

Best 13's record
DX-ing.
Hardman
14 July 1961.

CONTACT

THE MONTHLY JOURNAL
OF THE

WORLD

COMMUNICATIONS CLUB

OF

GT. BRITAIN

WCCB

CONTACT

Journal of the
WORLD COMMUNICATIONS CLUB
of Great Britain.

Vol. III No.2

July 1967

"DX-TRACTIONS"

You won't find 'DX-tractions' in any dictionary, but it is a word that every DX magazine editor knows well!

A definition is "those things which distract DX-ers from DX-ing, and Club members from (re)membering that a magazine is made up of their contributions". What are they? Well, a full list would fill three issues of 'CONTACT' but a few are ... the lawn that wants cutting, the garden that wants tidying, the house that wants painting, and the exams which have to be sat. Don't we all suffer! The problem really is that the scientists have not come to grips with the conquering of time.

Wouldn't it be nice to have a day of variable length? We all know that days vary greatly in their pleasantness or nastiness - Monday seems to possess a particularly high 'N' rating ('N' for nasty, of course), whilst Saturday and Sunday have good 'P' (for pleasant) ratings, and holidays - weather and money permitting!!! - rate P9, plus plus. Wouldn't it be grand if a 'P' day could be extended, at will, to the length you wanted. Just think! You could cut the lawn, tie up the Sweet Peas, paint the kitchen, do that constructional job you've had in bits all over the 'shack' for three months - and still find it was only 0900! Our grandfathers would never have believed that various assorted bits of man-made machinery would be scattered on the face of the moon - perhaps, one of our great, great, grand-children pottering about in the British Museum Library in 2067 will come across this issue of 'CONTACT' and wonder what I am nattering about. We shall never know.

By this time, someone will - suspiciously - be asking themselves "What's all this about?". Nothing really! I promised 'no soap-boxes' last month, but I do hope you will all 'have a go' at stretching your day in the next couple of months and keep your contributions coming along. Some of the greatest discoveries have been made by accident and you may be the chap who discovers how to extend time.

Summer is the season when DX-tractions are at their best - in full bloom you might say! - and the same problem affects newspapers which often come out with some intriguing snippets when 'hard news' is scarce. Sometimes, newsmen call it 'the silly season'. I don't know if 'TIT BITS' has ever before been quoted in a DX magazine, but recently they carried this letter from a reader in Jedda, Saudi Arabia :-

"You think the British postal service is awful? Then you should try ours in Saudi Arabia. An airmail letter can take anything from 5 days to 3 weeks to reach us. One reason is that all mail entering Saudi Arabia at Jedda is emptied on the floor of the so-called post office - one load after another. And it's just hard luck on those poor people whose letters arrive first and finish up at the bottom of the pile".

(continued)

Now I know why my report of the 24th July 1966 still hasn't earned a QSL, whilst many of our members have had later reports verified. You see, it's all a question of 'extensible time'. If only there were 30 or so hours in a day, all the mail would be cleared! So, have a go at stretching it, and if you find the answer share it with the rest of the world, won't you?

Oh! I've just remembered a few more DX-tractions ... watching cricket, watching TV, reading magazines Excuse me, whilst I go and cut the lawn!

ALAN THOMPSON.

MEMBERSHIP LIST

A very sincere welcome to the following new members of the Club - I hope that you will find in these pages something of interest to you, and on behalf of all the old and new members of the Club I wish you a very sincere welcome, indeed!

- WCC168 : Jaap Kleijn, de Ruyschlaan 195, Amstelveen, Netherland.
- WCC169 : Peter Utting, 35 Lynn Grove, Gorleston-on-Sea, Norfolk.
- WCC170 : Stephen Rigley, Lowe House, Denstone College, Uttoxeter, Staffs.
- WCC171 : David Burdsall, 3 Poplar Drive, Whitburn, Nr. Sunderland, Co. Durham.
- WCC172 : Maurice Williams, 11 Cedar Avenue, Woodside Estate, Sleaford, Lincs.
- WCC173 : Andrew Blakey, 86 Teviot Avenue, Aveley, South Ockenden, Essex.
- WCC174 : Clifford David, 108 Manor Road, Manselton, Swansea, Glam.

Total membership now stands at 130, and our target is 200 members by the end of this year. May I use the old cliché and say : 'If you like the Club then tell your pals: if you don't like it then tell me (or Syd, Green)'. Sample copies of 'CONTACT' for prospective members can always be obtained from Syd, and we both hope that every member will try and get another to join the Club in the next few months. The greater the number of members we have the lower the cost of each copy of 'CONTACT', and this means more money in the 'kitty' which will enable us to extend the scope of the service we can give you.

A word of sincere thanks here to the Area Representatives all over the country who have been doing a great job in the last few months in getting the Club publicity in various local papers - their efforts are greatly appreciated. A special word of thanks, too, to our Publicity Coordinator, Derek Knight, who has arranged publicity for us in a number of the national radio magazines - if the number of enquiries we have had is anything to go by we shall have a big increase in membership soon. In addition, we have recently had publicity over Radio Nederland and over Radio Finland, and there is now hardly a single international station of any size which has not made mention of the Club on its DX programmes.

A couple of changes of QTH which you might like to note in the 'Members List' which appeared a few months back:-

- WCC78 : Des. Hoddinott, 4 Grandridge Close, Fulbourn, Cambridge.
- WCC136: Bill Taylor, (Manager), The Presidential Hotel, Enugu, Republic of Biafra.

I don't mind admitting that it was with a great deal of nail-biting and trepidation that Syd. Green and I awaited the appearance of the last issue of 'CONTACT'. As you will know, if you saw that issue, it was necessary to announce that there had to be another version of the 'new look' and at the same time we had to announce to you that it was necessary to make a sharp increase in the membership fees of the Club. A number of members have asked whether it was necessary to do this with the haste we did, and I should like to say just a few words about this. You will recall that the April issue was delayed until early May and included a promise that the next issue would be in your hands by the end of May - as it was. What could not be said at that point was that the difficulties with the 'new-look' issues did not come to a head until the 2nd May when it became apparent that it was not possible for many reasons to continue with the existing kind of 'printing', mainly because of the time that was being taken in producing it. In this case, the time was that of George Partridge's staff and this meant 'money'. Therefore - and I would stress that the crisis could not have been foreseen by anyone as it was due to a combination of things like sickness and staff difficulties - on 2nd May we found ourselves in a position where we had to make alternative arrangements for the production of the magazine and keep our promise that the next issue was with you in the following 4 weeks. For this reason, there was no chance at all to discuss the question of increased fees with the members at large, and to have discussed it with some would have been invidious, and unfair to the members who were not consulted. We decided that we had to keep the Club going, and the magazine appearing, and in the result this meant the increase in fees referred to in the last issue. You will have seen from the June issue that this meant a complete re-write of the magazine in a very short period and, of course, we wondered the extent to which errors would have crept into the finished script. Happily, the errors were few in number, and apologies will be found in the appropriate positions in this issue. I do hope that you will all realise that the short space of time available to us made consultation impossible and that was the sole reason that the news of the changes first appeared when you read the June issue. Quite truthfully, we had no other course open to us if you were to get a June issue without delay. Happily, the new arrangements are moving smoothly, and barring unforeseen accidents, 'CONTACT' should appear regularly, in the last few days of each month - dated for the following month - in future.

As I write this the temperature is well into the 70s, although it is about 9 p.m. - at last, Summer has arrived with a vengeance. The question now, is whether it will last. The experience of the last couple of years has been that it has been rather shortlived. Propagation conditions continue much the same as they were when I wrote this feature a month ago. On the high-frequency bands conditions continue to be very patchy. From time to time, 10 and 15 metres come to life on the 'Ham' bands, whilst the same goes for 11 and 13 metres in the broadcast spectrum. Both 16 and 19 metres on the broadcast bands, and 20 metres 'Ham' have been providing some interesting openings but nobody seems to have reported anything extraordinary in the way of DX. Much the same story applies to the 25, 31 and 41 metre bands - everyone says 'just the usuals', but 49 metres has been providing some interesting catches from South and Central America late at night. The main interest here, is still in the 60 and 90 metre broadcast bands which are at a stage where one does not know what you are going to hear next. Conditions DX-wise on those bands have been - and at the present are - really AI with some quite good LA DX around 2100 GMT which is, of course, early for mid-summer. In contrast, 120 metres is now virtually dead of BC signals.

(continued)

It's a bit difficult to know what to predict for the rest of the summer. Of course, we are currently on the 'up-swing' of the sunspot cycle and this should mean some really good DX openings at any time. On the other hand, sooner or later we can expect a solar storm and then will come the sort of fade-out of radio communications which will make it quite a feat to hear a station only 500 miles away. All we can do is 'wait and see'. Most DXers will know that Radio Nederland issue regular (monthly) Propagation Forecasts which can be obtained free of charge from the station. However, as they emphasise, these are merely forecasts and what happens in the event may be very interesting and very different from the forecast. Of course, S.B.C., too, includes such forecasts in its DX programmes each month.

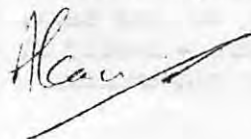
On another page, you will find the latest news of the correspondence I have been having with the Post Office regarding the reception of Communications and PTP Radio stations. This is not the time for me to comment on the correspondence as I do not consider that the issue is finally settled - there are still a number of matters which require a great deal of clarification in the interests of members of this Club, and of SWLs and DXers at large, who reside in the United Kingdom. I shall be very interested to hear the views of members on this question and you may rest assured that they will be conveyed to the Post Office, and in due course, I shall let you know the outcome of the discussion with them on this question.

This is as good a place as any to tell you that I have plans to make available to members in the near future "World Communications Club Report Forms" in French, Spanish, Portuguese and English. It is hoped that these will be more comprehensive than any others currently available, and they will be prepared either by people to whom the languages are their birth tongues, or else by people who are well acquainted with the languages concerned. The charge for the forms will be very reasonable, and I am arranging for them to include a very detailed vocabulary of all the terms that one needs in sending a report to a station in one of those languages. I hope that in the August issue it will be possible to give you details of prices etc. Virtually every station can be reported to in one of those 4 languages, but if you want report forms in Russian - together with a very good vocabulary - they may be obtained from "Radio Sofia DX Club, Ferdinands-platz 11, 6380 Bad Homburg, West Germany." Non-members of the Club can have 15 copies of the report form (and the explanation sheet) for 2 I.R.C.s.

This month you will find that LOG BOOK is rather shorter than usual - the reason is 'DX-tractions' referred to on page 1 -- in this case the main reason is the fact that many of the regular contributors are in the middle of their examinations at the time of writing and I know they will be back with us shortly. On behalf of all members, I wish everyone of them all success, from all the members of the Club. I would like our new members to realise that their logs etc are awaited with interest - the more the merrier, of course!

Finally, deadline for the August issue will be 12th July at this QTH, and in the case of Dennis (DX TV) and Paul (Ham Section) a week earlier, please. I hope you will beat all records again next month, as you have this time. Thanks to you all!

The very best of 73s to you all, and if you are having a holiday before we meet again I hope it will be blessed with the sort of weather we are having at the moment! Cheerio until next month!



W.C.C. "DX LEAGUE"

Hi, DX Leaguers! Well, here is the second League Table, showing the position as at 16th June 1967. Just to make it clear, Anthony Thompson (welcome, Tony) is not related to me - my 'local' competition comes from son, David, who vows that he is going to climb up the ladder!

Before we go any further then, here is the current League Table:-

	<u>Countries</u>	<u>Stations</u>	<u>'Bonus'</u>	<u>Total</u>
1. Alan Thompson	103	139	55	400
2. Anthony Thompson	91	131	50	363
3. Malcolm Dickinson	77	150	52	356
4. Andrew Waddelow	67	122	37	293
5. Michael Barraclough	72	88	28	260
6. Roy Williams	59	106	28	252
7. Frank Broughton	68	71	22	229
8. D.K. (Mac) MacCrossan	57	69	16	199
9. Donald MacLeod	52	70	19	193
10. Pat O'Donohoe	48	74	17	187
11. John K. Bradley	48	64	14	174
12. Archie Emslie	38	41	8	125
13. Giorgio Romanin	37	37	6	117
14. David Thompson	34	36	6	110
15. Vic. McCulloch	28	31	4	91
16. Reg. Preston	18	25	-	61
17. Ken Proctor	15	15	-	45

In several cases the above scores will not agree with those you sent in, so here are the explanations - necessarily brief, I'm afraid:-

ANTHONY THOMPSON: Sorry, Tony, I.O.M. counts as part of Great Britain, not as a separate country.

MALCOLM DICKINSON: BBC Far Eastern Relay Station is in Malaysia, at Johore Bahru - he nce counts as Malaya (gives you another country). See note above re I.O.M.

ANDREW WADDELOW: You were doing yourself out of a few countries, Andrew - RIAS counts as West Berlin: R Kiev as Ukraine: R Vilnius as Lithuania: R Erevan as Armenia and R Tashkent as Uzbek SSR.

ROY WILLIAMS: See above re USSR stations, Roy: ICRC is broadcast over an SBC xmr and does not rank as separate country. Have decided it is easier not to 'disallow' cases where there are two QSLs for different organisations over same station - e.g. Radio Nederland and TWR both over Bonaire. Things like Radio Safari, Finland's DX Club etc. do not count, though.

FRANK BROUGHTON: Note re I.O.M. applies to you, too, Frank. You also had Brazil twice in error.

DEREK MACCROSSAN: R Berlin International gives you East Germany as another country, Mac. You, too, did not give yourself full credit for the Russian stations logged. O.K.?

(continued)

JOHN BRADLEY: I think the adding machine went wrong, John - I make it 64 not 63.

ARCHIE EMSLIE: Sorry, Archie, but the 'Ham' QSLs don't count, nor the FDX and DX Alliansen ones. O.K.?

GIORGIO ROMANIN: You made the same 'mistake' as Mac, Giorgio. Another country in the bag.

REG. PRESTON: The extra country is the Ukraine for R Kiev, Reg. The missing 'station' is CBC Northern Service which is, of course, all-same as R Canada.

KEN PROCTOR: The station you've lost is the same as Reg's, Ken.

I think that clears up all the scores to date. If anyone doesn't agree, please let me know.

A special word of thanks to all the 'Leaguers' for making it so easy to check the entries by the way they were laid out. It helps more than I can say! I have a feeling that we are going to have a real battle in the League, and yours truly will not be at the head of that table for very long! That's not inside information but just a hunch, by the way. I do hope that every member interested in DXing (apart from Ham and TV which don't count in this - sorry, lads!) will have an entry soon. It does not matter how many, or how few countries and stations you've got. The main thing is to enter and see what you can do to climb up the ladder. I also gather on the grapevine that there will shortly be rather a lot of changes in the 'middle order' above - something tells me that as soon as the summer holidays start and the QSLs roll in there will be a lot of changes.

For the benefit of our new members let me say that there is nothing very difficult about entering this competition. Just send in a list of the countries and stations you have verified - not including 'ham' and DX TV stations. So far as 'Countries' are concerned we use a list of our own designed to add more fun to the League - it appeared in the June issue on pages 17 - 19, but if anyone would like a separate copy they can have one if they will send me a foolscap envelope addressed to themselves, with a 4d stamp/I.R.C. By the way, there are some amendments necessary to that List, see below. Each 'country' verified counts 2 points, whilst each station verified earns you 1 point. The 'bonus' figure is for reaching certain numbers of countries and stations, and the table is below - I've only given the part of it which is likely to affect members: if anyone goes 'over the top' I'll credit the appropriate points, I promise!

The following alterations need to be made to the Countries List:-

(a) French Somaliland (247) is now known as Afra: (b) Biafra became a separate 'state' seceding from Nige ria on 30th May 1967: (c) 264 Gough Island should be added under Africa: (d) 578 Navassa Island should be added under Central America. If anyone should come across any other country which is not included in the List which has, or is going to have broadcasting facilities (excluding 'ham') I would much appreciate it if they would tell me.

The 'bonus' (or 'Standards') table follows, but just a reminder to new entrants of the other rule and that is that all QSLs must be for reception on or after 1st January 1964, and all QSLs must be for reception in the same country (the U.K. and Ireland counting as one for this purpose).

(continued).

'STANDARDS' TABLE

<u>Countries verified</u>	<u>Bonus Points</u>	<u>Stations verified</u>	<u>Bonus points</u>
20 - 29	2	30 - 39	2
30 - 39	4	40 - 49	4
40 - 49	6	50 - 59	6
50 - 59	8	60 - 69	8
60 - 69	11	70 - 79	11
70 - 79	14	80 - 89	14
80 - 89	17	90 - 99	17
90 - 99	20	100 - 109	20
100 - 109	25	110 - 119	23
110 - 119	30	120 - 129	26
120 - 129	35	130 - 139	30
130 - 139	40	140 - 149	34
140 - 149	45	150 - 159	38
150 - 159	50	160 - 169	42
160 - 169	60	170 - 179	46
170 - 179	70	180 - 189	50
180 - 189	80	190 - 199	55
190 - 199	90	200 - 209	60
200 and over	100	210 - 219	65
		220 - 229	70
		230 - 239	80
		240 - 249	90
		250 and over	100

That in fact, is the complete 'Standards Table' - perhaps, we shall have another look at the amount of the bonuses when someone reaches the 200 countries and 250 stations marks. Anyway, until next month when I hope we shall have a much longer League Table, it's "Cheerio".

DX CERTIFICATES AND AWARDS

A number of members have recently asked whether the Club has any plans for the issue of DX Certificates etc. to members who reach certain standards in their DXing - e.g. to those who have verified 50 stations, or 50 countries and so on. My own view is that this would be an excellent idea but I am afraid that it would be necessary to make a charge for the Certificates themselves, sufficient to cover the cost of printing. This cost figure depends on the number of people who would be interested in the idea, and, of course, that depends on the number of 'awards' the Club would have. Will everyone interested in the idea please let me know what they think, and in particular I should like to know the various Awards for which they think we should issue Certificates. Just in case you have forgotten, the address is:-

Alan Thompson, 16 Ema Avenue, NEATH, Glamorgan, United Kingdom.

Your views on this suggestion will be very much appreciated as they will give an idea of the amount of interest there is in the scheme, and will let us know what sort of Awards you would like to see.

charge the capacitor, but the resistor would cut down the voltage so that the capacitor will take longer to charge. In time, it will become as fully charged as if the resistor was not there, but it will take longer to happen. That is why we often find a resistor and a capacitor in series in the A.V.C. circuit of a receiver, because it is often desirable to delay A.V.C. action for C.W. and S.S.B. reception. If we disconnect the battery and connect a meter across the resistor and capacitor, there would not be such a large surge of current but it would last longer.

This time delay is known as the 'time constant', and it is worked out by multiplying together the capacitance in farads, and the resistance in ohms. Let us say that the resistor was 100 ohms, and the capacitor was 10 mfd, or 10 μ f, then -

Time constant = 0.00001 x 100 = 0.001 seconds.

Where capacitors are in parallel, the sum value will be a simple addition of the two capacitances. If the capacitors are in series we use the formula:-

$$\frac{1}{C} = \frac{1}{C_1} + \frac{1}{C_2} \text{ and so on as needed.}$$

C O R R E C T I O N

In the article on 'Resistance' in the June issue, some of the symbols were left out in the last part of the article. The portion on the top of page 15 should have read as follows:-

"If we add a third resistor in parallel (R_3) of 20 ohms, we use the formula:-

$$\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3} \quad \text{i.e.} \quad \frac{1}{100} + \frac{1}{10} + \frac{1}{20} \quad \text{so} \quad \frac{1}{R} = \frac{16}{100} \quad \text{or} \quad 16R = 100, \text{ and } R \text{ is}$$

equal to 6.25 ohms." The last sentence then reads as printed.

Apologies to anyone who thought that we were starting to set mathematical posers in this magazine!

WORLD RADIO BULLETIN

May I remind you of the announcement on page 6 of the June issue regarding the possibility of making arrangements with World Publications of Denmark, for members to receive copies of the WRB at greatly reduced rates. As I stated there, no details can be given until the response is known, and if you are interested, without obligation at this stage, please send me a postcard with your name and address and the word 'Bulletin', so that the demand can be assessed. The offer is only open for a limited period and your early advice of your interest would be appreciated.

The Bulletin consists of 8 pages of DX news each month and is the best way of keeping the "World Radio-TV Handbook" up-to-date, as it gives details of new station schedules, frequencies etc. In addition, details of new stations are announced as they occur and the Bulletin receives its information from a network of monitors around the world as well as from radio stations themselves.

COMMUNICATIONS & P.T.P. STATIONS

On page 4 of this issue I have referred to recent correspondence with the GPO seeking guidance on the extent to which it is permissible to make reference to reception of transmissions by Communications and PTP stations. As I have said, I do not consider that this is the time for comment to be made, by me, on this question but I would ask each member to consider, carefully, the views expressed on behalf of the Post Office. The important question is not whether this magazine can run a feature on loggings of these stations - that is of little importance in the general context of the letter which is quoted below. Your views on this matter will be much appreciated and will be conveyed to the Post Office.

It is necessary to explain that I wrote to the Post Office on 2nd April and put to them these three questions (these are the ones referred to as 'para 3' in the reply) as follows:-

- "(a) is there any objection by your Department to the inclusion in a magazine, such as 'CONTACT' of details of PTP, Communications, Marine- and Airradio etc. stations logged by members - i.e. times, frequencies, calls, addresses etc? (always excluding cases in which transmissions consisted of radiotelephone or radiotelegraphy communications correspondence). If so, is it qualified or absolute objection - if qualified, to what extent?
- (b) in regard to the Ship-to-Shore Radio Telephone Service, to what extent is it permissible to refer to the operating frequencies and channels used by this Service? The 'Handbook for Radio Operators' (HMSO) contains a great deal of information on this service and is, of course, freely available, whilst articles on this service have been published, using official photographs.
- (c) in regard to 'weather stations', the 'Handbook of Weather Messages, Part 1' (HMSO) contains much information on this service and again is generally available - am I correct in assuming that there is no restriction on reference to such transmissions?"

On 12th May, the Broadcast Officer of the G.P.O. replied to my enquiries in very general terms. Regrettably, this reply was not sufficiently explicit to be of any great value and the matter was taken up with the Post Office again on 14th May. I then asked for specific replies to the questions set out above and said this:-

"I regret that it is necessary to pursue this matter further but the position has been unsatisfactory for some time The sooner that specific guidance is available on this question the easier it will be for DXers in the United Kingdom to know where they stand in relation to disclosure of the reception of 'test tape transmissions'. This is the crux of the whole matter - numerous international magazines make reference to these broadcasts (I might instance that of the Benelux DX Club but there are many others) and the bulletins and magazines circulate in the U.K."

I took the opportunity to make some enquiries regarding the radiobeacon stations which may be heard in the MW band during the evening hours. What I said was :-

"It occurs to me that I have never seen anything published on the radiobeacons (?) which operate in the medium-wave band using call-signs which are suggestive of British origin. Are these officially non-existent as they operate in a band assigned to broadcast radio, or can you make some information available regarding them?"

(continued)

Here then, is the reply received from the Post Office:-

Radio Services Department,
Armour House,
St. Martin's-le-Grand,
LONDON E.C.1.
9 June 1967.

Dear Mr. Thompson,

I am writing to reply to your letter of 14th May to Mr. Greves. I have agreed with Mr. Greves that since the questions on which his letter of 12th May has left you unsatisfied are primarily matters for my Department, it will be best if I write to you direct. I am glad that you have found the information we have given you helpful on certain points but I must agree that on one point at least this was less specific than it might have been and in some important respects misleading; I shall do my best in this letter to put this right.

I think it will be best if I begin with the question you put to us in para. 3(a) of your letter of 2nd April. As I am sure you realise, neither the amateur licence nor the broadcasting receiving licence authorise the licensee to receive any of the types of transmission you mention. Plainly there are situations (e.g. in the case of those bands which the amateur service shares with other services) where some overhearing of transmissions which the licensee is not authorised to listen to is unavoidable, but the deliberate reception of such transmissions in any band - regardless of the nature of the transmission and even if there is no disclosure of information - is a breach of the terms of the licence. In effect, therefore, you are asking the Post Office to give its formal blessing to the publication in your magazine of evidence that your members are doing things which they are not authorised to do. Innocuous as your proposition, as you have put it to us, may seem I am afraid that we cannot see our way to do this. Nor are we prepared to consider any revision of licence conditions which would regularise reception of the kind of transmissions you have in mind.

As you plainly know, the International Telecommunication Convention and the Radio Regulations annexed to it place a complete embargo on the disclosure of both the content and existence of radio messages received by people for whom they are not intended. This does not mean, however, that such reception is to be regarded as unobjectionable provided there is no disclosure. In the Radio Regulations the embargo on disclosure is specifically related to radio messages received involuntarily and there is imposed on Administrations a positive obligation to do everything practicable, both in the running of their own radio services and through their licensing policies, to minimise the possibilities for accidental interception.

I am sure you will appreciate that one implication for us, as the licensing authority, of this obligation is that it would be wholly improper for us to authorise general reception on any frequency or frequencies other than those used for the amateur service and for broadcasting unless some kind of operational need (such as that we have taken account of in authorising the reception of standard frequency transmissions by amateurs) could be plainly demonstrated. We accept completely that it would be interesting for your members to listen to the kinds of transmission that you mention; nevertheless, the amateur service and high frequency broadcasting provide them with virtually unlimited possibilities for long distance reception in a very comprehensive range of frequency bands, and I am afraid we cannot accept that there is any case

(continued)

case/

whatever for extending - either in specific terms or by implication - the range of transmissions they are authorised to receive under their licences. If any of your members are under the misapprehension that they are free to receive any transmission that they please so long as there is no disclosure, you may feel that it would be advisable to disabuse them of this idea, (you are, of course, entirely free to publish this letter in your magazine if you wish). I am sorry that this is not the answer you would like. I hope, however, that you will find it sufficiently explicit.

As regards the questions you put to us in para 3(b) and (c) of your letter of 2nd April, I am not quite sure what you still require from us - Mr. Greves' letter of 12th May seems to me to cover the general question of publication very clearly. However, I can give you a positive assurance that so far as the Post Office is concerned there is no objection to the publication in your magazine of the specific types of information that you mention if you think this will be of interest to your members. More generally, there can be no objection to the publication of information such as is to be found in the publications of the International Telecommunications Union, although in the light of what I have said earlier in this letter you may think it desirable to consider rather carefully how this is presented.

Finally, you refer in the last paragraph of your letter of 14th May to the radio-beacons which operate in the broadcasting band. So far as I am aware nothing has been published about these but there is nothing secret about them - they are navigational beacons; they are of very low power; and they operate in the broadcasting band under cover of a provision of the Radio Regulations which authorises out of band transmission on the strict understanding that interference is not caused to the service(s) to which the band in question is allocated.

Yours sincerely,

(Sgd) P.W. FRYER.

That then is the present position regarding 'loggings' of Communications and PTP stations and whilst this question is still under discussion with the Post Office no references to such transmissions will be included in this magazine. I shall let you know the results of further approaches to the Post Office at a later date when I hope it will prove possible to summarise the position for the use of DXers in the United Kingdom.

'CONTACT'

I am very pleased to be able to announce that Vic. McCulloch will shortly be joining me in the Editorship of 'CONTACT'. For personal reasons it is not possible for him to take on the work of Assistant Editor for a month or two, and meanwhile all contributions for the magazine should continue to be sent to me (except for the DX TV and Ham Sections, of course).

Apart from making my task a lot easier, in preparing this magazine each month, I look forward in every way to working with Vic. with whom I have been in close touch for a considerable time. He is already well-known to most of our members, either personally or through these pages, and together we hope we shall be able to improve the quality and interest of the magazine!

Alan Thompson.

IN THIS MONTH'S MAIL

I hope you like reading letters from other members - if not 'Cheerio' and I'll see you again about 6 or 7 pages along (at a guess!). Actually, this month the mail sets another record, and if I have happened to miss your letter out please accept my apologies: I'm afraid that this is always a possibility when assembling the magazine. To business then --

REG PRESTON starts the ball rolling - "Once again a word from London's dockland, overlooking the River Thames. At my new QTH one gets a wonderful view of the river, from Greenwich naval college in the east to Stepney church in the west. Also get a panoramic view of the Milwall Docks. Some of the larger ships of all nations pass by. Their radios are silent, of course, as I do not believe they are allowed to transmit in port. Recently had a mention on R Budapest SWC re shipping in the London Docks..... I hope the DX League will not be a case of 'I have the most expensive Rx or the best QTH or antenna location, so therefore, top of the League'."

I don't think you need worry about the 'DX League' developing that way, Reg. I've made it plain - I hope! - that this is not to be taken too seriously and I can assure you that the chap at the top has anything but the best QTH, and certainly not the most expensive Rx. The same goes for a number of the other 'leaguers' known to me personally. Anyway, many thanks for your entry, and the view from your QTH sounds superb.

DEREK KNIGHT takes me to task for some of my notes in last month's issue. He says: "I had the impression after reading some of your comments that there are far too many do's and don't's To be frank with you, after all those rules etc. I'd be scared stiff to send in my loggings ..."

I take it that you were referring to the 'rules' regarding contributions to 'CONTACT' on page 6 of the June issue, Derek. Well, every month I get a letter or two which says 'you didn't use the so-and-so I sent you'. Research usually shows that the writer included the bit I left out amongst other stuff (which had been included). If the contributions for each bit of the magazine are on separate sheets it is easy to make certain they go in with the correct lot of stuff, e.g. LOG BOOK, DX News and so on. If you don't want to use separate sheets then it's O.K. so long as there is enough space between items to enable the letter to be cut up into its various bits. This will be even more important shortly when the editing of the magazine will be split up between Vic. McCulloch and myself. I hope you - and everyone else - understand that it isn't a case of rules for the sake of rules. The new method of 'doing' 'CONTACT' reduces the time available for its preparation a lot - anything that saves a bit of time is very welcome I can assure you. The same goes for my various 'blunt' comments - I feel that if I make my feelings plain everyone will know what I am getting at: if you don't agree, I hope that - like Derek - you will tell me so.

ALAN ELLIOTT writes from South Australia to say "I don't think every member realises just how much George Partridge has been assisting the Club, however, I think the increase (in membership fee) is a bit severe for the younger members, say around school age". Alan goes on to say: "I have had a minor accident at work. I ripped my knuckles open while frantically snatching at a tin roof after being belted with 440 volts from a power-line which broke loose. You should see the sheets of tin on the roof".

(continued)

IN THIS MONTH'S MAIL (Part 2).

Nice to know from our 'tape', since your letter, that you are now O.K. again, Alan. Re the increased fee, I quite agree that the increase may be a bit steep for the younger member. However, we could only have had a lower fee for 'juniors' if we had increased the fee for the 'seniors' to about 30/- a year. Still, I am hopeful that our plans for the future will allow every member to save enough - by means of discounts and so on - to recover the increased fees. After all, the fee is still only 6d a week, for U.K. members!

GERWYN ROBERTS says "Sorry I have not sent any contributions to 'CONTACT' for a while: this is due to no DX. I received a nice set of wooden spoons from R Moscow this week as a prize in a competition they held".

When I first read your letter, Gerwyn, I thought there had been a competition for those who had not logged any DX lately! Everyone has been complaining of this, and I was mad that I had not heard about it. Seriously though, congrats! You seem to do very well in these contests - I never win anything! By the way, as you will see from LOG BOOK you are not the only one with no DX to report - I was reading the June issue of one of our competitors recently and they were complaining that they had the smallest log they had had for years. As you will see, ours is a lot thinner than usual, too. (This is the reason for the different type - it was not large enough to justify getting it done separately as usual).

BILL MATTHEWS sends me some very interesting information regarding 'Clandestine stations' which I hope we can use in a month or two. However, what I would like to mention here is the page of cartoons he enclosed - I only wish I could reproduce them. I especially like one of two chaps standing in front of a massive government-surplus rig, whilst the XYL (it can't be a YL she wouldn't stand for it!) sits on a box with a hand-generator at the ready. The caption reads: "It's Army surplus. Okay, Gladys, fire it up!"

Thanks Bill, for all the gen on the 'clandestines' - I've got quite a collection of bits and pieces about them, now, and thanks to all those who have sent me various items. There are still a lot of missing 'links' but I hope to do a synopsis on these stations sometime soon. Any 'gen' that anyone has would be appreciated.

SYD. GREEN doesn't often get into these pages these days - we keep him chained up and only let him out once a week to have a look at his R Pakistan QSL! Syd. says "Just sent off 36 'CONTACT's and application forms, and still have about 30 more to go - the applications are coming in daily".

Now you all know what he is doing with his time! Keep up the good work, Syd - if we go along at that rate we should soon see the magic figure of 200 members on the list.

D.K. (MAC) McCROSSAN sends me a long interesting letter which I will quote at length:- "Regarding R. Andorra's recent test transmissions, I had a very courteous letter (and my postage refunded) thanking me for monitoring the tests (which have since ceased). However, the Director does NOT possess QSL cards and complains (to the eternal shame of all decent SWLs) that he has received personal letters pointing out his discourtesy in failing to QSL and presuming (I quote) 'that I am some kind of strange Andorran who has left his cave in the Pyrenees and sneaked into G.B.' Actually, he says

(continued)

IN THIS MONTH'S MAIL (Part 3).

says/

"I am English and a director of several companies, and well informed of the normal methods of business correspondence!" He hopes those who have written will understand that being on his own he cannot enter into personal correspondence with the many thousands who have been kind enough to write and help him". 'Mac' then says "Sorry to have been late for the July issue but must watch the deadline in future. Am delighted with the latest issue of 'CONTACT' and am sure that goes for all the other members, too".

Sorry that I could not use the very interesting commentary you enclosed on band conditions, Mac - could you do one every month for me, please? I do hope so! I'm afraid not everyone shares your views about the last 'CONTACT', although the proportion was roughly 4 to 1, in favour. Many thanks for your kind words which are greatly appreciated. The business with R Andorra is distasteful in the extreme, and I am sure you will have told their London representative that these letters are not typical of what he can expect from the serious DXer! However, there is a 'fringe' which considers that every public figure is fair game for their abuse - they even regard Editors of mags like this one as suitable victims! Not very often I am pleased to say. The problem is that you don't know what to do with their letters - if you answer them with logic you are wasting your time: once they've got an idea into their heads nothing will shift it, it seems. If you ignore them, they just go on with it! In my experience R Andorra display a great deal of courtesy in QSLing reports with a personal letter and a lot of interesting material regarding the Principality - in fact, their QSLing is carried on in a way which many larger stations could emulate with advantage.

DON JONES takes us back across the world to Kangarilla, South Australia, and says:- "I will be sending tapes to all others in the Club with taperecorders - 2 speed, 7 $\frac{1}{2}$ and 3 $\frac{1}{2}$ i.p.s. If any other members are stamp collectors I am a First Day Cover Collector and I will exchange covers with any interested members for all issues, from the time this is in 'CONTACT'".

I think it might be a fair idea if you contacted Don direct if you, too, are stamp collectors - full address is D.M. Jones, Box 25, Kangarilla, South Australia. This might be a good time to explain my position regarding tapes. Frankly, I can't manage any more much as I should like to do so. I know that several of us have been accused of being 'snobbish' for not wanting to take part in various tape Clubs. This is not the reason, - and I speak for a number of my own tapesponders who are very interested in DXing. We tend to exchange tapes which contain a lot of DX rather than pure 'chat' on this-and-that, and they take a great deal of time to do. Anyway, anyone interested in taping with Don has the address above, and I hope you have a really good response, Don.

FRANK BROUGHTON says "Sorry, but I must disappoint again as regards 'logs'. Have hardly done any logging recently lately as the shack is still in shambles as I have not had the time. It's either overtime or painting. Anyway, I promise a nice long log for the next edition".

O.K. Frank, but hurry up and get that SP600JX working! I can hardly wait to hear what it can do - as you know, I am still tempted and I don't want them to disappear off the market!

(continued)

IN THIS MONTH'S MAIL (Part 4).

JOHN K. BRADLEY told us last month that he had a R.1224A which he hoped to have in working order soon. John is still working on this, I gather.

Should be glad to have details of it, John - I am afraid that the original details you sent appear to have got mislaid somewhere. Sorry, O.M.! By the way, when you switch the power on for the first time I hope you don't have to deal with it as I recently had to do with a piece of 'new' government-surplus. The procedure consisted of taking it out of its case, turning it upside down on the floor, applying power, waiting for smoke to appear, replacing capacitor, turning on power, waiting for smoke to appear, replacing capacitor, turning on power It now works!!!

ARCHIE EMSLIE brings us back to the U.K., this time to Edinburgh from where he writes: "My Rx is an Alba 939 'Olympic' Transistor covering from 13 to 49 metre bands. I am also a member of various Clubs - R Canada SWC, R Prague Monitor's Club, R Portugal DX Club, WJWW Listeners Club and R Budapest SWC. I also receive many letters from various parts of the world which has made it really a world-wide hobby (radio and stamp collecting). One station I did hear was 'Radio Afinio, Italy. I wrote to them but my letter was returned and I mentioned it to R Prague who say that they may answer it in a future programme."

R Afinio is a new one on me, Archie, and I can't find it in any of the lists of 'clandestine stations' which I have. Can you give me some more information about it, please. I hope the radio had benefited from the check-up and you from your holiday - you'll notice the order I put them in didn't you? It just shows how hard-hearted I am. I want those logs for the August issue, you see. Nice to hear from you for the first time.

VIC HOWSON refers to the FDXCI/WCCGB special show on R Finland on 26/27 May and says "I managed to tune in at 1315 BST on Saturday and heard a station refer to Messrs. Brinley John and Alan Thompson, and played a request which was a Beatles song. He also read a tape of yours giving DX news and it was rather weird to hear you speaking from the distant station".

Yessir, it was definitely R Finland that you heard! Like you, Vic, reception was pretty poor, although generally it is excellent on that transmission. Believe me, if you think it weird to hear someone you know speaking from a distant station it is nothing compared with the experience of hearing your own voice coming out of the speaker saying things which you recorded 10 days ago. By the way, sincere thanks to the various members who made this programme possible from the end of this Club. Their cooperation in sending in requests etc. at short notice was much appreciated. The programme was arranged at very short notice and as a result there could not be a general invitation to all our members to send in requests. However, I hope that it will be possible to arrange with R Finland's DX Club a similar programme at a later date, and then we should be able to give everyone advance notice. If anyone did happen to hear it, and make a decent recording of it I shall be very glad to hear from them - my recording was poor in the extreme.

DAVID HARPER kindly sent me 'sincere congrats on 'CONTACT' and says "Sorry I haven't written before now, but I know first of all that you would be up to your eyes in it
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IN THIS MONTH'S MAIL (Part 5).

in it/

getting 'CONTACT' ready and personal letters would be the last thing you would want to be bothered with. Then suddenly I found myself on a 'crash' course of mobile crane driving and using an electro-magnet..... I have also taken advantage of the good weather and started on the tedious job of painting the outside of the house".

Many thanks for your nice comments on the last issue, Dave - as I have said elsewhere I am building on the foundations which you laid with Syd, and during the time we worked together! Regarding personal letters, there speaks a man who knows! Apologies to all my 'personal' correspondents in the Club for the delays in answering your letters.

ANDREW WADDELOW says that he is now corresponding regularly with Wolfgang Seyfried in Calmbach (West Germany) and says 'Like your son I think this is one of the best things about DXing'.

I feel that this is one of the most important features of any Club - the way in which we get to know something of the other chap's point of view. Have you, and any of our younger members too, any ideas on the setting-up of a 'Youth Section' - if so, perhaps you would like to get in touch with my son, David, at this QTH. Incidentally, I think I have done you out of a few points in the 'League' - will put this right next time. I'm afraid I did not notice until now that you had a few more to go in. Sorry, Andrew!

AUBREY LEES comes up with a letter which I should love to quote in full because he must be a prophet regarding certain recent world events. However, no politics is the rule in these pages! What a pity!!! So.... "I have read the June 'CONTACT' with the utmost admiration for you in achieving so much against so many unforeseeable difficulties in so short a time. It is truly a marvellous effort and I do take my hat off to you. The increase in subs is most fully justified but for your own sake I do hope you will bridle your ambition. Surely you have more than enough on your plate already!"

All I can say to that is - very sincerely, and humbly - 'Thank you, Sir'. It would be foolish to suggest that it is easy preparing 'CONTACT' sole. However, to claim that was so would be unfair to all the members who contribute to each issue, especially those who are responsible for regular features and sections of the magazine. Nevertheless, it is a job that has to be watched constantly to make certain that it does not take all of one's spare time, and genuine words of appreciation like yours, Aubrey, are the things which make the job worthwhile. Of course, the position will shortly be eased with the arrival of my old friend, Vic McCulloch who will be sharing the production side with me. On a lighter note - and for everyone else's info I work for a certain Government Department! - I can assure you that we really do 'indulge in the frivolities of ordinary mortals, such as twiddling knobs and differentiating between an ode and a diode'. I might add that we do all sorts of strange things really - one of my colleagues is a very keen pony-trekker, another plays the harp, several like 'messing about in boats', whilst I know of one whose main relaxation is watching TV. Very ordinary chaps, despite what the press says about us!

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IN THIS MONTH'S MAIL (PART 6).

GEORGE GARRETT's letter is the next on the list and he is having trouble with a Phillips L6X38T - this is the FM/AM/4SW/LW/MW/VHF job which costs over £100 new. George says that "I can never seem to get anything on the 11, 13 and 16 metre bands", and adds "I can never seem to get places like Australia and New Zealand but maybe I do not listen at the right times". George also asks what Paul means in the 'Ham' section by "28 mcs AM phone", and adds that he is new to this hobby.

O.K. George, let's start at the beginning and see what we can do in a few lines. The three bands you mention, 11, 13 and 16 metres are not all that productive of DX, although 16 metres should provide a fair number of stations, and 13 metres is generally fairly busy during the middle of the day. The 11 metre band is a bit more unreliable at the moment. It rather seems as though the Rx is not working properly and I suggest that you get the local dealer to have a look at it, if you don't know a local DXer who will be able to tell you whether it is working correctly. R New Zealand is not one of the easiest countries to 'catch' - far from it. Many DXers have been trying for years. R Australia is not too difficult though, and you should be able to catch it in its service to the U.K. around 0730 G.M.T. on the 25 metre band. If you will keep your eye on LOG BOOK you should have a good idea of the stations that are being heard, but if you know a local DXer you will learn more from an hour or two with him than from any number of books or magazines. I expect you will hear from a few of the members, George, and I am sure they will help you to sort out your problems. Lastly "28 mcs AM phone" means 10 metre speech transmission in the (ordinary) amplitude modulation system - ordinary radio as distinct from S.S.B., which is the stuff that sounds like a parrot house unless it is correctly resolved. Hope that goes a small way to solving your problems.

MALCOLM DICKINSON writes from the Isle of Man, and says "I have had little time for serious listening, what time I had is more or less equally divided between the LF Ham bands and the SW BC bands, 13 metres being the most popular at the moment...." Malcolm says that the pointer of his EC10 has gone 'nuts' - "can you imagine using a Rx with a pointer that looks rather like a clock pendulum?". He goes on to say: "I think it was the best thing to do to increase the sub rates, even at 25/- it will still be a bargain and a good one at that. I am sure no one will quibble at the increases, it was the only sensible thing to do". Malcolm says that he found the 'down under' logs in the June issue mouth-watering - tells me that the MW Madeira outlet on 1529 can sometimes be heard in IOM even when Vatican is on the air (with a loop antenna) - adds that he is no longer assisting with the QSLing of Manx Radio and finally says that he is studying for the December RAE.

Sorry that I've had to cut your letter to ribbons, Malcolm, but you see how we are fixed. Good luck with getting the EC10 fixed - I agree with the (unprintable) remarks regarding certain radio-repair shops! I hope the EC10 is now behaving properly - the 'pendulum' effect must have made DXing a bit of an adventure (hi). Can I make your mouth water a bit more, Malcolm? I've heard a lot of the DX in the down-under 'logs' - more in this issue, by the way! Not direct, but by courtesy of an Australian tapesponder - they really are something, believe me. If you are interested I can put you in touch with an Australian DXer who would be very willing to tape with you, I'm sure. Re Madeira you have finally done the trick and persuaded me that I must have a 'loop' before next winter. On the subject of Manx Radio I wonder did you send one to JAAP KLEIJN (welcome, Jaap!) who recently had one in 7 days from them. Lastly, as we turn the page, I'll quote you regarding Morse practice, so here goes

IN THIS MONTH'S MAIL (Part 7).

Malcolm adds: "Invaluable assistance to Morse learners can be got from listening to PAQAA on Friday at approx. 1925 GMT on 3600A khz with A2 signals. Very FB. Reception is usually excellent. I find these sigs easier to get than the RSGB slow Morse - there is no RSGB operator for 90 miles and on 160 metres in summer it is not too easy in daylight."

PATRICK CALLAGHAN has nice things to say about the June issue, too. He says that 'CONTACT' is getting bigger and better every month - the June issue was a real bumper. I see the membership fee is being increased - well, it had to come some time but I don't know how you kept going so long without an increase with the cost of everything going up yearly. I give my copy of 'CONTACT' to my friends to read each month but I make sure I get it back again. They were amazed to think that such a magazine could be sent for such a small fee".

Yes! It did make a bit of a bump as it came through the letter-box, didn't it? Go on, Patrick, harden your heart and don't let them see this issue - tell them to invest 25/- a year and get copies of their own. Syd. Green has about 10 million application forms that he is dying to get rid of - come to think of it, I have lots here too. Anyone can have some for the asking - no s.a.c. required!!!

BERT LAMPOURNE tells me that he will be clearing up the confusion I mentioned in a note in his last CB article about the 10-Code, in a later article he will be doing. Bert also tells me his plans for that series for the coming months, and I know the series is of very great interest to all those who are interested in card-swapping, as well as to many others.

All noted, Bert - carry on, OM. Sorry I had to insert the note but as I explained to you there was not time in that issue to consult the author first as I should normally have done. The remaining material appears elsewhere in this issue. Tnx.

JAN PETRZILKA from Praha (or Prague) comes along with an idea which may be of interest to members who send magazines to pals abroad. Having discovered that many failed to reach their destination when sent 'Printed Paper Rate' we recently tried marking the cover 'Dispatch Advised to Addressee' - this seems to work the oracle and they now arrive O.K. Jan tells me that the Czech version of this is "NEKRAST! ADRESAT ZERAVEN!"

Thanks for the advice, Jan. Looking forward to more 'Printed Papers' and 'Tiskopis' travelling between our respective QTHs in the future, as well as letters and tapes, of course. For the 1% who do not understand Czech, 'Tiskopis' is the same as 'Drucksache'. Poor Jan - he still has not recovered from my attempt to pronounce his name on one of my tapes with him.

GEOFF. GREEN's letter has now arrived at the top of the pile. Geoff says "I feel I have to drop you a couple of lines to show a little gratitude in the way you are handling the running of WCCGB. As you probably know, I have been - in one way or another, associated with the affairs of the Club and it is always discussed on my various tapes, letters etc." Censoring the bits that make me blush, we then get to ... "I know from experience that it leaves a well-known S.W. Club magazine very far behind".

Many thanks, Geoff! Glad that you are now a fully-paid-up member again. We couldn't have G-0001/RB running around on the loose. Congrats by the way to you (and Ted Williamson) on your latest awards from Radio Budapest. (From GW-0007/RB).

IN THIS MONTH'S MAIL (Part 8).

DONALD MACLEOD says "I have just received an excellent QSL package from Norea Radio Finland, comprising full QSL (mentioning it was the first ever report from Scotland), a small pennant, TWR schedule, a religious booklet and 10 used Finnish stamps and a very nice letter. The present address is - Norea Radio, Postisiirto 144040, Kauniainen, Finland."

Thanks for the details, Donald, and the best of luck with the RAE results!

BRIAN MULLEADY in writing about the job of an Area Rep says: "I believe liaison between all the members in your own area is a good start for boosting the membership".

Couldn't agree more, Brian! This is where the Area Reps have been, and are, doing a really great job. It is the contacts they make which hold any Club together and the local publicity they have been able to get us is the thing which has made our membership rise so rapidly in the past few months.

DORIS LAUTIERI writes from West Warwick, Rhode Island and sends me her very nice personal QSL card. Doris says that she swaps QSL cards 100%, also tapes and pictures of her correspondents.

Nice to hear from you, Doris! I look forward to hearing more about the various other hobbies you mentioned, at some later date.

That's the whole of the mail for this month, friends - at least, I hope that I have covered every letter that has not had a personal answer for one reason or another. As usual, if I have left anyone out please accept my apologies!

As you will see this month's mail has taken 8 pages to answer. The question now is whether you want this much of the magazine devoted to letters in future. This is the part of the magazine that it is the greatest pleasure to write each month, but you are the ones who decide what we include. So, please let me know what you feel about this.

Just a reminder that all letters, articles, loggings, news etc. for inclusion in 'CONTACT' should be sent to me at the address below. All letters etc. regarding membership fees, renewals, sample copies of 'CONTACT' etc. should go to Syd. Green, at 26 Tolhouse Street, Great Yarmouth, Norfolk, England.

Alan Thompson,
16, Ena Avenue,
HEATH,
Glamorgan,
United Kingdom.

Until next time,

Best 13 - to you all.
Alan

RADIO APARECIDA

Tuning through the 31 metre band when conditions are good for South Americans you are likely to hear a station announcing itself as: "A Rádio Aparecida, a mais poderosa emissora católica das Americas em Ondas Curtas, Médias e Tropicais, de Aparecida, São Paulo, Brasil". This, of course, is the call of R Aparecida on 9635 kcs.

Recently, as many DXers will know, the station has been fortunate enough to secure the services of José Dinys, as its International Correspondence Chief, and many listeners have been surprised to receive letters from the station acknowledging reports which they sent some time ago. The correct address to which reports should be sent is as follows:-

José Dinys, Rádio Aparecida, Praça N.S. Aparecida 315, APARECIDA, Est. São Paulo, Brazil.

A few weeks ago, one of our members - Tony Legendre - received a very nice personal letter from José Dinys in reply to a report and these notes are from original details supplied by Tony. José says:- "As you have requested, here are more details about Radio Aparecida. I must ask you to excuse the delay in answering your letter. You see, my International Correspondence is getting very large..... Now I have an important request to you. If you are going to publish these details, these "Fatos sobre a Radio Aparecida" in any DX paper or in any other paper, please, I would like you to send me a copy of that. Can you do it for me? I'll put this copy at the entrance of our station with your name and address as the sender. I hope I am not asking too much!".

Enclosed with the letter to Tony are 4 sheets giving a great deal of detail about the station and I am sorry that there is not space here to include a translation of any more than a few small snippets of information.

Regarding his own Department of the station, José says that they receive a large correspondence from many countries, including Sweden, Finland, Great Britain, United States, Japan, New Zealand, Argentina, Bolivia, Denmark, Italy, France, Germany, Switzerland, Norway, Belgium and Poland, but more than 50% of their letters come from Sweden. The station asks that listeners should send 1, 2 or 3 IRCs with their reports as they like to verify them with their QSL card and also with a 'souvenir'. They say, too, that they like to receive souvenirs of reception from the listeners' countries.

With his QSL, Tony received a most attractive pennant from R Aparecida - almost 12 inches long it is in white silk with a blue border, with a very attractive design in blue, red, yellow and black. A really worthy addition to any DXers collection.

Technical details of the station show that it operates on 1600 khz with a power of 250 watts, on 3285 khz (1 kw) and on 9635 khz (7.5 kw). The medium wave outlet began operations on 11 July 1951, the 90 metre band channel on 11 July 1955, whilst the 31 metre band channel started operating on 7 October 1954. The station is on the air from 0900 to 0300 GMT daily normally, but like most of the Brazilian stations the times vary as both Brazil and most of Europe change to 'Summer Time' on different dates. News broadcasts are carried at 0900, 1100, 1430, 1730 and 2100 hrs local time.

(Thanks to Tony Legendre, Château-Thierry, France, for the information on which the above notes are based).

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REPORT ON THE 'SKYHOOK JOYSTICK'

The April 1967 edition of 'CONTACT' carried, on page 8, full details of a version of the well-known 'JOYSTICK' V.F.A. system, known as the 'SKYHOOK'. In that issue I promised that I would report the results that I had achieved with the system and here is that report.

First of all, a brief resume of what the system involves. Basically, it consists of the De-Luxe version of the JOYSTICK - this is more suitable for outdoor use than the ordinary version - mounted as high as possible (in my case it is fitted to the top of a 20 foot pole). To the top end of the JOYSTICK is fastened a 12 ft. aerial of the 'whip' type - this aerial is insulated from the JOYSTICK, but is electrically connected to the top of the JOYSTICK by means of a short feeder running to the base of the whip. From the top end of the whip, the feeder is taken to the receiver and this may be of any length required - in my case about 45 ft. of feeder is used and this slopes down to the receiver at a sharp angle. The feeder is interrupted before reaching the receiver in order to take an Aerial Tuning/Matching Unit. That then is the basic layout involved in this system.

Let me make it clear that this is in no way a 'review' of the JOYSTICK, or of this system. Simply, it is a reasoned account of how the system has performed with me. My QTH is situated in the near bottom of a saucer of hills which rise to about 1200 feet in a distance of some 2 miles or so. The 'saucer' is reasonably open to the south and west, and the area is fairly heavily built-up, although with a fair amount of adjacent open space - a fairly average QTH in these days. The writer's main interest in the radio field is in DXing for the lower-power African and South American stations and consequently most DXing is done on the 60 and 90 metre bands where the intrinsic noise level is high, and the signal strength of the stations I am hunting for tends to be low. Consequently, the most suitable aerial for my purpose is one with a high signal-to-noise ratio, and one which will extract that last micro-volt of signal from the air! That is the thing which makes all the difference between logging the rare piece of DX and just hearing a vague unrecognisable signal.

Brought down to bare essentials the system will give you the equivalent of a 50 ft. vertical aerial coupled to a long wire feeder, with the added advantage that the aerial will resonate on any frequency (within the BC and ham bands). It is well-known that one of the most efficient aerial systems for the ordinary SWL is a dipole - or series of dipoles - cut to the length required for the bands on which one intends to listen most. This system is, of course, quite efficient and also possesses certain directional properties: these can be a nuisance as well as an advantage. The chief defect of such a system is that on bands other than that for which the dipole is cut the results are those which one would expect with any good aerial, of any type. In any town QTH the great problem is the man-made noise which bedevils reception of weak stations since it reduces the signal-to-noise ratio, which is the very thing which one wants to keep as high as possible! Various aerials have been tried - long wires, whip aerials, the ordinary JOYSTICK and so on, and each has performed very well, but always with certain limitations when the very weak signal is being monitored.

The 'SKYHOOK JOYSTICK' array has now been in use for about 2 months and has been tested against the other 5 aerials which are in daily use. In a nutshell, on strong and medium signals its performance is not markedly different from that which
(continued)

which/

one can achieve with any other highly efficient aerial system, except (and this is important) that there is a marked reduction in the volume of atmospheric and man-made noise which the aerial picks up, as compared with the conventional type of aerial. What of the weak signal? Here, I have no hesitation in saying that the 'SKYHOOK JOYSTICK' system is a vast improvement over any other aerial system I have used, when used in conjunction with a JOYMATCH Aerial Tuning Unit. There is no question but that the signal-to-noise ratio with this array is considerably better than the ratio with the aeriels against which it was tested here - these included a 225 ft. long wire, a 20 ft 'whip' coupled to a 75 ft. long wire, and a 105 ft. long wire, as well as several aeriels of the 'gimmick' type. Quantitative measurement of the increase in s/n ratio I leave to the technically minded who try this array - from a subjective point of view it is noticeable that there is a marked increase in the number of signals heard in tuning through the 60 or 90 metre bands. As all DXers will know, those are the bands which really test a receiver and aerial system, and it is for that reason that I refer to them specially. Results are equally good on all bands!

In fairness to the array, just a word about what it will NOT do. It will not suddenly make a 'real old clunker' of a receiver perform as though it is a super-duper brand-new, correctly aligned, very expensive Communications Receiver. It is not designed to do that, and it will not do it. However, given a receiver in good condition which is already bringing in the DX quite nicely it will certainly improve the chances of getting even more rare DX by raising the signal-to-noise ratio that bit which makes all the difference, as I said earlier, between hearing something recognisable and something too feeble to be worth trying to monitor. On the other hand, if you are not a DX seeker you will find that this aerial will reduce the 'degrading' of a medium signal for the same reason.

Lastly, a word about Aerial Tuning Units. This aerial system can only work correctly if the array is made to resonate at the received frequency, and this can be done by means of an Aerial Tuning Unit. With this array I have had the chance of testing the JOYMATCH tuning unit in both the Type 3 and Type 4 forms. These have proved to be very efficient in operation - although one could wish they were a shade heavier in weight: a minor criticism this - and with the SKYHOOK array they have proved capable of resolving many weak signals which would otherwise have been 'lost' under QRN.

To sum up, 2 months of operation of this system has satisfied me that there are very definite gains in signal strength to be obtained from this set-up. The combination of JOYSTICK, whip aerial and JOYMATCH has produced some loggings which were unintelligible on switching to the other aeriels available to the writer. Lest anyone should think that the receivers in use were in the 'super' category let me say that the set-up was tested using (a) a Marconi 52 set (b) a 'Lafayette' HE30 Communications receiver and (c) a 10 transistor 8 wave-band Rx of Russian manufacture. In other words, a fairly representative collection for the average DXer. In a phrase - well worth investing in if you are not satisfied with your present aerial system. This is especially so if you have not the necessary space to erect long-wires or other conventional aerial arrays - this system can be operated in any QTH which allows the array to be mounted on a suitable pole, chimney or other support, as the length of the feeder to the Rx is not critical.

ALAN THOMPSON.

CITIZENS' BAND NOTESby BERT LABOURNE

Last month, I explained how the Citizens' Radio Service was divided into Districts - each District with an allocation of prefixes.

The 1966 Class 'D' Prefix Chart

Below are listed all of the F.C.C. prefixes currently being used by Class D CB stations in each of the 24 radio districts. Since the CB licence terms are for 5 year periods, the 1962 prefixes will all be expiring in 1967. Prefixes shown with the mark ϕ are 'spares' which the FCC might use should any district run out of assignable calls. Those shown with the mark $\phi\phi$ are special authorisation prefixes which may be issued in the respective districts during any year.

<u>Prefix</u>	<u>Dist</u>	<u>Issued</u>	<u>Prefix</u>	<u>Dist</u>	<u>Issued</u>	<u>Prefix</u>	<u>Dist</u>	<u>Issued</u>
KBA	1	1962	KFA	11	1963	KIJ	22	1963
KBB	1	1962	KFB	11	1964	KJA	22	1964
KBC	1	1963	KFC	12	1962	KJB	23	1962
KBD	1	1963	KFD	12	1963	KJC	23	1963
KBE	1	1964	KFE	12	1964	KJD	23	1964
KBG	2	1962	KFF	13	1962	KJE	24	1962
KBH	18	1963	KFG	13	1963	KJF	24	1964
KBI	2	1963	KFH	13	1964	KJG	24	1963
KBJ	2	1963	KFI	14	1962	KJH	5	1963
KCA	2	1964	KFJ	14	1963	KJI	20	1964
KCC	3	1962	KGA	14	1964	KKA	1	1964
KCD	3	1963	KGB	15	1962	KKB	1	1964
KCE	3	1964	KGC	15	1963	KKD	2	1964
KCF	4	1962	KGD	15	1964	KKE	2	1964
KCG	4	1963	KGE	16	1962	KKG	3	1964
KCH	4	1964	KGF	16	1963	KKI	4	1964
KCI	5	1962	KGG	16	1964	KKK	5	1964
KCJ	5	1963	KGH	17	1962	KKM	6	1964
KDA	5	1964	KGI	17	1963	KKN	6	1964
KDB	6	1962	KGJ	17	1964	KKP	7	1964
KDC	19	1963	KHA	18	1962	KKR	8	1964
KDD	6	1963	KHB	18	1962	KKT	9	1964
KDE	6	1963	KHC	18	1963	KKV	9	1964
KDF	6	1964	KHD	18	1963	KKX	11	1964
KDH	7	1962	KHE	18	1964	KKY	11	1964
KDI	7	1963	KHG	19	1962	KLA	12	1964
KDJ	7	1964	KHH	19	1962	KLC	13	1964
KEA	8	1962	KHI	19	1963	KLD	14	1964
KEB	8	1963	KHJ	19	1963	KLE	15	1964
KEC	8	1964	KIA	19	1964	KLF	16	1964
KED	9	1962	KIC	20	1962	KLH	17	1964
KEE	9	1963	KID	20	1963	KLI	17	1964
KEF	9	1964	KIE	20	1964	KLJ	18	1964
KEG	10	1962	KIF	21	1962	KLK	18	1964
KEH	10	1963	KIG	21	1963	KLL	18	1964
KEI	10	1964	KIH	21	1964	KLM	19	1964
KEJ	11	1962	KII	22	1962	KLN	19	1964

(continued)

Prefix	Dist	Issued	Prefix	Dist	Issued	Prefix	Dist	Issued
KLO	19	1964	KOA	1	1966	KPM	19	1966
KLP	20	1964	KOB	1	1966	KPN	19	1966
KLQ	20	1964	KOC	1	1966	KPO	19	1966
KLS	21	1964	KOD	2	1966	KPQ	20	1966
KLT	22	1964	KOE	2	1966	KPR	20	1966
KLU	23	1964	KOF	2	1966	KPS	21	1966
KLV	24	1964	KOG	3	1966	KPT	22	1966
KMA	1	1965	KOH	3	1966	KPU	23	1966
KMB	1	1965	KOI	4	1966	KPV	24	1966
KMD	2	1965	KOJ	4	1966	KPW pp		
KMG	3	1965	KOK	5	1966	KPX pp		
KMI	3	1965	KOL	5	1966	KPY pp		
KMK	5	1965	KOM	6	1966	KUA pp	1	any
KMM	6	1965	KON	6	1966	KUB pp	2	any
KMN	6	1965	KOO	6	1966	KUC pp	3	any
KMP	7	1965	KOP	7	1966	KUD pp	4	any
KMR	8	1965	KOQ	7	1966	KUE pp	5	any
KMT	9	1965	KOR	8	1966	KUF pp	6	any
KMV	10	1965	KOS	8	1966	KUG pp	7	any
KMX	11	1965	KOT	9	1966	KUH pp	8	any
KNA	12	1965	KOU	9	1966	KUI pp	9	any
KNC	13	1965	KOV	10	1966	KUJ pp	10	any
KND	14	1965	KOW	10	1966	KUK pp	11	any
KNE	15	1965	KOX	11	1966	KUL pp	12	any
KNF	16	1965	KOY	11	1966	KUM pp	13	any
KNH	17	1965	KOZ	11	1966	KUN pp	14	any
KNI	17	1965	KPA	12	1966	KUO pp	15	any
KNJ	18	1965	KPB	12	1966	KUP pp	16	any
KNK	18	1965	KPC	13	1966	KUQ pp	17	any
KNM	19	1965	KPD	14	1966	KUR pp	18	any
KNN	19	1965	KPE	15	1966	KUS pp	19	any
KNP	20	1965	KPF	16	1966	KUT pp	20	any
KNS	20	1965	KPG	16	1966	KUU pp	21	any
KNT	22	1965	KPH	17	1966	KUV pp	22	any
KNU	23	1965	KPI	17	1966	KUW pp	23	any
KNV	24	1965	KPJ	18	1966	KUX pp	24	any
KNY pp	any	any	KPK	18	1966	KUY pp	any	any
KNZ pp	any	any	KPL	18	1966	KUZ pp	any	any

Some new prefixes appeared in late-1966 in KA? series. I have been unable to obtain a complete list to date, but the following have so far been checked - KAA is District 2, KAG - District 13, KAJ - District 5, KAP - District 4 and KAR - District 1.

All personal calls consist of 4 figures starting at 0001. The lowest number QSL card we have is for KBD-0003. The K, of course, means U.S.A., BD is the District (1), while 0003 is the personal call. The full QTH (or 10-20 in CB code) is shown as:- KBD-0003, Chuck Simmons, 531 Nash Road, New Bedford, Mass.

The KA? prefixes are believed to be Class B Stations. Some earlier prefixes consisted of a figure, or figures, followed by a letter, but it is understood that these are too like those of amateur radio stations, and have been withdrawn. QSL cards from these stations, however, do often appear as 'swops' - ones received include 2Q - District 2, 4B - District 4, and 1W, 3Q, 5Q, 6Q, 11Q, 17Q, 18B, 19A, 19Q and 20Q (the figure being the District concerned).

DX - TV REPORT

by DENNIS BONIFACE

All reports etc. for this feature should be sent direct to Dennis Boniface at
11, Holmfild Road, Ripon, Yorkshire.

The report this time is for the merry month of May, and a very merry month it was, producing some very good openings via Sporadic-E. For space reasons I cannot include every bit of the three logs I have here - this would take half of 'CONTACT'! The problem of recognising countries by the programmes seen can be tricky at times, so with this in mind can anyone tell me what 'RYBUNA TV' is? So, here is the log for May, with all times stated in G.M.T.

DENNIS BONIFACE:

14 May	Channel R1	??? Russia	Programmes	1210 GMT
18 May	E2	??? Finland	Testcard	1640

Unknown countries received on 18, 27 and 28 May. Spain received on 14, 23, 27 and 31 May with testcard programmes. Italy received on 14, 15, 23 and 28 May - programmes.

FRANK SMALES:

13 May	Channel E4	Patcherhofel, Austria	Testcard
	E4	Lopik, Holland	Test pattern
	R2	Bratislava, C/slovakia	Testcard
17 May	E3	Helpterberg, E. Germany	Testcard
22 May	R2	Bucharest, Roumania	Testcard
	E4	???, Sweden	Testcard
31 May	E3/E4	???, West Germany	Programmes
	E3	Lousa, Portugal	Programmes.

Spain received on 17 and 31 May: Italy on 22 and 31 May.

BARBIE STEPHENSON:

18 May	Channel E2	Aalter, Belgium	Programmes
24 May	E3	???, Sweden	Testcard at 1555 G.M.T.

Unknown countries received on 18 and 24 May: Spain on 24 and 31 May: Italy received on 22 and 31 May.

Thanks for good reports to Frank Smales, 33 Monkhill Ave, Pontefract, Yorkshire, and Barbie Stephenson, Dismunderby Close, Quarry Moor Lane, Ripon. All that's left to do now is to sign-off until next time. Let's hear from you. 73s and good viewing!

Dennis

"List of Television Stations - European Broadcasting area"

This book is published every year in May/June by the European Broadcasting Union (E.B.U.). It gives the name, power, location and height of all the TV transmitters in Europe, as well as the frequencies of all TV channels, details of different transmission systems etc. The subscription to this is 125 Belgian francs (about £1) and this includes six bi-monthly supplements with details of new txrs etc, as well as a map of Europe with txr locations. The address is: E.B.U., Technical Centre, 32 Ave. Albert Lancaster, Bruxelles 18, Belgium. This book and map are musts for any DX-TV man!

(db)

This is to describe the art of DX-TV in a simple language that everyone can understand. It will take the form of two parts - one this month, and one at a later date. In this article I shall deal with (a) Propagation and (b) Aerials.

(a) Propagation

To make DX-TV possible, we must have some means of making the DX signals present at our aerial. Several forms of propagation can do this - the most successful being 'Sporadic-E' (Sp.E). Sp.E is simply ionization of the 'E' layer, the cause of this is unknown, but this causes the TV signals from a distant transmitter to be reflected back to earth (TV signals normally fly off into space). The distance of the transmitter can be anything from 500 to 2000 miles away and signals received can be very strong, but have an erratic fast-fading nature. Sp.E propagation is Band 1 only and the MUF (max. usable freq.) rarely reaches 100 mcs, but this is not a hard rule. Only a few years ago, Sp.E gave a good opening on 2 metres and our amateur friends still dream about it! The best time of reception for Sp.E is during the summer months, but it can occur at any time during the year, and it is this method of propagation that upsets our domestic viewers on Band 1 with severe interference on the local stations.

The next method of propagation of our DX-TV signals is via 'Tropospheric' (Trops). Differing greatly from Sp.E., Trops can give results on Band 1, Band 3 and VHF and the signals are refracted, or bent to follow the earth's curvature; distances covered can be up to 500 miles and beyond in extreme cases. Unlike Sp.E, signals via Trops are weak and require a high-gain receiver and aerial. Trops occur during fine, warm, anti-cyclonic, settled weather and during widespread fog. Reception is possible anytime of year with Autumn being favoured.

'?' The question-mark signifies a common, but unknown, method of DX-TV reception taking the form of a DX signal appearing on the screen for a short period of time, far less than a second in most cases. Three possibilities arise - short-lived patches of Sp.E, reflection from aircraft or the various pieces of ironmongery orbiting around in space, or meteor-trail-scatter. Signals vary in strength and distance.

'F2'. This occurs when the M.U.F. of the F2 layer reaches the Band 1 T.V. channels during the peak of the sunspot cycle. Signals should be strong and the distance could be so great as to make reception possible from any part of the world. As we are approaching the peak in the sunspot cycle, F2 layer reception could happen very soon.

(b) Aerials

Aerials for Sp.E, '?' and F2 are simple. Because signals are strong, a horizontal dipole is very good; a beam is useful for the extraction of maximum DX signal for photographic purposes, but this can give rise to severe over-loading of the TV receiver during a good Sp.E opening. So, a straightforward dipole mounted as high as possible is favoured. Aerials for Trops have to be of high-gain in order to make use of the weak signals. So we need an aerial of say 3 elements for Band 1, 8 elements for Band 3, and 18 elements for U.H.F., and for best results mounted as high as possible clear of obstructions such as trees, buildings etc. Low-loss coax. cable is preferred and the down-lead should be as short as possible. Rotation of aerials is a Must - unlike Sp.E the aerial must be directed at the DX station.

(Next time - (c) the receiver, and (d) the different channels in use.)

Basically, a tape recorder is an instrument for recording sounds on a magnetic-tape and then reproducing them in a loudspeaker. A magnetic tape is a long narrow strip of plastic material coated on one side with oxide of iron, which is why tapes are the colour of rust! In an unused tape, the particles of oxide are scattered haphazard all over its surface. It is then put onto a tape recorder in this state, where an electric motor pulls it slowly and evenly across the poles of an electro-magnet. The current feeding the electro-magnet comes through a lead from the microphone (or other input source). As the words are spoken into the microphone, the current changes rapidly in strength, according to the vibrations of the sound and so the electro-magnet changes in strength in the same way. Its effect on the magnetic tape is to make the particles of iron oxide into tiny magnets and arrange them neatly with all their north and south poles pointing lengthwise along the tape. When the electro-magnet is strong, the particles then passing it become strong magnets, and when it is weak the magnetic particles are only weakly changed. The result is that all the sound vibrations of the voice (or input source) are represented by the different strengths of the tiny magnets of iron oxide particles contained in the recording tape.

In the 'play-back', the tape with the recording on it, is once more pulled slowly and evenly across the poles of the electro-magnet which, this time, is connected to the loudspeaker (through an amplifier stage). As the magnetised particles of iron oxide pass the magnet they generate minute electric currents in the coils of the magnet and these vary in strength exactly as the oxide particles in the tape vary. Thus, the sound vibrations that were recorded on the tape are changed back into variations in the strength of an electric current. These variations are made stronger by means of an amplifier and are then able to work the loudspeaker.

Magnetic recording of this type was first devised as long ago as 1888, when Oberlin Smith suggested that speech could be recorded on a cotton or silk thread filled with steel dust. The first successful machine was made in 1900 by Valdemar Poulsen, a Dane, who used steel wire instead of thread. Several inventions then followed, the best being the steel wire recorder of Blattner who invented it for adding 'sound' to the old silent films. For many years, the 'Blattnerphone' was used for making sound recordings, though it was never adopted for films. The 'first' tape recorders used steel tape instead of wire, but the steel tended to rust. Nowadays, stainless steel is used and wire is preferred to metal tape. Several experiments were made with paper tapes but they gave way to plastic tapes about 1935. As with many other inventions, e.g. Radar, the perfecting of the tape recorder was achieved only for military purposes during World War II. It is only since then that tape recorders have become popular among hobbyists and for home entertainment.

Owing to pressure on space in this issue, it has been necessary to carry forward to later issues a number of contributions. Articles on any subject which has a bearing on radio or television are always welcome; the more that are submitted the easier it is to produce a magazine which will include, at least, something to interest every member.

In preparing this issue, it has been necessary in particular to leave out a number of contributions by the Club's Area Representatives. I am sorry that this has been needed, but our CB and DX-TV contributors have had rather greater space than usual this month, so as to include their respective articles in full. Shortly, I hope it will be possible to carry a regular feature containing short news items from our Area Representatives, about events in their Areas.

CALLING AMATEURS

Edited by PAUL HARRIS

All contributions to, and comments on, this feature should be sent direct to :-
Paul Harris, Amateur Section Editor, 9 Stumperlowe Hall Road, Sheffield 10, Yorkshire.

- LOG SECTION -

DENNIS BONIFACE: 10 metres 1745 - 1900 GMT on AM phone: ZS6AD, ZC4MO, CR7CZ, ZC4TX, 5N2AVA, LU7EZ, CK1BY, LU5DGQ. On SSB - KZ5IX, ZE5AJ, ZS5OV, YV4RZ, YV4AD, PZ1BX and VS9ATC. (R.208 Rx with ex-government RFI as pre-amplifier. IF o/put of R.208 fed to HRO M Rx to give a double superhet. Aerial: 10 metre dipole: 12 ft high N/S).

WOLFGANG SEYFRIED: Calmbach, West Germany: 10 metres AM - UI7OB, UW9XP and LU5DJV, and on SSB - KV4CX. On 15 metres AM - EL2Y and HC2SP, and on SSB the following long list - ET3RB, GC8HT, KO7AB (German OM from Saudi Arabia with 3 kw!!!), KR6AB, KS6BT (in American Samoa), KV4CX, KX6BU (Marshall Island), W2CKL/MM near Gibraltar, MP4MAW, MP4TBA, OH0NI, TU2AF, TU2AY, TU2BDL, UH8IX, XW8BJ (Laos), 4U1JTU, 5A1TV and 9G1DY. On 20 metres SSB - CR7AP (Mozambique), DU9FB, FG7AL, FH8CE, FY7XM, GB2DX, GD3FXN, HP3AVI, HI8XNO, HI8LAC, HS4AK, WAIHAI/MM in Eastern Mediterranean, W7EQI/KH6, KG6AQQ (Guam), KH6GFH/KL7 (Adak Island), KW6EJ (Wake Island), OA4MB, OX3EX, PDLKL (which country? no trace in any of my lists either: Ed.), SV0MW, TF3HS, TI2LF, TG8IA, TU2BI, UJ8AC, VE8ML, VP2AA, VP9BY, VQCAK, VU2CK, VU2RM, YA5RG, YN1LB, YS1AG, YV0AA, ZD3G (op K6INX, Gambia), ZE3JJ, ZS6ADW, ZS6BAD, 3C3FCZ/SU, 3C8RC, 3C8YC (400 miles from the North Pole), 3A2MJC (Monaco), 5R8BC (Madagascar), 5Z4IR, 6Y5AR, 6Y5JMA (Jamaica), 6K7RX (what country?), 7Q7PBD (Malawi), 7X0AH, 9G1FF, 9M2LO, 9M2PO, 9V1NO (Singapore), 9X5CE, LH, MW, PB.

SVEN LINDBERG: Värnamo, Sweden: 10 metres SSB reports (times in brackets) - CN8FV (1335), ZELBR (1320), and on AM - EP2GI (1130), PY4AP (1340) and ZC4GY (1445). On 15 metres AM - JALTZI (1250), and on SSB - JALUHL (1220), JA2CWK (1315), JA2COX (1250), JA9AG (1215), OD5FC (1750) - Karl-Erik an ex-SM station working at Beirut, PY7KB (1445), SW0WKK (1700), 7Q7LZ (1800) - ex G3LZZ, I think, 9H1AG (1655) and 9H1S (1120). On 20 metres, all SSB, CR4BC (2145), GB3FOX (1715), OD5BA (1500), PILLS/MM - weather ship 'Cirrus' in mid-atlantic, PY2QN (2130), PY5GK (2125) and YA5RG (1450).

Sven received the following QSLs - EA3QW, OE9KSI, PA0HEN, SM7CRW and 3C6CT. Sven supplies the following list of QSL managers, compiled as a result of his listening to stations currently around the bands:-

Station CN8FV QSL via W2GHE; EP2GI via GI3HXV; YA5RG via DL6ME; 5T5KG via YASME Foundation, Box 2025, Castro Valley, California 94546, USA; 7Q7LZ via G3LZZ.

Sven writes that he is now the owner of a complete Call Book (DX Listings and U.S.A. editions) containing thousands of QTHs. If anyone wants the address of an amateur station Sven will be pleased to help them if they will write to him, enclosing a self-addressed envelope and 1 I.R.C. - the address is Sven Lindberg, Klövernägen 14, Värnamo, Sweden.

- AMATEUR RADIO IN THE U.S.S.R. -

(Acknowledgements and thanks to Radio Moscow for their cooperation and assistance).

The history of amateur radio in the U.S.S.R. begins in the year 1924, when a privately owned radio station scored the first long-distance contact. The man behind the trans-
(continued)

behind the/

transmitter was Pyodor Lbov: his opposite number was in Mesopotamia, 2000 miles away. Pyodor Lbov operated a 10 watt radio station. After that radio amateurs increased rapidly in numbers. In 1926, Soviet amateurs organised the "Society of Radio Fans" and in September 1927 held the first national DX contest. Taking part were 300 DXers.

Today, the number of hams in the Soviet Union runs into several thousands. They are united in some 450 radio-clubs. Radio clubs are non-profit organisations open to everyone. They function on the money obtained from membership dues. However, the state provides them with premises and some radio equipment. The club's activities are directed by a council elected at a general membership meeting for a period of one year.

The amateur headquarters is the Central Radio Club of the USSR. It is located in Moscow and sponsors all national and some international contests. It also draws up rules and regulations and awards prizes.

A few facts about amateur licenses, regulations and so forth:-
Beginners who go in for short-wave listening get letters for their QSLs at their radio clubs but no licences or tests are involved. There are lots of radio fans here who are keen on designing, telegraphy and 'fox-hunting' - a game which combines designing, radio operation and cross-country running - but none of these amateurs hold any licences either. So you can speak of station licences in the USSR. The basic regulation for amateur stations in our country is the same - "no pecuniary aim". In other words, an amateur station may not be used for material compensation or profit. Neither may it be used for broadcasting.

If you wanted to obtain a station licence in the USSR the first thing for you to do is join a radio club. Amateurs do not buy ready-made transmitters, but make them. At the club, among the things learnt are radio-fundamentals, designing and Morse code under competent instructors and free of charge. When you start building your equipment, and are ready, you file an application for a licence. Before the application goes to the Ministry of Communications, which has a special commission in charge of all amateur activity, the prospective amateur is grilled by a "qualifications commission" at the Club. This commission is chosen from among the veteran amateurs at the club and they test ability to copy code at the required speed, knowledge of basic transmitter theory and amateur regulations. If the test is passed, the application goes on to the Ministry. Six months are given to complete the station. If in six month's time one is still unable to produce a finished job, the application is cancelled. If the station is ready, an official looks it over. He wants to see if all the requirements have been observed, especially those of safety. If he okays the project the licence and call-letters are received. The licence costs nothing.

- AMATEUR BAND NEWS -

A crew of 4 Ecuadorians are sailing a balsa wood raft across the South Pacific hoping to reach Australia by July. An amateur radio station HC9EP is operational on 14150 kcs SSB currently active from Antarctica - KC4AAD (Byrd Base); KC4USB; KC4USJ (Polar Plateau), KC4USL, KC4USN (South Pole), KC4USP (Palmer Archipelago), KC4USV (McMurdo).... VESYL is the call-sign of the Flaisted Polar Expedition which is retracing the route taken by Admiral Perry in 1909 CR8AH active from Portuguese Timor on 21 mcs AM between 1000 and 1400 the value of the radio amateur in an emergency was shown during the recent 'Torrey Canyon' disaster. As the oil drifted towards the Cornish Coast and clean-up operations swung into action, official communications HQ at Newquay soon found itself overloaded. The Cornish section of the Radio

(continued)

Radio/

Amateur Emergency Network came to the rescue. A base station was set up in Newquay Town Hall and three mobiles passed messages from the beaches on 5.7 and 70.375 mcs, while all stations of the Cornwall group were put on standby.

Many thanks to this month's contributors - Sven, Dennis and Wolfgang. I am always pleased to receive your logs - the more, the merrier! All the best for now and good DXing,

VB Paul

M I S C E L L A N Y

'JOYSTICK' NEWS : George Partridge sends me two bits of news. Firstly, that Lord Snowdon came 4th in the International Cross-Channel Water-Ski Race from Folkestone to Boulogne on 28th May - the control station used a marine JOYSTICK aerial. The second concerns the DXpedition of the "Luton lot" to Guernsey from 5th to 12th April - full details in the "Short Wave Magazine" for June 1967. Included in the equipment was a JOYSTICK and the group made over 600 QSOs, working 56 countries. Interesting to note that TF2WKE on 14 mcs "reported only slight QSB when the Joystick was removed from the roof and held at shoulder height".

TAPE SECTION NEWS : Thanks to all members for their support in forming this section, which is now well under way. Especial thanks to Jan (WCC122). Cheap but good tapes will be available to members shortly. The first competition will be on the subject of 'Holidays'. Send your entry on a 3" spool, 3 $\frac{1}{2}$ i.p.s., 2 track to: Ted Williamson, (Tape Section Manager), Assarts Cottage, Welbeck Colliery Village, Mansfield, Notts. (vmc) Hope to have more news of this Section of the Club next month - this note arrived just an hour before this issue was finished - however, glad we could manage to include it. Good luck, Ted, and every success with the competition. (at)

AREA REPRESENTATIVES: A revised list appears on the final page of this issue, but it is not yet complete as one or two appointments remain to be made. For that reason, it is not yet possible to quote the exact geographical areas covered by each Rep. May I say a very sincere word of thanks to all the Reps for their cooperation in making these changes, especially to those whose areas have been curtailed as a result - your understanding that this was being done to improve local publicity is much appreciated. To the new Area Reps. a sincere word of welcome and may every success attend your efforts on behalf of the Club.

WORLD PUBLICATIONS, DENMARK: May I remind members that I have a supply of brochures with full details of the publications of this firm. These publications are available to our members at very substantial rates of discount, and full price lists will be sent you, together with a brochure, if you will send me a s.a.e. As a general guide the discount is in the region of one-third of the ordinary retail price in the U.K. (PLEASE NOTE:- World Publications do not produce the 'World Radio-TV Handbook, now: enquiries regarding that should be made to Syd. Green)

DEADLINES ETC: Let me use the final few lines on this page to say a very heartfelt word of thanks to all this month's contributors who kept to the deadline and who followed the suggestions in last month's issue about the 'form' of contributions. It has meant a considerable reduction in the time taken to produce this issue, and your help is very much appreciated. Next DEADLINE (for August issue) is 12th July here - a week earlier for Dennis and Paul's sections.

D X N E W S

Compiled by DAVID THOMPSON

All times are in G.M.T., and frequencies in khz.

BELGIUM: Full o/seas sked of Belgian Radio operative to 3 Sep is as follows:-

1000-1215 in Fr, Dutch and Congolese on 17860/21510/21590; 1215-1300 in Fr and Dutch on 17760/21510/11885; 1600-1715 in Congolese on 9740/11715/17860, and 1715-1830 on 11715; 1715-1830 in Fr/Dutch on 9740/17860; 1830-2100 in Fr/Dutch on 9740/11715/17860; 2115-2215 in Fr/Dutch to S America on 9615/9740/15335; 2215-2300 for sailors on same freqs as 2115; 2315-2400 for sailors in Fr/Dutch on same freqs; 0000-0100 in Fr/Dutch to N America on same freqs. Saturday only 1330-1630 for Africans on 15335/17860/21510; Sunday (Sports prog) 1330-1630 on 17720/17860/21510, and 1645-1715 on 9740/11715/17860. (Victor McCulloch).

BIAFRA: Eastern Nigerian Broadcasting Service on 4855 is now announcing itself as 'The Voice of Biafra' in both English and vernacular services. Reception fair around 1900. Currently there is no postal service from U.K. to Biafra. (Victor McCulloch: Editor).

BOTSWANA: R Botswana, PO Box 52, Gaborone is reported on 3356/4836 from 1530-1830 in Eng and local langs. (Vic McCulloch quoting 'R Safari').

BULGARIA: R Sofia now to UK in Eng from 1930-2000 on 11800 khz, and uses same freq from 2130-2200 in second service to UK. Service to N America from 0000-0030 and 0400-0430 in Eng is on 9700 khz.

CANADA: CHU Dominion Observatory xms are located 10 miles SW of actual observatory and stn uses three 3 kw xms on 3330; 7335 and 14670 continuously with id every minute. (Andrew Waddelow).

R Canada sked operative until 2 Sep 1967, service to Europe in English/French as follows: 0730-0800 on 9625/5990; 1217-1313 on 15365/11720/9625; 1515-1529 on 21460/17820; 2115-2150 on 21460/17820/15320 - above are Eng services except 1515 spot in Eng/Fr. French to Europe 0800-0815 on 9625/5990; 1316-1342 on 17820/15365/11720; 2001-2044 on 21460/17820/15320. Service to East Europe 1345 Ukrainian; 1415 Russian; 1445 Czech; 1530 Polish; 1615 Slovak; 1600 Russian; 1700 Polish; 1715 Czech; 1745 German; 1815 Hungarian; all now carried on 21460/17820/15365.

CENTRAL AFRICAN REPUBLIC: R Bangui has been reported to carry Eng news at 2000 on 5025 - however, station recently logged on 5035 at that time with local and French progs (Ed).

CUBA: R Havana reported in Eng to Europe from 2010-2140 on 15285, and to N and S America as follows: 2050-2150 on 15270/15300; 0100-0450 on 6170; 0100-0600 on 11760; 0330-0600 on 6135 and 0630-0800 on 9655. (Andrew Waddelow).

EAST GERMANY: R Berlin International carries Eng at 1730 and 2015 on 6080/6115/7185/7300/9730. For its 2200 transmission uses 6080/6115/7185/7300.

ECUADOR: HCJB English sked as follows: 0700-1000 for S Pacific on 6050/9745/11915, and until 0930 to Europe on 15325; 1400-1500 (Tue to Fri), 1530 (Mon), 1600 (Sun) and 1630 (Sat only) all to Americas/Jamaica on 15115/17890; 1845-2000 to Europe and E Caribbean on 15325/17885; 2100-2130 to Europe on 15325/17885; 2330-2400 to Americas/E. Caribbean/Europe on 15115/17890; 0200-0430 to Americas on 9745/11915/15115. "DX Party Line" 1st and 3rd Wed at 0930; 1st and 3rd Mon at 0230 and also at 2100 on 1st and 3rd Mon for Europe - last 'spot' logged but does not appear in sked. (Victor McCulloch).

(continued).

DX NEWS (Part 2)

FINLAND: R Finland now has additional Eng service directed to N America from 2300-2315 daily, followed by Finnish until 2400 - freq used is 15150. Remainder of sked in Eng is unchanged.

GREAT BRITAIN: BBC World Service commences on 1st July a new weekly programme called "World Radio Club". According to 'London Calling' - "Club membership is open to everyone - to everyone who writes in, that is. Perhaps you have a question on a technical aspect of transmitting or receiving, or you may simply want to ask for your membership card". Programme will be aired 4 times weekly and the current times and frequencies are as follows:- Saturday 0745 GMT on 7150/7295/9640/11955/15070/17810/21710; Sunday 0425 GMT on 4845/7185/9410/9580/11750/11860/12095/15260/15420/17790; Tuesday 2100 GMT on 9410/9580/11820/11860/12095/15070/15400/15435/17790/21550/21710, and on Thursday at 1245 GMT on 11750/15070/15420/15435/17705/17790/17885/21470/21550/21660/21710/25650.

HUNGARY: R Budapest broadcasts to Europe from 1950-2230 on 21685/17890/15160/11910/9833/7220/7100/6234/3995, and from 2330-2400 to Europe on 6234/3995 as well as 539. Noted in Eng at 2130 on 9833 by Victor McCulloch.

INDIA: General Overseas Service of AIR for UK and West Europe is carried on 7215 from 1745 (Sats 1800) to 2230, on 11620 from 1745-2030 and on 9912 from 1945-2230.

IRAN: R Iran was recently noted signing-off at 2027 GMT in Eng on new freq of 15265 (Ed).

ISRAEL: Kol Zion, Jerusalem now carries Eng to Europe 2115-2130 on 9009/9725, and to Africa 2015-2030 on 9009. French to Europe 2045-2115 on 9009/9725. (Victor McCulloch) Has also been noted on 9625 in parallel with above outlets.

NORTH KOREA: R Pyongyang currently has following English sked: 0400-0500 on 6540/15520; 0800-0900 on 6540/15520; 1100-1200 on 6480/7580; 1400-1500 on 6480/7580; 1900-2000 on 6540/7580, per station's sked. However, freqs appear to be somewhat variable.

NORWAY: R Norway broadcasts to Europe in English on Sunday only from 1200-1230 on 7240/15175/17825/21655/21730. Also from 2200-2230 on 15345/17825/21655/21730.

POLAND: R Warsaw in English to the U.K. as follows:- 1830-1857 on 9525/7125; from 1930-2000 on 9525/7285/7125/1502; from 2030-2100 on 9675/9540; from 2130-2155 on 9525/7125; 2230-2300 on 9540/7285/1502 and from 2303-2330 on 818 khz.

PORTUGAL: Current English sked of R Portugal is as follows:- 0200-0245 to USA on 9680/6185/6025; from 0345-0430 to USA on same freqs; 0600-0345 to Canada on 5985; 2045-2130 to Great Britain, Holland and Scandinavia on 7130/6025; 0730-0900 to Australia on 21495/17740; 1430-1500 to S.E. Asia on 21495/17895; 1815-1945 to Africa on 17880, and on 21495 until 1915.

SOUTH AFRICA: (a) Radio RSA is currently carrying the English service to UK from 1900 on 17790/15245 khz (b) R Highveldt (one of the SABC Commercial Services) is reported heard on 25650A around 1400 in English/Afrikaans at excellent strength (Brian Mulleady), (c) Domestic services of Radio RSA have recently been logged (see LOG BOOK) on 3235/4810/4895 (all approximate) during the evening hours. (d) Radio RSA has recently issued the second of its pamphlets in the series "How to get the most out of SW reception", entitled "The Receiver".

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DX NEWS (Part 3).

SWEDEN: R Sweden has following sked for Eng service until 3 Sep: 0515-0545: 17840: 0900-0930 on 9625/21690: 1100-1130 on 9625/15240: 1230-1300 on 15240/21690: 1400-1430 on 21585: 1900-1930 on 21690/15240: from 2015-2045 on 6065: 2245-2330 on 11810: 2330-2400 on 1178 khz.

TANZANIA: R Tanzania has been reported on 4915 approximately in the early evening in Eng (Michael Barraclough). Has also been noted on 5052 with External Service s/on at 1845 approx in Eng (Ed).

THAILAND: The Overseas Service of R Thailand over station HSK9 is reported to carry a transmission of its General Overseas Service from 1025-1157 G.M.T. (Eng news at 1030) on 11910/7185/6160. Station states that power is 50kw. (Alan Elliott).

TOGO : Radio Togo has recently been heard at excellent strength on 3220 approximately with Eng news at 2100 GMT. The old channel of 5047 appears to be in use either at very low power or only intermittently (Ed).

UNIDENTIFIED: Brian Mulleady reports hearing on May 6/7 a very strong signal on 10550A. Prog consisted of Classical music from 1830-1900 followed by a 'Radio Newsreel' type of programme until 1930. Only intelligible word was 'stereo' and (possibly) 'Moscow'. Also heard in afternoon with Pop Mx. Can anyone help, Brian, please?

UNITED STATES OF AMERICA: (a) R New York Worldwide reported to be on a provisional sked following recent fire: From 1800-2100 on 15440/17845/21530. "DXing Worldwide" said to be aired at new times of Saturday 2030 and Sunday 1905. (Patrick Callaghan).

(b) Current VOA European area schedule is as follows:-

English: 0300 - 0730 on 3980/5965/5995/6040/7200/7250/9540/9635/9740/11705/11790/11845/15295/1196 khz (6040 from 0500: 11705 replaces 11790 at 0600: 11845 starts at 0400, and 1196 s/on at 0500). Evening programmes are from 1400 until 2330 (2345 Sunday) on 3980/5965/9760/11770/15205/15290/17855/21455/21600/1196 khz (5965 from 1715: 11770 s/off 2000: 15205 s/off 2215: 17855 s/off 1800: 21455 s/off 1600: 21600 s/off 2015, and 1196 on air only from 1600-1800 and again from 2100 - close down in this service).

WINDWARD ISLANDS: Full current schedule is as follows:- 1545-1800 on 5015/9550/15105 (schedule shows s/on at 1500 on Sun, Mon, Tue and Wed but no prog details given until 1545): 1800-2000 on 5015: 2000-2135 on 5015 and 15015 (this includes portion of service intended for U.K. listeners): 2135-2245 on 3280/5015/15105: 2245-2315 on 3280/5015 and 2315-0215 on 3280/11970. Recently heard at good strength on 5015 around 2230 GMT. Relays frequent BBC Newscasts and also on weekdays 'London calling the Caribbean' at 2115 G.M.T.

Many thanks to all this month's contributors for the many items they sent in which have had to be omitted, as well as to those whose contributions have been used. All programme schedules, details of new frequencies, revised times of transmissions etc. will be very welcome to make this feature as comprehensive as possible.

Davis

LOG BOOK

Freq. khz.	Time GMT	Date	Station	SINPO	Programme	Lang.	Cont.
(1) OVERSEAS SECTION (loggings outside Europe and the U.K.).							
560	0900	----	6WA Wagin, W Australia			Eng	
3230	1020	3/6	VRH8, Fiji	44544	Sat night variety	Eng	
3305	0930	29/5	Daru, New Guinea	43443	Pops	Pid/E	
3335	0945	27/5	Wewak, Papua	54444	Pops	Pid/E	
3385	1100	26/5	Rabaul, New Guinea	32332	News	Pid/E	
3925	1330	27/5	Port Moresby, N Guinea	54554	Music	Eng	
3995	1030	----	Solomon Islands VQ04				
4750	1345	27/5	YDQ4 Makassar, Ind'nesia	43433	Indian Music	Indonesian	
4890	1355	27/5	Port Moresby VLT/K4	54454	Music	Eng	
5020	0945	21/5	Trans-Caldas, Colombia	43333		Sp	
6100A	1730	----	Mogadiscio, Somalia				
6100	1200	----	Voice of Malaysia			Eng	
7580	1100	----	R Pyongyang, N Korea			Eng	
9525	1130	1/6	NHK Tokyo	54444	Talk on Customs	Eng	
11770	0910	----	AFRTS Bethany			Eng	
11780	1045	29/5	NHK Tokyo	44554	News and Talk	Sp	
11810	1210	29/5	R Australia	54554	News (Asian Service)	Eng	
11815	1220	29/5	NHK Tokyo	54544	News and Talk	Eng	
11815	1015	31/5	NHK Tokyo	54553	'Japan and People'	Eng	
11840	1100	30/5	North Vietnam	44554	News	Laotian	
11840	1300	30/5	North Vietnam	23322	Music and Talk	Eng	
11845	1200	----	V.O.A. Hawaii			Eng	
11910	1025	----	Bangkok, Thailand			Eng	
11920	1215	29/5	Tashkent, Kazakhstan	33443	Talk	Eng	
11915	1230	29/5	HCJB Quito, Ecuador	43443	Religious Music	Eng	
15070	0215	28/5	BBC London	44554	Political	Eng	
15235	0650	----	BBC S Atlantic Relay			Eng	

The above 'log' is the work of Alan Elliott, Echunga, South Australia - many thanks, Alan.
 Abbreviations used above (only) - Pid/E: Pidgin English, Eng: English, Sp: Spanish.

(2) U.K. and EUROPE SECTION

SECTION 'A': LW and MW LOGGINGS

209	29/5	2320	Reykjavik	23432	Classical Mx & s/off	Icc	AT
575	11/5	2130	Sddeutscher R'funk	44444	Band music	Ger	RW
584	9/5	2230	RNE Madrid	43443	Interviews	Sp	RW
593	9/5	2200	Hessischer R'funk	44444	Political Talk	Ger	RW
719	14/6	2307	R Andorra	54544	Commercials, Music	----	GR
737	12/5	2302	RNE Barcelona	43343	Stations Announc'ts	Sp	RW
764	17/5	2225	SBC Sottens	44454	News	Fr	RW
782	20/5	2315	EAL101 R Zaragoza	43443	Spanish songs	Sp	RW
800	12/5	2230	EAL7 Madrid	44354	Music	Sp	RW

(Times and dates are unfortunately transposed in Section 'A' above!)

962	2240	22/5	Tunis II	34444	Arabic music	Arab	RW
971	2145	4/5	NDR Hamburg	55555	Classical music	Ger	RW
980	2225	22/5	Algiers I	44444	Arabic music	Arab	RW
989	2245	3/5	RIAS Berlin	32542	Pop music	Ger	RW
1007	2215	25/5	Nederlandsche RU	43433	Music	Dutch	RW
1025	2231	21/5	R San Sebastian EAJ8	42442	Station Id	Sp	RW
1025	2245	21/5	Oesterreicher R'funk	43443	Pop music	Ger	RW
1169	2230	13/6	R Renascenca	34333	Jazz	Port	GR
1178	0013	21/5	R Ieninsular	34444	Stn id, music	Sp	RW
1180A	0700	12/5	R Caroline South	35444	Pop music	Eng	RW
1286	2200	24/4	R Prague	54444	News	Eng	RW
1232	2225	24/5	Morocco	33443	Talk	Arab	RW
1322	1845	4/6	Radio 227	44433	Identification/Music	E/Dutch	AT
1358	2246	18/5	R Bremen	54444	Classical music	Ger	RW
1412	2303	4/5	Saarlandische R'funk	55544	News, identific'n	Ger	RW
1511	2222	1/5	Belgium	44544	Pop music	Dutch	RW
1529	2313	15/5	CSB91, Funchal	24322	Music and ident.	Port	AT
1538	2223	30/5	Deutschlandfunk	55534	Feature and s/off	Eng	AT
157Q	2235	28/4	D.D.R. 1	43433	Music, news	Ger	RW
1578	2240	1/5	R Norway	54544	Organ music	Norw	RW
1594	2240	2/5	Nederlandsche RU	42522	News, id and s/off	Dutch	RW

SECTION 'B': SHORT WAVE LOGGINGS

PART 1: NIGHT 0000 - 0559 G.M.T.

4840	0037	16/4	R Valera YVOI	33333	Commercials	Sp	RW
4840	0210	30/4	R Valera YVOI	24433	Identification	Sp	WS
4880	0000	16/4	R Comercial HIJP	33333	Identification	Sp	RW
4882	0220	30/4	R Comercial HIJP	45344	Id, Guantanamo	Sp	WS
4890	0130	28/5	R Dif Venezuela YVIB	33333	News	Sp	RW
4912	0215	30/4	Radio HIN	35444	L/A music, ident.	Sp	WS
4940	0005	1/5	Radio Mil HIBE	43433	Id, L/A music	Sp	AT
4940	0140	6/5	R Yaracuy, S Felipe	44434	Identification	Sp	WS
4940	0213	28/5	R Yaracay, YVPA	34333	'Postbag'	Sp	RW
4965	0351	23/4	R Santa Fe, HJAF	34344	Identification	Sp	WS
4980	0357	30/4	Ecos del Torbes YVOC	43343	Ident, s/off	Sp	WS
4990	0330	23/4	R Barquisimeto YVMQ	55455	Ident, news	Sp	WS
5006	0400	30/4	R Cristal, Dom. Rep.	45344	Ident, L/A music	Sp	WS
5015	0330	16/4	R Cristal, Dom. Rep.	44433	Ident, frequency	Sp	WS
5040	0101	23/4	R Maturin YVQH	34343	Ident, L/A music	Sp	WS
6203	0110	30/4	R Nacional Tikal TGF	24332	Features	Sp	WS
15235	0500	17/5	BBC S Atlantic Relay	23232	News (World Service)	Eng	VMCC

PART 2: MORNING 0600 - 1159 G.M.T.

4965	0600	30/4	R Santa Fe, HJAF	-----	Music	---	BM
5960	0800	23/4	ORTF Paris	-----	-----	Fr	BM
5980	1130	14/5	R Nederland	44343	'Happy Station'	Eng	VMCC
6070	0715	17/5	CFRX, Toronto	33342	Music, ident.	Eng	RW
6090	0834	13/6	R Luxembourg	54544	Pop music	Ger/Dutch	RW
6100	0835	13/6	Deutsche Welle	54534	News	Ger	RW
6130	0815	21/4	CHIK Nova Scotia	33333	Ident. and music	Eng	RW