## Reception in Waikato

# Value of Local B Station

(By "Microphone.")

ALTHOUGH subject to fading, 2YA and SYA are the two New. Zealand stations best received in the Waikato district.

Fading is not generally experienced with 1YA, but in places about 100 miles away from the station where the ground and sky waves neutralise a large amount of distortion often mars reception. The high voltage power lines around Matangi, Te Awamutu and other places impair the quality of the reception.

The relays last year of 1YA's Interrational programme on Tuesday evening by the Hamilton B station 1ZH were greatly appreciated, many listeners in the Walkato preferring the local relay to the direct transmission from Auckland.

1ZH, which is conducted by Anchor's Radio House, Victoria Street, Hamilton, and operates with a power of 50 watts on a frequency near that of 4YA, Dunedin, has done much to foster radio in the Waikato since the station's inception about eighteen months ago. The station's programmes consist mainly of recorded items, temporary permission to carry on with these having been received from the headquarters in Sydney of the gramophone companies imposing the ban on the broadcasting of records. The station has relay lines connected with 1YA, Auckland, and the Winter Show Concert Hall in Hamil-

Since the abandonment this year of the International programmes, 1ZH has not relayed 1YA's Tuesday broadcasts. The Hamilton station has not received advice from the Broadcasting Board as to whether weekly relays are to be continued. The Board, by subsidising 1ZH, and by stepping up its power to 100 watts, could cater for the many listeners outside the range of 1YA and 2YB, New Plymouth,

#### 1YA Combinations

A MONG the new combinations that assisted in the bright programmes from 1YA last week were Mr. Hadyn Murray's Trio (violin, 'cello and piano); the Mounce Sisters, specialty jázz melody duets, the Walter Rae Duo, saxophone and novelty piano duets, and the Da Silva South Sea Wanderers, a novelty instrumental combination.



CATHLEEN MULQUEEN, mezzo-soprano, who will be heard in several numbers with Len Barnes from 1VA on January 20. —S. P. Andrew photo.

#### Did You Know That-

TF one of your telephone enrpieces breaks down, remember that a wire near electric light power wires or an across its two terminals may enable induction hum will almost certainly be you to listen to the conclusion of the picked up. programme on the one earpiece.

WHEN plug and jack contacts have been in use a long time they should be examined occasionally for specks of dust, dirt, etc. These may lower the efficiency of the component. which may give rise to crackling if its contacts are not cleaned and scraped occasionally.

TF you are unable to get reaction when ward the lower end of your tuning your set is oscillating. range, a small fixed condenser, usually .0001 or less, connected across the reaction condenser is an improvisation worth trying.

ON some audio transformers it is the practice to provide an extra terminal by means of which the metal case of the instrument may be connected to earth, but there is no need to

### Radio-Gram. Instability

#### Several Causes

IT is occassionally found with combination sets that when they are bination sets that when they are switched over from radio to gramo-phone howling results. It may be found that the pick-up itself cannot be touched without getting a squeak from the loudspeaker, while in other cases, when volume is increased, instability and the properties. These are two main causes of There are two main causes of this trouble-firstly the amplifying itself, and secondly the position of the pick-up. In the first place it may be found that the howl takes place principally when using the pick-up and the amplifier is being given a far greater input voltage than that used with radio. This increased voltage when amplified, is sufficient to cause audio oscillation. To completely re-design the amplifier is perhaps the best cure in this case.

Far more common is the trouble due to long pick-up leads. Long loud-speaker leads, which run near the aerial or the aerial circuit of the set tend to cause instability, when the set is working on radio. In a similar way the pick-up leads, when trailed near the audio end of the set, or when running near the loudspeaker may cause trouble when the pick-up is put into operation. If long pick-up leads are necessary it is quite a good plan to use transformer input at the set end. An ordinary radio transformer will be quite satisfactory in most cases, though there are few pick-ups which do not operate well when used with input transformers.

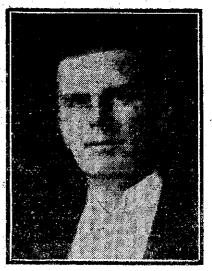
Finally, never run bick-up leads

connect this up if perfect results are obtainable without such a connection.

TROUBLE with reaction overlap is often due to the wrong "B" voltage on the detector, to an unsuitable detektor valve, or to a grid leak of wrong resistance.

TOO much reaction is worse than none at all, for it is impossible to hear your condenser is all in. except to long-distance or good quality signals if

> FOR accurate tuning on a short-wave set there are many advantages in mounting a small magnifying glass over the tuning-dial scale.



LEN BARNES, who will broadcast with Cathleen Mulqueen from 1YA on January 20.
—S. P. Andrew photo.

#### Radio in Sweden

#### Swedish Journalist's Views

REMARKABLY good reception of local and European stations is obtained in Sweden, according to Mr. Jansen, a Swedish journalist, who is visiting New Zealand in the course of an extended tour.

Mr. Jansen, in a brief chat with "Microphone" in Auckland a few days ago said the owner of a three-valve receiver in Sweden was able to hear practically every station in Europe. This was accounted for to a large extent by the geographical nature of Sweden as the country was generally flat and the greater part in close proximity to the sea. The highest hill near the capital, Stockholm, was only about 1000 feet.

Mr. Jansen said Sweden possessed only one main station which was situated near Stockholm, but there was a number of relay stations. The service was conducted by the State, the license fee being equivalent to about 14/- a year. There were approximately 300. 000 licensed listeners in Sweden.

Mr. Janson displayed a keen interest in the Auckland station. He closely inspected the studio equipment and the transmitting apparatus and took several photographs. He said he was impressed with the progress made in radio in the Dominion.



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