

### Short-wave Wireless on American Aero-Planes.

EUROPEAN commercial aircraft generally use a wave-length of about 900 metres for ordinary wireless communication, but in the United States many of the machines operated by the principal American airways make extensive use of the short waves below 100 metres.

The Boeing Air Transport machines, for instance, are equipped for radio-telephony on wave-lengths of 53.7 to 71.6 metres. These transmitters have been allotted call-signs within the series, KHBA-KHBV. Similarly, the Western Air Express 'planes, have sets working on 46.3 metres in I.C.W. with call-signs, KHCA-KHCK.

The aircraft operated by the Pan-American Airways and the Suburban Air Lines of New York are equipped for transmission in C.W., I.C.W., and radio telephony on 72.7 metres and 97.5 metres, in addition to the usual aviation frequencies within the longer wave-bands. The call-signs allotted to these stations are contained in the series, KHAA-KHAY and KHFA-KHFF.

It will be noticed that these call-signs in use at present are four-letter combinations, and are therefore exceptions to the rule of five-letter call-signs, which prevail in respect of civil aircraft of most other countries.

W2XE, Atlantic Broadcasting Company, New York.

ALL the programmes originating over the Columbia system in America are rebroadcast over W2XE, the short-wave station of WABC, New York, operating on 49.02 metres.

New Stimulus to Empire Broadcasting.

THE following is from a recent issue of "Wireless Word" (England):—"How much longer is 5SW to be known as the experimental short-wave transmitter? Possibly the project for a permanent Empire broadcasting station will receive fresh impetus on January 21, when the speech of His Majesty the King at the International Naval Disarmament Conference will be sent out from Chelmsford primarily for reception throughout the Empire.

The B.B.C. can, I think, be spared any further criticism in the matter of Empire broadcasting, as the question is now in the hands of the Colonial Office. I understand that the Dominions and colonies are now being canvassed for contributions towards defraying the expenses of a permanent service. His Majesty's speech will thus come at an appropriate juncture; the Dominions are sure to make a determined effort to hear it (as well as the speeches of the Dominion representatives on the Conference), and the degree to which 5SW can make itself heard on this occasion may directly affect the financial enthusiasm of its audience."

### FOR SALE OR EXCHANGE

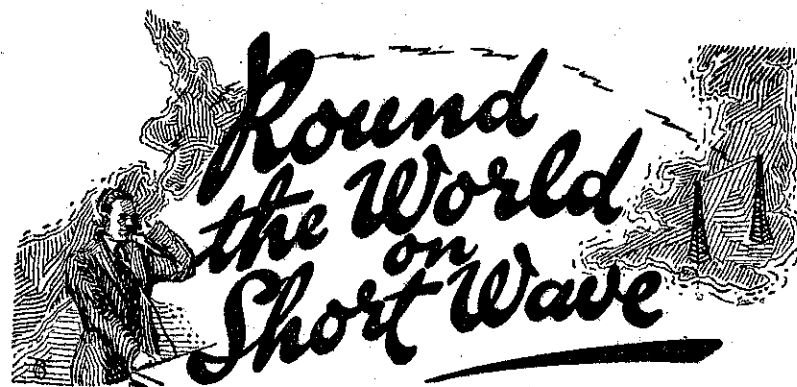
The rate for small advertisements under this heading is 1/6 cash for 20 words, and twopence for every other word thereafter.

80-VOLT. Philco Accumulator "B" Battery. Good condition. Ideal for short-wave set. Price £12/0/- . Reply "Power Plus," c/o "Radio Record."

STALLOY-TRANSFORMER. — Strips .36 x 1 inches, 2/- doz. Other widths proportional. Also supplied cut, punched. Special quantity quotations. Johns, Ltd., Chancery Street, Auckland.

SCREEN Grid and Standard Metrodyne Super Electrics give wonderful performance and value. Agents wanted. Catalogue Royds-Howard Co., 553 Colombo Street, Christchurch.

12 VOLT Number 6 Cells, guaranteed, 1/11 each posted; 45 Volt from 9/6. Speakers 32/6. Royds-Howard Co., 553 Colombo Street, Christchurch.



Reception during Week ending March 8, 1930.

CONDITIONS are improving for early morning reception of European short-wave stations, and it is hoped that some of these elusive strangers heard at about 6 a.m. will be identified as their signals increase in strength so as to be readable.

RA97, Siberia, 70 metres, has been received as usual at good strength, with plenty of static. On tuning them in on Wednesday at 8.50 p.m., Soviet news was being broadcast in English, received at full speaker strength, but static spoilt readability. A sextet from the opera "Lucia" was transmitted from the studio during an interval from the news items. This was followed by the doings of the Communist Party in various countries.

W9XF, Chicago, 49.83 metres carried on until 8 p.m. on Sunday. Since then I only heard them once—on Wednesday; they are evidently closing down earlier now.

W3XAL, New Jersey, 49.7 metres, was only heard on Sunday for a short time, being only R2 at 5.15 p.m.

W2XAF, Schenectady, 31.4 metres.—A programme of dance music from the crystal room, De Witzler Hotel, Albany, came in at R9 from 4 p.m. till 5 p.m. on Sunday. Volume was not quite as good on Saturday.

PCJ, Holland, 31.4 metres.—From 6 a.m. till 7.30 a.m. on Friday and Saturday PCJ was received at very good volume. On Saturday afternoon, signals were just audible at 2.30 p.m., increasing to R8 by 4 p.m., and remaining at that till 6 p.m., when the special New Zealand and Australian programme concluded with the striking of Big Ben. (Their Big Ben must have been the studio clock, at it was too fast in the chimes, and striking for the Big Ben.)

Zeessen, Germany, 31.38 metres, was heard each morning at an average volume of R8. On Wednesday, by the way of a change, some humorous songs with patter were heard. This was relayed from a hall where the audience were thoroughly enjoying the jokes judging by the way they laughed and applauded.

2ME, Sydney, 28.5 metres, continue to test with GBX, England.

GBX, England, 27.5 metres, vary considerably in the clarity of their signals when working duplex with 2ME. On Friday morning at 5.45 a.m. they were very good, the Englishman's voice was clear, but, strange to relate, the speaker from 2ME could be heard through GBX with even better clarity than the voice direct from England. This was probably accounted for by the Australian having a better broadcasting voice than the Englishman.

KZRM, Manila, Philippine Islands, 26 metres, appears to have settled down to 26 metres again, as this is the only wave-length I have heard them on since last writing. Reception from 10 p.m. is not quite so good now as a few weeks ago.

G5SW, Chelmsford, England, 25.53 metres, is improving quite a lot now at 7 a.m. Volume when opening at that time is about R2, readability being quite good. Rebecca West gave a talk on new novels on Tuesday morning. On Saturday morning "Literary Work" was the

subject of a talk in a series of talks on "Careers for Boys and Girls."

KDKA, Pittsburgh, 25.4 and 48.86 metres, were transmitting on two wave-lengths on Sunday. Volume was poor on each.

W6XN, Oakland, California, 23.35 metres, were received quite well on Sunday, Tuesday and Friday. Volume is best about 5 till 6 p.m.

W2XAD, Schenectady, 19.5 metres, was very weak on Sunday, about R3 at its best.

POK, Holland, 16.3 metres, at 8.30 p.m. on Tuesday were received at R8-9 with gramophone records, and were heard at 9.45 p.m. on Friday working duplex with PLE, Java.

PLE, Java, 15.74 metres, were calling Amsterdam and playing records at 9.20 p.m. on Tuesday. Strength R8. They were heard again on Friday at the same time.

PH1, Holland, 16.88 metres.—This station usually works at times not suitable for reception in New Zealand. They conducted a twelve-hour test on March 4 from 12 till 24 G.M.T. (midnight to noon on Wednesday here). Signals were R6 at 5 a.m., when records were broadcast; volume decreased to R3 by 6.30 a.m. Again on Thursday evening they were tuned in at 9.15 p.m., when strength was R7. Reception was excellent. Announcements were made in Dutch and English.

DGW, Nauen, 14.83 metres, was heard at 9.30 p.m. on Tuesday, R5, but very gushy.

PMB, Java, 14.5 metres, were working duplex at 9.45 p.m. on Friday; R5.

### Unidentified Stations.

THE list under this heading is growing, but with the approach of winter and better receiving conditions it is hoped that most of them will not remain unidentified much longer.

45.8 metres (about), Friday, 6.10 a.m., duplex in a very deep foreign voice; R4.

41.6 metres (about).—Every morning about 6 a.m. Friday the best, being R7, with talk and music; closed this morning at 6.20 a.m. without a call being heard.

31.5 metres (about).—A German is heard talking on this wavelength from about 6 a.m. nearly every morning.

31.3 metres (about).—Another station heard every morning. On Saturday the talk was readable, being English at R4 at 5.50 a.m., increasing to R6 by 6.30 a.m., when static becomes bad. All that was heard were the announcements as to what the next item or items were to be, but without any call being given. Perhaps some other listener heard a call when I was listening to other stations. If so, I shall be glad to know who the stranger is. The last item announced while I was listening was just after 7 a.m., "On with the Motley."

25.2 metres (about), 10.30 p.m., Friday, at R9, all talk in French, sounded like duplex.

23.6 metres (about), 9 p.m., Sunday, at R2-3, a foreigner talking.

### Short-wave Notes

I HAVE just received word from James Richardson and Sons, Ltd., that their short-wave station, CJRA, is temporarily off the air, while their experimental station, VE9CL, Winnipeg, is being tested on a wave-length of 49 metres. Reports on reception of the 49-metre wave will be greatly appreciated. Address to James Richardson and Sons, Ltd., 1038 Grain Exchange Buildings, Broadcasting Department, Winnipeg, Canada. The following is a short description of Radio Station CJRW: Situated three miles west of the boundary between the provinces of Manitoba and Saskatchewan, and far remote from large centres of population, the station has been designed to provide reliable service to the prairie listeners while interfering as little as possible with those who desire alternative entertainment. The 1000-watt transmitter was designed and built in Canada by the Canadian Marconi Company. To avoid the possibility of interruptions through breakdown of the external source of power supply, a gas engine and generator are maintained at the station in constant readiness to be called into action. The aerial towers are eighty-five feet in height, are surmounted with powerful electric lights, and with meteorological instruments. Private wires, specially designed and built for the purpose, connect the station with the studio at Winnipeg, 200 miles east.—H. F. Adcock (Masterton).

### International Short-wave Tests

ON Thursday, March 6, from 7 p.m. onwards, transmission from London on short-wave was very clear, speech from 2ME (Sydney), via London, being heard at good strength in Lyall Bay, Wellington. Stations GBX and GBX, London, were testing, and to locate a heterodyne whistle, which interfered with 2ME, GBX was stopped for a few minutes, and London spoke through GBX. 2ME was requested to check up their frequency. Speech from 2ME, Sydney, and London was heard simultaneously from the London station; Mr. Farmer's voice from Amalgamated Wireless (Australia) Ltd., Sydney, having traversed well over 20,000 miles. These two English stations must not be confused with G5SW, Chelmsford, England, which station broadcasts special functions.—R. Leslie Jones (Wellington).

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