

THE NEW ZEALAND Radio Record

PUBLISHED WEEKLY.

Printed Tuesdays to permit of effective distribution before the week-end, with full copyrighted programmes for the succeeding week. Nominal date of publication Friday.

LITERARY MATTER.

All literary matter and contributions must be addressed to the Editor. If the return of M.S. is desired, enclose 1d. stamp.

SUBSCRIPTION RATES.

Rate of Subscription: Single copies, 3d.; Annual Subscription (if booked), 12/6, post free; normal rate, cash in advance, 10/-. post free.

ADVERTISING RATES.

Schedule of Advertising Rates available from all advertising agents in New Zealand, or write: "Advertising Manager," Box 1032, Wellington.

Advertisements requiring setting should be in hand not later than Friday of each week to ensure publication in succeeding issue. Stereos and blocks, providing space has been arranged beforehand, can be accepted up to midnight Monday. Contract advertisements not changed will be repeated.

No responsibility is accepted for blocks, stereos, etc., remaining unclaimed after last use, beyond a period of three months.

A. J. HEIGHWAY,

Managing Editor,
"The N.Z. Radio Record,"

P.O. Box 1032,
WELLINGTON.

WELLINGTON, SEPTEMBER 16, 1927.

INVESTIGATION INTO FADING.

We are looking forward with interest to the results of the combined inquiry into the facts of fading, which we are asking our readers to undertake with us on the evening of September 26 and 27, in relation to the transmission of 2YA. It remains to be seen just what facts can be established by the mass of combined reports we hope to receive. The scattered and individual reports that have come to hand previously in relation to 2YA have been of a most contradictory nature—some listeners reporting no fading, while others indicate intermittent and occasionally persistent fading. Obviously the fault must lie either with the transmitter, the receiver, or intervening factors covering atmospheric conditions, including magnetic storms, or atmospheric electricity, or land absorption. It will be very interesting to discover, if possible, which factor is primarily at fault. If the transmission is at fault, every effort will be made to effect remedy. If the fault lies with the reception, then it will be the duty of listeners, individually and collectively, to put their receiving sets in such a state of efficiency as to avoid reaction and annoyance to others.

The comments that have been made in respect to 2YA recall the difficulty that was experienced in Great Britain following on the opening of the high-powered station at Daventry. Numerous and persistent complaints were then received from all quarters in relation to distortion, and an official article, published in the "Radio Times," dealt with the subject along lines that have an interest for New Zealand listeners. There were, it was pointed out, three possible causes. The first was fading, or what was commonly known as "night effect," which was described as being due to the confusion of those rays which travel tangentially to the earth's surface, and those which are reflected downwards from a supposed electrified layer. It is not impossible that "night effect" should be experienced during the day. A second cause was land lines, which at times, due to intermittent earth or some other variation, might give distortion. The third cause might lie either in the transmitter or the receiver. The fading effect might begin to be apparent at 150 miles, and should be most noticeable at 200, 300 and 400 miles. There was no cure so far as the authorities knew. Theoretically, an absolute constancy of wave-length should minimise the trouble, and that was what was striven for. While this might not be always successful, the authorities thought that the average accuracy was so nearly constant as to prevent serious night distortion from this cause.

As to leakage from land lines, the experiments carried out tended to show that this factor was immaterial. In relation to the transmission, the authorities affirmed that, with the greatest care, they could not suggest the fault lay here. Coming then to the conditions for reception, it was stated that they had found quite definitely that, if the receiver was brought near to reaction, distortion did arise. Whether this was due to a partial fault in the transmitter—too much carry or too little modulation—had to be determined, but the fact definitely remained as a fact. It was admitted and emphasised that it was not always perfectly simple to get good quality out of Daventry, and the authorities were working hard to find out whether that was attributable to them. If it was, it would be remedied; if it was not, they must continue to press for sane methods of reception on the part of listeners. In that connection, it was absurd for listeners to endeavour to force sets to do more than they were designed to do, and too much reaction was always bad. It was pointed out that the reports received by the authorities overwhelmingly showed that crystal users did not, on the whole, complain one-tenth as much as the valve people; and this was used in support of the theory that intensive reaction was spoiling results. It was suggested that some of those who had experienced trouble should try putting up a much bigger aerial or a really efficient earth, until they were sure they were not relying upon intensive reaction. Finally this review said: "We are all experimenters on the finer points, and can only go ahead in terms of co-operation and frank speaking."

We have summarised the British experience because it seems to us to be applicable in some points to our own case. We have proposed this investigation in an earnest desire to secure a clear understanding of fading problems, and definite information, if possible, as to the incidence of the fault. We confidently look for the co-operation of our listeners. The investigation will be continued over two nights, and if required, we will not hesitate at a later stage to institute further tests, both in relation to 2YA and other stations.

GOOD MUSIC WELL PLAYED

NEW DIRECTOR ASSESSES PUBLIC'S APPRECIATION

Mr. W. J. Bellingham, who, as director of music, will control the programmes for the Radio Broadcasting Company throughout New Zealand, expressed himself thus to a "Radio Record" representative regarding public appreciation of music:

"Respect your public," he says, "and they will respect you. Do not underestimate the capacity of the audience to appreciate good music well played. Majority opinion is generally sound. It will not express itself in a technically correct manner; it will not know the reason of its preferences (though it may think it does), but it does know the difference between good and bad. This reminds me of a very common error of expression. We continually hear the remark, 'I do' or 'I do not like classical music.' Classical music is commonly supposed to comprise all music that is involved or difficult to understand, in contrast to lighter and more melodious forms. The person who disclaims most strongly against classical music will be delighted with

Beethoven's Minuet in G. As a matter of fact the term 'classical' in music refers to an early period and to music written in the style of that period. The large majority of our master composers do not belong to the classical school, but to the romantic or modern schools. Musical compositions in their content are very similar to literature, and what is good and bad in both is produced in very similar proportions. The difference is, for the understanding of music an intermediary in the person of a performer stands between composer and the listener. I have no hesitation in saying that the full beauty of the works of the great masters is seldom heard in New Zealand, and in very many cases works of great beauty are so marred in performance that the listener is justified in discrediting the result. Unfortunately he more often blames the composer than the performer. I believe in a varied programme, with a major proportion of standard works. The essential feature is that what is done, whether it be fox-trot or symphony, must be well done."

RADIO RECEPTION IN NEW PLYMOUTH

EXPERIMENTS CONDUCTED

As 'tho' wearing the seven-league boots so renowned in nursery fairy tales, instead of moving in waves which are measured by metres, the radio energy from 2YA seems to jump over certain localities. Only a proportion of the power that was expected has been received. This has been the case in New Plymouth and it has been a source of great disappointment to listeners in that town who expected that 2YA would nearly "lift the roof." For the purpose of seeing and hearing for themselves, Mr. A. R. Harris (General Manager of the Radio Broadcasting Co. of New Zealand Ltd.), and Mr. J. M. Bingham (the company's chief engineer), accepted an invitation from the New Plymouth Radio Society to visit that place. They were most cordially welcomed and entertained and they conducted tests in several parts of the town. The members of the Radio Society could not do enough for the convenience of their guests and at a meeting on Monday night there was a general clearing of the air. The investigations

and receiver, Mr. Harris said that the company's contract was originally to instal four half-kilowatt stations the first two at Auckland and Christchurch, and the second two at Wellington and Dunedin. It had no obligations to carry on the old stations at Wellington and Dunedin, but did so. And in running a 24-hour service at Auckland and Christchurch instead of a 12-hour one it had to depend on voluntary talent. Sometimes the artists did not put in an appearance, and some times they did not give what the company wanted, so the matter of maintaining the standard of concerts was a difficult one.

The company had to take over the four old plants, realising at the same time that it would have to scrap them all. While the company was fully aware that "the programme is the thing of paramount importance," yet it was necessary that good studios and appointments should be provided, and at the same time the new stations had to be erected. It was subsequently decided to increase the power of Wellington considerably while they were on the job, and the constructional work at Auckland, Wellington, and Christchurch was now completed. Owing to better plants and better organisation the programmes had recently been much improved.

Cost of Operating Station.

When making comparisons with the services in Australia and England, it had to be remembered that whereas England had 2,000,000 people to each station, and Australia a million, New Zealand had only a quarter of a million. In England the land lines were used for the purpose of duplicating the broadcasting of programmes, but this was out of the question in New Zealand as the land lines here would not transmit music. The only way to remedy this was to instal repeater stations, costing between £10,000 and £30,000 each, to provide four channels of different frequencies. It was satisfactory to know that, in spite of expectations to the contrary, it was now confidently anticipated that musical programmes from Wellington could be rebroadcast from Christchurch. The rebroadcasting of speech was not so difficult a matter. It was a question of the availability of the lines.

The Problem of Fading.

Mr. Bingham, dealing with the technical aspect of "fading," said that increases in the power at Wellington evi-



MR. WILBUR DAVIES.

Mr. Wilbur Davies, of Welsh descent, possesses a fine baritone voice, full of quality and power. He renders his solos with fire and dash, inspiring them with a depth of meaning always found with the baritone of his country. He is a newcomer to the Dominion, and listeners to 2YA will have an opportunity of being the first to hear him before the microphone on September 22.

by the company's experts was productive of much good in many ways. The report from the "Taranaki Daily News" of September 6, states:

Messrs. A. R. Harris (general manager of the company) and J. M. Bingham (chief engineer), who conducted a series of tests in New Plymouth during the week-end in an attempt to solve the trouble of fading, were the guests of the society last night, and by their answers to a number of questions satisfied most of their audience that the company was doing its best in the interests of the listeners-in.

As an outcome of preliminary investigations tests had been carried out over the week-end, said Mr. Harris, and while it had certainly been found that fading was a distinct disadvantage in North Taranaki, yet Mr. Bingham and the speaker had something definite to work on, and hoped to be able to effect an improvement. There had been hundreds of conflicting reports about fading, and it could not be said whether it was due to atmospheric or something else. Wellington, during the past week-end's tests, had been found to be no better than Auckland under normal conditions, and as an experiment the power was increased to 10,000 watts, or 20 times the power of Auckland. Still the results were no better. Some absorption seemed to exist somewhere. The power undoubtedly went into the air quite steadily at Wellington, but where it went to after that he did not know.

Progress to Date.

Outlining the progress made to date, and the position as between broadcaster

dently did not effect an improvement in New Plymouth reception. It may be that Mount Egmont was the cause, and it may not. The theory of broadcasting was that one wave left the station and followed the surface of the earth, while a second, or "reflected" wave, travelled round the edge of the atmosphere. If the two waves synchronised in movement exactly, reception was satisfactory, but when the two waves did not synchronise fading and mushiness occurred. When receiving weak stations such as KGO (Frisco) listeners-in often experienced fading, but no mushiness, owing to the fact that only one set of waves reached them. The only way to improve the position in New Plymouth seemed to be to alter the method of sending the power from the aerial in Wellington. Experiments would be carried out on Thursday, Friday, and Saturday of this week, alterations being made on each of these days.

In reply to Mr. J. S. Lynch, Mr. Harris said that in the event of the company being unable to effect an improvement with the present plant, by experiment, it could do nothing further for the present. It had been suggested that Auckland's power might be increased, but the company would not do that, because from 75 to 80 per cent. of the power from Auckland was lost at sea. If the present schemes failed, the most practical alternative for Taranaki seemed to be the provision of a relay station in South Auckland.

Replies to Questions.

For some time Mr. Harris was bombarded with questions, in the course of answering which he said that the company could not at present consider starting broadcasting before 3 p.m. unless it were shown that the majority of listeners-in wanted this. In spite of the contention of his questioner that the farmers wanted to listen-in between 2 and 3 p.m., he said that the peak hour for the farming community had been found to be 7.30 p.m., and for the city community 9.30 p.m. The company had offered the Education Department the period from 2 p.m. to 3 p.m. for the purpose of broadcasting lectures for school children. If the majority of the listeners indicated that they wanted the afternoon session to last from 2.30 to 4.30 instead of 3 to 6, no doubt the company would do this.

For several reasons the company intended to continue with its "silent" days. For one thing, city listeners wanted one day when they could receive outside stations without being swamped by their own station. Secondly, the staff were entitled to one day off a week.

Asked whether the company would experiment to reduce fading by alteration of the wave length, Mr. Harris said that there was a limit to which the wave-length could be changed without overlapping other stations with the permitted band.

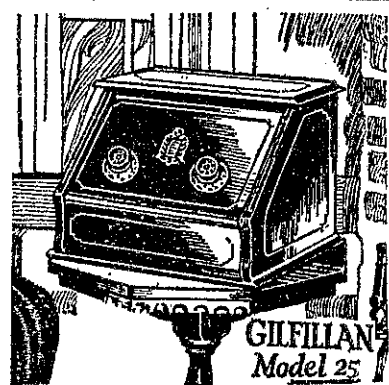
"Is the company opposed to broadcasting by 'free' stations such as Dra-leigh College, Auckland, and would the company welcome another meeting of the advisory board? were two written questions submitted. The first matter, said Mr. Harris, had not been discussed by the company. In regard to the second, he might point out that in the company's contract there was no mention of an advisory board. He would not say that the advisory board did not do good, but it dealt only with minor considerations, and not with fundamentals. It all boiled down to a question of qualified men, who demanded high fees, and this in turn developed into a question of staff.

At the conclusion of the meeting, on the motion of the Mayor (Mr. F. E. Wilson), who presided, a hearty vote of thanks to the visitors, was carried by acclamation.

DOMINION REVIEWED

The Rev. James Barr, M.P. in the British House of Commons, who has been touring New Zealand, has consented to give his impressions of the Dominion from 2YA on Thursday afternoon, September 15. This is the only time that can be arranged that is suitable for Mr. Barr, as his time is limited.

GILFILLAN RADIO



Complete Satisfaction in Tone, Selectivity, and Range.

Powerful compact 4-5-6 Valve Models. Model Nr 25 illustrated has outstanding features of Single Tuning Control and the separate metal shielding of the three radio stages which give the highest degree of selectivity, clear reproduction and purest tone quality. Six valves are used, including a power valve. The set has three stages of radio and two stages of audio frequency amplification. Cabinet is hand carved brown mahogany, with handsome satin finish.

All good Radio Dealers stock GILFILLAN.

GILFILLAN FOR RADIO SATISFACTION.

Controlling New Zealand Agents:—

RADIO LIMITED

WRIGHT'S BUILDINGS, FORT STREET, AUCKLAND.
Sub-Agents for Wellington, Wairarapa and Manawatu Districts:
Harringtons (N.Z. Ltd., Willis Street, Wellington.