had no experience either of superhets or of screen-grid valves.

A.: In the circumstances we do not advise you to begin a.c. construction by building an A.V.C. superhet, because a certain amount of experience is required before a set of this type can be built successfully. If you would like to commence with a superhet, build the "Eight Star Five," described in the August "Radio Times." This is a five-valve superheterodyne employing the latest type valves. Its construction is quite straightforward and is explained in detail in a lengthy article, which is well illustrated with diagrams and photographs. This set is capable of a very fine performance, and we are sure you would be pleased with it.

# FOR SALE or EXCHANGE

The rate for small advertisements under this heading is 1/6 cash for 20 words, and twopence for every other word thereafter.

#### SEASIDE HOUSE TO LET.

TO LET, for term at Eastbourne, Wellington's finest seaside resort, Gentleman's fully-furnished modern residence. Bight rooms, large sunporch, garage, telephone, electric light, electric stove, electric hotwater, septic tank. Right on beach, one minute from wharf. Moderate rental. Reply "Seaside," c/o "Radio Record."

FOR SALE, Philips 5-Valve A.C. set.
Absolutely perfect order. N.Z.,
Australian, American and Japanese stations received. Owner must sell. Leaving A.C. area. Price, £7 cash. "Philips,"
c/o "Radio Record."

FOR SALE, Solare 4-volt, 100 amp. type 2 N.L.W. accumulator. Hardly used. Sell for 30/-. "Solarc," c/o "Radio Record."

FOR SALE, Jensen Dynamic Speaker in good condition; 25/-. "Super," c/o Box 1032, Wellington.

FOR SALE, Second-Hand Microphone. Complete on table stand. Can be used with any set. Practically new. What offers?—"Micro," c/o "Radio Record."



# RADIOSERVICEMAN'S

• EXAMINATION

Governing regulations say that all Radio men must be fully qualified. To ensure this the Radio Serviceman's Examination has been inaugurated, which calls for an exact knowledge of radio principles and a correct diagnosis of radio troubles. Can you face the examination paper without being afraid of the results? Write to Mr. E. C. Johnson, A.M.I.R.E., Johnson's Wireless and Radio College, 8-10 Erandon St. Wellington, or Phone No. 42—468 about his various courses of instruction in Radio, especially the Radio Serviceman's course.

JOHNSON'S Wireless and Radio College WELLINGTON.



# THE WORLD ON SHORTWAVE

By F. W. Sellens

Empire Transmission Changes.

CERTAIN changes have been announced to take place as from October 8 in the hours of transmission and the naming of the zones.

The existing zonal names will not be used after this date, but the daily transmissions will be numbered in accordance with the following schedule:—

Transmission 1: 7 p.m. to 9 p.m. (October). (This time is changed from month to month as previously mentioned in these notes.)

Transmission 2: 12 midnight to 1.45 a.m. (12.30 a.m. to 1.45 a.m. on Mondays).

Transmission 3: 2 a.m. to 6 a.m. Transmission 4: 6.15 a.m. to 10.45 a.m.

Transmission 5: 11 am. to 1 p.m. (New Zealand Summer Time.)

The zonal names are to be dropped because it has been found that, in some instances, certain zones were receiving the Empire station programmes better when they were being radiated for other zones than their own. For instance, during a part of the year the African zone transmissions were being received better in New Zealand and Australia than the programmes intended for this part of the world.

#### Interval Signal From Daventry.

THOSE who listen to the Empire station will have heard a peal of bells during intervals. This is what the B.B.C. say about this interval signal: "Listeners who have found intervals between the programmes tending to become monotonous-even when enlivened the extempore remarks of an announcer will have heard already the peal of Bow Bells, which are being sent out when an interval is expected to exceed two minutes. Two distinct chimes are pealed on Bow Bells-Queen's Chimes and Whit-Both have been electington's Chimes. trically recorded by a British gramophone company, but it is the Queen's Chimes which have been used in the first experiments, as they are sweeter in tone and less 'boomy'."

## Identity of 25-metre Stranger.

Will had decided that the station heard late at night on about 25 metres was a Russian. A correspondent to the Australian radio paper, "Listener In," with the help of a Russian, has found out that the station is located at Irkutsk. on the trans-Siberian railway. The power of the station is 25 k.w. The programmes heard have been relayed for the benefit of Russian nationals in Manchukuo and employ three directional aerial systems which are used at different times, according to the country or area which it is intended to serve. The modulation system employed allows 100 per cent. of the carrier being utilised. Irkutsk is on the River Angara, near Lake Baikal, close to the border of Mongolia.

### New Bolivian Station.

A new broadcasting station, Compania Radio, Boliviana (Bolivian Radio Company), has commenced operations with the call letters CP4 on medium waves,

and CP5 on short-waves. Station CP5 broadcasts during the day on a wave-length of 19.6 metres, and at night on 49.3 metres.

It operates from 11 a.m. to noon, and from 7 p.m. to 11 p.m. Bolivian time (2 a.m. to 3 a.m. and 10 a.m. to 2 p.m. N.Z. Summer Time). The stations are known as Radio Illiamni.

#### Confusion on the 25-metre Band.

There are no less than eleven stations operating between 25.27 and 26 metres, several of them often being on the air at the same time. As these stations do not all operate on the frequencies shown in various lists, or in fact, the wavelength announced by the station, some doubt is often experienced as to which is which. According to advertised frequencies they should be in the following order:—W8XK, 25.27; GSE, 25.28; W2XE, 25.36; 12KO, 25.4; WIXAL, 25.45; DJD, 25.51; GSD, 25.53; XDA, 25.54; VE9JR, 25.6; FYA, 25.63; and XAM, 26 metres.

The order in which they are actually received is:—W8XK, GSE, W2XE, 12KO, WIXAL, DJD, GSD, XDA, FYA, VE9JR, and XAM.

Five languages are represented in this group of stations, so near each other in wavelength, English, Italian, German, Spanish, and French.

#### Reception in Auckland.

Mr. Nelson G. Wood (Auckland), sends some notes on short-wave reception in his locality.

EAQ is excellent on Sunday morning, being R9 till signing off at 7.30 a.m., with the usual requests for reports to Box 951, Madrid.

The Empire Station is still improving. On Saturday, three transmissions were heard, the morning, evening, and 10.30 p.m. till 12.30 a.m. The last transmission has only just been found. GSF at this time is usually up to R8-9 early in the session, sometimes decreasing toward midnight; on other evenings the volume is maintained all through the session. GSG during the same transmission is very weak, being only just audible.

# Log for Week Ending Oct. 7

FYA, "Radio Coloniale," commence their afternoon programme at 12.30 a.m., just after the Empire station closes. They come in at maximum strength at this time.

GSB is poorly received, being spoilt by morse at times. They are best at 9 to 9.30 a.m.

W2XAF has been heard from 8.45 a.m. till signing off at 9.15 a.m., at good strength.

W3XAL on 16.8 metres continues to come in like a local station. Relays from the "Century of Progress Fair" at Chicago are heard on Wednesday mornings. They close at 8.30 a.m.

2RO, Rome, is best from 7 to 7.30 a.m. at RS, but poor quality.

WSXK, 25 metres, can be heard on Sunday till they fade out at about 10 a.m. They reach R9 about 9.80 a.m., and then slowly go off.

W2XE, 25.3 metres, when heard, is very weak. Has been heard on Sunday between 8.45 a.m. and 9.30 a.m.

A harmonic of 2UE, Sydney, has been heard on the 50-metre band at night. This may be one of the mystery stations.