

# MERCURY



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JULY 1978

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# EDITORIAL

.....G3DPS .....

## WARC '79.

Much has been written about the forthcoming WARC and what should and should not be done. Although it would be nice to think that the amateur population of the world will be blessed with a brand new frequency allocation (or two) it must be remembered that there are now many more 'countries' wanting many more allocations for many more services. Many of these emerging countries are not interested in Amateur Radio, some are down-right "anti" and, unless a very strong case is presented on behalf of the Amateur Radio World, it may well be possible that such countries could suggest that the required frequencies come from those at present allocated for Amateur Radio working. So rather than get a new frequency band we could well find that our allocation has been (dramatically?) cut.

In the next edition of "Mercury" it is hoped to publish an article from a Royal Signals Amateur Radio Society member who, unlike many of us, has given the matter a lot of thought. For those of us who have not given the subject very much thought, or are prepared to leave it "to the authorities", it will be an eye-opener and amply demonstrates what we may lose, rather than gain, if the conference goes against us. Would you be happy to find that the brand-new rig you had just purchased had one or two Bands, or part-Bands, which were no longer allocated to the Amateur Radio Service? Views of members on the forthcoming WARC will be welcomed and it is hoped that a selection can be published along with the above-mentioned article.

Gone are the days of Amateurs "opening up" frequencies (remember 440 Metres?) being moved off, and being given, other or higher frequencies to work on. It would appear now to be a case of just being "moved off" (except, perhaps, for the UHF Bands).

When the Conference is over, all the paper-work cleared away, and the delegates returned safely home, will we, like good Boy Scouts, "be prepared" for the outcome?

  
JACK COOPER  
G3DPS

The response to the request for articles for "Mercury" has been good, please keep it up.

## BEACONS.

By : "Begone Dull Care"

(Reprinted, with permission, from The Royal Signals Institution Journal, Volume XIII/3 the Winter 1977 issue.)

One aspect of the Silver Jubilee celebrations in which many thousands joined was the lighting of beacons across the country. Signallers will have been delighted by the speed and effectiveness with which a message, albeit prepunched, was communicated across the land: delighted, but perhaps not surprised because many is the hard-pressed planner who has studied a map in search of a relay site and joyfully found it, already marked " Beacon Hill" as if with a mediaeval seal of approval.

Many of our readers will consider the concept of a mediaeval IEE a charming little whimsy but little more. It is to them and all others that I am delighted to reveal the results of certain studies. These suggest most strongly that much of our everyday professional jargon is not the product of the 20th Century, although Marconi et al gave it new life, but springs from much further back in our history....

In the beginning there were beacons, simple, omni-directional, line of sight, when an operator sighted a burning beacon, he lit his own. B, on seeing A's fire, lit his, to relay the message to C, but, of course, A would also see B's fire. This feature of the system was known as double sideband working as the information was passed in both directions. Readers with a feeling for Old High German (dopel zeyt brant) will not be the only ones surprised at the close correlation with modern practice, but there is worse to come.

The system became very efficient and so it was only natural that the manpower cuts imposed by the Defence review of AD 475 should lead to the abolition of the horse-borne couriers. Thus the beacon system became Double Side Band (DSB) Suppressed Carrier.

Everyone realised the enormous redundancy in DSB, the more so as training was so good that during the sixth Century it was generally accepted that A did not need to watch for B's fire. It could safely be assumed that the message was through. This was the "Fire and Forget" principle.

Sadly, the Dark Ages were dark for the beacon men too and it was not until about 800 that Mercurius Bede got to grips with the redundancy problem and devised the Single Suppressed Side Band System. This allows answers to be relayed back along the line. On seeing A's fire, B would light his own as before but would shield it from A with a large shield, later called a Sideband Filter. Thus, if A lit his fire, to signify that, enemy were approaching. B would relay the message to C, shielding the fire from A's view. When C had raised the alarm, he would light his fire. B would see it and remove his shield, so that A could see it and know that help was on the way, this was called Independent Side Band working. B had the option of shielding his fire from C (Side Band Inversion) and could then remove it to relay a further message from A to C (Manual rebroadcast).

Beacons were of course primarily relay stations, Less well recorded are the activities of observers at various points, not necessarily on hill tops, who noted whether beacons were alight or not and took appropriate action such as rousing a village. Thus the beacon system served many subscribers at once. These observers were known as passive satellites. It was found that at any one point it was desirable to have more than one observer at a time. Several observers at one post could be spread across an area (Space Diversity). Often some would stand and some lie down (Polarization Diversity). The roster, even in those days, was based on 8 hours on and 8 hours off, and this was called the Shift Frequency.

The beacon system was very efficient over friendly ground, but suffered from being omni-directional. The fluid fronts of the Scottish clan feuds and later those of the Wars of the Roses created a requirement for greater security. It was found that this could be achieved by lighting fires on forested hilltops and cutting down trees along the desired sight lines, so that only friendly forces saw the beacons. This was Narrow Band signalling in its earliest form. It was highly inflexible, due to the time needed to grow trees, but a modification using movable trees was first used against Macheth. One W. Shakespeare was the first officer to receive TE Pay, awarded for his account of the technique.

THE ROYAL SIGNALS INSTITUTION.

The previous article was reprinted from the Journal of The Royal Signals Institution. The object of the R.S.I. is "To foster the professional and technical interests of the Royal Corps of Signals" and membership is open to the following :-

- a). All officers who have been gazetted to the Corps,
- b). All warrant officers, non-commissioned officers, soldiers and boys who are serving, or have served, in the Corps,
- c). All past members of the Signal Service, Royal Engineers,
- d). All present members of, and those who have belonged to, the signal arm of any of the land forces of the British Commonwealth, Colonies or Dependencies,
- e). All present and past members of the WRAC and ATS who are serving, or have served, with the Corps on inter-communications duties; whether in the Regular Army, Reserve, National Service or Cadet Forces.

Associate members shall consist of such others as the Council may, from time to time, decide to be eligible.

In the case of Royal Signals units of the Reserve Army and signal units of the British Commonwealth, Colonies, or Dependencies, corporate membership may be arranged. This allows the unit to receive three copies of the JOURNAL and entitles it to three votes at the Annual General Meeting. The payment of such corporate subscription shall not preclude any member of the unit from joining the Institution as an individual.

Serving regular officers who subscribe to Corps Funds are members of the Institution, their subscriptions being paid from their contributions to Corps Funds.

ANNUAL SUPSCRIPTIONS.

Members and Associate members (except serving regular officers and soldiers)	£2 - 00p
Serving regular soldiers	£1 - 50p
Retired membership (open to retired members aged 60 and over)	£1 - 00p
Corporate unit membership	£8 - 00p
Covenanted subscriptions - seven year period	£2 - 00, £1 - 50 or £1 - 00 as appropriate to class of membership.

All Members and associate members receive free copies of the JOURNAL.

Full particulars of membership and deeds of covenant can be obtained on application to The Secretary, Royal Signals Institution, Regimental Headquarters Royal Signals, Cheltenham Terrace, LONDON, SW3 4RH. (Please mention the Royal Signals Amateur Radio Society if writing for details.) And in case you may think that the JOURNAL is all red tape and Unit histories, a glance through one or two back copies produced the following:

"The Crimea in Retrospect" by Colonel L.W. Wright TD, "NATO Satellite Communications" by Brigadier R.H. Maxfield C Eng MIERE, "Computers and Users" by P.A. Clarke BSc BSc (Econ) FBCS C Eng MIERE, "Some Notes on the use of the High Frequency Spectrum (1.5 - 30 MHz) for Groundwave Propagation" by Major P.J.F. White TE AMBIM Royal Signals, "The Age of Silicon" by Professor W Gosling BSc C Eng FIERE, "High Frequency Prediction and the Use of the HF Spectrum for Skywave Communications" by Major M.H. Stephenson BSc (Eng) C Eng MIEE Royal Signals, "Enigma - The Ultra Secret" by Lieutenant Colonel D.A. Dickson.

Other items include Council Reports, Editors Notes, Correspondence Pages, Book Reviews, Memoirs, etc. Why not drop a line to the Secretary if you are eligible and get in on a good thing - Ed.



# WELCOME

The Society is happy to welcome the following recruits and re-enlistments. We hope that their stay with us will be a long and happy one.

RSARS 0680 - GEORGE WILLIAM RODGERS, G3YMR, 10 Coronation Avenue, Colburn, Catterick Garrison, North Yorkshire, DL9 4NP. Older members will remember George in earlier days. He had to leave us for a while and we welcome him back with his old number. George served from September 1948 until September 1953 with 75 H.A.A. Regiment R.A. and with the 4th, 7th and 8th Royal Tank Regiment from October 1953 until October 1969.

RSARS 0736 - JAMES ALBERT NICOLLS, G3ECN, Vine Lodge, Shoe Lane, Aldershot Hants, GU11 2HE. Jim is another re-enlistment who picks up his old number. Members may remember him from his ZC4 days.

RSARS 1352 - Dr. E.H. Squance hails from Northern Ireland and operates under the call-sign G18OJG. He served from 1963 until 1967 with 661 Regiment Field Artillery (TA) and from 1967 until the present date with 40 (U) Signal Regiment (V). The equipment at 'OJG' consists of a Yaesu FT-200/Europa 'B' for 2 Metres SSB, a Pye Cambridge for FM (with several conversions) and a Trio TR-2200 for Mobile and Portable FM working. The antenna farm consists of a 6-element Quad and a vertical whip with Ground Plane at 50 feet. G18OJG is a member of RSGB and is a Committee member of the Bangor and District Amateur Radio Society. Other interests include Golf and Swimming and making SSB contacts on 2 Metres with all parts of the UK.

RSARS 1353 - JAMES JOSEPH WARD, G3PNP, 66 Laburnum Road, Sandy, Bedfordshire, SG1 9HY. James made a move during the course of his application from Stevenage to Sandy and we trust you are now settled OM. You may have met him as 23097817 at one of the following locations - January 1955, around 7 TR or 3 TR at Catterick, March 1955, at 1 AGRA Field Signal Squadron at Scarborough. 1 AGRA FSS then, apparently, moved to Carlisle in June 1955 and, in August 1955, went overseas to Cyprus. 14 January 1957 saw G3PNP at Chester where he completed his National Service. The following day he was with Princess Louise Signal Regiment TA at Hammersmith and on 5th July 1960 he completed his service. The rig is a HW-100 and a home-built 807 PA for Top Band with a TW Mobile RX for 160 M. Antennas, Dipole  $\frac{1}{4}$  - wavelength on 20 and a loaded whip on 160. He is not, at present active on VHF, James is also a member of Institute of Quality Assurance.

RSARS 1354 - JAMES GERARD FITZGERALD, G8MDW, 21 St. Ardens Avenue, Darwenm, Lancs. James, who is also a member of the GB5RF and GB3MP Repeater Groups, the RSGB and the East Lancashire Radio Club, served in Royal Signals from 1959 to 1961 and was known as 23623717 Signalman Fitzgerald J.G. with the trade of Electrician-Driver. He trained at 5 TR, Ripon and was posted to Special Wireless Squadron at 50th Signal Regt., Blandford. James passed the RAE in 1971 but the Salt Mine dictated that the ticket was not taken out until September 1976, before which he was a SWL for 20 years. Active only on 2 Metres at the moment but a lot of work is going into mastering the dots and dashes. Interested in Gardening and Reading, James also travels in connection with his employment and has visited Caracas, Venezuela and Osaka, Japan.

RSARS 1355 - ALAN THOMAS HENRY RACKLEY, G4GOE, 2 Roulstone Crescent, East Lake, Loughborough, Leicestershire. Alan is also a member of RSGB and also held the call-sign G8DAU. He was a National Serviceman with The Royal Armoured Corps in the 1st Royal Dragoons as a Gunner Mechanic. This was between 1945 and 1947 after which he served for 2 years in the TA with The Berkshire and Westminster Dragons as a Driver/Operator. Ticket "history" reads, RAE taken in May 1969, G8DAU in September of same year, Morse Test in October 1977 and G4 call received on the 11th November 1977. Other interests include Photography and Slow Scan TV.

WELCOME - Contd.

RSARS 1356 - DAVID CHARLES WOODHOUSE, G3TWX, 13 Gannet Close, Haverhill, Suffolk, CE9 0JL. David served in the T & AVR with 87 Signals Squadron and 38 Signals Regiment (Volunteers) but had to leave due to transport difficulties between home and the Drill Hall in Nottingham. David runs a Swan 350, which spends most of its time on 80 Metres and most of that time around 3.760 MHz on W.A.B. contacts. Additional interests are listed as Angling Philately and Small Bore Rifle Shooting.

RSARS 1357 - ALAN KEITH CHAPMAN, G4FZC at present serving with Whiskey Troop, 233 Signal Squadron (NI), B.F.P.O. 801. Alan started his service career at The Army Apprentices School/College at Harrogate from 1959 until 1962. This was followed by a 'stint' in the Far East with 249 Signal Squadron between 1962 and 1965. For the next three years it was with 22 Signal Regiment followed by a further three with 20 Armoured Brigade HQ & Signal Squadron, 1971 - 1974 were spent at R.M.A.S. with the two following years with 2 Div. HQ & Signal Regiment. He moved in 1976 to Northern, Ireland where he is still serving. Alan prefers to operate on 10, 15 and 20 Metres and mainly on CW. The rig is the KW 2000E followed by a KW 1000.

RSARS 1358 - CLIFFORD JAMES BROWN, 1 Squadron, 8th Signal Regiment, Catterick Garrison, North Yorkshire whose home address is 40 Clifton Road, Worthing, Sussex, BN11 4DP. To O i/c Records Cliff is known as 24398583, and he spent a year in training with 11 Signal Regiment at Ouston, Newcastle and, at the time of his application had served four months at 8 Signal Regiment (no doubt under the watchful eye of the Gen. Sec.). His other interests are Photography and Hi-Fi. Thanks to Kit, G4EMX for the introduction.

RSARS 1359 - RON F. ELLIOTT, G3SDM, 7 Hirst Drive, Rotherham, Yorkshire, SH5 3NR. Ron was previously a member of RSARS but, unfortunately could not pick up his old Society number (0835). No other details are known at this stage but, doubtless, many members will remember him from the old days.

RSARS 1360 - DONALD BEECH, G8JMP, "The Beeches", 3 Birch Lane, West End, Woking, GU24 9QB. 20th October 1949 saw Don arriving at 1 Sqdn., 7 Selection Regiment, Royal Signals, for Basic Training which lasted from, then, until 6th November. Trade Training, at 1st Training Regiment resulting in a Radio technician 'A' III. No doubt this trade training was applied on his posting to 15th Medium Regiment R.A. in B.A.O.R. Don made L/Cpl in November 1951 and was put in charge of the Radio Section until 4th November 1951 when he was demobbed. His Reserve service was with 56 (L) Armoured Div. Signals T.A. and later 624 L.A.A. Regiment R.A. as Corporal i/c Radio Section. He was discharged after 4 years and became a member of the Army Reserve Class 1 Group 'N' until 30th June 1959. He passed the RAE in 1974 and now runs an FR50B RX with a home brew 2 Metre Converter and a 5 Watts TX to an 8/8 at 25 feet. Later he obtained a 12 Watts FM TX with VFO covering 144-146 MHz, this being all solid state. He is busy building SSB gear for both 144 and 432 MHz. He is interested in QSOs via OSCAR and, as from 19th January 1978 is the Group Controller for the Surrey (Airports) RAYNET Group. Other hobbies include Stamp Collecting and D.I.Y. Don also has a great interest in aircraft and history of the two Great Wars. He would very much like to contact any old Army colleagues on the air.

RSARS 1361 - KEITH ROBERT SELLAR, ZL4LP, P.O. Box 483, Dunedin, New Zealand. Keith served in 1 (NZ) Divisional Signals Regiment from 16th October 1949 until 19th May 1954 reaching the rank of Sergeant, and has previously held the call-signs ZL2ARV and ZL1APJ. He is a member of The New Zealand Association of Radio Transmitters, The Rotary Club of Dunedin and the Dunedin Stock Exchange as his 'Salt Mine' is concerned with stocks and shares. No details of operating times or frequencies but we hope to be hearing from Keith when time and circumstances permit.

RSARS 1362 - ANTON ROY MATTHWS, G3VFB, 13A King Street, Twickenham, Middlesex, TW1 3SD. Anton served from 29th July 1965 until 10th January 1968 and saw service at R.M.A.

WELCOME - Contd.

Sandhurst before being discharged. He passed the RAE in 1963 after 5 years of SWL activity. The Morse Test was conquered in 1965 and the full ticket came along in April 1966. Whilst at Sandhurst, Anton put in quite a bit of work at G5PM which was then the Club station. (Now alas, defunct. - Ed.). After leaving R.M.A. little activity took place until 1976 but since then he has been quite active mainly on 80 rag-chewing and operating with W.A.B. Keen on 'home-brew' equipment he has a lot of it around the shack. Active on 2 Metres, and keen to bump into ex-G5PM types such as G3UPT, G3PNM and David Moir (c/s unknown). Other interests include Photography, Reading and Playing Musical Instruments.

(More details of new members in forthcoming issues. - Ed.).



MORE ON THE B2.

M. PAVELY G3GWD.

(Following John I. Brown's (G3EUR) notes on the B2 in the last issue of 'Mercury' Mike, G3GWD and Ex-VQ4CW, VQ5CW, EI2VCF was prompted to write on his experiences with this piece of equipment. Mikes address is 25 Whitmore Road, Beckenham, Kent.).

I was very interested to read the comments from John I. Brown, G3EUR/0403 in the last 'Mercury' "Here and There" from which I note that he was the original designer of the equipment. Whilst I cannot fill in any of the early history of the B2 I can tell you some of my experiences with this most remarkable piece of gear, but only, of course, from an amateur point of view.

For the benefit of readers the B2 (or Army No.3 set Mk.2) was designed as a TX/RX for use with Special Forces, SOE, etc., and consisted of a separate transmitter and receiver but both built into the same steel case. A separate case comprised the power pack and coils, xtals, 'phones, etc. The TX was an EL32 co driving a 6L6 pa covering the frequency range 3 - 16 MHz with plug-in pa coils. The marvellous little receiver was a 4-tube superhet (7Q7/7R7 loctal-based valves) with a regen IF for BFO but no RF stage. The sensitivity and selectivity of the receiver were incredible for equipment of this type. The B2 operated on both mains or 6V car battery and the pa could be loaded to between 20 & 30 watts CW.

I was fortunate enough to obtain a B2 in 1951 just prior to taking up an appointment in commercial life in East Africa. For the next few years my complete ham station (VQ4CW) consisted of just the B2 and a few pieces of ancillary gear. At this time co-ax was very expensive and difficult to obtain in East Africa so I used a 20 Metre dipole fed with plastic flex. Using this antenna and one crystal 7010 KHz and doubling in the pa to 14020 KHz I managed DXCC in a fairly short time. I also operated the B2 on 3.5 and 7 MHz and during a spell in Uganda I worked W6DFY on 7 MHz CW on several occasions in January 1952 using the same 20 Metre dipole the feeders strapped to form a 'T' antenna for 7 MHz.

One of my first 'G' contacts was with RSARS member Stan, G2DPY. Most of my contacts were from hotel bedrooms with the dipole slung up to the nearest tree. At a later date 'phone was added to the rig plus a VFO driving into the xtal socket. Various forms of modulation were tried including the famous 'Clamp' mod., which proved to be fairly successful on such a QRP rig.

Towards the end of my stay in East Africa the same rig was used as a portable station during the East African Safari (1958) operating from Eldoret and Kitale and it was also used in 1960 operating emergency traffic in connection with the Congo crisis.

As the top end of the frequency range was 16 MHz the xtal oscillator was only designed to operate at a maximum frequency of 8 MHz so that on 14 MHz the pa was acting as a doubler which reduced the efficiency but this made the performance of the rig all the more remarkable!

I still have the B2 in my possession and a few years ago I modified it for operating on Top Band and during a business trip to Eire I operated it on 160 Metres CW under the call-sign EI2VCF for a short time, suitably modified for 10 Watts, of course!. As I mentioned to Dennis (G3ADZ) on the Net this morning I might try and get the rig going again for the Top Band Nets very shortly - if there are no major snags with it after 30 years!!

73 Mike.



## MOBILE SECTION

( )) A communication received recently from the Amateur Radio Mobile Society points out the facilities offered by this Society to those amateurs and SWL's interested in this facet of Amateur Radio. These include 8 copies of "Mobile News" per year, Reciprocal Licensing details, Interference Suppression leaflets, Repeater information, etc. Fees are £2-80p per annum plus 28p "admission" fee. If you would like further details, a sample copy of "Mobile News", etc., drop a line to the Hon. Sec. - Norman Pitch, 40 Bekdale Gardens, Purley, CR1 2EZ.



(With acknowledgements to "Images" published by The Southampton Museum, Hampshire).



## THE OWL REPORTING.

By: Strix Flammea

...That congratulations are in order to Duncan Sutherland, G4DJI, who recently won second Prize at the Maidstone Blind Exhibition for a specialist table in wrought iron.

...Also to non-member Ted John, G3SEJ, Secretary/Treasurer of the RSARS Affiliated St. Dunstan's Amateur Radio Club, on being the first recipient of the G3MOW Trophy by being nominated "Gentleman of the Air, 1978". Congratulations, Ted.

...That a brand-new 'GB' call-sign will be put on the air in July for the Surrey Police "Do". Prefix hunters take note - the call is reported to be GB8SPF. (Yes - GB8).

...That the Guildford Repeater group has been formed with G3OWF as Chairman and with RSARS member Tom, G4CMG, actively engaged.

...That the newly formed Manchester Institute of Science and Technology Radio Society has an address at POST OFFICE BOX 88 - in Sackville Street, Manchester, not Moscow!

...Reading that the Birmingham University Radio Society has "Meetings followed by visits to Real Ale establishments". Now there's an organising Committee for you!

...Hearing that a certain RSARS member with the call-sign G4BNI is not really working from the knave of Canterbury Cathedral. That nice full sounding audio is due entirely to two 4 1/4-inch springs in a reverb unit.

...Seeing an advertisement in the "Radio" section of "Exchange & Mart" for some SUMMER CANP equipment!

..."Reading in a publication entitled "BATTLE" - A History of Conflict on Land, Sea and Air" by Alistair Revie, Thomas Foster and Burton Graham, published by Enigma Books Ltd in the chapter entitled "Zeppelin Raid" the following report dealing with the destruction of Zeppelin LZ-37 during an attempted raid on London. "At 10 p.m. in the small upstairs room of a house on the Norfolk coast an amateur radio enthusiast named Russel Clarke picked up some halting Morse signals on his home-made Short Wave receiver. Clarke, a barrister, adjusted his headphones and fine-tuned the frequency. The dots and dashes went on for a time, then stopped. Then, after a time,

### THE OWL REPORTS - Contd.

there came more - from somewhere closer. He took off his headphones and hurried downstairs to the telephone. He rang the Admiralty and gave them the frequency. Clarke's message was received almost thirty minutes before one from the Navy's own listening station at Hunstanton.....". The date was Sunday the 6th June 1916. It would be interesting to know if any RSARS members have heard of this story or, indeed, remember Mr. Russel Clarke.

...Hearing that G3VSA had a contact at the end of last year with YV5CEP and that his name was Menelaos Vafiadis. Nothing unusual in that? - well, on the back of YV5CEP's QSL card Manny (as the operator is known) writes "My very best 73's to all the boys in Royal Signals. I'm an ex-L/Cpl in Royal Signals during W II when I served in the Middle East with the 8th Army". Anyone remember "Manny" from those days?.

...That, via Johnny, G3EJF, comes a note from non-member Tony Cottee, now a civilian instructor at Catterick, with the answer to the Cap Badge problem in the last edition of 'Mercury'. Tony quotes page 78 of MILITARY BADGE COLLECTING by John Gaylor, Published by Seeley Service & Co., London, 1971 (ISBN 0 85422 015 1) which states "...There are two parts of the HAC, Infantry and Artillery, wearing separate badges.....Oddly enough, for beret wear in training, the Gunners had produced at Regimental Expense the small w/m badge (shown in Plate 39 in the a/m book), the crest from the Arms of the Company, an armoured right arm grasping an ornamental staff. On each side is a wing bearing St. George's cross, all on a heraldic wreath.....". This was confirmed by the Editor during a recent visit to the QTH of G3BID (who served in Royal Signals attached to the HAC during W II) who produced a copy of the Arms of the Company. Further information on cap badges came by way of a letter from George Hare of Leadenham (RSARS 0668). George searched through (and has listed) at least 7 publications dealing with badges, but to no avail. He does mention, however, that there appears to be an error in ARMY BADGES AND INSIGNIA by Guido Rosignoli (Blandford Press, 1972) when it states that 48th (South Midlands) Division did not serve abroad. George relates how he served with 102nd (1 Corps) Provost Company, B.E.F. and landed at Cherbourg on 16th September 1939 at two Division strength - 1st Division (White Triangle) and 2nd Division (Crossed Keys). Later they were joined by a first line Territorial Division, the 48th (South Midlands) Division, sometime in January 1940. George goes on to say that on return from a leave (which was cancelled before he left France!) he found his C.M.P. colleagues wearing a Div. sign consisting of a blue parrot on a red diamond on a blue circular background, and, according to FORMATION BADGES OF WORLD WAR 2 by Lieut.-Col. Howard N. Cole, this was the badge of 48th Div. although it is there described as a blue macaw. So the question remains - Did 48th Div. serve abroad during W II? Old Timers (and others) may like to comment.

...That, after looking at the pictures in the April 14th edition of "REVEILLE", he noticed the article headlined "RADIO HAMS DECLARE AIR WAR". This concerned the deliberate jamming of Repeaters, particularly GB3LO and contained an interview with David Evans, the General Manager of The Radio Society of Great Britain. Generally speaking it was an accurate and well-presented article, but finished with an interview with "an official of the Amateur Radio Exchange in West London"!,(Who? - Ed.).

...Hearing that Mark Sandoz, G3GBS/RSARS 00360 is O i/c the RAIBC Valve Section. Many pieces of equipment used by our blind and handicapped colleagues still use valves and if you have any spare SERVICEABLE valves that you wish to dispose of, why not drop a line to Mark Sandoz, G3GBS, "Edelweiss", Broad Lane, Wood End, Solihull, W. Mids.

...Receiving CARA News from the Cheltenham Club, and "Radial" from RAIBC. Mni Tnx.

...Reading that G3SEK worked K1WHS direct on 2 Metres. G3SEK was using 1 kW i/p to a 16-element Yagi. The QSO was, of course, E-M-E. Congratulations.

...Hearing, via ZL2AM, that G4RS maintained a good signal on 20 Metres in New Zealand throughout the voyage of "Adventure".

## THE OWL REPORTS - Contd.

...That the RSARS till is now much better off, thanks to donations received (as at the beginning of April) from 0011, 0186, 0219, 0358, 0799, 0988, 1071, 1096, 1225 & 1336. Many thanks indeed.

...That the Editor thought he was saying "Too Whit Too Whoo" whereas he was actually saying "You Twit You" - for leaving out the name for G4FHG. Apologies - it's E. Oldaker.



## P.O.W. RADIO.

(Much has been written about POW conditions in both Europe and the Far East and, doubtless, much remains to be recorded. The need to know how the War was progressing was uppermost in most POW's minds and, as 'Welfare' nets were unheard of in such establishments, there was only one answer - build a set. For those members who, perhaps fortunately, were not around during WWII, the following article may help them to appreciate the immense difficulties, which were overcome by dedicated prisoners. - Ed.).

The first article is reproduced, with acknowledgements, from the Official Programme of the National Conference of the Prisoner of War Association at Blackpool, 1956.

.....It was not long before the wireless technicians got going, and several large sets were built in Changi. In April 1942, a party of men were sent to the other side of the island to the naval barracks called Kranji. On arrival they found that the place had not been touched since the capitulation. After a recce, it was found that the electric light could be made to work all over the camp with very little trouble, and, as the Japs were very interested in getting electric lights for their own quarters, permission was given for our electricians to explore the whole system and put it in order. On entering the transformer room they found to their surprise another door leading into a smaller room, and it didn't take them long to realise what was inside. Stocked on shelves around the walls were every different kind of radio valve from the smallest to the largest. The possibilities of this find were appreciated at once and the valves were hidden until such times, as they were required. Eventually a message was sent back to Changi that the valves were ready for making wireless sets! did they want them? Yes!, was the answer, and ways and means had to be found to transport them the 22 miles across the island of Singapore to Changi.

The POW's were marched out every morning to Bukit Timah Hill where they were building a shrine to the men of both armies who had died during the campaign. At the bottom of the hill the Ford Motor Works were situated, and it was reported that large drums of petroleum jelly were lying about. If one was of any use for cooking they would bring it in. The jelly would also be useful for ointments back in Changi Hospital, and the 50-gallon drum was duly put on one of the trucks and dumped off in the Camp. It was quickly realised that the valves could be placed in containers of the jelly and sent back to Changi. They were duly notified and the valves reached their destination safely.

The building of the sets commenced immediately, and from then on, every party of men that left Changi was supplied with an officer-type water bottle, incorporating a miniature wireless set built into the bottom half. These sets were to be operated by the small 1½ Volts batteries, which could be obtained by various ways and means, such as theft from the Japanese or purchased through the Canteen Officer for torches, but never used as such. For the next three years the Cloak and Dagger Brigade operated these sets and selected officers gave out the news about a fortnight late, in case some misguided individual passed it to the wrong quarter.

When the Camps started to leap-frog up the railway there were in one Camp as many as six sets all fully operational. Gradually the supply of batteries up country dwindled and sets were forced to go off the air through lack of power. But the Changi set and one or two others, about one in each group, maintained the service. The Kempati tumbled to the fact that we were getting information, and they thought it was from "The Bangkok Chronicle". Firm in this belief, they instituted a Camp

P.O.W. RADIO - Contd.

search without letting the Jap guards know their intention, and their amazement at finding a wireless set quickly changed to anger. In their rage three members of the Camp were beaten to death by the Kempetai.

The news spread quickly and the sets were hidden just in time to beat the searchers. After a time operations started again, but more care was taken. One listener who was under his blanket receiving the latest news was horrified to hear a Japanese Guard asking what was the matter with him. The quiet reply was "malaria", whereupon the listener shivered realistically and the guard passed on.

When the officers were all moved to Kanchanaburi Camp, - the problem of moving the wireless and batteries seemed insurmountable, as a search was made on leaving the camp and on arrival at the new camp. After deep thought, the set from Changi was selected to be moved. A special stool was made, with hollow legs, and lined with rubber, for carrying the valves. The set was completely dismantled and brought in, in the outside of one-gallon thermos flasks, and managed to evade the eagle eyes of the Japs.

The batteries were a different matter altogether, as there were about 300 1½ Volts separate cells and were too bulky to hide anywhere. Fortunately the Japs played into our hands. They decided that the River Bridge Camp should be dismantled, and that the bamboo should be brought to the Kanchanaburi camp to build the new huts required by the officers. A party of officers was very quickly assembled and taken to the Bridge Camp to start dismantling the huts. During the day, liaison was managed between the officer concerned who had come over from Chunkai about half a mile away, to visit the sick!!! He of course was accompanied by the usual Korean Guard. The batteries were placed in the bottom of a pack covered with fruit, etc., and brought from Chunkai to the Bridge Camp under guard, all salutes given and taken in a smart soldier-like manner. The batteries were secreted away, and during the same night the bamboo poles left for transfer the next day were filled with all the batteries and marked. The next day the official party arrived and the officer i/c of the party who was the only one of the detail in the know, duly packed the bamboo poles in the bottom of the truck, and they were sent off to the officers camp, with all due haste, under the Jap guard, the officer concerned, making the excuse that he had forgotten his mess tin, to be sure that there was no slip up. Everything went according to plan and the batteries were delivered daily until all were safely inside the new officers' camp.

Some considerable time elapsed before the set was put together, but eventually the news was given out by the Cloak and Dagger Boys again. This time the whole thing was built into the structure of the clay oven in the cookhouse as "smoothers of the clay oven". When the officers were marched across country to the other side of Bangkok the wireless went as well. This time, unknown to the Japs, it was secreted in the Japanese Commandant's baggage, with the music instruments he had confiscated from us, and duly arrived intact. No batteries were taken on this trip; we were to bring them later. The set had just been put together when the atom bomb hit Japan, and one of the first things that our old captors were asked for was batteries to run the wireless set. The Japanese officers refused to believe that this had happened, but nevertheless the batteries were produced, and we heard for the first time that Mr Atlee was Prime Minister and that atom bombs had been dropped on the Japanese cities.



OVERSEAS TOURS.

The OWL reports that RSARS member, Geoffrey Cole, G4EMN, has been operating as G4EMN/P/W6, and that he quite enjoyed the trip, including seeing the W6AM Antenna Farm - 24 acres for 18 rhombics arranged so that, by switching, he can cover the World. Lots of QRM on 20 over there, but also plenty of repeaters.

(Tnx, WARG Newsletter).

SHEEPSKIN DEPARTMENT.

The "RADIO CLUB DOMINICANO INC." will issue The "HI AWARD" to all SWLs and licensed amateur radio stations who can prove contacts with Dominican stations in accordance with the rules below.

All authorised amateur bands may be used and contacts may be made with AM, SSB, CW, SSTV, RTTY or OSCAR modes.

Non-Dominican stations should submit a certified list of QSL cards in the possession of the applicant. This list must show; Station Contacted, Date, Time (GMT), Frequency and Mode. (There is nothing to say that this list must be certified by a Club, Society or other Radio Amateurs. - Ed.).

All QSO's from January 1st 1962 are valid.

The Award is permanent (? - Ed.) and will be issued in the following classes :-

HI-5 = QSOs confirmed with 5 HI stations.

HI-25 = QSO's confirmed with 25 HI stations.

HI-50 = QSO's confirmed with 50 HI stations.

HI-75 = QSO's confirmed with 75 Hi stations.

Hi-100 = QSO's confirmed with 100 Hi stations.

CLASS 5 CERTIFICATE CAN ONLY BE OBTAINED BY STATIONS FROM ASIA AND OCENIA.

Applications together with 7 IRC's should be sent to :-

AWARDS MANAGER, ERNESTO DESANGLES, HI8HDS, P.O. BO No. 1157, SANTO DOMINGO, DOMINICAN REPUBLIC.

(Your Editor would very much like to hear the first RSARS member to make HI-100!!)



OLD TIMERS SECTION.

(The notes by G6LV in the last issue of 'Mercury' prompted several members to "drop a line" to the Editor, and these are most welcome. Extracts are given below. - Ed.)

From : Evan, G5YN.

"I was very interested to read G6LV's notes on The Old Timer's page in the March 1978 issue of 'Mercury' particularly as I knew the late Claude Willcox, G2FL, well in the old days. He was an old friend of my father's, was the owner of the Warminster Motor Company, and lived at 21 George Street. Warminster, Wiltshire.

He started experimenting before licenses were even thought of using an old X-Ray Spark Coil as a transmitter on 1000 Metres. It had been passed on to him by his father who was a doctor. He was first issued with the call-sign WUX and later 2FL.

Having built my first "1-V-0" broadcast receiver in 1923 when I lived at Winchester, I used to listen to Claude on 440 Metres outside broadcasting hours. Later I persuaded my receiver to operate on 180 Metres by pruning the coils and listened to Claude on that wavelength, when amateurs were no longer allowed to use 440 Metres.

In 1927 I built my first transmitter, a "loose-coupled Hartley" self-excited oscillator and was granted my licence in the autumn of that year.

In 1928 my parents moved to Warminster where I frequently spent the evenings with Claude at his station which was situated in his garage office building. He took me to visit two other Old Timers, long since Silent Keys, G2CV Commander B. Hippisley of Ston Easton Park, and. G2BI, Lieut.-Col. W.L. Palmer of Elm Field, Calne.

Claude regularly broadcast "The Crockerton Band" (Crockerton is a neighbouring village). When a reporter of the local Warminster Journal asked him if it really was a band, he took him to his station where some music stands were in evidence and left him to draw his own conclusions Happy Days!.

G5YN

OLD TIMERS SECTION - Contd.

From : Brownie, G2BQ.

"With reference to the Old Timers Page in the latest issue.

G5FL, of Warminster was Claud Wilcox. Evan, G5YN, knew him well, as he lived in Warminster for a time, and I met him once or twice when visiting Evan. I remember he had an early moving coil loudspeaker mounted in a hole in a wooden wall in one of his rooms, and this gave very good quality reproduction because the wall made an almost infinite baffle.

0-V-1 means a receiver with no HF stage, a detector and one LF stage (a 1-V-1 would mean one with a HF stage). Reaction was used to bring the leaky-grid detector nearly to the point of oscillation, where it was not sensitive and selective, for reception of A3 speech or music, or just into oscillation for the reception of A1. The degree of reaction was controlled by moving the "reaction coil" relative to the grid coil, or alternatively, by means of a variable capacitor in the feedback path.

Scott~Taggart was a well-known designer, perhaps best known for the invention of reflex circuits; I think that basically the first valve of a two valve receiver was used for HF amplification, and the output of the second valve, the detector, was fed back into the grid of the first valve, which thus amplified both HF and LF, a well-worthwhile economy in those days of the R valve.

Goyder (not Guyder) was the first 'G' to make two-way contact with New Zealand., which he did while still a boy at Mill Hill School. (Refer to "The World at their Fingertips" by G6CL). The Goyder Lock was a means of stabilising a relatively high-power oscillator from a stable low-power oscillator, thus saving amplification stages; the low-power oscillator was coupled to the high-power one which was supposed to lock on, rather as one does with a multi-vibrator. I tried this once but could not get it to work. I met Goyder in India shortly after the 39/45 War; he was then Chief Engineer of All India Radio.

Bright emitter valves had a "filament" of tungsten which emitted electrons when heated, thus also acting as the cathode of the valve; they were very inefficient compared with the dull emitter valves which superseded them; dull emitter had the tungsten filament coated with barium oxide or other "rare earths" which emitted electrons when the filament was barely glowing.

Three-letter calls were issued with "Artificial Aerial" licenses. (See "The Birth and. Early Life of a Ham" by VU2BC - that's me - in a previous issue of 'Mercury'.) After the 39/45 War the P.O. told all pre-war artificial aerial license holders that they could have full licenses without more ado, or so I have been told, and the letter 'G' was put in front of the call-sign. Thus 2ABC became G2ABC. Why artificial aerial licence holders required call-signs I do not know, unless the P.O. thought that some might be naughty and radiate a signal from their one square foot coil and 10 Watts.

I could probably go on like this for a long time, and so could many others no doubt, but I will refrain. I think that I have answered all the points raised."

G2BQ.

From : John, G2YS.

"G6LV's note in the 3/78 issue of 'Mercury' prompts me to comment on Goyder Lock.

The name was not Guyder : Cecil Goyder 2SZ was a boy at Mill Hill School when he made the first contact on the HF bands with New Zealand.

The "Goyder Lock" system worked on the principle that two generators coupled together tend to keep in step, so a low power crystal oscillator could be used to "lock" a relatively high powered oscillator of the tuned anode - tuned grid type and give it a T9 note - unless, of course, it happened to slip out of lock!!.

G5ML's license is no longer active, but before the last War he was one of a handful of stations licensed to run 500 Watts. His record for WAC on phone was just over 3 minutes, which was no small achievement in the days of poorer receivers and relatively slow operating techniques; as far as I know this record has never been beaten"

G2YS

FT-221 AND FT-221-R MODIFICATIONS.

By Tim Harrowell G3IMI.

Conversion to European Repeater Standards.

The FT-221 was designed for areas using the U.S.A. method for repeaters - repeater input 600 KHz UP from the output frequency, whereas in Europe the repeater input is 600 KHz DOWN from the output frequency. "When using the FT-221 in Europe it has been necessary to work by switching to the 145.0 MHz band and using the 'Reverse' switch. This does not apply to the FT-221-R in which the switching is normal.

Users of the earlier model can modify to the normal quite easily, the cost being only for an additional crystal at 14.0222 MHz.

The modification is as follows : Remove outer case (12 screws)- Locate the Band switch. The wafers, are lettered A - D with D nearest the front panel. Connect terminal 4 of wafer C to terminal 3 of wafer D. Locate the wire from pin 30 of J13 (Local Unit) and move it from terminal 5 to terminal 4 (both on wafer B). Fit new crystal in socket X209.

To align the new crystal : Switch Range Switch to 145.5 MHz. Mark Switch to 'ON' VFO dial to 145.8 MHz. Tune for zero beat with the 'Mark' signal. DO NOT DISTURB THIS SETTING. Switch to 'Repeater'. Switch to 'Reverse'. Adjust TC209 to zero beat (This provides the 600 KHz shift).

You now have normal repeater switching and the previous system is still operative.

.....

The following modifications apply to both the FT-221 and the FT-221-R.

Single Pressure automatic Tone Burst.

Connect a small disc ceramic capacitor, 0.1µfd, from pin 15 of QO4 to pin 6 of QO3 (see Fig. 22 in Handbook for location). This capacitor is most easily fitted on the soldered side of the board.

Microphone.

You may find an improvement in outgoing audio if a capacitor of 0.05µfd is fitted inside the microphone, in series with the voice coil. This removes part of the base content.

Additional RF Stage.

The receiver can be greatly improved by the inclusion of a low-noise, high-gain pre-amplifier. There is room under the chassis, adjacent to the antenna relay, and a 13.8 Volts positive supply is available at pin 18 of J20 (SSB IF Board).

(Txn, Tim. Similar modification details on any amateur radio equipment are always welcome. Layout is not important - clarity and completeness is. - Ed.).



THE OWL REPORTS.

That if you want to work a genuine Chelsea Pensioner, look around for G3GXW, who is an In-pensioner at The Royal Hospital. He has been heard through GB3LO.

That if you want to keep a check on those RSARS contacts (or any others for that matter) why not purchase some RSARS Index Cards from the Stores Dept. They have room for just about all the information you need to record, are 5" x 3" and 100 will only cost you a Pound, and that includes postage and everything. You could do the Society a favour by taking a sample to your local Club and collecting a few orders!!. (P.S. if you buy 1000 each one will only cost you 0.7 Pence each).

DID YOU KNOW?



By THE OWL

The Military use of SHF and TV is not new. During World War II the German Services worked on the MAXIMILLIAN equipment where the 'A' version operated on 7,100 Mhz/Mcs with the 'B' version higher still on 10,000 Mhz/Mcs. The WINDHUND equipment, operated in the 3cm band. Both were Radar Homing Devices. The SEEDORF equipment, which was a Television Receiver for use with Glide Bombs utilised a 2¼ x 3¼, screen and provided a picture composed of 224 lines.

## A "SURE-FIRE" REPEATER ACCESS TONE GENERATOR.

G2AIH/1158.

(In response to the request for articles for "Mercury". Norman Hyde. G2AIH/RSARS 1158, sent along the following details of a tone generator which he hopes will be of interest to other members. If you have constructed any useful little item in the past why not follow Norman's example and send it along to "Mercury". He would also like to hear from any member who constructs this item. - Ed.)

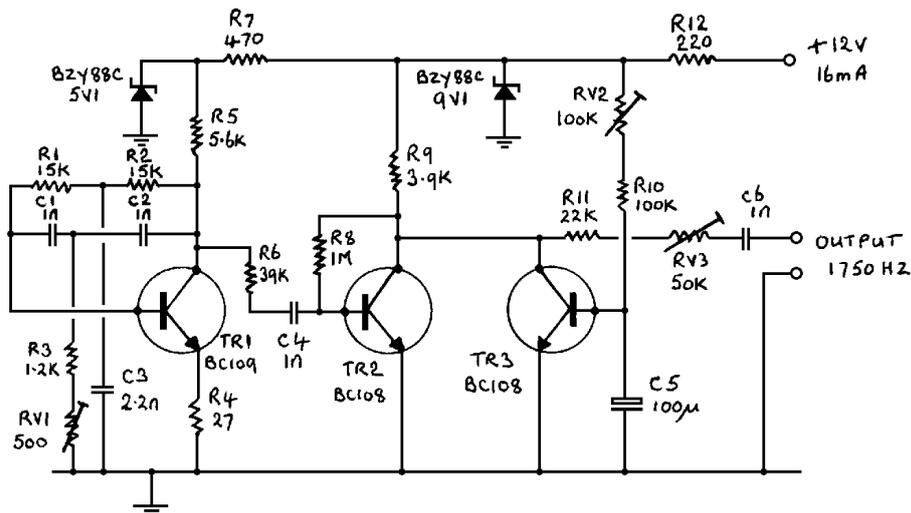
One of the problems concerning many users of my local 2-Metre repeater. GB3SN appears to be "Am I accessing correctly - lets take a K". This applied to me, and after building several tone-burst generators using various i.c's in multivibrator circuits (which accessed the repeater only when they wanted too) I decided that something must be done about it.

This "something" is the 3-transistor circuit shown. TR1 is a low-level parallel-T oscillator, employing high-grade components in the frequency-determining circuit, preferably metal-film resistors and either polyester or polystyrene capacitors. The frequency is set by RV1, which in my version is a Trimpot, although a Cermet pre-set would be equally suitable. RV1 can, with advantage, be reduced in value to, say, 100 Ohms, to give a finer control if R3 is increased appropriately.

TR2 is a buffer amplifier to isolate the oscillator from the following circuitry. The shunt resistor TR3, in conjunction with C5, R10 and RV2 control the tone-burst duration. When power is initially applied C5 is discharged, the base of TR3 is consequently at earth potential and the transistor, being cut-off, has no effect on the operation of the circuit. C5 then commences to charge through R10 and RV2 until TR3 base rises to approximately 0.65V, when the transistor switches on and effectively short-circuits the output. Tone burst length is controlled by RV2. Continuous tone for setting-up is made available by short-circuiting C5. RV3 sets the output level, R11 being included to avoid any shunting effect by TR3 on speech should RV3 be set to a low value.

Before being put into service I checked the tone frequency with a Yaesu YC355D counter, which indicated 1750 Hz immediately on switch.-on, and remained at this frequency over a period of several hours, with occasional flips up to 1751 Hz and back again. The generator is insensitive to supply voltage variations and temperature increases (from 66°F ambient up to 95°F).

Since fitting this tone-burst generator into my home-brew 2-Metre rig, my problems concerning repeater access have completely disappeared.





DEAR SIR ... (Contd.).

Douglas Carson, RSARS 1316, writes from McNab House, Dollar, Clacks., Scotland to say that he will be leaving School this year and proceeding to University, hopefully on an Army Cadetship. Douglas intends to join the University OTC and Royal Signals on completion of his University chores. (We wish you every success, Douglas, and look forward to seeing you as a serving member on the RSARS Stand at some future event. - Ed.).

From that part of Dorset which, not too long ago, was Hampshire, Peter Heaton writes to square up his subs and mention that he retired from The Signals Research and Development Establishment in April 1977 after 32 years employment there. Prior to that Peter was in the Corps from 1933 until 1945 - a total of 44 years work with the Corps. Peter writes from 17 Bracken Way, Christchurch, Dorset, BH23 5LW. (Congratulations, OM, and here's to the next 44 years with RSARS - Ed.).

G4BWS, Arthur S. Edwards, writing from 44 Renton Drive, St. Mary Cray, Kent, also tenders his resignation from RSARS. Arthur mentions that he has no RSARS QSL cards outstanding and wishes all members the best for the future. (Sorry to see you go, Arthur, but best wishes to you also. - Ed.)

The next two letters in the file both come from RSARS members, both come from Overseas, and both come from members named Worrall!. The first comes from John, serving in Germany as Captain J. T. Worrall DA2AH, L Troop, 21 Signal Regiment, BFPO 43. John sends along his subs and writes ".....My call-sign DL2AH has been taken off me and DA2AH allocated. Seemingly, I was messing up the computer being one of the last Brits with a DL2 call-sign.

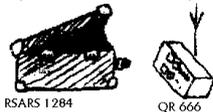
I have a 14AVQ antenna now and am active on 10 and 15 Metres and hoping to meet members when possible..." (John also mentions that RSARS Records had his address wrong, so, if you are writing to John, please note change of Call-sign AND BFPO number. - Ed.),

The second letter comes from a little further afield, from K. Worrall, C/o Police HQ, Fire Service, Box 920, Doha, Qatar, Arabian Gulf. Keith also sends along his sub and mentions that by the time we read this he should be back in the UK. His address will then be 37, Altham Grove, Harlow, Essex, CM20 2PQ. (Welcome home, Keith - Ed.).

RSARS 1210, otherwise S.V. Gerrard writes from 133 Park Street, Haydock, St. Helen's, Merseyside, WA11 0BL to send along his sub and to say that, owing to Salt Mine hours he was unable to complete his RAE Course but hopes to have another go in the near future, He writes "I am sorry to say that I am only an SWL....." (Never apologise for being just an SWL, OM, remember that even the most active licensed amateur is an SWL for approximately half his time on the air!. We wish you well with the Course and look forward to adding your call-sign to the RSARS List. - Ed.)

From NATO HQ in BFPO 49 comes a letter from Basil Complin, G4CHT and better known to many as the RSARS Liaison Officer when he was at The School of Signals at Blandford. Basil writes to say that he is now ON8IS and that he has been active for some months using an HW-8 with 2 Watts to a 20 Metre End-Fed antenna slung between two large buildings in Brussels, He has been successful up to about 1500 km on CW, although the End-Fed pattern does not seem to favour the UK. (Nice to hear from you. Basil, and perhaps that ON8IS-UK "First" will not be too long in coming. - Ed.).

24018509 is the number, Sgt. Buxton F is the member, the address is LAD REME, 29 Commando, Royal Citadel, Plymouth, Devon and the RSARS No. is 1284. All this information heads a letter to the



Society together with up-to-date subs and a small sketch (see left). 1284 writes ".....I have been living out of a suitcase since we returned from fire-fighting, the builders are in our accommodation and I can find nothing in the chaos that was my cabin!. Things are a trifle hectic here at the moment....." (Hope things soon

improve, OM, and you can get some serious listening done on that QR-666. - Ed.) "

DEAR SIR ... (Contd.).

Standing next to the Editor on RSARS Parade, is Ron Shelley, RSARS 0091 (0090, 0091 Get it?. No? Oh Well! Never mind) who writes from a new QTH at 1 Meadlands, Appletree Village, York, YO3 0NU to say what a good investment he thinks his Life Membership was some years ago, plus a few nice compliments about 'Mercury'. He admits to little activity over the last few years but hopes to get back on the air at the new QTH as soon as the host of "new QTH" chores are completed. His fingers are permanently crossed as the new QTH is at the bottom of a hill whereas the old QTH was at the top!. Ron hopes to be at the AGM in June and looks forward to meeting members there.

(Looking at Ron's Postal Code it becomes apparent that if Des Barry could move to Glasgow, and the politicians would move Glasgow into England, Des could have his call-sign as his Postal Code - P1954.). (Sorry about that, readers, I don't know how he got in here, but the statement is the product of an idle mind and a misspent youth. - Ed.).

An interesting letter comes from WA6CEB, otherwise G3XSP or RSARS 0557, known to many as JOHN F. NEVILLE, of P.O. BOX 1698, ALTADENA, CALIFORNIA, 91001, U.S.A.. John reports that he has accepted early retirement from the Lockheed Aircraft Corporation in Feb. last year, and since doing so has been on a holiday/vacation to VK and ZL where he was on the air as VK4AFN and ZL1BAY. Didn't bump into any RSARS types unfortunately. The story of the 80 Metre report to G3WNI from WA1VHX reminded John of his weekly 80 Metre skeds maintained with ZL1BKD in the Bay of Islands on 3.805 MHz SSB around 1300 hours GMT. John also reports hearing 40 Stateside stations on 80 Metres whilst staying with Colin, (ZL1BKD). This was between 1300 and 1400 GMT. Plans had been considered for getting to this years AGM, but a letter on the mat on return from holiday changed that. It was a notice to report to the Los Angeles Superior Court for a one months tour of duty as a juror!! WA6CEB is still a regular check-in on the Ex-G Net (Sundays, 14.346 MHz, 1900 GMT) and he is looking for RSARS members. (Thanks, John, For the letter and the generous donation to funds enclosed. Will be happy to pass your 73 to all members especially at the AGM. - Ed.)



QSYs

Bob Norcross, until recently VS6AF, is now back in Western Australia and licensed as VK6WO. His address is 36 Camberwarra Drive, Craigie, Western Australia, 6025, and his Service address is Sgt. R. Norcross, 3 TELU, RAAF Pearce, Western Australia, 6085. Bob was Royal Signals from 1956 until 1964 and has been RAAF since 1966.

Gordon Whitehead, G3YGW is at a new QTH, which is 11 Burswin Road, Carterton, Oxon. He mentions that he appreciates the difficulties in getting "Mercury" to members, as he has, in the past, had to edit, print, collate, staple, stamp and post the RAFARS QRV.

Major Keith Worrall, G3LIT/RSARS 1203 is now back from Police Headquarters Fire Service, P.O. Box 920, Doha, Qatar, Arabian Gulf and can now be found at 37 Altham Grove, Harlow, Essex, CM20 2PQ. (Tel. (0279) 20648). Gordon sent along his C. of A. in both English and Arabic, which tells us that the move was actually made on 22-4-78 (or 15-5-1398 if you want it in Arabic). Welcome home, Keith.

It appears there was a ZFU regarding the moves of VK6PG and VK6JR. To straighten it all out Alan, VK6PG is at 12 Munyard Way, Morley, 6062, Western Australia, and Sean Ryan, VK6JR is at 1 Frimley Place, Morley, 6062, Western Australia. Alan is RSARS 0843 and Sean RSARS 0575. Alan, VK6PG, is still willing to arrange a sked for any member needing a VK6 contact if you drop him a line (check the address first, though!)

Do you know the present location of G3TNU (He is NOT QTHR)? If so please pass the info to John Randall, G3OAZ/RSARS 0021, 243 Paddock Road, Basingstoke, Hants. Tnx.





I spend a lot of time "earwiggling" around the bands and what strikes me most is the amount of time it takes to say 'good-bye!'. To some extent I can understand the use of a "standard QSO" when working a foreign station who is non-English speaking; it's hardly likely that many of us could conduct an intelligent conversation in Mandarin for example..... But is it really necessary when working another English speaking station? It would seem to me that few pause to consider what they really mean when they say "73, 73, best wishes and vy 73's" not just once, but several times at the end of a QSO. Would many of us be offended with a simple "TU"? Perhaps one day we'll have a code number which means "Goodbye with all the trimmings"...

#### WHAT SPEED?

A basic "word" in Morse Code consists of 50 elements, an element being a dot period. The common test word is "PARIS" followed by the inter-word space of seven dots length. For example, 'p' is 11 elements, 'A' is 5. Together, and including the 3 element space between them they total 19 - and so on. Thus, if you send PARIS 5 times in 15 seconds, your speed is 20 wpm.

#### WEIGHTING.

This is the name given to the ratio of a dot to the inter-element spacing, nominally one dot. If an "unweighted" stream of dots is generated the time interval between the dots should equal one dot period for a "dot-space ratio" of unity. There is a limited range of speeds where such a ratio is ideal. Fortunately, this range lies in the band of speeds from about 18 - 26 wpm. At speeds slower than 18 wpm it is often easier to both send and receive code if the ratio is made "heavier", that is, the dot period made greater than the space following it. Similarly, at speeds greater than 26 wpm a "light" ratio, or clipped dots, is desirable. Clipping can be advantageous under noisy band conditions even at the slower speeds; the more precise nature of the code often makes it cleaner and easier to copy.

Experiments have shown that three distinct dot to space ratios form a good compromise over the entire speed range of 10 - 50 wpm :-

Heavy	- 9 : 7 - Speeds up to 18 wpm
Normal	- 1 : 1 - Speeds from 18 to 28 wpm
Light	- 7 : 9 - Speeds above 28 wpm or noisy band conditions.

(Note that the dash to space ratio is less affected by weighting, being 3 : 1 for Normal, 25 : 7 for Heavy and 25 : 9 for Light weighting).

Electronic keyers designed with a continuously variable ratio control suffer two main drawbacks. Firstly, this control is almost the most misused control in the shack - second only to the microphone gain control....

Unless the proper ratio is set up by measurement the results are often poor. Secondly, the ratio varies with the speed setting of the keyer - invariably in the wrong direction. The faster the speed, the heavier becomes the ratio. Clearly, the best average ratio is unity - thus a fixed ratio keyer gives good average results. But the complete answer lies in a digitally derived ratio control where the optimum ratio can be set up with a three position switch and be exact every time. Details of a keyer using this principle will be included in a future "Key-tronics".

If you have an SWR Bridge, keyer weighting can be checked or set up quite easily. Transmit a constant stream of dashes (into a dummy load, PLEASE) and adjust the SWR Meter to read a number divisible by 5, i.e. 90 if the meter is calibrated 0 - 100. The keyer speed should be adjusted to give a fairly constant reading. Now change to dots. The meter should fall to a reading  $\frac{2}{3}$  of the original - 60 in this example for unity ratio. Readings below this value indicate light or clipped keying, readings greater indicate heavier keying.

#### MORSE KEYBOARDS.

These are devices which have the appearance of a portable typewriter and generate a complete character in Morse Code when a key is tapped. All characters, including barred ones like  $\overline{A}$  and

KEY-TRONICS - Part II - Contd.

BT are available on a single case, 4-bank, set of keys, and are self-completing; a simple tap of the key is sufficient to generate the complete character plus an inter-character space (dash length) at the end. On the simpler machines the typing speed has to be geared up to the code output. On other, more complex boards it is possible to type into the machine faster than the output is being used, the input characters being stored and presented to the output at the proper time and in the correct sequence. This is called "buffering".

NON-BUFFERED KEYBOARDS.

Of necessity, typing on the simpler keyboard calls for a rather special technique. If, say, the 'J' key is pressed the length of this character leaves ample time to press the next key before the 'J' is completed, thus making full use of the automatic inter-character spacing mentioned earlier. On the other hand, a character like 'E' calls for a much faster jump to the next key. The net result is that the manipulation of the keys is jerky, rather than the rhythmic flow normally associated with touch-typing. It is difficult to use the space-bar on an un-buffered keyboard due to there being no sound emitted when it is pressed and generally the simpler boards omit this facility, leaving the inter-word spacing to the judgement of the operator.

BUFFERED KEYBOARDS.

At first sight these seem to be the complete answer to sending perfect code; in practice there are problems. Using a modern integrated circuit miracle called a FIEO (First In First Out), the operator can type faster than the speed at which the Morse code is being sent each FIFO can store 32 characters - they can be stacked to give as many characters as required. They cost about £12 each. A common feature of machines using buffered inputs is some sort of indication as to how much of the store is full - it might be a meter calibrated "EMPTY" to "FULL", or a series of light-emitting diodes. As the FIFO empties, it can be topped up. So what is the snag?

The big problem is typing 'blind'. It is extremely difficult to type one thing and, at the same time, to monitor the output which is something you said earlier.....Typing 'blind', one tends to lose 'contact'; just sitting hitting a set of keys takes the personal feel from a QSO. And it takes considerably more skill to type with no monitoring facility - try typing a letter sometime without looking at what you have written!. This objection to the FIFO could be overcome with some sort of visual display unit (VDU), but unbuffered keyboards are easy to use and don't require this added complication.

What does it cost to build a keyboard?. The biggest item is a set of keys. The best sort, are ex-computer terminal boards which appear on the surplus market from time to time. Most of these have switches, which are small reeds activated by a tiny magnet when a key is pressed. Other common key-sets available are active units, which require a 5 Volts supply to operate. (These use a principle called 'Hall Effect'. Inside each switch is a tiny integrated circuit. When a key is pressed a small magnet covers the integrated circuit and a voltage is generated within the circuit due to the presence of the magnet. Unlike the normal voltages generated by a magnet, the voltage remains in the presence of the magnet, even when the magnet is stationary. (This is the Hall Effect). Prices can vary from as little as £5 to as much as £65. The electronics side of a keyboard consists of some 10 common integrated circuits and a 5 Volts PSU. If a buffered unit is considered the main extra cost is that of the FIFO, and a -12 Volts supply is also necessary.

Whatever the type of keyboard, to get the best results and the most pleasure from its use the added skill of 'touch-typing' must be learned. By far the best way is to learn to type on an ordinary typewriter first, either by using a do-it-yourself course from one of the many (cheap) books available, or by joining the girls at night school..... But once you have used a Morse keyboard you'll never want to return to the el-bug!.

To be continued.



HEADQUARTER STATION MANAGER'S AND LIBRARIAN'S REPORT.

G4EMX

As you will all know the move of the HQ Station from Blandford has happened, and the new home of G4RS is situated in an old wooden hut in Messines Lines, Vimy Barracks, Catterick. It is very near the building used by G3CIO for the past five or six years.

Thanks to the persuasive manner of Ray, G3EKL, the HQ Building has been split into three rooms and suitable facilities, such as plenty of power sockets via a separate station isolation switch, a plumbed-in "Brew Dept" and numerous "goodies", by way of furnishing and fittings have "appeared". I thought I was well up the "Scroungers Ladder" but I am beginning to appreciate the finer points!.

The three rooms will offer a general storeroom (where all the more interesting bits and pieces can be hidden from prying eyes!), the shack, and a workbench area cum coffee room, lounge and general natter area. It is hoped to offer the following facilities from the shack - SSB/CW from Top Band to Ten with ropey AM if needed; RTTY from Eighty to Ten, at 45 Bauds and possibly Slow-Scan when the expertise can be mastered. On VHF, SSB/AM/CW, on Two and Four Metres. We hope to start Slow Morse transmissions again on Top Band for the benefit of any SWL listeners in the area. A lot of effort has gone into getting and erecting a 60' Versatower, It's up and carrying a three element beam for Twenty Fifteen and Ten together with beams for Two and Four Metres, so that you can see the HQ Station is slowly getting on it's feet again. In the meantime, G4RS has been frequently aired on the HF Bands as well as being used in the RSGB VHF CW contest and the Low Power NFD session.

Club nights are each Tuesday commencing around 1900 hours Clock Time, but if you are visiting other than on a Tuesday please give Ray, G3EKL, a ring on the landline so that arrangements can be made for someone to open up for you. Should any member require a sked of any sort from G4RS/G3CIO please drop me a line or give me a shout on the air and I'll be glad to oblige.

The HQ Lending Library has not yet got off the ground in time to meet this "Mercury" deadline, but a list of books, etc., available for loan will be included in the November edition. It is very much the same as the last one published from Blandford. If you have any books, pamphlets, diagrams, etc., don't dump them in the dustbin, dump them with G4EMX - Ed.).

73 Kit, G4EMX. (Main prop to G3EKL - and what a prop!!.)

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GLIDER PILOT REGIMENT.

Further to the mention of the Glider Pilot Regiment in the last issue of "Merc." M.J. Stepney, GM4BAF/0907 writes to say that he transferred from Royal Signals in 1946 and completed his initial training at RAF Shellingford. This was followed by conversion at Croughton and Brize Norton. Later Mick became a Fireman after demob., but still managed to get some flying hours in, mainly in Chipmunks. He remembers Catterick from his recruit training days, way back in 1937. Interested in construction, he is making the "Mercury" Frequency Standard (G3ONU design). (Mine worked first time, OM. one of the few things I have built that did!! - Ed.).

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RSGB 144 MHz CW CONTEST.

G3EKL.

The HQ call-sign, G4RS, was used during the Two Metre CW Contest in late April and quite a few Society members were worked.

The Portable QTH was about 950' a.s.l. on Hauxwell Moor, south of Catterick Garrison. The station comprised a four-element Yagi about 15' high fed by an IC-202 running at about three Watts input. Both items belonged to member No.120, G3JZP.

Many thanks, Johnny and Jean for your support of the HQ station - much appreciated.

Ray, G3EKL

A little more to report this edition.

G4RS has been aired in the RSGB Two Metre CW Contest and will be operative again for the Low Power Field Day event, courtesy G3EJF.

On the Society Contests front, the 5-59 Contest results are shown below, with G3NVK and G3UAA carving it up between them.

<u>Call-sign</u>	<u>Section 1</u>		<u>Section 2</u>			
	<u>Section 3</u>		<u>Section 4</u>		<u>Bonus</u>	
	<u>TOTAL</u>					
G3NVK	27	21	31	17	95	191
G3UAA	27	23	26	18	85	179
G3PJB	24	15	23	11	70	143
G3WNI	19	14	28	12	60	133
G3TKX	15	16	15	15	60	121
G3NOB	16	9	26	10	55	116
G3LHJ	25	14	27	--	35	101

From the above, it can be seen that Dick, G3NVK, was the overall winner whilst his arch-competitor, Alf, G3UAA, gained both the Fone and CW Section prizes. There was more interest this season than previously and the scores are quite a bit higher. Regrettably, Derrick, G3LHJ, was "called out" during the second leg and was unable to start until 1456z, whilst he missed out completely on the fourth leg - hard luck, Derrick, I suspect that you could have caused both Dick and Alf a little worry had you not been "on duty"; better luck next season!. G3NVK was using a KW2000B during each leg, with a KW600 Linear during the Fone sections. His antenna systems were an 80 Metre Looped Dipole and a 1/2-size G5RV for 40 Metres. G3UAA, not so well blessed with space, used an FT-101E and an outdoor dipole for 80 Metres, the centre section of which is under the eaves of the bungalow whilst his 40 Metre antenna was a dipole in the roof-space - clearly Dick has an advantage, don't you think? Other "combinations" were' G3PJB - KW2000B into a G5RV, G3WNI - Drake TR4C into a G5RV, G3TKX - an FT-200 feeding a ground mounted 18AVT five band vertical, G3NOB - TRIO TS-900 into a trapped Dipole, and G3LHJ - a TRIO TS-510 into a 260' Long Wire.

Thank you all very much for the various check logs which were sent in, most useful and I'm glad to see an upsurge of activity.

The "Le Touquet" Trophy went to G3NVK also. Well done, you two good and faithful servants!! I'm having second thoughts about the "Le Touquet" but have yet to clear my mind - no, I'm NOT asking for suggestions!! The HF Anniversary Contest was a runaway for Kit, G4EMX - he cleared the field utterly with the best submission I've had the pleasure to receive in the last five years. So I now know it can be done!! It's all a case of enthusiasm, coupled with friendly neighbours and very tolerant local amateurs!!. Well done, Kit, and I hope the XYL gives you a permanent place to put the plaque.

The Awards Ladder has shown some movement too, and I am very pleased to congratulate Alf, G3UAA, on reaching the zenith on the Special Ladder with a convincing 500 plus, consisting of 43 Overseas stations and 187 CW contacts - excellent work, Alf, your support of the contests and Awards Ladders has helped me tremendously and is living proof that our members can be found if the interest is there. Alf has also topped the 250 CW rung - again proof that we do have CW exponents amongst us. I would dearly like to hear from Derek, G3UPY - his CW score would be very interesting to see!. But back to the Special Ladder. Congratulations also to G3PJB, Peter, who has managed to produce the required 200 mixture despite difficulties with shift working and has secured "EUROPE SPECIAL No. 24". Well done, and I hope you manage to catch your drifting VFO before it disappears outside the band!!.

Elsewhere on the "Any Mode" Ladder G3NT and G3PJB have reached the 250 rung, DA2WN (G4EMX on the loose) has hit the 100 mark, whilst G3PCW, Mike, and G3SDM have latched on at the 25 Basic level - well done to you all. The CW Ladder has also welcomed a new contender

AWARDS AND CONTESTS MANAGERS REPORT - Contd.

with Dennis, G3ADZ, who is perched at the 50 rung.

And that's it - I expected a shout from G3YSK on the VHF Ladder but he is saying nowt!. So, till the next edition, keep trying, remember the VHF Contest in September. Top Band in October and the 5-59 Leg 1 in November. With this issue is a sheet giving details of Society contests - dig it out and pin it on the shack wall - it must remind you when something is on!!.

Vy 73

Ray, G3EKL.



WORLD TELECOMMUNICATIONS DAY.

(Another snippet from G3EKL)

Wednesday 17th May 1978 was World Telecommunications Day and the British Forces Broadcasting Service, better known as 'FBS', ran a live programme from their station in Malta to mark the occasion.

An unexpected telephone call one evening during the week previous from the Chief Programme Organiser FBS, one G3USX, enquired if I could rustle up some help from G, DA, and ZC4. Suggestions were made, QRG'S agreed and a time set for a trial run on May 16th. Nothing happened!! A few strong oaths (not on the air) followed by some 600 Ohms work late 16th/early 17th May and another test was scheduled for 1230z on the day - perfect. Unfortunately the details for the Tuesday had been "mislaidd" in Malta and, although no excuse was offered, I feel confident that it wouldn't have happened in the good old COMCAN/AWC days - but perhaps I am biased!! No more back biting, back to the story. 1500Z found two stations from 'G' and two from 'DA' on tap for 9H3W (World) C (Communication) D (Day) and eagerly awaiting the cue to go. All went well. Fifteen Metres behaved itself and the Producer at FBS Malta was able to radiate in Band II a mixture of live and taped three minute snippets to the local service and civilian population of 9H-land. Just what they made of it hasn't been released, but I hope that they were intrigued enough to follow up what we all know to be a very interesting hobby.

Those taking part? G4RS (HQ), G3NKO (0227), G4EMX (0404), DA1DA (0590) and DA1BS coordinated at 9H3WCD by one of our more silent members 9H5G (0435). Thank you, Iain, for acting as MC to so many keen broadcasters and I hope FBS may call on the Society again in time of need



TNX.

The Treasurer acknowledges, with thanks, donations up to June 1st 1978 from the following : 0011 G3MKR, 0186 G3EHZ, 0219 ON8IS, 0358 SWL, 0799 GM4AEA, 0988 G8QO, 1071 SWL, 1096 G3DOX, 1125 G2ZT, 1225 G4EMT, 1336 SWL, 0907 GM4BAF, 0325 G3DCZ, 1142 PA9AKG and two donations from "ANON" (£4 & £5).

LATE HOLIDAYS THIS YEAR?

From Douglas, G3KPO, the Curator of The National Wireless Museum, Arreton Manor, IOW, comes news that the second annual "Isle of Wight Get-Together" of local amateurs is due to take place this year at the Museum on the afternoon of Sunday 17th September. Drop Douglas a line, or ring him on Shanklin 2586, if you can get along.

GET WELL SOON...

We hear via G5YN that Meredith Rhodes, WB6JXC/G5BXW/RSARS 0723 who has been in the U.K. for some time has had to return to the United States due to his XYL's illness. Mrs Rhodes has had preliminary treatment in this country and treatment will continue at an Air Force Hospital near their home in California. We wish Mrs Rhodes successful treatment and a speedy recovery, may you soon return to England fit and well. Meredith can be contacted at 850 South Orchard Avenue, Vacaville, California.



G3HSE & G3SMG



It is with regret and a great sense of loss that we have to report the passing of Dave French BEM G3HSE. Dave will be remembered by many for his cheerful participation in the 80 Metre Nets a while ago and, perhaps, more so for the amount of work he put into getting the RSARS QSL Bureau off the ground and its efficient operation for a number of years before handing over to G3YSK. Dave was awarded the BEM for his services with the Post Office at Buckingham Palace and The Houses of Parliament. In his younger days he took an active interest in motor racing and was, for a long time, active in the Youth Club field. He died peacefully in his sleep after a long illness on 13 April 1978.

It is also our sad duty to report that G3SMG RSARS 0878, Bill Ringrose of Scarborough has joined the ranks of the Silent Keys. Bill, who had been ill for some time, passed away on 10 April 1978.

Both leave gaps in the RSARS ranks that will be hard to fill. The President, Council and all members pass sincere condolences to relatives of two very fine amateur radio operators.



THE AGE OF TECHNOLOGY.

G4FKJ/1212.

In this day and age it is sometimes useful, in order to impress the boss, management or establishment, to be able to utter, from time to time, words or phrases which sound rational, technical, descriptive or just plain puzzling. Those of your audience who are familiar with similar sounding words will put their own incorrect interpretation on your meaning. Those who haven't the foggiest idea of what you are talking about will be too afraid of showing their ignorance to ask you to explain in front of others. Below are three columns of suggested words and the generator can easily be programmed to provide additional words.

It works by random selection of any three words, and these can be introduced into the conversation or address as required, e.g. Synchronised Digital Time-phase, Parallel Monitored Hardware, etc.

Integrated	Management	Options
Total	Policy	Flexibility
Systemised	Monitored	Capability
Parallel	Reciprocal	Programming
Functional	Digital	Mobility
Responsive	Logistical	Time-phase
Optimal	Transitional	Concept
Synchronised	Incremental	Projection
Compatible	Third Generation	Hardware
Balanced	Organisational	Contingency
Fundamental	Complex	Modular
Structural	Exploratory	Techniques
Flexible	Dynamic	Seminar
Proportional	Versatile	Facility

Ad Infinitum.... Have Fun!

Technical details and PCB for Video-writer-generator with proportional dynamic facility "may" be available for bona-fide RSARS members when balanced incremental projection has been finally developed. (? -Ed.) G3 Stan G3FKJ/1212.

MINUTES OF THE 17th ANNUAL GENERAL MEETING  
OF THE  
ROYAL SIGNALS AMATEUR RADIO SOCIETY  
HELD AT NORTH HALL CATTERICK GARRISON  
ON 10 JUNE 1978

\*\*\*\*\*

The Meeting opened at 1450 hours.

PRESENT:

Council

President	Brigadier D.H. Baynham GM G3DHB
President Elect	Brigadier N.H. Butler CBE
Life Honorary Vice President	Captain (Rtd) J. Cooper G3DPS
Treasurer	Mr. R. Walmsley G3IBB
Station Manager	Sgt. C.R. Hall G3EMX
Non-Serving Members Rep.	Major (Rtd) D.W.J. Haylock G3ADZ
General Secretary )	
Awards and Contests Manager )	Major R.A. Webb Royal Signals G3EKL

Members

0454	G3UAA	0131	G3FMW	0939	G4AMX
0138	G3NVK	0130	G3DBU	0540	G3WRY
0532	G3JME	0264	G4CQS	0343	G3XSN
1274	G4FKZ	0803	G3NT	0677	G8CFM
1047	G4ATD	0026	G8PG/GW8PG	0173	G3VYZ
1045	G4FLL	0120	G3JZP	0950	G3MAY
0014	G13HXV	0004	G3EJF	0845	G3JFE
1381	BRS 39191	1168	G3POB	0461	G2BQ
0988	G8QO	0437	G4DBF	0227	G3NKO
0904	G3AEF	0457	G3GWD	0144	G3PHK
0396	G3ABM	1253	G8DFZ	0185	G3DNF
0362	G3GEJ	1343	G3HTB	0508	G3PJB

APOLOGIES were received from:

Council

GW3ASW G3YSK

Members

G3XHA	G4EHU	GM4ELV	GM3JOA	G4EOV	G3ZEE	G3DCZ	G3LWT
G5XB	G4AOO	G3AFD	G3DMK	G2DX	G5YN	G3DSS	G3FSN
G3ONU	G4AKN	G5YM	G3WER	G3KLX	G4AYZ	G3AMR	G4AKQ
0048	G3YSK	G5GH	G2CKM	G3NOB	G3NUR	GW3UDU	G4DBR
	G4AKW	G3GWD	G5BM	G2HLL	G6HB	G3XHA	

Chairman's Opening Remarks

Welcome to you all here in North Hall to the 1978 AGM and in particular to the new Treasurer and station Manager. Much water has flowed under the Society bridge since the AGM last year and with the move of Headquarters to Catterick a certain amount of upheaval has been inevitable. The Admin. side of your Society was taken over in Catterick on 1st January and the station and stores moved up during March. Regrettably, G4RS as such has virtually stood still since its arrival here because there has been no Station Manager, a part-time job but one without which it is not possible to function. The problems involved with finding a suitable man in the right place at the right time have been many, but, as you can see, someone sits behind the "Station Manager" indicator and I am

## AGM REPORT - Contd.

very relieved to see the post filled at last. I'm sure that Kit, G4EMX, will prove a very sound and worthy member of Council - if nothing else his youth and exuberance will shatter the quiet of any Council meeting!.

Since the last AGM, the previous General Secretary, G5YN, has moved on and I would like to thank him for keeping the hot seat warm until another "volunteer" could be found. That "volunteer" is beside me, pencil sharpened at both ends, ready to take notes for the Meeting. Ray finishes his service in March 1980, so the Secretarial chair is well and truly filled to beyond the next AGM. I would like to thank you most sincerely for taking on the move from Blandford as well as Secretary. You were my severest critic as President and I must agree that many of your niggles were well founded. Now, with it all under your thumb, perhaps things will run as smoothly as you wished. I can certainly say without fear or favour that since you took over at the beginning of the year I have sat back and watched.

As I speak, unless the floor disagrees, the workers on Council are willing to carry on with the possible exception of GW3ASW, Cyril, who has had some trying times over the past few months would like to "move on" and he quite rightly feels that he has had a good innings and would prefer someone else to look after the various sideband nets now that his health is failing. I am extremely sorry to find Cyril not amongst us as he has been a tower of strength. But this can be discussed later.

For myself, I am also moving on, back to civvy street, and so have to hand over my collar of office as President to Brigadier Norman Butler, Commander, Training Brigade. Brigadier Norman, although not sporting a call-sign, is extremely interested in the Society with the wealth of expertise it embodies and has already done a lot of spade work in producing a Station Manager and kindly allowing G4RS permanent space within Catterick.

Norman, welcome to the Society may your tour as President, be quiet and enjoyable. Please accept this collar of office.

(Brigadier Butler then accepted the collar of office and took over the Presidency)

2. The minutes of the previous AGM were discussed.

Apart from an amendment to item 13, deleting Dick Foot, G4BKU, and inserting Dick Lock, G3PHK, the minutes were accepted as a true record on a proposition by G3PHK, seconded by G3DBU.

3. The following reports were then given.

### General Secretary/ Awards/Contests and Stores.

Good afternoon. I shan't keep you long but will try to brief you on what has happened since the last AGM. 44 members have joined in the last eight months, one application has been refused, and the membership stands at around 1150 members. I can't be more precise than that because I am still getting replies to some 200 letters I sent out to members last month who were either out of compliance or whose subscriptions had lapsed at the end of last year. I realise that this doesn't comply with rule but I am anxious to get a clear picture of just how strong the Society really is. The deadline for replies is the end of this month, at which point I'll take a firm grasp of the situation and only send the July "Mercury" to those members actually paid up. I included a Bankers Standing Order with each letter and quite a few have come back completed - this should help in the future. Inevitably I have written to some who have paid previously; to them my sincere apologies; but I can only get the records straight by asking!

The HQ station has been laying fallow since moving up here. G3CIO, the Catterick Club, has kindly absorbed G4RS and the two have moved into a suitable building for the next three to four years. Plans have been approved to take over a brick building at the top of Vimy Road late 1981 which will be self-contained within its own compound. It is well situated and ideal for HF, VHF

## AGM REPORT - Contd.

and, possibly, UHF working. Since moving to Catterick the call-sign G4RS has been frequently 'aired' by local members and unless something goes radically wrong it should be regularly active on all Bands Top thru' Two by the end of July, coupled with Slow Morse transmissions on Thursday evenings probably on One Sixty and/or Two Metres. The Club station should also be ready for visitors at the same time and it is hoped to get back to a regular weekly Club evening each Tuesday. I would like publicly to thank the Corps Committee for a most generous donation towards a 60' tilt-over tower for use here. This should prove most useful in re-establishing G4RS on the air.

Society stores continue to move slowly along, under the guidance of Ron, G3NKO, but we still have difficulties with the QSL card overprinting service. It is good, but slow and that is as far as I am willing to go!! - Thank you very much for your help, Ron.

Awards and Contests -still very slow, I'm afraid. The Awards Ladders move gradually on and a new 'high' has been reached on the CW Ladder with Alf, G3UAA, passing the 250 rung. He has also reached the highest rung on the 'Special' ladder, obtaining the "Special Supreme" Award last month. Two more Special Awards have been won since the last AGM by Harry, GM3VVM, and Peter, G3PJB. Various other movements have occurred on the "Any Mode" and VHF Ladders and I am hoping for better things with the improving conditions associated with the eleven year sun-spot cycle.

Contests - a very energetic 5-59 series last winter with more submissions than I have previously seen; the Top Band Contest last October showed signs of life and has been made a permanent fixture whilst the VHF and Le Touquet Contests produced winners but not much activity. However, the Anniversary HF Contest in May produced a lot of fun. However, between Jack Cooper and I, we dropped a large brick. My original draft to Jack was OK, but I didn't check his type up in the "Mercury" proper - the nett result was that the HF Anniversary Contest was moved from May to June instead of the other way round!. It should be in May and the sheet on your seat will verify this, so will the July "Mercury" - sorry about that ZFU!. (My fault and my apologies to all - Ed.) All the Contest winners will be announced at the end of the meeting.

We didn't partake in NFD this year from Catterick; instead we fielded a team in the Affiliated Societies Contest held in January and came 21st out of a total entry of 61. G4RS will be partaking in the 80 Metre Field Day on July 16th.

Enough from me except to say "Thank You" to those who have kindly written offering good wishes; I hope I can live up to your expectations!.

The Treasurer then gave the Financial report, a copy of which is shown below.

He explained that the expenditure on a Secretary would not appear in the next financial report as the Secretary was no longer a paid post. In consequence the excess of expenditure over income shown (£228 - 73) should change to an excess of income over expenditure of about £300 by the next report, all other things being equal. It was also confirmed that £1000 of the cash shown against Building Society was now placed on a 2-year Investment Bond with the Alliance Building Society and that the balance was on a Deposit Account with the same Society from where it could be quickly withdrawn if needed. Any future Life Membership fees would also be placed in the Deposit Account.

The "Micro-processor Convertor and. Memory" was discussed and its proposed use explained.

A query from G3XSN as to why it had been necessary to pay a Secretary was answered by the retiring President. As a result of a further question from G3XSN, G3DHB assured the members present, that the £1100 odd, which had been spent over the last two accounting periods, was exceptional and that no further such expenditure was anticipated. The report was accepted on a proposal from G4CGS, Seconded by G3WRY.

AGMREPORT - Contd.

CASH RESUME OF SOCIETY FOR PERIOD 1 MAY 1977 - 31 MARCH 1978

INCOME

	£	p
Profit from sales	142	- 54
Subscriptions	1043	- 00
Donations	166	- 11
Building Society Interest	60	- 81
	<u>1412</u>	<u>- 46</u>
Excess of expenditure over income	228	- 73
	<u>1641</u>	<u>- 19</u>

EXPENDITURE

Secretary	544	- 33
HQ Station maintenance	61	- 40
Awards/Contests	38	- 05
"Mercury" - all costs	640	- 09
General Postage	31	- 02
Property Depreciation	165	- 34
RADCOMEX '78 Expenses - (to be refunded)	77	- 00
Beef Island Dxpediton	13	- 20
Micro-processor "Murray Code - Morse Code convertor and Memory" - (to be added to Property once functional)	50	- 00
Miscellaneous expenditure	20	- 76
	<u>1641</u>	<u>- 19</u>

STOCK/PROPERTY VALUATION

Society Stores (at cost)	927	- 08
Society Property	1189	- 50
	<u>2116</u>	<u>- 58</u>
<b>TOTAL ASSETS</b>	<b>- £3944</b>	<b>- 78</b>

CASH

In hand	69	- 15
At Bank	463	- 04
Building Society	1276	- 01
Sundry debtor	20	- 00
<b>TOTAL CASH</b>	<b>- £1828</b>	<b>- 20</b>

OSL BUREAU MANAGER'S REPORT.

It has again been disappointing year for Bureau business. The statistics extracted from the input log again shows a serious decline in the turnover of cards handled. A total of 2377 cards were received of which 206 emanate from HQ or Special calls. Since taking office the yearly figures were: 1973/4 - nearly 11000, 1974/5 - 10000, 1975/6 over 7000, 1976/7 - under 4000, followed by this years low of barely 2000.

An analysis by user also shows a drop with a total of 143 licensed members and two SWLs using the system. It was apparent that the greatest decline was in Overseas members with only 4 stations submitting cards for distribution. So, by call and region the users were:

### AGM REPORT - Contd.

G2, G3, G4, G5, G8 + 2 letters - 91 members. G4 + 3 letters - 29 members.  
G8 + 3 letters - 1 member. GD - 1 member. GI - 1 member. GM - 7 members. GU - 1 member.  
GW - 4 members. DL - 3 members. PA - 1 member. 3D6 - 1 member. VS5 - 1 member.  
ZI - 2 members. SWLs - 2 members.

Perhaps the only positive gain has been the fairly minimal build-up of uncollected cards.

To those of you who do use the Bureau perhaps this will help to explain the sometime long delays before receiving your cards as I am loathe to despatch a light packet. My thanks is also rendered for your patience.

### NON-SERVING MEMBERS REPRESENTATIVE'S REPORT - G3ADZ.

Activity level on the LF CW Nets has remained fairly constant during the past year, with up to 17 stations reporting in on 80 on some evenings and a small number on Top Band. Nevertheless, those who do use 160 seem to enjoy it, so we have decided to carry on with the arrangement at least through the winter of 1978/9. Times and frequencies are unchanged, and members will see a repeat of the full details in the next issue of "Mercury". Although I have to close on 80 within a few minutes of 2115, prior to the QSY on Top Band at 2200, G3KLX often takes over control at that time to bridge the gap between 2115 and 2200 for late callers and those who want a further natter. Both Bands have suffered from mainly poor inter-G conditions for evening working, and we seem also to have unusually high QRN levels.

Will members please note that although I do not miss many Wednesday evenings, the normal Deputy Control Stations are G3KLX and G5BM.

Apart from this regular LF activity, I do feel that during the next year we should make a real effort to contact our Overseas Members on CW. Quite apart from many of us would like more RSARS DX contacts for award purposes, it is these friends overseas who have less regular contacts with the Society and news of our affairs, I therefore ask that all members who have any news of such overseas activities, and overseas members themselves when they see these notes, to please advise me of full details direct. I must, however, ask them to accept, bearing in mind the problems of time differences and band conditions, that firm skeds on 21085 and 14085 (plus 80 Metres during the Winter) can normally be kept - apart from a few retired members during week-ends, and on week-days between about 0650 and 0730 or after 1900 hours local (GMT/BST) times as most of us are otherwise at work. Please QSP this request in the course of any QSOs you have and let me know all the information as soon as possible. You will nearly always find me on the 80 Metres SSB Net on Sunday mornings, or else drop me a line.

Like any other activity, I am very conscious of the fact that the way the Nets are run does not please everybody. I regret that we cannot please all of the people all of the time, but I can assure you that any practical ideas sent in are always most carefully considered by the secretary, other users and myself. The suggestions cannot always be adopted, because to do so would upset others and my personal view is that it is important to keep a regular pattern of activity for fairly long periods, otherwise we waste more time trying to find one another!.

Can we please help ourselves by doing two main things. Firstly, some of the netting on CW is quite dreadful. Do please come on my frequency, and even if, for some reason I fail to hear you, this will increase the chances of you being heard by another station on the Net who can then break in. Secondly, if you want to especially work a particular station and the Net is QRL or QRS because we have a most welcome caller who is a bit out of practice, it should only take a few seconds to 'BK' (to which I will always respond) and QSY to the alternative frequency for your contact and then rejoin the main Net. It does, of course, help to save Net time if you tell me when and where you are going, and when you come back. I normally work semi- or full-QSK so you should be able to get in for anything urgent, although I ask you to try not to break QTC periods when we are

### AGM REPORT - Contd.

trying to circulate Society information. Again, from the communication viewpoint and, after all, that is what it is all about, do please give me information about members on the air when it is something to be acted on for QSP to HQ or general interest.

Thank you for your support, but no-one should keep a job too long. Although I am willing to carry on with Net Control for another year, if that is your wish, I have now done a two-year stint and if someone would now like to have a go I am more than willing to stand down, and give them my full support. Welcome as this would be for me, remember that this means 52 Wednesdays a year apart from holidays and other occasions when you need to arrange a relief, and it is no use taking on a Net if you allow them to fade away after a few months.

### NON-SERVING MEMBERS REPRESENTATIVE'S REPORT - GW3ASW.

Most regrettably, due to ill-health, I am unable to be with you to-day. It is more the pity, as I haven't seen Catterick for many, many years, and had been looking forward to a nostalgic visit. My report this year is very short and sweet and is really a précis of what I said last year. Little has changed since, although conditions on the HF Bands are beginning to improve. Netting is still a problem and I implore members to net on to Control AND STAY THERE!. The biggest trouble is that we have few Overseas members upon whom we can rely regularly. The most consistent is ZL1AXM who is worked with monotonous regularity by G3NVK every day between 0800 - 0900Z. John Grigsby, ZC4JG is shouting his head off on 28450 and 21375 each week-end between 0900 - 1000Z and is often joined by Harry Stickley, 3D6BP. G6RC regularly skeds with Jim Pershouse, 9M2DQ, on Fifteen Metres daily 1000Z around 21357. We have lost our VS5 contact with Maurice Caplan who is now back in G-land, although VS5MM may still be active out there.

The Society sponsored a DX-pedition to VP2 earlier this year and Barry Jenkins, G4CZJ, enjoyed himself for a few weeks in the sun. Quite a few of our members managed to work him on both Eighty and Fifteen Metres. The HQ Station was also involved in a small hook-up with the Forces Broadcasting Service in Malta to commemorate World Telecommunications Day last May so one way or another Twenty, Fifteen and Ten Metres are coming to life once more. I can only suggest that you keep monitoring the frequencies listed on the inside rear cover of "Mercury" - should you find a member, determine his operating habits and let HQ know on the 80 Metre Nets.

The LF Nets still function although Eighty Metres has proved extremely difficult these last few months. The frequencies and timings are still the same for the weekend and evening Nets but the Monday mid-day Natter Net has QSY'd to Forty.

My absence today is due to a recurring illness, which completely floors me; "Att. 'C' Bed Down" is the order of the day and I am unable to leave my charpoy. My voice goes too and quiet reigns on Eighty and here at home. Seriously though, I feel it is time I handed over the job of Non-Serving Members Representative to a more healthy and able member. This is with great reluctance and you may rest assured I shan't leave the Society Nets - I have made very many good friends through RSARS and shall do my utmost to keep in touch.

I would like to recommend G3ONU to you who, becomes "Non-Serving" in September. I wish you all health, prosperity and good DX.

### REPORT OF THE EDITOR "MERCURY".

Mr. President, Council Members, Ladies and Gentlemen. Early this year it was your good fortune (or is that 'misfortune'?- I can't read my own writing!) that I at once accepted the office of Editor of "Mercury" when "requested" to do so by superior officer - the General Secretary.

Seriously though it is my pleasure to be once more wielding the pen and operating the typewriter - a machine which is unique in history as having its own entry in the Guinness Book of Records as the worst spelling machine in the Country (and looking back I see that i has spelt Guinness wrong!).

## AGM REPORT - Contd.

For the period between my holding office of Editor last time and now, I must thank Evan for holding the fort and churning out the editorial paperwork. Also I must thank all those members who have so kindly contributed to the make-up of "Mercury" to date. Since taking over in January we have managed to get the Spring 1978 edition out to members on time, and it would appear that the Summer issue should be reaching you all with the minimum of delay - the draft having been completed except for the details of today's events. I certainly cannot take credit for the delivery, as all I have to do is collate the received information and type it up. It is then forwarded to Ray who then proceeds to (a) put all the sheets the right way up, (b) put all the pages in correct numerical order, (c) write a frantic letter to me asking for the missing pages!, (d) get sufficient copies printed, (e) put them all in envelopes, (f) get address labels from the computer section, (g) attach the labels to the envelopes, (h) post all the copies having weighed and stamped them, and (j) sit back with a sigh of relief and say "Thank Goodness, that lot's gone" - by which time I am well on the way to the completion of the next draft. From this you will see that 90% of the Editor's report should really be given by Ray and his band of stalwarts. I must not forget, also, to say a word of thanks to our new President who, whilst wearing an entirely different hat, has made the production of recent "Mercurys" possible.

I am happy to report that I have sufficient material for the forthcoming "Mercury" with a little left over for the next edition. However, there is no magic formula for obtaining material and I must once more request that if you have anything to offer please do so - don't worry about the spelling mistakes, I'll make those for you! - also don't worry about the layout. If I can read it, I'll sort it out.

In closing may I say how pleasing it is to meet a representation of one's reading public (You do read it, don't you?). If anyone has any suggestions regarding "Mercury" I'll be more than happy to listen and make the necessary excuses. Mr President, Members of Council, Ladies and Gentlemen, - Thank you.

Following the reports the Chairman asked for any suggestions regarding a replacement for Cyril Mountjoy. Members present could offer no alternative to the one already made. The General Secretary explained that he had been in touch with GW3ASW and G3ONU who were both willing to affect the change. The members present gladly accepted the offer made by G3ONU to relieve GW3ASW later on in the year at a time to their mutual agreement.

At this point the retiring President rose to thank Cyril Mountjoy for all his very hard work for the Society over the years and particularly his strong views and voice on Council. Cyril would be sadly missed and it was hoped that his health would quickly recover to the point that he could once again be able to take an active interest in the Society.

A vote of thanks to Cyril was passed, and a "Get Well" card was signed by members attending the meeting and despatched.

### Council Composition.

To regularise the position of Council, the following nominations were made and accepted without dissent.

GENERAL SECRETARY	-	G3EKL	
TREASURER	-	G3IBB	
STATION MANAGER	-	G4EMX	
NON SERVING MEMBERS REP.	-	G3ONU	(At a date to be determined,
			probably September, 1978.)

### Any Other Business.

Under Any Other Business, the following points were discussed.

- (a) Raised by G3PHK that the General Secretary, be reimbursed for all out of pocket expenses incurred on behalf of the Society. The meeting was assured that such expenses would be minimal and it was agreed that they be met as necessary.



AGM VISIT.

By "A

Visitor".

(The following, which forms no part of the above official AGM Report, has been included to fill the remaining space, and, it is hoped, to give an idea of the happenings to those who could not attend.)

From the start it was apparent that a lot of work had gone into the preparation for the meeting. A central meeting point had been arranged with a car park opposite. The meeting place was spacious, well furnished and contained a bar, as well as a 2-Metre Talk-In station operated by Kit, G4EMX and various guest "speakers". Ron, G3NKO, had a selection of RSARS stores on view and was busy convincing arriving members that they needed a) a new Log Book, b) a RSARS Lapel Badge, c) 500 QSL cards, etc., etc., etc. Lunch followed in the Dining Room and was indeed, value for money. North Hall was the venue for the actual Annual General Meeting and appeared to be an ideal place for such a gathering - plenty of room and spacious layout. Business was conducted as described elsewhere, and, although some suggestions and propositions were made and some discussion involved in, the general quiet tone of the meeting certainly indicated satisfaction rather than lethargy. The meeting over, it was "time for tea" which was available in a room adjoining the main Hall. During the course of the meeting the ladies were taken on a minibus trip of the surrounding Yorkshire Dales and it would appear from their comments that it was enjoyed by all.

The raffle was drawn and a bottle of "the hard stuff" and boxes of chocolates were distributed to the lucky ticket holders. During the evening the writer attended the "Playing of Retreat" by the Band of The Royal Corps of Signals, something which brought back many happy memories. Sunday morning found us on the Sports Field at the RSARS Stand and the operational HF and VHF stations, surrounded by a display of RSARS items, various Awards, etc. All in all, a very enjoyable week-end, marred only, perhaps, by meeting my old SSM of 25 years ago (who still insisted I needed a hair-cut). well done, all.



## THE LAST WORD or BITS AND BOBS FROM SOCIETY HQ

### (a) PART PAYMENT OF ANNUAL SUBSCRIPTIONS

There are still some members who are running on a bankers standing order of less than £2.

If you are one, please send the balance of this year's subscription to me and update your standing order. Members still under paid on 30th Sept this year will be dropped from the November "Mercury" mailing list. Unless I've missed a trick somewhere the following list should help to jog the odd memory; it may not be complete.

115	G3ZUM	685	G3OOQ	818	G3YYU	995	G2BAR	1172	G8KLE
337	GM3TDS	722	HALL	852	G3VVE	998	G3BIN	1182	GW3ZEY
353	G3TTH	730	FRANCIS	872	G3AQC	1002	G5CP	1192	COLBORN
366	G4AKQ	735	BUTLER	888	G3PRN	1071	LAWRENCE	1193	GM4FOZ
392	G3VDF	742	GM4CKP	894	G3RWN	1107	DA1GU	1197	G8KFR
484	G3FNK	744	COLMAN	912	G4AXS	1124	G3LXX	1282	G5BZ
488	GW3DIX	746	G3OLV	974	G8TO	1125	G2ZT	1302	G4FPI
573	G3OOD	761	BLAMPIED	976	G3CAA	1130	G3PGI	1321	G4GAQ
645	G3OFW	786	G3EDB						

### (b) RESETTLEMENT/REHABILITATION/REJUVINATION!!

Member 261, G3WKM, has now left the service and settled at 3 Yewtree Crescent, Melton Mowbray, Leics. This is within spitting distance of 198 G3NVK and both members are interested in a "very cheap pair of 2 metre portable rigs or a very simple design for a milliwatt type TX/RX combination - just a single channel press and squawk affair. Any suggestions to G3WKM please. Ken is starting a new career as a Lecturer at the Charles Keene College of Further Education at Leicester.

### (c) OPERATION DRAKE

The Society has been asked to assist with the radio communications associated with "Operation Drake", a round the world voyage in a 150 ton brigantine "Eye of the Wind". The voyage is planned to last two years and is split into various phases commencing late October this year. The voyage is to be from Plymouth via the Canaries and Antigua to the Panama Zone from the Panama Zone to Fiji with a fortnight break on the Galapagos Islands; from Fiji to Papua, New Guinea and then Port Moresby; Port Moresby to Sulawesi, Indonesia and on to Singapore; Singapore to Port Sudan and finally Port Sudan through the Suez Canal and the Mediterranean back to Plymouth.

Long stop overs are planned between each leg to allow various archaeological, biological and scientific studies to be completed or assisted. These studies are being master minded by the Scientific Exploration Society.

At the moment just what is wanted of the Society is rather vague and as the first phase of the voyage starts before the next edition of "Mercury" is due out this is only an appetiser. I'll keep you informed once I have a firm request from the organisers.

### (d) SUBSCRIPTION REMINDER - A PLEA FOR COMMON SENSE

During the last three months I have written individually to nearly four hundred members who had not paid their subscriptions from anything between one year up to three, or sometimes four years. The effort of writing is not all that punishing but the time spent in determining whether members have paid or not, whether they regularly "forget" and need nudge, whether they may be out of the country etc is both laborious and unnecessary. The XYL and I do not wish to waste hours doing the same thing again. Society rules allow me to cease membership facilities after the last day of April. I shall list members who haven't paid by 1st March on the last page of the March "Mercury" as a reminder, if no subscription is received by the end of March, that edition of "Mercury" will be the last despatched until a further receipt of subscription - please help.

73



G3EKL  
GENERAL SECRETARY

"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.

L.F. NETS      PHONE

SUNDAY	1100	3720 kHz	Controlled Natter Net, with 3740 alternative
MONDAY	1300	7075 kHz	Natter Group for approximately 15-30 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 3720 MHz. at 1115 hrs.

L.F. NETS      CW

WEDNESDAY	1930	Prim 3565 kHz Sec 3526 kHz	CONTROLLED NET: Net terminates at 2115 exactly and re-opens at 2200 on TOP BAND.
	2200	Prim 1837 kHz	This net is again CONTROLLED. Full details can be found in the SPRING 1977 issue of <u>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 28450 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 144-23 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 'ON0NO 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.