

# MERCURY



NUMBER 59

MARCH 1978

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# EDITORIAL

G3DPS

## MOVING HOUSE

Most members, particularly those with Service experience, will be only too familiar with the upheavals and inconvenience of moving house. The Society is, at the moment, going through this rather unfortunate experience. As readers will see elsewhere, Headquarters has QSY'd North from Blandford to Catterick. "Back Home" some will say and this is very true. Before WWII a Club existed at Catterick and it was certainly going strong in 1946 amidst the "Char & Wads" of the YMCA building, with G2TA and G8RF prominent in your Editor's memory. In 1955 it was still a going concern in the wooden building alongside the Cary Theatre with a full-time staff of one (a Sgt. Griffiths - a National Serviceman waiting for his number to come up) and a host of enthusiastic part-timers. It was on these, and AWRARS foundations that RSARS was built.

When RSARS moved with the School of Signals to Blandford in the mid-Sixties, it left G3CIO to fly the flag at Catterick, which it has done, as an RSARS Affiliated Society, ever since. The wheel has now turned full circle and G3CIO and G4RS will again amalgamate to accommodate RSARS HQ.

Of course, the transfer cannot be completed overnight. Accommodation has to be found and approved, equipment has to be dismantled, packed and transported, new staff found, and so on. Which leads me to the main point - please bear with us during this very busy and somewhat difficult period. The aim is to resume normal service as soon as possible.

On a personal note, may I say how nice it is to be polishing the Editors chair once more, and to extend thanks to Evan G5YN, who held the fort so well in the interim period.

In closing, may I again request your help in filling coming "Mercurys". Such material does not have to be highly technical, although such items are equally as welcome. Even if you do not become a contributor, how about giving encouragement to those who do and send in your "Best Mercury Article" vote?.

CU at the A.G.M. at Catterick in June?

 <sup>73</sup>  
JACK COOPER  
G3DPS

BEST "MERCURY" ARTICLE VOTE. Members are invited to award up to 6 points in any order (5, 5 & 1, 4 & 2, 3 & 3, 2 & 2 & 2, 1 & 2 & 3, etc.) for any 3 articles that appear in the Autumn 1977 and this edition of "Mercury".

**NOTE** 

# BOOK REVIEW

EX BRS10593

Several editions ago, mention was made of a book dealing with ULTRA and ENIGMA, a system whereby the Allies read the top German and Japanese ciphers during World War II. A member has read this book and sends along the following comments.

THE ULTRA SECRET by F.W. Winterbotham, published by Futura Publications Limited as a Contact Book in paperback. Price : UK - 60p, Australia - \$2:20, New Zealand - \$1:90 and Canada - \$2:50 (the last three being recommended prices). 239 pp including index.

The review elements of the Press commented favourably on this publication as follows : Disturbing, suprising, enthralling... It must completely revise our picture of how the last world war was fought - Economist, A story as bizarre as anything in spy fiction... The book adds a new dimension to the history of World War II - New York Times, Military historians, like the general reader, will be astonished by this book... Group-Captain Winterbotham cannot be too highly recommended. - The Listener, Superbly told - Daily Express. Even Marshal of the Royal Air Force Sir John Slessor GCB DSO MC DL closes his Foreword to this book with "The word "fascinating" tends to be overdone in forewords and reviews of books; but I feel sure that readers of this book will agree that it amply merits that description". This reader certainly agrees.

This is a book that the reading public had to wait for nearly 30 years for - until details were down-graded from their high level classification. Even so, the author did not have access to official records and relies upon his memory and various signals retained by Whitehall. The author is well qualified to write such a remarkable history having been the Senior Air Staff representative in the secret Intelligence Service for 10 years before the start of World War II and having been directly concerned with the Ultra Secret throughout the War. Such a publication could well have become a dry and dusty list of statistics and figures but this was not to be with The Ultra Secret. The fact that it is not a highly technical publication makes easy reading assisted by many interesting and entertaining facts. For instance, members who remember the Gary Powers and the U-2 spy plane incident (which almost provoked a world crisis) will be interested to read about the authors high-level photographic spy plane which was so successful just before the War. And those readers who think that all highly classified signals deal only with logistics, strategy, casualties, etc., will be amused by the intercepted signal from Goering instructing the Commanding Officers of all men to whom he was to present decorations would be "suitably de-loused first". Later chapters are headed (and deal with) the effect of ENIGMA on The Battle of France, The Battle of Britain, Operation Sea Lion, The American Campaign, Alamein, 'Torch', 'Husky', 'Avalanche', the preparation for 'Overlord', the Battle of Normandy, Arnhem, the Ardennes Offensive and the Japanese War, etc.

Group-Captain Winterbotham was not a chair-borne office commander. He did sterling work in Germany before WW II, he met Hitler and, from 1934 - 36, travelled freely around Germany with such people as Rosenberg, Rudolf Hess, Erich Koch, etc., until his "cover was blown". Although a long serving members of the Royal Flying Corps and the Royal Air Force he knew what it was to wear a khaki uniform having been commissioned as a subaltern in The Royal Gloucester Hussars Yeomanry when only 17 years of age prior to transfer to the RFC in which he was shot down by the famous Richtofen Geschwader.

Anyone who served in RSS, SIS, SCU, etc., will find this book of immense interest as will, I am sure, anyone who served in WW II or has an interest in Military History. The last two sentences of Chapter Three probably sum up the war-time work with ULTRA and ENIGMA better than any reviewer can do - "Let no-one be fooled by the spate of television films and propaganda which has made the war seem like some great triumphant epic. It was, in fact, a very narrow shave, and the reader may like to ponder, whilst reading this book, whether or not we might have won had we not had Ultra". One interesting final point remains - the ENIGMA machine that was "spirited" out of Germany may not have been the one that arrived in England.

Why? - Why not get the book and find out!!

FROM THE DISTAFF SIDE.

When a letter arrives headed Westbury End, Finmere, Buckinghamshire we normally look forward to a witty, newsy letter from Chas. G5GH. This time we were in for a pleasant surprise. The writer was Harriet, Chas's XYL. The news it carried, however, was not so good as Harriet told us that Chas has been seriously ill off and on during 1977 and had not been on the air. However, he does apparently hope to get on the air in the not too distant future but, even then, it will only be for short periods. Both Chas and Harriet were unable to get to the 1977 A.G.M. something they both much regret. Harriet ends her letter with "P.S. If anyone should pass this way, there is always a cup of tea!".



We all wish you well Chas., and hope it will not be long before a complete recovery is recorded. In the meantime, it is hoped that someone (or sometwo or more will take up Harriet's kind offer of a cuppa, and drop into Westbury End to give Chas half an hours Pokey Drill to get him back on his feet.



Top Band DX.

The following, written by Edgar, G2FWA, was stolen from CARA NEWS, the journal of the newly formed Cheltenham Amateur Radio Association, to whom all acknowledgements are made.

"Top Band should be interesting for the next few months. As a check on the North Atlantic path the following commercials provide a good indicator (or otherwise!) of conditions.

WCC                      2036 kHz                      WFK                      2046 kHz

There are other North American commercials in the region HF of Top Band and it is worth spending some time during the winter in order to get to know them".

(Editors Note: CARA is an amalgamation of The Cheltenham RSGB Group and the Cheltenham Amateur Radio Society. RSARS take this opportunity of wishing CARA ever success in the future.)



HEARD ON THE BAND.

On 20 recently a G4+3 was in QSO with an OE station. The OE, whose English was very good, had his XYL in the shack with him. He was talking about a big Party they had had the evening before "where there was lots of people and lots of loving - Oh - QRX (Silence on the channel for a moment) - my XYL tells me that should have been laughing.



CAN YOU HELP???

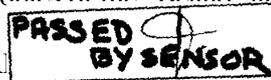
A non-member recently requested the help of RSARS members in identifying a British Army cap badge. Your scribe was of no help at all so the query is passed on to members. Apparently it is a very rare issue and the enquirer had only seen two copies, one in a collection and one being worn by a young lady during the war who refused to part with hers as "it was a gift from her boy-friend who was fighting in North Africa" at the time. It would appear to be of silver finish and shows a mailed fist and arm, bent at the elbow and grasping a short hand spear, mounting between what could only be described as "bat-wings". It gave the appearance of a collar-dog rather than a cap badge. It was reported to have been a Specialist Unit of the H.A.C. although this has been denied by an ex-officer of that Company. Any info. to the Editor, please.



P-1954 - AGAIN!

The piece of paper came from an agent in the field by "MOST SECRET" means, and dropped on to the desk amidst the biscuit crumbs, tea cup rings and old copies of the "Beano" and "Dandy". Our hero picked it up and stared at it for a long time. It read :

SY:RS DYGPI T,R,N RTDPG TDSTD STRSV YOBR  
H4UDL H4UUF SMFH5 VBUST SMU,P TRIDO MHYJO D,PFR



Some time later both feet fell from the desk with a crash as our hero jumped having obviously cracked the code. "Not a problem for those who still use pen and ink, or ball pens, or even pencils, for that matter" he mused. He tapped on the door of Colonel xxxxxxxxx office and placed the plain language version on the great man's desk together with an application for a long week-end (Wednesday to Wednesday). If you have the plain language version of the above message send it along to the Editor with an explanation of how you broke the code and, if your answer is correct and one of the first three "out of the hat" (always assuming we get three or more!) you may, as our solicitor friends say, "Hear something to your advantage. Closing dates : Home 1st June 1978, Overseas 1 August 1978.



I FORGOT WHAT I WAS GOING TO CALL THIS PARAGRAPH! - Ed.

"Ref. the poem on page 21 of the Spring issue of "Mercury". There are three indicators that one is getting old. One is a progressive loss of memory. Another is....Ah.....is.....mm.... Damn, I can't remember the other two!!!". (From a letter from Julian Jablin, W9IWI/0798).



OPEN MARKET.

(Being that part of "Mercury" devoted to the exchange, sale, purchase or scrounging of items and/or information of any sort, type or style on behalf of RSARS members and their friends. Entries are published FREE. Remember, postage etc., costs money so please return any outlay made by correspondents. Unless otherwise stated, please deal DIRECT with the advertiser. Neither, the Editor, Council or the Society can accept responsibility for any transactions made as a result of this article.)

WANTED - Circuit diagram, etc., for the C.R.O. No. 13 and/or 13A (the black box) or R.A.F. equivalent. Will copy and return. All expenses paid. C/o the Editor.

WANTED - by J.W. McCulloch, VK7CCC/0955, P.O. Box 56, Evandale, 7212, Tasmania, Australia. A Racal receiver (type not known but possibly RA-17 or RA-117 - Ed.) in good condition. Seller should be prepared to pack and despatch.

WANTED - by Dr. G.R. Kelman, G4BVC/1127, 61 The Fairway, Oadby, Leicester. The circuit diagram of the "Oscilloscope Miniature CT52". Will buy or borrow.

WANTED - by Jacques Baume, F3WL/1162, 25 Avenue Nicolas II, 78600 Maisons Laffitte, Les Yvelines, France. For purchase or loan. Radio catalogues dated between 1919 and 1930, especially those issued by Gamages.

WANTED - by Mike, M.G. Taylor, G3UCT/0226, 27 Glen Road, Fleet, Hants, GU13 9QS (or give him a ring on (02514) 6998). The following items : For a Redifon GR410 SSB Transceiver (the C14) - plug-in SSB generator/demodulator unit 6202A, IF unit A6204/B, Audio unit 6203A. Also some advice/help from anyone who owns a working set. CT160 Valve Tester or AVO Valve Characteristic Meter complete with handbook, valve data manual, etc. R209 Mk. II receiver in good working condition. Valve Voltmeter 1 mV to 50+ Volts at frequencies up to 10mHz. And finally, a mains PSU for a BC221AK.

OPEN MARKET - Contd.

WANTED - by Brigadier R.E. Ridley Martin, RSARS 0048, September Cottage, North Road, Brockenhurst, Hants, SO4 7RQ. "One of the snags of retirement is the loss of contact with current techniques, I have no idea how to design a crystal controlled transmitter to give me ½ Watt at 459 mHz + or - ½ mHz (Frequency Modulation). This is, of course, for Radio Control of a model, the hull of which was made at Catterick in 1935 (control was then based on some No. 1 set techniques.). Local knowledge is singularly vague. Can R.S.A.R.S. please help?". If you are a radio control type (particularly with boats) and can help in this matter please drop a line to the address given. Tnx. (Other journals, please copy.).

WANTED - by non-member Leonard S. Rees, 6 Maes Meugan, St. Meugans, Ruthin, Clwyd. Amplifier-Recorder No. 1 Mk. 1 with H.T. Unit (for use with Undulator UG6A). Leonard would also like to hear from anyone who has first-hand information on the construction or operation of the UG6A.

+++++

WANTED - by the RSARS Librarian. Any books, Magazines, data sheets, information sheets, circuit diagrams, etc., appertaining to Amateur Radio, Electronics, Telecommunications, etc. These will benefit ALL members by being made available FREE. Don't fill the dustbin, fill the RSARS Library.

Serving members are advised against sending information which may be still classified in response to requests in this column, particularly extracts from classified Electrical and Mechanical Engineering



DID YOU KNOW-TICE??.

Over the Christmas period a number of films were shown on TV ("Quite normal" you might say). In one, entitled "Fear is the key" a scene was set in the radio room of an oil rig in the Gulf of Mexico and, scattered around the walls, were numerous amateur radio QSL cards, the most prominent of which was probably the one from DK4UH. One wonders if DK4UH knows he has made both the "large" and the "small" screens!!.

Also, in "Those magnificent men in their flying machines", in a scene set at Dover, the military communicator was dressed in SD and wore what appeared to be the old-type Royal Signals badge. Not bad, when you consider that the action took place in 1912. Wonder what "The Wire" would have to say about that!! (Or the Royal Engineers, for that matter!!).



CONGRATULATIONS.

A letter from RSARS 1219 reads "I am very pleased to be able to tell you that I have been issued with the call-sign G8OLG and I hope to be active on the RSARS 2 Metre Net as soon as I can get some equipment.....", The address to which to send the QSLs is Charles J. Gripton, The Farmers Arms, Frankby, Wirral, Merseyside, L48 1NJ. Charles hopes to join Royal Signals next year through the University Cadetship Scheme.

Congratulations, OM, here's wishing you many happy QSOs in the future and a place on the VHF Ladder,

CW NET NEWS.

CW NET CONTROLLER : Dennis Haylock, G3ADZ, 6 St. Mark's Avenue, Bilton, Rugby, Warks. CV22 7NP. Although the following changes took place a while ago, Dennis has asked that the following information be brought to the notice of all, Net members and prospective Net members.

In response to suggestions made at the AGM and elsewhere, members are asked to please note the following changes to the Wednesday evening Nets, applied from 26 Oct.

1. TIMES. The Control Station on the 3.5 MHz Net will close at 2115 hours clock time. The frequency will thereafter remain open as a non-controlled Natter Net for as long as there is any activity.

The Top Band Net will now open at 2200 hours, and will be controlled for about one hour, or as long as reasonably required by members.

The periods 2000 hours to 2010 hours and 2050 to 2100 hours are the times when:-

- a) A nominated station on the main Net will make a specific check on 3.550 MHz for callers, and
- b) The main Net will remain as silent as possible for QRP and QRS callers.

2. OPERATING. a) All stations are requested, whilst Nets are controlled, to operate at the comfortable speed of the slowest station on the Net for the time being.

- b) QSY + or - 5 kHz if you want to natter with an individual station.
- c) When on Net, Control will give priority to stations wishing to work G4RS/G3CIO/G4CCF.
- d) If Control has RSARS information for the Net, in order to comply with licence regulations, this MUST be addressed to an individual station or stations with whom contact has already been established. Other members on the Net will obviously copy, and are asked to QSP to other member stations they contact outside the Net. Such information will in future be transmitted at 2015 hours on 80 Metres and 2230 hours on Top Band.

N.B All other information is as published in the Spring 1977 edition of "Mercury".  
Comments and suggestions are always welcome.

73

Dennis.

(Editors Note: In an organisation such as ours one would expect to find proficient and skilled CW operators operating at speeds around 20 - 30 wpm. But these operators will be the first to acknowledge that no-one STARTS using CW at such speeds and they will willingly transmit at "your" speed (See Notes 1b and 2a above). So do not be afraid to join an RSARS CW Net because you are a 10 wpm man. You will be made most welcome and there are a lot of good contacts to be had. CU on the CW Nets???)



WELCOME - WELCOME - WELCOME.

To the following new members we extend a hearty welcome. May your stay with us be a long a faithful one.

- 1338/ G4AOO W.A. Winterburn, Sprotbrough. 1339/VE3AX W.V. Sturdy, West Hill, Ontario.
- 1340/G4FZJ C. Williamson, Rotherham. 1341/NL R.Green, Doncaster.
- 1342/NL J. McDermott, Durrington. 1343/G3HTB M.P. Squance, Bramhope, Leeds.
- 1344/G3XED C.S. Masters, Bishopsworth, 1345/G4JGX J. Weir, Fulford, York.  
Bristol.
- 1346/NL A/T. R.C. Colclough, A.A. College, 1347/G4FYQ M.D. Robins, Stourbridge.  
Harrogate.
- 1348/G8ODZ V.W. Burkwood, Chingford. 1349/G15554 C.V. Keylock, Hornsea.
- 1350/G8ALM J.E. Mulye, East London. 1351/G4GLH D.G. Bennett, Ramsbottom.
- F055/51A Queen Mary's CCF, The Vyne School, Basingstoke.

EXCHEQUER GRATITUDE.

The following are thanked for their generous donations to Society Funds :-

1093 VE3IVM	1070 WD8JIV	0306 G4BOS	0234 WA8PCT	0138 G3NVK
0144 G3PHK	0330 G2UV	0209 G5YM	0339 G2IO	0545 G3FK
0226 G3UCT	0043 G3CRP	0118 G2BPC	0491 G6TQ	0188 NL
0037 G2CX	0073 G3PPK	0133 G3RFI	0080 G3XCS	0626 G3ECV
0329 G3UUO	0372 G2TA	0521 G3WNI	0443 G4DBR	1168 G3POB
0290 G8LT	1040 G5KJ	1162 G3WL	0798 W9IWI	0792 VK6MK
0729 G2KI	1045 G4FLL	1047 G4ATD	0273 NL	0326 GW3BGP

and last but not least 0520 G4CBT.

Sincere thanks to all.



THE LF CW NETS REPORTS.

G3ADZ/0039.

In spite of the very difficult conditions on 80 during the Winter there is a slow but sure increase in activity. We have had as many as 18 members call in on Wednesday evening, and I am also pleased to confirm that the Top Band experiment will continue until further notice. Here, again, activity is on the increase, but more stations are always welcome.

Please note that as from the publication of these notes, our alternative frequency on 80 is changed to 3.526 MHz, so please do not use our old F2 of 3.550 MHz. The main reason for this is that 3.550 is an established QRG of RAFARS. They transmit slow morse from Locking, Monday to Friday between 1930 and 2000 on A2 at 5, 9 and 12 wpm, and this may be of interest to some members. We are also invited to call in on their CW Net on Tuesday evenings - 1900 hours onwards on 3.525 MHz + or -, and, as RNARS also appear on frequency, this is quite an Inter-Service Net. The Control Stations are usually G3ZDW OR G3ZZR.

I manage to be on the air most Wednesday evenings, but if I am away, G5BM or G3KLX have kindly agreed to act as Deputy Net Control stations so Frank and Doug are nearly always to be found. If, on very rare occasions, none of us can make it, another "volunteer" will have been found - and he is the chap calling CQ!!

Another reminder - when we change to BST, the CLOCK times of 1930 and 2115 on 80, and 2200 onwards on Top Band will apply.

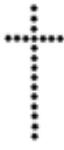
The next CW objective is to try and ensure that our overseas members have a better chance to contact us, so I appeal to "The CW Supporters Club" to consult the HF CW List at the back of "Mercury" and get on those frequencies whenever they can. When you do have a QSO with an overseas member please remember to report all available 'gen' back to one of the LF Nets, (Also please ask if the overseas has regular operating times/frequencies/modes/etc., for inclusion in "Mercury" - Ed.). As far as VHF CW goes, my own 2 Metre station is very limited as I only run QRP to a pair of X-Dipoles at 20 feet, but I do try and listen on Saturday and Sunday whenever I am around.

My final word this time is an apology to late callers on 80, but for domestic reasons I do have to QRT fairly smartly at 2115 hours if I am to get on Top Band at 2200!!

73 Dennis (G3ADZ/0039)



The report in the "S.W.M." that 'Mercury' is to cost 14p in future was incorrect. This is the estimated inland postage charge per copy and not a charge that members will be necessarily expected to pay.



### SILENT KEYS



Once again it is our sad duty to record the passing of several R.S.A.R.S. Members. To relatives and friends we extend the deepest sympathy of the President, Council and all members of the Royal Signals Amateur Radio Society. They will be missed.

Major (Rtd.) P.S. Harris RSARS 0077 of Cheltenham, who died 19th August 1977

Frank J. Wadman G2GK/1240

K.R. Belcher G3RLM/0160

A.G. (Archie) Cole GJ3GS/1166

V.L. Mayhead G2ACA/0760

J. (Jack) Partington G5PX/0265

Allan Stewart GM4ABO/0839

M.C. ("Bill") Locke  
G3NKE

Via The Cornish Link we learn of the passing of Bill Locke G3NKE, on January 2nd 1978 after a long and painful illness. Bill was an active member of The Cornish Radio Amateur Club from its inception and filled such appointments as President, Chairman, Vice-Chairman, and, right up to the end, Public Relations Officer. He was the R.S.G.B. Area Representative for Cornwall and during the War served in the Post Office Home Guard and later became an officer in The Army Cadet Force. He will be sadly missed by all who knew him and to his XYL, Sheila, (also a member of RSARS) we extend the sympathy of the President, Officers and all members of The Royal Signals Amateur Radio Society. R.I.P.

Bill Begg RSARS 0624

It is reported that Bill Begg died just before Christmas 1977 but unfortunately no further details are to hand. Bill was a keen and active SWL member of RSARS and his passing will leave a gap in the RSARS SWL ranks that will be difficult to fill. To his relatives and friends we extend condolences from the President, Officers and all members of RSARS.

### VALE.

From George Spencer, G2KI/0729, 7 Rivey Close, West Byfleet, Weybridge, we received the following letter.

"I regret to advise you of the death of Frank Wadman, G2GK on Sunday 13th November 1977, after a short illness.

A church service was held at All Saints Church, Babbacombe, Devon, at 11 a.m. on Friday 18th November 1977, followed by cremation.

Frank had many interests (even archaeology and he was a great painter). So the church service was very well attended indeed with a generous sprinkling of the amateur fraternity.

He was a very old friend of mine, so, with my wife, I made a special journey to be present in my own interests and also to represent The Thames Valley A.R.S. Frank was active to the last on all the HF bands and indeed I spoke to him at least once a week on 80 Metres. He was a longstanding member of the R.S.G.B. of course, a founder member of the Thames Valley A.R.S., a member of the R.A.O.T.A. and of course a member (1240) of R.S.A.R.S. He was held in high esteem and will be sadly missed".

Also from Leonard W. Salaman, RSARS 1283, of 42 Rusthall Avenue, Chiswick, comes the following "In Memoriam" letter.

With reference to the Spring edition of "Mercury" - among the sad list of Silent Keys is the name of

E.W. Wardrop, G3MOW/0791. The only other Publication to mention his passing was, I believe, RADIAL. I do not feel capable of writing or attempting to write an obituary but I so much wanted to record my own very sincere appreciation and admiration of a very dear friend.

Wally - as he was known to so many amateurs across the world - was a truly beloved figure in the amateur world. Having lost his wife and suffering severely from bronchitis, with two young daughters he nevertheless brought them up successfully and they are now married with children. Despite being alone and very ill, he managed morning noon and night to be on the air and even attend Rallies.

He was a great comfort to those in distress and an inspiration to those fearing life in general. And he helped so many aspiring SWLs to pass their RAE; and he always seemed successful in gathering around him a large network of XYLs. Whilst I realise that this tribute should perhaps, have come from a radio amateur, tribute was paid in the following way, that after his demise on Tuesday 28th December (1976) at his daughters home, at the subsequent memorial service at the South London Crematorium, the placing of his ashes in the Garden of Remembrance was witnessed by his daughters families and between 40 and 50 amateurs, one of whom, F6CYL Madame Koloboff, a very close friend, had flown from France to be present. I shall be ever grateful that he accepted me as a friend".



TAKE A BREAK

By: EX BRS10593

(Having read this far, why not take a break and see how well you know your International prefixes. The following are taken from the Technical Manual dealing with MARS and shows some of the "Block" allocations. Can you put the name of the country concerned alongside? To help you certain letters in the country's name have been left in, the remainder have been replaced with "stars". Answers over the page somewhere.)

AMA - AOZ	**I*	3ZA - 3ZZ	**o****p****o**i***
ATA - AWZ	*n***	4YA - 4YZ	l*****v*****
EKA - EKZ	**S*		**g*****n
HNA - HNZ	**a*	5PA - 5QZ	*****k
JWA - JXZ	*o****	6PA - 6SZ	**k*****
JZA - JZZ	*e**e* **e*	7JZ - 7NZ	**p**
MAA - MZZ	**i**i*****	8RA - 8RZ	**y**a
SSA - SSM	**i****a**p*****	9BA - 9DZ	**a*
VZA - VZZ	*****a	A2A - A2Z	***sw***
ZQA - ZQZ	*****h*v*****t*****	C2A - C2Z	***ru



HERE AND THERE

23992637 S/Sgt (YofS) K. Straw writes to say that he has been posted to 33 Signal Regiment (V) Liverpool, and that he is now licensed as G4FZX (Cograts OM). He is RSARS 0811 and the home address is 74 Belper Street, Leicester. LE4 5EA (The Owl muttered something about this being the Chap that recently took part in a marathon darts match for charity. The Bands must have been dead. Any truth OM?).

Captain Tom Duerden, ZL4IJ/1018 of 166 Layard Street, Invercargill, New Zealand, says that he finds it difficult to foresee conditions to make schedules. He suggests the callers break him on 14-125 mHz + or - when he is working GM3GRX on 20 Metres short path at 0930Z on some weekdays or 1000Z on some week-ends. If 15 Metres is open try listening on 21-375 mHz + or - short path at 1030Z on Saturdays.

### HERE AND THERE - Contd.

WOI (FofS) Dave Sugden G4CGS/DA2PS/ZC4DS/VS9MT/0064, writes, on 4th October 77, that he will be with Special Projects Agency, 224 Signal Squadron, Garats Hay, Old Woodhouse at Loughborough for about a year with occasional visits to Germany. He has some spare blank DA2PS QSL cards. Would anyone who is owed one please let him know and he will rectify the situation. He has taped the book "The World at their Fingertip" both on cassette and normal reel to reel ¼" tape. It has done the rounds of White Stick readers and is available on loan to anyone who is interested. Great work, Dave.

A late, but nevertheless warm welcome to G3Twx who joins us as RSARS 1356. This call-sign/number is held by David Charles Woodhouse, of 13 Gannet Close, Haverhill, Suffolk, CB9 0JL. David was a member of 87 Signals Squadron and 38 Signals Regiment Royal Signals TAVR but due to distances and travelling problems he had to reluctantly leave. He runs a Swan 350 Transceiver mainly on 80 with, at present, a Trapped Dipole. Its a new QTH so much experimental work to be done and he hopes to be soon on 2 Metres. Also interested in Angling, Philately and Small-Bore Rifle Shooting.

You might have known him as P29MC, or later as VK3CCC or just as RSARS 0955, but a letter from John McCulloch tells us that he is now a little further South and known as VK7CCC with an address at P.O. Box 56, Evandale, 7212, Tasmania, Australia. He is now based at Launceston Airport and has purchased a 120 acre farm which keeps the family busy and somewhat restricts amateur activity although he is active on 2 and 80 Metres with a little construction work thrown in. John is after a Racal RX (as mentioned elsewhere). He sends his best regards to all members.

Erie Warner, G4EWI/0937, writes from 9 Mountford Close, Rowley Regis, Warley, West Midlands. He has just become a Life Member and mentions that his gear at the moment is a Trio TS-520, a trapped vertical and an end-fed through an A.T.U. For FM he uses a 2200G, a vertical half-wave and a five-element beam with rotator, all from a 10 Watts P.A. The QTH is 650 feet asl and it is intended to increase the 2 Metre equipment. Erie is now very involved in microprocessors which is limiting radio expansion at the moment. The MPU gear consists of a 6800 D2 Kit with extra memory and a SC/MP which he intends to use in a dedicated form in some of his household equipment. G4EWI reports he has an understanding XYL who hopes to become a G8 soon (and appreciates that if they ever move the next QTH must be 1000 asl with a 1000ft long garden!). (Do we have any other members experimenting with MPUs SC/MPs, etc.? - Ed.).

Many members will remember a regular visitor to the Nets a while back in the form of DA2YF - Frank. He returned to Canada where he is VE3IVM and has now left the Canadian Forces after 20 years service and is now settling down to "a nice desk job and pension" existence. He is trying to erect antennas but the heavy snow does not help. The present antenna has dragged in "DX from all over the world on 10" (a good sign - Ed.). Frank runs a Swan Cygnet and Cygnet Linear with a Fritzel Beam for 10, 15 and 20. A 'phone patch set-up has recently been added to the rig for the benefit of the lads in SU-land. At the moment he is working on tone generators for the RTTY set-up and is looking forward to some typed QSOs with Gs and particularly RSARS members. He closes with "the best to everyone from all us guys over here in the snow up to your you-know-what". Franks QTH is Franklin H. Thompson, VE3IVM, 7 Derby Gate Crescent, Kingston, Ontario, Canada.

From a member: "Reading about the RSGB National VHF Convention in the January 78 issue of RadCom (page 51 -Ed.) I notice the location is given as 140½/2703½ - perhaps this is why I was always lost on Exercises"!.

Congratulations are in order for Eric Cockerill, RSARS 1271 of 6 Richmond Avenue, Barnoldswick, Colne, Lancashire. Having used G8HTJ for a while, Eric is now getting used to signing G4GOZ. Hope to see you on the Nets before long, Eric.

### HERE AND THERE - Contd.

A letter from Bill Western, G3TDW/0388, of 181 Topsham Road, Exeter, EX2 4SQ, mentions that he has been pretty inactive during the previous Summer and Autumn due to many things, such as a large number of family and friends visiting the South-West, a lot of garden landscaping and some D-I-Y. He mentions that he has even missed out on his regular QSOs with Cyril, GW3ASW, and "Andy of Bishop's Rock".

G6CJ, better known to some as "Dud" Charrman and author of the recent article on Filters in "Mercury", reports from The Firs, Hanger Hill, East Stour. Gillingham, Dorset, that he has had some feedback from the article. However, this did not come from the ranks of RSARS but from the mention of the article in Technical Topics in RadCom by Pat Hawker, G3VA. One was from a "boater" in Bournemouth who wanted to cut noise on his Consol Position Finder and another from R.R.E.!. 6CJ, has now perfected the filter and details may well be appearing in a future issue of "Wireless World".

A long and interesting letter comes from John I. Brown, G3EUR/RSARS 0403, of 74 Humber Avenue, South Ockendon, Essex, RM15 5JN. John, together with his wife Irene and a friend "Connie" Anne Turner (who is the Secretary of the Special Forces Signals Section) recently visited Blandford where they enjoyed a trip to the Museum. John writes ".....it was a thrill to see the B2 (my design of 1941/42) in this hall of fame and history.....". He goes on to say that there is another B2 in the Science Museum where he visited Keith Geddes who is responsible for this type of exhibit and who is trying to fill various gaps in the history of the B2. If you have any first-hand information on the B2, John would appreciate it if you would pass it along to Keith Geddes at The Science Museum. He goes on to mention that The Special Forces Club at 8 Herbert Crescent, (Off Hans Crescent), Knightsbridge is now shared with the SAS types and looks like surviving. John will be happy to meet any of our members there by prior arrangement for a natter/noggin. John mentions that he is looking forward to Catterick this year where he hopes to meet many members (especially any war-time types of his vintage and calling. He enclosed a very interesting item on P.O.W. Radio which it is hoped to reproduce in a forthcoming "Mercury". Tnx, John.

Quite by coincidence a letter arrived from Steve, VE4AI/RSARS 0415 straightening out a small admin detail, and enclosing an item from the Ottawa Amateur Radio Club Bulletin "Groundwave". This is an equally interesting write-up on - of all things P.O.W. Radio. This, too, should appear in the next "Mercury" together with the one above. To whet your appetite, it concerns a P.O.W. Camp in Kuching, Borneo and a British Sergeant named Beckett (possibly Royal Corps of Signals) and Stew mentions that it would be interesting to know if (ex) Sgt Beckett is still with us. If you think that you might have information, why not drop Steve a line at Steve T. Chisholm, VE4AI/RSARS 0415, 551 Bruce Avenue, Winnipeg, Manitoba, R3J 0W3, Canada.

Forewarned is forearmed!. Every year since 1963 the Radio Amateur Society of the Socialist Republic of Macedonia has issued an Award for contacts with the town of Skopje, the capital of Macedonia, to commemorate the tragic earthquake on 26th July 1963. The operating period each year is from 26th July to 2 August and contacts as follows are required, DX stations - 3 QSOs, EU stations - 5 QSOs, YU stations - 10 QSOs. No QSL cards, just a Log extract together with 2 IRCs to : The YU5 Award Manager, P.O. Box 14, 91001, Skopje, Yugoslavia. The Log extract must be certified by two other licensed amateurs or a Club Officer. The Award is, apparently, framed.

It is regretted that no Reports have been received from the following Reps., SWL, CCF, Stores and QSL Bureau. It is hoped that no news is good news!.

Apologies are, perhaps, in order, for the state of the print in this edition. It would appear that the RSARS typewriter has, like its driver, seen better days. If any member knows where a relatively cheap typewriter (preferably electric) is taking up valuable storage space and could use a good home, your Editor would be most pleased to hear!!!.

AWARDS AND CONTESTS SECTION REPORT.

G3EKL/0046.

It seems months since I last wrote on Awards & Contests; last June, I believe and much water has flowed under the proverbial bridge since then. So, as at 1st Feb.1978, let's see what has happened. GM3VVM, Harry, has been awarded "Special Europe" No. 23". G3MKR has joined the "Any Mode" Ladder and progressed to the 350 rung, climbed to 50 on the CW Ladder and to 13 on the VHF Ladder - which has made him MOP winner for 1977. G3TKZ has joined the "AM" Ladder at the 100 level and is on the bottom rung of the CW ladder. G8KLO, better known perhaps as one of our more experienced SWL members, has jumped on the bottom rung of the VHF Ladder and is eagerly looking/listening for member stations and G2AIH has also jumped on the same rung. Regrettably, there has been no change on any of the Overseas Ladders. Congratulations to you all.

The Society Contests come and go, the 1977/78 5-59 has almost finished, and has certainly produced more competitors this season - results next time!. The 1977 VHF Contest went to G3VSA and the 1977 MOP (as reported earlier) to G3MKR. I'm afraid I dropped a brick last year - the 1976 MOP went to G8TK not G3YSK - Sri!. The 1977 Top Band Contest made me think - three members produced identical scores and I used my prerogative and decided to take the claim with the most CW/CW contacts, This made the winner G3UPY, with G3ADZ and G4CZJ "in parallel".

To those of you who have copies of the Society Awards & Trophies Rules, please note the following amendments:-

- (a) To Page 1, Para 1 - add to G4RS "or G(W)4CCF"
- (b) Page 4 - RSARS HF ANNIVERSARY CONTEST preamble - change month from JUNE to MAY.
- (c) Last Sheet. Add :-

TOP BAND CONTEST : A Contest to be held on the Saturday of the second full week-end in October. Times of operating are 2000 - 2300Z, any mode may be used and the member with the most contacts will be the winner. In the event of a tie preference will be given to CW contacts, followed by distance. Rules are as for the Society VHF Contests paras. 1, 2, 3, 5 & 7 - the QRA Locator is NOT needed and Logs are required by the end of October. A trophy will be presented to the winner.

That's the lot this time -see you again in July - don't forget the change of Awards and Contests Rules above.

73 G3EKL *Ray*

PS Keep your ears open for member 435 9H5G from April onwards, & SSB.



CAN YOU HELP???

In a letter to HQ, Julian Jablin, W9IWI/0798, asks if members can throw any light on Bob Ford, and he asks if he is a member of RSARS. Julian writes ".....Does anyone know of his whereabouts these days? Mr Ford is the author of "Wind between the Worlds" (1957) which tells of his experiences as a Radio Operator for the Government of Tibet just before that country was taken over by the Chinese Communists. He operated from Tibet as AC4RF while pursuing his official duties, and, after the Chinese overran the country, he spent five years in a Chinese prison camp. Altogether, it is a fascinating book and any RSARS member would enjoy it.....".

No, Julian, Bob Ford never was a member of RSARS and I seem to remember (and I hope I am wrong) that he died shortly after his release from China. I understand that he worked for the Diplomatic Wireless Service. Perhaps members can help on this one. If so, why not drop a line to, Julian Jablin, W9IWI/RSARS 0798, 9124 North Crawford Avenue, SKOKIE, Illinois, 60076, U.S.A.

## KEY-TRONICS.

### G3IBB/0653.

Along with every other aspect of Amateur Radio, the simple function of switching a transmitter on and off to produce Morse Code, has become highly technical. Very few serious CW operators have retained the "pump-handle" key. Even the simplest keyer in the hands of a competent operator enables him to enjoy long rag-chews with no discomfort; at speeds which were once the prerogative of the elite. Those operators with less ability can achieve the same degree of success by using keyers with built-in memories or even a keyboard.

The other side of the coin is very different. Tuning across the HF bands and listening to the barrage of spurious dots and dashes a mental picture emerges of wild-eyed, hysterical operators scrambling through innumerable QSOs and rapidly disappearing under a mountain of QSL cards.....

But, let's face it - electronic keyers are here to stay. They are going to become more and more complex with the result that an operator must learn a little more about the beast he is trying to control if it is to perform correctly. "Key-tronics" is to be a regular feature in "Mercury". Its aim will be to discuss all aspects of the art of CW ranging from operating to practical keyers and key-boards. By thus doing it is hoped that the knowledge gained will do a little towards improving the quality of CW, fostering an interest in this mode and be a guide to good operating practice.

What makes one keyer "feel" different to another?. Perhaps the most important factor is "SLOP-TIME". This is the time in which the operator can release the lever once a dot or dash (element) has been initiated. All keyers are self-completing - once the lever is pressed the element will be correctly generated even if the operator releases the lever. Some poorly designed keyers make it necessary for the operator to release the lever before the dot or dash is completed. If the lever is held into the space period following the element another (unwanted) dot or dash is generated.

Because of the shorter time involved, spurious dots are the biggest problem. Ideally, the operator should be able to make the decision to release the lever right up to the end of the space period following the element. It's surprising how many operators adjust themselves to the inadequacies of their keyers. You can check for this problem as follows : Turn the keyer speed to its slowest setting and press the dot lever. Try to consciously hold the lever into the space period following the dot and then release it. If two dots are generated, NOW YOU KNOW why you have never been able to master it.

Contact bounce is another factor that can cause problems. If you put a good quality switch on the input of a counter, when the switch is operated as many as 60 or 70 counts will be registered for a single operation. What is mind-boggling is that when the switch is released a further count of several operations is registered. The net result is spurious elements being formed or a dot or dash being incorrectly generated. The more frustrated the operator becomes, the harder he hits the paddle and the more the bounce. Try putting a capacitor from each lever to common. Values will vary from keyer to keyer, but something in the order of 0.1 $\mu$ F to 1 $\mu$ F should help.

Another subtle problem arises from a keyers dot/space ratio. Ideally, this should be variable and set up to give unity ratio at the output of the transmitter. All too often it is fixed with the result that the keying is slightly clipped. If the resultant side-tone is clipped, sending at low speeds becomes extremely difficult, the keyer feeling decidedly "hairy". It is unfortunate that if the keyer is made with a variable weight (dot/space ratio) control, the setting of same will be a function of the speed of the keyer. Unless weighting is achieved in some form of digital manner the operator will have to fiddle with the weighting control if the speed is changed appreciably.

The most important feature of an electronic keyer has got to be a dot memory. All too often when using a simple keyer, a single dot inserted between dashes is missed a letter 'K' emerges as 'M' or a 'Y' becomes 'O'. A dot memory is simply a bistable, which is set by the initial operation of the dot lever and will inhibit generation of dashes until a dot has been sent. It is generally arranged for the leading edge of the first dot to reset the memory so that subsequent dots in a series depend on the lever being held pressed so giving maximum "slop-time".

### KEY-TRONICS - Contd.

"Missing dot" errors are responsible for a very large proportion of keying errors and when an operator first uses a keyer which has a dot memory the difference is truly amazing - yet all too often one is not aware of the reason. To test the operation of a dot memory, again set the keyer to its slowest speed. Now "paddle" a 50 wpm 'N'. If 'T' ensues, the memory isn't working.....

Finally, on the subject of "feel", all too often the poor little over-run relay protests. Most of the popular keyers in the UK employ small relays, the contacts of which are rated at 40 Volts. As most of the transmitters they Key employ grid-block keying where the keyed voltage can be over 100 Volts, it's little wonder that the contacts occasionally stick together up to the point where total collapse occurs. How often this problem gets put down to "RF getting into the keyer, OM".... The answer to this problem is to build a simple solid-state keying interface as shown below. It can be built in a small box between the keyer and the transmitter. No current is drawn from the battery unless the keyer is operated so it is not necessary to switch it off. The keying transistor is suitable for all modern keying systems using grid-block (FT-101E and suchlike). The only thing to check is that neither side of the keying relay contacts is earthed at the keyer. It will be noticed that the keying sounds slightly 'softer'. Further shaping can be added if needed in the usual way. Burned out relay contacts will soon become a thing of the past.

For the operator about to bury his pump-key and take up electronic keying a wide choice of devices is available. Squeeze keying has become popular, and when one of the systems is mastered lends itself to effortless high speed sending. All squeeze keyers can be used with a single lever paddle. Three quite different systems exist. "Iambic" keying is where the keyer produces alternative dots and dashes when both levers are pressed at the same time. (The word 'Iambic' means "Short followed by a long" and is used in poetry to describe the sound of "The BOY stood ON the BURNING DECK....." for example).

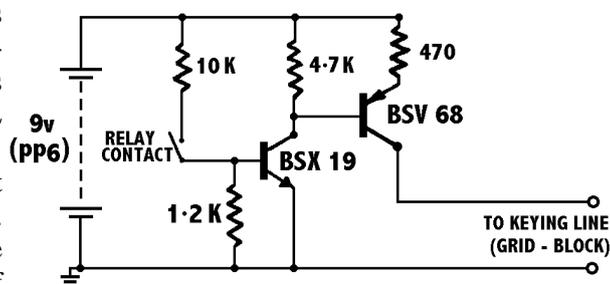
A second system is the "Single dot insert" method, which was popular when the MSK-5 keyers manufactured by the late OZ7BO were on the market. Pressing the dot key in a stream of dashes inserts one single dot. It is claimed that all letters with the exception of 'X' can be formed with a single squeeze of the paddle.

The third system was introduced in a keyer called the "Ultimatic" by W6SRV (QST; Feb. 1953, Apr./May 1955, Sep./Oct. 1960) and is often referred to as such. If the dot paddle is pressed during a string of dashes, the output reverts to dots. Similarly the output changes to dashes if the dash lever is pressed during a string of dots.

Each system has advantages over the other two, and each has its own following. When any one system is mastered it is very difficult to change to another. It would be foolish to advocate any as the 'best' system. Iambic keying has tended to become the most popular primarily because it was available commercially in the early days of electronic keyers.

Automatic spacing between letters is taken for granted, but now automatic spacing between words is possible. After a letter has been formed, if the paddle is not pressed again for a period in excess of the normal inter-space lettering, a counter locks out the paddle until a space corresponding to 7 dots has elapsed (inter-word spacing). Paddle manipulation has to be a lot more precise if this system is to be exploited - all too often an 'A' pops out as 'E' and 'T'. A modern keyer with inter-word spacing is the "Accu-Keyer" details of which are contained in the ARRL Handbook (and QST, Aug. 1973. - Ed.).

Whichever system is adopted, a great deal of practice (OFF THE AIR) is needed. If all else fails, there is still the Morse Keyboard available and this will be one of the topics discussed in the next issue.



## ANNUAL GENERAL MEETING - 1978.

The A.G.M. for this year is to be held at CATTERICK AT 1445 hours on SATURDAY JUNE 10th. We shall be saying "farewell" to G3DUS, our current President at this meeting.

The location is to be NORTH HALL, within VIMY BARRACKS. Vimy Barracks is clearly signed on all roads leading to Catterick Garrison Camp centre, and NORTH HALL is sign-posted within the Barracks - there should be no difficulty at all in finding the place.

If you are a Royal Signals Association member and are planning to attend the "Old Comrades" week-end please book overnight accommodation in the usual way through your Association Branch Secretary. This booking covers you for lunch on Saturday through to Sunday afternoon, but please let me know if you have done this so that I can be quite sure about Saturday lunch figures.

For non-Signals Association members, and Association members not intending to stay overnight on Saturday - if you wish to have lunch and tea, please - book through me by the end of May, enclosing £1 to cover the cost.

G4RS will be active on 80 Metres and G3CIO on Two on the usual Signals "spot" frequencies and on the FM Calling Frequency, from North Hall until 1330 hours.

The Minutes of the 1977 A.G.M. are rather lengthy so, to save wasting "Mercury" space, copies of these Minutes will be available for all members attending at North Hall. Should any other member wish to receive a copy, please drop me a line (large SAE, please). So, a timetable re-cap:-

1100 hours : G4RS and G3CIO on 80 Metres and Two.

North Hall - Bar and Reception opens.

1330 hours : Lunch.

1445 hours : Annual General Meeting in North Hall.

1630 hours : Tea.

Don't forget to book for meals if you are coming - Thank You.

73

General Secretary



## HQ RSARS - A PLEA FROM THE GENERAL SECRETARY.

As you may have gathered from the Newsletter circulated last December, HQ RSARS has had a QSY.

Ten years ago the Society Headquarters moved from Catterick to Blandford and the then Field Secretary, Les Beaumont, G3RUS, handed over HQ RSARS to me. The Society was some 500 strong and the entire HQ RSARS work force comprised the Secretary and the HQ Station Manager. Sensibly, the station operator, Les G3VYZ, asked to go back to his trade and agreement was reached that the HQ Station Manager would be available to the Society for 50% of his working day, and "to trade" for the remainder. Luckily, this arrangement has been perpetuated and, one way or another, G4RS has had a licensed operator available to operate the station, look after the Society's technical equipment and cope with the numerous displays at which G4RS attended. Needless to say the Station Manager put in a lot of his own time too and the Society has been extremely fortunate in having such keen members as G3VYZ, G3YOB, G3YBT and G3ZKA to look after the core of the Society. Couple this with a band of volunteer Secretaries and we have had a very energetic HQ which was responsible for bringing the Society membership to over a thousand strong a couple of years ago.

This increase was largely due to Jack, G3DPS, and the hours he put in were far more than the 50% of his working day he was allowed to devote to the Society. When the time came for him to leave H.M. Service a large vacuum appeared and despite very energetic efforts within the Corps it was not possible to produce a replacement Secretary at Blandford.

HQ RSARS - A PLEA FROM THE GENERAL SECRETARY - Contd.

To keep the Society viable the HQ work load was broken down by the introduction of a Stores Manager and a Membership Secretary and one of our retired and respected members took on General Secretary as a stop-gap, but difficulties continued to arise, the most prominent of which was editions of "Mercury" getting cancelled or issued late, culminating with the Newsletter last December and the comment that the Society would be returning North.

So the wheel has turned full circle, and HQ RSARS has returned to the place of its birth. The HQ Station is being housed in an old wooden hut in conjunction with The Catterick Amateur Radio Society, G3CIO, and the facilities of both stations are being pooled. It is hoped to improve the location in due course but that is some years hence and meanwhile the facilities available to visitors will be extremely limited compared with what has been available at Blandford.

As I write this, there is no licensed amateur as Station Manager and my present workload doesn't leave me much time to scratch. Be that as it may, G4RS will be activated as frequently as possible by the Society members in the Catterick area, "Mercury" is back on a regular four-monthly cycle, with editions arranged to reach you by the end of March, July and November each year and as you will see from this "Mercury", Jack, G3DPS, has kindly agreed to take on Editor, leaving me the task of getting it printed, enveloped and posted - as we have both held the combined Secretary and Editor slot before, we feel confident that between us this will result in a regular and interesting magazine once again.

I can only request members to be patient for the next couple of months until the change-over to Catterick is complete and the dust has settled. Any queries for Stores please send to Ron Ford, any contributions or brick-bats for "Mercury" to Jack, and all other queries to me (Addresses inside front cover - Ed.) . Thank you.

73

Ray/G3EKL.



REPS REPORT - AFF 54 - GW4CCF.

GW3ASW.

Council, during their September 1977 meeting, decided that, due to the shortage of operator staff at Headquarters at Blandford, the call-sign G4CCF should be transferred to the writer. It was also decided that a QSL card from AFF 54 would count "in lieu of" the mandatory card from G4RS for Award purposes.

In compliance with this decision the transfer of the license from G4CZJ went ahead. Due to administrative "hiccoughs" the Home Office eventually passed it over to me on 1st December 1977. Some clerical errors still remained and the call-sign was eventually altered to GW4CCF and settled with me on the 9th December 1977.

It is my intention to fully "air" this call for all Net and Contest purposes :-

- i) alternating with my own call-sign,
  - ii) as instructed by the Council of RSA.RS, and
  - iii) as requested from time to time by members who may require the contact for Award purposes.
- NOTE - During Society Contests it is my intention, except when the Society's Contest Manager otherwise requests, to join all Contests during the FIRST HALF using my own call-sign of GW3ASW, and during the SECOND HALF using GW4CCF. Participants in these contests are requested NOT to request a contact under the alternative call-sign during these periods.

QSL CARDS FOR AFF 54 - ALL contacts will, if requested, be confirmed by QSL card through our own Bureau only. Requests for direct QSLs should be accompanied by a SAE of suitable size. Confirmations for previous contacts with G4CCF can still be made upon request. LOGS ARE HELD ONLY FOR 22 FEB 77, 1 MAR 77, 12 MAR 77 and 18 MAY 77. These only can be considered.

73 Cyril

GW3ASW/GW4CCF

REPS REPORT - NON-SERVING MEMBERS AND RSARS NETS.

GW3ASW.

I hope we have reached the ultimate "low" in activities, as far as Nets are concerned. I can only save space for Mr. Editor by reiterating those parts of my report to the A.G.M. which is covered in the A.G.M. Report and is available to members as indicated elsewhere..... conditions are that bad!!.

My thanks are extended to those members (a total of 31) who called into THE CHRISTMAS DAY NET and passed along their regards. Also to those who appeared on Boxing Morning. This latter Net was not quite so large, but at least their attendance makes the organisation of these special Nets very worth while. Thank you, all!! I must not forget those who contributed to the seasonal goodwill by sending along cards, etc., to adorn the shelves of the '3ASW shack (they helped to hide the homebrew, etc!.) These many greetings are heartily reciprocated.

At the A.G.M., with the information then available, I bade farewell to Dick Peddar or, as he is sometimes known, Dick the Pen!. It now appears that Dick, whom we all know as G3NEE, and his XYL Olive have decided forever to forgo those visions of the Barrier Reef Breakers and perpetual sun and to put on an extra sweater or two and continue to tolerate our climatic variations..... Welcome back, Limey!

73 Cyril GW3ASW.



AN AMAZING STORY.

G3WNI/G4DBR/G4BOS/G3VIJ & Co.

The following story recently reached the Editors desk. Read it carefully for there appears to be no catch and the photo-copy of the QSL card appears to be perfectly in order. It just goes to show what can happen on 80 Metres.

The covering letter from Bill, G3WNI/0521 reads as follows : "Enclosed is a photo-copy of a SWL report and QSL card from WA1VHX which is an amazing report.

I have been in touch with John, G4DBR/0443 and we confirm from our logs that indeed we were in QSO on that date, at that time, and on that frequency. There is a frequent RSARS "Mini-Net" early mornings with G4DBR, G4BOS, G8QO, G3VIJ and others.

I thought that readers of "Mercury" may be interested in this very unusual report, and may, perhaps, like to offer some explanation" 73 Bill Lindsay-Smith, G3WNI/0521.

The letter, which accompanied the note from Bill was from Roy Rehbein, WA1VHX, 1 Cutler Street, Hopedale, Massachusetts, 01747, U.S.A. It reads "A funny thing happened in the middle of the nite. It was 3 a.m. in Central Massachusetts or about 8am. Zulu and, not sleeping, I was tuned to the high end of 80 Metres listening to some 20 wpm CW so that I might someday upgrade.

All of a sudden my ears were blasted by a gentleman in Britain somewhere talking to another one in Carlisle. They were soon joined by others - John, George and Bill and passing 5/6 - 5/7 signals reports. This didn't seem possible as the RF Gain on my \$100 Radio Shack all-band receiver was shut way down and they were still loud - loud!. Since we were in the middle of an ice storm I figured it might have been one of those scary ham radio phenomenons so I checked to see which antenna I had clipped to my station console. Well, there you go - I had forgotten to clip TO ANY OF THEM and was receiving loud and clear on a eight feet length of wire attached to NOTHING - through the cement foundation of an aluminium clad house - listening to a mobile G3WNI. Since I was ¾ asleep I wasn't writing any calls down and my memory is what I use to forget with, I'm sure it's quite likely it wasn't G3WNI/M, G4GBR (sic) (talking about G3VIJ) or G4BOS.

Anyway, they were loud - or was it all a dream?!.  
Whichever, 73 to you and yours and may all your frequencies be clear in '78!!.

R.

(The details shown on the card indicate that Bill, G3WNI/M was 5 and 9 on SSB on 3.7 MHz at 0810 hours GMT on December 14th 1977. -Ed.).



FROM AN OLD TIMER'S SCRAPBOOK.

G6DW.

This story concerns a visit by Group Captain D.H. Johnson R.A.F.V.R. (Rtd) (Douglas, G6DW, licensed 1923) and Lieut-Col. A.B. Whatman MBE Royal Signals (Rtd) (Brownie G2BQ, licensed 1927) to Portishead Radio in 1934.

Portishead (GKU) was the leading Post Office Wireless Station for contacting the bigger ships and was situated on the southern shore of the Bristol Channel. I believe it was also known as Highbridge and Burnham-on-Sea. Transmitting and Receiving stations were some way apart, which may explain the different names.

Brownie was proposing to operate the radio equipment on the Oxford University Arctic Expedition due to depart shortly and stay for a year in Northeastland. Douglas had been asked by The Royal Society to communicate with the Expedition periodically throughout the year in order to receive the critical frequency figures obtained by the special equipment in Northeastland operated by Brownie. All this work was, in fact, satisfactorily conducted. The primary reason for this visit was to ascertain the suitability of Portishead for other proposed communications with the Expedition. Portishead duly operated with the Expedition and its work proved to be entirely satisfactory.

Whilst Douglas and Brownie, together with the Station Superintendent, were inspecting the transmitting aerials, it was suddenly discovered that Brownie was absent. He was observed some way up one of the tall aerial masts which he was apparently proposing to climb!. However, he returned to earth in due course - much to our relief.

Quite apart from confirming the suitability of Portishead, the visit proved to be of considerable interest to Douglas and Brownie and a number of interesting features were apparent. For example, the emergency transmitter at that time was the old main transmitter from Devizes (GKU) which had preceded Portishead as the Post Office Wireless Station for communication with the bigger ships.

Brownie's wireless work with the Oxford University Arctic Expedition is understood to have been, mentioned earlier in "Mercury". Brownie is now living in retirement at Brockenhurst in Hampshire, while Douglas lives at Dorking in Surrey. It is interesting to note after all this time that Brownie and Douglas are in very frequent radio contact on the 80 Metre Band.

(I am sure that all members would wish "Mercury" to pass along our best wishes and congratulations to two "Old Timers" who have totted up over 100 years of Amateur radio between them. We look forward to passing similar congratulations at the 150 year point! - Ed.).



TAKE A BREAK - THE ANSWERS.

AMA - AOZ	SPAIN	3ZA - 3ZZ	PEOPLES REPUBLIC OF POLAND
ATA - AWZ	INDIA	4YA - 4YZ	INTERNATIONAL CIVIL AVIATION ORGANISATION
EKA - EKZ USSR			
HNA - HNZIRAQ	5PA - 5QZ		DENMARK
JWA - JXZ NORWAY	6PA - 6SZ		PAKISTAN
JZA - JZZ WEST NEW GUINEA	7JZ - 7NZ		JAPAN
MAA - MZZ	UNITED KINGDOM	8RA - 8RZ	GUYANA
SSA - SSM UNITED ARAB REPUBLIC	9BA - 9DZ		IRAN
VZA - VZZ AUSTRALIA	A2A - A2Z		BOTSWANA
ZQA - ZQZ BRITISH OVERSEAS PROTECTORATES		C2A - C2Z	NAURU

(Sorry about the 4YA - 4YZ one - not really a Country is it? - but it does tend to keep our readers on their toes - Ed.) (It was the OWLs idea to put it in, anyway!).







MAIL BOX - Contd.

A change of beam heading now to Bombay from where Col. Dady S. Major, VU2MD, of Petit Mansion, 85 Sleater Road, Bombay, 400 007 writes to say that he is still on the lookout for 'G' stations particularly RSARS contacts. He can hear the G's but they don't seem to latch on to his QRP signals although he can work into VK and ZL with little trouble and, of course, into where the prefixes begin with 'U'. He is also on the look-out for a few new countries to 'up' his DXCC score above the present 286 confirmed. Dady is active every day from 1200 to 1330 and 1700 to 1830 GMT on 14050 kHz and will willingly QSY to other bands if they are open after initial contact has been made. Away from the amateur side, Dady also mentions that the Indian travel regulations have been eased a bit and they can now take \$500 : 00 per person out of the country and bring in £50 worth of articles on return. He wonders if this will include amateur radio spares. 1978 may well see Dady and his delightful XYL in the UK sometime during the year and we look forward very much to another eye-ball QSO. During his last visit his application for a G5 call-sign "went astray" to quote the H.O. WX-wise he reports 90 inches of rain during the monsoon season which should mean no shortage of water or power during the coming months. However, during October, when the letter was written, the temperature varied around 37°C during the day and 25°C at night. Dady closed with best wishes to all RSARS members.

From : 32 Redwood Avenue, Melton Mowbray, Leicestershire, LE13 1TZ, a couple of letters have arrived from Dick, G3NVK. The first one enclosed a "RUSH JOB CALENDAR" which appeared in "Unity", the magazine of the Registration Officers (Births, Deaths and Marriages). (Guess what Dick does for a living!). With full acknowledgements to 'Unity' we reproduce the calendar below:

MIR	FRI	FRI	FRI	THU	WED	TUE
8	7	6	5	4	3	2
15	14	13	12	11	10	9
22	21	20	19	18	17	16
29	28	27	26	25	24	23
36	35	34	33	32	31	30

This is a special calendar, which has been developed for handling rush jobs. All rush jobs are wanted yesterday, consequently all dates run backwards - with this calendar a client can order his work on the 7th and have it delivered on 3rd. Everyone wants his job by Friday, so there are three Fridays in every week. There are five new days at the end of the month for those "end-of-the-month" jobs. No-one likes Mondays so these have been eliminated. There are no Saturdays or Sundays, so overtime rates can be kept to a minimum. There is a special day each week - MIRDAY - for the performance of miracles.

Dick also reports that he had a good time in the first phase of the 5-59 Trophy Contest last November and worked 27 stations (his best so far). The second letter tells ".....Worked Ken, ZL1AXM on Friday morning for QSO No. 500; This has taken 18 years but has been unbridled pleasure. We made QSO No. 001 this morning as Ken insists we start all over again.....". (Congratulations, Dick, and also to Ken, here's to your next 500!! - Ed.).

From : H.T. (Tom) Mulder, VK6MK/0792, 2 Bedwell Street, Emu Point, Western Australia, 6332, "....It is many months since I last heard activity from members at 1300Z on 14175, although I listen every Wednesday at that hour. There is plenty of activity near the frequency, mainly from Eastern or Southern Europe, but not from UK. Whether it is due to lack of activity by members in the UK or generally poor conditions I don't know, but if you could let members know that I am there at that time I would be grateful. My station consists of a complete Collins S-Line with a four-element monoband beam, together with an ideal location, so there should be little difficulty in repeating the many excellent contacts I had last year with members in the UK...." (Perhaps members will bear in mind that Tom is ready and waiting around 14175 when conditions permit - Ed.).

### MAIL BOX - Contd.

From the South comes a letter from Major M.H. Smith. ZS3MS/0754, of P.O. Box. 3289, Windhoek, 9100, R.S.A. He asks for a replacement list of out-of-the-ordinary 'Z' Codes and mentions a particular code which was used for "I have to go to the WC". Regret that we can find no details of the requested list, although one 'Q' Code that springs to mind and was certainly used just after, if not during, the last War, was QAU which comes from the Aeronautical Section and means "I am about to jettison fuel". The Joint Services 'Z' Code list held by the editor lists over 300 'Z' Codes but no trace of another (More applicable) Code can be found. ZS3MS remarks that he has also had an argument with the local Radio Inspector (!) regarding the Code QLC. 3MS maintains that he remembers this being used during the last War to indicate the taking over Control of a Net, but thinks this has now been changed to QTV, Well, the 'Book' tells us that QLC has no allocated meaning at the present time, and that QTV means "Shall I stand guard for you on the frequency of ..... kHz (or mHz) (from ..... to ..... hours) or Stand guard for me on the frequency of ..... kHz (or mHz) (from ..... to ..... hours)" depending on whether the Code was followed by a question mark or not, The list shows ZKD as meaning "Shall I take control of Net (for .....) (until .....)?," or "Take control of Net (for .....) (until .....)" Some 'Q' Codes are a little unusual 'QUQ' - "Shall I train my searchlight nearly vertical on a cloud, occulting if possible, and, if your aircraft is seen, deflect the beam up wind and on to water or land, to facilitate your landing?". If anyone can help ZS3MS further please drop a line direct,

From : Julian N, Jablin, W9IWI/0798, 9124 North Crawford Avenue, Skokie, Illinois, 60076, U.S.A. "Re the letter from G3AEF: this recollection brought me right back to Algiers and AFHQ in 1942 where I arrived as a W/T Op. a day or so after the invasion, I was on the U.S. side, of course, but for many reasons was frequently to be found down the hall in the British Army's radio shack. Just prior to leaving for an armoured battalion out where the action was, I took part in a primitive American experiment with RTTY. A standard 'printer was hooked into the keying circuit of an SCR-299 to make-break the CW signal - no nonsense about Frequency Shift Keying!. My job was to man the Algiers end of a CW circuit to Constantine to find out what was happening there as we transmitted the RTTY. I would send "What did you get?", The answer might be "SDFRT YHBCDWSETPLL DXNBGF EWOP", upon which I would say "That's not what we transmitted - it was GREETINGS TO YOU AT XMAS". I think that the effort was shortly discontinued. And a good thing too!...." (perhaps you really started something, Julian, as your editor recently purchased an American CV-89A RTTY Terminal Unit which, it would appear, retransmitted incoming RTTY as a "Tone On - Tone Off" system to line. Nice to hear from you and hope that some of the members will be making a W9IWI entry in the log before long. - Ed.).

And last, but by no means least, comes a note from G5YN. ".....This is the last "Mercury" in whose preparation I shall have had a hand. As promised in the Autumn edition there is another article reproduced from the Bulletin of the Vintage Wireless Society by kind permission of their Editor. This one is about the 'R' Valve and I hope it will provide happy recollections for our senior members. Another reprint (to appear in a later edition - Ed.) is by kind permission of Lucas Marine of Frimley Road, Camberley. Our thanks are due in particular to Mr. G.B. Chandler, their Marine Technical Services Manager whose article on interference suppression will be reproduced. Now, although there are rather more members who own cars than boats (English understatement!) the basic principles apply to any installation with alternator/rectifier charging systems and the article is very interesting. An article on the detailed suppression of motor cars appeared in "Mercury" not very long ago. The next A.G.M. is at Catterick so I look forward to meeting you all again at Blandford in 1979. May I take this opportunity of thanking you all for your great support and encouragement during my temporary period of office between "regular" editors.

This edition has been finally edited, made up and reproduced by the new management at Catterick to whom my grateful thanks are due for giving me this opportunity to say the very best 73 to you all.

Evan G5YN.

P.S. It gives me great pleasure to know that Jack, G3DPS, has taken over as Editor.

## SHARED BANDS - Second Epistle de FIVE FIFTY-NINE.

In a recent "Mercury" Mr. Editor was pleased to print a "shortish" article from me on QRGs to avoid, etc. This article only mentioned British and Irish Coastal stations operating in the Top Band and 80 Metre sections. None of the information given, or that which follows, is classified in any way and can be obtained freely from H.M.S.O.

Looking around for the 'source' of those funny noises percolating into my RX on and around 3717 - 3722 kHz led me to BREST (and several others) on 3722 and, possibly, LIVORNO, Italy on 3717 as the "offenders". Now the nominal range of all these coastal stations is, at least, 400 Kms IN DAYLIGHT with an obviously greater range at night. These ranges by day, etc., are within the range where the received signal can be used into the ship's own telephone system, which we may take at, say, S7. If so, WELL!!!.

Is it therefore irrelevant to add to that former list the following?, PLUS the whole of the Mediterranean area as well.....What a shared band it really is!

BELGIUM: Antwerpen - 1901, 1904, 3652, 3655 kHz.

Ostende - 1517, 1820, 1905, 1908, 3629, 3632, 3681, 3684 kHz.

DENMARK: Ronne - 1995 kHz.

FRANCE : Brest - 1806, 3722 kHz. St. Nazaire - 3795 kHz. Bordeaux - 1820, 1862, 3722 kHz. Marseille - 1906, 1839, 3795 kHz. Grasse - 1534, 3722 kHz.

GERMANY: Norddeich - 1911 kHz.

GREECE : Kerkira - 3613 kHz. Patrai - 1800, 3785 kHz. Crete - 3640 kHz. Rhodes - 1824, 3617, 3630 kHz. Athenai - 1879, 3624 kHz. Khios - 1820, 3743 kHz. Thessalonica - 3793 kHz.

HOLLAND : Schevenihgen - 1862, 1890, 1939, 1995, 3673 kHz.

ISRAEL : Haifa - 3656.7 kHz.

ITALY : Livorno - 1925, 3717 kHz. Napoli - 1925 kHz. Palermo - 1855, 3735 kHz. Mazara - 1883 kHz. Crotona - 3642 kHz. San Benedetto - 1855, 1876, 3724 kHz. Civitavecchia - 1888, 1925, 3608, 3747 kHz. Messina - 3717 kHz. Traani - 1811, 1848, 1925, 3666 kHz. Lampedusa - 1876 kHz. Bari - 1929, 3743 kHz. Venezia - 3770 kHz. Trieste - 1848, 1939 kHz.

P.S. Come to think of it, our 3740 kHz QRG is not such a wonderful choice either!!!.



## THE 'R' VALVE.

Philip

Beckley.

(Reproduced, by kind permission, from the Bulletin of The Vintage Wireless Society).

It has often been observed that in time of war technical development is accelerated to meet a need so that devices become available long before civil development would have made them so.

This pattern certainly applied to the thermionic valve. Around 1913 the Lieben-Reisz valve (which contained mercury vapour) had some degree of use but it was a clumsy device and difficult to regulate for best results. Many valves of the period had rather poor vacua and, although this gave a characteristic with ionisation kinks in it which was good for rectification, it militated against standardisation and simplicity.

It is interesting to note that, prior to 1913, virtually every investigator had concluded that electron emission required the presence of some gas in the tube and that the emission was due to some sort of reaction between the heated filament and the surrounding gas. This accounts for the late appearance of the hard vacuum valve which had to wait until Dr. Irving Langmuir (an American chemist) proved in 1913/14 that gas was not necessary and that furthermore, in contrast to the erratic behaviour of the soft valve, the electron current became regular and obeyed definite laws in a hard vacuum.

### THE 'R' VALVE - Contd.

During World War I research was going on in the French military laboratories in the Champ de Mars in Paris in the shadow of the Eiffel Tower - indeed the tower was used as an aerial mast (try proposing simple ideas like that today!!). Among other things, the French researchers developed a valve with a good vacuum, robust and simple in operation, having a standardised set of pin connections (eventually these became standard in Britain as the B4 base) and electrodes whose size and spacing were precise for the day.

What was this new French valve called? There were certainly not enough valves about to need a complex code number so it soon got the name of "French Valve". The filament of the French Valve was of plain tungsten and operated at about 4 Volts for reception purposes though it was often at 6 Volts to get more emission for transmitter use. When thus over run its life was bright but rather brief - maybe 100 hours or less.

We would not these days look upon the French Valve as a miracle of gain, having  $g_m$  of about 0.2 to 0.3 mA/V depending on how it was operated, but when compared with some of the German war-time valves this is a superior performance - worthy of secret protection.

The French Valve appeared in two type, Type-S and Type-Metal. This appears to refer to manufacturing sources and Metal valves of various types were made after the War in France. I have never traced the Manufacturing source of the S-type French Valves. The two forms differed in minor details only.

Tungsten filaments tended to "clean up" the vacuum of the valves they were in, so no form of gettering was used at this time for the war-time valves. Being in the Allied Club Britain was able to use the French Valve design - and did so. The British version was tested for vacuum by seeing how large an anode potential could be applied before ionization effects set in (a blue glow) and one form of classification was :

Type-A : up to 2000 Volts, Type-B : up to 1200 Volts, Type-R : up to 150 Volts.

Presumably the Type-R referred to "receiving duties only" and so the famous R-valve emerged as a result of this selection.

After the War the country was plentifully supplied with ex-Government French and R-type valves and this aided the beginnings of amateur usage of valves. I have a valve made exactly to the "French" pattern by Moorhead (San Francisco) so I wonder if the USA also had access to the French development work - can anyone advise?

Once broadcasting got under way many firms made R-type valves. Marconi brought out a 5Volt type, the R5V, which meant that it was more convenient and safe for 6 Volt accumulator work. The Marconi type-LS3 amounted to a low impedance version of the R-type valve, which aided early loudspeaker work.

But now we are beginning to refer to specific specialised types and there this chapter in history should end. The 'R' reigned in the days when a valve was a valve and it was seldom asked what type, only how many.



## **Old Timers Page**

**G6LV**

(The following arrived on the Editorial desk and made such interesting reading of Amateur Radio in days gone by (even before the Editors time!!) that it was thought that members would like to share in a little nostalgia. It comes from H. Wright, G6LV/0857, 1 Pare-an-challow, Green Lane, Penryn, Nr. Falmouth, Cornwall.

I had often wondered how one became a radio amateur in the earlier days. With the greater amount of activity today it is easy to understand. From my school-days I was always interested in radio and built many Xtal sets, using a gold cats-whisker or stranded flex to ensure a good contact point on the crystal.

OLD TIMERS PAGE - Contd.

It was whilst an apprentice in Electrical Engineering in Melksham, Wilts., and in 'digs' that I built my first 0-V-1 to receive our local broadcast station which was Cardiff on about 300 Metres.

One night, after this station closed down (it closed earlier on Sundays, by the way) a voice came on saying "This is G2FL of Warminster". He played records (legal in those days - Ed.) and asked for reports. (I believe this call-sign is correct - does anyone else remember him?. I think he owned a garage). Goodness knows how I reported his signals, I don't suppose I mentioned my RX and Ant., but it was a great thrill to hear on a following Sunday "Thank you, Mr. Wright of Round-ponds, Melksham for your report". This would have been around 1925-26.

My RX was an 0-V-1 with plug-in honeycomb coils made variable for reaction, battery operated, using Dutch bright emitter valves.

Much later I tried receiving on much higher frequencies and could not understand why I got no reaction, not understanding that my square tinned copper wire with its beautiful straight right-angle bends was probably longer than the frequency I was after.

After completing an apprenticeship I drifted to St. Ives, Cornwall, and during the next few years I constructed a number of Broadcast RXs, including a number of Scott-Taggarts. My favourite, however, was "The Cossor Melody Maker". Eventually, I built a Short Wave RX and heard American 'ham' voices asking for reports. Wanting to know more about the 'Ham' business I was advised to write to the R.S.G.B. which I did, becoming BRS 1089. I was later transferred to Penryn, Cornwall and learnt the Morse Code by regular listening to various transmissions.

During my BRS period it was usual that an exercise book was posted around BRS and G call members to record comments, opinions, etc. It was very much over my head at the time, but I seem to remember a constant subject which was "Goyder Lock". Due to various hold-ups, the book eventually faded out.

Never having had a car, and never to this day having ever driven one, I was alone in the wilderness - until Ron Warne came out of the Navy. Both of us being interested in radio we obtained three letter calls as issued in those days. We formed a Club and met in Lanner. This was in about 1934.

Now feeling confident, Ron and I took our Morse Test at Falmouth G.P.O. and later learned that we had passed. I received the call-sign G6LV and Ron got G8AW. This was in 1936. License power was 10 Watts but some stations, for various experimental reasons, operated with 100 Watts, of which I think G5ML was one.

During the War my hobby stood me in good stead in The Royal Corps of Signals where I was known as 2600978.

I would very much like to hear any other "early" ham experiences. All my facts may not be accurate - but it is a long time ago!

73 Bert/G6LV.

("Mercury" would also be interested in hearing from our Senior members regarding the early days. If you feel you can't go back that far, you are invited to write an article based on the above experiences, as if you were explaining things to a very young member who is just taking up the hobby, i.e. 0~V~1, Reaction, Bright Emitter Valves, Scott-Taggart, Goyder Lock, Three Letter Calls, etc. We will publish the best of the bunch. (The OWL tells me that this should be right up G2TA's street as he won a similar competition some years ago!) - Ed.).



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FROM HEADQUARTERS.

(a) We shall be at "RADCOMEX '78" at Alexandra Palace on May 5/6th - see you?

Sunk Without Trace

(b) Following publication of a large list of members who had not paid their subscription for 1977, the following list indicates members who will not be on the Society mailing list and so will not be receiving this "Mercury". Should you know any of them and should they wish to remain a member of the Society, please ask them to remit their annual subscription to G3EKL.

65	G3XMZ	103	G3WME	104	G3GVV	105	G2CPM	115	G3ZUM
161	G3UVE	187	GW8MQ	200	G3SJF	211	NL	220	NL
221	G3BJA	223	W0CYM	225	DL2AH	230	G3YZO	244	G4BHV
260	G8RF	276	G4BUS	296	NL	311	G8HDR	346	G8GLS
379	DL6AA	407	ZL1OR	427	NL	433	G3YRX	446	G4CDK
450	WB5HMF	452	GW3LAD	453	GM3VIO	466	GM3FSV	468	G4CFN
505	G5FG	515	G3XGQ	518	G3MYF	541	G4AWI	561	G3YOS
578	G8CQZ	587	NL	594	G3LZR	598	NL	618	WB6BPA
621	NL	622	G4BOU	623	G3XYF	685	G3OOQ	711	c/o G3VSA
715	NL	795	G5RV	797	G3EAX	800	NL	807	W7KOS
813	G18KYB	838	G8FG	841	NL	844	G3SZR	865	G8HUV
874	G2BUC	878	G3SMG	895	G4ACT	899	G3LCK	905	DL4RI
922	NL	928	G4BEY	929	G3JAO	941	NL	948	NL
953	G13NQH	963	G4ETG	965	VS5JS	969	NL	973	G4BMJ
975	G2RT	980	G3AAK	1015	ZL4MI	1033	VU2YC	1052	NL
1057	NL	1067	G3DEA	1076	G3JGC	1080	VE3HES	1084	DA4BI
1086	G4LV	1088	G3YHP	1097	G2CKM	1100	G3NZU	1102	NL
1103	GM4EAS	1109	GM4CLW	1110	G8IXD	1113	NL	1114	G3DJM
1119	G6TD	1122	G4EPI	1123	G4EAG	1129	G3MWI	1131	G3XAJ
1135	G3XDC	1144	G2APN	1150	NL	1155	NL	1157	G4DZY
1160	NL	1163	G3JIN	1170	G3NUJ	1174	ZC4CG	1175	G4DBV
1177	NL	1180	G3EQF	1182	GW3ZEY	1188	G3FAA	1194	G8KOT
1196	NL	1199	G8HUJ	1213	VE3AHU	1215	NL	1216	G4BYM
1217	G4EXH	1221	NL	F5	G3SIG	F12	G4COF	F15	G4CDH
F20	VE3RCS	F24	G3LUN						

Part Payment of Subscription 1978

(c) The following lists members who have been paying their annual subscription by Standing Order and have forgotten to increase from £1 to £2. Could you please remit the extra cash and adjust the Standing Order for 1979 onwards.

11	115	151	208	337	353	366	392	473	484
488	512	573	645	685	726	742	748	758	761
774	786	640	872	888	894	907	912	926	949
974	995	998	1006	1061	1089	1107	1124	1125	1142
1152	1171	1172	1182	1192	1193	1197	1201	1302	1321
1336									

Non Payment of Subscriptions for 1978

(d) Should any members have a guilty conscience and who read this far, if YOU haven't paid your subscription for this year please remit ASP - thank you.

73 Ray G3EKL

"SIGNALS NETS" or Where you might find them!

ALL TIMES are UK CLOCK TIMES except the 20 metre Overseas Net which is in GMT.

ALL FREQUENCIES are PLUS or MINUS the QRG shown - search boldly.

<u>L.F. NETS</u>	<u>PHONE</u>		
SUNDAY	1100	3720 kHz	Controlled Natter Net, with 3740 alternative
MONDAY	1300	3720 kHz	Natter Group for approximately 35-45 minutes
TUESDAY	1800	3740 kHz	CONTROLLED NET
THURSDAY	1900	3740 kHz	CONTROLLED NET
SATURDAY	1100	7075 kHz	CONTROLLED NET. If conditions on 40m do not permit inter-G operation net will move to <u>3720 MHz at 1115 hrs.</u>

<u>L.F. NETS</u>	<u>CW</u>		
WEDNESDAY	1930	Prim 3565 kHz Sec 3526 kHz	CONTROLLED NET: Net terminates at 2115 exactly and re-opens at <u>2200 on TOP BAND.</u>
	2200	Prim 1837 kHz	<u>This net is again CONTROLLED. Full details can be found in the SPRING 1977 issue of MERCURY.</u>
SUNDAY	1000	3565 or 3526 kHz	European natter net

HIGH FREQUENCY NETS PHONE

WEDNESDAY	1200 GMT	14130 kHz with an alternative 14275 kHz	Though primarily a CONTROLLED NET the UK controller usually requires an overseas station to assume co-control, if more than 2 overseas stations join in. 14275 kHz is for the benefit of those USA and other members who prefer this part of the spectrum. Please monitor both QRGs
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When conditions permit, members are encouraged to use the following HIGH FREQUENCIES in addition to those above:

14085, 21085, 21375 and 28575 kHz.

OTHER FREQUENCIES AND MODES

RTTY 3590 & 14090 kHz Use 170 Hz shift and 45.5 Bauds.

SLOW SCAN Please notify activity to Headquarters for publication.

VHF FREQUENCIES

RSARS SPOT CHANNELS are 70-22 and 144-33 MHz Please notify locally arranged nets for Mercury publication.

All modes.: Call 'CQ RSARS' or 'CQ ROYAL SIGNALS AMATEUR RADIO SOCIETY'. During a QSO sign 'G1ABC de G1DEF BT BOTH RSARS K' or 'ONONO de G1GHI BT RSARS K'. DO NOT join 'RSARS' to your call-sign in any way (i.e. G1JKL/RSARS). In Great Britain this is illegal under Home Office Regulations.

Do not wait for the above nets to form - find the nearest clear frequency and call 'CQ RSARS'. Please do not call CQ on the CW LF controlled nets as there is always a control station around to bring you in. Always book IN and OUT of controlled nets. Pass all details for awards and contests unassisted.