

MERCURY



**THE JOURNAL
OF THE
ROYAL SIGNALS
AMATEUR RADIO SOCIETY**

NUMBER 47

SPRING 1974

ROYAL SIGNALS AMATEUR RADIO SOCIETY
(AFFILIATED TO THE RADIO SOCIETY OF GREAT BRITAIN)

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MEMBERS SUPPLIES : Captain (TOT) J. COOPER, (Address as above)

HEADQUARTER STATION : Normal call-sign : G4RS. Special call-signs : GB3RCS, GB2AAD and
GB3AAD (Aldershot Army Display) or to suit event. ACF/CCF call-sign : G4CCF.
Locations : G4RS at Blandford Camp, Dorset. GB2AAD and GB3AAD Aldershot.
GB3RCS As required. G4CCF : With G4BTW. Blandford Camp : Grid Reference (1"
Ordnance Survey Sheet 179) 921091. QRA Locator : YK10e. WAB Area : ST 90.

SOCIETY FEES :Members : Annual - 50p. Life (after 3 years consecutive annual membership) : £5.

Clubs : Annual - 50p. Life (after 3 years consecutive annual membership)
: £5.

Annual membership fees become due on 1st January each year and can be paid by a Standing Order. In the event of non-payment of annual fees, no "Mercury" after the January (Winter) edition will normally be forwarded and the members name will be removed from the membership list when fees are six months overdue. The editor of "Mercury" reserves the right not to forward "Mercury" in the event of two or more editions being returned undelivered indicating an un-notified change of address.

Membership dates from the 1st of the month in which application is made, subject to the application being approved by Council. Members joining on or after 1st September each year are granted the remainder of that year free of subscriptions PROVIDING that fees for the following year are paid at the time of application.

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EDITOR "MERCURY" : Captain (TOT) J. Cooper, (Address as above)

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Note pages 14 to 24 were loose 'Flash' attachments to the SPRING 1974 'Mercury'

CC41

For those members old enough to remember the heading symbol, it will be apparent that this has to be a "Utility" edition. (For the younger members, that symbol appeared during, and after, WW II to indicate 'war-time' or 'Utility' clothes', etc.). The reason is the world-wide shortage of paper which has hit Blandford as much as anywhere. Hence apart from being a little thinner, you won't be getting a back cover either!!!.

The Annual General Meeting will be held at Blandford on July 20th (details appear elsewhere) and it is hoped that as many members as possible will be able to attend. The ladies are, of course, welcome and we will endeavour to provide some alternative to the A.G.M, for them. All members are requested to return the form for the best "Mercury" article as well as the "AGM Attendance Form".

All for now - on with the (utility) business.

~~Jack~~
~~230PS~~

G8PG/026

At great personal risk, having climbed at least two electrified fences. marked ""Danger - 12V DC" our top undercover agent reports that :-

- (1) There are still members in the Society who can read Morse code - fast!
- (2) That these lunatics don't even use linears, and that they often work across the Atlantic with powers of less than 5 Watts.
- (3) That MI 99 (MOD NAAFI) have definite information that on 12th and 13th January 1974 these people took part in an amazing signal exercise involving the hitherto unheard of combination of NATO, Warsaw Pact and Third World countries.
- (4) That FBI (PX Surplus Disposal), the American opposite numbers of MI99, have infiltrated an agent into the group analysing the results of the exercise mentioned in (3). The agent has discovered that :-

- The Code name for the exercise was DLAG/CW WINTER QRP CONTEST 1974.
- RSARS are likely to figure prominently in the results achieved. by the UK contingent.
- A further exercise is scheduled for 6th and 7th July 1974 using all bands 3.5 - 28 MHz

All of which adds up to that DLAG/CW WINTER QRP CONTEST. And a bumper Contest it proved to be, with an increase of 50% in UK entries over previous efforts, and call-signs like W6, JA3 and WN2 suddenly appearing in the listings. The QRP Section winner was DJ7HZ who's 8 Watts plus an aerial farm put him at the top of the 54 entrants. A fine 2 Watt effort from DL7DO/P put him in 2nd place, and anyone who heard the terrific 6 Watts signal from ON8IW will not be surprised to know that he was 3rd. W6BH put up a fine show with 8 Watts on 14 MHz only to lead the DX field and take 13th place overall. The home entry was lead (surprise, surprise!) by two RSARS members, namely, G8PG (21st) and G3DNF (28th), other UK entrants being G4AYS (33rd), G3VDW (39th) and G3JVJ (40th). The QRO section (for the QRO station working most QRP entrants) was won by DK4EXX with DJ4HR second. This is the first ever QRO involvement, and it produced 7 competitive logs and 7 cheek logs, which the organisers find very encouraging. The total of 68 logs received rivals that of many contests run by national societies, which is not bad for a purely 'amateur' contest organised by a few enthusiasts in their spare time. The next Contest will be held on 6th and 7th July, 1974, and full details can be obtained from G8PG/026 at 37 PICKERILL ROAD, GREASBY, WIRRAL, CHESHIRE.

Should any of the SSB fraternity be biting the carpet and saying "why can't we have some fun like

(This story-angle is exclusive to 'Mercury' - submitted- by A.D. Taylor G8PG/026, GSO (I)16 to MI 99).

Nobby, G3VUC, writes to tender his resignation from the Society on health grounds. He writes ".....as you may know, over the past two years I have been in and out of hospital several times and I now face two further operations as soon as I have built up from the last one. This, combined with the fact that I have lost all interest in Amateur Radio, means that I will not be renewing my licence when it becomes due..... My KW200B will be given to R.A.I.B.C. which leaves me with the DX-100-U to dispose of. It's in tip-top condition for AM 'phone and CW. With it is a Dynamic mic and a Marconi International Maritime Key with built-in suppressors and all ball bearing. It may interest someone at the give-away price of £30 cash. The 6146s were replaced only 3 months ago. It is complete with Handbook, wiring diagrams and is one of the later models with the large meter....."

HQ has heard that several members have been 'under the weather' recently and we wish them all well. Ted, G2AYQ, spent a while in a Service hospital chatting up the nurses while they did a bit of maintenance and repair on his undercarriage. It is understood that he is now back at home and has bought a skipping rope.

G3PDS (not to be confused with G3DPS!) reports having been ill but making a slow recovery and is spending his time learning to write again.

To all the above, and to any other RSARS members who have been temporally medically downgraded, get well soon.

10 YEARS AGO

G3ONU/076

'Mercury' No.7 - April 1964.

G3EJF, as editor, produced some sound comments on operating standards and suggested that members 'take the lead' in 'cleaning up the clots'. He noted that 3 members received New Year Honours, one MBE and two BEM, made no apology for devoting half the 'Mercury' to Rhombics!! and bade a fond farewell to G3RUS who had been Treasurer for two years. Ron Briggs BEM described his 5N2RSB DX-pedition to the Cameroons. G3CIO gave a page and a half on results and comments on the CW and Phone Contests. G3RCJ won the CW section and the late G5HZ the 'phone section (using AM and SSB). Activity in 5B4-land was described - "...lots of Royal Signals members active in Cyprus..." was the proud claim. GW8PG was moved to write about Top Band DX - "a sport for men!". A long letter from G3CIO brought members up-to-date on activity and two pages of NEWS AND VIEWS were included. Finally, the call-signs, names and full QTHs plus RSARS number were listed - 230 members in all - concluded the 15-page issue.

WANTED.

Nick Carter, G2NJ/492 has written to HQ asking for details of "Underground Aerials". He thinks that an article appeared 'way back' in 'Mercury' but HQ has been unable to locate. If any member has any information, or knows where it can be obtained, please contact Nick at: W. CARTER, G2NJ/RSARS 492, 34 WEST PARADE, PETERBOROUGH, NORTHANTS. Your editor seems to remember a series of articles or letters in a national radio journal many years ago on this subject culminating in a letter from a 'ham' saying that he had operated his station over 1,000 feet down a coal mine - a record for underground aerials?

APPENDIX 'A' TO ABOVE PARAGRAPH.

G2NJ who is connected with The Wireless Preservation Society, writes that the W.P.S. is in need of two valves for a CW Transmitter Type 57 No.1 which he has renovated among other items for the Society's Museum at Homa House, Quadring Watergate, Lincs., (a labour of love which affords him much pleasure - and brings back many memories). The Society also wants transmitting valves before 1930, receiving valves with "pips on the top" as used in the 20s, and wireless literature, such as early magazines and catalogues. Transmitters and receivers of the early 20s and prior to this would, of course, be much welcomed. The person to contact is MR DOUGLAS, BYRNE, G3KPO, HONORARY SECRETARY AND CURATOR, HOMA HOUSE, QUADRING WATERGATE, LINCOLNSHIRE. (A check at the Royal Signals Museum shows that there were several types of 57 set but all were either 'phone only or would completely fill the normal sized house. If you can help the W.P.S. in any way, please drop a line direct. Nick goes on to say "The Society is grateful to Bob Smith, G6TQ/491 for the gift of a copy of "The Handbook for Wireless Telegraph Operators". This bears the words Revised in accordance with the Radiotelegraph Convention of London, 1912" as well as the date and price "1916, Reprinted 1919, Price 3d net". Hopes are entertained by the Society that a Morse key, as used in the First World War, will be forthcoming".

THANKS

As most of our members will know Arthur, G2TT/291 has had a spell in hospital. We sincerely hope that by the time members are reading this he will be up and about again forming a welcome addition to the RSARS Nets. Thanks are extended to Conrad Stevens of Balham, who has been keeping 'tabs' on Arthur's condition and informing Bert, G3MAY/950 who has been passing along the news to the RSARS and RAFARS Nets for distribution. Thank you for your help, gentlemen. (Mr Stevens is the 'Conrad' that many members will have heard mentioned on the RAFARS Net).

This article, which appeared in the last edition of "Mercury", was intended as a little nostalgic reading for the OTs, and, perhaps, a bit of a history lesson for our younger readers. However, it has provoked a lot of thought among readers as was shown by the following reactions. Just after publication G5YN/040 rang the editor to say that he recognised the story as being the history of another RSARS member, namely, Lieut-Col. A. B. Whatman, now perhaps better known as G2BQ/461. He went on to mention that he and G2BQ met at school at Winchester and both received their 'tickets' in 1927. G2BQ was then living at Twyford. Both entered the Service, G2BQ via "The Shop" and Evan via University. It is understood that G2BQ hopes to retire this year and he can be often heard on the Sunday Net on approximately 3.730 from about 1230 to 1300. Thinking this was the end of the 'mystery' your editor was a little surprised to receive a letter from the Editor of "Short Wave Magazine" who suggested that the author may have been a certain Captain Ben Wallich now living near Bristol. This was suggested by the fact that the author mentioned that he was 6BW and, as "SWM" has copies of call-books going back to 1924, they had checked on 6BW. They also stated that the 1938 call-book showed VU2BC listed as "P. Dutt of Benares University". This deepened the mystery a little. The same day a telephone call was received from a serving member of the School of Signals saying that some years ago whilst serving with the U.N. Forces in the Congo he was trying to contact 9M2ER (RSARS 061) when he was called by a VU2. In the subsequent QSO the VU mentioned that prior to the War he had been VU2BC whilst serving with the Indian Army. It would appear that at least 2 people held the call 6BW prior to the War, although there now seems no doubt that the 'mystery author' was in fact, G2BQ. How about letting us know, OM???

A letter from Mike, VP1MT, tells that he is on the bands as follows :-

Monday to Friday 14.130 + or - MHz 1330 - 1400 GMT

1800 - 2000 GMT

He is normally on SSB but is quite happy to QSY for a RTTY QSO. His QSL Manager is W3FVC who has just received 1,000 RSARS QSLs ready to confirm all those contacts. Also active from Belize are VP1DW (Jim Graham) and VP1JR (WO2 (Y of S) Jim Rayment)



Bernard, G3MKR/011 sends along a cutting from the Manchester Evening News, which mentions that many British Ex-Servicemen may be entitled to several more medals than those already held. Certain service in Europe during WWII may mean that a person is eligible for such decorations as the Aisne Medal, Somme Medal, King Alberts Fidelity Cross, the Dunkirk Medal and the Croix Des Combattants. Although space does not permit a full reprint it appears that if, for instance, you served in the Somme region between 1939 and 1945 you are entitled to the Somme Medal (not to be confused with the Somme Medal of WWI - Ed.). If you left the European Theatre of Operations via Dunkirk in 1940 the Dunkirk Medal can be yours. If you would like further details, it is suggested that you write to The Secretary of the Dunkirk Veterans Association who is :
Mr. T.A. TURNER, 7 ELSMORE ROAD, FALLOWFIELD, MANCHESTER 14.
Don't forget the courtesy of an SASE.



THE BISTABLE MULTIVIBRATOR

23. A bistable switch can be made up by cross-connecting two transistor inverter stages as shown in Fig.6(a). The choice of component values for this arrangement follows exactly on the principles given for transistor switches in general. The essential feature of the circuit is that, when the supplies are connected, one transistor will switch on and the other will remain off; the particular transistor that conducts will depend upon the effect of the unavoidable unbalance in the circuit.

24. The circuit shown in Fig.6a has the possible disadvantage of demanding an additional supply line. This disadvantage can be overcome by using a common emitter resistor to provide the bias supply, as shown in Fig.6b. Since the circuit is normally designed to be symmetrical, the voltage at the emitters will not change when the transistors are switched.

25. A bistable circuit can be set to a particular state by applying a signal momentarily to one of the base or collector terminals. For example, temporarily shorting one transistor between collector and emitter will cause the other transistor to turn off and then stay off when the short is removed. Usually, setting signals are applied to the bases. A bistable pair can also be energised so that it alternates between one state and another for each successive input pulse. This function provides the basis of the binary counter and usually requires the addition of gating circuits to steer the input signals to one transistor and then the other.

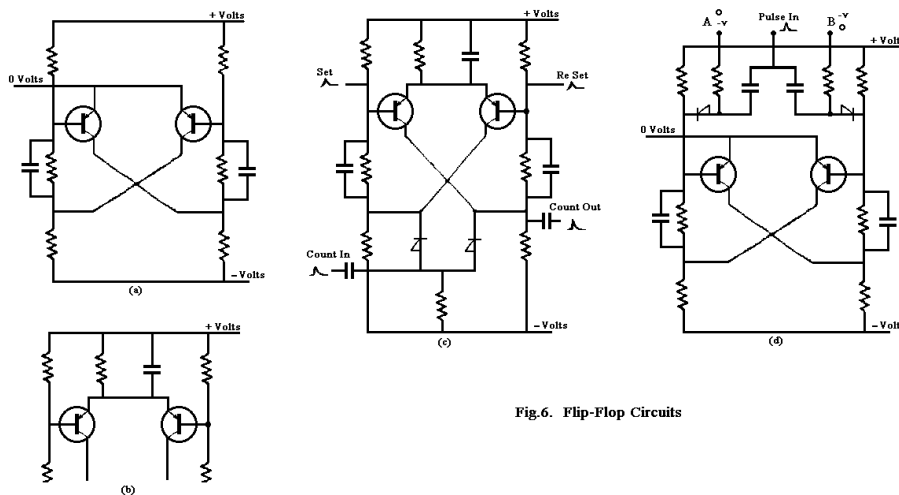


Fig.6. Flip-Flop Circuits

26. Fig.6c shows a bistable switch with a gating circuit added to enable a counting function to be achieved. The diode connected to the collector of the conducting transistor will be reversed biased by several volts while the other diode will be reversed biased by a very small amount depending on the small voltage drop across the associated collector resistor. Positive-going input pulses are applied via the diode connected to the non-conducting transistor to the base of the other transistor, where they will turn the latter off. Steering diodes are often better connected to the collectors of the transistors rather than to the bases because the larger voltage swing at the collectors provides a greater degree of discrimination between the two paths.

27. A multi-element binary counter can be made up by connecting a number of circuits of the sort shown in Fig.6c in cascade. Positive-going input pulses will cause the first circuit to alternate between one state and the other. The input pulse to the second stage will be derived from the positive-going change of potential at one of the collectors of the first stage (the right-hand collector in the Fig.) and so on. Each bistable switch can be set to one particular state by applying a pulse directly to one base or the other.

28. A circuit that can be set from a common input point to a particular state depending on the DC condition existing at two other points is shown in Fig.6d. The DC inputs at A and B can be set to either V- or 0V and for normal operation one input would be the inverse of the other. The diode associated with the V- input will be reversed biased by several volts, while the other diode will be very near or just on the point of conducting, depending on the state of the transistors. A positive-going pulse at the input will then be applied to the transistor base that is associated with the conducting diode and that transistor will be switched off.

29. The circuit shown in Fig.6d can be made to operate as a counter by connecting the DC inputs at A and B to the corresponding collectors of the previous stage. The positive-going clock pulses will then be steered alternately to one transistor and then the other causing the stage to count. Succeeding stages would be driven from one of the collectors, as in 'c'.

30. There are a great many detail variations of the circuits shown in Fig.6 to be seen in practice. There are, for example, numerous ways in which a bi-stable switch can be set and triggered, some involving the use of additional transistors. The basic principles, however, are covered in the range of circuits shown. Any of the diode clamping techniques described previously may be adopted for bi-stable circuits to improve their switching characteristics.

THE SCHMITT TRIGGER.

31. A useful square-wave generator that, like the plain bi-stable circuit, does not include a timing element is the Schmitt Trigger. The circuit is essentially a voltage comparator which changes state when the input signal exceeds a predetermined level. Fig.7a shows the most common arrangement. So long as the base of the input transistor, T1, remains positive with respect to the emitter, the transistor will be held off, which will cause T2 to be held on. When the signal at the base of T1 crosses over from a positive to a negative potential with respect to the common emitter point, the transistor will conduct, and the positive-going change of potential at the collector will turn T2 off. The action accentuated by the positive feedback provided by the common emitter resistor.

32. The Schmitt circuit can be used to give an indication each time an input signal exceeds a predetermined level or it can be used to generate a square wave of any desired mark-space ratio from a sine wave or other waveform input. The amplitude of the input signal or the value of the common emitter resistor may be adjusted to give the required switching level.

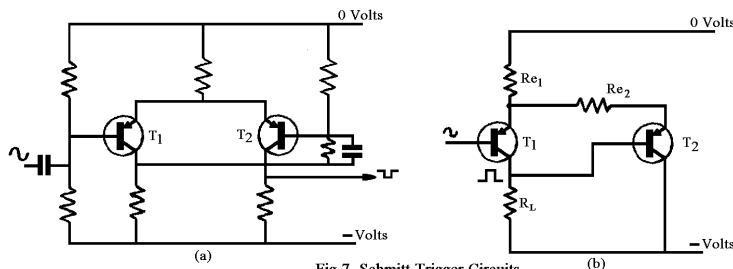


Fig. 7. Schmitt Trigger Circuits.

33. An alternate form of Schmitt circuit is shown in Fig.7b. With the base of T1 held at zero potential, that transistor will be cut-off and T2 will conduct current through Re1 and Re2. The values of these resistors are chosen so that the voltage drop across Re1, which is holding T1 in the OFF state, is set to the required switching level. If, now, the base of T1 is driven in the negative direction, T1 will remain cut off until the base potential reaches the potential of the junction of Re1 and Re2. At this point, T1 will turn ON and the resulting increase in voltage drop across RL will turn T2 OFF. The switching action is accentuated by feedback from the emitter of T2 to the emitter of T1. During this condition, T1 is turned fully on while T2 is just not conducting because the voltage applied between base and emitter is now very small.

(Further episodes in this series will deal with The Blocking Oscillator, Diode Logic circuits, etc. -Ed.)

RSARS VHF CONTEST

(Consideration regarding a VHF Contest for members has produced the following rules. It is hoped that as many members as possible will take part with lots of check logs to help check the scores - Ed.).

The Contest will consist of two short operating periods on 144 MHz and above held on THE SUNDAY OF THE SECOND WEEK-END IN SEPTEMBER. Times of operation are:-
0900 to 1200Z and 1300 to 1600Z

Rules

1. Entrants must adhere strictly to the rules of their licences and observe Band Planning regulations as applicable.
2. Stations may operate /A, /P or /M but must give their QTH/QRA Locator for each contact.
3. A contact will consist of an unassisted exchange of SIGNAL REPORTS. RSARS MEMBERSHIP NUMBERS and QTH/QRA LOCATOR. Mixed contacts are allowed.

Scoring

4. Scoring will be based upon distance worked per contact as follows :-
 - a) up to 50 kms (31¼ miles) 1 Point
 - b) 51 to 100 kms (62½ miles) 3 Points
 - c) 101 to 150 kms (93¾ miles) 5 Points
 - d) 151 to 200 kms (125 miles) 7 Points
 - e) 201 to 250 kms (156¼ miles) 9 Points
 - f) 251 kms and upwards 10 Points

Multi-band contacts are allowed but cross-band contacts are not eligible.

All scores are additive, the winner being the member with the highest overall score. In the event of a tie the station with the most multi-band contacts and/or the furthest contact shall be the winner.

Method of entry

5. Entries shall be submitted as follows :-

Serial No.	Date : Time	Freq.	Station Worked	RSARS No.	QTH	QRA Locator	Points Claimed
------------	-------------	-------	----------------	-----------	-----	-------------	----------------

i) The reverse of the first log sheet submitted requires a signed declaration quoting the entrants station equipment, aerial system, input used and confirming adherence to the rules of the competition.

ii) The total points claimed shall be shown at the bottom of the log sheet.

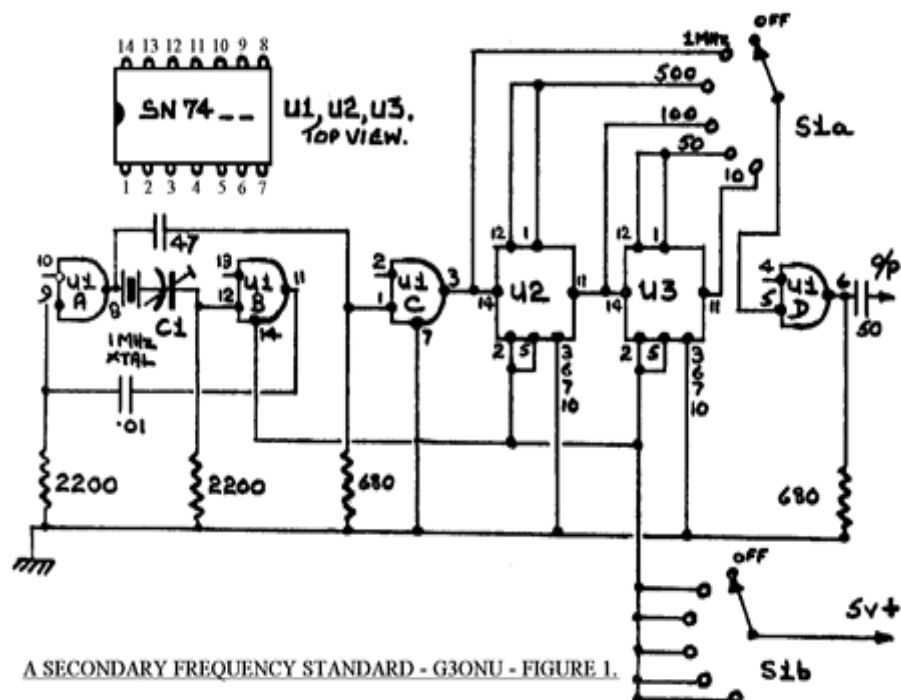
6. Logs (including any listeners reports) should be posted to the Society Awards and Contests Manager by the last day of September. Address :-

MAJOR (QM) R.A. WEBB, T.Eng (CEI), FSERT, G3EKL, R. Sigs. AIRFIELD CAMP, NETHERAVON, WILTSHIRE.

7. The decision of the Society Awards and Contests Manager must be accepted as final.

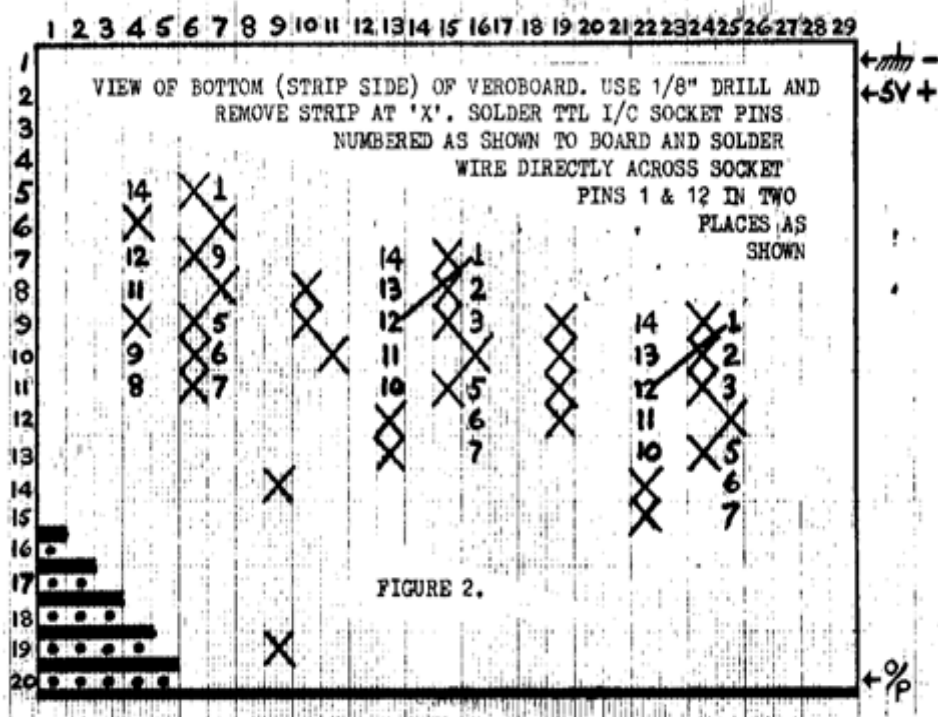
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DISCOUNTS FOR RSARS MEMBERS. Several companies have replied to HQ's request for discount facilities and have granted discounts from 2½ - 20% on various items. Paper shortage does not permit a list with every 'Mercury' so SAE to HQ please.



A SECONDARY FREQUENCY STANDARD - G3ONU - FIGURE 1.

ALL RESISTORS 1/4-WATT COMPOSITION. ALL CAPACITORS DISC CERAMIC (EXCEPT C1). C1 = 8-50pfd CERAMIC TRIMMER, S1/S2 = DP 6 POS ROTARY SW (GANGED), U1 = SN7400 NAND GATE, U2, U3 = SN 7490 DECADE COUNTER.



AWARDS AND CONTESTS.

G3EKL

Hello once again from Netheravon. The 5-59 Trophy competition participants have ceased "CQ RSARS-ing" for a few months and the bands are full of innumerable other "CQ Contest" calls instead. Some members have bemoaned the Contest as an unnecessary QRM evil; quite a few have expressed a pleasing interest but far more have taken part during the 73/74 Winter season. Indeed your scribe, nobbled at Netheravon during the CW weekend, was extremely gratified at the number of members partaking in the more ancient mode. Competition was more intense than last year, although Top Band still seems to be a lost world!! It was not my intention to restrict CW operation from one QTH. Line 6 of the preamble to the 5-59 Rules should strictly have read: "6 short operating sections". Results were:-

Call-sign	Sections	Contacts	Bonus	Total	Place
G3NVK	6	90	175	265	1st
G3UAA	6	94	165	259	2nd
G3XTL	6	82	140	222	3rd

The 5-59 Trophy will be available for presentation at the AGM at Blandford on 20th July '74. Thank you again to all members who took part, particularly those members who sent me logs of one sort or another. The increased activity is very gratifying. Next season (74/75) will see slight changes to the timings, bands and rules, with the Contest moving to the second full week-ends of November, December and January. Watch out for details in the Summer Mercury!

Another Society Award which has been settled since I last wrote is "The Most Overall Progress" Award for 1975 as shown by the greatest movement up the Society Award Ladders. The winner, by a handsome margin, was RSARS 530 - G2KK (now ZL1AXM, - Ed.). Ken obtained 450 points by advancing to 400 from 101 on the "Any Modes" Ladder, together with from 1 to 150 on the CW ladder. Second was RSARS 413 - 9H1BX who moved from 1 to 150 on the "Any Modes - Overseas" Section, thus obtaining 300 points, whilst third was member number 340 - Old Man Bill Windle of G8VG fame who went from 250 to 400 on the "Any Modes" Ladder and from 1 to 100 on the CW Ladder - total 250 points. So Ken Cook does it again! and wins the first Society "MOP" Award. It has been despatched to ZL together with good wishes and congratulations from your Council.

And so to the Awards Ladders as at 1st March 1974. Additions are:-

SPECIAL AWARD (EUROPE)	BRONZE CLASP	(300) G3YSK
SPECIAL AWARD (EUROPE)	No.14	(200) G3WMZ
"ANY MODE" LADDER		(350) GW3ASW
		(300) G3YSK
CLASS 1 CERTIFICATE (EUROPE)		(100) G3VSA
		(100) G5GH
CLASS 1 CERTIFICATE (OVERSEAS)		(50) 5B4FF
VHF LADDER		(30) G3YSK
		(12) G3VSA
CW LADDER		NO CHANGE

Well done! keep up the activity.

Which brings me very neatly to Activity Sunday. I mentioned in the Winter edition of "Mercury" that Activity Sunday would be changing to the Sunday of the second full week-end in each month. Why? - you may ask. Because we already have the Society Anniversary Contest over the second week-end in June, the 5-59 Trophy Competition is moving to the second week-end in November, December and January, and finally (and I'm not joking) there has occasionally been some confusion when Sunday fell on the first of the month, as to which was the last week-end!. I am hoping that this move will overcome any possible doubt as well as standardising all the Society activity to the same week-end in each month. OK? Good!]

Now where do we go?? - Ah yes, The Society HF Anniversary Contest 1974 (to be held over the second full week-end in June). The rules are :-

RULES FOR THE RSARS HF ANNIVERSARY CONTEST. 1974.

The Contest will be held from 1200 GMT 8th June 1974 until 1200 GMT 9th June 1974.

Any paid-up member of the Society may take part and the scoring details are :-

a) FOR CONTACTS BETWEEN MEMBERS WITHIN ZONE 14 (INCLUDING THE MEDITERRANEAN ISLANDS)

ANY BAND - 1 POINT PER QSO.

b) FOR CONTACTS BETWEEN MEMBERS WITHIN ZONE 14 (INCLUDING THE MEDITERRANEAN ISLANDS) AND THE REST OF THE WORLD)

ANY BAND - 3 POINTS PER QSO.

c) FOR CONTACTS BY MEMBERS OUTSIDE ZONE 14 (INCLUDING THE MEDITERRANEAN ISLANDS)

ANY BAND - 5 POINTS PER QSO.

2. Multi-operator stations are to divide their score by the number of operators used.

3. Members may only contact each other ONCE.

4. SWL members may submit claims (using identical scoring as in para.1) for reports of QSOs BETWEEN members, although only one end of the QSO need be heard. Reports must give both members call-signs, but reports of members working non-members are not valid.

5. A prize is offered for the leading score in Zone 14 (including the Mediterranean Islands), the remainder of the World and the leading overall SWL (a total of three prizes).

6. Claims in the form of log extracts are to reach the Awards Manager by the last day of July. The Awards Managers decision is final.

That's it for now, rules for the RSARS VHF Contest appear elsewhere and details of RSARS Net times and frequencies on the back cover of the last issue (sorry, no back cover this time!!). Should you need a reminder about the Society's Operating Awards rules a copy can be obtained direct from G3DPS at HQ (SAE please) - this can save the Society quite a bit of bumph each year by not repeating the rules in alternate "Mercurys". Thank you for all your help and encouragement.

Vy 73
Ray, G3EKL.

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#### THAT OWL

Two letters, so far, about the 'The Owl' article. One from Jim, G6LL, saying that he thinks that the member who had to sell his bees in 1942 was G2CX. Quite right, Jim it was 037, although he hasn't admitted it yet! Another letter, this time from Chas, G5GH, commenting upon the 'Via Siberia' address, remarks ".....From 1932 until 1936 when I was at Whitfield Barracks, Kowloon, and where I received the call VS6AX, we had three ways of receiving mail. One was via the Trans-Siberian Railway and mail marked 'Via Siberia' took 21 days from England. Another was non-marked sea mail which either came via P & O (the ship took 28 days), or, thirdly, via the British India boats which took 6 weeks and mail was always listed "Via Negapatam". I can also remember the old Imperial Airways first flight from Hong Kong - I have a First Day Cover on their flight from Hong Kong Panang". Chas adds "Flying Boat. of course - the ONLY way to fly!!!". (Have YOU really thought about the owls remarks? At least one person that wrote on this article had had a mention and didn't realise it. To give you all a clue or two, the following are indicated in the last Owl article : A G8 who was an XU8, a G2M, a G2+3 with a number in the 300s, a G3I, a GW8, a G3X, a G2Y, a G6L and a G8K. OK? get re-reading!! - Editor.

1794(P).

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ODDS AND ENDS.

RSARS 621 has completed the G3VYF Triband Vertical antenna. He resonated the antenna ON THE GROUND at 4MHz for 80 and 20 MHz for 15. Tunes 80, 40 and 15 using a small rotary coil and reversible motor at the base. K2QPS/RSARS 714 writes to say that his licence only allows him on 6 Metres, but he reads the mail on the HF bands and is quite willing to look for Western Hemisphere RSARS members on 6 particularly during openings. Member No.884, otherwise known as G4AKN is seeking information on the circuit and characteristics, etc., of the R1132A, also any suggestions for improving the bandspread and selectivity on his Eddystone 840C. Did you know that the Berne List (and a rather out-dated one at that) shows over 2,090 'legal' stations listed between 3.500 and 3.599 MHz with powers ranging from 30 Watts to 60 kW?. Thanks to the member who sent along a coloured picture of £6,000! - we'll know what to look for when the Pools come up! From Stan (G2DPY) a note saying "I must mention that I heard a new member mentioned in your tape (of 'Mercury' - Ed.) who took over the Section that was formed at Hounslow in '39 and I went to Basra with, it was 63 Heavy W/T then. Cyril Teece took that lot over in '45 and I was Section Sergeant with them in Basra until the winter of '43". From "A member" - "I think you should raise the fees to £1 - they've been 10/-/50p long enough....." (Tnx, OM, but as long as we can keep the books balanced at 50p we feel we should keep our present sub.). From G2DPQ, a note tells that he has been having a FB time on 20 CW. Plenty of VK, ZL, JA and PY, etc., not to mention the usual run of Europeans. G3EDG comments on the disadvantages of being on the 9th floor with only a balcony "just about enough room for a rhombic on 432". GM4BAF/907 seeks information on some old pals. If you know the whereabouts of any of the following, please let Mick know at GM4BAF, 35F KELBOURNE STREET, GLASGOW, G20 8PF, - Cliff Torrode of the Channel Islands (Catterick 1937), 2325980 Dennis McGuire (also at Catterick), 2573430 W.O. (later Lieut.) Bill Rowborry, 839984 Bill Newsham (252 Ind. Armd Gp). Ginger Williams, Sep Bonner, Joe Morgan, Lofty Calder and 'Sally' Lund (all of 252). Also looking for old buddies is J. Rimmer, G3VSD/784. 'VSD says "I did my OWL training (B3) at Catterick, Mons Lines in 1939/1940. After a short time in Kent with 2nd A.A. Brigade HQ Signals all the unit was posted to Egypt as 4th A.A. Brigade HQ Signals in October 1940. After chasing up and down the desert I went through the siege of Tobruk in 1942. I wonder if any members were around these areas at the times mentioned?". Peter, G3UXH/172 has been on the move from Kent and is now resident in Eastwood, Notts., and with the move went a change of job. No longer in the oil business, Peter mentions that he is now in the leisure/pleasure supply business "in which I hope to make my fortune". He sent along some literature showing the items such as Dinghy and Boat Trailers, the Air Camper (a tent on the roof of your car!), Tent Trailers, Tow Tents and various accessories. Just the things for the Summer holidays. If you're interested drop a line to Peter at : P. Carey, A.J.C. Trailers Ltd, 1 Coach Drive, Eastwood, Nottingham, NG16 3DR. Serving amateurs are reminded to take a peep at DCI 148/70. All members are asked to return the two slips with this edition, one to let us know whose name should go on the 'Best 'Mercury' article of 1973/4' and the other to say if we will be having the pleasure of your company at the A.G.M.

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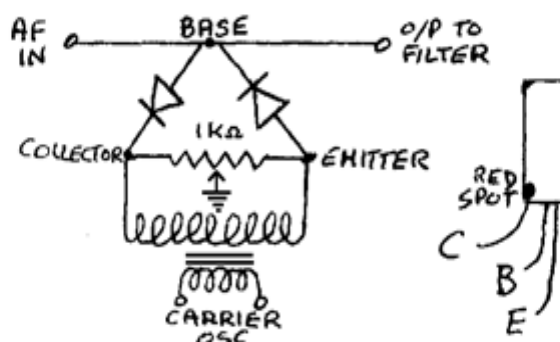
Two 50p vouchers for first two correct entries opened at the AGM.

Colonel

FURTHER HINTS AND KINKS FROM MANCHESTER.

PRINTED CIRCUIT DE-SOLDERING. There has recently appeared on the market a delightful device known as a "Desoldering Wick", which is very useful when removing 14 pin DILICs, etc., from PC Boards. Don't go out and buy one, though, you have the raw materials to hand in the shack already!. Take the copper braid of a scrap bit of co-ax, flatten it, dunk it in your tin of "Fluxite", lay it over the solder to be removed, apply a hot iron of the 25 Watt variety, and watch the braid suck up all the solder by capillary action!. Cheap, very effective, and virtually free.

BALANCED MIXERS/MODULATORS. I was reminded the other evening at the local radio club meeting of a dodge that I thought was very well known, but, even at the Club, was surprised to find that few people knew about it. The standard diode ring balanced mixer or modulator is very well known, of course, and has a reputation for good performance and reasonable stability under normal circumstances. However when AF is applied to it along with the carrier, the capacitance of the two diode junctions varies at the rate of the applied AF voltage, producing imbalance and an increase in intermodulation products at the output, not to mention a reduction of carrier suppression. This can be virtually eliminated by using a transistor for the mixer and not the usual two "balanced" diodes. The OC200, a silicon transistor of now ancient vintage is a symmetrical transistor, that is to say that the junctions are of equal size and shape, and when used as shown below makes a superb diode ring mixer/modulator. The symmetry of the junctions and their enclosure in one case ensures one of identical (or as near as damn-it, identical) capacitance at the two junctions which obviates the usual problems in two "matched" diodes whereby the reversed biased junctions are, in fact, of unequal capacitance, and have a different rate of change of capacitance at the depletion layer. Using the OC200 in this way the carrier suppression can be improved by anything up to 20 db by comparison with the normal OC79 OC81 arrangement and usually eliminates the balancing capacitor normally used in the circuit - unless you have a considerable difference in the two halves of the circuit for some strange reason!



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WILD CAT AWARD.

Albert Cash, RSARS 918, from Morwell, Victoria, Australia, sends along the details of the "Wild Cat Award". The Eastern Zone of the Wireless Institute of Australia (Victoria Division) has made available to overseas amateurs the DX Club "Wild Cat Award". This Award is obtained by making two-way contact with 5 stations of the Eastern Zone of Victoria on the bands 1-8 - 28 MHz. To obtain this award submit certified log extract only together with 3 IRC to:-

D.V. SCOTT, 174 JOHNSON STREET, MAFFRA, 3860, VICTORIA, AUSTRALIA.

All contacts to be after June 1st 1967. QSOs through Satellites or repeaters are not recognised.

XX

'FLASH' SHEETS - SPRING 1974 MERCURY.
THE OWL - ANSWERS.

Very few comments on the last 'Owl' article, so, to put your minds at rest, here are the suspected answers. At least two members had 'Via Siberia' in their Far East addresses, G5GH and G8DK. This indicated mail via the Trans-Siberian Railway. It was Arthur, G2MI, who received the QSL from the War Box in 1946 and the Best Man at 2BSR's wedding was none other than our Chef-in-Chief G2DRT/322. When Poynton 2087 rang it would probably have been answered by G3IR/560 who then lived at Poynton and was one of the many hosts to locally serving troops. The other telephone number (Carmarthen 672) would have raised Jack Millie, GW8MQ/187. Who got married on the 26th September 1942? - lots of people, no doubt, but in this case the Owl was thinking of G3XT/498 who married Miss M.A. Freeman, then a member of the A.T.S.. Who was the second 'ham' to land in North Africa? Well, although he didn't make the claim, the 'Press' said it was G2YS/472. The only clue that was correctly spotted by a member was the one about the QSL Manager having to sell his bees. This apiarist was G2CX/037. Although he didn't appear to remember it, it was G6LL that G5KV met over the pyramids in 1941, when both were flying to (or from) Egypt. The Forces Broadcasting station installer was none other than G8KW. Wonder if he ever did get any Listener Reports to QSL?. The member incapacitated over Xmas and New Year 1945/6 with a thumb operation was, again, G2MI. Judging by the way that the multitude of outgoing QSLs are sorted, Arthur certainly made a full recovery. The Owl has been seen in the area so watch out for a further thrilling instalment in the future.

WANTED.

By Ian Linehan, RSARS 910, 2 The Woodlands, London Road, Withdean, Brighton, BN1 8WA - The Handbook and/or circuit diagram and any other details of the 1155A. By Captain M.G. Taylor, R. Sigs., 633 Signal Troop, B.F.P.O. 12 - Wanted for a local radio amateur in Belize (VP1) a RF Amplifier for wireless Set No.19 Mk 3 in original unmodified condition if possible. Details direct to Mike, VP1MT.

WANNA NOTHA COUNTRY?

Bill, GM3KLA, of Ark, Haroldswick, Lerwick, Shetland Islands sends along a note to remind members that the Shetlands are a separate country for such things as WAE. Bill is prepared to make a sked on any band 3.5 - 28 for those needing the Shetlands. Just drop a line to the above address. Give date/time/frequency.

THE WORLD OPENS UP TO A BLIND MAN.

G4AWI/541.

(The following article was written, and typed, by George. For a 'White Stick' operator this is a considerable achievement. The article shows what amateur radio, taken for granted by many of us, can really mean to some. Let us count our blessings - Ed.)

It was about 16 years after being blown up by an 88 mm, shell from a Tiger tank that I found I was losing my sight and hearing. Well, to cut the story short, after many examinations it was found that my left ear had been damaged and that there was a growth on the nerve of the ear which had to be removed. This entailed major surgery and I can say that I am very lucky to be alive to write this story. When I had had the operation I was left with one very good ear and not much else. All the other senses had been affected. Of course, the worst thing that had happened was that I had no vision in my lamps. In many respects, the next few years were dreadful as I did not take kindly to being blind. Without going into too many details it meant starting life all over again - doing everything by a sense of touch and I was then aged 36. That was in 1959. In 1965 I was enrolled as a member of the War Blind Organisation, St. Dunstons and after a time I was trained for Light Engineering work. Before I lost my sight I had been employed in the coal mines of South Wales as a Fitter. For the next few years I enjoyed working and taking a paypacket home to my wife. It was a wonderful feeling after expecting to be put on the scrapheap. Nevertheless, those days have now gone. Now, in 1974, I can honestly say that I am a very happy and contented man. It was in 1971 that I had to finish work because of my wounds, etc, and I began looking for a full-time hobby. I had done some Regimental Signalling - but that was all. I put an advert in my local paper and this

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was answered by a kind gentleman who I phoned and who then came to see me. After a chat he decided that he would try to teach a man with no sight the necessary knowledge to pass the RAE. It goes without saying that we both overcame all obstacles and I have nothing but praise for the man who did not know what he was taking on!. For any member who belongs to the RSGB there is an article in the July 1972 issue by my very good friend, Eric, and I know him today. I must now mention another very good friend - some of you will know him - Stan, G2DPY. Like all good soldiers he came to my aid when I wanted help with my Morse, and I am very happy to say that after Stan put me through my paces, I took the Morse examination and passed at the first go. It goes without saying the joy and excitement I felt on getting my ticket in 1972. Words cannot be found to express the feeling. The title of this article is the truest thing I have ever heard, as I am now about 95% CW and have had many contacts on the DX bands, so I can assure all members that Amateur Radio has made one man's life complete and extremely happy. There are just one or two things that I would like to add before I finish. First, if any member does have a contact with me on SSB or CW would they please make a point of telling me that they are members as I HAVE NO WAY OF CHECKING THE LIST. Secondly, if any member has a really good pump key they would like to dispose of would they please get in touch with me as I am looking for a really good key. Ending this short version of many years of life I would like to wish all members near and far, very 73 and good luck.

All G4AWI QSO's are QSL'd via Stan, G2DPY 100%. George Cole, G4AWI/541

(George's address is 19 Oxen Avenue, Shoreham-by-Sea, Sussex, BN4 5AF and Stan G2DPY, can be found at 160 Old Shoreham Road, Shoreham-by-Sea, Sussex, BN4 5TE.

DISCOUNT FOR R.S.A.R.S. MEMBERS.

As mentioned in a previous 'Mercury', negotiations with a number of suppliers have taken place for discount facilities for members. Answers are still coming in but enough have been received to compile a list. Paper shortage does not permit a copy with each 'Mercury'. If you would like a copy please send a SAE to HQ. No need for a letter, just put "Discount List" on the back of your envelope. Firms granting discount include AMTRON, ANTEC, BAMBER, BIRKETT, BULGIN, CLINE, YOUNG, C.T. ELECTRONICS, DERWENT, GAREX, GLOBAL, HAMGEAR, HOBBS, WATERS AND STANTON, INTERFACE INTERNATIONAL, J.H. ASSOCIATES, LINEAR, MACMAHON, MARK EQUIPMENT, MAYS, MICROWAVE MODULES, MOSLEY, NOMBREX, NORTH WEST ELECTRONICS, SINCLAIR, SOUTERN SURPLUS, STRUMECH, TELFORD, T.M.P., TRAMPUS, ERNEST TURNER, WESTERN ELECTRONICS, YORK PHOTO AUDIO CENTRE, ETC. Firms NOT granting discount include ELECTROVALUE, GOODMAN'S, G.W.M. RADIO, IMHOFS, LASKEYS, LOWE, B.H.MORRIS, R.T.V.C., J. & A. TWEEDY, and Z & I AERO SERVICES.

NEW MEMBERSHIP LIST.

As suggested by a member, a new layout membership list has been prepared. This shows Call-sign (in alpha-numerical order) with spaces to enter name and an indication when the QSL has been received. Spaces have also been left between groups of calls (G3A, G3B, etc.) to permit the addition of new member call-signs. There is also room to add the RSARS number when received during the contact. In view of the wider spacing the list runs to 6 sheets, and, due to the paper shortage, only a limited number have been produced. If you would like a copy, SAE to HQ please. Request can be enclosed with the Discount list. A number of lists have been earmarked for overseas members (IRC pse).

AWARD DETAILS ADDITION.

Please add the following to Para, 6 of the RSARS Operating Awards rules :

"Members holding Class 'B' licences (G8 + 3 letters) cannot use their call-signs for Award contacts below 144 MHz".

'FLASH' SHEET - WITH SPRING 1974 - MERCURY.

LAST MINUTE ITEMS.

Don't forget the Annual General Meeting on July 20th. We had a FB turn-out last year but there were still a few vacant seats in Princess Mary Hall. If you can make it, please return the form enclosed with this edition. CU?. Tnx,

VP1MT is looking for member-QSOs on 14.130 + or - 5 around 1900 GMT. Mike will also give you a RTTY contact if requested, The Society will be operating a Special Events call-sign at The Aldershot Army Display on 28/29/30 June 74. Why not come along? - plenty to see and do, and a chance to show Gran how some of her Income Tax is spent. Lots of static displays and an Arena Display every PM.

TIDWORTH TATTOO.

The Tidworth Tattoo is to take place on the 25th, 26th, and 27th May 1974 at 2:30 p.m. and 6:30 p.m. Lots to see and do - Massed Bands, Kings Troop Royal Horse Artillery, Junior Parachutists Gymnastic Display Team, Grand Fun Fair, a host of civilian trade stands and stalls, Licensed Bars, Refreshment facilities, etc., Free Car Parks adjacent to the ground, See you there????.

LETTER FROM BRUNEI.

From Maurice, VS5MC. ".....I thought I would take a little time off from working the 462,477 licensed JA's in the current WPX contest. That figure was passed to me over the air as genuine and is reckoned to be increasing at a rate of 55,000 a year."Mohamed, VS5PM, has got the bug again and wants to put his DX-40 back on the air. He has just had the mains transformer rewound but he hasn't a handbook or circuit diagram. If any member could help it would certainly be appreciated, (Pse send to: Captain M. Caplan, Royal Brunei Malay Regiment, B.F.P.O. 605).....You have no doubt heard that W1GEY(?) has been given permission to operate from Peking providing he leaves his Drake gear behind when he leaves.....!! BCNU one of these Wednesdays, 73 to the HQ gang and to all the boys on 80. 73 Maurice.

From Syd Smith, RSARS 349.....Very pleased that Summer time has returned, now I can hear the Net once again..... Have been checking on QSL returns: Sent 244 and received 209. So, a fairly high return but after reading the last issue of 'Mercury' I can understand where the rest are!! 73 to all, Syd. (Please, remember that our SWL/NL members require a card in order to claim RSARS Awards. If you think that the report warrants a card, please drop one into the RSARS Bureau with your next batch. We did have a SWL Members Representative at one time, but nothing has been heard from that department for a long time. Do we have a member who would be prepared to look after the interests of our non-licensed colleagues? It would require quite a bit of non-reimbursed time, collating reports of activities, listing calls heard (not necessarily RSARS calls), etc. Offers to RSARS HQ, please - Ed.)

From : Chas, G5GH. "....don't look now, but I have just received a QSL via the Bureau for a QSO in 1965 - all the way from Italy!!(I think that G3ABG may have beaten you slightly, Chas, - he received a QSL for a 1947 QSO 19 years after the event. I know, I sent it!!! - Ed.).

From : Bert, G3MAY. ".....I now have a Liner 2 with a 6 over 6 slot Yagi. Results not too bad, but am fitting a pre-amp to the RX which will improve things quite a lot. So far have only worked three RSARS members; G3HSE, G3EKL, G3YSK in that order". (Where are all our wandering 2 Metre boys tonight.? - or, for that matter, at any other time.? - Ed.).

From : Dady, VU2MD. ".....I see that G2ZA/447 has served with the 14th Army in Burma and G4CDK/446 was in Poona. I wonder if there are other members who may have served with the 14th Army, especially in 17 (L) Ind. Div., or 20 Ind. Div., during the Burma campaign, or in India. I would very much like to hear from them.....". (Write to Dady at Col. Dady R. Major, VU2MD, Petit Mansion, 85 Sleater Road, Bombay, 400 007, India. - Ed.).

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From : GI3HXV, Ron. "....Am only on VHF at the moment, but hope to meet a lot more members when the beams go buck up again (2 Metres and 4 Metres). Of course, we do try to help out any Society "visitors" who may be in GI-land for a few months..... " (Tnx, Ron. much appreciated. - Ed.).

From : Keith, G3ZVD. "....Unfortunately, I have suffered three bereavements in as many months and am a little behind with things including QSL cards to members. But am catching up and anyone to whom I owe a card will get one before very long and I do apologise to all these people....." (Sorry to hear your bad news, Keith, but hope to hear you on the Bands again very soon. - Ed.).

From : W. Burton/034 "... Please delete G8ANQ and insert G4CWA. Having coerced the dreaded 'Baldy Bill' (G3VGN) into taking up the 'VGN call a few years back I thought it was about time I got my finger out and got a Class 'A' call!. Used to operate 14 MHz CW from DL2 many years ago when I was 23648788. I joined the RSARS at Catterick in 1959 in the days of Bob Frary (G3DMK), Stan Symonds (G3DSS) and Ted Philp (G3NJM). At present mainly active on 3.5 MHz CW but am building an SSB rig. Surprising how the 2 Metre Parabeam loads up well on 80. I have had 599X from SP2! .

From : Gary D, Thomas, 9V1RJ/RSARS 407, 121 Signal Squadron, 9 ANZUK Signal Regiment, B.F.P.O, 5. ".....It has been good to be able to get on the RSARS Net and work all those chaps one reads about in 'Mercury'. I will endeavour to get on as much as possible during my stay here in 9V1. The set-up here is as follows : A Yaesu Musen FT101 with a TH3Jr and a 12AVQ for the antennas. I do have the facilities for split frequency working in the form of a FV101 - this information may be of use sometime in the future - I do not have the capability to utilise 80 Metres, no antenna for that band, although I do have a LC80Q (the loading coil to convert the 12AVQ to 80 Metres) I have no plans at this stage to carry out the conversion whilst still in Singapore, but I will wait until such time as the antenna is down and stripped for shipping back to ZL. Look forward to meeting G2KK when I return to New Zealand and wonder what his address will be?....". (The call is ZL1AXM and the address, Gary, is 105 Forrest Hill Road, Forrest Hill, Auckland 10 - Ed).

From : F. Roberts, RSARS 954, 72 Turton House, Turton Street, Bolton, BL1 2SR. ".....I am enclosing a few Green Shield stamps. I trust that you can put them to good use. I will send along any more that I can get hold of in the future....." (Many thanks, Fred, these have been the only ones received so far - Ed.).

From : A MEMBER. "Another point that struck me today is the number of members who say that they have had a Curry Lunch. Whilst the subject matter is not exactly a 'ham', or Signals, matter, it is a hobby of mine and a very technical one, certainly to the Cook (Khansama). How about an introductory recipe?, and perhaps later on we can get a few "Members Specials" recipes.....". (OK, and I think we have at least one member who will provide 'the necessary'. As members who have served with the Indian Army or with Gurkhas will know Curry is NOT that stuff that comes in highly decorative packets from the Super-Market, but is a work of art. Are YOU a Curry, Baht and Raksi man?. If so, drop a line about your favourite ingredient/curry. Perhaps this is where our lady members can come into their own. - Ed.).

(Sorry it's all a bit rough this issue - trying to get a quart into a pint pot -Ed.).

NEW MEMBERSHIP LIST.

A limited number of the latest Membership List are available from HQ. Members are requested to amend the List as follows to bring them up-to-date (24/4/74)

Delete GM3OFV, Insert G3FV. Delete DA1DQ, Insert DA1QD. Delete G3CMG, Insert G4CMG. Add: G2RT, G2XQ, G3AAK, G3ALI, G3CAA, G3LZO, G3NAK, G4AYH, G4BNI, G4BYJ, VU2BK.

MEMBERS DETAILS

Herewith a few more members details in an attempt to clear the back-log.

RSARS 209 - G5YM - Details withheld at member's request.

RSARS 223 - W0CYM - COLONEL (RTD) FREDERIC H. PALMBLAD, 2329 MOUNTEAGLE SREET, COLORADO SPRINGS, COLORADO, 80909, U.S.A. Fred, whom you may have met in the past as W5CYM, W0KPU, W2TDA or W6JTC, joined us w.e.f. 1st October 1973. He was first licensed in 1933 with the same suffix but with a W5 prefix and took a Radiotelephone First Class Commercial license in 1938. Fred has been active in the amateur field since being first licensed with, of course the exception of the War years and when on assignments in locations where amateur radio was prohibited. He is a member of ARRL and is active in the Military Affiliate Radio System (MARS). Amateur operation takes place mainly in the high frequency portion of the amateur spectrum. Fred will be known to many who may have passed through the School of Signals at Catterick between June 1960 and May 1961 during which time he was the U.S. Army Liaison Officer with Signals Planning Wing. He remembers such personalities as Colonel Everest Moseley, Phillip Banbury, Graham Campbell, Derick Emly and Dick Hamer. Also the then Commandant, Brigadier Robin Yolland and his successor Brigadier Allistair (Gerry) McGill and Fred would like to take this opportunity of passing along his best wishes to all old friends.

RSARS 677 - G8CFM - WILLIAM MACKUNE, 25 WOOLFALL HEATH AVE., HUYTON, NEAR LIVERPOOL. Very little on the back of Bill's form but sufficient to show that he was 19023921 Signalman Mackune, W., from 1946 until 1948. A member of the RSGB and also The Liverpool and District Amateur Radio Society.

RSARS 679 - G3WRQ - FREDERICK E. COX, 35 THOMPSON PLACE, HEREFORD, HR4 0JP. Anyone who served in 163 Infantry Brigade during the last War between 1942 and 1943 may well remember Fred as number 1413013. And for that member who says "But that is an RAF number" we agree, Fred was at attached to the Corps during this period from the RAF. Now settled in Hereford he is a member of the Hereford Amateur Radio Society.

RSARS 691 - G4NS - JAMES HUDSON, 29 THE LARCHES, ESH, WINNING, NR. DURHAM. Jim's membership became effective w.e.f. 1st August 1973, thanks to the efforts of Frank Pickard, G2HLL/512. G4NS served with Royal Signals from 1941 until 1945 with S.C.U.3, which means no doubt, that quite a few other members know him. Welcome, Jim.

RSARS 693 - G3HW - LESLIE W. DYMOND, "FAIRWAY", BUDDLEFORD, TEIGNMOUTH, DEVON, TQ14 9PB Introduced to the RSARS by Cyril, GW3ASW, Les is an OT who joined Royal Signals in 1939 and served for 1 year in Southern Command Signals and then with Salisbury Plain District Signals until January 1941. It was then that Les joined special forces with whom he stayed until demob in 1945. He still maintains contact with Special Forces by way of The Signals Section, Special Forces Association, and is a member of RSGB and The Torbay Amateur Radio Society.

RSARS 697 - G3LN - PHILLIP H. ROCK, 53, DUNCOMBE STREET, WOLLASTON, STOURBRIDGE, WORCESTERSHIRE, DY8 3QY - Phillip spent WWII on Radio Security work with the Radio Security Services (R.S.S.). He is also a member of his local Radio Club, The Stourbridge District Amateur Radio Society. Membership is effective from 1st November 1973. Welcome, Phillip.

- RSARS 701 - LCpl BARRIE JOHN JENKINS, 'J' TROOP 21st SIGNAL REGIMENT, RAF GUTERSLOH, B.F.P.O. 47. Barrie, is a serving member of the Corps, is a keen SWL (BRS 34486). He has been in the service since 1965 and in January 1967 accompanied G3VIY/418, then better known as Ray Vasper/VS9ARV on the Kuria Muria DX-pedition whilst serving with him in Aden. Barrie is also an active member of the RAF Gutersloh A.R.C. where he runs Morse instruction and, by the time this is in print, he should have taken (successfully, we hope), the RAE. The rig, at the moment, is a Trio JR500S with a W3DZZ antenna at 60', and a home-brew 2M convertor fed by an 8-element Yagi at 70'.
- RSARS 707 - G3RFC - LEONARD OGDEN, 14 WESTMINSTER AVENUE, REDDISH, STOCKPORT, CHESHIRE, SK5 7AZ. Service for Len started in 1936 when he joined the R.A. T.A in which he served until the outbreak of war when he joined the regular R.A. Demob in 1946 did not quite see the end of service as he was recalled ('Z' Reserve) in 1952. Len served as a Fire Control (Radar) Operator and a Driver/Wireless Operator. The receiver line-up in the shack is an AR88, a R107 and an RA1, the transmitter side is a DX-100-U and a Home-brew Top Band TX and the Antenna is a Hygain 14AVQ. If you want a QSO with G3RFC you'll have to look at the low end of the Bands as Len's interests are "100% CW". He is a member of TOPS and the RSGB and RSARS membership was effective w.e.f. 1st August 1973.
- RSARS 709 - SIMON JAMES BROWN, "RIVERSIDE", GLEN AULDY N. RAMSEY, ISLE OF MAN. It was a visit to G4RS that introduced Simon to the Society during a short stay in Dorset on a CCF Course. He has been a member of the CCF since 1969 at King Williams College, and operates on the National Net as '37'. He obtained his Signals classification and AIE at Donnington in 1972. Effective 1st August 1973.
- RSARS 718 - K2JFJ - JACK M. JANICKE, 122 BELLVUE AVENUE, BUTLER, NEW JERSEY, U.S.A. 07405. Jack worked with Royal Signals during January, February and March 1945 during the Battle of The Ardennes whilst serving with 106 Signal Company, U.S. 106th Infantry Division. Liaison included both radio and land-line. Later in the same year he again worked with Royal Signals from August to November when he was in charge of the U. S. 7th Army Transmitter Pool at Heidelberg in Germany. Jack was licensed as K2JFJ in September 1954 and is very active on the bands, mainly CW on 40 and 20 (and 15 when the band is open). The main rig consists of an HW101 (170 Watts) with the following antennas : HyGain TH6-DXX Beam for 10-15-20, a HiGain 18AVT/WB vertical Ground Plane for 10 to 80 inc., an 80 Metre Inverted Vee, a 40 Metre Folded Dipole, a 2 Metre Ground Plane and a 2 Metre 10 element Beam. When not at home, Jack runs a SBE-34 Transceiver and a Hustler whip antenna from the car. His present 'Salt Mine' requirement is as Engineer and Vice-President RFL Industries in Boonton, New Jersey where he has been since 1952. His Military Service List reads : U.S. Air Corps - September 1942 until February 1944, 106 Signal Company (U.S. 106 Infantry Division) - February 1944 until July 1945, and U.S. 7th Army HQ (Signals) : July 1945 until January 1946. Jack is keen to meet other members on the key and is already notching up a respectable RSARS 'score'.
- RSARS 723 - WB6JXC - MEREDITH RHODES, 850 SOUTH ORCHARD AVENUE, VACAVILLE, CALIFORNIA, 95688, U.S.A. Joining us w.e.f. 1st August 1973 and from a little further West than Jack (718) we welcome Meredith whom you may also have met as WA9HXQ. He was a member of the 1028th Signal Company, U.S. Army Signal Corps with the Serial (Regimental) number of 39 024 027, and arrived in the U.K. in May 1943. His first stop was at Aldermaston followed by an

assignment at RAF Geenham Common with the only American Unit there. During this period Meredith worked closely with Royal Signals in establishing Inter-Service communications, both land-line and radio. A move to the Winkton area for the D-Day build-up again meant working with the Corps building up the extensive communications for the move across the Channel. Following the Invasion of Europe 723 found himself on Signal Support for the American 1st and 3rd Armies and no doubt, once more getting used to English Beer and English accents whilst again working with Royal Signals. 1946 saw his return to the U.S.A. and demob or, as he puts it "mustered out of service". Two years of "Civvy Street" was enough and Meredith returned to uniform in 1948, this time in the Air Force. Finally retired from the Forces in 1965 after a career that had always been in electronics, including airborne communications, Air Radar, Ground Radar and Missile Communications. After retirement, Meredith was in the Civil Service as a Repairman Airborne Radar Equipment, finally retiring in 1970 since when he has devoted his full time to Real Estate Work. He closes with "Active as a 'ham' but not as active as I would like due to the pressure of business and the long Summer days. Presently am running a Collins S-Line as primary with a National NCX-3 as back-up. Have phone-patch facilities. Presently have a terrible antenna system, a vertical, but have hopes of installing the two-element beam that now reposes in the garage". To show what a small world it really is, it turned out that Meredith's Brother-in-Law is a Padre at Blandford Camp.

724 G3BXF - Details withheld at member's request.

725 G3QI - RONALD BEAN, 20 WALTON ROAD, WETHERBY, YORKSHIRE, LS22 4JJ. As the call-sign suggests, Ron was first licensed in 1939 but WWII did not allow a lot of operating before he found himself (Like several other RSARS members) serving in a Special Communications Unit, in this case, Nos. 3 & 4 on Fixed, Mobile and DF work. 3 years were spent in the Middle East. Ron is a member of the Harrogate and Knaresborough Radio Society. Welcome, Ron.

726 VQ9HCS - HARRY CHARLES STICKLEY, ASTOVE ISLAND, C/o KENYA SHIPPING AGENCY, P.O. BOX 84831, MOMBASA, KENYA, Harry, who will be well known to many Corps members, has been fortunate enough to do what many of us would like to do - retire from the Service and settle on an equatorial island. Judging by reports in various publications he is active as VQ9HCS. He is 'caretaking' the island for the owner, but, if you write to him, there is a chance that he may not get your letter as boats to and from the island are few and far between. Incidentally, the Times Atlas of the World lists Astove Island as being located at 10° 05'S, 47° 40'E, not too far from Aldabra which Johnny Walker DL5ZU/VQ9JW/378 will doubtless remember. Welcome Harry.

727 - ERIC ARTHUR WOOLFENDEN, 13 ROBIN HOOD STREET, CHEETHAM HILL, MANCHESTER, 8, LANCASHIRE. Eric is a 2/Lieut serving with the Army Cadet Force and is a Detachment Commander with Crumpsall Cadet Company, Royal Regiment of Fusiliers. A recent Signal Course at Blandford helped the bug to bite a little deeper and, apart from organising a Signal Section within the unit, Eric is studying hard for the RAE. Wish you lots of luck, OM and hope that we can add another Cadet call-sign to the list shortly.

736 5B4JN - JAMES ALBERT NICOLLS, 261 SIGNAL SQUADRON, EPISKOP, B.F.P.O. 53. A near neighbour and friend of 5B4 "Freddie Freddie", Jim is a U.K. Based Civilian with the Corps and has been since 1962, Jim adds "I started as a Comcan Technician with 15th Signal Regiment, which was then reduced to 259 Signal Squadron, and, on transfer of 'long haul' communications to the RAF I continued to

work with 261 Signal Squadron on Automatic Exchange Maintenance up to the present time and, hopefully, in the foreseeable future. P.S. I think I was probably the last person to run up the SWB 8 that you have in the Museum at Blandford in its role as Standby TX at Paramali TX Site. I was certainly very much involved in its dismantling and preparation for shipping to U.K."

- 742 G4CKP - Details withheld at member's request.
- 743 W8KXA - Details withheld at member's request.
- 753 G2DFH - HARRY GRIFFITHS, 4 WESTBOURNE TERRACE, SALTASH, CORNWALL, PL12 6BX. The combined efforts of GW3ASW and G2AYQ ensured G2DFH becoming RSARS 753. At the outbreak of WWII Harry was attached to the G. P. O. Radio and Telephone Service as an Engineer and Radio Operator engaged on Radio Security Services (R.S.S.) maintaining and operating high power transmitters and DF equipment. He was later with Royal Signals Special Communication Unit No. 3 employed on DF and other duties. After the War he resumed duties as a Telephone Engineer and was transferred to The Royal Air Force on Radio (Civilian Operator) operating duties with Coastal Command on Direction Finding and Ground-to-Air communications with Shackleton and Nimrod aircraft on R/T and CW. He retired from The Ministry of Defence (Air) in October 1972 and is at present employed as Assistant Checkpoint Security Officer at Plymouth Technical College Library, (Where rumour has it that he is known as "Checkpoint Charlie"! - Ed.)
- 755 G3UZD - FREDERICK BILKE, 2 WALCOTT AVENUE, CHRISTCHURCH, HANTS, BH23 2NG. Fred was a Craftsman in R.E.M.E. from June 1948 until September 1949 when he was medically discharged with a 100% pension at that time. During his service he was 22040850 and his trade was Elect. V. & P. He is, at present, an Established Civil Servant with the Ministry of Defence at MVEE at Christchurch as an R & D (S) with the Electrical Research Laboratory. Welcome, Fred.
- 760 G2ACA - VICTOR LESLIE MAYHEAD, "BROOKSIDE", FIRS AVENUE, BRAMLEY, GUILDFORD, SURREY, GU5 0ED. Vic was introduced by G3AQC which is not unusual as they are a Father/Son family team. He served from 1940 until 1946 with Radio Security Services at Barnet which limits what we can say about his past service history a bit. Nevertheless, happy to have you "on parade" Vic.
- 761 - NICHOLAS PIERRE BLAMPIED, BON AIR, QUEEN'S ROAD, ST. PETER, PORT GUERNSEY, CHANNEL ISLANDS. From the "Sunny South" we welcome another CCF member. Nic joined Elizabeth College CCF in September 1969 and took Apex Scheme Proficiency on 10 June 1971 later joining the Signals Platoon in September 1971. He passed the Signals Classification Examination in March 1972 and attended a Cert 'T' Course at the School of Signals at Blandford during March and April 1972, obtaining a 'Pass'. Promotion to LCpl came in March 1972 followed by a Signals Advanced Classification in March '73 and a Cadet Leadership Course at Easter the same year. He was promoted Cpl in the Summer of this year ('73) and then attended a 10-day Electronic Engineering Course at Aborfield. He is now No.1 Operator on c/s 47 on the ACF/CCF National Net.
- 765 GM2MG - LT. COL. (RTD) CHARLES C. MILLAR TD, THE GRANGE, NEIDPATH ROAD E., WHITECRAIGS, GIFFNOCK, GLASGOW, G46 6TX. Charles, now a Chartered Accountant by profession, had long connections with the R.A. T.A. including being CO of Heavy Ack-Ack Regiments. On the 'ham' radio side he has held a license since 1921 ("2MG - no prefix in those days") and made his first contact with the U.S.A. in 1923 on about 200 Metres. Around 1930, he was Signal Officer with the 7th Highland Light Infantry.

FLASH SHEET - WITH SPRING 1974 - MERCURY.

SATELLITE PREDICTIONS.

The following information is published with the permission of the Director of The Science Research Councils Appleton Laboratory. The Society is indebted to the Director for making such information available for publication in 'Mercury' on a regular basis. In the following tables, which gives the time of nearest approach to 51°N, 2°E, gives frequencies in MHz, and Rev. Changes (i.e. the correction to be applied in order to find the time of the next pass) and Daily Changes (i.e. the correction, in minutes, to be applied each day to find the times of corresponding passes on following days). To find the time on previous days the correction should be applied using the opposite sign. Since the predictions are issued at weekly intervals, no more than 3 days corrections need be applied to any satellite.

Satellite Name	Internat. Desig.	Dir.	24 April	1 May	8 May	15 May	22 May	29 May	Rev. Change (Mins.)	Daily Change (Mins.)
ESSA 8	68 114A	SN	2046	2059	2113	2126	2140	2001	115	+50
		NS	1135	1148	1009	1023	1036	1050		
ISIS A	69 9A	SN	1616	1506	1356	1456	1347	1238	128	-28
		NS	0358	0250	0142	0242	0135	0026		
CHINA 2	71 18A	SN	1007	0859	0748	0635	0335	0217	102	-10
		NS	1856	1747	1453	1339	1222	1104		
ISIS B	71 24A	SN	1656	1732	1616	1653	1535	1419	114	+38
		NS	0558	0441	0324	0401	0244	0321		
SOLRAD 10	71 58A	EQ	0722	0524	0326	2332	2133	1755	95	-17
		EQ	0901	0703	0147	0127	1954	1934		
ERTS A	72 58A	SN	2010	2050	2129	2027	2106	2004	103	+6
		NS	1012	1052	0949	1029	1108	1006		
NOAA 2	72 82A	SN	1922	2002	2042	1929	2008	1855	115	+54
		NS	1010	0857	0937	1017	0903	0943		
OSCAR 6	72 82B	SN	1948	2027	1912	1951	2030	1915	115	+54
		NS	1036	0922	1001	1039	0925	1003		
NIMBUS 5	72 97A	SN	1031	1035	1039	1042	1046	1050	107	-45
		NS	0010	0014	0018	0021	0025	0029		
NOAA 3	73 86A	SN	1917	1945	2012	1846	1914	1941	116	-45
		NS	1000	1027	0901	0929	0956	1024		

Satellite	Tracking	FREQUENCY		Notes
		Telemetry (1)	Telemetry (2)	
68 114A	136-77	136-77	137-62	SN = Northbound
69 9A	136-08	136-58	136-41	NS = Southbound
71 18A		19-995		EQ = West to East
71 24A	136-41	136-08	136-59	All times U.T.C. (GMT)
71 58A	137-71	137-71	136-38	
72 58A	137-86	2229-50	2265-50	
72 82A	136-77	136-77	1697-50	
72 82B	29-45 to 29-55	145-9 to 146-0		
72 97A	136-50	136-50	1702-76	
73 86A	136-77	136-77	137-41	

ROYAL SIGNALS AMATEUR RADIO SOCIETY
ANNUAL GENERAL MEETING - 1974

THE 1974 ANNUAL GENERAL MEETING OF THE ROYAL SIGNALS AMATEUR RADIO SOCIETY WILL TAKE PLACE AT THE SCHOOL OF SIGNALS (BY KIND PERMISSION OF THE COMMANDANT), BLANDFORD CAMP ON 20TH JULY 1974 AT 1400 HOURS. BRIGADIER D.H. BAYNHAM GM B.Sc (Econ) WILL TAKE THE CHAIR.

1. CHAIRMANS OPENING REMARKS.
2. MINUTES OF THE PREVIOUS MEETING AND BUSINESS ARISING THEREFROM.
3. GENERAL SECRETARY'S REPORT.
4. TREASURER'S REPORT.
5. EDITOR'S REPORT.
6. AWARD AND CONTEST MANAGER'S REPORT.
7. QSL BUREAU MANAGER'S REPORT.
8. NON-SERVING MEMBERS REPRESENTATIVE'S REPORT.
9. ELECTION OF NEW GENERAL SECRETARY/EDITOR AND ELECTION/CONFIRMATION OF OTHER SOCIETY OFFICIALS.
10. PRESENTATION OF WRITTEN PROPOSITIONS.
11. PROPOSITIONS FROM THE FLOOR.
12. ANY OTHER BUSINESS.
13. PRESENTATION OF AWARDS AND TROPHIES.

PROPOSITIONS, IN WRITING, SHOULD BE SENT TO THE GENERAL SECRETARY AS SOON AS POSSIBLE. SECONDS, IF REQUIRED, WILL BE CALLED FOR FROM THE FLOOR OF THE MEETING.

MEMBERS AND GUESTS ATTENDING THE A.G.M. ARE ADVISED TO CARRY SOME FORM OF IDENTIFICATION (RSARS MEMBERSHIP CARD, DRIVING LICENCE, ETC.). VISITORS ARRIVING BY CAR ETC., BEFORE APPROX 13:30 HOURS SHOULD FOLLOW SIGNS TO "RSARS HQ", AFTER 13:30 HOURS TO CAR PARK SIGNED "A.G.M."

NEITHER THE MINISTRY OF DEFENCE, THE SCHOOL OF SIGNALS OR THE ROYAL SIGNALS AMATEUR RADIO SOCIETY CAN BE RESPONSIBLE FOR ANY INJURY, ACCIDENT OR LOSS WHICH MAY OCCUR AS A RESULT OF VISITORS ENTERING BLANDFORD CAMP.

THE CRYSTAL CHECK OSCILLATOR AND COUNTER WILL BE AVAILABLE AT G4RS BRING ALONG THOSE UNMARKED CRYSTALS AND WE'LL GIVE YOU A FREQUENCY FIGURE.


IT IS HOPED THAT ONE OR TWO PIECES OF 'JUNK' WILL BE AVAILABLE FOR SALE/AUCTION. IF YOU HAVE ANYTHING FOR SALE/AUCTION PLEASE BRING IT ALONG. NO FEES FOR SALES TRANSACTED, ALSO, BRING SOME CASH WITH YOU - MAYBE WE CAN SELL YOU A FEW ITEMS OF RSARS STORES (THE BAR WILL BE OPEN, ANYWAY!).

DON'T FORGET! IF YOU NEED A MID-DAY MEAL AND TEA AND BIKKYS AROUND 1700 HOURS, SEND 50p PER PERSON AS SOON AS POSSIBLE - THE GENERAL SECRETARY NEEDS TO KNOW HOW MANY HE HAS TO COOK FOR!!

THERE WILL BE AN AFTERNOON TRIP THROUGH THE BEAUTIFUL (?) DORSET COUNTRYSIDE FOR THE LADIES DURING THE AFTERNOON. LADIES WHO WISH TO ATTEND THE A.G.M. ARE MOST WELCOME TO DO SO.

PROVING THE SEARCH OF THE LOCAL DUST-BINS IS FRUITFUL, THERE WILL BE A RAFFLE WITH (A) FANTASTIC (?) PRIZE(S) AND AN "ODD-COPPER" BOX WILL BE AVAILABLE FOR RABIC DONATIONS.

SEE YOU ON THE 20TH ???


GEN. SEC. RSARS