings on the site, and the new station should be operating by November next. The site at Highcliff was selected after exhaustive tests from various localities near Dunedin by means of a portable test transmitter and field-strength measuring equipment, and is considered to be the best obtainable.

The end of April, 1935, should see the completion of extensions and improvements to the 3YA transmitter at Gebbie's Pass, which will have the effect of increasing the power to 10 kilowatts aerial energy. When this increase is effected and the new 4YA transmitter is brought into use, the Dominion will have three modern transmitters of ten kilowatts. The next step is to be the erection, near Wellington, of a national transmitter of 60 kilowatts aerial energy. Specifications for this transmitter are in hand, and tenders will be called at an early date.

The Board is represented on the Interference Committee which has, during the year, assisted Government in the preparation of regulations for the control of interference due to human causes. In deciding to increase the power of the four main stations, the Board took into account the desirability of providing signal-strength which will be above the noise level in most localities.

As opportunity offers, careful surveys are being made of the transmission equivalent of the terrain in different parts of the Dominion. During the year much useful information was gathered in several localities, notably Canterbury, Otago, and Nelson, by means of field-strength measurements.

The four main stations are now equipped with portable short-wave transmitters, making it possible to broadcast descriptions of events held at places not served by relay lines. The range of these transmitters is approximately ten miles.

As recording apparatus is likely to become part and parcel of modern broadcasting services, the Board has ordered, chiefly for experimental purposes, two sets of disc recorders, and it is expected that good use will be made of the apparatus.

SUBSIDIZED PRIVATE BROADCASTING STATIONS.

The following private broadcasting stations were paid, as formerly, regularly monthly subsidies throughout the year: 1ZH Hamilton, 2YB New Plymouth, 2ZF Palmerston North, 2ZD Masterton, 2ZJ Gisborne, 2ZH Napier, 4ZP Invercargill, 3ZR Greymouth.

Further assistance in the way of gramophone recordings is given to the subsidized stations, and relays of the national programmes are arranged in some cases.

FINANCIAL REPORT.

The Board's Third Balance-sheet and the relative Revenue Account, duly certified by the Controller and Auditor-General, are presented at the end of this report. In addition to the amount of £5,000 required to be paid annually off the amount owing for the assets of the Radio Broadcasting Company of New Zealand, Ltd., acquired from the Minister of Telegraphs, the sum of £10,000 was paid off during the year. In three years the Board has reduced this indebtedness by £25,039 17s. 2d. The total cost of land, buildings, technical equipment, and furniture for the new 1YA transmitter at Henderson and for the new studio and office building at Auckland approximated £87,000. Of this amount some £28,000 remained unpaid at the 31st December, 1934.

BALANCE-SHEET.

Considerable expenditure will be incurred in providing further transmitting equipment at Christchurch and new installations at Dunedin and Wellington. In addition, to provide sufficient accommodation and to conform to modern practice, it will be necessary within the next few years to erect new studio and office buildings in Wellington, Christchurch, and Dunedin. The Board has deemed it advisable, therefore, to appropriate from revenue to Accumulated Fund the sum of £60,000 towards meeting capital expenditure.

The old transmitting equipment and associated apparatus have been depreciated at the same rate as last year, but a lower rate has been applied to all new equipment.

REVENUE ACCOUNT.

After transferring £60,000 to Accumulated Fund towards meeting capital expenditure, and after providing for depreciation of assets, the excess of income over expenditure for the year ended 31st December, 1934, is £3,936 14s. 10d.

The expenditure on programmes during the year was £46,167 13s. 10d.—£6,717 9s. 1d. more than the amount expended in the previous year. This cost will tend to increase each year.

The sum of £2,518 13s. 4d. was paid by way of subsidies to the eight subsidized private stations. In addition, £1,597 7s. 5d. was expended in providing gramophone recordings, equipment, and relay lines for those stations.

Maintenance of plant, power, and engineering, and operating salaries this year entailed an expenditure of £11,797 18s. 1d., as against an expenditure of £7,796 12s. 7d. last year. Expenditure under this heading will increase considerably as higher-powered transmitting units are installed.

The item, Administration salaries and expenses, is £6,017 0s. 1d. this year, the corresponding figure last year being £6,037 0s. 9d.

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

THE NEW ZEALAND BROADCASTING BOARD.
REVENUE ACCOUNT FOR THE YEAR ENDED 31ST DECEMBER, 1934.

F.—3.

<i>Expenditure.</i>		<i>Income.</i>	
To	£ s. d.	By	£ s. d.
Expenditure on programmes, including payments to artists, performing rights, relay lines, music, salaries and expenses of programme staff, records, stationery, and sundry miscellaneous items	46,167 13 10	License fees	164,928 10 8
Maintenance of plant, power, salaries of engineering and operating staffs	11,797 18 1	Net interest	1,599 8 4
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 items	12,749 8 2	Proceeds from sale of assets previously written off	7 9 6
Administration salaries and expenses, including expenses of Advisory Council	6,017 0 1		
Subsidies to "B" stations	2,518 13 4		
Depreciation of assets	23,348 0 2		
Appropriation towards meeting capital expenditure	60,000 0 0		
Balance	3,936 14 10		
	<u>£166,535 8 6</u>		<u>£166,535 8 6</u>

BALANCE-SHEET AS AT 31ST DECEMBER, 1934.

<i>Liabilities.</i>		<i>Assets.</i>	
I. Accumulated Fund—	£ s. d.	I. Land and buildings—	£ s. d.
Balance at 1st January, 1934	40,357 0 0	Value at 1st January, 1934, less depreciation	22,751 2 0
Balance of Revenue Account at 31st December, 1933	2,393 2 2	Additions during 1934 at cost	52,266 1 7
Appropriation from Revenue Account towards meeting capital expenditure	60,000 0 0		<u>75,017 3 7</u>
	<u>102,750 2 2</u>	II. Machinery and plant—	
II. Reserve for renewals and replacements		Value at 1st January, 1934, less depreciation	12,702 6 11
III. Liability to Post and Telegraph Department, fixed by Minister of Telegraphs as price of assets acquired	59,839 17 2	Additions during 1934 at cost, less depreciation	23,993 17 5
Less repayments	25,039 17 2		<u>36,696 4 4</u>
	<u>34,800 0 0</u>	III. Office and studio equipment—	
IV. Sundry creditors		Value at 1st January, 1934, less depreciation	4,869 0 11
V. Revenue Account : Balance at 31st December, 1934	34,858 6 1	Additions during 1934 at cost, less depreciation	2,554 11 2
	<u>3,936 14 10</u>		<u>7,423 12 1</u>
		VI. Sundry debtors and prepayments	356 2 2
		License Fees Account	1,443 9 5
		Investment Account	16,928 10 8
			<u>45,000 0 0</u>
		VII. Cash at bank and in hand—	
		At bank	7,310 0 10
		In hand	170 0 0
			<u>7,480 0 10</u>
	<u>£190,345 3 1</u>		<u>£190,345 3 1</u>

H. D. VICKERY, Chairman.
GEO. R. HUTCHINSON } Members of the Board.
LESLIE MACFARLANE }
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.—J. H. FOWLER, Deputy Controller and Auditor-General.

Approximate Cost of Paper.—Preparation, not given; printing (615 copies), £7.

By Authority : G. H. LONEY, Government Printer, Wellington.—1935.

Price 6d.]