

THE NEW ZEALAND Radio Record

PUBLISHED WEEKLY.

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SUBSCRIPTION RATES.

Rate of Subscription: Single copies, 8d.; Annual Subscription (if booked), 12/6, post free; normal rate, cash in advance, 10/6, 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.

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

P.O. Box 1032.
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WELLINGTON, FRIDAY, JULY 20, 1928.

RACE BROADCASTS BANNED

THE Trotting and Racing Conferences have together decided to ban their meetings from public broadcast on the grounds advanced that thereby illegal betting is encouraged, and the business community distracted by the time taken in listening. Unquestionably the racing authorities are entitled to manage their own business in their own way. And the public, although it might not like the decision, would have no valid ground for objecting if the conferences said that in their judgment the broadcasting of race meetings kept people away and diverted money from the "tote" to other channels, and by doing these things was affecting their financial strength and the security of their investments. But the conferences have not advanced those reasons—in fact, we do not believe they apply—and have based their decision upon grounds which are debatable and fitly the subject of public comment.

THE party most concerned is the public. How will the public appreciate the action of the Racing Conference and the Trotting Conference? It is the public that supports these sports, and it is entitled to express its view concerning the news service it would like in relation to them. The allegation is that broadcasting promotes illegal betting; that hotels, clubs, billiard saloons have sets installed, and the receipt of the news promotes the activity of the bookmaker. What are the police doing—if these statements are correct? But are they? All race meetings are not broadcast. The bookmaker does business on all (presumably), and has made it his business, as a matter of common knowledge, to acquire his information by other means in respect of all meetings. He did this before the advent of broadcasting, and the system still obtains. Banning broadcasting will not ban the bookmaker. It will simply limit the pleasure and curb the enjoyment of a large body of inoffensive listeners because of a questionable claim that a public utility is the subject of abuse. Every modern convenience and utility is the subject of injury as well as good. The motor-car dispenses death as well as health; chemistry saves life as well as takes it; all utilities are subject to wise administration and the assessment of merit by balance. Where does the balance lie here? Our view is that the wheel of progress cannot be stopped. That the public, if it is entitled to the recreation of racing in an exacting world, is entitled to the additional service of pleasurable and rapid descriptions thereof. The reasons advanced by the conferences for their decision are not in our opinion valid in themselves, and are but a cloak for other reasons. The decision rests with the public, and we believe the public will not be slow in expressing disapproval and disappointment at the failure of these responsible conferences to balance out the merits of the case, and allow the good of the greatest number to have sway.

Hellesen Radio Batteries

THE BEST IN THE WORLD

DOES THIS NAME MEAN ANYTHING TO YOU?

HELLESEN STANDS FOR BETTER RESULTS, LONGER LIFE, AND GREATER EFFICIENCY IN YOUR SET.

Large Stocks Carried by

SOLE N.Z. AGENTS.

John Chambers & Son, Ltd.

AUCKLAND, WELLINGTON, CHRISTCHURCH, DUNEDIN, AND
INVERCARGILL.

Crystal Control

EFFECTIVE AT 2YA.

FIRST IN AUSTRALASIA.

STATION 2YA is now equipped with Piezo Crystal control, and is believed to be the first station in Australasia to be so equipped. Mr. J. M. Bingham, the company's engineer has been in Wellington for several days past working on this equipment. The work is now completed, and the station is now transmitting on the new system. This is a marked advance and demonstration of the desire of the company to keep the station equipment in the forefront of technical efficiency.

With the conventional valve oscillator there was reason to suspect that the frequency of the wave would be liable to be varied by the impressed speech and music as well as the amplitude of the wave. For best operation the wave length should not vary—only the power of the station be varied by the speech or music. If a station suffers from frequency as well as amplitude, modulation, it is bound to suffer from a certain amount of lack of clarity. Under crystal control the possibility of frequency variation is reduced to an absolute minimum, and the wave put out has only the amplitude variation which is the objective desired.

The frequency of 2YA, it may be stated, is 713.9 kilocycles.

As showing how up-to-date 2YA is now in comparison with other stations, we append a brief reference to crystal control from an American authority which is just to hand by the American mail.

SPECIAL piezo oscillators, which will hold a station so close to its frequency that several such stations can operate on the same wave length without interference, is a possibility of the very near future, according to Dr. J. H. Dellinger, of the radio laboratory of the United States Government Bureau of Standards.

"Radio frequency standardisation, of hitherto laboratory character only, has been of first importance in reducing radio interference," says Mr. Dellinger. "The recent International Radio Conference recognised frequency as the corner-stone in the radio structure by devoting its major attention to a frequency allocation to provide for the orderly development of all radio services."

"Because of the increasing use of all available radio channels, particularly those for broadcasting, and the very high frequencies, the requirements of frequency measurements are a hundred times more rigorous than they were five years ago. The perfection of standards and measurements to the necessary accuracy requires the most intensive work by the Government and by various large organisations to produce standards and instruments that can be used to keep radio stations each operating on its own channel. This development has been facilitated by a special co-operative plan organised by the Bureau of Standards a year ago involving the Commerce, War and Navy Departments and several large American electric and radio companies."

"Piezo oscillators are now available to hold radio station frequencies extremely constant. For instruments of this type equipped with temperature control, national and international comparisons have shown that they are reliable to a few parts in 100,000."

"This brings in sight the possibility of the use of special piezo oscillators in broadcasting stations which will hold the frequency so close that several such stations can operate simultaneously without heterodyne interference on the same frequency."

SPORTING

NEXT WEEK'S FIXTURES

Wednesday, July 25: Otago v. Wairarapa, 4YA.
Saturday, July 28: Rugby—1YA, 2YA, 3YA and 4YA.
Boxing—Griffiths v. Barber, 4YA (Mr. Divers, Announcer).

"MYSTERY NIGHT" FOR 1YA

DATE FIXED FOR AUGUST 29

PRIZES FOR READERS.

IN accordance with the recommendations of the 1YA Musical and Dramatic Committee, a "Mystery Night" programme is to be broadcast on Wednesday, August 29. On September 26 there will be another "Mystery Night" programme.

On the first occasion the names of the artists will not be announced, but listeners will be asked to fill in coupons which will be published in the "Radio Record." The "Radio Record" will offer a prize to the reader returning the most correct coupon most speedily, and the exact terms will be published later.

On the second occasion the names of the items which are being given will not be announced, and here again a prize will be offered for competition amongst those possessing the necessary skill to detect the items.

The New "Radio Record"

Souvenir Number on August 3

WE had hoped that the change in our size and shape could have been effected with the commencement of our second year, and began planning to this end some months back. The paper required has to come from Canada, and shipment from the mills is not always immediately available. We believe supplies will be in hand by a steamer due this week at Auckland, and the change will be made just as quick as delivery is secured.

We make this explanation in response to several letters from listeners who were desirous of getting the first volume of the "Radio Record" bound. The 52nd issue bore date July 13, but our suggestion to listeners concerned would be that they should withhold binding till the change is actually made. We hope the new size will appear on July 27, but if not then certainly on August 3. We sincerely regret this delay, which we endeavoured to avoid by moving in the matter of new paper five months ago, but the delays have been beyond our control.

The issue of August 3 will be of a specially comprehensive and valuable character, running probably to 48 pages or more. It will be a souvenir number, commemorating the opening of 2YA, and the completion of its first year of service to listeners. Opportunity will be taken to give a particularly comprehensive review of developments in connection with broadcasting. We can assure readers in advance that this will be a specially interesting number.

What Tones can your Set Reproduce?

Continued from cover.

the fact that it contains practically no harmonics, particularly when softly blown. The flute is thus seen to be an instrument of the purest possible quality.

The test transmission will range from frequencies of 32 to 30,000. That limit is, of course, beyond the capacity of any set and of many human ears. Sets should be capable of receiving at least up to 10,000. If, on the other hand, sets are capable of receiving only up to 5,000, instruments and voices become more or less colourless and similar in quality, and one instrument can hardly be told from another.

To help listeners to make a complete record of the result of the test, so far as their own set is concerned, the "Radio Record" publishes a schedule on which are marked the various frequencies which are to be broadcast, and listeners are invited to mark opposite each one the manner in which it is received.

The Broadcasting Company invites listeners to send in these coupons so that an analysis of the results of the test can be made.

TABLE OF HARMONICS

The following table of harmonics is referred to on page 1.

	Piano	Clarinet	Flute	Cornet
3rd octave above....	10 9 8 7 6 5 4 3 2	Bf—Bn, 1800° G, 1820 B, 1850 C, 1080 G, 810 C, 540	Bf—Bn, Absent B, 1236 G, 1280 C, 1024 G, 768 C, 512	E, 2560 D, 2294 C, 2048 Bf—Bn, 1792 G, 1536 B, 1280 C, 1024 G, 768 C, 512
2nd octave above....	4 3 2	C, 1080 G, 810 C, 540	Absent G, 1236 B, 1280 C, 1024 G, 768 C, 512	
1st octave above middle C 1	C, 270	C, 270	C, 270	C, 256

Bf—Bn equals B flat and B natural.

"CAPPING" BROADCAST

4YA USES PORTABLE TRANSMITTER

A BROADCAST of the students' capping celebrations in Dunedin on Tuesday, July 10, was well carried out by 4YA, and proved thoroughly enjoyable. The whole carnival was well "covered," and listeners in who have never seen how Dunedin students honour the important occasion were able to form a good appreciation of all that was going on.

The street scenes were described by the announcer, who visited various parts of the city in a motor-car equipped with Mr. J. D. McEwen's short-wave transmitting set. This transmission was picked up on Mr. F. Barnett's short-wave receiver at the Kai-korai Band Room, relayed to 4YA and then broadcast. The transmitter in the motor-car was operated on a wavelength of 80 metres, so that, owing to

the harmonics, it could not be received at the station.

The crowd which surrounded the motor-car made transmission difficult, but compensation lay in the fact that the street noises added colour and atmosphere to the broadcast. Whenever the crowd was silent the broadcast and re-broadcast were exceptionally clear. At one place where the car stopped there was some electrical interference which prevented any transmission.

As well as the street performances, the doings in the Octagon Theatre were described, the two broadcasts alternating. Big Brother Bill was in charge of the microphone and he gave a breezy account of all that was happening, while the students' speeches, picked up from the public address loud-speakers, were relayed and broadcast.

IF reversing the condenser leads does not stop hand-capacity effects it will often be found that one of the grid leads is placed too near to the panel face.

DON'T YOU THINK YOUR RADIO SET COULD BE IMPROVED?

IF Philips "Miniwatts" are NOT in every socket of your receiver, then certainly there is ample room for improvement.

It is only when you take a full set of these mighty valves home, and place them in your receiver, that you realise that they are DIFFERENT.

See that you are using the CORRECT TYPES by either writing to us, or asking a GOOD dealer.

Whatever you do, see that you get a copy of our attractive and informative value folder.



Advt. of Philips Lamp Co.
(N.Z.) Ltd. (Radio Dept.),
Hope Gibbons Building,
Courtenay Place, Wellington.