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FEBRUARY 1948
VOLUME 2 · NUMBER 3



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VOLUME 2

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EDITORIAL

VHF's

We would like to bring to the notice of our more experimentally-minded readers the importance of the frequencies above 30 mc, and to suggest—though the season for making and breaking resolutions is now past!—that they resolve to give these frequencies more attention during the coming year.

In round terms, DX on the bands between 3.5 and 21 mc is, fortunately, always with us. Not so on the VHF's. We are now at about the peak of those ionospheric conditions which produce interesting results on frequencies between 30 and 50 mc, and even up to 60 mc. With the decline in conditions to be expected above 21 mc during the next few years, the opportunity to get DX results on VHF is gradually ebbing away.

It should be the aim of every real SWL to be able to receive on all usable frequencies. On the amateur 50 and 58 mc bands, in particular, he can make a contribution fully as valuable as that of the SWL's of the early days of short wave radio, when frequencies above 2 mc were beginning to be explored. From the point of view of the SWL interested in Amateur Radio, much the same situation obtains now above 30 mc as was the case 25 years ago with wavelengths shorter than 150 metres. It is of course true that in this year 1948 far more is understood about the behaviour of the VHF's than was known about waves above 2 mc in 1922. Nevertheless, there is much scope for useful and interesting work in the amateur field. For instance, who among our readers has heard all American call areas on 50 mc (six metres)? It has been quite possible during the last two months, and could be counted a very real achievement!

If these words kindle any response among SWL's prepared to work quite hard and be very patient about getting results, we would be glad to consider starting a VHF section in the *Short Wave Listener* for the benefit of those interested.

So what about it?

CONTENTS

FEBRUARY 1948

Editorial	65
Ship Stations	66
Amateur Transmis- sion for the Beginner, Part V	68
Zones and Countries	71
Have You Heard?	74
Calls Heard	80
SWL Stations—No. 8	83
"Pse QSL"	84
Getting a Licence	86
DX Broadcast	88
Broadcast Station List, Revision 16.86-25.35 metres	95

A COMPANION PUBLICATION TO "THE SHORT WAVE MAGAZINE"—
THE JOURNAL FOR THE RADIO EXPERIMENTER AND TRANSMITTING AMATEUR

Ship Stations

How and Where to Find Them

By **C. W. BROWN**

(This article will interest all keen SWL's who can read Morse. It opens up an interesting new aspect of S/W reception.—Ed.)

IT is hoped that this short article will suggest a new field of interest for the SWL. Keeping track of ships on their voyages is a fascinating pursuit; the thrill of logging a signal from mid-ocean is enhanced by the fact that the callsign does not reveal the location of the station. A "G" call might belong to a ship cruising across the Indian Ocean; on the other hand, don't be too excited about CXYZ—he could be steaming up the English Channel!

The Area System

For the purpose of clearing traffic to and from ships at sea on HF, the world is divided into nine areas. There is one shore station in each area called the "area station," which has several transmitters and is thus capable of working on different bands simultaneously. In addition to the area station, there may be one or more supplementary stations in the area. These stations form the British HF net.

Countries outside the British Empire have their own HF stations; details of some of them are given in Table 3.

HF Bands

The bands allotted to ships are near 4, 6, 8, 12 and 16 mc. In each band, a few kilocycles are reserved for the "calling wave", where ships will be heard calling shore stations (see Table 1). If traffic is to be exchanged, the ship may QSY to another part of the band when contact has been made, in order to reduce QRM on the calling wave.

Also shown in Table 1 are the answering frequencies of the Post Office transmitters at Portishead. This station serves Area One, which covers the greater part of the North Atlantic, and the Mediterranean Sea. The other area and supplementary stations in the net are given in Table 2.

Callsigns

Ships have four-letter callsigns, the first letter or letters indicating nationality.

Frequency Band mc	Calling Wave kc	Portishead Answering Frequencies and Callsigns	
4	4135-4145	4995	GKK
6	6202-6217	6388	GKV
8	8270-8290	8385	GKL
12	12,405-12,435	12,515	GKG
16	16,540-16,580	16,845	GKS

Table 1. Calling Waves and Portishead Answering Frequencies.

Station	Call-sign	Area	Station	Call-sign	Area
Capetown	ZSC	2	Singapore	GYL	8
Ceylon	GZP	3	Hong Kong	GZO	8
Bombay	VWF	3	Halifax		
Falkland Is.	VPC	4	N.S.	CFH	9
Wellington	ZLO	5	Gibraltar	GYU	Supplementary
Awarua	ZLB	5	Malta	GYZ	
Vancouver	CKN	6	Bermuda	GYG	
Sydney	VIS	7			

Table 2. Other shore stations in the British HF Net. Most of these answer on 4740, 6395, 8370, 12520 and 16845 kc.

Station	Call-sign	Station	Call-sign
Lisbon	CUL	Göteborg	SAG
Montevideo	CWF	Thomaston, Maine	WAG
Bergen	LGB	Chatham, Mass.	WCC
Buenos Aires	LPD	Tuckerton, N.J.	WSC
Rio de Janeiro	PPR	Amagansett, N.Y.	WSL

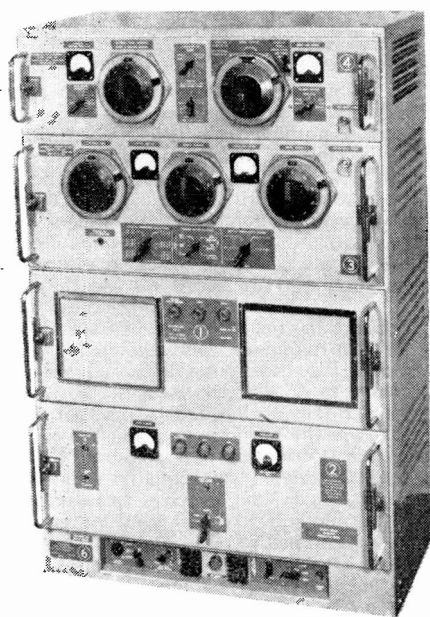
Table 3. Some HF Ship-Shore stations in other countries.

Callsigns commencing with the letters G, M and B are British; the W's, K's and A's belong to the U.S.A. (The letters "A" and "B" were allotted during the war; the majority of ships holding these calls are the American "Liberty" and "Victory", and the British "Empire" and "Fort" type cargo vessels.)

The callsigns of shore stations in the British net have three letters, or three letters with a figure suffix, which indicates the megacycle band on which that par-

Ship	Call-sign	Ship	Call-sign
Niagara Victory	ANYB	Highland	
Fort Fraser	BKBG	Monarch	GMZF
Queen Elizabeth	GBSS	Mauretania	GTMM
Queen Mary	GBTT	Sydney Star	MKSM
Capetown		Gudrun Maersk	OZEH
Castle	GKGM	Gripsholm	SKBA
Aquitania	GLRZ	Mormacsea	WGUD

Table 4. Examples of ship-station callsigns.



Front view of the Philips MZ-601 commercial CW/Phone transmitter, giving up to 400 watts RF output in the 1.5-24 mc band. Three of these units were installed in the King's ship *Yanguard*.

particular transmitter is operating. Capetown Radio, for example (ZSC) uses the call ZSC8 on 8 mc, ZSC16 on 16 mc, and so on.

Both CW and MCW are employed. The Portishead transmitters use MCW, and have a distinctive low-pitched note.

The speed of working naturally depends on individual operators and the conditions at the time; but, as a guide, is generally between 15 and 25 w.p.m.

Where to Start Listening

8 mc is usually lively in the evenings.

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Around 8280 kc several signals can be heard from ships trying to raise shore stations. For example, GBKB (s.s *Marsdale*) may be calling GKL (Portishead); GKL replies on 8385 kc, if not too busy. When contact is established, GBKB may send a "TR", or perhaps he has some telegrams on hand for England.

A TR is a short message addressed to the shore station, giving the ship's name, position in latitude and longitude and the next port of call; it also indicates the particular area station to which the ship listens for traffic lists, weather reports, and so on, at scheduled times. Thus: "TR Marsdale 0540 N 2925 W bnd Montevideo QSX area four from 101600 = 09 12 15"; "09 12 15" is the date and time of origin: 1215 GMT on the ninth day of the month.

The standard time used at sea is GMT, and this is sometimes indicated by the addition of the suffix "Z" to a time group.

Finally, a warning! If a telegram should be overheard, don't copy it. All persons who are in a position to become acquainted with the contents of radio-telegrams are bound to preserve the secrecy of correspondence.

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PART V

by **THE OLD TIMER**

(This article swings away from purely technical topics and discusses the operating technique of amateur transmission: What can be done on the various bands, how they should be used, and, in short, how to make the most of Amateur Radio according to your ability and inclination—to say nothing of your pocket.—Ed.)

AMATEUR transmission as a hobby is now more than thirty years old, and even in its present form—using the short waves—it is at least twenty years old. This means, naturally, that it has a great amount of tradition bound up with it. Amateur transmitters constitute a Fraternity, with its own written and unwritten laws; and to belong to, and become an honourable member of that Fraternity, you must know something of the traditions.

Every keen SWL who is reading this article will have spent many hours listening to amateur transmitters all over the world. He will know the bands they use, and quite a lot about their particular jargon. He will know, too, that there are good amateurs and bad; co-operative types and nuisances; experts and dabblers; good operators and "lids." And he will naturally wish, when his own ambition of holding a licence is realised, to become a useful amateur, a co-operative type and a good operator. The "expert" part won't come until much later!

Using the Bands

So, from now on, I will describe Amateur Radio as if it were in that ideal state which would prevail if only the good types used the ether, and will not touch on the painful subject of the misdeeds of the few.

Now different amateurs have different ideas of what they want from their hobby. Some ask nothing better than to meet a number of kindred spirits in their own country—preferably on 'phone—and to plug away at the friendly and social side of

the hobby. For this they will not need a complicated or expensive rig; many of them use nothing but a little ten-watter on 1.7 mc (the "top band", or 160 metres). This band is ideal for working 'phone throughout the British Isles; ranges up to 300 miles are often attainable after dark, and up to and beyond 50 miles in daylight.

There are, in actual fact, many such amateurs, who are heard *only* on the top band; a solid week-end's listening will prove this to you. And those who specialise on that frequency, and therefore have erected the best possible aerial for it, manage to do wonders with the 10 watts to which they are limited.

Lots of the local chatter which goes on between 150-watters on 3.5 and 7 mc could be carried out equally well with 10 watts on 1.7 mc, which is an extremely fascinating and likeable band once one gets accustomed to it.

3.5 mc

The 3.5 mc or 80-metre band is essentially a compromise between the top band and the higher frequencies. It is ideal for reliable communication in daylight over medium distances, but it also has surprising DX possibilities after dark. Thus an amateur with £n 807 and 50 watts on 3.5 mc can work, say, 100 or 200 miles on 'phone or CW during the day, and then work Americans and Canadians (conditions permitting) between the hours of 2300 and 0800 GMT, at this time of year. Conditions have so greatly improved on "eighty" just recently that quite a few British amateurs have worked New Zealand, and one, at least, has worked all continents in the last two months.

For CW communication 3.5 mc just fits the bill so far as Europe is concerned. By the time it is dusk one can usually hear very strong signals from HB, HA, OZ, SM, LA, OH and so on; and many of these strong signals come from quite low-powered stations. In our ideal world, no one would clutter up the DX on 14 mc by working stations at such distances as these, but would transfer his operations to 3.5 mc.

7 mc

What can one say about our unfortunate 40-metre band? It was once the mainstay for all reliable DX work, with 14 mc (20 metres) regarded as a rather freakish and unreliable band. But 7 mc, unfortunately,

also has good local possibilities. So, long before the encroachment of the commercials and the broadcast stations, 7 mc was jointly and protestingly occupied by the CW DX-working fraternity and by a large number of 'phone stations interested only in chatting to semi-locals.

Nowadays, of course, short-wave broadcast has all but stolen the entire band from us; when the new regulations are finally ratified, the 7 mc band will be only 100 kc wide as far as exclusive use by amateurs is concerned, and I have no doubt that sundry commercials will show their ugly faces within that narrow slice, too.

You can still hear the DX on 7 mc, but you have to wait until after dark, or else become an early riser. But in spite of all its trials and tribulations, "Forty" has a peculiar fascination for a faithful band of addicts, who work DX on the band and never bother to use the higher frequencies at all.

14 mc

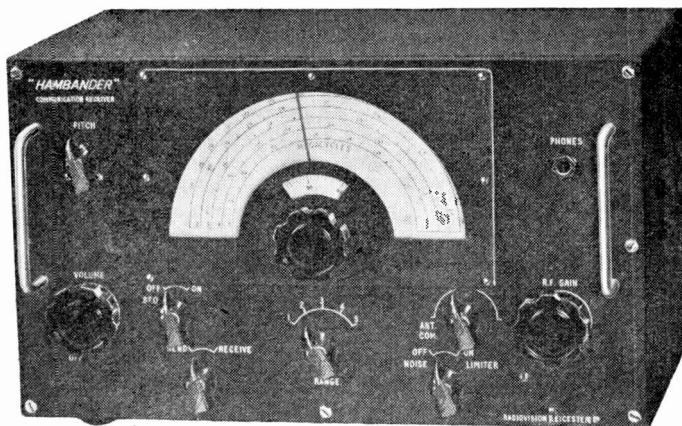
Yes, here, it is—the good old reliable DX band which seems to be everyone's favourite, despite the QRM. The best thing about 20 metres is that the 'Phone/CW position has rationalised itself fairly

well. One rarely hears a 'phone station below 14100 kc, and between that frequency and 14000 most of the world's CW DX contacts are made. If that tiny section of 100 kc were removed from amateur use and put back into the spectrum out of reach, I really think hearts would be broken! Many keen DX-chasers have never bothered about the 28 mc band at all, because they have found it possible to work well over 100 countries on 14 mc alone.

This band is particularly good between the hours of 0800-1000 and 1600-2100 GMT. Usually at those times it is by no means full of United States stations, and all the world's DX can be heard when conditions are not too unkind. In the morning period all sorts of rare Pacific DX sometimes crops up, with plenty of signals also from VK and ZL. In the evening period *anything* can be heard. Between 1800 and 1900, recently, I logged PY and LU, together with a ZS working a KH6, and a C6 and KG6 coming in for good measure.

On the 14100-14300 section of the band you will find at least half of the world's DX 'phone stations. Fortunately 14 mc is distinctly unsuitable for local chatter, so

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that it has never been spoilt in the way that 7 mc has been.

The type of amateur who uses 14 mc 'phone and CW is difficult to describe; it would be a "type" embracing practically every kind of amateur transmitter. The fellow with a beautiful and elaborate 150-watt station will be heard picking out new countries; the 25-watter with an 807 will be there happily doing the same thing; and the absolute learner with a very few watts will be working, say, between G and ZB1 or CN8 with just as much thrill as the high-power man rolling in the super-DX.

Lots of newcomers to the amateur ranks have started up right away on 14 mc with a low-powered rig for CW only; and some of them have worked their 60 countries and 30 zones within the first two months or so. So, whatever you want from Amateur Radio—local 'phone chats or super-DX—you can find it with 10 watts on the top band and 25 watts on 14 mc, which does not by any means involve an expensive or complicated station.

28 mc

"Ten metres" is, at present, an extremely fascinating band which is claiming more and more attention from amateurs who once were not even interested in DX work. The reason, I suspect, is that when "ten" is good it is very, very good. Indeed, to work the States with 25 watts of 'phone is such child's play that one soon tires of it! What is so convenient about the band is this: That at present the USA 'phone section is from 28.5 to 29.7 mc. This seems a lot, but it leaves the whole slice from 28000 to 28500 for the rest of the world (that is wider than the entire 14 mc band) and, of course, clear of USA 'phone. So, by more or less common consent, we find CW occupying 28000-28150 kc, or thereabouts, and all the world's DX 'phone, other than USA, using 28150-28500 kc. And in that 350 kc section there are some really interesting things to be heard and worked.

Quite a lot of British amateurs have found 28 mc so fascinating that they have made it their *only* band. An important point is that many an operator who has not the space for a really good aerial system for the other bands can easily put up a little ten-metre rotary beam on a mast or tower not more than about 30 feet high, and can then compete with all the world's amateurs on more or less equal terms!

The sad thing is that 28 mc is very much dependent upon the behaviour of sunspots; so much so that for a few years,

when the sunspot cycle really begins to run down, the band will be of little use. Fortunately by then we shall be allowed to use the new 21 mc band, which should prove very interesting. It will probably take on approximately the characteristics of 28 mc as we now know it, but at a different period of the sunspot cycle.

So there is your necessarily brief summary of the various bands and the purposes to which they are put. We could also mention the extremely fascinating VHF bands—5 metres, 6 metres and lower. But they are very much in the melting-pot at present, and we don't know quite what sort of use is going to be made of the territory round about 144 mc until the time comes.

But you will see that whether your inclinations lead you towards the social cum-'phone-chat side of the hobby or to the scratching-after-that-weak-one-that-nobody-else-heard business, you will find a band on which you can indulge your whim.

Likewise, you can start up with the most inexpensive gear possible, and still, by intelligent and unselfish use of the bands, give yourself infinite pleasure without causing (much) inconvenience to others! That "much" is there in parentheses because every new station arriving on the air is going to make the QRM situation worse. But we would far sooner welcome a score of intelligently operated newcomers than put up with one single Old Timer doing stupid things like using a DX CW band for local 'phone chatter of the more futile kind.

So listen round the bands once more, with, I hope, a new appreciation of their traditional use; and resolve that if you ever get your own "ticket" you will respect this tradition and not be branded as a Red from the day you come on the air!

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Zones and Countries

Discussing Present Anomalies

by A. CROSS

(Though our contributor is right in many of his contentions, the fact remains that there are tremendous difficulties in devising a scheme which, while meeting all possible objections, would now find world-wide acceptance. The present zone system is based upon a purely arbitrary division of a Mercator map of the world with New York as its centre! A similar division with London as the centre would look equally irrational to American eyes. The present system, such as it is, does go a long way to meeting the practical requirement, in spite of its manifest anomalies.—Ed.)

THE local "rag-chewing" fraternity probably care very little about the question of what constitutes a country, but to the DX enthusiast it is a matter of supreme importance.

After some twenty years knocking round the Far East, I have returned to Amateur Radio, and have spent many hours trying to fathom the inconsistencies of the present list of accepted countries.

Look at Zone 28. Here we have two areas which are almost identical in their political aspects. The Dutch East Indies—that "conglomerate assembly of a thousand islands"—have been given the prefix PK. They have a Governor-General and are a political unity (I am ignoring the current dispute between the Dutch and the Indonesian Republic). For their own convenience the Dutch authorities allocated the numbers 1 to 6 to different parts of the Dutch East Indies. Then along come the powers that be in Amateur Radio, who decide what shall be considered separate countries and make five countries of it, splitting PK6 in two in the process!

The other area is Malaya, VS1 and VS2. Here we have a country with a Governor-General for the whole area and Governors for each of the two parts. VS1 is Singapore Island and VS2 the Malayan Union; yet for assessment of the number of countries they are lumped together as one. Can anyone reconcile these two cases?

Coming nearer home we find that

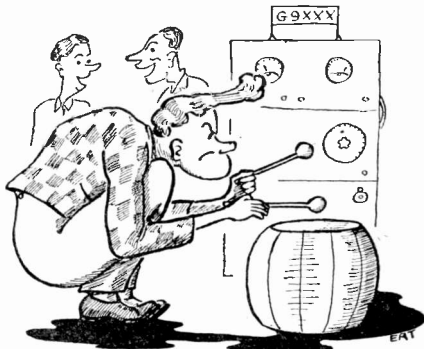
Corsica is to count as separate from France, and Sardinia from Italy. Why? The call signs give no indication of their being separate. Are we out to make as many countries as possible? Judging by Corsica and Sardinia it would appear so; yet all different VE and W districts are ignored. There is surely a vaster difference in distance and DX achievement between W1 and W6 than between Italy and Sardinia?

Five Zones—One Country!

Let us consider the case of a new W9 operator in, say, Chicago. He gets his ticket and comes on the air for the first time. Through one of these queer freaks of chance, which so often crop up in SW work, he has QSO's with a VE1, a VE2 in Northern Quebec, a VE3, a VE7 in Vancouver, and a VE8 in Yukon Territory. If, at this point, he stops to contemplate his achievement, he will find that he has worked five zones, *but only one country*. The situation is perfectly ludicrous. It is, however, a strong argument in favour of a drastic revision of the list of accepted countries.

I would suggest that any area which, for Amateur Radio purposes, has its stations designated by an international prefix (F, ON, etc.), or a prefix and number (W1-WØ), or by a prefix, number and letter (VE8 A-L and M-Z) should constitute a country. This would mean that the United States would become ten different countries, which, in view of its territorial size, I do not consider unreasonable, if one compares it with the

"OLD GXXX IS DETERMINED TO WORK SOME DX SOMEHOW."



different countries one can make out of the British Isles. In a case such as England, where the different numbers have no territorial meaning, only the prefix should be taken into account.

I quite admit that there will always be a few cases difficult to decide. The various Occupation Zones of Germany, for example, might well be considered as only one country, as this is a purely temporary arrangement. Again, OE and MB9 are one and the same. From the point of view of the Army authorities MD1 and MD2 are different areas, but together with TR1 they form Libya (LI). On the other hand, why should MD5 be included in SU, if NY4 is to count as separate from CO? They are almost identical circumstances in different parts of the world. These "exceptions" would require individual consideration, but in the majority of cases, the territorial aspect, as outlined above, should be the determining factor.

This would mean a considerable increase in the number of accepted countries. Whether this is desirable or not depends largely on one's point of view. I consider it is desirable, provided it is done logically, and we do not have farcical separations like Corsica from France. As more and more operators of the DX fraternity reach the 40-Zone mark, the deciding factor on DX achievement becomes the number of countries. Surely he who has worked all the VK districts is entitled to rank above the man who has worked only VK2 and VK6 (for his two zones, say), all other things being equal? I know one transmitter who has worked the wide world, but VE5 still eludes him. He does not need it for his zones or countries, as things stand at present, but this, in my opinion, is unfair to the brother operator who, being otherwise equal, has also worked VE5.

Suggestions

The suggestion is therefore put forward that the Editors of the leading British and American periodicals interested in DX working should discuss the whole question and try to evolve order from the present chaos.

I would also suggest that if and when a revision of the list of countries takes place, some of the Zonal boundaries be re-considered. The majority of the zones are well thought out and do not require adjustment, but cases in which a country, as already designated, lies in two zones only cause confusion and fail, in my opinion, to serve any useful purpose.

For example, why put a zonal boundary right across the Province of Quebec and split VE2 in two? As a contributor has remarked, it requires a call book, an atlas, and infinite patience to unravel Zone 2. The following alterations to the Zones are therefore put forward for consideration:

Zone 1—KL7 and all VE8.

Zone 2—VE1, VE2, and VO.

Zone 3—VE7, W6, W7.

Zone 4—VE3, 4, 5, 6, W5, 8 9, O.

Zone 5—W1, 2, 3, 4, VP9.

Zones 14 and 15—Transfer Corsica from Zone 15 to Zone 14.

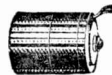
Zones 21 and 22—The zonal boundary crossing Pakistan should be altered so that Pakistan lies entirely in one zone or the other. In due course Pakistan and India will, no doubt, have separate prefixes or numbers.

Zones 29 and 30—Redraw the boundary so that VK5 lies entirely in Zone 30.

Zones 18 and 19, and 23 and 24, present problems which frankly I cannot solve!

It might be argued that once a contact has been established and QTH's exchanged, the amateur at this end knows the Zone in which his opposite number is situated. This is admitted. But if G9BF still requires Zone 1 for his WAZ, how is he to know if a VE8 which he hears calling CQ is in Zone 1 or 2?

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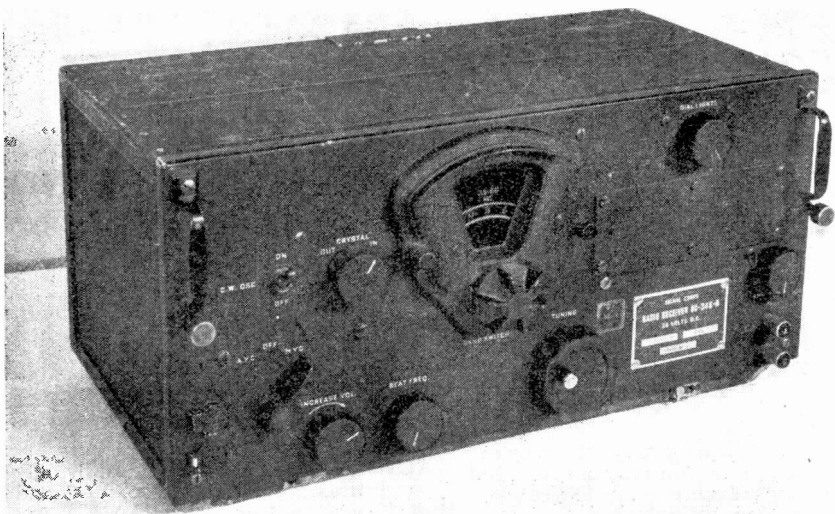
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Radio Hints Manual	...	2/6
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Transmitter Construction	...	2/6
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Have you heard?

Greetings, readers and listeners, for the first time in 1948. Many thanks to all those who have sent New Year wishes with their budgets this month, and may 1948 be a most successful year for everyone. Let all the existing DX records be well and truly burst!

I am afraid some of the New Year resolutions did not quite extend to getting your copy in on time, with the result that quite a lot of very interesting Calls Heard lists arrived *just one day* too late for publication. Please remember that if your Calls Heard are even one day late, "they've had it." But is it generally possible to make fleeting reference to late letters with Stop Press News.

As usual, however, enough Calls Heard lists arrived for filling some ten pages instead of the regulation three, so this time the rule was strictly "first come, first served"—and even then all the 14 mc General lists had to be squeezed out!

Set Listening Periods

The 28 mc Period on December 28 was a very interesting one, and I spent a whole evening off the air doing an analysis of the logs, as I did once before.

For this 28 mc SLP there were twenty-two lists. (More have arrived since, but we can't do anything about them.) A summary of these twenty-two gives the following interesting facts: Jointly between all those listeners, 133 countries were heard on 'phone. (All the following remarks, by the way, apply to the 'phone lists only.) In spite of this "availability" of 33 countries, no single listener logged more than 19—two of them made that figure. Two of them logged 17, one 16, two 15 and one 14. But I am not trying to make a competition out of this, so let's examine it the other way.

The 33 countries heard were as follows: AC3, AR, C, CN, EA9, EL, FA, HZ, J8, J9, KA, KG6, KP4, LU, MD5, MD6, MD7, PZ, ST, VK, VP6, VQ2, VQ4, VU, XZ, ZBI, ZB2, ZC1, ZC6, ZD2, ZE, ZL and ZS. Of these, only *two* were heard by all the twenty-two listeners, and those two were MD5 and VU. Next highest scorer among the countries was ZC6, heard by nineteen; and then KG6 and ZL, heard by seventeen.

At the other end of the scale we have

AMATEUR BAND COMMENTARY

by the

DX Scribe

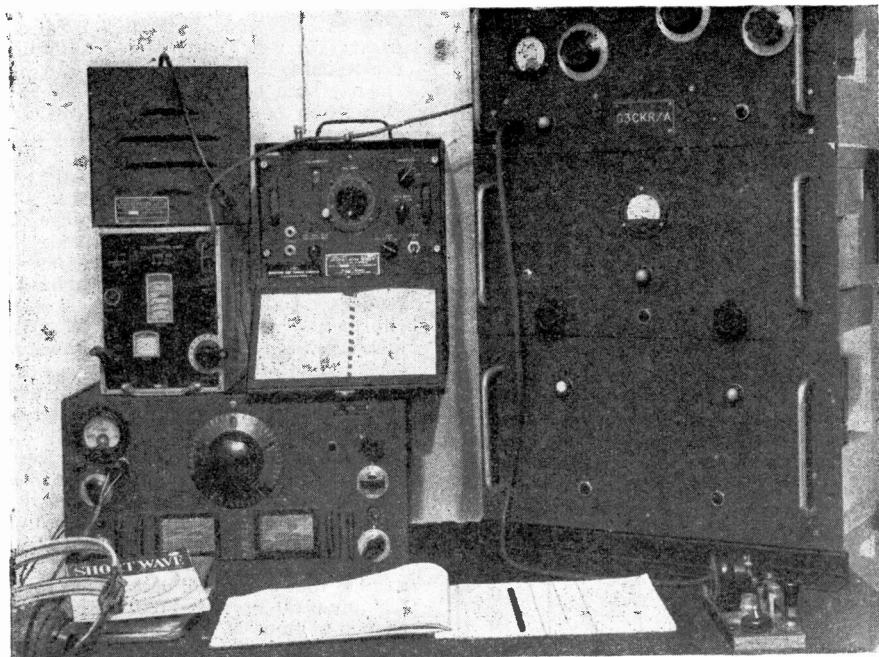
AC3, C, LU and XZ, each heard by only one listener; J8, KP4, MD6, VQ2 and VQ4 each heard by two; EA9, KA and ST, by three; EL and FA by four; J9 by six; and AR, HZ and ZE by seven. The others all struck a fair average figure. So it appears that the easiest countries to hear were MD5 and VU, and the most difficult AC3, C, LU and XZ, which probably means merely that there was only one station from each on at the time. Thus it was rather a question of being on the correct spot at the right moment.

Are You Sure?

But in one respect how some of you have shown yourselves up! Lots of you heard our friend W6PJM/KG6 on Saipan; but how many of you have sent QSL's to him? Because he was variously logged as W6PJM, 6PJM, 6EJN, 6VJN, 6TJN, 6CJN and 6CTN! One listener even had him as 6PIN, but I thought this could have been a clerical error in copying from the log, so I put that one right.

So now you know why some at least of your reports do not fetch back QSL's. I shall have to do a snap check like this every month and see how many "phonies" appear; but I maintain that the only safe rule is to *leave him out* if you are not dead certain of his call. Copy out those words "Are You Sure?" in letters six inches high and hang them somewhere near the receiver!

By contrast with the 28 mc SLP, the 14 mc one was rather a flop. Short skip, as usual, was the trouble, and 14 mc has been terribly erratic during the month. There have been one or two of those delightfully quiet days on the band, when one would say at first glance that it was



This is the outfit at G3CKR/A, the station of the Warrington Radio Society. Operated by G3AAB, they came second, in the *Short Wave Magazine* 1.7 mc Club Contest, with 1168 points.

dead, but found instead that it was full of weak DX signals, with no local interference and a very low noise level.

"Long Waves"

Note the terrific increase in interest on 3.5 mc this month. No longer is there any shortage of lists of DX calls on the band. Canadians and North Americans have been "in" every night by 2300, and sometimes have been heard as early as 2030. And in the mornings the hour between 0700 and 0800 has yielded all sorts of interesting signals such as ZL4GA, NY4CM, XE1A, KP4AO, CM2SW and a load of W's and VE's. One or two British amateurs have worked all districts USA and one is reported to have made a WAC on 3.5 mc. When the sunspot cycle really gets moving, of course, the 28 mc band will fade out on us completely—perhaps for as much as five years—and 7 and 3.5 mc will take their rightful places as DX bands. If only some of the rather stupid local chatter on 7 mc can be moved to 1.7 mc, it will leave 40 metres clear for something worth our while again.

News from Readers

A bulging post-bag this month necessitates some snappy answers. The regulars are all there—the specialists in 1.7, 3.5, 28, Maritime Mobiles and all—and they all continue to send news of everything interesting they have heard, bless them! I only hope they are not too disappointed when they find a six-page letter dismissed in a couple of sentences, but I am sure they will understand. Every piece of news helps in the preparation of this column—your Scribe does not pretend to know all the answers.

L. Collis (Banstead) has been listening on 7 mc, and says "What with commercial CW, Spanish BC stations and Continental 'phone, the results have not been particularly gratifying." However, he did hear UAØSG (Irkutsk) and VQ5JTW. On 14 he got VQ8AZ for his 38th Zone, and also logged UAØKBA, who *might* be in Zone 19 to give him his 39th. Does anyone happen to know?

W. N. Sandeman (Rudyard) queries RAEM, giving his QTH as Moscow. This station is a genuine amateur, who, for his

ZONES HEARD LISTING

Listener	Post-war Zones	Post-war Countries
'PHONE and CW		
M. H. Preston (London, S.W.12)	40	190
N. A. Phelps (London, N.10)	40	186
K. Callow (Mansfield) ..	40	172
O. A. Good (Oswestry) ..	40	171
D. W. Bruce (Eltham) ..	40	164
L. N. Goldsbrough (Wirral)	40	160
A.W.G. Boulton (Farringdon)	40	157
A. Baldwin (London, E.11)	40	156
C. S. S. Lyon (Liverpool) ..	39	164
A. E. Hardman (Manchester)	39	152
R. A. Hawley (Goostrey) ..	39	147
W. J. C. Pinnell (Sidcup) ..	39	139
L. Collis (Banstead) ..	38	155
G. P. Watts (Norwich) ..	38	149
A. Frost (Thornton Heath) ..	38	140
L. M. Singletary (Honiton)	38	127
N. S. Beckett (Lowestoft) ..	38	122
A. H. Onslow (Hove) ..	37	149
A. J. Slater (Southwick) ..	37	145
G. V. Haylock (London, S.E.13)	37	132
M. D. Lipscombe (Seaford)	37	115
M. Harrison (Darlington) ..	36	131
A. E. Lincoln (Grimsby) ..	34	109
D. F. Willies (Holt) ..	31	96
D. A. Pullen (Colchester) ..	31	87
W. N. Sandeman (Rudyard)	31	87
'PHONE ONLY		
R. A. Hawley (Goostrey) ..	37	135
M. D. Lipscombe (Seaford)	37	113
A. H. Onslow (Hove) ..	36	144
A. J. Slater (Southwick) ..	36	140
D. W. Bruce (Eltham) ..	36	137
E. J. Logan (Hertford) ..	36	133
D. L. McLean (Yeovil) ..	36	132
L. Collis (Banstead) ..	36	131
C. G. Tilly (Bristol) ..	36	130
T. W. Jones (Birmingham)	36	112
O. A. Good (Oswestry) ..	36	111
N. S. Beckett (Lowestoft) ..	36	109
L. N. Goldsbrough (Wirral)	35	129
G. P. Watts (Norwich) ..	35	126
E. J. Parish (Watford) ..	35	123
C. S. S. Lyon (Liverpool) ..	35	122
G. Hare (Leadenham) ..	35	120
B. Cage (Ipswich) ..	35	108
L. Tombs (Swindon) ..	35	108
L. Shearlaw (Camberley) ..	35	106
A. W. Robertson (Cranford)	34	106
D. Kendall (Potters Bar) ..	34	101
W. B. Harrald (London, S.E.21)	34	92
K. Callow (Mansfield) ..	34	84
B. Needham (London, W.11)	33	109
K. R. Toms (Boreham Wood)	33	87
P. A. Kerry (London, W.7)	33	86
N. A. S. Fitch (London, E.10)	32	90
A. Cross (Perthshire) ..	30	85

services in the famous Icebreaker *Chelyuskin*, was honoured and allowed to use RAEM, the call-sign of his old ship. He has been heard signing "MM" from 'way up in Zone 19, too, so he obviously has not deserted the sea—frozen or otherwise.

A. W. Robertson (Cranford) voices the general opinion when he says that 28 mc is very interesting in the mornings, but somewhat dull after midday because it is invariably cram full of W's. He asks why all the numerous "MM's" seem to have W prefixes. I think the answer lies in the enormous preponderance of American amateurs over all the rest of the world put together, and the fact that many countries (the U.K. included) do not officially allow the operation of amateur transmitters on ships.

A morning SLP on 14 mc is suggested by N. A. S. Fitch (Leyton), in view of the troubles we have had with short skip in the evenings (but you get it in the mornings too!) He would also like it from 0800-1000 instead of an hour later; his argument is that 0900-1100 necessitates breakfast pre-0900 or post-1100, with a good chance of none at all. But he adds as a more serious reason that most of the good 28 mc DX faded out around 0930. N. A. S. F. would like to know how much time some of the top-scorers spend on the bands. During December, for instance, he heard 26Z and 53C in a total listening time of 13 hours only; is the average time spent on the bands more like 60 hours per month?

Two pieces of interesting news from D. L. McLean (Yeovil). First, that EA7BA, on 14 mc 'phone, was heard to say that the QTH's of EA stations were still as in pre-war call-books and that QSL's should be addressed to them as listed. Secondly, KA1CB said that he could hear lots of G stations calling him, but that KA's were not allowed to work G's, as Great Britain had not yet signed a treaty with the new Philippine Republic! He was very sorry but hoped to work all the G's as soon as circumstances allowed. D. L. McL. seems to be making a speciality of logging stations working on low power, such as VU2CD (15 watts), VS2BU (25 watts), ZB2A (18 watts) and even ZB1AK (6 watts). (I recently heard VK2AHM using less than one watt, on which he has scored a WAC!)

The mysterious "EDZ" referred to last month is still causing some comment. L. N. Goldsbrough (Wirral) says that his call is definitely just plain EDZ, and that "EA7" and "EDZ" sound very similar in

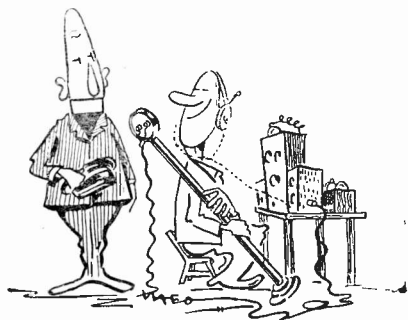
Spanish. Others come along, however, and say that he is now calling himself "EA9EDZ"! C. S. S. Lyon (Liverpool) says he spelt out his call "E A Nueve" and not "E A Siete"; so maybe EA9 is now used for all Spanish colonies in North Africa. In any case EA7AV and EA7BA are both in Spain.

C. S. S. L. continues that the stations in Malta were out to work the Empire on Christmas Day; to each country worked they said "A very Happy Christmas and best of luck in the New Year from all the amateurs in Malta", and asked the other station to QSP the message. Another item from him is that Boxing Day was a kind of West Indies field day on 28 mc, and he heard, in the morning, VP2GB, 6CDI, 6JC, 6KM, KP4DP, 4FP.

The 80-metre band

Still continuing with C. S. S. Lyon of Liverpool—he had a real surprise when he started taking 3.5 mc seriously, and found that the W's were audible for 10½ hours a day, 2250 until 0920, and on 'phone at that. Remember that the W/VE 'phone band is 'way up the top end—above our own 3.5 mc band. But unfortunately other countries are not so well organised, and our own 'phone "Spivs"—G's as well as other Europeans—appear on any frequency down to 3500. I heard one the other morning, right on top of some nice Canadians on CW; he was calling CQ for half an hour and apparently used a crystal set for reception, for he called nothing else.

L. M. Singletary (Honiton) sends another long list of 1.7 mc Calls Heard, and also a goodly one of W's and VE's on 3.5—but unfortunately they missed the boat. He, too, has heard EA7EDZ and asks whether Rio de Oro counts as a country. The answer is Yes!



Have a word with him, Vicar. but for heaven's sake be careful what you say. . . .

DX QTH'S

AR8BC	Selim Chaeb, Rue Abdel Kader Beirut, Lebanon.
FT4AC	Henri Devaux, La Marsa, Tunis.
HR1JC	J. M. Coleman, San Pedro Sula, Honduras.
J2AA	APO 704, c/o PM, San Francisco, Calif.
J9ANT	APO 239, c/o PM, San Francisco.
KL7T	PO Box 1994, Fairbanks, Alaska.
KV4AD	Box 171, Christiansgad, St. Croix, Virgin Islands.
MD2B	Tripolitania Signals Sqdn., Tripoli, North Africa.
MD5LR	H. Mess, 5 BOD, Tel-el-Kebir, MELF.
OQ5RM	R. Meunier, Kindu, Maneuma, Costermansville, Belg. Congo.
OX3GE	APO 859, c/o PM, New York City.
ST2GE	Dr. F. G. Elvins, c/o Sudan Medical Service Khartoum.
SUIJM	c/o TWA Communications Dept., Farouk Airport, Cairo.
VP4TAA	W. Acase, 94 Frederick Street, Port of Spain, Trinidad.
VP9E	C. Holmes, Box 11, Mangrove Bay, Bermuda.
VQ2FR	F. G. Radcliffe, Box 111, Mufulira, Northern Rhodesia.
VQ4GWB	P.O. Box 4012, Nairobi, Kenya.
VR5IP	Bert Monahan, Box 25, Nukualofa, Tonga.
VU2GI	QSL via G3BYH, 4 Woodville Avenue, Scarborough, Yorks. (Stn. at Karachi, Pakistan).
ZC1AF	RAF, Amman, Transjordan.
ZD1BD	Capt. S. B. Duke, Royal Signals, Sierra Leone and Gambia Signals Sqdn., Freetown, Sierra Leone.
ZE2JN	Box 225, Buluwayo, Southern Rhodesia.
ZS3G	Box 513, Windhoek, South-West Africa.
ZS4P	J. D. Leask, Tosing, Outhing, Basutoland.

The suggestion that we should segregate our "HAZ Marathon" for 1948 into 28 mc and 14 mc lists comes from K. R. Toms (Boresham Wood). In many ways this would be an excellent idea; but we have thought it over carefully and decided that it wouldn't work. There would have to be a third list showing combined totals. And, furthermore, there are a few countries which seem to be heard only on 7 or 3.5 mc. (I have only heard GD on 3.5 and GC on 1.7, for instance!) No, the highest scorer ought to be the all-rounder who can get results on all bands; those who don't yet cover 28 mc will be well

advised to build a simple converter—they will find it well worth while.

A. Cross (Perthshire) laboured until midnight to get his Calls Heard in on the deadline, and then just missed the boat*. Hard luck—but blame the postman! Being 450 miles north of London he finds conditions somewhat different from those reported down South. In particular he notices a shortage of Eastern and Australian DX, and recently heard his first ZS. He mentions a number of phoneys, such as D4OH and SP2CU.

O. A. Good (Oswestry) reports that he now has 33Z and 68C confirmed on CW and 'phone, and 30Z, 42C on 'phone only. He didn't like December DX very much, what with short skip by day and low MUF at night. But on December 6, round about 1030, he logged J8ABF, J9AAW, ZL1NT, ZL2BT and ZL3ID in five minutes—all 14 mc 'phone. In the afternoon WØTKK/VK9, UH8AF and UI8AE were coming in. Then O. A. G. quotes an interesting case of localised skip at 0030 on December 26, when KV4AA, KV4AD and W4GXL/KV4 all appeared together, with no other Zone 8 signals audible. A few queries from him: Any information about VK3QP/MM? What Zone is UAØSG in? (18, I imagine.) And what about MX2B and YL5CO?

Another newcomer to the column is D. C. D. Potter (Birmingham) who listens on the family receiver—7 and 14 mc bands with a spread of about $\frac{1}{2}$ in. each! He queries a station calling itself GPO9, Barbados, and working PCZ, London. This certainly wasn't an amateur, and probably was not in the amateur band—might have been an image of a commercial.

One of those looking forward to the start of the HAZ Marathon next month is W. J. C. Pinnell (Sidcup), who says it will make 14 mc listening more interesting again. That's the idea of it, we hope! When you've already heard most of what's going, the only thing is to start again. W. J. C. P. logged YA3B (Afghanistan) during the month, and we think he's genuine. Two queries: What is the significance of D4AWK/6? And are Imperial Reply Coupons now valid for Egypt, India and Pakistan? I can't find the last one out myself; perhaps some habitual user will know.

E. G. Cressey (Wisbech) unearthed a funny one with O1UP (Oh One Uncle Peter), calling CQ on 7 mc 'phone. I

should say he is a phoney of the most blatant type! R. Pascoe (Truro) is another newcomer, using an 0-V-1 receiver with a 210VPT and a 220OT, with a 14-foot indoor aerial. He sends a nice list of 7 mc Calls Heard and does some top-band work as well.

New ones from A. W. G. Boulton (Faringdon) include VQ8AZ, HI8WF, HP2CA and KV4AD. Now that he has to scrap his score of 40Z and 157C in favour of the new 1948 score, he's building a two-stage preselector.

A whole list of new calls from D. A. Pullen includes EK1DI, FT4AN, VP2GB, YV5ADA, KP4KD, TF3EA and others. Seems to have been a good month out Colchester way. D. W. Bruce (Eltham) has been on 3.5 mc, logging W's and VE's from 2300 onwards, and has also amassed five new countries. N. A. Phelps (London N.10) has likewise added five—M1A, UF6CB, HR1AT and PX1C, all on 7 mc, and W2WMV/C9 on 14 mc. His total is now 186C!

A. H. Onslow (Hove) queries W6YAW/AK. AK seems to be cropping up as a possible new prefix for Korea instead of J8; Korea used to be AK in about 1929! Anyway, that's where W6YAW is. A very nice list of new QTH's comes from N. S. Beckett (Lowestoft), whose best catch for the month was FB8AH (Madagascar) on 14 mc CW. He also logged ZS4P (Basutoland) on 'phone.

Suggestion for an earlier evening SLP on 14 mc comes from B. Needham (London, W.11). Correct me if I am wrong, but I think B. N. is the only listener to hear more than 100 countries in a pre-fab! He enthuses over the last 28 mc SLP, and queries the Zone for VE8MB, which we think is Zone 2. K. Parvin (London, W.1) has now heard 23 countries on 3.5 mc in the last three months. All his Transatlantics on that band were logged between 2245 and 2300 GMT.

Our MM-Fancier, R. A. Hawley (Goostrey) still comes up with a list of the seaborne boys, plus the call D4AYO/Air Mobile, approaching Spain in a B.17 bound for Frankfurt. Next day he was working his fixed station in Germany.

G. Braithwaite (Belfast) is a new correspondent and his Calls Heard lists speak for themselves. He remarks on the good signals all through the month from CR9AG, CR9AM, VU2CD, VK2ADC and VK2RU—all R5 and S9 plus. ZA2KK and EQ2L were a couple of unusual ones logged by G. B.

D. N. Jones (Harringay) found VE8NB on Resolution Island (Zone 2), and also

* It was a very tight month for us too, as the Third Thursday fell so near January 1. It happens that way sometimes, but we always try to allow as much time as possible for correspondents.—Ed.

heard VP9F and ET3AF—out of the ordinary. A. F. Hayton (Palmer's Green) sends some QTH's and says that he has heard fourteen ZC6's and five ZC1's in the last four months.

The only listener to mention AC3AE during the SLP was J. M. Graham (Glasgow), although someone else heard him being called. He hopes this may be Zone 23 at last—but AC3SS in Sikkim was in Zone 22. However, we'll see. J. M. G. remarks that VU2BJ and VU2QV are both in Pakistan. He was busy on Christmas Day logging Americans on 28 mc, and collected 37 States that afternoon, including Oregon, Montana and New Mexico.

I. E. Alfrey (Chiswick) has been favouring 3.5 and 7 mc, but on 14 mc he heard W1JEO/KG6 working D4AYO/Airborne. He found short skip conditions very queer on occasions, with W6, W7, VK and OX all coming in mixed up with local Europeans. D. F. Willies (Holt) divided his time between 28 mc and 3.5 mc, and enjoyed both bands. He remarks that for the second half of 1947 he received a 75 per cent. return on QSL's sent out—thanks, he says, to our "Pse QSL" feature.

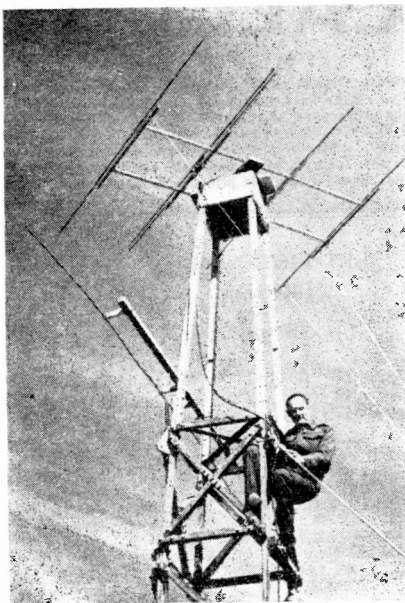
E. Nottingham (York) wants to see a small section dealing with the 5- and 6-metre bands. Certainly—if it receives enough support. But very few SWL's appear to be keen on those bands as yet. Some of them do sterling work which is reported in the *Short Wave Magazine* from time to time. But any of you regulars who extend to the ultra-shorts—please tell me so, and we'll get cracking.

A letter from the operator of the Norwegian aircraft LN-HAU is mentioned by the Rev. A. Cumming (Lymington). When heard he was using 150 watts in a Skymaster *en route* from Palestine to Oslo. A. C. is also an MM-chaser and sends a list of 17 of them, all logged on 28 mc.

R. F. B. Featherstone (Kenya) puts in a list of Calls Heard which is interesting to peruse, showing, as it does, the greatly different set of stations heard down there.

The 1948 Marathon

Practically every reader has remarked that he is looking forward to the 1948 Marathon, so I hope it *will* prove popular. It will certainly be interesting to see the form shown by the various DX-chasers next month. We will be running *four* columns again, so send in your scores as follows: (a) 1948 Zones; (b) 1948 Countries; (c) Post-war Zones; (d) Post-war Countries. Please separate



If you hear MDSKW (Canal Zone) on either 6 or 10 metres, this is the aerial layout at present in use.

them out from your letters—preferably on a post-card. So the order of merit will be set by the 1948 scores, and we can expect some startling changes, especially up at the top end.

Someone should have heard about 39Z and 100C by next month's deadline, which will be first post on February 4. Nothing received after that will squeeze in—so be punctual!

Set Listening Periods

January 24, 2100-2300 GMT—7 mc (no Europeans).

January 25, 0830-1030 GMT—28 mc.

Please send separate lists for 'phone and CW; and I hope the 7 mc period will strike lucky! All lists, claims, letters and everything to the DX Scribe, *Short Wave Listener*, 49 Victoria Street, S.W.1, by February 4. Good Hunting in 1948!

CORRESPONDENT WANTED

D. L. McLean, Yeovil, mentions that he has had a letter from Albrecht Heinrichs, Braunschweig, Kasstenallee 73, British Zone, Germany, asking to be put in touch with amateurs in this country. Will those interested please write direct to the address given.

CALLS HEARD

Please arrange all logs strictly in the form given here. Note, in particular, that the prefixes must be in alphabetical order, and that the number but not the prefix must be repeated with each call sign (e.g., W1AZ, 1BCR, 1COL, 2DY, 2EF, etc.). The call signs, after the number, must also be in alphabetical order. Where listening has been on more than one band, a separate list should be sent for each band, under the appropriate heading. In other words, study the layout of this lists below, and make yours exactly like them.

SET LISTENING PERIODS

28 mc

Dec. 28, 0900-1100 GMT

D. L. McLean, 9 Cedar Grove, Yeovil, Somt.

'PHONE: CN8AB, EA9AI, EL2A, J9AAI, 9AAS, KG6AAF, MD5AK, 5GW, 5KW, 5LR, 5TS, VP6CDI, 6HR, VU2BG, 2CS, 2LJ, W6PJM/KG6 Saipan: ZB2A, ZC1AF, 6JL, ZD2KC, ZE1JH, ZL3CX, 3JO, 4BN, ZS2AF, 6FC, 6IK, 6JB. (Rx: AR88LF.)

A. Frost, 18, Beechwood Avenue, Thornton Heath, Surrey.

'PHONE: C1CH, CN8AB, J9AAI, 9AAS, KG6AAF, MD7RJ, 5KW, PZ1M, VU2LJ, W3NIC/MM, W6EJN/KG6, ZBIAD, 1AH, 1AJ, 2A, ZC6JL, 6JP, ZL2AY, 2FV, 2JB, 2OY, 3AP, 3AW, 3BG, 3CX, 3LC.

CW: PY2OE, UA3AF, 3BM, UB5AB, VK2GW, 3XK, ZS6BJ. (Eddystone 504.)

N. A. S. Fitch, 79 Murchison Road, London, E.10.

'PHONE: CN8AB, MD5GW, 5KH, 5LR, 5OV, 5TS, VU2LJ, W6PJM/KG6 Saipan, ZC1AF, 6KL, ZL3FX, 4AT, ZS6FC. (Rx: 1-V-1.)

E. G. Domett, 38 Yonder Street, Ottery St. Mary, Devon.

'PHONE: CN8AB, EA9AI, EL2A, HZ1AB, J9AAI, KA1CB, KP4FP, MD5GW, 5KH, 5KW, 5LR, 5TS, PZ1A, 1M, ST2CH, VP6CDI, 6HR, VQ4NSH, VU2BG, 2LJ, W2QIC/MM, 3NIC/MM, 6VJN/KG6, ZC6NF, ZD2KC, ZE1JX, 2JV, ZL3AW, 3CX, 3HC, 3LC, 3JA, 4AT, 4BN, ZS6FC, 6JB. (Rx: RME 69.)

A. W. Robertson, 149 Firs Drive, Cranford, Middx.

'PHONE: HZ1AB, KG6AAF, MD5CW, 5GW, 5KW, 5LR, 5TS, VU2LJ, 2MC, 7BR, W3NIC/MM, 6PJM/KG6, ZBIAB, 1AH, 1S, ZC1AL, 6KL, 6NF, ZL2AR. (Rx: 1-V-2 Mains.)

L. Shearlaw, Kaduna Frimley Road, Camberley, Surrey.

'PHONE: CN8AB, EL2A, FA3FB, MD5GW, 5KW, 5LR, 5OV, 5TS, VP6CDI, VU2LJ, 2LK (Assam), W6TJN/KG6, 2QIC/MM, 3NIC/MM, ZBIAB, 1AG, 1AH, 1AK, 1S, 2A, ZC6JL, 6NF, ZD2KC, ZL2LB, ZS6AJ, 6FC. (Rx: R.208.)

J. M. Graham, 2 Kelvinside Terrace West, Glasgow, N.W.

'PHONE: AC3AE, CN8AB, KA1ABX, 1CB, KG6AAF, LU4EB, MD5GW, 5KW, 5TS, PZ1M, VK3OC, VP6CDI, VU2BG, 2CS, 2LJ, W3NIC/MM, XZ2KM, ZC6JL, ZL2IE 3AW, ZS6CD, 6FC. (Rx: Marconi CR100.)

E. Nottingham, Lyndhurst, Upper Poppleton, York.

'PHONE: AR8AB, FA3FB, HZ1AB, MD5GW, 5KH, 5KW, 5LR, 5OV, 5TS, 7RJ, PZ1A, VK3EE, 3HG, VP6CDI, VQ4GWB, VU2BG, 2BJ, 2CS, 2LJ, ZBIAB, 1AG, 1AH, 1AK, 1L, 2A, ZC1AF, 6JA, 6JL, 6KL, 6NF, ZD2KC, ZL2BN, 3CX, 3LC, 4AT. (Rx: R.208.)

L. N. Goldbrough, 19 Erook Road, Sheffield 8.

'PHONE: EL2A, KG6AAF, MD5GW, 5KW, 7RJ, VK3EE, VP6CDI, VU2CS, 2LJ, W3NIC/MM, W6PJM/KG6, ZC6JL, 6MF, ZL2BM, 3AW, 3CH, 4AC.

CW: PY2OE, UA3AF, 3BN, UB5AB, UN1AO, VK3BR, 3XK, 3YP, 5NF. (Rx: R1155 plus 3-valve converter.)

D. F. Willies, The Wilderness, Grove Road, Holt, Norfolk.

'PHONE: CN8AB, MD5GW, 5KW, 5LR, PZ1M, VQ2DH, VU2LJ, ZBIAB, 1AG, 1AH, 1AK, 1S, 2A, ZC6KL, 6NF, ZE1JM, 2JV, ZS2AF, 6AJ, 6FC. (Rx: R103/A with converter.)

J. N. Trye, The Cottage, Hartshill, Nuneaton.

'PHONE: CN8AB, MD5GW, 5KW, VU2BG, 2CS, 2LJ, ZBIAB, 1AF, 1AH, 2A, ZD2KC, ZL3CX, 4AT. (Rx: V55R with Expander.)

R. A. Hawley, Torrey, Brookfield Crescent, Gosport, Cheshire.

'PHONE: CN8AB, FA3FB, HZ1AB, J9AAI, KG6AAF, MD5KW, 5LR, 5OV, VP6CDI, 6HR, VU2BG, 2CS, 2LJ, 2PG, W3NIC/MM, W6EJN/KG6, ZBIAB, 1AH, 1AK, 2A, ZC1AF, 6JL, 6KL, 6NF, ZD2KC, ZL3CX, 3JA, 4AK. (Rx: Eddystone 540.)

W. N. Sandeman, Rock House, Rudyard, Nr. Leek, Staffs.

'PHONE: AR8AB, CN8AB, MD5KW, VK3ZJ, VU2BG, 2LJ, W6TJN/KG6, ZC1AF, 6KL, ZL3JO, 4AT.

CW: VS6AE. (Rx: Hallcrafters S-36.)

G. P. Watts, 62 Belmore Road, Thorpe, Norwich, Norfolk

'PHONE: AR8AB, CN8AB, FA3B, KG6AAF, MD5KW, PZ1M, VK5BF, 6FL, VP6CDI, VQ2DH, VU2BJ, 2CS, 2CQ, 2LJ, 2QV, ZBIAG, 1AH, 1AK, 2A, ZC6JL, 6KO, ZD2KC, ZE2JV, ZS2AF, 5D, 6AJ, 6EB, 6FC, 6JB, ZL4AT.

CW: UB5AB. (Rx: Hallcrafters S.20.)

A. Hayton, 69 Munster Gardens, London, N.13.

'PHONE: HZ1AB, J8ABF, 9AAS, KG6AF, MD5LR, 5KW, 7RJ, PZ1A, VP6CDI, VU2DG, 2LJ, 2OV, W6PJM/KG6, ZB2A, ZC6JL, 6NF, 6NS, ZL2BN, 3AW, 3CX, 3JO, 3LC, 4AG, 4AO, 4DN. (Rx: R1116 and 2-stage converter.)

E. A. Parkinson, 8 Hawthorn Drive, Rodley, Leeds.

'PHONE: MD5GW, 5KW, VK3EE, 6HM, VU2BG, 2BJ, 2CQ, 2LJ, 2PS, W6PJM/KG6, ZC6JO, ZE2JV, ZS2AF, 6FC. (Rx: Eddystone 504.)

D. W. Bruce, 39 Dunkery Road, Eltham, London, S.E.9.

'PHONE: J8ABF, KG6AAF, MD5GW, 7RJ, ST2CH, VK6HM, VP6CDI, VU2DD, W3NIC/MM, W6PJM/KG6, ZBIAB, 1AK, ZL3AW, 3AY, 3IA, 3LC, 4AO. (Rx: 0-V-1.)

C. S. S. Lyon, 15 Ullet Road, Liverpool 17.

'PHONE: AR8AB, MD5GW, 5KW, VU2BG, 2LJ.

CW: UA9CH, VK3NM, 3XK, 3ZB, 5NR. (0930-1000 only.)

B. Needham, 31 Bomore Road, Kensington, London, W.11.

'PHONE: AR8AB, CN8AB, HZ1AB, KG6AAF, MD5GW, 5KH, 5KW, 5LR, 5TS, 6AR, 7RJ, PZ1A, 1M, ST2CH, VK6HM, VP6CDI, 6HR, VU2BC, 2BG, 2CQ, 2LJ, 2OV, W3NIC/MM, 6PJM/KG6, ZBIAB, 1AG, 1AH, 1AK, 1L, 1S, ZC1AF, 6JL, 6KL, 6NF, ZD2KC, ZE1JM, ZL3AW, 3CX, 4AT, 4CN, ZS1AX, 1P, 2AF, 6EB, 6FC. (Rx: R.208.)

N. Robins, 56 Avondale Avenue, Bury, Lancs.

CN8AB, EA9AI, JIAH, 9AAI, 9AAS, KA1CB, KP4KP, MD5AR, 5GW, 5LR, 5LS, 5TS, 7RJ, VK3BR, 3EE, 3OP, VU2BC, 2CH, 2CS, 2LJ, 2PG, 3WW, ZB1AB, 1AH, 1S, 1FH, 2A, ZCIAF, 1P, 6FC, 6FT, 6KL, 6NS, 6J, 6JL, ZD2KC, ZE1FH, 2KC, 2JD, ZL3CX, 3FC, 3HC, 3LC, 4AD, 4AT, 5TN, ZS1P, 2AF, 2WS, 5CY, 5DK.

M. Larner, 12 Connor Road, Charlemont, West Bromwich, Staffs.

PHONE: AR8AB, CN8AB, HZ1AB, MD5GW, 5KW, 5LR, PZ1M, VU2LJ, W3NIC/MM, 6PJN/KG6, ZC6JT, ZD2KC. (Rx: R.208.)

A. H. Onslow, 10 Egmont Road, Hove, Sussex.

PHONE: AR8AB, CN8AB, MD5AN, 5GW, 5KW, 5LR, 5OB, 5TS, 6AR, 7RJ, PZ1M, VP3CDI, VU2LJ, W6CTN/KG6, ZC6JL, ZS6FC. (Rx: R.208.)

14 mc

Dec. 27, 1900-2100 GMT

A. Hawley, Torview, Brookfield Crescent, Goostrey, Cheshire.

PHONE: CN8AB, 8EF, 8MB, D4AVE/EL, HK3AP, OX3GE, PY7AY, VO4P, VP2GE, 9F, YV1AC, 1AN, 5AB, 5AY. (Rx: Eddystone 504.)

W. B. Harrald, 124 Turney Road, London, S.E.21.

PHONE: CN8EF, D4AVF/EL, PY4BI, 7AY, VO4P, VP2GE 9F, YV5AY. (Rx: R1155A.)

J. N. Trye, The Cottage, Hartshill, Nuneaton.

PHONE: CN8AB, 8EF, 8MB, PY7AY, 7WA, VP2GE, 9F, YV1AB, 1AN. (Rx: V55R.)

T. W. Jones, 56 Cuckoo Road, Nechells, Birmingham.

PHONE: CN8AB, 8EF, D4AVE/EL, OX3GE, PY1KZ, 4BI, 7AW, 7AY YV1AN, 5AB. (Rx: V55R.)

L. Shearlaw, Kaduna, Frimley Road, Camberley, Surrey.

PHONE: HK3FAP, PY7AY, 7WH, VO1A, VP2GE, YV1AC, 1AN, 5AB. (Rx: R.208. 2000-2100 GMT.)

A. W. Robertson, 149 Firs Drive, Cranford, Middx.

PHONE: CN8BA, 8EF, HK3AB, PY7AY, VO4P, VP2GB, 9F, YV1AU, 5AB, 5AY. (Rx: 1-V-2.)

A. H. Onslow, 10 Egmont Road, Hove.

PHONE: CN8BA, 8EF, FA3GZ, HK3FAP, PY1KZ, 2AT, 4BI, 7AY, 7DO, VO4P, VP2GE, 4TAX, 9F, YV1AC, 1AF, 1AM, 1AU, 4RM, 5AB, 5AY, 8AG, ZB2A, EDZ.

M. Larner, 12 Connor Road, Charlemont, West Bromwich, Staffs.

PHONE: CN8BA, 8EF, 8MB, HK3AP, PY4BI, 7AY, VP2GE, 9F, YV1AN, 5AB, 5AY. (Rx: R.208.)

E. A. Parkinson, 8 Hawthorn Drive, Rodley, Leeds.

PHONE: CN8AB, 8BA, 8EF, 8MB, PY7WH, VP2GE, 9F, YV1AN, 5AB, 5AY. (Rx: Eddystone 504.)

W. J. C. Pinnell, 40 Melville Road, Sidcup, Kent.

PHONE: CN8EF, PY7AY, VP2GE, 9F, YV1AN, 5AB, 5AY. *CW:* NY4CM, PY11, 7AD. (Rx: V55R.)

"XYL," 43 Grenville Place, Brighton.

CW: CM6AD, CR7BC, EK1AA, KP4KD, PY1GJ, 1HQ, 1HX, 1II, 2KT, 4IE, 8MD, VO2C, 6B, 6X, VP7NX.

A. J. Slater, 72 Underdown Road, Southwick, Sussex.

PHONE: CN8BA, 8MA, CO2JY, EA9EDZ, FA3GZ, HK3FAP, PY1KZ 7AY, 8AG, T2FG, VO4P, VP2GE, 4TAX, 9F, YV1AC, 1AN, 4AM, 5AB, 5AY. *CW:* PY11, ZS6DY. (Rx: SX24.)

C. S. S. Lyon, 15 Ullet Road, Liverpool 17.

PHONE: PY7AY, VP2GE, 4TAF, 9F, YV1AN, 4AM, 5AB, 5AY.

CW: KP4KD, PY2KT, VO2BF, VP2AA, ZS6DY.

B. Needham, 31 Bomore Road, Kensington, London, W.11.

PHONE: CN8BA, 8EF, CO2MA, 5CM, FA3GZ, HK3FA, OX3BD, PY1ALF, 1KZ, 4BI, 7AY, 7WA, VO2AY, 4P, VP9F, YV1AN, 5AB, 5AY, ZB1AH, ZS6DY. (Rx: R.208.)

ST2JF, 2MP, SUIBM, 1HF, SV1RX, ØAB, ØAB/A, ØAC, TF3EA, VK2ADC, 2AKR, 2ALQ, 2TH, 3CP, 3WY, 3XJ, 3ZY, 5KG, 5KL, 6HL, 6MU, 6RU, VOZZ, VP4TAX, 4TT, VO3EDD, VS7AC, 7PF, VU2BF, 2BG, 2CD, 2CQ, 2CS, 2DG, 2LJ, 2LT, 2OV, 2TM, 7BR, 7JU, W2WMMV/C9, 3NIC/MM, 4MLV/MM, 6TJN/KG6, 6YLC/MM, XZ2DN, 2KM, ZCIAF, 6JL, 6P, 6KL, 6NF, ZL3JE, 4AT, 4BN, 4CN, ZS1P, IT, 5BS, 5Q, 6FT, 6NE, 6W.

CW: CN8BK, CR9AG, VK3HT, 3NM, 3ZB, VS6AE, XZ2DY. (December 1-28. Rx: Hallcrafters S-36.)

G. Braithwaite, 15 Ayr Street, Belfast.

AR8AB, CE1AH, 1EH, 2AX, CR9AG, 9AM, CX1VD, EA7BA, 9AI, EK1DI, EL2A, 3A, EW2L, HH2WC, 5BA, HK3AB, 3EO, 4BE, 4CO, HRICE, 1MB, HZ1AB, KA1CB, KG6AD, KP4BI, 4DP, 4DU, 4FP, 4CN, 4ERZ, MD5AM, 5LR, 6AR, 7RJ, O4A1, OQ5AR, 5BL, ST2JF, 2MP, SUIHF, 1WS, SVØAB, TG9RV, TI2MY, 2RC, VK2HK, 2HU, 2ADC, 2AKR, 2ALQ, 3AJ, 3CP, 3QK, 6FC, 6FL, 6HL, 6HK, 6RU, VP4TT, 4TZ, 6HR, 6JC, 6KM, 6CDI, 9F, VO4NSH, VS7AC, 7PS, 7PW, VU2AF, 2BE, 2BF, 2CD, 2CS, 2DG, 2DS, 2GB, 2LJ, 2LU, 2LV, 2QV, 7BR, 7VR, 7JU, W2NRV/MM, 2EJV/PK3, 4LGP/KP4, 6VK/V16, XE1A, XZ2DN, 2KM, YN1AB, YV4AM, ZAZ7K, ZD2KC, 4AL, ZS1P, IT, 1BV, 5Q, 5CD, 6U, 6KS.

R. A. Hawley, Torview, Brookfield Crescent, Goostrey, Cheshire.

PHONE: AR8AB, CM9AA, CN8AB, CR9AM, EK1DI, EQ2L, FA3FB, HK3EO, HZ1AB, J9AA1, 9AAS, 9ABX, KA1ABX, 1CB, 7GC, KG6AAF, 6AD, 6BT, KP4BP, 4EZ, 4FP, MD5KW, 5LR, 5OV, TI2MA, VK4DA, 4NV, 5KL, 6DF, 6HL, VO2AN, ZZ, 6H, VP2GB, 4TT, 5AL, 6CDI, 6JC, 6KM, 6HR, VU2BG, 2CD, 2CS, 2LJ, 2PG, 2QV, 7BR, W2LHD/MM, 2OHD/MM, 2WMMV/C9, 2RNV/MM, 4LCU/MM, 3NIC/MM, 6EJN/KG6, 6YLC/MM, 7RNT/MM, 8VHS/KG6, XE1A, XZ2KM, ZB1AB, 1AH, 1AK, 1L, 2A, ZCIAF, 6ZL, 6KL, 6NF, ZD2KC, ZL3CX, 3LE, 4AN, 4BN. (December 1-28. Rx: Eddystone 504.)

3.5 mc

D. L. McLean, 9 Cedar Grove, Yeovil, Somt.

PHONE: D2GN, GD61A, OK1SC, VE1AO, IDU, 1GD, 1GR, 1JN, 1INB, 1QW, 2AI, 2LV, 2RF, VOZAV, W1AW, 1AAH, 1BHD, 1CFO, 1GE, 1IN, 1XT, 1MCB, 1MVA, 1OPE, 2AGM, 2AQP, 2AYR, 2CSY, 2EGN, 2FSU,

GENERAL

28 mc

W. N. Sandeman, Rock House, Rudyard, Nr. Leek, Staffs.

PHONE: AR8AB, CN8AB, CR9AG, 9AM, EK1DI, EL2A, HZ1AB, KA1CB, KG6AF, 6AD, 6BT, MD5KW, 6AR, 7RJ, OQ5BA,

CALLS HEARD—(contd.)

2HCN, 2SFT, 4DCQ, 4FCZ, 4IYC, 4JFU. (Rx: AR88LF. 2300-0030 and 0715-0745 3-29 December.)

A. W. Robertson, 149 Firs Drive, Cranford, Middx.

'PHONE: D2DB, 2HL, 2K1, E1B1, HB9S, LA3G, LX1JW, OK1DR, ON4BAL, 4LMB, OZ3TM, 8Y, PAØCF, ØCM, ØCT, ØDE, ØKM, ØNO, ØRU. (Rx: 1-V-2.)

T. W. Jones, 56 Cuckoo Road, Nechells, Birmingham.

'PHONE: D4CW W2MMO/D4/MM, VE1DZ, 1G1, 1GR, 1LB, 1MB, VO1AB, 1I, W1AAH, 1CND, 1EKN, 1IS, 1Y1, 1MAGY, 1MLJ, 1MO, 1QDO, 2CSY, 2J1, 2M1, 2PDU, 3BWH, 3OFR, 3LAC, 4BAK, 4CAY, 4VKP, 4WS, 9ECA.

CW: FA8BG, OH2SF, TF3W, VE1JK, 1KF, W1GKU, 1N1JM. (Rx: V55R.)

I. E. Alfrey, 45 Rushall Avenue, Bedford Park, Chiswick, W.4.

'PHONE: D2GN, 2JC, HB9HK, LA3G, LX1JW, OK1S, ON4JW, 4LMB, 4MD, 4TB, 4XBR, OZ4AL, 4FC, 5OF, PAØAB, ØAD1, ØCT, ØDO, ØFB, Ø1MK, ØJA, ØJM, ØK1-ØRU, ØSY, ØWF, ØWVD, VE1GR, 2AO, 2MB, W1AAH, 1EKN, 2LOV, 2LZM, 3BES, 4IYC. (Rx: V55R.)

D. F. Willies, The Wilderness, Grove Road, Holt, Norfolk.

'PHONE: D2CK/MM, 2DB, 2DY, 2GN, 2GV, 2HL, 2JC, 2JD, 2JI, 4ACR, 4BW, 6AC, EI6J, 8L, F3CM, 3RW, 8BO, 9DO, 9FK, HB9BG, 1IQW, MB9AA, OK1S, ON4EDB, 4LDX, 4LMB, 4TB, 4XBR, OZ3IP, 4AD, 5AB, 5BB, 7IC, 9Z, PA1BV, ØCT, ØFB, ØFN, Ø1MK, ØML, ØMQ, ØOE, ØTM, ØWQ.

CW: F3MD, OK1DC, 1FM, OZ6AZ, PAØCG. (Rx: R103/A, December 1-25.)

G. Braithwaite, 15 Ayr Street, Belfast, N.I.

VE1EW, 1GR, 1LO, 2DX, 3EK, VO1I, 2P, 2AV, W1AC, 1HL, 1MQ, 1XO, 1ZE, 1AOH, 1ANA, 1DHD, 1H1M, 1LYA, 1MGY, 2M1, 9BYV, 2OJF, 2TEX, 3BSV, 3BWH, 3HOX, 4CTW, 4CYN, 4DLX, 4JFU. (Rx: V55R.)

C. S. S. Lyon, 15 Ullet Road, Liverpool, 17.

'PHONE: VE1DZ, 1GR, W1AAH, 1AW, 1CPI, 1DHD, 1NO, 1ZE, 2AOP, 2CSY, 2UX, 2LZM, 2MLM, 2RTM, 2RUI, 2SOV, 3JDM, 3LAI, 4HDA, 9LLX.

CW: FA8BG, OH2SF, VE2TB, W1AW, 1COV, 1GKU, 1MXO, 1OCA, 2CAY, 2CUQ, 2RBJ, 4ROR, 5KC, YU7KX. (Rx: 0-V-1.)

D. W. Bruce, 39 Dunkery Road, Eitham, London, S.E.9.

'PHONE: VE1BU, 1GD, 1GR, 1HB, 1JY, 1KP, 1LR, 1PX, 2DD, 2LZ, 2RV, 3ADC, 3KE, 3MB, 3OR, VO1A, 1B, 1I, 1T, 1Y, 2AV, 2H, 2L, W1BGO, 1CB, 2CSU, 2EMZ, 2IL, 2IYM, 2JEH, 2KKO, 2MI, 2PCX, 2RBJ, 2RMY, 2VEK, 3AEL, 3CE, 3EZJ, 3LU, 4DCQ, 4EAV, 4EL, 4FLK, 4IMJ, 4VKG, 8VPO.

CW: VE1JD, W1AJL, 1EKN, 1GUE, 1HNH, 1HM, 1IXO, 1JJS, 1QOE, 2KTU, 2RGH, 2TEP, 2VIE, 5OR, 9OGI. (2300-0000 and 0300-0500. Rx.: 0-V-1.)

1.7 mc

D. L. McLean, 9 Cedar Grove, Yeovil, Som.

'PHONE: G2BMP, 2CXW, 2FIX, 2KS, 2NC, 2TZ, 2VO, 3AAL, 3ARS, 3ARX, 3AUH, 3FT, 3PU, 4FD, 4GJ, 5MM, 5MN, 5UF, 5XM, 5XR, 6GU, 6HN, 6MB, 6NB, 8DX, GM6SR, GW2BG, 3ALE, 3ALV, 5B1. (Rx.: AR88LF.)

Sgmn. Bennett, Wireless Wing (I(D&M), RAC Centre, Bovington Camp, Dorset.

CW: D2IJ, G2AOH, 2AQN, 2BK/A, 2FIX, 2FRG, 2HDT, 2HOX, 2KO, 2LK, 2QN, 2XY, 3ABG, 3AFZ, 3AOL, 3AOX, 3AY1, 3BRA, 3CBO, 3CMI, 3CV1, 3CYL, 3KP, 3PU, 3ZY, 4DC, 5RI, 6CT, 6FO, 6PR, 8DV, 8GF, 8NF, 8SG, 8YZ, G12DHV, GW5TC.

'PHONE: G2DGB, 2KM, 2KS, 3ARS, 3PU, 6GL, GW2BG. (Rx.: 0-V-1.)

D. W. Bruce, 39 Dunkery Road, Eitham, London, S.E.9.

'PHONE: G2AZL, 2BFB, 2BYF, 2CBA, 2CD, 2CYV, 2DKT, 2FMM, 2FSX, 2FUU, 2HFD, 2HOX, 2HP, 2HPP, 2JG, 2MI, 2MU, 2NK, 2TO, 2YZ, 2ZZ, 3AAL, 3AEX, 3AMG, 3AON, 3AUG, 3AWA, 3BGU, 3BOB, 3BPX, 3CET, 3CLA, 3FT, 3KP, 3MD, 3OV, 3PU, 4AU, 4CW, 4DC, 4OK, 5IH, 5SU, 6HD, 6HU, 6IO, 6NJ, 6UT, 6YP, 8DN, GD5CZ, GM4NK, 6SR, GW2BG, MU16.

CW: D2IJ, 2IQ, G2FKZ, 2FXK, 3ACO, 3AKZ, 3AQX, 3ARS, 4IV, 5LC, 5SK, 5SZ, 5YU, 6CL, 6VS, 8NF, GW5MD, OK1AM, 1AW, 1DC, 1HW, 1LM, 1MC, 1NS, 1OD, 1TW, 1VW, 2MV, 3AL, 3JL. (Rx: 0-V-1.)

7 mc

D. A. Pullen, 14 Lisle Road, Colchester, Essex.

FA8BG, PY1LO, EE1CY, 1GT, VK3HG, W1AF1, 1GXV, 1VDD, 2LMH, 2WZ, ZC6LJ, 6SM. (Rx: R103 Mk. II.)

C. S. S. Lyon, 15 Ullet Road, Liverpool, 17.

CW: KP4CP, KV4AA, PY2CK, UB5KAF, UC2AD, 2CD, UO5AE, VE1BV, 1CY, 1GT, 1HT, 2FM, 2TO, W1JNN, 1KDW, 1KQY, 2CBS, 2EWD, 2KPV, 2LKN, 2LMH, 2NRA, 2OEC, 2OUT, 2USA, 3FLY, 3GZH, 3KBB, 3MNC, 3OP, 4AOB, 8HX, 8ULU, 9DNZ, 9KFO, 9LUA, ØNXF.

D. W. Bruce, 39 Dunkery Road, Eitham, London, S.E.9.

CW: EA300, FA8BG, OX3MG, PX1C, UB5KAB, VO2R, W1AMA, 1MLP, 1YA, 2KVY, 2LKN, 2LOJ, 2MMO/MM, 2NUU, 2OOM, 2PFM, 2VDD, 3IAK/MMT, 3KQJ, 4CDE, 4ERN, 4MRT, 6BPD, 6WDS, 8AYK, 8DGF, 8DKR, 8WNO, 8ZYE, 9MXP, ØNUC, YR5I. (0600-0900 and 2100-0000. (Rx: 0-V-1.)

W. J. C. Pinnell, 40 Melville Road, Sidcup, Kent.

CW: CM6AA, 7RS, CO2LT, 6AV, FA3WV, 8BG, 8IH, G3AHY/ZB1, KP4CP, KV4AA, LU2EL, OX3MG, PY1AHL, 1LO, 2AJT, 2CK, 4IR, UG6VD, VE1BV, 1CO, 1CY, 1CZ, 1EY, 1GM, 1GT, 1HC, 1OA, 1PA, 1PQ, 1TF, 2AAL, 2AL, 2FM, 2NR, 3AIX, VK3HG, 3KY, VO2R, W4ATP, 4CT, 4GXW, 4IZI, 4JPZ, 4JXO, 4KVW, 4LEZ, 4LKP, 4MCM, 4MDC, 4MFB, 5ORL, 6SZY, 8VNO, 8WZ, 8YX, ZC6SM, 6WL, ZD3B. (December 1-29, Rx: V55R.)

R. Pascoe, 6 Higher Moresk, Truro, Cornwall.

CW: CM3AW, PY2LW, VE1BV, 1GT, 1HC, 2FM, W1AQT, 1OUN, 1WU, 2BXU, 2EOS, 2OEC, 2HFJ, 2HZS, 2LAS, 2LKN, 2OCT, 2SMK, 2SUO, 2SVF, 2WKK, 3IEN, 3OP, 4CA, 4GIP, 4IZI, 7DL, ZS6OV. (Rx: 0-V-1: 2015-0015 GMT and 0845-0930 GMT. December 17-22.)

T. W. Jones, 56 Cuckoo Road, Nechells, Birmingham.

'PHONE: CT1LF, 1PR, FA8BL.

CW: CT1SX, EA300, PY5DZ, UA3KI, UC2CB, UQ2AD, VE1CO, VK2NY, W1AW, 1JCE, 2A1A, 2BIV, 2MFV, 2UNY, 2WGV, 3BBC, 4LMR, 4MKJ, YR5I. (December 20-27. Rx: V55R.)

L. Collis, 6 Brighton Road, Banstead, Surrey.

FA8BG, 8IH, UA4HC, 6KSA, 6LJ, ØSG, VE1GM, VQ5JTW, W1AW, 1BW, 1JCW, 1MD, 1MNG, 1OOD, 1OUQ, 2JAU, 2LGD, 2OXL, 3MOD, 9PPI. (November 28-December 28, 1900-2300 GMT.)

SWL STATIONS

No. 8

THIS is an impression of the station operated by J. A. Lambert, 28 Canadian Avenue, Catford, London, S.E.6, whose equipment is entirely home-constructed.

The bench carries a wooden rack on which the various units are assembled—bottom left, the 250-volt power pack; then the 1-V-2 receiver, using EF50-EF50-6C5-6V6; and to the right the speaker. On the central panel is the aerial selector arrangement for long-wire or Vee-beam aerials, and the mains control switch; the latter actuates a relay behind the panel which cuts power to the whole station.

On the top section of the rack, J. A. L. has his home-built six-valve superhet, fitted with AVC, BFO and S-meter; this receiver is provided with its own power pack.

With this gear, J. A. L. has heard 112 Countries in 35 Zones, with 39 Countries



verified. He has been keen on radio for four years now and is working for the next Radio Amateurs' Examination, when he hopes to qualify for a radiating permit. Incidentally, J. A. L. remarks that he thinks all SWL's should use home-built equipment, particularly for SLP's and the like.

MULLARD VALVE WALL CATALOGUE

After an absence of seven years the Mullard Wall Catalogue of valve data is again being distributed. The new edition includes details of the latest additions to the various ranges of receiving valves and cathode ray tubes. Some special types are also listed.

Nine indexed sheets provide quick reference to abridged characteristics and operating data, base diagrams, equivalents and recommended substitutions.

Supplies are limited and there may be some delay in copies reaching dealers. Traders who are not certain whether they are on the Mullard mailing list should write for a copy to The Mullard Wireless Service Co., Ltd., Century House, Shaftesbury Avenue, W.C.2.

"PSE QSL"

The object of this feature, now supported by amateurs all over the world, is two-fold: To provide transmitters with a reliable reporting service, and SWL's with the fullest possible details of amateur stations wanting listener reports and prepared to QSL by card.

We now receive from transmitters a far greater volume of requests for inclusion in "Pse QSL" than the space at present allotted will contain; we carry

forward from month to month upwards of 60 such requests, mainly from W's and nearly all DX.

Careful use of "Pse QSL" will pay SWL's good dividends in the overall percentage of cards obtained. While always giving preference to our own G's and D2's, the rest of the list is selected so that in any three-month period, the whole world is covered. It is of course essential that reports should be accurate, reliable and detailed; amateurs cannot be expected to reply to rubber-stamp reports, and it should be remembered that even for the best-intentioned operators QSL'ing involves heavy expenditure of time and postage.

THE CLUB CONTEST

The *Short Wave Magazine* 1.7 mc Club Contest, held on the top band over the period November 15-23, 1947, produced final entries from 14 Clubs. The winners were West Cornwall (G2JL), with 179 contacts, a multiplier of 7 for call areas worked, and a final score of 1253 points; second were Warrington (G3JCKR/A) with 146-8-1168; and Coventry (G2YS), last year's winners, were third with 140-8-1120.

It was hard work for most contestants, but all taking part reported that they thoroughly enjoyed the event, which is to become an annual affair organised by the *Short Wave Magazine*.



PSE QSL

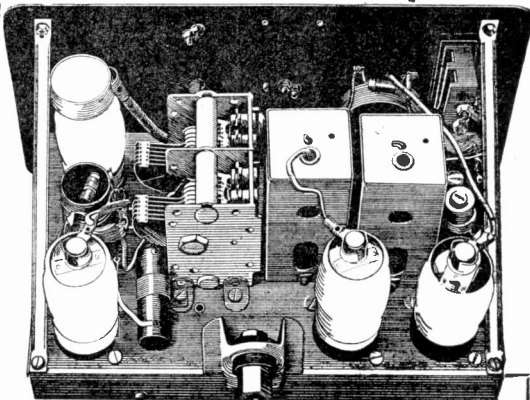
The operators listed below have informed us that they would like SWL reports on their transmissions, in accordance with the details given. All correct reports will be confirmed by QSL card. To maintain the usefulness of this section, please make your reports as comprehensive as possible.

- CE4AD P.O. Box 336, Talca, Chile. Reports wanted on CW transmissions 14030, 14085, 28060 and 28170 kc, operating 0030-0200 GMT.
- CM2BC Luz No. 205 (Bajos), Habana, Cuba. Operating CW on 14000 and 14010 kc, 2200-0500 GMT, and on 28000 and 28020 kc, 1300-1900 GMT.
- CN8MZ 38 Rue de Beaujolais, Rabat, French Morocco. Reports on VFO-controlled 'phone and CW in 7, 14 and 28 mc bands; operating periods irregular.
- D2DB Radio Club, 7 Armd. Div. Sigs, Regt., BAOR 10. Reports requested on 3-5 and 7 mc VFO-controlled 'phone, operating 0900-2300 on Sundays; 1300-2300 on Saturdays; 1700-2300 on week-days. Times GMT.
- D2FR 22 Hwy W/Shops, R.E.M.E., BAOR 3. Reports on VFO-controlled 14 mc 'phone, operating evenings and week-ends.
- D2GO QSL to 81 Campbell Street, Gainsborough, Lincs. Operating CW on 14 mc, 0630-0900 and 1800-2300 GMT.
- D2HL R. Sigs., 6 Highland Inf. Bde., BAOR 4. Reports wanted on 3-5, 7 and 14 mc CW and 'phone, operating periods irregular.
- D2IU Phantom Radio Club, 3 Ind. Sig. Reporting Sqn., BAOR 15. Reports on 14 mc CW and 'phone.
- D2IY 3 Area Intelligence Office, Brunswick, BAOR 11. Operating VFO-controlled 7 and 14 mc CW and 'phone, after 1700 GMT.
- D5AA SP.74622, BPM 415, French Zone, Germany. Reports requested on 3-5, 7, 14 and 28 mc CW and 'phone, operating 1200-1300 and 1900-2300 GMT.
- F8GT 7 Place Aristide Briand, Montpellier, Herault, France. Operating VFO-controlled and with various spot frequencies on CW only in 3-5, 7, 14 and 28 mc bands. Operating times irregular.
- F9DZ 43 Rue Gazan, Paris XIV, France. Reports wanted on CW and 'phone transmissions on various frequencies in 14 mc band.
- G2BBP 23 Bearton Green, Hitchin, Herts. Reports requested on one-watt QRPP CW, 7010 kc, from any distance over 100 miles; also reports on 28040 kc CW from over 1000 miles. Operating periods 1900-2030 GMT on Saturdays and 0900-1500 GMT on Sundays.
- G2CNO 43 Daphne Road, Orford, Woodbridge, Suffolk. Reports wanted from Sussex and S. London area on 7 mc 'phone, operating week-end mornings and afternoons; also on 14 mc CW and 'phone, operating evenings. All reports welcomed.
- G2CWL 22 Rack Field, Woolmer Hill, Haslemere, Surrey. Reports wanted on 58560 kc CW and 'phone, operating 2200-2300 GMT daily.
- G2HOP Wothorpe, Nr Stamford, Lincs. Reports wanted from distances over 1000 miles on VFO-controlled 'phone and CW on 3-5, 7, 14 and 28 mc bands; also operating on various spot frequencies in these bands. Working periods 0745-0815 GMT and 1800-2000 week-days; 0800-2300 Thursdays and Saturdays; times GMT.
- G3ABG 66 Allport Road, Cannock, Staffs. VFO-controlled CW and 'phone on 1-7, 3-5, 7, 14 and 28 mc bands, operating 1630-2300 GMT on week-days and 1000-2300 GMT over week-ends.
- G3ADR 223 Highland Road, Portsmouth, Hants. Will QSL all reports received on 14 and 28 mc transmissions.
- G3CBW 9 Chester Street, Middlesbrough, Yorks. Reports requested on 7, 14 and 28 mc CW, operating 1800-2200 GMT week-days; 1000-2300 GMT week-ends.
- G3CPP Harford, Brook Street, Wall Heath, Brierley Hill, Staffs. Reports requested on 1875 kc CW transmissions.
- G3CSE 568 James Reckitt Avenue, East Park, Hull, Yorks. Operating CW on 3547 and 7094 kc, 1800-2000 GMT daily.
- G3CWP 557 Fletchamstead Highway, Coventry, Warks. Reports wanted on CW transmissions in 7 mc band.
- G3CYV 16 School Lane, Pinner, Middlesex. Operating CW only on 1-7, 3-5, 7, 14 and 28 mc bands, but mainly on 14080 kc, at various times 0800-2300 GMT; all reports welcomed and 100 per cent. QSL'd.
- GW3CZT 2 Pandy Road, Bedwas, Nr Newport, Mon. Using CW only on 3-5 and 7 mc bands, reports requested from outside U.K.
- GM3OL Westland, Pleasance Avenue, Dumfries, Scotland. Reports wanted on CW transmissions 58750, 59200 and 58400 kc CW, operating 2000-2200 GMT daily.
- G4NT Chiltern Works, High Wycombe, Bucks. Reports requested on 28 and 58 mc 'phone; 10-metre frequency 28430 kc.
- G4OT Ranworth, Woodham Walter, Nr Maldon, Essex. Operating 'phone on 3-72, 7-22, 14-19 and 28-22 mc, and CW and 'phone on 59 mc. Periods 1200-1245, 1630-1730, 1900-2000 and 2330 GMT.
- G5AO Sergeants' Mess, R.A.F. Watton, Norfolk. Reports wanted on QRP CW, 7010 kc, during week-ends; on VFO-controlled transmissions from G5AO/A, 3-5 mc 'phone 1830-2000 GMT evenings; 7 mc CW and 'phone from outside U.K. only; and on 14 mc transmissions from any distance. Operating periods irregular.
- G6PJ 124 Nicholson Road, Sheffield 8, Yorks. Reports wanted from 'ZS and J' areas on 14 mc VFO-controlled CW, operating 0730-0815 and from 1900 GMT onwards.
- KH6FD Box R, Kukuhaele, Hawaii, Territory of Hawaii. Reports wanted on 28900 and 28968 kc 'phone, operating 1700-1900 GMT.
- KS4AH Swan Island, West Indies, Via Tampa, Fla., U.S.A. Reports on 3-5, 7, 14 and 28 mc CW, operating mainly on 7263 and 14100 kc.
- KV4AA Box 403, St. Thomas, U.S. Virgin Islands. Reports wanted on VFO-controlled 3-5, 7 and 14 mc CW, operating 2300-0200 GMT.
- LU7EO Gabota 538, Quilmes, Republica Argentina. Working 'phone and CW on various frequencies in 14 and 28 mc bands, during periods 0800-1200 and 2200-0300 GMT daily.
- PY2AJ Rue Azevedo Sodre 127, Santos, Brazil. On 50 mc 'phone before 2359 GMT daily.
- ST2CH R.A.F. Station Khartoum, Anglo-Egyptian Sudan. Operating 'phone and CW on 14320 kc, 1800-2100 GMT; and on 28400 kc, 1200-1500 GMT. Also using VFO control on occasions.
- VE7HC 2075 Nelson Street, Vancouver, British Columbia, Canada. Will be calling "CO Europe" at 0700 GMT, on 3500 kc, every Sunday morning during January and February. Detailed reports particularly requested.
- VE8BC Bear Creek, Dawson, Yukon, Canada. Operating 'phone on 14165 kc during period 0800-0900 GMT daily.
- W5CNK Frank Bray, Poteau, Oklahoma, U.S.A. Reports requested on VFO-controlled 28 mc 'phone, operating 1200-2359 GMT daily; IRC's need not be sent.
- W6WKU 3250 Midvale Avenue, Los Angeles 34, Calif., U.S.A. Operating CW in 14000-14200 kc band, during periods 0300-0700 and 1300-1600 GMT daily.
- XAFQ HQ Co., 351 Inf., APO 209, U.S. Army, Trieste. Requests detailed reports on VFO-controlled 14020-14128 kc CW, operating 1630-2245 GMT daily, 1130-2245 over week-ends. 100 per cent. QSL station.

4 VALVE SUPERHET

HERE IS A SUPERHET which will bring you hundreds of short wave stations just as soon as batteries and phones are connected. 6 to 9 MC/S—4 2-volt valves—slow motion drive—size only 6" x 5" x 9½"—complete as illustrated and guaranteed O.K. Price 29/6, postage and insurance 2/6

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0/500 microamps, 2" meter. Moving coil black engraving on white scale	10/-
0/500 microamps, 1½" meter. Moving coil white on black	10/-
0/1 mA, 2" meter. Moving coil, black on white	7/6
0/5 mA, 2" meter. Moving coil, black on white	7/6
0/2.5 mA A.C., 2½" meter. Moving coil, with rectifier	12/6
0/150 volts D.C., 2½" meter. Moving coil, with internal resistance	7/6

COMPONENTS. All new and unused.

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.05 Mfd. 500v Sprague metal-cased tubular condensers ..	9d.
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.25 Mfd 500v Metal pack tubular condensers	1/6
50 Mfd. 1.2v Reversible electrolytic	1/9
Wright & Weaire Midget AF Transformer, 4.3:1 type 209	7/6
Wright & Weaire Midget AF Transformer, 15.0:1 type 210	7/6
Aerovox 4 Mfd. 1,000v.d.c. wkg. oil-filled condensers, complete with fixing clips	7/6
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EQUIPMENT. Stromberg-Carlson receivers type CCT-46145 in original cartons, absolutely brand-new and complete with dynamotor for 22/30 volt operation. Range 520/1500 kcs. (Postage and packing 5/ extra), £6.

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Getting a Licence

Some Notes for Those
Who Want to Know How

WE frequently receive enquiries from readers which amount to "How Can I Become an Amateur Transmitter?" If you do not hold exempting qualifications, you have to pass a technical examination and a Morse Test. Here is an outline, in brief, of the procedure involved.

The Radio Amateurs' Examination is conducted under the *agis* of the City & Guilds of London Institute, at examination centres all over the country. Particulars regarding the R.A.E. can be obtained either from your local Technical College or the Superintendent, City & Guilds of London Institute, Dept. of Technology, 31 Brechin Place, South Kensington, London, S.W.7. Specimen question papers have appeared in the *Short Wave Listener*.

The authority for the issue of licences is the Engineer-in-Chief, Radio Branch W5/5, G.P.O., London, E.C.1, from whom Forms E-in-C 447 (Application) and E-in-C 428 (Conditions and Exemptions) can be obtained. The Morse Test standard

is 12 words per minute, sending and receiving, and is arranged through the nearest head post office on instructions from London.

Almost all prospective applicants who have been in the communications or radar branches of the Services, whether commissioned or not, will find they are exempt from either the R.A.E. or the Morse Test, if not both. For instance, an Officer R.N. (C), a LRM W/T, an Officer R.A. (I.F.C.), a Foreman of Signals, a Signals Officer R.A.F., and a W/Op (Air) are merely examples from a long list not having to take either examination. They would thus be granted an "A" Licence as amateur transmitters merely on the acceptance of their applications by the G.P.O.

Grades such as LRM A.R., Radio Mech., R.Sigs., and Wireless Mech. I would be exempt from the technical examination but would have to pass the Morse Test. On the other hand, an Air Signals Officer (F.A.A.), a Telegraphist S., an Operator Wireless & Keyboard, and a W/T Slip Reader Operator are accepted as being fully qualified in Morse but would have to sit the technical examination.

There are also a number of civilian exemptions in the same sense as the foregoing. All are covered in Form E-in-C 428, obtainable from the G.P.O.

FIELD DAYS IN SWEDEN

A live-wire in Sweden is Arne Skoog, who finds time for listening to world-wide short wave broadcasting stations, editing the short wave section of Sweden's largest newspaper, *Dagens Nyheter*, preparing the programme weekly *Roster i Radio* ("Voices in Radio")—the Swedish Broadcasting Corporation's equivalent of the *Radio Times*—besides operating his own amateur transmitter under the call-letters SM5CQ at his home in Danderyd.

From July 26-30, Arne Skoog was on vacation in the district of Jämtland in Central Sweden, at the field-day camp on Frösön, a beautiful island on the Stor Lake (Storsjö). This camp operated under the call-sign SM3XA, with three transmitters installed in two spacious tents. Contacts were made in the 14, 7 and 3.5 mc bands. In addition, a number of transceivers were put into use for ultra short-wave work.

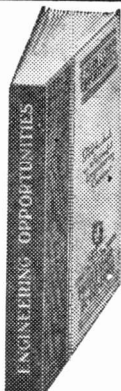
Frösön Camp was visited by at least fifty Swedish amateurs, two Norwegians and one American, WI4KY from Boston; there were also hundreds of other interested

visitors. There is no doubt whatever that this radio camp was a huge success, and WI4KY expressed the opinion that it was the biggest ever held in any part of the world.



Arne Skoog, SM5CQ, of Danderyd, Sweden, operated SM3XA at the Frösön holiday camp on Lake Stor.

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TEST SET No. 72

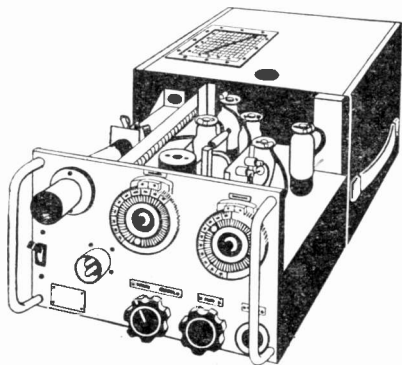
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MONTHLY COMMENT

DX

by

R. H. GREENLAND, B.Sc.

broadcast

December was a month particularly favourable for the reception of Asiatic broadcasters, and for that reason it is appropriate to deal first with stations in that part of the world.

At the end of the January article I mentioned reception of a Japanese broadcasting station on 9650 kc and using the call-letters JOAK. This one has since been quite consistent and I hope that many of you have been able to find it. On December 4 at 2240, the Japs were being given an English lesson by an American who was instructing them in the meaning of the words: "O come, All ye faithful." At 2300 came the call-letters JOAK, given by a woman, and followed by a "pips" time signal. WLKS, Kure, Japan, by the way, has returned to its original frequency of 6105 kc.

Hong-Kong is ever an elusive locality to log, but each year around Christmas time the writer is able to find it. On December 13, between 1400 and 1415, ZBW3, 9525 kc, was heard broadcasting a number of pianoforte duets; then came the direction: "And from now until eleven o'clock, ZBW is presenting a programme of cabaret and dance music."

Hong-Kong has two medium-wave transmitters: ZBK, 640 kc and ZBW, 845 kc, but ZBW3 on 9525 kc is the only short-wave outlet. The last-named operates on weekdays, 0430-1500 and on Sundays, 0230-1500.

XGOY, The Voice of China in Chungking, is operating daily in the 31-metre band on a frequency of 9635 kc, and is not now heard in the 25-metre band. It can be logged at 1400 with a Newscast in English relayed from Nanking, and on Sundays; this is preceded by a thirty-minute broadcast entitled: "Bringing Christ to the Nations."

Listening to this on December 21, the writer found it to be a transcription of a U.S. feature; this at first leads one to believe that it is not a Chinese station at all. XURA is a broadcasting station in Tia-Pei, Taiwan (Formosa), which has recently

World-wide reception of Short Wave programmes

adopted the 6150 kc channel as its frequency. Its daily schedule is understood to be 1100-1435.

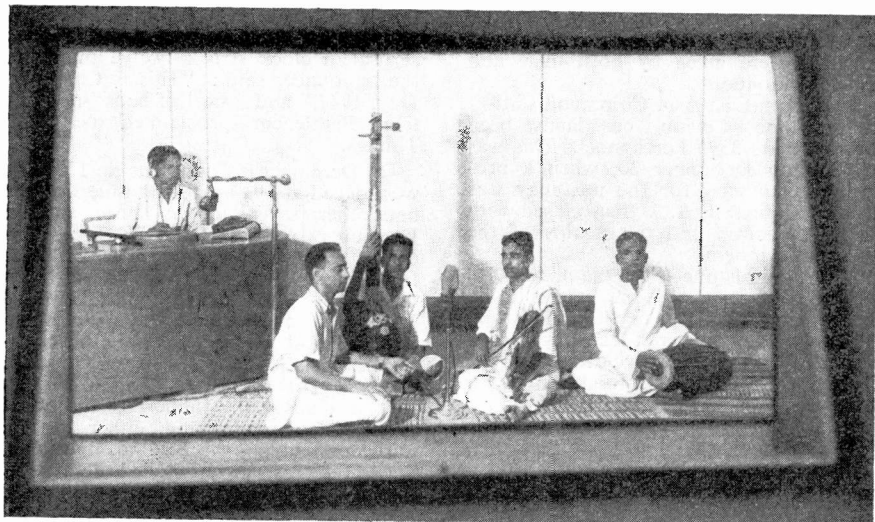
In French Indo-China, Radio-France, Hanoi, operates on 6048 kc. The authorised schedule gives the close as 1400, but in reality it is more often 1300. Reception reports are earnestly requested by Radio-France, the address being 56 Rue Richau, Hanoi, French Indo-China. It can here be mentioned that Radio Viet-Nam in the same country is an *unauthorised* short wave station. There are reports that a station using the call-letters VS4S and located in British North Borneo has been heard broadcasting on 7237 kc with a power of 1000 watts. This should be a good catch for real DX'ers!

Far East

Station YFA4, 9350 kc, has been consistent in the early afternoons. Well-known dance airs are a feature after 1400, and the concluding announcement at 1500 is not without interest. It is: "This is Radio Macassar, situated in the island of Celebes, one of the largest islands of the Eastern Archipelago, and broadcasting from Macassar, capital of the autonomous state of East Indonesia." Radio Macassar, which is operated under Dutch administration, was stated to be using wavelengths of 32.05 m. (YFA4) and 59.64 m. (YFA10).

Finally, this broadcaster terminated with the words: "Listen to the programme of Radio Macassar to-morrow. Goodnight Everybody, Goodnight."

In the island of Java, Radio Batavia has been heard on 9557 kc recently. About 1420 on December 6, a programme of Strauss waltzes was being broadcast and



An interesting photograph recently received by R.H.G. from VUM2, Madras. It was taken during an Indian music broadcast.

at 1430 came the chimes of a clock striking eleven, the call "Radio Batavia", and further directions in Dutch.

On December 13, YHN, Djokjakarta on 11000 kc, was logged with an English talk at 1750; it closed down at 1800. In the Philippine Islands, KZRH, Manila, is still the foremost broadcaster. On Saturdays you can hear the feature: "Saturday Night Party" from 1500 until 1600, at which hour the following announcement is given: "You are listening to KZRH, The Voice of the Philippines, broadcasting on 750 kc medium-wave and 9630 kc on the 31-metre band short-wave. KZRH is now signing off. We conclude with the Philippine National Anthem."

A most interesting letter is to hand from Miss I. Ballingall, of the British Far Eastern Broadcasting Service, P.O. Box 434, Singapore. She gives the present frequency allocations for this service, and includes a very clear account of the position as regards the British Far Eastern Broadcasting Service and Radio Malaya. I feel that her verbatim statement will be of interest to readers. "There are two broadcasting authorities operating from Singapore. Radio Malaya is the local station, run by the Government of Singapore—a Colonial Office department. The British Far Eastern Broadcasting Service broadcasts on short waves only to target areas outside Singapore and Malaya.

We just happen to be sited in Singapore, but we are not broadcasting to the local population—however, being on good neighbourly terms with our colleagues of Radio Malaya, we lend them our transmitters for one hour daily so that Radio Malaya lunch time programme (0530-0630 GMT) goes out on our 25, 44, 19 and 13 metre bands. Our own programmes do not start till 0800 GMT and we have two networks, namely Orange and Purple, which always broadcast on two frequencies. Incidentally, B.F.E.B.S. is run by the British Foreign Office for the purpose of projecting Britain to South-East Asia."

Radio Malaya, Singapore, uses the following short wave channels: 4825 kc (61.18 m.) and 7200 kc (41.67 m.), each with 7.5 kW power. Radio Malaya, Kuala Lumpur, has adopted 6060 kc (49.5 m.) and uses 1 kilowatt. The writer logged Radio Malaya, Singapore, 4825 kc, on December 20, with dance music until 1600, when a "pips" time signal was heard, then the direction: "This is the Red Network, Radio Malaya." Then came the News headlines, followed by: "Goodnight Everybody, Goodnight" and "God Save the King."

HS8PD, Bangkok, 5994 kc, is the short wave outlet of the Siamese Broadcasting Corporation. It is understood to present an English programme from 1100 until 1130 daily, and reopens at 1200 with a

broadcast in Siamese. It was logged here at 1230 when directions in a foreign language were given by both male and female announcers.

The South-East Asia Command station in Colombo, Ceylon, has lately been logged on its 3395 kc channel. This was at 1610 on December 20, when a programme summary for the next day was given. Radio S.E.A.C. then closed with its usual march and the strains of the National Anthem.

F. W. Hardstone (Streatham, S.W.16) informs us that he, too, has logged Radio S.E.A.C. on this frequency, and adds that it is only a low-powered transmitter (800 watts), used for local broadcasts to the districts surrounding Colombo and for Southern India. Well done, F.W.H.!

India

In India itself, VUB2, Bombay, 4880 kc, was heard with native music at 1630, and VUD2, Delhi, 4860 kc, came in at good strength with the news in English at the same time on December 6. On December 13 at 1015, an All-India Radio broadcast of Western music was well received over VUD8 on 21510 kc; the time was announced as "3.45 p.m. Indian Standard Time." Again, VUD2, 3495 kc, was logged at 1610 on December 20, when an English programme entitled: "My Tallest Story" came over uncommonly well.

E. Strangeway (Scagglethorpe, Yorks) has reported on an unusual broadcasting station, heard with an English programme on Sundays and Wednesdays from 1700 to 1730. This has been identified by the writer as RAD, Radio Tashkent in Russian Turkestan, using a frequency of 6820 kc. The broadcast consists of an English news, a topical talk, and a short orchestral concert. At the conclusion, the following direction is given: "This is Radio Tashkent calling! Goodnight, Everybody," and listeners are requested to send their comments to: The Tashkent Broadcasting Committee. You may note that this station employs a woman announcer, that the striking of a metallic object is used for an interval signal and that all hours quoted are in Indian Standard Time.

JCKW, Jerusalem, 7220 kc, has been well received of late. Its most impressive broadcast was on Christmas Eve, when the closing time was extended to 2200. At 2130 we heard a Christmas Oratorio, this being followed by a programme of familiar

carols and hymns, concluding with: "O Come, All ye faithful" at 2156. Then a Jerusalem clock struck twelve midnight, the announcer said: "This is Christmas Day, 1947," and a peal of bells—possibly from Bethlehem—proclaimed the Good Tidings.

On December 6, Damascus on 12000 kc was logged at 1910 with the Blue Danube and other items of light music, and on December 14, FXE, Syria, 8036 kc, concluded its Western programme with the following words: "You have been listening to the English Hour from the Lebanese Broadcasting Station, Beirut, so until to-morrow evening at a quarter-to-seven, this is Max Pringle saying Goodbye to you." This was at 1645. There are also reports of a R.A.F. Middle-East station on 12080 kc, broadcasting either Arabic music or relaying the BBC around 1200, but so far, this one has eluded the writer's efforts to log it.

Finally, TAP, Ankara, 9465 kc, was well received on December 11, when at 2130, the usual Thursday broadcast in English contained an interesting talk on the manufacture in Turkey of meerscham pipes.

Australasia

From down under we have the usual batch of interesting broadcasts. Firstly, VLH3, 9580 kc, is still an excellent signal prior to the close at 1400 daily. On Saturday, December 6, at 1355, for instance, the final Five Minutes' Meditation was given by Professor Berry of Western Australia. Latterly, a lady announcer has been noted in this transmission. VLQ3, Brisbane, 9660 kc, put in a surprisingly good signal around 0810 on December 20, when the writer listened to a running commentary on a cricket match then in progress between South Australia and New South Wales at Adelaide. A weather forecast for Queensland was given at 0913, and the call: "Short wave station VLQ3" was clearly heard at 0915. Here I would mention that Radi Australia's afternoon broadcast to the British Isles from 1400 to 1500 over VLA6, 15200 kc, and VLG10, 11760 kc, is also carried over VLC7, 11810 kc, from 1430 to 1500.

Expedition Station

Some real DX appears to be in sight now that the Australian Research Expedition

ALL TIMES GIVEN IN THIS ARTICLE ARE GMT EXCEPT WHERE STATED

has set sail for the Antarctic. The base station, which will maintain communication with Australia, will be located on Heard Island, and will use the following call-letters: VJH, 9940 kc; VJH2, 12255 kc; VJH 3, 15845 kc; and VJH4, 19255 kc. Fixed stations VJM, 9940 kc; VJM2, 12255 kc; VJM3, 15845 kc; and VJM4, 19255 kc, will also be maintained on Macquarie Island.

As a sequel to this news may I add that I have just heard from Commander H. H. Holton, Officer-in-Charge of the Radio-Television Section of the United States Navy, confirming my reception on February 23, 1947, of NAVE aboard the *U.S.S. Mount Olympus*, flagship of the Byrd Antarctic Expedition at the South Pole.

Africa

There is not a great deal to report from Africa, though the writer logged ETAA, Addis Ababa, 15060 kc, twice during the month.

First, on December 6, news in Amharic was heard from 1840 to 1850, then native music until 1903, when the broadcast ended abruptly with the words: "This is Radio Service." A week later, again on a Saturday, native music at 1804 was followed by the call at 1808: "Radio Addis Ababa."

In the adjacent country of the Sudan, Radio Omdurman, 13320 kc, was at good strength for its weekly English broadcast at 1730 on Friday, December 5; in the French Cameroons, FIA, Douala, 7950 kc, is daily on the air from 1800 to 2000. I. E. Alfrey (Chiswick, W.4) logged FIA on December 1 and on subsequent evenings with an S7-8 signal.

CR6RN on 15895 kc was a good signal early in the month, and on one occasion, dance music at 1915 was followed by a bugle call, march, and news in Portuguese read by a man. At 1930, a direction was heard, which included the words: "Luanda, Africa Portuguesa Occidentale."

Reception of South African broadcasting stations has not been good, but Cape Town, 5880 kc, was moderate during its Epilogue at 2103 on December 7. The preceding eleven o'clock chimes emanate apparently from the Union Buildings in Pretoria. On December 21, the spirit of Christmas was in the air when the Hallelujah Chorus was heard from Johannesburg, 3450 kc, at 1620.

Europe

Both E. Strangeway (Scagglethorpe, Yorks.) and the writer have rediscovered Radio Barneveld; during the Christmas season it was heard regularly with an S9



An outside in bottles. The Mullard N.T.30 high power silica transmitting valve being shown to visiting officers of the Electrical Branch of the Royal Navy.

DX BROADCAST—CALLS HEARD

F. W. Hardstone, 43 Shrubbery Road, Streatham, London, S.W.16.

1.	December 2	1540	KZRH	Manila	9640 kc, S8-9
2.	December 4	2100	FGA7	Dakar	11715 kc, S8
3.	December 6	0030	HHCN	Port-au-Prince	5660 kc, S7
4.	December 7	1840	SEAC	Colombo	3395 kc, S4-5
5.	December 7	2315	PZH5	Paramaribo	5845 kc, S7
6.	December 8	0030	HH3W	Port-au-Prince	10135 kc, S6-7
7.	December 8	0130	YV5RW	Caracas	3400 kc, S7
8.	December 8	0140	YV1RU	Maracaibo	3440 kc, S8
9.	December 8	0150	YV4RP	Valencia	3460 kc, S7
10.	December 9	2350	COBC	Havana	9360 kc, S7-8
11.	December 10	0045	OAX4Z	Lima	5895 kc, S8
12.	December 10	0055	HRN	Tegucigalpa	5875 kc, S7-8

Rx. V55R plus 3 Stage Preselector. Aerial: 60 ft. Inv-L

H. R. Purser, 50 Whitehall Road, Harrow, Middlesex.

1.	November 28	2100		Warsaw III	6220 kc, S8
2.	November 28	2145	OTC2	Leopoldville	9745 kc, S8
3.	November 30	2000		Belgrade	6100 kc, S8

Rx. Ekco A28 with bandspread tuning

D.X. Listener, 3 Langton Terrace, Rochdale, Lancs.

1.	December 3	2250	CHOL	Sackville	11720 kc, S8
2.	December 5	2200	WRUS	Boston	11790 kc, S6
3.	December 7	2320		Andorra la Vieja	5980 kc, S9
4.	December 8	2230	OLR2A	Prague	6010 kc, S9
5.	December 8	2330	WRUL	Boston	15290 kc, S8

C. A. Wharton, 14 Vicars Terrace, Harehills, Leeds 8.

1.	December 23	2353	CJCX	Sydney, N.S.	6010 kc, S6
2.	December 24	1500	KZRH	Manila	9640 kc, S6
3.	December 24	1600	XGOY	Chungking	9663 kc, S4
4.	December 25	0937	JLR	Tokio	6015 kc, S2
5.	December 27	2040	ZRK	Capetown	5880 kc, S3
6.	December 28	1400	VLA6	Shepparton	15200 kc, S7

Rx. Eddystone 640. Aerial: 120 ft. Inv-L SSE

M. E. A. Matthews, 63 Evesham Road, Stratford-on-Avon, Warcs.

1.	November 29	1645		Jaffa	3320 kc, S4
2.	December 3	1800		Tetuan	6067 kc, S7
3.	December 6	0400	HJEX	Cali	4865 kc, S7
4.	December 6	0430	VP4RD	Port of Spain	6085 kc, S8
5.	December 6	0500	WOR	New York	4750 kc, S9
6.	December 11	2300	HJDE	Medellin	6145 kc, S8
7.	December 12	1800	ZOY	Accra	4915 kc, S5
8.	December 19	2340	HL2T	Trajillo, D.R.	7275 kc, S9 plus
9.	December 20	1500	ZBW3	Hong-Kong	9525 kc, S5
10.	December 20	1320	1320	Batavia	9550 kc, S7
11.	December 21	1730		Tananarivo	10615 kc, S4
12.	December 21	1830	OQ2RC	Leopoldville	9210 kc, S7

Rx. V55R. Aerial: 50 ft. Inv-L N/S

J. H. Simpson, 32, Aberdare Gardens, London, N.W.6.

1.	December 19	2315	HH3W	Port-au-Prince	10135 kc, S6
2.	December 21	1100	KRHO	Honolulu	9650 kc, S5
3.	December 21	1300	XGOY	Chungking	9655 kc, S7
4.	December 26	1445		Macassar, Celebes	9360 kc, S6
5.	December 26	1510	KZRH	Manila	9640 kc, S6
6.	December 26	1555	CR7BF	Lourenco Marques	9640 kc, S8
7.	December 26	1740		Radio Barneveld	6513 kc, S8
8.	December 26	2310	CJCX	Sydney, N.S.	6010 kc, S8
9.	December 26	2315	CBFW	Quebec	6090 kc, S9
10.	December 27	1245		Cetinji, Yugoslavia	9360 kc, S7
11.	December 28	1025		Saigon, Indo-China	11785 kc, S5
12.	December 28	2030		Ponta Delgada	11090 kc, S9 plus

Rx. RAP SH6. Aerial: 21½ ft. Indoor

J. H. Saunders, Old Market Inn, Torwood Street, Torquay.

1.	December 7	1545	VUD2	Delhi	3495 kc, S8
2.	December 7	1551		Jaffa	3325 kc, S8
3.	December 7	1553		Jaffa	6790 kc, S6
4.	December 7	1600	S.E.A.C.	Colombo	3395 kc, S4
5.	December 8	2345	CJCX	Sydney, N.S.	6010 kc, S8
6.	December 9	2300		Rome	6085 kc, S9 plus
7.	December 9	2301	ZYB7	Sao Paulo	6095 kc, S8
8.	December 9	3208	ZFY	Georgetown	6000 kc, S7
9.	December 21	2315	YV5RN	Caracas	4915 kc, S9
10.	December 21	2330	YV5RU	Caracas	4880 kc, S8
11.	December 22	1600		Radio Barneveld	6513 kc, S6

Rx. 1155. Aerial: 30 ft. Outdoor

signal, but still suffering from intermittent morse QRM. E. S. noted the following direction given by a woman announcer at 1530 on December 21: "This is Radio Barneveld—Your own favourite station." The same afternoon, the writer listened from 1745 to 1800 to a "Services Quiz" which was won by the 14th Field Survey Squadron, BAORC; the direction followed: "This is Radio Barneveld on the short wave 46 metres or a frequency of 6513 kc."

In Germany, the American Forces Network station at Frankfurt, 6080 kc, was prominent with the speeches of Mr. Ernest Bevin and Mr. George Marshall, relayed from the Dorchester Hotel, London, on the occasion of the Pilgrims' Dinner held in honour of the American Secretary of State at 2115 on December 12. From Linz, Austria, came a programme summary in German at 0625 on December 20. This is a Rot-Weiss-Rot (red-white-red) network station on 9575 kc. A reader from Rochdale (name not given) reports Radio Andorra at good strength on 5980 kc with dance music for the U.S.A. and United Kingdom at 2320. H. R. Purser (Harrow) tells of good reception of Belgrade, Yugoslavia, 6100 kc (49.18 m.), broadcasting in English between 2000 and 2100, and of Warsaw III, 6220 kc (48.25 m.), also with an English programme prior to 2100. Is the latter a new channel for Poland?

Latin America

Latin Americans are plentiful if you are prepared to spend an hour or two's listening after midnight and even before!

LRX, Radio El Mundo, Buenos Aires, 9635 kc, gives its call in Spanish at regular intervals; the direction is preceded by a series of vibraphone notes; and LRS, Radio Splendid, 9315 kc, may also be heard at 2300. In Brazil, search for PRL7, Radio Nacional, 9720 kc, and PSH, La Voz do Brasil, 10220 kc around 2245; both were logged here on December 5. Both PRL7 and ZYB8, 11765 kc, were excellent as early as 2015 on December 7, with the relay of a commentary on a pelota game.

The latter station included the following slogan in its direction at 2030: "Emisoras Sociales de Sao Paulo." Peru's most consistent station is OAX4Z, Lima, 5890 kc, logged here at almost any time between 2300 when it signs on, and 0425 when it closes down. On December 27 at 0110, two stations were logged on 5870 kc and

5875 kc; they were respectively CP15, La Paz, Bolivia and HRN, Tegucigalpa, Honduras.

In Central America, YSUA, San Salvador, 6250 kc, was logged recently, closing down with a National March at 0458. Two Mexicans in the 31-metre band were well received in the morning of December 20.

XEWW, 9470 kc, gave news in Spanish at 0555, ending with the call and slogan: "La Voz da la America Latina"; it faded out at 0600 to the strains of a slow waltz. XEBT, Mexico City, 9625 kc, continued with dance music until 0620, when "El Buen Tono" closed down with its familiar signature tune—Liszt's Liebestraume. Some evenings you may hear HH3W, Port-au-Prince, Haiti, 10135 kc, as early as 2315, with announcements and soprano songs, all with a French flavour.

Two readers are to be congratulated on hearing and receiving verification cards for their 9625 kc channel reports from Radio Trinidad. They are I. E. Alfrey (Chiswick, W.4) and L. A. Moreton (Evesham); both give the hours of transmission, namely; Weekdays: 1100-1300, 1600-1800, 2000-0300; Sundays: 1100-1800, 2000-0300. L. A. M.'s reply from them contains the following note: "As from December 1, we shall be operating on 6085 kc (49.3 metres) during the hours of 2200 and 0300." Both QSL's contain the additional information: "We propose to carry the commentaries of the cricket matches between the M.C.C. and W.I. next year (commencing January, 1948), and if you succeed in picking us up, we shall be glad to have your reports. It is likely that we shall still be using the 6085 kc frequency at that time, but in any event, announcements will be made when it is decided what frequency will be used." These details were supplied by A. Cross, Chief Engineer, Trinidad Broadcasting Co. Ltd., Broadcasting House, 11b Maraval Road, Port-of-Spain, Trinidad, British West Indies.

Incidentally, a late report from M. E. A. Matthews (Stratford-on-Avon) says that he listened to the Louis-Walcott fight over VP4RD on 6085 kc at 0430 on December 6.

Last month I mentioned VPO3, Bridgetown, Barbados, 10605 kc, heard around 2130 nightly. News has now reached us that VPO2, 15425 kc, and VPO8, 19055 kc, are being used in addition after 2100.

North America

In the United States, good reception can

be reported from WGEX, 17880 kc. On December 6, it was logged during a first rate performance of Dvorak's New World Symphony at 1855. The call followed at 1900; it ran: "This is General Electric Station WGEX, Schenectady."

E. Strangeway has again logged signals from the American station on approximately 42700 kc. On December 18, between 1510 and 1600, he heard various sponsored programmes, which included such announcements as: "Use water sparingly." The call-sign was difficult to follow, but appeared to be: WCBS, New York. Can anyone offer a solution here?

A certain number of readers' letters unfortunately arrived too late for inclusion this month. Please note that the closing date for reports to be covered in the next issue is January 31 *latest*. Address all correspondence for this feature to R. H. Greenland, c/o *Short Wave Listener*, 49 Victoria Street, London, S.W.1.

In conclusion, may I take this opportunity of thanking each and every one of you who has been so kind as to send me the season's good wishes, and I have the greatest pleasure in reciprocating them all most heartily.

WORLD UNIVERSITY OF THE AIR

The Programme and Budget Committee of the Unesco Conference now in progress in Mexico City has recommended the creation of a "World University of the Air" to link up radio networks and make available the best brains of every country to all peoples.

The proposal was made by the Mexican delegation and it was urged that Unesco should promote international collaboration in the production of radio programmes. It was pointed out that there was a great lack of cultural knowledge in many Latin-American Universities compared, for instance, with Oxford or Yale, where eminent men were available with the latest knowledge for the benefit of students. The World Radio University would make possible the world-wide dissemination of knowledge and culture.

TELEVISION LICENCES

An interesting summary given by the GPO discloses that there are now no less than 31,500 television licences issued, an increase of 3,400 for the month of November. The percentage increase for the six months ending November was 66.

PREFIX LIST WALL-CARD

A neat hanging card is now available, consisting of an up-to-date list of international amateur prefixes, arranged alphabetically by prefixes, which will be of value to every SWL. It is 6d. only, of Messrs. R. Martin & Co., Ltd. (G6MN), Bridge Street, Worksop, Notts.

EX-U.S. NAVY AIRCRAFT RADIO RECEIVER UNIT

This outfit is complete in a black metal case size 12" x 12" x 8", and contains, in addition to a host of useful components, ten International octal metal cased valves including two 6H6, 6 6SH7, etc. Super quality Rotary Generator, relays, I.F. transformers, etc.

We advise you to place an early order to be sure of securing this exceptional bargain.

PRICE 39/6 Each *Carriage and packing 7/6 extra.*

We have just had a fresh delivery of the R1224A Communications Receiver.

Complete with five valves, Muirhead dials, etc., 30 to 300 metres in three wave bands. All brand new and guaranteed. **ONLY £7/10/0 plus 10/- carriage and packing.**

NOTE: We still have available a few only Brand new and tested M.C.R.I. Receivers. **£9/10/0 plus 2/6 carriage and packing.**

Brand New Moving Coil Microammeter calibrated 0 — 250; by famous makers. 2½ in. panel mounting. 25/- each **Panel** complete with the following components: 1 miniature volume control, 2 amphenol valveholders, 1 L.F. transformer and several resistors and condensers, only 3/-. A real Bargain.

WHY NOT PAY US A VISIT ? IT WILL PAY YOU

We have the finest range of components and units at real bargain prices, and in addition to our large stocks of government surplus we can supply all standard test equipment, pick-ups, amplifiers, etc.

We shall be pleased to give you the benefit of our experience and to advise you on all your radio problems.

If unable to pay us a visit, send for List "S.L.," of other bargains available

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SHORT WAVE BROADCAST STATIONS

Revision 16-86-25-35 Metres

Giving Frequency, Wavelength, Callsign and Location

These lists appear each month, covering the 11-128 metre section of the wave band within which all the short wave broadcasting services of the world operate. For economy of space, this band is dealt with in five sections, a list of active stations in one of these sections being given in full every month. Such revision is necessary due to constant changes of frequency, callsign and operating schedules. All stations appearing in our lists are normally receivable in this country and are under regular observation.

Fre- quency	Wave- Length	Callsign	Location
17784	16-87	HER7	Schwarzenburg.
17780	16-87	WNBI	New York.
		KGEX	San Francisco.
17775	16-88	PHI	Hilversum.
17770	16-88	S.E.A.C.	Colombo.
			Moscow.
17765	16-89		Paris
17760	16-90	KWID	San Francisco.
		VUD3	Delhi.
		VUD8	Delhi.
17750	16-90	WRUW	Boston.
			Moscow.
17745	16-91		Moscow.
17740	16-92	OTC5	Leopoldville.
17730	16-92	GVO	Daventry.
17720	16-93	LRA5	Buenos Aires.
17715	16-93	GRA	Daventry.
17700	16-95	GVP	Daventry.
17527	17-11		Brazzaville.
16670	18-00	CNR	Rabat., Morocco.
15895	18-87	CR6RL	Luanda., Angola.
15825	18-96	WBC	New York.
15450	19-41	GRD	Daventry.
15440	19-43		Moscow.
15435	19-43	GWE	Daventry.
15420	19-45	GWD	Daventry.
15412	19-47		Moscow.
15385	19-50		Moscow.
15360	19-53		Moscow.
15350	19-54	WRUA	Boston.
		WRUS	Boston.
			Paris.
15340	19-56		Moscow.
15330	19-57	WGEO	Schenectady.
		KNBX	San Francisco.
		KCBA	Los Angeles.
15320	19-58	CKCS	Sackville.
		OZH2	Copenhagen.
		VLA5	Shepparton.
		VLC4	Shepparton.
			Moscow.
15315	19-59	HER6	Schwarzenburg.
		HEU6	Schwarzenburg.
15310	19-60	GSP	Daventry.
15300	19-61	GWR	Daventry.
			Singapore.
15290	19-62	WRUL	Boston.
		VUD11	Delhi.
15280	19-63	WNRE	New York.
		ZL4	Wellington.
			Moscow.
15270	19-65	WCBN	New York.
		WCRC	New York.
15260	19-66	GSI	Daventry.
15250	19-67	WLWK	Cincinnati.
		WLWR2	Cincinnati.
		KNBI	Dixon.
		KRHO	Honolulu.
15240	19-69	TPA2	Paris.
		VLG6	Lyndhurst.
		MelH5	Melbourne.
15230	19-69	OLR5A	Prague.
			Moscow.
15220	19-71	PCJ	Hilversum.
		S.E.A.C.	Colombo.
15210	19-72	WBOS	Boston.
		VLC11	Shepparton.
15200	19-74	VLA6	Shepparton.
		WLW1	Cincinnati.
		WLWL2	Cincinnati.
15195	19-74	TAQ	Ankara.
15190	19-75	OIX4	Bjornborg.

Fre- quency	Wave- Length	Callsign	Location
15190	19-75	CKCX	Sackville.
		VUD5	Delhi.
15180	19-77	GSO	Daventry.
15170	19-78	TGWA	Guatemala City.
15160	19-79	VUD7	Delhi.
		VLG7	Lyndhurst.
		OLR5C	Prague.
15155	19-80	SBT	Stockholm.
15150	19-80	WRCA	New York.
		KCBA	Los Angeles.
			Munich.
15145	19-81	JKW6	Tokio.
			Batavia.
15140	19-82	GSF	Daventry.
15130	19-83	WLWR1	Cincinnati.
		WLWR2	Cincinnati.
		KGEI	San Francisco.
		KCBR	Los Angeles.
		VUD11	Delhi.
		XRRA	Peiping.
15125	19-83		Rome.
15120	19-84	HVJ	Vatican City.
		S.E.A.C.	Colombo.
15115	19-85	HCJB	Quito, Ecuador.
15110	19-85	GWG	Daventry.
15105	19-86	JLG4	Tokio.
15100	19-87	EPB	Teheran, Iran.
15095	19-87	HVJ	Vatican City.
15070	19-91	GWC	Daventry.
15060	19-92	ETAA	Addis Ababa.
13320	22-52		Omdurman.
12455	24-08	HCJB	Quito, Ecuador.
12170	24-65	TFJ	Reykjavik.
12095	24-56	GRF	Daventry.
12050	24-90	VRR5	Kingston, Jamaica.
12040	24-92	GRV	Daventry.
12000	25-00	CE1180	Santiago, Chile.
11970	25-06	FZI	Damasus.
		LR52	Brazzaville.
11950	25-10		Buenos Aires.
11945	25-12	ZPA5	Tabriz, Iran.
11930	25-15	GVX	Encarnacion.
11915	25-18	XGOY	Daventry.
11900	25-21	VLG9	Chungking, China.
		CE1190	Lyndhurst.
		CXA10	Valdivia, Chile.
		KWID	Montevideo.
		H12T	San Francisco.
			Trujillo, D.R.
			Moscow.
11893	25-22	ORY3	Brussels.
11890	25-23	KWIX	San Francisco.
			Moscow.
11885	25-24		Paris.
11880	25-25	VLG5	Lyndhurst.
		V LH4	Melbourne.
		LRR	Rosario.
		XEHH	Mexico City.
			Moscow.
11872	25-26	ZPA3	Asuncion.
11870	25-27	VUD9	Delhi.
			Munich.
11865	25-28	HER5	Schwarzenburg.
11860	25-29	GSE	Daventry.
			Moscow.
11850	25-32	CE1185	Santiago, Chile.
11845	25-33		Paris.
11840	25-35	VLC7	Shepparton.
		VLG4	Lyndhurst.
		OLR4A	Prague.
11835	25-35	XGOA	Nanking, China.
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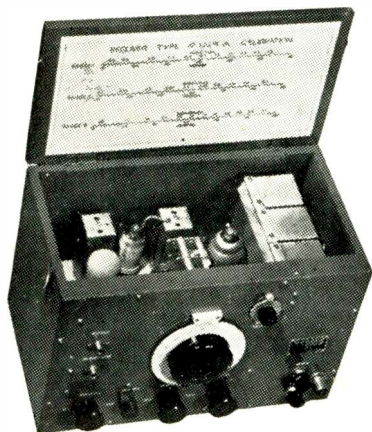
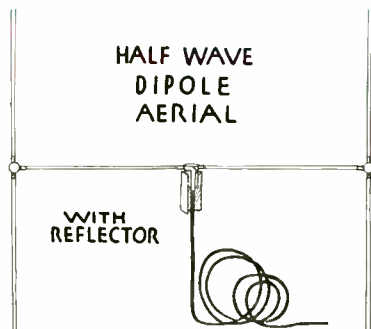
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