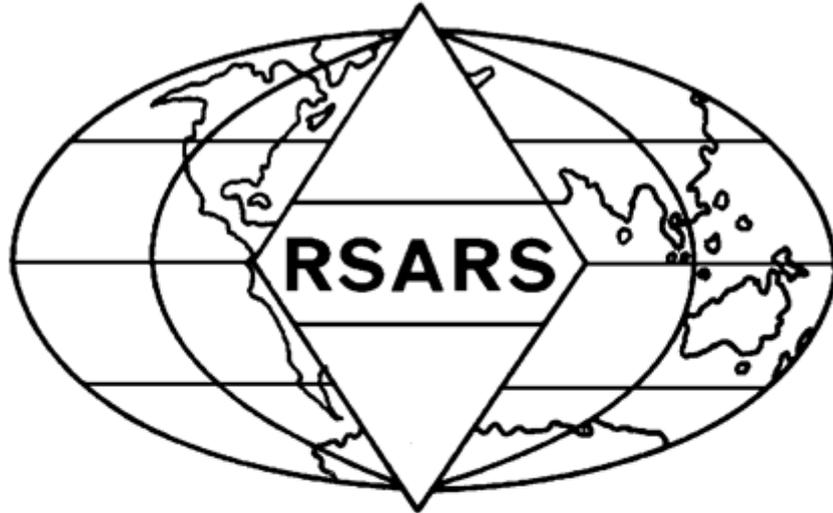


# MERCURY



THE  
ROYAL SIGNALS  
AMATEUR RADIO SOCIETY  
JOURNAL

NUMBER 74



MARCH 1983

## ROYAL SIGNALS AMATEUR RADIO SOCIETY

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Applications for membership and general correspondence on RSARS matters should always be sent to: The General Secretary, HQ RSARS, Trade Training School, 8th Signal Regiment, Vimy Barracks, Catterick Garrison, North Yorks. DL9 3PS.

Membership subscriptions are currently: Annual UK Members £3, Annual Overseas Members £5, Life Members (after 5 years consecutive annual membership) £25. Affiliated Clubs £3. Membership fees are due on 2nd January each year. MERCURY will NOT be forwarded after the March Edition if membership fees are not paid. Members who have not paid annual fees will be removed from the membership list on 30th April.

The views expressed in MERCURY are those of the author and do not necessarily reflect those of the Society, its Council or its Officers.

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Mercury is published in March, July and November in each year.

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# MERCURY

Issue Number 74

March 1983

## EDITORIAL

Participation: the act of taking; part. There is a small nucleus of Members who actively engage in the day to day running, organisation and management of the Society on a voluntary basis. There are a few more who attend on the Nets (which in one form or another take place every day) and there are yet more who indulge in the Society's Awards Scheme, Contests, field Day and other events. The Society as a thriving whole would be dormant if it were not for these acts of participation.

It was reported at last year's Annual General Meeting that only 21 people took the trouble to exercise their votes for the Best Mercury Article and this, out of then some 1800-plus members is, to say the least, pathetic.

At this time of the year we canvass your votes for the efforts of the stalwart few who take the time trouble and energy in writing articles which make up MERCURY and without which no issue would appear.

I exhort you therefore, to send in your votes for BEST MERCURY ARTICLE before 1st June and thus participate in the running of your Society and encourage those who submit such articles.

You have a total of 6 voting points which can be deployed over any three or less articles appearing in this issue (March 1983) and the two preceding issues (November 1982 and July 1982). Please send your voting papers to the Editor at the address below. The winner will be announced at the AGM at Catterick on 25th June 1983.

RICHARD WINTERS

32 Redwood Avenue, Melton Mowbray, Leicestershire.

SIGNAL HONOURS - THE ORDER OF THE DAY.

The Society is pleased and proud to announce the following "promotions" :-

Following the recent retirement of Mitch Powell, VE3OT, the new President of the Canadian Radio Relay League, Inc. is Torn Atkins, VE3CDM, RSARS 674 of Willowdale, Ontario. Tom is a Life Member of RSARS and also holds the call G4ABN.

Tom was formerly a founding Director, Secretary of CRRL and Vice-Director, ARRL. He is presently the Canadian representative to the International Amateur Radio Union.

Born and educated in the United Kingdom, he was licensed as VE3CDM in 1968. He holds the Canadian Advanced Amateur Certificate and also the call G4ABN, having passed the examination for a British licence in 1950.

From 1969 to 1978 Tom was an active member of the executive of the Radio Society of Ontario, Inc., with assignments including public and media relations, external affairs and served as a Director, Vice President and President of the Provincial society. He was closely involved with the Canadian amateur radio film "Fine Business" and in the creation of ONTARS, the Ontario Amateur Radio Service. He has also served as CARF Ontario Director, a member of the CARF WARC 1979 advisory committee and the ARRL public relations advisory committee. In October 1980 Tom represented Canadian Amateurs at the I.A.R.D. Region II Conference in Lima, Peru.

Other amateur radio affiliations include life membership in the CRRL/ARRL, RSO, RSARS and membership in CARF, the Toronto West Side ARC, several FM repeater groups, Canadian DX Association and is a co-founder of the Ontario ATV Assn. Active on 160 metres to 75 centimetres. He has Sponsored a White Caner. His diverse background includes 26 years of active and reserve military duty, and a long time involvement with Canadian Power Squadrons.

A member of the Quarter-Century Club of the Canadian Association of Broadcasters, Tom is Vice-President of Standard Broadcast Sales Co. Ltd. Television. He is married with two daughters and has made his home in Toronto since 1952.

We are grateful to The Canadian Radio Relay League, Inc. for the above information and congratulate Tom on his achievements.

\* \* \* \* \*

We are indebted to Burke's Peerage for the facts that SIR EVAN YORKE NEPEAN, 6th Baronet, BA., MA., Lt.-Col (retired) Royal Signals was born on 23 November 1909: the family name is from the Cornish and means "head of the valley" and the family comes from St. Just, near Land's End. The family motto is RESPICE.

Better known to us as G5YN/RSARS 0040 and at one time the famous and much sought-after AC4YN is Sir Evan, and we are pleased to announce that he has just been made Vice-President of the Radio Society of Great Britain. Congratulations Evan.

\* \* \* \* \*

FOR SALE:

By G3UXH/0172 of 99 Bells Lane, Hoo Street, Worburgh, Rochester, Kent.

YAESU FTV250 (as new)

£90

TAYLOR VALVE TESTER 45c

£15

ono

TRANSFORMER O/P 0/8/10/12/16 VDC @ 27AMPS

£15

TRANSFORMER O/P 13-6 VDC at 12 AMPS

£7.50

BUYERS COLLECT.

\* \* \* \* \*

ATTENTION FT101 USERS

N2DAN has kindly sent along details of a simple modification to enable the gear to operate on the new band 10 mHz (30 metres). Any member wishing a copy please send a stamped addressed envelope to the Editor or G3UAA.

### PAGE THREE - THE LADIES

Rummaging through the Membership Lists and listening and working in the Nets revealed that we have a number of the fairer sex as Members and it was thought that they should be high-lighted in MERCURY. Three of the ladies were asked for autobiographical notes for this issue and such notes are reproduced below. It is hoped to persuade the other three to give us similar write-ups for a later issue.

#### JEAN HODGKINS, G3JZP/0120

To some people Amateur Radio is an activity which fills all their waking hours, whilst to others it is a hobby to be taken up and enjoyed from time to time along with other interests. Member 0120 is a quite definitely "among the latter category".

After Trade Training as an OWL (not our former reporter) at the ATS Signal School at Craigmillar Park, Edinburgh, she served at various HQ's in the UK before being demobbed in 1947. A few years employment as a librarian was followed by a post as a statistical clerk which she blames for her profound distrust of all official figures.

In spite of having been introduced to amateur radio beforehand, Jean still went ahead with marriage to G3EJF in 1950 and was licensed four years later. By the late 1950's a dislike of town life led to a move to the present QTH in a village of about 250 inhabitants, a shop, two pubs and three places of worship with a bus service on Friday. In such a place there are always so many things to be done that amateur radio tends to take a back seat.

After being QRT for a few years it was the Worked All Britain Award scheme which re-awakened interest and many hours were spent poring over maps as mobile stations dashed about the country. Later, after some rapid building of a 3.5MHz SSB 5-watt rig by the OM, several weekends were spent walking into and operating from areas so remote that it was not possible to drive a vehicle into them. One such area on the Durham/Cumbria border involved passing notices reading "You are now entering a Shelled Area". Nowadays a regular weekly sked with Rita, G3NOB ensures at least one log entry each week and occasional forays onto the DX bands are made in search of other YL stations, particularly other YLRL members.

Although a far-from-ideal VHF location, a listening watch is usually kept on S 20 and members venturing up the A1 are within range between the Baldersby roundabout and Catterick Airfield. As some members discovered during the Anniversary Award period this allows ample time for an "official" QSO.

Jean has been known to put in an appearance in the Phone Sections of RSARS Contests and lurks the odd rung from the bottom of the Awards Ladder

\* \* \*

#### MARJORIE TABBERER, G6HAK/1813

My service life was 5 years attached to the RASC. At that time Royal Signals were a lesser breed who relied on us for transport. On demob I met and married Tony and there wasn't a mention of amateur radio.

Three sons and a few years later our eldest boy - Peter, came home from school filled with excitement about a school chum who was playing around with crystals and 807's that glowed, and tuning by watching the television set across the road. The rot had set in.

Tony seemed to understand the jargon that was being used and before long night school and RAE was the subject. Peter wasn't allowed to attend so Tony went and brought back copious notes for him.

Numerous trips were made to the surplus stores and mysterious objects were smuggled in - usually on the bulky side. Solder glued itself to bedroom carpets. Wires draped themselves in all manner of unusual places and queer contraptions which glowed and hummed and squeaked arrived, changed shape and disappeared.

Peter started his apprenticeship, Tony passed the RAE and obtained the call G3WRY and more junk arrived, this coincided with a lot of Squeaks which I was informed was communication called Morse.

John was now joining-in the action and discussions, and throughout these distractions I kept myself sane by developing a deaf ear and blindness.

Eventually Peter left home and got married, John eventually followed suit, Peter got his licence and so did John.

By this time a lot of squeaks had disappeared to be replaced by Donald Duck, with occasional bursts of Advanced Modulation.

From somewhere the RSARS had appeared on the scene: it didn't arrive just infiltrated, and seemed to involve a lot of printing combined with radio. By this time I had given up the unequal struggle and just insisted on having these activities centralised in one room instead of encroaching on every corner of the house. I could at least close one door on it all.

Time goes by, our youngest son, Roy, is getting drawn in and slowly, through trips to rallies and the like I get acquainted with faces behind voices and discover that there exists a lot of unsung heroines behind the many amateurs I meet.

A couple of removals, and changes of equipment and I sit in and listen to the conversations but have still got my deaf ear to use when a Morse key appears. Amateurs who by now have become friends include me in remarks to Tony and many times I felt I would love to answer them back.

One day I said as much to Tony and was encouraged to study for the RAE. Roy would drive me to night school and sat in to keep my company, he also sat the examination with me so that I would not feel alone. We both passed and I was able to answer back on 80 metres and keep in touch with my family on 2 metres.

But please can somebody tell me how to get rid of my carefully practised deafness to CW? They want me to get a Class A Licence and all the time my built-in filter prevents me from listening to Morse. Any ideas?

\* \* \*

### RITA SHEPHERD, G3NOB/0613

My introduction to amateur radio was sending Morse in order that Tom (now G3HPJ/0614) could learn to read it to obtain his licence.

During the next few years the interest was dormant due to other things keeping me occupied, and then Tom started building 2-metre beams. This was in 1958/59, and I decide to go to the RAE class being run by Tom Griffin G3GUV. During this period I was the weatherproof beam rotator – Armstrong method.

When I became G3NOB in August 1959 I operated on Top Band via a 19-set and on 2-metres using a 1540 ground-to-air (TX522) and a 2-metre converter through a re-built Bendix receiver. My regular contacts were with G3DMK, G3NT and G2HNL plus the local amateurs around the Middlesbrough area. One day I worked G3OPW, now GM3OPW, who was half-way up a hill in Cumberland and I was in South Bank using 5 watts.

Then there was a gap of about 9 years when I spent all my time flying gliders - we all virtually lived, ate and drank flying.

One day we decided to build a transceiver copied from the Swan 350, and this was started whilst we were still flying so took about a year to complete.

That is how I came to meet Jack G3DPS/0090, who, as Net Controller in 1969 welcomed me into the net and suggested I became a member of RSARS, since when I have enjoyed every minute of my membership. Many thanks Jack.

I used to spend most of my time DX-ing on 80 metres, running about 90 watts to a ¼-wave vertical in Bridlington and did very well, even managing to work ZL on SSB.

Transceivers since then have been Yaesu 401, Trio 900, Trio 180 and now Trio 930.

We welcome three other ladies to the fold: details so far are sparse but we hope to publish full autobiographical notes in the next issue, and hereby invite these ladies to submit copy.

RSARS 1666. Barbara Ann Hamilton joins us from 33 Montpelier Park in Edinburgh. Barbara is a Corporal WRAC Royal Signals TA., 61 Squadron, 32 Regiment and tells us she enjoys hill walking.

RSARS 1697. Susan June Cogger is also with Royal Signals TA - 71 Signal Regiment. She is also a member of the Royal Signals Association and of BYLARA. Home is 74c Southover Street, Brighton where she prefers to listen on HF rather than on VHF in spite of husband Gerald (G3TUQ/1696) having bought her an AR240 2-metre rig for Christmas.

RSARS 1706. Gladys Crooks was licensed in October 1968 as G3XWE and operates from 80 Hartington Road, Stockton, County Cleveland. Her ATS number was 282124 but we will try and get her 'phone number for you for the next issue!

\* \* \* \* \*

### THE VITAL STATISTICS.

Now simmer down lads, this is not a continuation of the preceding article.

The simple half-wave dipole aerial is very efficient and is still widely used notwithstanding a plethora of more complicated designs.

Additional elements will improve the aerial, give gain and directivity.

Here are some useful computer-derived dimensions (courtesy of G3WKM/0261) for various commonly-used frequencies.

The table assumes 1mm wire up to 30 mHz, 6mm tube up to 145 mHz and 10mm tube above 145 mHz.

mHz	Dipole	Reflector	Director	<u>Spacing</u> - all in metres.
1.800	80.50	82.17	77.33	20.83
1.825	79.40	81.04	76.27	20.55
1.900	76.26	77.84	73.26	19.74
3.500	41.40	42.26	39.77	10.71
3.550	40.82	41.66	39.21	10.56
3.725	38.90	39.70	37.37	10.07
3.750	38.64	39.44	37.12	10.00
7.000	20.06	21.17	19.84	5.36
7.025	20.58	21.10	19.77	5.34
14.000	10.33	10.59	9.92	2.68
14.150	10.22	10.47	9.82	2.65
21.000	6.89	7.06	6.61	1.79
21.150	6.84	7.01	6.57	1.77
28.000	5.16	5.29	4.96	1.34
28.400	5.09	5.22	4.89	1.32
29.000	4.99	5.11	4.79	1.29
144.000	0.99	1.03	0.93	0.26
145.000	0.99	1.03	0.93	0.26
70.00	2.06	2.13	1.95	0.54
88.0	1.63	1.69	1.53	0.43
98.00	1.46	1.52	1.38	0.38
430.00	0.33	0.35	0.30	0.09

\* \* \* \* \*

## AWARDS AND CONTESTS

G3UAA/0454

As we go into our 22nd year I note that the 559 Contest continues to draw more support each season and that a steady number of new Members join in the fray, bringing very welcome surprises to all taking part. Quite obviously the formula used by Cyril, GW3ASW, when creating this enjoyable Contest over a decade ago has proved to be a winner. A detailed report on the 1982/83 559 Contest will appear in the next issue of Mercury.

Here in Europe the VK/ZL Contest organised so well by George, VK4XY, coincided with some pretty ropery short-skip conditions. I found on looking through my own log at the close of activities, only George himself and VK3BBT had actually been heard in spite of scouring the usually fruitful frequencies. Was anyone lucky enough to make a scoring contact on 40 metres?

Before I move onto the Award winners for 1982 I must record my thanks to all out Net Controllers for a job very well done under difficult and variable forms of QRM, especially on the crowded LF bands.

The Member who made the "Most Overall Progress" during 1982 was Charles, G5GH/0247 with 419 points of movement up the various ladders. Second place went to G3PJB/0508 with 273 and very close behind came G3DVL/1628 with 267.

Easier to decide was the QRP winner for 1982. G3BWX/0620 hangs onto the Trophy for another year and I heave a sigh of relief that I do not have to organise transport for the heavyweight transmitting valve trophy.

Other Awards gained recently by Members are as follows:-

WAC RSARS No.23	G3PJB	CW 200	G3ADZ	CW 100	G3MKR
WAC RSARS No.24	G3YBT	CW 150	G3BWX	CW 100	N2DAN
WAC RSARS No.25	ZS3MS	CW 150	G3NOB	CW 50	G3PJB
		CW 150	GW3XHJ		

VHF Basic No.35	G3UAA	VHF 20 sticker	DJØSS
VHF Basic No.36	G4IVB	VHF 20 sticker	G3PJB
VHF Basic No.37	G3PJB	VHF 60 sticker	G3ADZ

Any Mode Basic - G4NJV, G3YSZ, G3BPB, GW3YXC, G4MUC, G3TG

Any Mode First Class (200) GM4ELV

Any Mode First Class (100) G4LO, G3BPB

Any Mode Supreme (350) G5GH

Any Mode Supreme (400) G5GH

Any Mode Supreme (400) G3PJB

The frequencies of 21170 (SSB) and 21130 (CW) still continue to carry the bulk of RSARS Overseas traffic with VK/VE/W2/N2/WA8/G and DL frequently heard - the best time in the UK being 1200z onwards.

28450 kHz has also proved to be well worth checking, especially at weekends. Over Christmas the experiment of using 29225 kHz made it possible to establish two-way traffic between the East coasts of America and inter-G at the same time.

I notice that checking back through old logs, the Society had a thriving Overseas net around 21385 kHz in the early 1970s and remembering the W6/W7 and VE7 stations heard and worked at that time I wonder if, through this column, I can persuade our present West coast members to give 21385 kHz plus or minus 10 kHz a try? If, as I anticipate, Mercury is with Members by early March, can I ask that each weekend in March becomes an Activity Weekend (easier to remember than just the last weekend in the month), with Members looking over 21385 kHz from 1600z onwards? Whilst listening for W6 and VE7 Members do not forget VE6IH and ZS5YY may show and find this frequency suitable for traffic also.

Other news to hand is that CX5RV is QRV "up 25 kHz" on most of the HF bands. VU2MD is

worth listening for on 14050 kHz daily and G6ZY/EA6 has been active late December and early January on both CW and SSB.

There will be a slight change to the 22ND ANNIVERSARY CONTEST this year and, in fact, I hope quite a few winners will emerge.

Unlike last year, when there were two separate events, the one-day Contest and the Activity Period, this year the Contest and Activity Period are to be one unit, held in the month of May and not June. This makes the celebrations a month premature but the awards can then be presented at the June AGM.

As last year Members are invited to hear/work 25 paid-up Members of the Society ON 40 METRES AND UPWARDS between 1st May and 31st May inclusive - a shorter time period than that previously allowed.

Log extracts only and not QSL cards to me before mid-June so that I can make the necessary arrangements to take your "winners" Rosette to Catterick. For members not attending the AGM, the Rosette will be mailed to you direct. I hope to have all the Rosettes marked "22nd Anniversary Contest Winner 1983" with the Royal Signals colours in the tiered surround. If the exercise proves to have generated or to have stimulated interest it may be possible to change the Rosette centre colour and date for 1984 onwards and add a colourful addition to Members' shacks each year.

Just one extra request - could full licence holders try and include two Overseas Members in their 25? If you just cannot raise those elusive Overseas Members, but have the necessary 25, submit your log entries in the normal way. If demand for Rosettes exceeds stock held then a Certificate will be awarded.

A final list - the list of the whole of the 500 Supreme Award holders since the inception of this Award:

1. GW3ASW May 1975
2. G3YSK Aug 1976
3. G3UAA May 1978
4. GW3XHJ Aug 1979
5. G3XSN Oct 1979
6. G3DPS Dec 1980
7. G3NOB Dec 1981
8. G3DBU Dec 1981
9. G3MKR Apl 1982
10. G3NVK Apl 1982

ALL AWARDS AND CONTESTS CLAIMS to:

G3UAA, D.A.RAMSEY, THE ORCHARD, CARMEN GROVE, GROBY,  
LEICESTER, LE6 0BA

\* \* \* \* \*

#### CO-AXIAL CABLE FOR SALE

DELTA ENFIELD CABLES have very kindly donated 200 metres of URM 67 50-ohm coaxial cable to the RSARS for sale in lots to members.

All money received will be donated to a Charity chosen by Delta Enfield Cables, Enfield.

Sale details as follows:-

Price: 30 pence per metre. BUYER COLLECTS. No cable will be posted and we expect Members who want cable to arrange to collect it at the AGM or have it collected on their behalf. The cable will be cut and tied up in lengths with a ticket on it after payment is received at HQ RSARS. This is high quality cable, about the best there is. First-come first-served.

We would like to thank Delta Enfield very much for their generosity and in particular Graeme Hudsmith, G4LTM/1685 who has arranged all this for us.

## WELCOME TO NEW MEMBERS

Where we extend the hand of radio friendship to new Members.

RSARS 1637. Laurence Lewter joins us as VE3HUB from 813 Walkley Road, Ottawa, Ontario. A long career in radio includes service with Tank Brigade Signals in North Africa and Italy, Baird Television and GEC. Laurence enjoys gardening and photography and has a son VE3KIM.

RSARS 1638. A Teleprinter Operator from 1956 to 1958 must have set the seeds of amateur radio for G8YQI who hails from 13 Cedar Grove Southall. Using a Creed 7A/RP on receive only prompts Victor to forecast getting his G4 ticket before too long.

RSARS 1639. Brian KcKenna of 65 Sherbourne Road, Hove operates as G4IYQ and also saw service with 5th RTR in Germany. His other interests include the martial arts which he teaches at a local club.

RSARS 1640. G4ISO, Francis Wilson of 15 Byrd Walk, Baldock, Herts saw service from 1939 until 1946 out East and now indulges in Bell ringing and nature study when not on the air.

RSARS 1641. Ernest Cookson, G4KEC is one of our white stick operators and is to be found at 14 Carroll Avenue, Merrow, Guildford. He enlisted in 1937 and was discharged in 1944, passed the RAE in 1979 and was licensed in August 1980. Open University study of social science and arts also interests Ernest.

RSARS 1642. Particulars and details withheld at Member's request.

RSARS 1643. W/O RAF Donald Foster-Bazin tells us that he is at Defence ADP Training Centre, Blandford and is something of a telegraphist so is probably monitoring our CW Nets.

RSARS 1644. Studying hard for the RAE is shared with rifle shooting and sailing by Simon Langlois of Badgers Holt, St. Brelade, Jersey, CI. A keen CCF member Simon should prove an interesting net member when the callsign comes through.

RSARS 1645. Derek Laird is a Signaller with 8th Signal Regiment but gives us no further details. Doubtless he is in the background at G4RS and will be spurred on by other members there.

RSARS 1646. Keyboards to Henry Hogg, GM3PPJ, mean pianos, electronic organs and accordions but his application from 35 Glen Avenue, Logan, Cumnock, Ayrshire does also mention his liking for high speed CW. Henry served with REME and is also interested in slow scan TV.

RSARS 1647. Paul Cox is with 604 Signal Troop and would welcome members around Munster and Osnabruck contacting him. Angling and Badminton take up some of Paul's time.

RSARS 1648. Andrew Henry is at 58 Franks Avenue, Stirling Estate, Hereford, and is another AAC Harrogate man. The big outdoors attracts Andrew to partake in rock climbing, mountaineering and skiing.

RSARS 1649. G4IUT is Gerard Craig of Green Ridges, Tibberton, Newport, Shropshire - he is a caravanner and inland waterway enthusiast and served 1960-1963 with the Corps in Germany.

RSARS 1650. It's a pity that our Editor has not come across Dennis Seymour, G4KMQ at many visits to Navy Days. Dennis is in the MOD Radio Test Shop Devonport, a short distance from 38 St. Vincent Street, Stoke, Plymouth and is a golfer and fisherman.

RSARS 1651. John McLeod, GW4KZC of Gorsedd Park, near Holywell, Clwyd, seems to have given up Go-kart racing for amateur radio. He served attached to 7th Armoured Div after training at Catterick - the fate of many of us including the Editor.

RSARS 1652. How fortunate was David Longden of Thorpe, St. Andrew, Norwich. Now G8XQC, David tells us on his application form that he only served 4 weeks at Catterick before a posting to Sandhurst came along in 1960. A keen Scouter, David is to be found nowadays at British Rail, Norwich.

RSARS 1653. GW8XAN is Roger Woods of 4 Curve Street, Aberaman, Aberdare and presumably knows GW3ASW. Roger served with the TA Royal Regiment of Wales and came onto the air in September 1980 but continues camping and hill walking whilst working for his A licence.

RSARS 1654. John Hackett signs LA2QAA from Aukra Island, Norway and maintains his CW/QRP/AERIAL experiments - he has worked 48 US states plus VK, JA, VE and many others on two watts input. His other interests include chess, poetry and music.

RSARS 1655. G4BOF, Peter Harry can be heard from North Read, Kingsland, Leominster when he is not winemaking and caravanning. John is a radio and radar technician with the Civil Aviation Authority.

RSARS 1656. An OWL B2 in Germany and serving from 1939 to 1949 probably started off Leslie Short's amateur radio enthusiasm and he is to be heard regularly from 13 Church Street, Tea Tree Gully, South Australia as VK5AOA on the overseas nets.

RSARS 1657. Bob North is G4KHR at 21 St. Augustines Grove Bridlington and joined up in 1940 at the age of 22 and was at one time the Sports NCO. He is still keen on football and cricket but amateur radio comes to the forefront now.

RSARS 1658. Catterick and Germany again started off Grahame Emerson now of 2913 Fairman Street, Lakewood, California and WB6GWS. Grahame is keen to locate anyone from "H" Troop 2nd Squadron 2 Div Signal Regiment in BAOR 22.

RSARS 1659. To be heard as either G4ALF or DJØHN is Ken Law of 3171 Hillerse, Hauptstrasse 9. He is a professional band-leader and was with the Royal Marines Band, Deal 1954 to 1958.

RSARS 1660. An ex-member of 9M2RH and now a keen SWL is Fred Roe of 40 Duncan Court, Kilmarnock who transferred to Royal Signals in 1970 after enlisting in 1964 in the RA.

RSARS 1661. SHAPE, Belgium is now the home of Tim Elsey who signs G8WIW when back home. He joined the Corps in 1971 and has been seen at Catterick, Cyprus, Iceland, Hong Kong and several other places. Tim is interested in contacting Mick Joyner G8FYJ who is also an ex-Corps member.

RSARS 1662. GW4KHW of 12 Penian Bryn, Llanelli, is known to us as Vernon Rees. Vernon is keen on satellite communications and is well active on all bands.

RSARS 1663. RSGB, ISWL are but two of the clubs of that keen SWL Ian Ireland, hailing from Tarrant Hinton near Blandford. He kicked off with the Junior Leaders Regiment in 1963 and saw plenty of service until 1976.

RSARS 1664. How many of us can say his most enjoyable task was operating the Fullerphone to Brigade HQ but that's what G4FHL, John Heesom says from 43 Grantchester Street, Newnham, Cambridge. Nowadays he indulges in model engineering and reminisces on his service from 1940 to 1946 in India and Rangoon.

RSARS 1665. Spiritual Healing, 30 years in the Fire Service, and army from 1945 to 1948 are the brief details for Peter Rosamond of 13 Newnham Close, Hartford, Huntingdon where he signs G4LHI.

RSARS 1666. We welcome another lady member in the shapely form of Barbara Ann Hamilton and reserve details for our special ladies page in this issue.

RSARS 1667. Another ex OWL B2 with service in North Africa and Italy and happily signing GW4LLE is Carey Owen of 51 Bunkers Hill, Milford Haven. At the age of 64 Carey is keen on Model aircraft and filming (sound).

RSARS 1668. Backwards and forwards from UK to BAOR and N. Ireland was Ray Prosser, now G8XUF of 11 Brookside, Canon Pyon, Hereford from 1971 to 1980. Ray is also a keen photographer.

RSARS 1669. 47 Somerset Close, Catterick finds Ken Lott, at the time of joining us he was keen on taking his RAE when not indulging in water sports, squash and tennis.

RSARS 1670. GW3XZU is known as Trevor Stafford at the Britannia Inn, near Llangollen and is a keen fisherman and very active on HF and 2 metres. 1949 first saw him in the RAF.

RSARS 1671. March 1939 was the enlisting date Royal Signalwise for Harold Bennett now G4LPV of 15 Fearnville Close, Leeds. Much travelled, Harold still travels the length and breadth of the British Isle and he tries to keep photographic records of all his journeys.

RSARS 1672. G4FGK, Ronald Tandy is at 13 Edith Road, South Norwood and prefers SSB to CW operating. He first reported to Vimy Lines in 1953 and also had a spell in Germany.

RSARS 1673. G2RJ of Garden House, Toys Hill, Westerham, Kent had a long service career commencing with 43 Div. Signals in 1939 but relaxes now with Classical music and choir training.

RSARS 1674. Barry Phillips is another Catterick man who has seen service in BAOR and Hong Kong but gives us no amateur radio details.

RSARS 1675. One of our keen CW operators is heard signing PAØRRS and was at one time DA1IE but now is in Alphen, Netherlands. He is Richard Smeets and is keen to contact the Far East and VP8 areas which should be a boost to his stamp collecting.

RSARS 1676. Few who are active in the OS Nets on 15m have not worked N2DAN (formerly WA2YBR) Steve Nurkiewicz of Freeport, NY. One of our keenest CW operators, Steve served from 1941 to 1946 in various theatres including USSR, Middle East and the UK.

RSARS 1677. At one time DL2TS, later VK6YB but now GM3KKO is Tom Ballantyne of 22 Earlston Way, Glenrothes. He served with the Corps 1950 to 1962 and runs a modified 19-set and home brew equipment.

RSARS 1678. VE3SG is often heard on the nets and Harold Stuart Graves is to be found at 53 Lawrence Avenue, Stoney Creek, Ontario. Our computer pages will interest him when he is not golfing, canoeing, camping, or polishing semi-precious stones. Stu was with the RCN in 1941 and has had his licence since 1956.

RSARS 1679. John West joined us from VS6JW but is now back in the UK as G4LRG. John says that without any doubt his Royal Signals training was very beneficial when it came to taking the Morse test.

RSARS 1680. RA, RE and Royal Signals saw Fred Singleton and we now know him as G4JHF of 8 Rodsley Close, Holme Hall Estate, Chesterfield. Fred obtained his ticket in 1980.

RSARS 1681. Persistence will surely pay in the case of David Neville of 26 Aldrin Drive, Mt. Waverley who is a member of WIA and has twice sat for his VK Licence. David was with 3 Signal Regiment in 1964 until 1973.

RSARS 1682. G4LQN is Ken Packman of 27 Hunters Hill, High Wycombe but in 1952 he was a Teleprinter Operator. He is keen on woodwork and model horse-drawn vehicles.

RSARS 1683. Catterick 1939 and France and Gibraltar but now Dunnville, Ontario, with camping and gardening tells us what Eric Stabler does when not operating VE3ISD or teaching the local lads CW as he has done for 4 years.

RSARS 1684. Bill Hitchcock is G8TOM of 76 Lomond Grove, Camberwell. He was with RASC at one time but has been interested in our mutual hobby since 1946 together with photography.

RSARS 1685. Music, reading and swimming interest Graeme Hudsmith but we bet that much time is spent operating G4LTM since the ink dried on the licence in mid-1981. Like to many of us Graeme has seen the parade grounds and classrooms of Catterick Garrison.

RSARS 1686. Roy Hughes is well known as ZS5YY at 9 Perth Road, Westville, Natal and is another ex-Harrogate man with service in Germany and Hong Kong. He enjoys gardening, tennis and swimming and was formerly 9M2GX and VS6ES.

RSARS 1687. Colin Anetts signs VK8NCA from 12 Walker Street, Alice Springs from where he enjoys bush travelling and touring Australia. He is keen to contact G3HVI and tells us he served with us 1955 onwards.

RSARS 1688. An ex RAF man now living at Catterick village is John Harkness who served in Nicosia and Khormaksha. Sailing takes some of John's time as well as amateur radio.

RSARS 1689. Seven years in the RN but later with 24 Signal Regiment at Catterick are listed as some of G4JRE's service details. John O'Halloran is now at 29 Knox Lane Harrogate and is a keen CW man running QRP at 2 watts maximum input.

RSARS 1690. Airborne Unit 52nd Light Infantry and Sets 18/19 and 22 come from the memory of John Challenger, now G4EIB of 42 Gibbons Hill Road, Dudley. He is keen on radio-controlled model boats and photography.

RSARS 1691. Particulars and details withheld at Member's request.

RSARS 1692. Andrew Patchett loves farming and collecting coins and stamps. At West Summerside, Healy Masham, Ripon he runs a listening station RS46579 but gives no further details.

RSARS 1693. Charles says his surname is Patchett too and he also lives at West Summerside. No further details but we assume he goes on listening watch as well.

RSARS 1694. Ken Clinch is a member of RAIBC, lives at 13 Pound Piece, Ashbury near Swindon, runs station G4LCN and was with RAOC in 1945.

RSARS 1695. G4GHS has been heard often in the nets and is Harry Cohen of 41 South Station Road, Liverpool. He was an SWL as long ago as 1938 and served with Air Formation Signals SEAC. A fellow member of the Liverpool & District ARS with G3XSN.

RSARS 1696. March 1980 saw Gerald Cogger join Royal Signals and he is at the moment "heavily into a solid state RTTY unit" from 74c Southover Street, Brighton with the callsign G8TUQ.

RSARS 1697. Susan Cogger and readers will find her details on the ladies page.

RSARS 1698. GM4JPH is Alex Kindness of 22 Balmellie Street, Turriff, Aberdeenshire a long way from India where he joined the Army in 1941 having commenced listening in the 1930s.

RSARS 1699. Clifford Last served in the Army after the RAF, comes from 213 Rushmere Road, Ipswich and operates as G8WGL.

RSARS 1700. Another landmark numberwise - only 200+ to go and we shall be up to date!! GW3YXC saw service in India, Egypt and Syria among other places and probably prefers to give his QTH on the key as Ty Mawr Farm, Rhiwsaeson, Pontyclun, Glam. Prefaced by the name Jim Bulcraig.

RSARS 1701. Bill Thompson is G4LQO and is ex Royal Marine of 18 Llewellyn Close, Upton, Poole, Dorset which enables him to pursue his other hobby of sea fishing no doubt.

RSARS 1702. Ronald "Bing" Crosby is at Forester NSW, has the callsign of VK2NHV and is on the lookout for any members of the British Army in particular ex Cavalry or Armoured Regiments. Not surprisingly since he was in the Cherry Pickers and Queens Royal Lancers.

RSARS 1703. Drop in to 8 Tyrfran Avenue, Llanelli and you will find Arthur Johnson ready to fire up GW4JKX or have a game of Bridge or Bowls with you. Ex-Dental Corps as well as Royal Welch Regiment Arthur was an SWL before the war.

RSARS 1704. Normon Sumner is a keen SWL at 56 Severn Road, Culcheth, Warrington now that he has retired from the Civil Service. Norman joined up in March 1942 at London District Signals and served in the 8th and 10th Armies and the American 5th Army.

RSARS 1705. Prefers to Remain anonymous.

RSARS 1706. Yet another lady member, this time Gladys Crooks who will appear along with other ladies on page 3.

RSARS 1707. Bob Page is G4FTY of 49 Harecroft Crescent, Sapcote, Leicester. He is a scuba diver who also gardens and was with TAVR Rugby 1967 to 1970.

RSARS 1708. GM4KLO will call you from Elphinstone Road, Giffnock, Glasgow if he is not out controlling model aircraft, playing golf or playing jazz. ACF Signals Section Ayr and Glasgow know him well.

\* \* \* \* \*

CROSSWORD

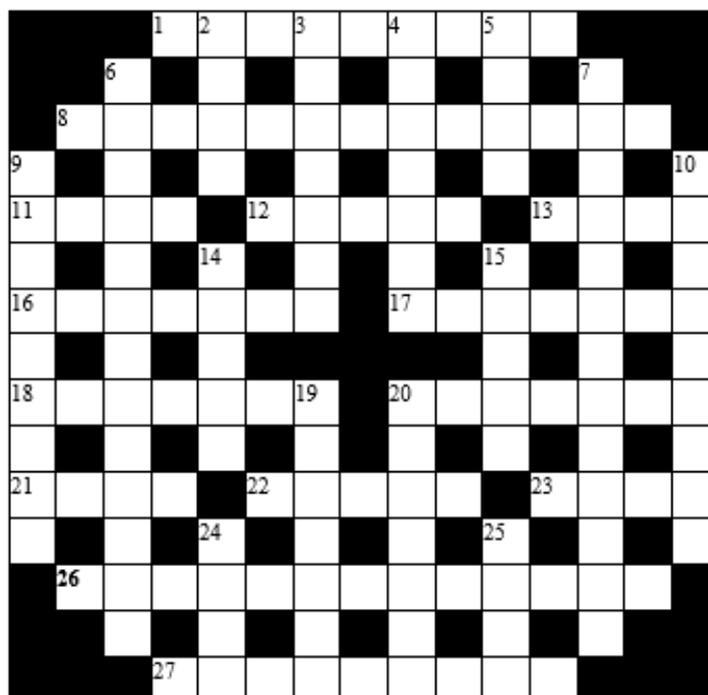
by G3NVK/0138

ACROSS

1. Polythene communication form (9)
8. Blast! No champagne send-off from these (9,11)
11. Car on the Lease-lend list (4)
12. Spiked iron swingle used before tanks (5)
13. Pig turns inward for German defence (4)
16. Imaginary space-age alien (7)
17. The act or using firearms (3-4)
18. Confound the enemy (7)
20. Law star of 1939-45 (4, 3)
21. In short the East Africa Rifle Corps parade on an acre (4)
22. Aircraft (5)
23. The medics cram again (4)
26. Code RN tea item used for finding submerged or buries explosive hazard (1, 4, 8)
27. Arsenal team member (1,3,5)

DOWN

2. She appears in the United Nations HQ (4)
3. Step-wise arrangement of troops (7)
4. One penalty for treason (7)
5. Japanese soldiery (4)
6. Sheep used to bring down walls? (9,4)
7. Instrument likely to cause death (1,6,6)
9. An advocate of hostilities (9)
10. Military transport from Bedford to Leyland (4,5)
14. Plunder a groove spirally (5)
15. Snap of teeth in anger (5)
19. Armoured vehicle of the Sultan of Egypt (7)
20. Partner for Big Bertha? (4,3)
24. Sheltered from reverse arms (4)
25. Member of the Highland Division (4)



The next issue of "MERCURY" will be mid-July: this will include the AGM Report. All copy to the Editor by 1st June 1983 please.

ACF/CCF INTERDISTRICT RADIO NETWORK.

Mike

Buckley

The Signal Platoons of the Cadet Forces have recently received a "boost" by the issue of new equipment - C13s and A41s to be precise. Now you may think this is all very old hat but we are very pleased to have this equipment: the 62 sets and 88/31 Sets having either been pensioned off or can now soon be.

For the first time in the existence of the National Radio Network it will be possible to expect all stations to be on the correct frequency, rather than just hoping that they are somewhere near! The C13 looks as though it will be with us for a number of years, and, judging from past experience, will prove excellent value - MOD have even managed to find some 12v ones which helps to overcome the battery problem. However even the C13s will not entirely eradicate the No.12 Sets, the 19 and C12 sets from use - what, you didn't realise that anybody was actually using these old sets still?!! Well surely the 19 set will go on for ever, and the No.12 set has gone on for ever, despite the occasional mains transformer blow up, and problems in obtaining the PA valve - £45 is the quoted price for one.

While the rest of the Army get their Clansman sets the Cadets will patiently wait for their issue of PRC 349 - when funds allow presumably. For the present we will have the use of the A41 and this is an excellent little (?) set - certainly it does all that we require of it - ever seen a 5' nothing under an A41 set, carrier, spare battery and all the bits? Well, they tend to shrink a bit!

The National Radio Net (NRN) continues to do well, and some hundreds of stations, mostly CCF, are active in term time. If you are near one why not consider giving a helping hand? They always appear to be having problems with antenna or repairs or something.

Now, lastly, may I ask for some information? I am trying to compile a list of members who are Ex-Cadets (ACF/CCF/ATC/SCC) and who now hold Amateur Callsigns.

Please don't forget will you - use the phone if you prefer, my wife will be pleased to note the details at all times of the day or night!

Happy QSLs to you all,  
MIKE BUCKLEY, 12 Ranmore Avenue, Croydon, Surrey  
TEL: 01-654-2582

\* \* \* \* \*

THAT MAN THERE !



Section 38 of the Army Act, 1955 says that "any person subject to military law who absents himself without leave shall on conviction by court-martial be liable to imprisonment for a term not exceeding two years or any less punishment provided by this Act".

And it was with those words that the Court Martial hearing of the case against 22035565 James Slangis opened.

Jimmy was in fact discovered first by G3EKL, hiding under the shack table at the Celle & District Amateur Radio Club during the first week of November last. (Readers will remember that this man absconded from the 73rd/88th Foot and Mouth (Webb's Own) platoon).

In mitigation, the Defending Officer submitted Jimmy's overwhelming desire to become a radio amateur and to join RSARS and it seems that this desire was so strong that he deserted shortly after publication of Mercury No. 72 whilst helping in the changeover of editorial offices. After serving his sentence (28 days at Colchester Military Corrective Establishment) Jimmy has returned to duty and is now, thanks to G3TAN taking him under his wing, appearing at G4RS most evenings and has embarked upon a course of instruction for the RAE at the University of Scotton.

More details of his progress will be published in future issues of MERCURY but meanwhile we wish him well and welcome him to our mutual hobby and Society. QTH: Jimmy Slangis, care of The Editor.

## AUDIO MONITOR AMPLIFIER

G8ODE/1691

The accompanying drawings for the Audio Monitor Amplifier should be self-explanatory. The drawings and designs were originated in the Public Supply Industry that I now work for and so far 20 have been built. The prime reason for its development was a need to have an easily portable robust unit capable of presenting the correct impedances to circuits being tested. Since I am a telecommunications engineer, the impedances are those commonly associated with Audio Telephony etc. No doubt Members can adapt the design to suit their particular needs.

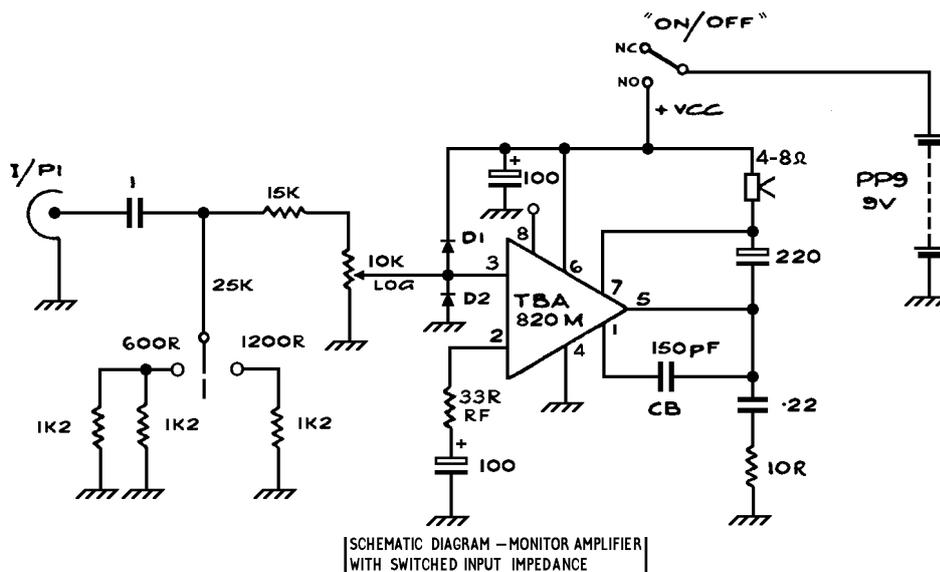
My design is not really original, the main amplifier circuit being the "economy" version from the Data book, the band width however is tailored to my job's particular needs, see CCT. Notes.

A part of the circuit which may need a little explanation is the single transistor pre-amplifier This was added to the pcb as an extra frill, just in case extra amplification might be required. This feature could be utilised to enable a loudspeaker to be used as a microphone.

The main amplifier has been put to use as a "Baby Minder", the unit was powered using the external jack.

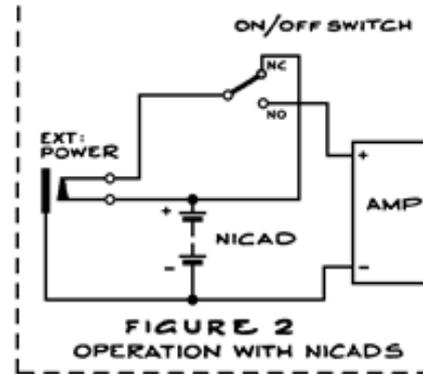
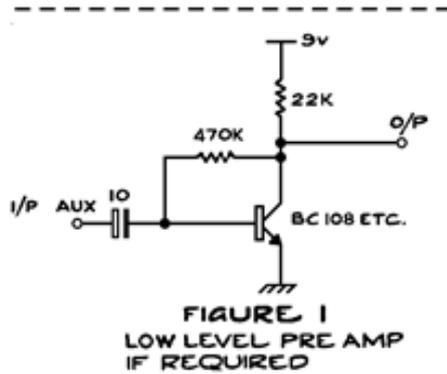
The unit if switched off and still having the external jack in situ will charge the battery; when the switch is on, the battery will be taken off charge and power is supplied to the amplifier. Please note that if Nickel-Cadmium batteries are used they should be charged at constant current.

On the other hand, Members may want to build a mains-powered unit: certainly if the box specified is used, there would be enough room if the battery was removed.



### NOTES

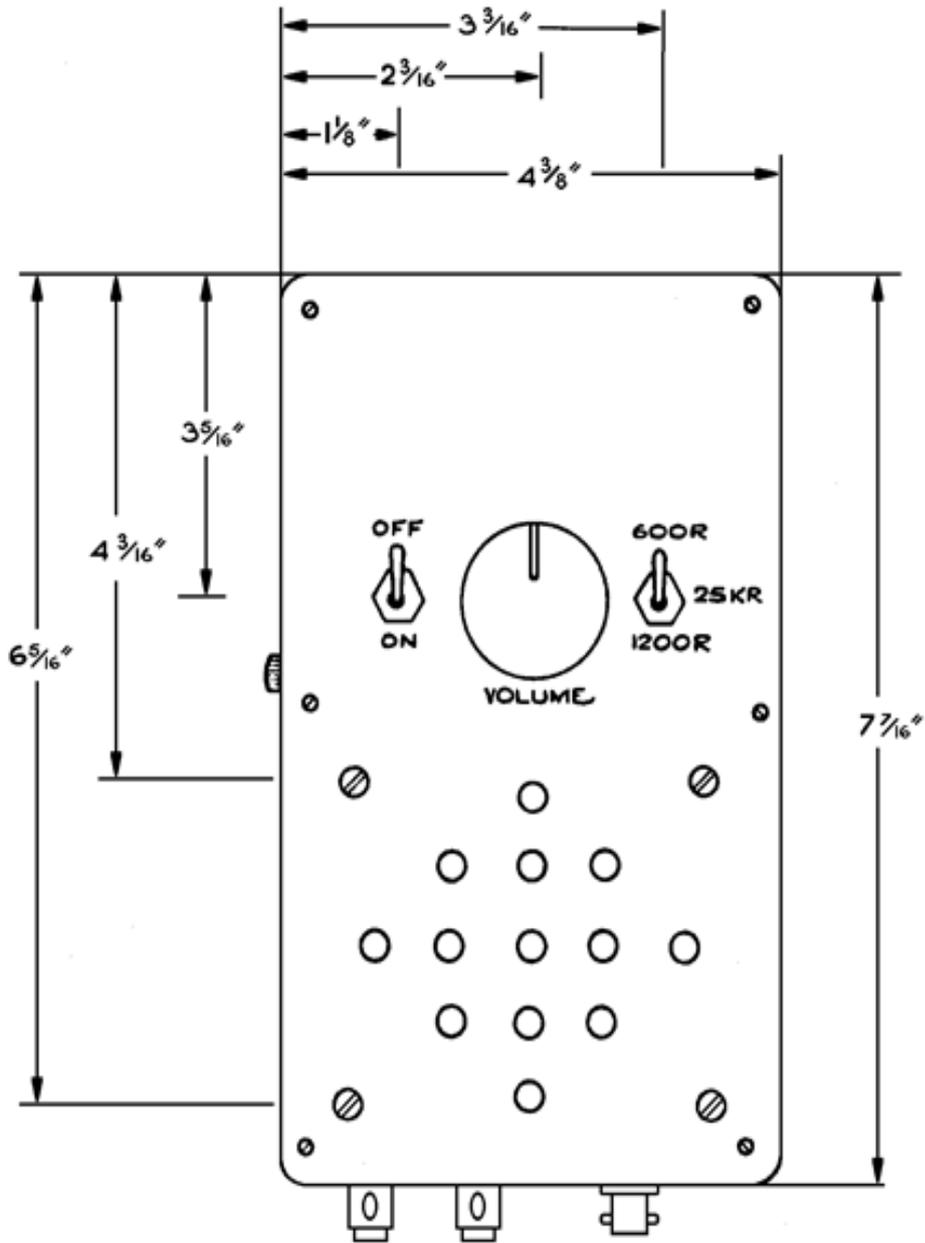
1. D1, D2, IN4148 GEN. PURPOSE.
2. PIN 8 IS NOT CONNECTED, BUT FOR GOOD RIPPLE REJECTION CONNECT TO +VCC WITH 50 $\mu$ FD CAPACITOR.
3. AMPLIFIER CUT OFF SET BY:- CB = 150pF AND RF = 33R AT 8KHz, CB = 200pF RF = 100R AT 20KHz, CB = 1000Pf, RF = 100R at 5KHz.
4. RATED OUTPUT 1 WATT.
5. ALL CAPACITOR VALUES IN  $\mu$ FD UNLESS OTHERWISE MARKED.



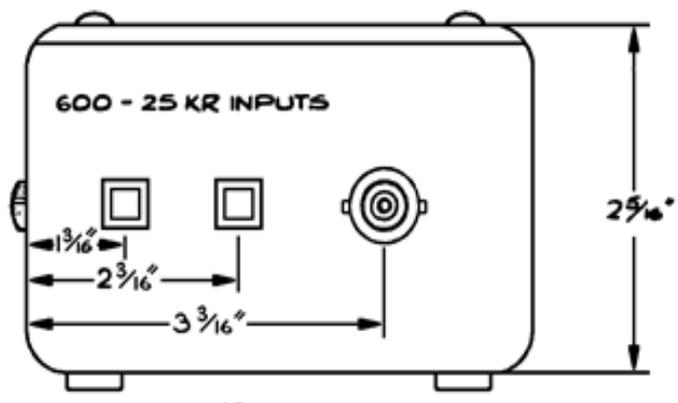
MONITOR AMP. WITH SWITCHABLE I/P IMPEDANCE STOCKLIST

	<u>PART CODE</u>	<u>QTY</u>
1. CASE VERO SPEED 192 X113 X 62MM	86-20104E	1
2. FEET VERO SPEED	75-1788E	4
<u>ITEMS 3 - 30 FROM RADIO SPARES</u>		
3. SPRING TERMS RED	434-368	1
4. SPRING TERMS BLK	434-374	1
5. 50 OHM BNC SCOKET	455-674	1
6. 50 OHM LEAD AND CROCS.	488-523	1
7. BATTERY STUDS	488-012	1 PAIR
8. VOLUME POT 10K LOG	161-694	1
9. LOUDSPEAKER 4 OHM 3 3/4 ROUND	248-533	1
10. SWITCH SPDT WITH CENTRE OFF	317-055	1
11. SWITCH SPOT	316-973	1
12. KNOB BRUSHED ALUMINIUM 22MM DIA	498-902	1
13. RESISTOR 10R 1/4 WATT 2%	146-011	1
14. RESISTOR 33R 1/4 WATT 2%	146-134	1
15. RESISTOR 1K2 1/4 WATT 2%	146-515	3
16. RESISTOR 15K 1/4 WATT 2%	146-774	1
17. CAPACITOR 150PF CERAMIC	124-803	1
18. CAPACITOR 0.22MFD 100V	113-910	1
19. CAPACITOR 1.0MFD 250/400V	112-901	1
20. CAPACITOR 100MFD TANT 6.3V	102-730	1
21. CAPACITOR 100MFD ELECT 25V	101-579	1
22. CAPACITOR 220MFD ELECT 25V	102-588	1
<u>RIPPLE BY PASS IF REQUIRED</u>		
23. CAPACITOR 47MFD ELECT 25V	103-575	1
<u>RIPPLE BY PASS IF REQUIRED</u>		
24. CAPACITOR 10MFD ELECT 25V	103-553	1
25. RESISTOR 22K 1/4 WATT 2%	146-819	1
26. RESISTOR 470K 1/4 WATT 2%	147-137	1
27. TRANSISTOR BC108	293-533	1
28. SPEAKER FRET 100 X 100MM	555-831	1
29. 8 PIN DIL SCOKET	401-683	1
30. DIODE IN4148	271-606	1
31. ASSORTED STRANDED WIRE	VARIOUS SUPPLIERS	-
32. HELLERMAN SLEEVES	VARIOUS SUPPLIERS	-
33. INTEGRATED CIRCUIT TBA820M	VARIOUS SUPPLIERS	1
34. 4BA BOLTS	VARIOUS SUPPLIERS	4





MONITOR AMP WITH SWITCHABLE  
 I/P IMPEDANCE  
 MECHANICAL DRAWING



## OF MORSE AND MEN (CONTINUED)

G4BUS/0276

Many a military-history text and high-ranking memoir has unravelled the tangled skein of the Chindit campaign of 1944, over the years. My own recollections are blurred by a malarial miasma.

I remain baffled - and so, I suspect, do most of those involved in the campaign.

The consensus is that for a capital investment of six 4-battalian brigades, the dividends were disappointing. This is fair comment. Such an investment would seem to require the taking and holding of enemy territory. Our make-up was not orthodox, however. Outside the strongholds, we had no artillery support and our air-borne supply-lines were too tenuous to sustain a conventional, lateral advance on a divisional front. The run of events elsewhere in Burma negated much of Wingate's initial purpose. But he was killed long before the campaign was concluded. Our brigade did seize and hold enemy territory - at Mogaung, at a large cost in already exhausted man-power.

There was a hopeful school of thought on our side during the war that imagined it could be won fairly painlessly by some sleight of hand. Perhaps Churchill subscribed to this with his "soft under-belly of Europe" pre-occupation and his fondness for the unconventional. The emergence as a prophet of the hirsute Wingate from Burma in 1943, having led the first offensive against the Japanese by British land forces, swayed the balance. Some great conjuring was planned at

Quebec for the following year. Hey-presto, we were the darlings of the Press.

The force I was with was to operate Vietcong-fashion in the extreme east of the theatre of operations. Unlike those latter-day guerillas, we couldn't melt into the indigenous background come break of day however. We had many misadventures and delays before reaching our stamping-grounds, via a diversion to 'Broadway', the first Chindit stronghold, instead of the planned glider-landing east of the Irrawaddy. The W/T mule with our B.2 suitcase-set, plus cipher-books, had deserted to the Japs on the Bhamo-Hyitkyina road crossing, so we were starving by the time we reached friendly Kachins up in the mountains. Through the radio facilities of our secret agent there, we ordered massive supply drops.

For a while there on the China border, it seemed that our main purpose was to set up as a kind of mail-order business hell-bent on bankruptcy. As fast as we received one bumper drop, the Japs would attack us by the light of our own signal-fires on the D.Z. and swipe the lot. Or we would gather our own supplies, and those for the Chinese brigade who were supposed to support us (a war lord and his bandits), only to have them scuttle off across the Salween and into Yunnan, there to whoop it up on our runs and pawn the gold bangles that were dropped to us as hard currency. Eventually old Fu-Manchu and his horde would come skulking back with their tommy-guns and umbrellas at the long trail, obviously hung-over, but full of tales of derring-do o'er yonder, beyond the Salween.

We learned the lesson and became solvent. The 76/109 sets arrived by parachute, with chore-horses and batteries complete. Forming up into our sections of South Staffords commandos, Burma Rifles and Kachin levies, we departed to our various battle stations.

Broadly our mission was :-

1. To raise the Kachin hillmen in revolt against the occupying Japanese, and to arm them and train them.
2. To operate with demolitions against the Myitkyina-Bhamo road, with the object of closing it to Japanese reinforcements moving against General Stilwell's forces in the north. They were advancing south, building the Ledo Road behind them.

Neither of these objectives proved easy in the event. The Kachins, once armed, showed a strong inclination to move down upon their ancient enemies, the Shans. As fast as we blew and mined the road, the Japanese, no slouches at civil engineering, would make it good within twenty-four hours. We had better luck blowing bridges. There was no question of us blockading the road. At our flimsy strength, we couldn't cope with the armour the Japs could bring to bear along the road. On this, via W/T, we would call down air strikes.

My memory of all this blurs, but it retains stark impressions of the forced-marches, and even clearer pictures of my comrades - a grand bunch they were, too.

Nowadays, when I get occasional, nostalgic T.V. glimpses of grinning, thumbs-up idiot-Tommy Atkins types caught in the patronising news-camera lenses of war-time, I shudder. Was that us - that vast army of George Formby clones? Were we really that damned simple? Then I remember my old mates and take heart. Not bloody likely we weren't! Not the Signals chaps, anyway. All the same, when the going was good on the march, and when our supply-drops were successful, with our lucifers we lit up our fags, and smiled, smiled, smiled.

I was somewhat laggard on those marches. The severe bout of Jhansi malaria had taken its toll. Most of my mates practised a form of self-hypnotism. As their bodies struggled wearily along, their minds were elsewhere.

As a reward for a successful campaign, we had all been promised a month's leave in Bombay at its conclusion. That's where they were in spirit. Few thought of home. That was too painful. There was no "repat" in the War. Pre-war Regulars there were in India, it was said, nine years out from Blighty with no hope of repatriation. But Bombay now.....

"Where are you, Nobby?" would come a query as we staggered along. "Strollin' up Colaba Causeway, mate - headin' for' the holiday camp. Where are you?" "Goin' the other way, cock - up Grant Road" - this with a lascivious chuckle.

Such transcendental meditation was beyond me. Try as I might to place myself in the 'es-steak-yegg-and-chip' nosh-houses of Hornby Hoard, the cutting of my pack-straps, the rubbing of my water-bottle against my hip-bone and the itching of my leech-bites would bring me back to the aching "here and now". The sweaty neck of ungainly 'Geordie' stumbling just ahead of me would drive me to silent fury. The silly pork-pie fashioning of his stupid bush-hat, and the way his big pack sagged down to his back-side, were a constant torture - and he would keep crunching those damned Dextrose-tablets.

Then there was the cavorting Tug, always so maddeningly neat. Back in India he had got a durzhi-wallah to run him up a posh pagri for his bush-hat. Now, in the jungle, its smartness had a vexing incongruity, calling to mind church-parades at Mhow. His was a long-legged, balletic style of marching. In his fastidiousness, he would prance from side to side of the muddy track, never venturing a well-turned boot into the mule and elephant droppings the rest of us trudged through. This was heroic of him, for, as well as his big pack and rifle, Tug bore the full weight of The White Man's Burden.

In the hustle of our leaving Jhansi, Tug had forgotten to settle his 'kitab' with the char-wallah. On the slate he had left the huge sum of two Rupees, four Annas. Well to the east of the Irrawaddy, his conscience was in torment.

"Gosh, whatever will the man think of me?" he would ponder, lugubrlously. "I've let the side down, you know. I mean, our word's supposed to be our bond. isn't it!"

We felt tempted to ask him to do the decent thing, and pass him a rifle. So humourless was he that he may well have taken our hint. A real pukkha sahib, he.

Tug, some time after stand-to in the early mornings, could be a sore trial. We would have spent a wretched night, lying deep in the mud in pouring rain, mosquito-bitten to distraction. He would come prancing out of nowhere, daisy-fresh.

"Where did you spend the night?" he would demand to know. At the bleedin' Ritz. Where else?"

A smug smile would creep over his long features (such smiles were brief). That char-wallah-johnnie, don't y'know.

"I had a lovely dwy night - under a big teak twee, just off the twack".

While we fumed over this, he would clinch it with: "What did you have for bweakfast?". As if we were all standing in the foyer of the Savoy!

Dextrose-tablets and chewing gum from our expired K-ration packs would have been our fare.

His December dawn of a smile would re-appear:

"I made myself a lovely biscuit powwidge, fwied some chopped-ham-and-egg-yolk, ate a bar of chocolate, and washed it down with hot coffee!"

The worthy, provident Tug, how he wasn't shot at dawn, I'll never know.

Almost as bad was Tug on radio-watch. The tip of his tongue would protrude from his lips, he would flex his fingers and crack every joint in them, adjust his headset a dozen times, and then, with a delicate tweak of the tuning-dial, he would go right off net.

And he would scratch himself. Oh, how he would scratch himself! He couldn't possibly have itched more than the rest of us, with all the ticks we'd picked up in the jungle, and the fleas from Kachin huts. His acute sensibilities made him scratch much, much more. Inevitably, the time came when he reached prissily down with one hand, and tapped himself gently in the crotch. With his other hand he scratched furiously at the Morse key. The White Man's Burden had pressed him very hard that day.

We established ourselves at various ambush-posts and hide-outs. Our internal radio network operated perfectly. Although a high-grade cipher was employed by the two cipher corporals for rear-link traffic, we used a simple transposition cipher between our own out-stations. The two key-phrases of it remain with me to this day.

The Kachins were wholly loyal and wonderfully hospitable to us at great sacrifice. The Japanese, constantly dogging us, would move in and destroy any village that had given us succour. The Kachins would be prepared for such attacks, with all families and livestock moved to secondary villages deep in secret jungle. Running battles would precede these evacuations.

A sturdy mountain-people of Chinese origins, the Kachins dwelt atop great hill features, in thatched and stilted huts. By religion they were pantheist-animist, worshipping the 'nats', or spirits, they believed ruled all the flora and fauna of their world. Most of us were much more pagan than they.

Every approach to a Kachin village was blocked by a flimsy wicket gate - to exclude all evil spirits. Nearby would be bamboo shrine on which were placed bamboo phials of drinking-water and offerings of rice. The blasphemous observation of one of our number as we approached our very first Kachin village had been:

"Oi, Charlie: Nip up there an' see if they've left five Woodbines on that thing, would ya:"

Yet, amazingly, the Kachins loved us - the scruffy, sweaty, cursing British soldiery!

Perhaps we owed our popularity to the wise and dedicated district officers who had preceded us in less fraught days. In those remote mountains the hand on the Imperial rein had been fairly light. Those British administrators had been almost the only contact the Kachins had had with the West. Their innocence had been preserved. Now they had thrown-in their lot with us as the Burmans of the more developed south had not.

For our part, we pretended not to notice the whole hill-sides burned out of the jungle and, in the anarchy of war-time, bright with the blooms of the opium-poppy. The Japanese would not permit such horticulture. One day, unbelievably, our trusty B.2 rear-link set was not 'through'. Imphal, where our base BC.610s were sited, had been invested. The Japs were at the old L.R.P. caper themselves, in great strength. Their ill-fated invasion of India was on! Within twenty-four hours communication was restored and our devoted ace-operators at Rear Brigade were copying us solidly in their new QTH, Sylhet. They had been flown there in record time.

We knew that Allied command of the air over North Burma had been achieved when, instead of Zeroes, Mustangs swept low to strafe us. Then our frantic waving of our bright orange kerchief "panic maps" would evoke an apologetic waggle of wing tips. On the positive side, we could now conduct our supply-drops in daylight.

There were quiet periods for us around that time - almost cosily domestic, indeed. In our clandestine W/T hide-out well off the beaten track, it was nice to be able to say:

"Listen, Nobby. I'm just gonna pop over to China for some eggs. Hold the fort - heh - will you".  
And over to China I popped.

Up I went, past the frontier fort (where our little force had, unwisely, tried to withstand a Banzai charge) zigzagging up the pony-trail beyond the tree-line, clearing one false crest after another, over the massive Mount Lungrabum which stood, a climatic barrier, twixt Burma and Yunnan.

The sweat chilled under my shirt as I started down from the final crest. Far-off a cock crowed in the clear air, delighting me with its domesticity. On this side there was no buzzing jungle, no alien cicadas or unnameable cries. Green and terraced China lay before me, just as Marco Polo must first have perceived it.

I experienced an improbable deja-vu, and at that instant a call came to me that was to bring me back to the Orient again and again in later life.

On the floor of the valley below was the cleared padi of a light-plain strip where big, cheerful American sergeant-pilots had lifted our wounded in their little L.1.s, to the comparative security of the 'Broadway' stronghold. My destination was half-way down, to a little, walled village whose name I can't for the life of me recall.

I was made welcome in the village. It had survived many visits from Jap patrols and was the source of much useful intelligence for us. There was an indefinable air about the place - something I was to sense in other places farther east in more peaceful days to come. A kind of Buddhist absence of evil is the only, inadequate, way I can describe the sense of well-being I first had there.

There were little, trousered, high-born old ladies tottering around on tiny feet which had obviously been bound in their infancy, and scholarly old gentlemen, in long gowns, who would have known the Manchus. Maurice, our Anglo-Chinese sergeant-interpreter of the Hong Kong Volunteers, told me soon afterwards that these old people, refugees our little force had, from the interior, spoke a refined form of classical Mandarin which taxed all his powers of translation.

I soon traded my tins of K-ration corned pork-loaf and, finishing my green tea, reluctantly I departed. In my hand-held bush-hat I carried a dozen or so new-laid eggs, some fresh-fried pork and, for Nobby, a quarter-pound of roasted sunflower seeds. It was the niftiest bit of early 'Chinese take-away' I can recall.

Cor, didn't we have a rare old 'gut-bash' that night!!

We got to know our area of operations so well that, within it, we could travel without a Kachin guide. Such journeys were always tense, though, and always made in at least pairs. There was ever a fear of humping a Jap patrol round the next bend in the track. Our two instrument-mechanics, Geordie and Geoff, constantly made trips between the out-stations. Not one of us, arriving at a hide-out deep in the jungle, could ever resist greeting our mates with: "Ah, Doctor Livingstone, I presume!"

We picked up a smattering of Jing-Pawny, the language of the Kachins. Entering a village, after the required salaams, we would demand belligerently, jaws jutting:

"Murree pien?" ("Where is the enemy?") - intending to take the opposite route if a direction was indicated. Or we would enquire:

"Murree salongwa?" ("Where is the head-man?") - thus assuring ourselves of a long draught of his delectable rice-beer stored in long, hollowed-out boles of bamboo. Hospitality was unfailing. We would be pressed to stay the night. We did so only with reluctance.

How does one refrain from scratching one's backside when seated before one's host - while other tiny guests of his are making a host of one's person? The Kachins never scratched. Presumably they had a life-long truce with their vermin.

Skeletal old grand-dads and elderly, dissipated uncles would join us, and again our manners would be put to the test. We tried hard not to stare as the old boys pulled out their pipes, produced dried banana leaf, blended it with raw opium, lit up and went off into a slobbering trance. Thank God they weren't Red Indians!

TO

BE CONTINUED

## MOBILE SAFETY.

G3WKM/0261

Our motor cars are still pretty dangerous things - to the driver as well as the other fool. This is in spite of modern technology with its crumple zones, safety belts and so much plastic that it's a wonder there is ever a threat of rust!

Into this hazardous area, we introduce Mobile Radio with lots of distractions from the vital job of controlling our progress along crowded streets and winding roads. To use the modern language, it is the man - machine interface where troubles may occur.

We are used to listening to car radios and there is no doubt that broadcast programmes can be a great help, particularly on a long journey. It takes a great deal more concentration to hoist in a typical amateur conversation whilst on the move.

The real problem comes when we want to transmit. Operation of a fist microphone commits one hand totally, fine on the straight, but not so good in bends or traffic. Channel changing is another problem, with two aspects - first, moving the tuning control, second, looking to see which channel you have selected.

Both activities demand concentration, deflected from the basic job of keeping the car in straight and level flight! The use of the rig in the car therefore demands minimum interference with the normal safe activity that we call driving. This includes - keeping the eyes on the road and mirror, keeping the hands on the wheel when not occupied with gear changing, keeping the mind on the road conditions, route etc.

My solution to these problems is the subject of the rest of this short article.

The requirement is limited to channelised FM on VHF. No SSB - tuning too difficult, no HF - aerials too bulky, no CW - impractical in a moving vehicle.

My microphone is a small electret device designed for use on a tie clip. The microphone contains a miniature 1.5v cell which supplies an FET amplifier. The snag here is that the cell is permanently connected and has a short life as it supplies a small current continuously. I overcame this by fitting a switch in series with the cell. No normally available switch was small enough so I designed a simple device using very thin double sided p.c.b. This has given me 3 years regular usage on one battery, and still going strong. The little microphone is fitted on an aluminium carrier which hooks on my spectacle frame, the microphone being about 2cm to the left of my mouth. Tests using the microphone at chest level, as designed, gave too much car noise, particularly if the window was open.

The microphone cable runs down my left side, outside the safety belt. In the event of any sort of disturbance, the microphone and carrier fall off as the carrier only hooks over the side of the spectacles. This ensures no element of restriction in the event of an accident. The microphone cable is terminated in a 3.5mm jack plug: again, a snatch would pull it free, and this plugs into a small plastic box fitted to the gear lever by a Terry clip.

The plastic box contains the transmit/receive switch, operated by the thumb and forefinger of the left hand when rested naturally on the gear lever. Two spring loaded, momentary contact switches are also mounted on the box. These provide up, down and scan facilities for channel changing. A selector switch on the rig allows for 10kHz or 100kHz steps and a brief touch of the appropriate button moves one chosen step, whilst a long hold gives a rapid scan. All this is achieved by grounding lines from the multiway microphone control socket on the rig.

The Tx/Rx switch also controls 13.8v DC to an in-line pre-amplifier mounted in the boot, the amplifier is RF switched but operating the inbuilt relay provides a fail safe situation as the relay is energised in the receive mode.

The switched DC is also taken back to the rig and is then routed, with digital display data to a remote frequency readout located on top of the "hump" above the instruments. The reason for the remote display is that the rig is under the glove box on the passenger side and is well out of the field of view when on the move. The remote display is located just below the normal eye line and offers no obstruction to the view ahead. The switched DC operates a green LED which has been added to the display to give a clear indication of the transmit mode since, as the Tx/Rx switch is not spring loaded, inadvertent operation of the switch could result in an unintentional carrier being radiated - not a popular, activity on a busy local Repeater channel! The choice of green for this function was purely because all the other indications on the remote display are red.

A remote speaker is fitted near the driving position, angled so that maximum high audio frequencies are directed at the operator's head - the advantage found here is that concentration on the QSO is easier as the higher audio range gets over car noise.

I do not recommend any sort of earphone as so many clues to car performance and external activity would be masked.

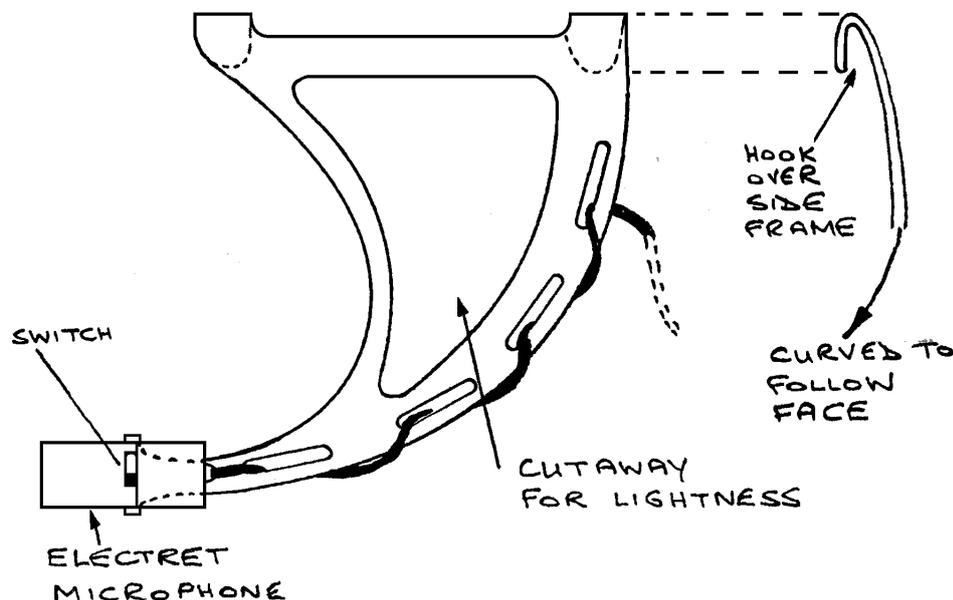
I don't like a push button microphone as operation of the button is possible if the microphone is dropped in the lap, leaving you wondering what channel you were on and again distraction from the main activity of driving.

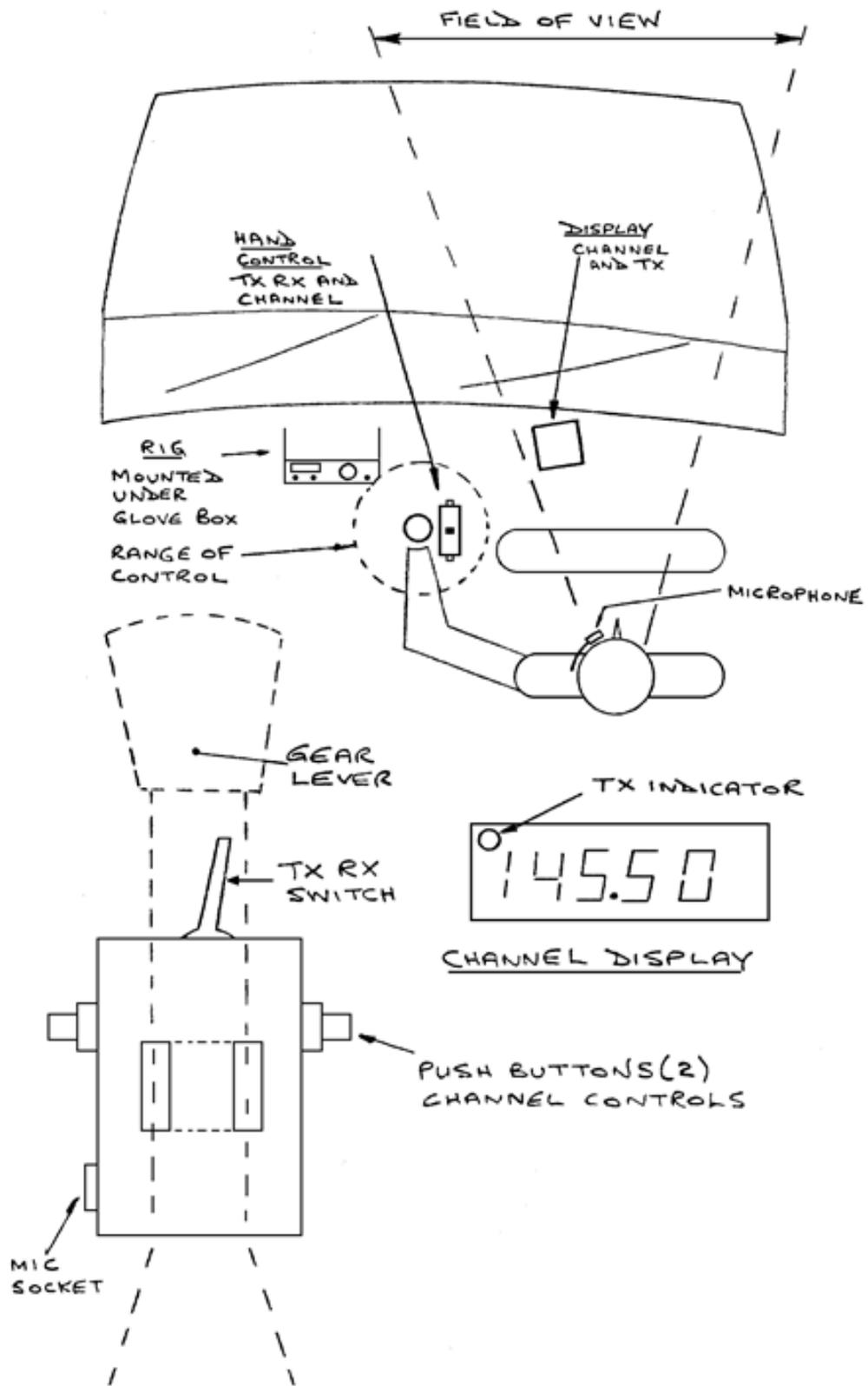
My advice to newly qualified drivers is not to attempt mobile operation until you are fully competent at the wheel. Newly qualified operators should also defer mobile working until talking on the air becomes a natural activity.

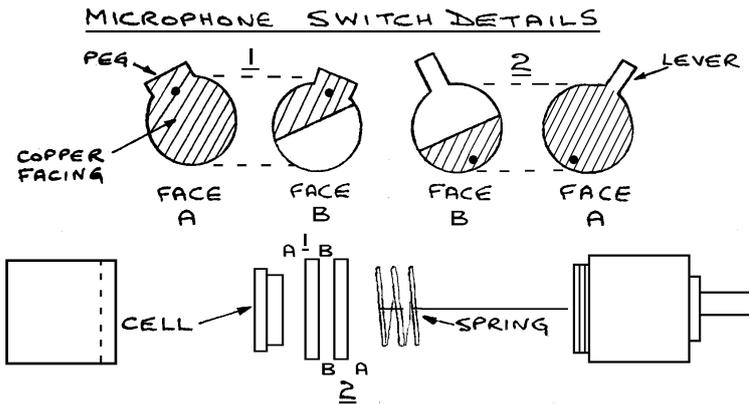
The sketches show the layout for a right hand drive car, the relative positions must be adjusted in some parts of the world.

The alternative to all this of course, is to get the YL/XYL to do the driving!

### MICROPHONE CARRIER







PEG ON ITEM 1 LOCATES IN SLOT IN MICROPHONE BODY.  
 LEVER ON ITEM 2 ROTATES TO GIVE OVERLAP OF 'B' FACES  
 FACES ON EACH ITEM CONNECTED BY SOLDERING THROUGH WITH FINE WIRE.  
 MATERIAL - VERY THIN DOUBLE SIDED PCB.

\* \* \* \* \*

HAPPY FAMILIES LEAGUE

Research into the Society's membership records proved connections between certain members and these are listed below for interest.

- G3WRY/0540    Wife G6HAK/1813 and Son G6HAJ. Son G8XZZ. Son GW8JJP.
- G3XSN/0343    Twin brother G4IHS/0806
- G3NOB/0613    Husband G3HPJ/0614
- G5HB/0716    Cousin G6NB
- DA1SI/1393    Mother GW6OBV and Father GW4MNQ
- G3JZP/0120    Husband G3EJF/0004
- G3WKM/0261    Son G5AEA
- G3EKL/0046    Father-in-law G8NY/0486
- G3DVL/1628    Son-in-law G4IYQ/1639
- G3PJB/0508    Son G6MOR/1727 and Son G6KKM
- GW3XHJ/0232    Brother G3VVE/0852
- G4PYP/1922    Father-in-law of G3OAZ/0021
- G4KEE/C023    Son of the late G3HMY/0634
- G8TUQ/1696    Wife Susan/1697

Any further information on these lines would be welcome at the Editorial Office.

\* \* \* \* \*

"MERCURY" - WE HAVE IT TAPED!!

As a service to our White Stick Members we are pleased to report that G4CGS/0264 has volunteered to Tape-record issues of MERCURY and that G3WRY/0540 has agreed to act as distribution manager for the recordings.

If you have a need for this service or know of any member who would like to be placed on the distribution list kindly inform the Editor or G3WRY

#### THE GRAPEVINE

By popular demand this column continues, and comprises a series of disconnected jottings and snippets of information and misinformation gleaned from numerous sources. No accuracy is guaranteed and all libel suits will be strenuously defended.

G3UAA/454 is to be congratulated on obtaining his B.A. Degree with the Open University.

G4KKI/1596 is currently engaged in QRP working with 2 watts input and has so far worked and confirmed 40 countries towards his anticipated DXCC.

G3EKL/0046 is acquiring as much data on steam engines as he can – is he thinking of starting his own railway.

Ill health has dogged G4EMZ and G4FHG lately and we wish them both a full and speedy recovery.

Three countries were represented on the RSARS Top Band Net recently one evening according to G3GZG/1460.

Leonard/1283 now has a No.19 Set operating before him and says it's "quite like the old days". Talking of 19 Sets: HELP: Wanted urgently - aerial bases for WS19 all types but particularly a "B" Set base. Also WS19 fittings particularly harness cables and control boxes, in fact ANYTHING to do with those famous sets that will help to bring Monty's Armoured Command Vehicle back to working condition. Any such bits and pieces please to Major Les Taylor at the Royal Signals Museum, Blandford Camp, Dorset, DT11 8RH or telephone (0258) 52582 Extension 248.

G4BZP/0345 recently visited Sydney, Australia and inevitably went to VK2NLE's QTH. A reception was held for Laurie at the St. George Rugby League Club and present were VK2VVV, VK2AV, VK2VZB, VK2DDW and three other non-members. G4RS was worked immediately after the dinner.

GM4BAF/0904 is living on the ground floor of a tenement with no access to the roof and consequently cannot erect any aerial so is off the air at the moment. Mike found a recent MERCURY reference to No. 69 sets of great interest and remembers the painful results of accidentally touching the top of the transmitting valve - RF burns and being thrown out of his chair.

G3OAZ/0021 reports his father in law's success with the RAE and Morse Test at the age of 71. Vic Tindall/1407 reports that A.B.Smales/1414 has also passed the RAE and is struggling with his Morse but due to Parkinson's disease is finding it very hard to copy and send. We certainly wish 1414 well and hope to hear him on the air soon.

The DA2CL Club licence has been transferred to Eddi DJØSS/1620.

ZS2RJ ex ZS6XC/0287 reports his address now as 66 Frere Crescent, Uitenhage 6230, Cape Province, Republic of South Africa. Rex wishes to be remembered to G3EKL and G3DPS and says he is on the air regularly at the low end of 15m.

ON8GM/1022 tells us that during a reports round-up after the Belgian Amateur News he heard "You are 5 and 9 but rather weak with much QRM please repeat your name and QTH". John wonders if anyone can help him get onto SSB - he is finishing the SSB transceiver based on the G3ZVC (Plessey) board. The output stage is copied from the G2DAF design and John has the problem of how to get the 10 mw from the exciter up to a level sufficient to drive the 6146's. Anyone having a circuit please contact the Editor.

G3VIR/0224 is pleased with the West London 2m Net and says the publicity in the last issue of MERCURY resulted in 12 members calling into the Net. Roley reports that G8YQI is now G4PPD.

ZS5CS/0592 is now at 274 Brighton Road, Wentworth, Natal, RSA and sends greetings to G3MKR and G3PY.

VK2NLE/1422 circulated a record 100 copies of our sister magazine "JIMMY" at Christmas world-wide including 25 copies to G-members.

G4IVB/1497 reveals a notice on the Signal Office wall Palestine 1946 as "A quiet sense of urgency shall prevail at all times" after his revolutionary run round a net.

On the Notice-board at G4RS/HQ was seen "In the event of a nuclear attack all present will evacuate, and parade at Loos Lines".

VE3AX/1339 is handling QSL cards for VE members from PO Box 49, Colborne, Ontario.

G3ZDM/0738 is looking for 23 cms and higher contacts with RSARS Members.

WA4MRR/1873 would like to contact members who are interested in collecting or who have information/manuals on Royal Signals wireless equipment from 1935 to 1960. Tony would like to borrow or buy photographs or documents relating to equipment during this period for a forthcoming publication in this field.

Captain Mike Buckley is trying to compile a list of RSARS members who are either Cadets or ex-Cadets. Mike is of course our ACF/CCF Rep.

G3AEF/0904 is anxious to contact Jack Clark, VK3ET, formerly GM2HIK/0097 so perhaps Jack would get out his pen and write to Doug direct or via the Editorial Office. Jack and Doug were together in France 1944/45.

G3TPN/1736 writes to the effect that he has had a succession of nasty faults in recent days which have kept him off the air but he does listen in to the Nets, and is hoping that his KW gear will soon be returned to him from a works overhaul.

VK4XY/1546 has been keeping fit with a lot of shovelling and concreting (is he getting set in his ways one wonders?). George says he has only received 2 VK Christmas Contest logs so far (January 1983) but hopes to declare a result in March.

The Marriage Puzzle - pp 12 last issue - Archie (28) married Frances (26) Bernard (25) married Deirdre (29) and Charles (30) married Elsie (24).

VK2DGS/1483 returned to Sydney on SS CANBERRA at Christmas. It is reported that Gordon will leave Sydney again in April en route for the AGM.

Anyone with a set of Tide Tables or Reeds Almanac should look out for N2DAN/1676 - Steve's beam tower is standing in salt water at Freeport and when the tide comes up the SWR changes and so does Steve's signal. He tells us that our Stateside cousins run a net on 10125 kHz at 2330Z for the CW boys.

G4BUS/0276 (the author of the serialised "Of Morse and Men") tells us of a change of QTH: Reg is now at "Greynam" Coursers Road, Colney Heath, St. Albans, Herts. Reg has no spare room for a shack or room for a full length multi-band aerial but his daughter lives next door.....!!

VK6UV/0390 (ex GI8FYZ, VK6ZCU and VK6NHC) tells us he can now be found at 8 Bolt Court, Lesmurdie 6076, Western Australia, and sends his regards to all Committee Members.

Those involved previously with codes and ciphers may know the answer to the following: An Agent wishes to send a strongbox containing secret papers to another Agent. The box cannot be opened except by unlocking a padlock, by a key. It cannot be forced open in transit. The originating Agent dare not send a key by post to his fellow Agent. How is the box sent in such a way that only the second Agent can open it? The answer lies in the Rivest-Shamir-Adelman coding system and will be revealed in the next issue.

G3UXH/0172 and G4ICC/1415 are now in touch thanks to these pages, on the matter of reciprocal bearings and Great Circle distances etc.

G5RV/0795 is wintering in his XYL's homeland, Uruguay and has been heard and worked quite often during the early evenings.

G3ZFN/0968 who had a query on page 8 of MERCURY No. 72 was written to on the subject and soon got an answer from the Imperial War Museum.

VE3NZ/1783 is helping celebrate the 80th Anniversary of the founding of the Royal Canadian Corps of Signals. Dates are 2, 3 and 4 September 1983 at The Signallers Club, Kingston, Ontario. All are cordially invited and the Editor has available booking forms for those wishing to attend.

G4OJQ/0951 is anxious to trace an old timer Harold Hambly who operated in Shop, Morwenstow, Cornwall around 1914. Anyone with an old Wireless World Callbook may be able to help?

It is with much regret that we learn of the death of GM3IAA/0107. Jim was of course ex VS1AA (and who has not used one of his famous aerials?) and died at the age of 85.

We have received NATNET the magazine of the ACF/CCF Inter District Radio Network and will be pleased to loan it to any member interested. Further details from the ACF/CCF Representative.

G4KWL/1635 of Reading School, Reading says that the new School Club has just obtained an appropriate call - G4RSC and including Tom there are 3 licensed amateurs at the School and several others preparing for the RAE.

Attempts are being made to activate G4RS each Thursday lunchtime by G3EKL.

GM3LWS/0089 like so many others spotted the missing 73rd/88th Foot Member in the last issue. Ted has his own unprintable ideas of the armament of these lads but does request the publication of the Editor's address (done, under the Editorial, Ed.) and appreciates why serving members addresses are not shown.

Heard on GB3CF, the Leicester area Repeater after a particularly nasty exchange at 0440Z -'Its pirates like you what get us CBers a bad name!'

We learn that our General Secretary, G3TAN has been awarded his Colours for services to Army canoeing. Congratulations Dave.

GM4GJS/PA (Member 0782) writes to us from his new location Rothenbach B. P. 42, Vlodrop (L), 6063MN Netherlands and says he has achieved the ultimate in do-it-yourself home-brew in that he has built his own house together with a 10W CW (of course) rig to go with it. The shack above the garage at Bill's is ready shortly and aerials are no problem so shortly we shall be hearing him. We will give Bill the "treatment" here as he says he's never been mentioned in MERCURY. 37 years old. SWL from 1955. Sparks Merchant Navy 1962-66. Post Office Overseas Telegraphs 1966-69. Royal Signals (Spec. Op.) 1969 to 1975 and Radio TV serviceman 1975 until now.

VK6PG writes to inform us that he is now resident at 223 Crimea Street, Noranda 6062, Western Australia with the tower remaining to be re-erected. As the only active VK6 in our nets Alan is in great demand and says that it is 2500 miles to the rest of the members in the East so even to work them is DX!!

G3UYH/0875 has also moved and is now at 36 Grange Close, Hitchin. He has a small business of his own, buying and selling antiquarian and second-hand books. Harold is always keen to buy any quantity of such items including those on Military and early wireless subjects. Active only on 10m with 100 watts of CW and an indoor dipole frustrates Harold but he hopes to be back on 80m shortly.

J. Osborne, RSARS 0879 is ill-fated enough to have had a nasty car crash resulting in severance from his Rolls-Royce job following a broken right leg and two broken shoulders. He is still keeping in touch with his FR400 SDX and Trio 9R-59D. J.O. has also had a removal of QTH and is now at 374 Boulton Lane, Alvaston, Derby.

We have another "HELP!" This time from G3XUG who wishes to beg, borrow or copy the Handbook and/or circuit diagram of the Heathkit OS2 Oscilloscope. Any offers to help Ron?

\*\*\*\*\*

AUTHOR!                      AUTHOR!

Our near namesake the LEICESTER MERCURY reports the latest offering for thousands who love to read about railways is the story of Groby and its railways, concentrating on the line which took stone from the quarry to Leicester.

Published by Tee Publishing, Hinckley, Leics. At £2.95 is GROBY AND ITS RAILWAYS by D.A. RAMSEY, none other than G3UAA who we feel sure would autograph copies on behalf of Members if asked. It has taken Alf some 3 years to complete.

Like many other members I was fascinated by the experiences of Don Shirreff, G3BGM/1539, with Special Signals, 1939-45. He showed clearly the value of Sigint and conversely the importance of good Signals security. In Part 3 he dealt with his experiences in Holland in the tragic Winter of 1944-45 and in some later comments (Mail Box, No. 72, 7/82 page IV) specifically mentions my articles on Clandestine Radio published in Wireless World, January/February 1982, suggesting that his recollections rather clash with mine.

Don's account may indeed have left readers with considerable reservations about: (1) the private across-the-lines telephone that existed September/November 1944 at the Nijmegen power station; (2) the role, if any, of the "do-it-yourself" secret radio networks of the Dutch Resistance, independent of those organized by Allied Intelligence and Special Forces (SOE/OSS); and (3) whether Western European Resistance was as effective as some post-war books have suggested. Readers may also have been puzzled by his unhappy experiences at Nijmegen when attempting to retrace his steps in Holland. I would like to comment on these matters, whilst fully accepting that Don accurately described the situation as it appeared to him.

(1) The power station telephone was, as Don states, handed over to Airey Neave's 159 "escape" organization. During November 1944 it was used, inter alia, for setting up the ill-fated Pegasus 2 operation intended to bring back a second large batch of Arnhem evaders. No less than 138 Arnhem survivors had been brought back on October 17-18 in Pegasus 1 although a national newspaper had unfortunately revealed details that clearly indicated that further attempts at rescue were likely to be made. Although never an official member of 159 I spent several weeks with the escape unit's Nijmegen detachment during this period and was well aware of the secret telephone - although my own visits to the power station were to take advantage of its hot water baths, a precious rarity in the town!

Unhappily, the evaders assembled on the night of November 23 were ambushed by the Germans while still on the wrong side of the river. I believe that 36 members of the party - evaders and Dutch guides - were killed or captured, but the others were able to regain the Dutch homes that had been giving them shelter.

There is little doubt that the Germans knew in advance that a rescue was planned that night. However, I do not believe that this was due to any betrayal by the Dutch power station engineers. The link went "dead" shortly before Pegasus 2, and it is more likely that conversations over this link had in fact been monitored by the Germans for some days or even weeks. On the other hand there is no doubt that the Dutch Underground successfully operated a number of clandestine telephone systems, even including secret telephone exchanges in occupied territory.

(2) Don Shirreff's account may have left readers with the impression that the clandestine radio networks of the Binnenlandse Strijdkrachten (Dutch Forces of the Interior) existed only on paper and have been embellished by post-war writers. Can I assure him that this is far from the truth? Again, my evidence for this is not based on hearsay but stems from the fact that from January 1 1945 to May 1945 I was one of two British radio operators loaned by British Intelligence to the Netherlands Intelligence Bureau (Bureau Inlichtingen or B.I.). During this period no less than 2409 cipher messages passed between Eindhoven and the clandestine radio stations of the Raad van Verzet (RVV) Radiodienst, the service with which I was concerned. My SCU colleague, Sgt. Bert Lawler, was similarly working at a separate control station for the radio service of Orcliedienst (OD), a group which had originally been founded by former members of the Dutch Army and which was undoubtedly more "right wing" politically than RVV, whose early members had political affiliations far left of centre. While the number and value of messages handled by the OD radiodienst were less than those of RVV, it was nevertheless a substantial operation providing useful information on German activities, including V-weapon launchings, in occupied territory.

Both radio services suffered tragic losses, especially as a result of a series of German raids on clandestine stations in late January and February 1945. Indeed by May 1945 I believe that only a small number of the people responsible for these stations were still alive. Both organizations, which together formed the Binnenlandse Radiodienst, included a number of pre-war Dutch radio amateurs, although RVV drew primarily for radio operators on the Dutch KLM airline.

A third internal Dutch radio network was organized in advance of Operation Market Garden - the massive air drops that launched the liberation of Holland - by the Landelijke Knokploegen (LKP) or National Fighting Squads. I have found no record of any LKP radio traffic, and this network may never have functioned effectively on any substantial scale.

The OD radio network was originally established by a well-known Philips radio engineer, J.P. Heybeer, author of several pre-war text books. In the summer of 1944 he handed over the running of this service to W.J.L. Dalmijn, PAØDD, who survived to become a prominent member of the IARU Region 1 Bureau and who published one of the few detailed accounts of the work of the Binnenlandse Radiodienst in "Electron" in 1970, not long before his death. Heybeer, unhappily, was shot on April 14 1945. Dick Rollema, PAØSE, a schoolboy during the occupation of his country, kindly translated part of PAØDD's account and has provided other information that was not available to me in 1945. Since the publication of my Wireless World articles I have also been in touch with Professor Dr. L de Jong of the Netherlands National State Institute for War Documentation and author of the 16 volumes of the official "The Kingdom of the Netherlands during the second world war" copies of which (Dutch text) can be found at The Imperial War Museum reference library in London.

Prof de Jong has corrected one or two details of my account of the Binnenlandse Radiodienst and provided me with further information. In his view clandestine radio links were indispensable to covert Resistance and Intelligence work (personally I believe that radio should be avoided for outward transmission if at all possible). He reveals that RVV, with an active sabotage section, was first organized by Jan Thijssen in the Spring of 1943 and by early 1944 was in touch with the Dutch and British Intelligence services in England. However in Autumn 1944, Thijssen quarrelled with Colonel H. Koot, Commander of the Dutch Forces of the Interior. As a result Thijssen ceased to be leader of the RVV Radiodienst; however he was arrested by the Germans on November 8 1944 and shot in March 1945. The RVV radio service was continued by F. van der Laaken. At the time I became principal radio operator at the Abbe-Museum in Eindhoven the network comprised some ten clandestine transmitting stations in the occupied north, interlinked by couriers. Van der Laaken was arrested in February 1945 about the time when so many of the RVV and OD stations were lost. He was shot in April.

An RVV station which remained in operation until the Armistice in Holland was the one that served Amsterdam. The operator there was extremely proficient (almost certainly ex-KLM); he frequently sent me five-letter cipher traffic at over 25 groups per minute: I once timed him over several complete messages and found he was averaging 27 groups per minute. This man, whom so far I have never been able to identify, also operated a clandestine link to one of the Special Communications stations near Stony Stratford. He was by far the most efficient operator that I came across in two years of working clandestine links with France, Belgium and Holland.

(3) Don Shirreff states, with some justification, that "a great deal of the post-war literature of Resistance has been exaggerated". Undoubtedly this is the case - though it could be argued that many of the most remarkable stories have either never been written or never published in the U.K. Sir Herbert Marchant, a wartime member of Bletchley Park, has stated: "Old men forget and clandestine operators tend, more than most, to put a very rosy gloss on the roles they played, secure in the knowledge they will not be found out". ("Operators", in this instance, does not refer specifically to radio operators). Malcolm Muggeridge, no stranger to MI6, has put it even more bluntly: "Intelligence agents tend to be even bigger liars than journalists, and are given to exaggerating their achievements, as well as the importance of their opposite numbers, in order to magnify the feat of getting the better of them". Despite these devastating comments, I agree with

Philip Jones, who in 1944-45 controlled the Belgium and Dutch sections of SOE, when he writes: "I have been dismayed by the profusion of books covering covert operations in World War 2 which overlook or even ignore the part played by the Underground in Belgium and Holland".

(4) One reason for the absence of authentic accounts of Belgian and Dutch clandestine work, I would suggest, can be found in the continued distrust of many Dutchmen of the wartime British-organized covert operations in their country between 1939 to 1945. It began badly with the kidnapping by the Germans of two senior members of SIS at Venlo on November 9, 1939 during which a member of Dutch Intelligence lost his life and which led to the loss of a number of SIS's agents in Holland and Germany. An even greater calamity was the successful "turning" of clandestine radio circuits to Holland in the well-known Operation North Pole (Englandspiel). Throughout 1942 and 1943 the enemy virtually ran the entire SOE operation in Holland: 47 young Dutch agents sent into Holland from England lost their lives in a fiasco for which responsibility undoubtedly rests with SOE, although at least some of the turned radio links were with SIS's Special Communications stations. In turn, North Pole led to the Allied decision not to risk providing supplies to the Dutch Underground, at least on the massive scale of those delivered to the French Resistance during the pre D-Day build up. Then again, several operations of IS9, including the unnecessary venture across the rivers by Captain Peter Baker, led to the execution of Dutch families sheltering or assisting Allied forces.

In the U.K., the Arnhem part of "Operation Market Garden" is seen as a heroic failure - a bridge too far. For the Dutch it resulted in that terrible winter of hunger and death in the north; a disaster that might have been avoided if only the British planners had paid more attention to the warnings from the Dutch Underground of the presence near Arnhem of crack German troops. By an ironic twist, there are even those in Britain who still believe the failure was brought about by Christiaan Lindemans ("King Kong"), or another so-called "Traitor of Arnhem", despite all the evidence that indicates this was not so. Later, incidentally, it was the Dutch Underground who, if my memory serves me correctly, first identified Antwerp as the target for the German Ardennes offensive of December 1944.

Relations with Dutch civilians were not improved by Allied bombing, no matter how essential this may have been. In Nijmegen I heard bitter accounts of a heavy daytime raid by the USAF who mistook the town for Kleve in Germany. At one stage, the Dutch Underground openly threatened to cease all activities on behalf of the Allies unless RAF bombing of V-weapon bases near The Hague was conducted with fewer civilian casualties.

Nor have post-war politics smiled on former members of European Resistance movements. Dick Rollema, PAØSE, has told me his experience in approaching a former OD radio operator (still an active Dutch radio amateur). He proved "somewhat reluctant - as many other people are - to talk about their activities in Resistance groups". This man finally admitted he had operated a radio transmitter first from the basement of a church in the centre of Amsterdam and later from a hospital at Zwolle until it had been raided by a large number of SD (Gestapo) agents.

Similarly, following the publication of my Wireless World articles, I received a letter from one of the relatively few French amateurs still living who were actively concerned with clandestine radio in that country. He wrote: "I find it rather moving that the British pay a tribute to a somewhat forgotten corporation. Here, in France, the best thing you can expect when you are brought to confess that you have been a radio agent is an ironic smile".

So, Mercury readers, do not judge the Resistance or its clandestine radio links solely on the basis of those bridges that Don indicates may or may not have actually been blown up. Still less on an unenthusiastic welcome should you visit the Nijmegen power station. Remember, for example, that while the escape routes of IS9 successfully brought back many thousands of aircrew it has been estimated that for every escapee, at least one member of the Underground paid with his or her life. And although the Intelligence networks may not have consistently provided as much information as Sigint, they made a valuable and indispensable contribution. For my part, I retain a high regard and much admiration for those who dared work secret radios from enemy-occupied territory.

For any member of RSARS who may still be inclined to doubt the achievements of the Dutch Resistance I would add, from information from Prof. de Jong, that in addition to the stream of information received by B.I. from the radio traffic of RVV and OD, high-grade written reports also came in from the "Albrecht" group who did not use radio. Furthermore he assesses as probably the most remarkable services rendered by a Dutch underground movement neither Intelligence nor sabotage but the care of 300,000 people, both Jewish and non-Jewish, forced to live in hiding. This service was provided by the "Landelijkje Organisatie voor Hulp aan Onderduikers" founded by Pastor Frits Stomp and Mrs. Helena Kuipers-Rietberg housewife and mother of five children, who died in Ravensbrueck concentration camp. At its peak, it included some 15,000 volunteer helpers. A vivid glimpse of life in the shadows is contained in the remarkable diary of the 13 year-old Jewish girl Anne Frank who went into hiding in Amsterdam in July 1942; was discovered on Aug 4, 1944; and died of typhus in the Bergen-Belsen concentration camp in March 1945.

\* \* \* \* \*

LE COURIER'S TABLE OF THE LEGIBILITY OF COLOUR COMBINATION

That may sound a mouthful but a glance at the table below may aid the design of your next QSL card or even front panel.

Colour and colour-contrast of paper and sorting symbol can affect the speed and accuracy with which the eye can read, especially under artificial lighting. Red envelopes are not acceptable in Postal Services because it is difficult to work with them over any period without strain. A table of colour-contrasts based on Le Courier is accepted in many spheres of activity, but there is evidence that, for sorting, black on white may be equivalent to black on yellow and red should be avoided as a background. Colour may be useful for electronic sorting.

<u>Order of legibility</u>	<u>Decoration</u>	<u>Background</u>
1	Black	Yellow
2	Green	White
3	Red	White
4	Blue	White
5	White	Blue
6	Black	White
7	Yellow	Black
8	White	Red
9	White	Green
10	White	Black
11	Red	Yellow
12	Green	Red
13	Red	Green

An afterthought is that perhaps we should persuade HQ to print mercury on yellow paper?

\* \* \* \* \*

THE EFFORT YOU HAVE EXPENDED IN TURNING THIS TO READ IT  
 IS NO GREATER THAN THAT REQUIRED TO MAKE OUT A CHEQUE  
 TO "RSARS" FOR £3 (EUROPE) OR £5 (OVERSEAS) AND POST IT WITH  
 YOUR NAME, CALLSIGN & MEMBERSHIP NUMBER TO HQ RSARS.  
 SUBS BECAME DUE ON 1ST JANUARY. FAILURE TO PAY WILL  
 CERTAINLY RESULT IN YOUR BEING STRUCK OFF THE COMPUTER  
 LIST AND YOU WILL RECEIVE NO "MERCURY" AFTER THIS ONE !!!

CQ BAOR

DJØSS/1620

I would like to start by wishing everyone a prosperous, healthy 1983.

There is not a great deal of news from this neck of the woods at the moment, with many people having been back in the UK over the Christmas period. Judging by the comments I have heard on the various Nets, some of you must have had a really good time!! Anyway, back to business: talking of Nets, I'm glad to say that the 20 metre Sunday lunchtime Euro-Net has been quite a success with a good number of regulars over here and back in the UK, but unfortunately no other European members. Where are you all hiding? Regrettably due to other commitments I have been absent on several occasions.

Welcome to Hugh Colborn, G8TMA/1192, who has joined us over here, hope that your DA4 call comes through soon Hugh - looking forward to a 2 metre QSO.

On the subject of 2 metres, I am still interested in hearing from anyone looking for FM/SSB contacts.

A call sign to look out for in the near future is DA4JS, otherwise known as G6PRW/1796. Steve hopes to be QRV sometime in February good luck with the new ticket

No doubt most of you who join the Nets on a regular basis will have by now heard that John, DL/GW4HHD has got rid of that mouthful and is now to be heard as DA1SI (it's got nothing to do with flowers, Jack!)

I would like to end with a few items of news from the Celle and District Amateur Radio Club. As part of a programme to show the single soldiers, who were unable to return to the UK for Christmas, some leisure activities were requested by 94 Locating Regiment. We were asked to put on a demonstration station, so armed with the trusty 820S, a Z-match and a long wire, we put DA2CL/P on the air. Unluckily conditions on 15 metres were not very good but we did manage to work Canada and quite a few other countries. We hope we have generated some interest in Amateur Radio. "Thank you" to Steve Andrew who acted as aerial rigger, log keeper and Public Relations Officer.

I must say a big welcome to the new members of C&DARC who hail from 3 RGJ, nice to see you all. By the time this goes into print I will have started RAE classes at 39 AEC in Celle which are held once a week. Judging by the provisional enrolment list there is quite a bit of interest with about twenty having put their names down. Hopefully I will be able to report more about the classes next time but it is encouraging to see the current interest in Amateur Radio.

Before I close I must once again thank two members for their generous donations to C&DARC - thank you to Gordon G3ZFZ/0053 for the antenna traps and to Tony G8UGV/1402 who is now in sunnier climes for the 6 element 2 metre Quad - very much appreciated.

So that's all for now: I look forward to hearing from anyone who has anything to contribute to this spot. For the time being - 73.

News reaches us after the above that Vernon DA2CW (alias G4HSA) is now a Member and has been allocated the RSARS Number 1935.

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SPECIAL ANNOUNCEMENT

WE ARE DELIGHTED AND PROUD TO NOTIFY MEMBERS THAT THE COLONEL-IN-CHIEF, HER ROYAL HIGHNESS THE PRINCESS ANNE, MRS. MARK PHILLIPS, GCVO., WILL BE PRESENT AT CATTERICK GARRISON ON THE SUNDAY OF OLD COMRADES' WEEK-END 25/26th JUNE 1983.

RSARS AGM IS ON SATURDAY 25th JUNE.

THE VISIT WILL BE COMMEMORATED BY THE ISSUE OF A SPECIAL QSL CARD.  
FOR FURTHER DETAILS LISTEN TO THE REGULAR NETS PLEASE.

NEW AWARD \* 1st APRIL 1st APRIL \* NEW AWARD

by Les Hivers

Following the appointment of G3UAA/0454 as Awards and Contests Manager in succession to G3EKL/0046 but for which Alf accepts no official responsibility it is announced that a new Award is to be introduced from 1st April 1983. The Award will be known as WAM - (Worked All Members).

The object of the Award is for all Members to work all Members and a handsome Plaque will be presented to all Members achieving this.

To facilitate getting this new and unique Award all Members are asked to book into a special Net which will commence at 1000 hours on 1st April 1983 on 3740 kHz. G3WRY/0540 has arranged to be Net Controller for the whole period on a 24-hour a day basis.

Each participant will be allowed ONE MINUTE to effect each QSO with all the other 1900 Members of the Society and will be strictly in accordance with the order in which you book into the Net.

The resultant 1900 x 1900 contacts if continuous will take only 6.86 years and thus should conclude the net by 1st February 1990.

G3YSK/0692 has arranged a suite for storage and office facilities at The Town Hall, Winchester to handle the 3,610,000 QSL cards and Members will be sent their cards on an 18-per-envelope basis and should therefore NOW, each deposit 106 envelopes with John. (The return to the Post Office of postage at 16½p per envelope will be in the region of £33,231.00).

The Under Secretary of State, Home Office has kindly agreed to consider making 3740 kHz a "spot" frequency for use only by RSARS members during the period of the Award so there should be no QRM save for that generated by members: please, therefore, observe net discipline and do what Net Controller asks.

The Plaques will be purchased in anticipation of the conclusion of the Award Scheme and the Treasurer has set aside the necessary £18,050.00 in the ensuing financial years. Presentation will be at the AGM to be held in 1990 and owing to the length of time to be taken in presenting these 1900 plaques Brigadier C.R. Oehlers has allowed a 2-day presentation period following the normal AGM business.

G3DBU/0130 the Stores Manager has arranged the necessary supplies of 3+ million special QSL cards and these are now available from him at the rate of 2000 cards per member. Log Books containing 1,000 entries are available in pairs for each member at special Award-season prices so order yours now whilst the existing stock of 3800 books is still available.

The usual Award exchange of callsign, RSARS number, name and QTH applies.

Lists in duplicate to the Awards and Contests Manager to be submitted by 31st March 1990 please.

If the above proves totally successful a WAM, CW-sticker endorsement will be available and G3GZG/1460 has volunteered to commence a CW Net on 3565 kHz on 1st April 1990 terminating at Christmas 1996 and Members will thereafter be able to talk to each other in a more relaxed manner without the need to exchange number. Etc .Good luck to all.

RAFARS and RNARS please copy.

\* \* \* \* \*

RULE 3b3 CHANGES AGAIN

The last change to this Rule (page 2 last issue) was met with some quite vociferous objections from a number of Members. Further consideration has been given the Council have raised no objection to the Rule being again amended to read:

‘Any serving or retired member of a Commonwealth Signal Corps, including the direct Commonwealth equivalent of the British Territorial Army (Royal Signals)’

This change is effective 3 July 1982.

## RSARS COMPUTER SECTION

(G3TAN)

### NEWS FROM MEMBERS

Members have been writing in with details of their own home computing and with programming activities, and I thought that this edition could well be devoted to passing this information around with the idea of getting some more of you talking to each other.

Bill Trenchard G4EHU says his ZX81 with 16K pack has recently been expanded with a Memopac 32K rampack and his 48K is good stuff. He runs a Maplin keyboard and has put the whole lot into a wooden box lined outside and in with cooking foil. This stops interference on 10, 15 and 20M. Bill also notes that a loading device is on offer for ZX81 to help you load tapes first time. The device has three LEDs RED indicates volume too high, GREEN too low and YELLOW just right. Sounds like a frustration crusher to me. Bill asks if anyone has a circuit for this bit of kit? (advertised price is £11.50 in Sinclair User).

Chas Brown G3XTL, runs a VIC Commodore. Chas mentions that his Commodore does a little more than the Sinclair equipments with respect to morse training items. A simple programme he has developed gives several options while generating morse training on audio cassettes. Single key commands output either letter or figure groups and there is speed and spacing adjustment. Speed can be questioned and the randoms and the display from text can be altered before the conversion to morse takes place. This conversion imposes a delay but as the intent is to put the output onto a cassette for playing to morse students, this delay is quite acceptable. (Chas we are very interested in this one, can you let us have details of your programme for publication)

Chas is also interested in 2M and orbital information. He says that in recent weeks he has tried to develop a programme to give ongoing reference orbits for future dates, using a known reference (W1AW) and orbital data from the Radio Comms Handbook but for some reason he cannot get the information to agree when he cross checks it. Anyone who can help with information on Oscar 8 orbits contact Chas.

Dave Gorse G8UKU, currently with 28 Signal Regiment in BAOR says that there are quite a few users of home micros in the area, although not specifically tied to ham radio. He has a partly home built device in the workshop which is used for keeping spares and equipment records on(!) as Dave settles in he thinks that things could develop into a ham radio-micro-CB users club. Anything we can do to encourage that situation will only help, so let us know Dave. Perhaps the Celle and District boys want to give you a buzz and talk things over with you.

Jack Winstanley G4OKP, Tells us that he wants to set up a micro and get working on RTTY. There are some items on this Jack, and you should get some leads from them.

Richard Kingston 7P8BX reports that he now has a Spectrum, and that it works (you lucky man!) and now all he wants is something to do with the thing! Perhaps RTTY is one to look at Richard. See later.

Mike Gater G4ICC, now has a ZX81 and is very pleased with it. Mike is interested in the morse keyboard aspects and welcomes information from anyone.

Ben Cusick G4MUC has had the Spectrum problem common to many hundreds of users, loss of colour. He sent his back and after a month received another machine which lost colour after only one hour on line. Ben returned that one on November 20th and is still waiting for the third attempt. We said earlier this year that gremlins abound around Spectrum and since then many more people have complained than have complimented. Sinclair is known to be working on another computer, but this one is aimed at the business market. Lets hope that he doesn't leave a lot of frustrated amateur users high on the hook.

## RADIO TELEPRINTER WITH HOME MICROCOMPUTERS

Undoubtedly the most talked about application of the home micro these days is the move to RTTY. The many RTTY enthusiasts who have for years filled the corner of the room with teleprinters, rolls of paper, punched tape, perforators, and boxes of bits for WD7B, Teletype and other clang, bang and bell generators, are all looking forward to running a small home computer with VDU as the main RTTY instrument - even if it is only for the peace and quite lovely silence!

So what is bubbling through the mass of software and amateur press and what is available to get us on the way to RTTY. Let's have a look:

ROBERTO, I1ARZ, is running a bulletin for SARUG (Sinclair Amateur Radio Users Group) on Saturdays on 14090 ± QRM and includes items of interest to all RTTY Micro users. He will change to CW or SSB on request.

ROGER BARKER, G4IDE, has announced that he will be marketing an RTTY system for the ZX81. The programme will be in an EPROM and there will be a circuit for the terminal unit. Price around £7. The item will include information software to help you to set up the filters in the terminal unit using the ZX81 as a frequency meter. See January RADCOM or write direct to G4IDE, 10 Fontwell Road, Wolverhampton, WV10 6PS, with SASE or valid IRC.

SCARAB SYSTEMS announced in Practical Wireless January, their own ZX81 RTTY system. Features: 5 memories up to 255 chars each, up to 255 'RYS' sends, scrolling screen, optional auto line feed and carriage return, auto fig letter shift, adjustable baud rate etc. Information from SCARAB SYSTEMS, 141, Nelson Road, Gillingham, Kent, ME7 4LT. Prices Cassette £9.75, Interface pcb £3.70, Component kit & instructions £11.50. You will need a terminal unit.

Paul Newman, G4INP, has details of a FAST mode RTTY RX routine for pin 20 of IC1 on the ZX81. Details from Paul for SAE.

There is a lot going on around us on the RTTY scene. Its simple to convert to RTTY receive and not too much trouble to go to send, but you should pay particular attention to your PA stages in your rig. Ensure that your rig is rated for continuous operation duty cycle, otherwise its expensive!

Finally, G4RS will be taking receipt shortly of its TERMINALL II RTTY equipment which allows our APPLE II computer to run RTTY, CW and SSB with the TS530. This gives us a sophisticated set up which is state of the art. Home micro owners and RTTY enthusiasts are welcome to look around the equipment during the open house session of the AGM day on June 25th.

Micros on hand in the Society seem to be: ZX81, Spectrum, a few ZX80, Beeb and Beeb II, Dragon, Commodore, UK180, Tandy, one or two New Brain and some other non micros, but equally interesting equipments. Let me have a listing of what you have, so that we can try to get the section working for as many people as possible.

### OTHER NEWS

IBM have announced their new Personal Computer, PC2. This has a 16 bit micro-processor. They fell down with their PC (i.e. the mark 1) because they only sold it in the USA. Some bright lads exported it 'for IBM' to Europe and of course IBM got itchy about it. Sensing that the European market would buy IBM, the PC2 is their answer, with software backup and sales and marketing. I haven't seen a price yet.

Uncle Clive has gone public as you all know. He made £10M profits on £27M sales last year which is good news in anyone's corner shop. His latest projects are the battery car and the new office computer. His decentralisation of the production lines for ZX81 and Spectrum means that he could catch the British Leyland version of strike magic, where one firm making 5mm plugs holds up the whole of the Spectrum line, but then Clive probably has a few in his garage anyway. The latest I hear is that his Quality Control is the best in the business. WOW!

## ONE MANS SPECTRUM

The article below was received from Frank Harrop, RSARS 1628, and is in response to our request for information from members on their own experiences with the Spectrum.

SPECTRUM BLUES - BUT WITH REDS & GREENS TOO!  
HARROP,G3DVL

FRANK

What a pity that Sinclair Research reaches extremes - excellent marketing for a first class product at a price that appeals to the public only to be damned by under estimating the demand and then compounding it by using the customer as quality control to find the faults!

I suppose I am lucky - I do have a Spectrum - the first one arrived within six weeks of ordering - first impressions - excellent; a considerable improvement on the old '81, with a keyboard which although not keyswitched nevertheless has a nice feel about it; very easy programming and the facility of lower case letters all make for a very presentable display. Two handbooks - a small familiarisation booklet together with a thick manual - both in the excellent style as with the 81. Loading is really a joy and the verity function after saving is a boon. So now it meant settling down to a new keyboard with extra functions which came as one practised the programmes listed in the handbook. Then came the first snag. DEF FN didn't work - checked carefully all the keys and then found that the "extended mode" function was not working along the "Q" to "P" line of keys (a lot of these apply only to the microdrive so the point had not arisen earlier).

So pack up and return to Camberley and expect to wait and wait and wait.... Again I consider I was lucky - the replacement arrived in a month or so and has now been used (and abused!) since early September.

I like the Spectrum very much. The "beep" tone generator is at a very low level - no complaints, it stops it annoying others in the vicinity. I don't like removing the plugs for saving and loading so I've built a switching unit for SAVE, LOAD and AMP incorporating an amplifier and speaker out of the junk box and included a "press to break" in the power feed line to reset if the programme "crashes" and the machine locks up.

I like the user friendly display - when you switch on the display "Sinclair Research Ltd" appears - the various reports are not just numbers - you get "O.K." "Out of memory", "Variable not found", and the one I like "Nonsense in Basic". I don't like the two shift keys being on opposite sides of the keyboard it is a pity they were not duplicated on both sides. The colour displays suits me fine, the user programmable graphics are good - my grandchildren like the guessing programme where a small railway engine with a puff of smoke moves across the screen with each correct guess!

There is no doubt that with the anticipated early arrival (except for delivery problems!) of the microdrive and with software organisation becoming aware of the extensive capabilities of the Spectrum, it is a powerful tool for the ordinary and inexperienced (and slightly geriatric) member of the public like me.

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AVAILABLE FROM DANNY KAY, G4KIC. (APPRENTICES COLLIGE HARROGATE): MORSE KEYBOARD PROGRAMME FOR ZX81. DANNY WILL PROVIDE TAPED VERSION (NOT LISTING) FOR CASSETTE AND POSTAGE. CONTACT DIRECT OR THROUGH G3TAN

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They do say that the easiest way to spot an Aussie computer operator is that he is usually the only guy around with a chip on both shoulders:

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REMEMBER THAT ANNUAL SUBS WERE DUE 1st JANUARY - you would not like to be "archived" after this issue would you?

## GETTING YOURSELF SORTED OUT

D.T. LLEWELLYN, G3TAN.

Chances are that if you are programming for a QSO recall system or callsign listing, contest contact listing, or simply wanting to list all RSARS numbers worked, you will want the information shown in numerical or alphabetical order. Your programme then must SORT the items and display them on the VDU in the order in which you want them to be shown. There is nothing too magical about the way in which this is done. The important thing to remember is exactly what you want to be shown. For example, if you want all RSARS numbers worked to be shown, then you must be specific in your programme instructions and not get all frustrated if the list comes up in date order instead, if each line in your listing begins with the date! If the RSARS number happens to be the 20th, 21st, 22nd and 23rd character in the line, then it is those characters that you want SORTED isn't it? not the date.

To illustrate, have a look at this simple SORT routine.

First the input side:

```
20 DIM X$(20,6)
30 LET I=1
40 PRINT "NEXT"
50 INPUT X$(I)
60 PRINT X$(I)
70 IF X$(I)="YYYY" THEN GOTO 190
80 LET I=I+1
90 GOTO 60
```

The escape hatch or safety loop, line 80, doesn't do its job unless you include a further instruction 85 IF I=10 THEN GOTO 190 (or whatever value you decide for I). If you specify what part of the input is to equate to YYYY however, then line 80 will work and there is no need to add line 85. For example, 80 IF X\$(I)(1 TO 4) = "YYYY" THEN GOTO 190. Then this will work and the programme jump will be OK.

Try a listing out using an input side as above with a correct line 80, and data comprising the following: 010183-G3TAN-0268-80CW-0101-Y

This represents DATE OF CONTACT, CALLSIGN, RSARS NO. BAND/MODE, DATE QSL SENT, WHETHER QSL RECEIVED. If you count the characters you will see that the RSARS No is 14 TO 17. So, to list 14 TO 17 you must specify those characters in your SORT routine, which is as follows:

```
190 LET N=I-1
200 FOR K=1 TO N-1
210 FOR L=K+1 TO N
220 IF X$(L)(14 TO 17)>=X$(K)(14 TO 17) THEN GOTO 280
230 LET Z$=X$(L)
240 LET X$(L)=X$(K)
250 LET X$(K)=Z$
280 NEXT L
290 NEXT K
300 FOR P= 1 TO N
310 PRINT X$(P);" ":
320 NEXT P
330 PRINT
```

By the way, if you use the above input routine and add the SORT routine to it, then you will lose data after you have displayed the result. To keep it, you must give each data line a permanent line number i.e. 10 LET X\$(1) = "010183 G3TAN 0268 80CW 0101 Y"

GOOD LUCK. HAPPY TO DISCUSS THE ABOVE WITH YOU ANYTIME. 73.

THE WINTERS SUMMER WALK

G3TAN/0268

(Or how to get to the AGM the hard way)

Dick Winters, your Editor, likes to walk! Many of us do of course. We pop of to the paper shop, saunter to the cinema or perambulate to the Post Office. Dick likes to walk to Catterick which is OK, but then he lives at 32 Redwood Avenue, Melton Mowbray which is 137 miles South of Catterick!!

Our Stalwart Editor of Mercury, proud of having served with the Corps intends to walk from the Signals Squadron at Garrats Hay, Loughborough to 8th Signal Regiment, Catterick to attend this year's AGM making a total distance of 150 miles. His effort will be to raise money for the Royal Signals Benevolent Fund. He would appreciate sponsorship from anyone in RSARS and you can show your appreciation by completing the tear-off pro forma below.

To start the ball rolling HQ RSARS on your behalf is pledging £50.00. You can pledge whatever you like. If every Member were to pledge one penny per mile walked then Dick would be able to donate over £2,000.00 to the Fund. I am sure you will support him in his adventure. We will be helping to publicise the event.

Don't whatever you do send him a cheque for what you think he is worth, otherwise HE will probably owe YOU a couple of quid! All pledges will be most gratefully received and acknowledged. You can start NOW if you wish, so that you don't forget. **REMEMBER TO SEND YOUR PLEDGE DIRECT TO DICK WINTERS, G3NVK, and NOT TO ME.**

This is a tremendous effort for someone who is not in the first flush of youth, and the money will go to a very worthy cause. So help as much as you feel able to and **THANK YOU ALL**.

DAVE LLEWELLYN, G3TAN.

.....  
I HEREBY PLEDGE to the ROYAL SIGNALS BENEVOLENT FUND the sum of £ \_\_\_\_ if G3NVK completes his 150 mile walk to the AGM at Catterick in June 1983.

(SIGNED) .....

ADDRESS

RSARS NUMBER .....

.....

STEP FORWARD THAT MAN!

In connection with the information overleaf, I need FOUR volunteer two metre stations, manned by either mobile operators or by volunteer walkers, to meet Dick Winters as he leaves the new A1 bridge to Catterick Village, as he approaches the Catterick Racecourse, then at Colburn Village and finally at Camp Centre roundabout. The aim of these radio stations is to report our mans progress along the last five miles of his personal marathon, to join in with him over that last lap, and to pose with him for glamour photographs for the local press and of course the WIRE magazine.

So, if you are sober, reasonably fit, and you think that you can walk some of those final sections (which range from 5 miles down to about ¾ mile) then contact me.

I can't issue boots to protect your feet, but I can promise a 'stiffened' lemonade at the AGM hall! I will let you know timings and all the information you will need as you put your name forward.

The queue starts on the right . . . . . over there . . . . .

(names to G3TAN soonest please)

Well done Mr. Ramsey!! That's your Awards Manager first on the list . . . . . anymore??

# NOTICEBOARD

Being an assortment of items of some interest to many

NB13. Of specific interest, particularly to the Treasurer, is the fact that many of you didn't change your standing order to your bank, and you owe us the difference to make it up to £3.00 naughty! Not one single overseas member forgot to increase his subs to £5, well done lads. You UK lot are going to look sick when Mercury for November doesn't drop on the mat arnt you!

NB14. J K GIBSON, G3WYN, (0902), wants information on 19, 22 and 62 sets, while new member 1940, C L BISAILLION, VE3CBK, is a lover of 19 sets, so there could be a connection there.

NB15. TONY GROGAN, WA4MRR, (1873), has thousands of items of surplus type equipment, mostly of USA origin. He is interested in hearing from anyone who collects, or restores old military gear.

NB16. MIKE BUCKLEY, our Cadet man, is always on the lookout for old pamphlets, left over leaflets, instruction manuals and so forth. Contact as per last Mercury.

NB17. KW2000E with AC PSU and KW110 Q Multiplier. £150.00. KW108 Scope £38.00. KW1000 £90.00. 2 x 576B Amp tubes in mint condx separately £30.00 each, or bought with the KW1000 £50.00 the pair. Contact Paul Walker G4RS Manager.

NB18. HAPPY ANNIVERSARY to the Apprentices College Harrogate. THIRTY years this year for G3HKR the club station there. Danny Kaye tells us that a QSL is available with a suitable overprint denoting the anniversary for contacts made during this anniversary year. Harrogate have their Open Day in June.

NB19. A 'Wireless Revival' in East Suffolk, organised by the Ipswich Radio Club, takes place SUNDAY 29 MAY (BANK HOLIDAY) at the Civil Service Sports ground, The Hollies, Straight Road, Ipswich starting at 10.00 G6CRN is handling space, G4IFF is the information man.

NB20. HARRY HOGG, GM3PPJ, (1646), is active EVERY DAY on SLOW SCAN TELEVISION, 14.230 MHz, 15:30-17:00. Harry's QTH is LOGAN, CUMNOCK AYRSHIRE. We are very interested in anyone on SSTV. Let us know how it goes.

NB21. VERY pleased to announce a visit to CATTERICK of HRH THE PRINCESS ANNE, our Colonel in Chief, which is scheduled for the SUNDAY of the Reunion weekend. (Thetas June 26th) We will be running our G3CIO/G4RS portable stations from the tent site and Dave will be running G3SIG from the same field. SPECIAL QSL will be available for the Sunday for those members who work us. These are of course valid contacts with any of those three stations. Members who eyeball the stations will be given a QSL but it will be overprinted PERSONAL VISIT.

NB22. By press time we hope that our APPLE II will be hooked up to a TERMINALL II unit and that we will have our TS530 on the air with the APPLE II controlling RTTY/CW(KEYBOARD) and SSB. So look out for the equipment when you come and visit G4RS over the AGM and give us a call on RTTY if you are interested in either just RTTY or microcomputer controlled RTTY/CW. Next plan is to extend the system to generate our slow morse transmissions for us.

NB23. Harrogate and Ouston both are in the act of purchasing a receiver, and a Viceroy TX is moving from Harrogate to Ouston. Receivers courtesy of the Corps. Keep those youngsters coming both of you. RSARS needs them.

NB24. For sale. 18 AVT Wide Band Vertical. £20.00 from Bill Bevan G3DBU.