

2YA Overhauled

From Microphone to
Aerial

A COMPLETE overhaul of 2YA's transmitting equipment has just been completed by the company's chief engineer, Mr. J. M. Bingham. The station is now working perfectly. Every piece of apparatus, from microphone to aerial, has been thoroughly examined and tested.

The quality of the transmission has been carefully checked by an oscillograph. Of recent evenings listeners may have heard 2YA broadcasting the whole range of frequencies. These tones were generated by a low-frequency oscillator and the transmission of 2YA, covering the very wide range from 60 cycles to 6000 cycles, has flat characteristics; that is, the amplification of the original sound is the same for all frequencies within this range.

The attainment of this desirable result was not achieved by merely testing each individual piece of apparatus separately, but by carrying out the frequency tests with the whole of the station's apparatus in use—all the circuits, including the land-line to the studio, the amplifiers, the modulating equipment, etc.

Strange as it may sound, visual proof of the accuracy of the transmission was obtained by means of the oscillograph referred to, a very delicate instrument which showed the nature of the transmission and the effect of the various adjustments made.

The oscillograph, an expensive piece of apparatus, is the latest addition to the Broadcasting Company's equipment and has been used for the first time in this overhaul of 2YA.

The Pope's Address

Successful Rebroadcast

IN connection with the very successful rebroadcast of the opening of the new short-wave station in the Vatican City on Friday, February 13, last, Dr. James M. Liston, Bishop of Auckland, has written to the Station Director at 1YA as follows:—

"On all sides our people are speaking of the delight with which they heard the broadcast from 1YA of the Pope's address on Friday morning. Whilst offering you my cordial congratulations on the great success of the broadcast, may I add that we all appreciate very highly the excellent manner of the announcements."

Following on the rebroadcast, Mr. A. R. Harris, General Manager of the Broadcasting Company, forwarded a cablegram to Senatore Marconi at Rome, advising him of the result of the broadcast by the New Zealand stations. Senatore Marconi promptly replied:

"Most sincere thanks for your kind message and most efficient co-operation, for which please accept my very sincere congratulations.—Guglielmo Marconi."

"Radio Record and Home Journal."
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The Advantages of Crystal Control

Synchronised Programmes

AS recently reported, crystal control has been installed at 3YA and various alterations have been effected at the studio. The policy of the R.B.C. is to keep the transmitting equipment and studios of their stations completely up to date, and to that end additions and alterations in accordance with the best practice are continually being made.

It is quite two years since crystal control was installed at 2YA, and this is indicative of the policy of the Broadcasting Company, for, apropos this, the latest news which the company has received from America shows the development in that country of automatic crystal control. Most broadcasting stations in the United States are maintaining their frequency within 100 to 200 cycles of their assignments.

In a country like America, where the air is crowded with stations, it is of vital importance that frequencies should be strictly adhered to.

The development of commercial equipment maintaining carriers within five or ten cycles of a given frequency is a matter of the utmost economic importance in Europe and America, where the number of broadcast stations to be accommodated is considerably greater than the number which can be accommodated on the available channels. As the standards of frequency control continue to improve, the day is approaching when carrier differences between stations on the same channel will be below the audio range, eliminating heterodyne interference where carriers overlap.

Experiments in Synchronisation.

AT the same time that progress is being made toward independent local sources of stable carrier frequencies, steps are being taken for an exhaustive experiment to learn the effects of phase distortion occurring

from the reception of two stations, the carriers and programmes of which are synchronised. The synchronisation method employed will be the transmission of carried frequencies and programmes over wire lines, and means will be provided for altering the phase relation between the audio components of the two stations.

Four leading stations of the National Broadcasting Company system, WEA, WJZ, WBAL, and WTIC, are participating. WEA and WJZ are of 50,000 and 30,000 watts power, respectively, located near New York City, and enjoy full time operation on clear channels. WTIC, Hartford, Conn., and WBAL, Baltimore, MD., on the other hand, share a cleared channel, which each uses on alternate days.

In order to permit the simultaneous operations of both of these stations, each will synchronise with one of the New York stations during that period when it would normally be standing-by for the other. WTIC, in Hartford, will synchronise with WEA, a distance of about 108 miles, while WBAL has the use of the cleared channel.

On the other hand, when WTIC is entitled to use the cleared channel, WBAL will synchronise with WJZ, a distance of 140 miles from Baltimore.

The reason that this experiment is particularly significant is that the listener will be able to hear each of the stations with and without synchronisation. The availability of a comparison makes it possible for the uninitiated to pass judgment upon the effect of synchronisation upon quality. Furthermore, the experiment affords two ratios of local to distant signals of significant values. The high quality service area of WTIC and WEA overlap, and are of equal and substantial value at many points. On the other hand, WBAL is but 10,000 watts and 140 miles from WJZ, so that almost any ratio of field strength difference can be observed.

Lord Baden-Powell 1YA Children's Picnic

Broadcast Schedule

THE schedule of broadcasts in connection with the visit of Lord and Lady Baden-Powell to Wellington and Christchurch is as follows:—

Friday, February 27.—Civic reception in Wellington Town Hall at 8 p.m.
Saturday, February 28.—Scout and Guide Rally in Basin Reserve, Wellington, at 2 p.m.

Tuesday, March 3.—Civic reception at Christchurch Municipal Chambers, 12 noon.

Saturday, March 7.—Scout and Guide Rally at Addington Show Grounds at 2.30 p.m.

Sunday, March 8.—Special service in Christchurch Anglican Cathedral to commemorate the handing over to the Cathedral Chapter of a dedicated flag, a white ensign, from the Cenotaph, London, presented by the Boy Scouts of Britain to the Boy Scouts of New Zealand, 3 p.m.

Date Postponed

AT a meeting of the 1YA Children's Session Advisory Committee, the question of holding a picnic was considered, and it was decided, in view of the changed circumstances which have arisen since the proposal was mooted, that arrangements in connection with the outing, which was tentatively fixed for March 7, be not proceeded with in the meantime, but that a similar attraction be organised for some future date.

The Rev. L. B. Busfield (representing the Sunday School Union) presided and there were also present: The Rev. Albert V. Whiting ("Uncle Bert"); Mrs. Jean Le Petit ("Aunt Jean"); Mr. David Faigan ("Uncle Dave"); Miss R. Palmer (children's organiser at 1YA); and Mr. L. C. Barnes (station director at 1YA).

Abusing Their Privileges

Station Proprietors
Indicted

RECENTLY a paragraph appeared in these pages concerning the charges brought by the Federal Radio Commission of America against the proprietor of a radio station for broadcasting "obscene, profane and indecent language."

It now appears that this broadcaster, who was convicted on the charge in question, has again been brought before the Radio Commission to determine whether or not he should be permitted to "go over the air" again. In support of his claim he was able to bring forward 167,000 affidavits in which listeners attested that "they could not live without his programmes." So great, indeed, was this avalanche of testimony that it could not be contained within the court itself, and a room was rented specially to hold it.

It is doubtful whether the new license will be granted, but apparently such is the appeal of the broadcasting methods described that two other station proprietors have been indicted for a similar offence.

The second was a defeated candidate for Congress who used a particular station in order to heap criticisms upon those who opposed his candidacy. He was adjudged guilty of violating that provision of the Radio Act which says that "no person within the jurisdiction of the United States shall utter any obscene, indecent, or profane language by means of radio communication."

The third case was that of a Senator who made a violent broadcast attack against the "radio trust" and was defeated in his purpose, not by the Radio Commission, but by an ingenious enemy of his. While the full flood of his inspired eloquence was in course of transmission, a spurious S.O.S. alarm caused his speech to be shut off.



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