MERCURY

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EDITORIAL - G3EJF

Quite often one sees in the magazines photographs of Hamfests in one or other of the newly-independent nations and it is rarely that many nationals of the country are present.

Frequency allocations are decided at international conferences and as the newer nations, each with one vote, increase in number so their voting strength will tend to overshadow that of the older nations. Whilst we in the United Kingdom may be sure that the RSGB will do all in its power to defend our frequency bands what will be the attitude to Amateur Radio of those countries with no indigenous amateurs? The danger is that they will consider Amateur Radio purely a White man's hobby.

The membership of your Society continues to grow but there must be many past and present members of the Corps who are interested in Amateur Radio but are still outside the fold. Whenever we at G3CIO hear of an eligible non-member we drop him a line and invite him to join. This is only scratching the surface and we need your help.

Do you know anyone who should be a member but isn't? Is your unit's Amateur Radio Club affiliated?

Incidentally, WHOSE MERCURY ARE YOU READING ???

73

Echo Juliet Foxtrot

NEWS FROM THE CLUBS

Our clubroom which is cold, dirty and situated on the roof of Wolseley House is also shared by three water storage tanks which produce strange and unmelodious harmonics every time someone pulls the chain somewhere in the building.

This state of affairs has not pleased our Commanding Officer, Lt. Col. Swan who has spared no effort to better the accommodation and facilities and has finally come up with a "plum". We shall soon be getting a practically new 10 Ton Trailer specifically for use of the Radio Club.

58th Signal Regiment TA
Wolverhampton

The G5RV has been serving us well, we've heard all the real DX. VK9, ZS2ML on Marion Island etc. Heard is all, for speaking personally I like a bit of a chat on the key. Apologies to any RSARS members who may have wondered why 5B4TX although clearly audible sometimes seams to ignore them, a DL2 recently earned RST299, it's the QRM from the QRO TX's round about us.

Just recently we have been using the rig to transmit to Southern Rhodesia reports gathered on IQSY HF propagation. This is being done to help 5B4WR of Limassol who operates a 29·5 Mc/s beacon on most weekday evenings and weekends. He receives 40 Mc/s transmissions from Salisbury, Southern Rhodesia and transmits on 28·5 Mc/s to save sending reception reports by mail which takes 6 days even by air. We are using 28·1 Mc/s to transmit and receive reports to enable 5B4WR to keep his beacon going on call band all the time. ZE1AN receives us on 28 Mc/s surprisingly well no doubt due to the trans-equatorial propagation phenomena,

Our TA 33 beam has arrived at last, better be good, we had to pay £8. 10s duty on it.

Down at Episkopi 5B4TJ, now largely an RAF club has been getting some first class DX with a 3 element beam and of course they don't have our QRO QRM problems.

Sorry we shan't be portable for NFD this year mainly due to exams and "Ham Widow" pressure, I'm sure your readers are well aware of this problem.

Finally we here at 5B4TX are hoping for a little Top Band CW activity in the coming months. Operation will be mainly at about 2200 to 0300 GMT on odd evenings.

259 Signal Squadron (Comcan)

17 Gurkha Signal Regiment operate 9M2SR from Seremban. They claim to have the first Gurkha to operate on the amateur bands in Cpl TIKARAM GURUNG (TIKA).

Any one wanting Nepal for DXCC should look on 14 Mc/s for 9N1BG from the British Gurkha L of C.

In addition our friends of Gurkha Signals operate VS4CS from Sarawak so it looks as though the thing to do if you want to be rare DX is to apply for secondment .

SIMPLE ELECTRONIC KEYER

E. DAVIES G3PGM

Ex Op MD7RCS

This simple keyer is a compromise between the basic dot-dash generators and the more complicated "elbugs" using many valves or transistors and in some cases needing a fairly stable power supply for successful operation.

No originality is claimed for this circuit as the basic design was seen used as a timing device and with slight modification was made suitable for application as a keyer. Several models have been made and used at the writers' QTH without any trouble at all.

From the circuit diagram it will be seen that the keyer consists of very few components all of which are probably in the "junk box".

The action is very straightforward and a few words might help the constructor to see what is happening. It is necessary to have some form of paddle action key available and no details are given because of individual preference. Some operators like a "built in" paddle - others prefer a paddle only on a heavy base and connected to the works via a length of 3 core cable. To form a dot the paddle is pressed to the right and in doing so the battery negative volts are applied to the 12mF capacitor, the speed control, and the base of the transistor which makes the transistor conduct hard - collector current flows and operates the relay. As this relay closes, it cuts off the negative supply but the capacitor still holds a charge and keeps the transistor hard on until such times as the charge in the capacitor drops below a certain level. When this capacitor is discharged the transistor stops conducting and allows the relay to open. At this point if the paddle was still pressed to the right a further dot would be formed, and so on, until the paddle was released.

To form a dash the very same action takes place except that extra capacitance is needed to hold the transistor on longer during the discharge period.

It is known that a dash is three times as long as a dot so obviously 3 times the amount of 'C' is required which is 36mF. Having got 12mF permanently in circuit it is only necessary to bring an extra 24mF into play when dashes are required.

This is done with the aid of a diode placed across the key contacts in such a way as to conduct only when dashes are needed. A lot of diodes that are found in the junk box are not much good for this job as they have a poor "front to back" ratio and the action of the key becomes erratic.

The use of the base emitter junction of an audio type transistor is excellent. The base is connected to the dash contact and the emitter to the dot contact. The collector left O/C. At this point the action of the key should be found to be working on both dots and dashes. Adjustment of the "Dot dash ratio" is all that is required for reasonable operation over a plus or minus 100% normal operating speed. This ratio is best adjusted with the aid of a small capacitor and it is placed in turn across the 12mF and the 25mF capacitors.

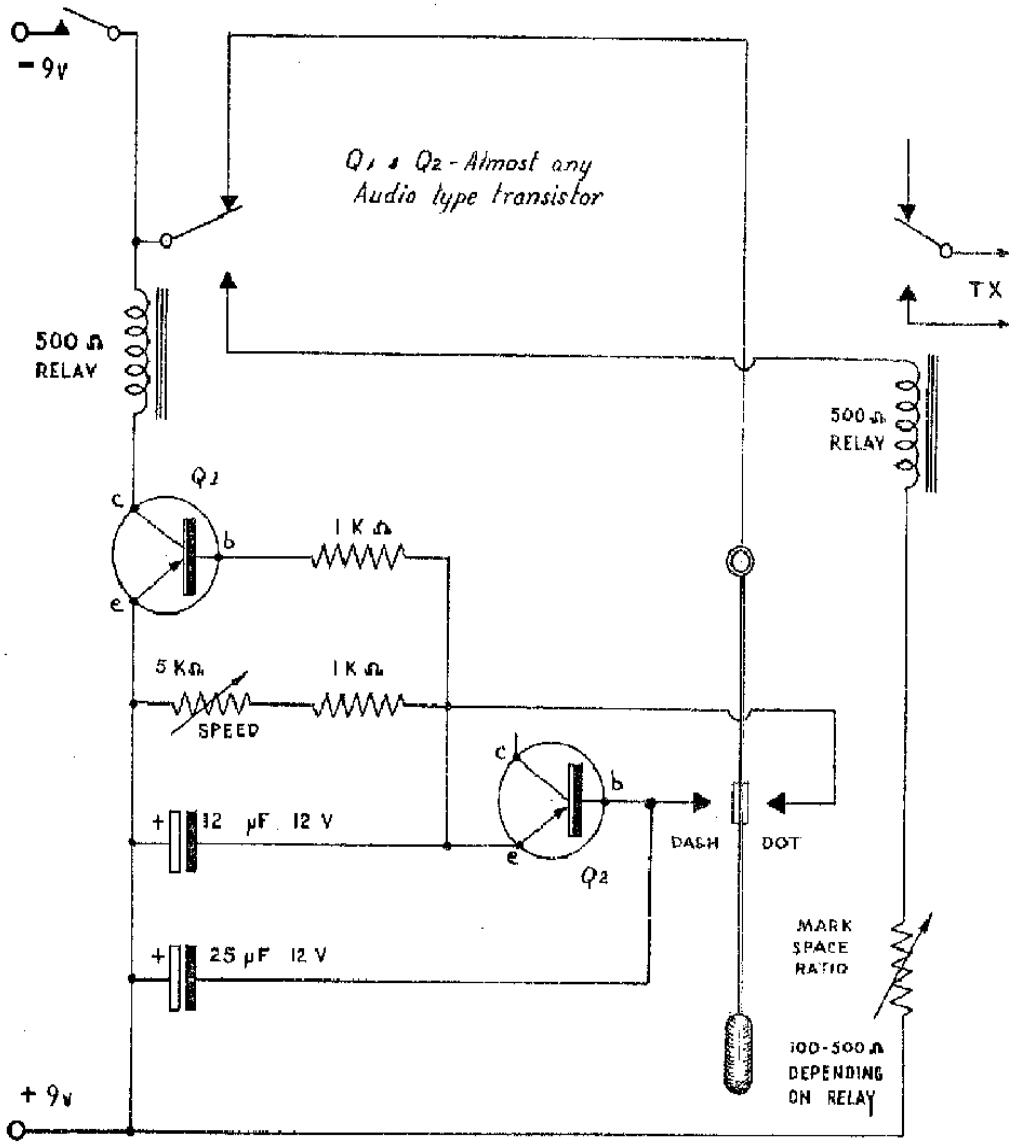


FIG 1. SIMPLE ELECTRONIC KEYER.

A value of 3mF gives a reasonable amount of correction.

With the 3mF across the 12mF the ratio would be
ON DASH 12 + 25 + 3 = 40mF ON DOT 12 + 3 =15mF
a ratio of 40 : 15 = 2⅔: 1 (SHORT DASHES)

With the 3mF across the 25mF the ratio would be
ON DASH 12 + 25 + 3 = 40mF ON DOT 12mF ONLY
a ratio of 40 : 12 = 3⅓: 1 (LONG DASHES)

These values give a plus or minus of about 10% which should be enough for the average tolerances.

The keyer as such was found to be 'heavy' in its action and a means of altering the weight had to be found. Various electronic devices were tried but as this is intended to be a simple keyer an easier method had to be found. The TX that it was being tried on fortunately had a separate keying relay and a few tests soon revealed the fact that there was a delay, although slight, between the keyer relay closing and the keying relay in the TX closing. This delay became an advantage at high speeds because the keying relay was only just able to start off again. So why not do this deliberately. A simple series resistance proved that the mark space ratio could be adjusted at any speed. To complete the unit the keying relay in the TX was moved to the keyer chassis and the whole lot was mounted on foam plastic to absorb what little noise there is.

The result is a small keyer - extremely simple to build and very reliable, with most - if not all of the trimmings found in more expensive electronic keyers.

Layout is not critica1 and in the writer's case the whole lot including battery is housed in a 6" x 3" x 2½" chassis which gives plenty of elbow room for all sorts of mods if needed. (trying various relays etc.) At one end the paddle only is showing - along the side are the speed - mark space ratio - on off switch.

One last word to constructors who have not handled an "elbug" before. Please practice on an audio oscillator. You may be able to send your callsign and CQ quite well after only a couple of minutes but one callsign is not enough for a QSO.

TECHNICAL TIPS

Having Top Band V.F.O. stability troubles? Then try this idea.

Wind ten turns of 20 SWG wire onto a one and a quarter inch former spacing the turns a quarter inch apart and tap 2 turns for the cathode connection.

Wire in a preset trimmer and the VFO tuning capacitor and then swamp with parallel capacitance until it resonates on Top Band (about 1000pF). Connect up the circuit in the standard E.C.O. arrangement. The stability even using an unstabilised power supply is claimed to be phenomenal.

DX'PEDlTION TO DAHOMEY

R.S.BRIGGS 5N2RSB

The station in Nigeria was dismantled and packed on Thursday evening. On Friday 7 Feb., my driver and I left Kaduna at 0900 hrs. Distance to travel was estimated at around 350 miles.

The trip on the whole was uneventful, except that the Landrover again developed engine trouble, but fortunately was of such a trivial nature it was decided to ignore it and just go on till we got to the border.

We arrived at the border to Dahomey at 1835 hrs at a small town called BABANA, and made off into the bush in a Southerly direction. The terrain was very sandy and rough, and at approx. l900 hrs I parked the Landrover and setting up operations commenced. The first job involved the erecting of the aerial masts, as the evening was drawing in and it would have been very trying putting up a mast while it was dark. The masts were two 24 ft ones and with just the two of us they were erected surprisingly easily.

Operation from TY2 commenced at 1926 GMT, and my first QSO was with a very good friend in ZS6BBP. Conditions appeared to be good, and I prayed that things would not turn out as bad as the first TJ8 trip. Little did I know, this was later to develop into just that.

From 1935 till just after 2300 hrs things really were hectic, and a total of 88 QSO's were made. Here I nearly fell asleep, so decided to call it a day and get my head down, as the trip had completely exhausted me.

TU2AU had called in to let me know that his XT2 trip was definitely on, and that operation would start during the last weekend of the ARRL phone contest. Smitty and TU2AQ were to be the operators. 9G1DV (Rich) told me the following day that he had also intended doing the Upper Volta, but when I mentioned the activities of Smitty, he immediately cancelled it.

Saturday 8 Feb. was sheer bedlam, though at one stage I got in the desperate situation of calling CQ for a half hour without any replies.

At this stage mostly Europeans were worked till about 1700 hrs when the path to the States opened, and I started giving some of the boys there a few contest points. I must admit, this trip was not planned especially because the ARRL Contest was on. It just so happened that this was one week-end I could get off.

I worked contest QSO's till 1827 when all of a sudden the path to the States closed. This was the first TJ8 expedition all over again. On Sunday conditions were the worst I have ever known them to be for quite some time.

I then went on CW and had quite a busy time, till I started to get really good reports, before I again reverted to SSB. This proved to be my busiest period. From 2034 to 2245, when conditions deteriorated, a total of 140 stations were given contest points from TY2. Up to this stage 201 W\K and 142 other contacts were completed.

Unfortunately there were such a lot of other stations also working in the contest, that a lot of QRM was caused on my frequency. I was at one time sandwiched between two Somali stations, whose transmissions were spreading 2½ kcs either side, and yours truly just happened to be in the middle. However, 6OlWF, Woody, called in later and apologised. While listening out on 14300, several stations started to call 5N2JKO. Apparently Mike was also listening out on 14300, The only way out was for me to listen on 14290. I then tried to split the states up into groups, i.e. listening for 5 minutes for W2's and then calling for W3's etc. This is fine in theory but never works in practice, and so aptly proved by a K0 station in a plaintive voice saying "What about the zeros then Jim??"

I worked K9JJS (yl) immediately followed by K9JJR. when I asked JJR if there was any connection he promptly replied that he was holding her hand.

Woke up on Sunday 9 Feb. and as I was about to put my shirt on, a scorpion crawled out!! It's a good job I am acclimatised to the extent of checking every article of clothing before putting it on. Even my shoes are upended, as this is a favourite place for these insects to hide.

At 1030 my generator packed up, and after spending a full hour trying to repair it, I gave up, packed the gear and made for home.

A total of 365 QSO's were made in 48 countries. Not bad but still not good enough. If conditions had proved better I think a lot more of the unfortunates whom I did not manage to hear would have got a report. If I heard you I worked you!!

READERS LETTERS

Dear Mr. Editor;

I was interested to read comments in a recent "Mercury" regarding RTTY. Having been interested in this method of communication for some time I realise that a large number of "hams" do not put out an FSK signal, due not to the expense, but rather to the scarcity of the right type of equipment. Very little commercial RTTY equipment is available to the amateur at a price to suit his pocket and therefore, he has to rely upon such items of Government surplus as become available. The main requirements seem to be Teleprinters and Terminal Units. In the past these items seem to have been scarcer that regular VK contacts on 160, but with the advent in the Service of the D11 and the T100 R printer perhaps we can expect a greater number of such items as 7B printers and especially such units as the Receiver Adaptor C.F. (SEA 39384) together with its PSU (SEA 39385). Some of these equipments have already appeared on the Surplus market. (See S.W.M. June 1963). If more of these items become available would the Society be prepared to approach the War Office with the suggestion that these be made available to Society members at Government Surplus prices with perhaps the buyer being responsible for collection. This would cut out the "middleman's" profit and allow more Society members to become proficient in a method of communication fast becoming popular in the amateur world and with the Service in the form of the D11)

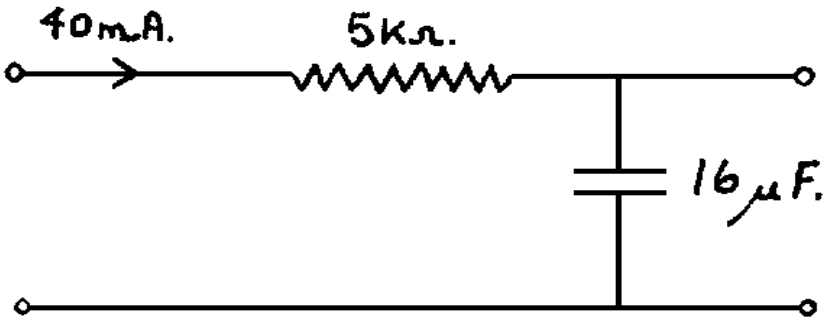
J. Cooper G3DPS

Resistance-Capacity Filters for Power Supplies

Sgt Dave Sugden

The resistance-capacity smoothing filter is finding increasing use in these days of miniaturisation and cost reducing trends, a smoothing choke being a bulky expensive item.

The one severe disadvantage of this type of filter is that it is wasteful of both power and voltage as the following example will show :-



If we have a full wave rectifier circuit followed by an R/C filter with the typical values shown, this filter will reduce the 100c/s ripple from the rectifier as follows :-

Ripple Reduction Factor ~ wCR
$= 2\pi$ fCR
$= 628 \times 16 \times 10^{-6} \times 5000$
$= 50 \cdot 24$

Thus with these values of C and R if 50·24 volts of ripple were applied to the filter we would get only 1 volt of ripple out.

This cheap R/C filter has reduced our ripple for us but it has also reduced our output voltage as well. Suppose we draw 40mA from our power pack :-

V = I x R
= ·04 x 5000
= 200 volts

What of the power in R?

P = E x I
= 200 x 0.04
= 8 watts

Thus 200 volts is lost to us for useful purposes and 8 watts is used merely to warm up the resistor.

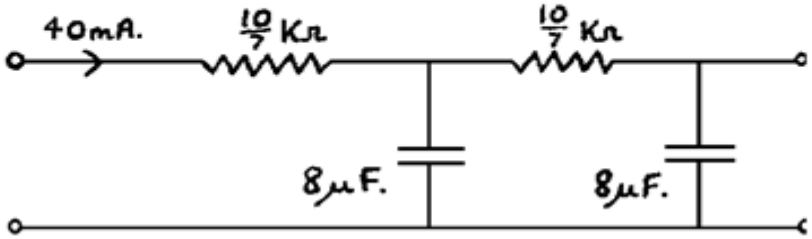
How can we get round this problem but still retain our cheap R/C filter?
Let us filter out our ripple in two steps.

Using two sections of filtering for the same load current and ripple reduction as will compare the voltage drop and wattage dissipation required of R.

For the same overall ripple reduction factor as before (50·24) each section must have a factor of $\sqrt{50 \cdot 24} \simeq 7$.

If the capacitor of each section is of 8mF (total of 16mF as before)

Thus the complete filter will be :-



What of the voltage drop and power dissipation of this arrangement?

Total R = $\frac{20}{7}$ K ohms and if 40mA are drawn as before :-

Voltage drop = $\frac{20 \times 40}{7}$ = 115 volts (approx.)

Total power dissipated = $\frac{115 \times 40}{1000}$ = 4·6 watts

Thus we now only lose 115 volts across the smoothing circuit as against 200 volts in the original single section filter. Also each resistor is only dissipating 2·3 watts.

It will be seen that it is more economical in terms of power, volts drop and hard cash (two 3 watt resistors cost less than one 10 watter) to use multi section filters.

WAITING.....WAITING.....

Do you mutter under your breath when you are held up at traffic lights, or level crossings? Can you resist glancing at your watch if someone keeps you waiting a few minutes? How long does it take you to change a fuse? Or maybe you yourself have experienced what it means to be unable to help yourself, to be dependent on someone else to do things for you. Either way, it is not difficult to picture the position of the blind or disabled short wave listener and Amateur who, when things go wrong, cannot immediately rectify the fault, put back the aerial which has blown down, even maybe replace a lead which has come adrift.

The RADIO AMATEUR INVALID AND BEDFAST CLUB was founded ten years ago, by a handful of invalids, to help others similarly placed to get as much pleasure as possible out of their hobby of Amateur Radio. There are now over 170 members scattered all over the United Kingdom, a few in the States, and the Club endeavours to ensure that they have the equipment they need and that it is kept in a serviceable condition. There is also a monthly news-letter which is available on tape and in braille as well as in print, and as much as possible is done to help those working for their transmitting licences by correspondence, tape and braille. These services can be maintained by post, but the problem of repairs, those little snags mentioned above, need personal attention. It may not be very often, but the assurance that someone is willing to come to the rescue when need arises means a very great deal to someone who knows so well what it means to wait, wait, wait. The lists of names and addresses of members of the Royal Signals Amateur Radio Society published with Mercury show that the coverage of the Society is even greater than that of the R.A.I.B.C. If any of you, either as individuals or as clubs, can guarantee help when needed if there is an invalid or blind R.A.I.B.C. member in your locality, please contact the Hon. Secretary, Mrs. Frances Woolley G3LWY, 10 Sturton Road, Saxilby, Lincoln. Your Headquarters Station has already volunteered its support, why not follow the good example? Remember! It might be you!

The B44 Mark II TX/RX

This piece of equipment which has recently appeared on the surplus market requires but little modification for use as a low power A.M. rig on the 70 Mc/s band. The set is designed to work from a 12 volt DC source and consumes 3·55A for the receiver only and 5·1A when transmitting. The TX output is about 2 watts and either a half wave rod or a coax fed aerial can be used.

The transmitter consists of a crystal oscillator, driver and push-pull PA. As originally used the crystal frequency was tripled in the C.O. and doubled in the driver thus requiring a crystal between 11·683 and 11·783 Mc/s for the extended 70 Mc/s band. If however the driver is used as a tripler giving a total of 9 times frequency multiplication a crystal between 7·788 and 7·855 Mc/s will be needed. In this case It will be necessary to add additional capacitance in parallel with C56 to resonate the oscillator anode circuit to approx. 23·3 Mc/s (C76 & L12 are designed to cover 17 to 40 Mc/s).

The receiver is a double superhet and is designed for crystal control. The oscillator has its anode circuit tuned to three times the crystal frequency and this frequency is injected into the second mixer. The output of the oscillator is further tripled in the frequency multiplier and injected into the first mixer. The first I.F. is thus variable within the range 13 to 18 Mc/s whilst the second I.F. is 2·625 Mc/s.

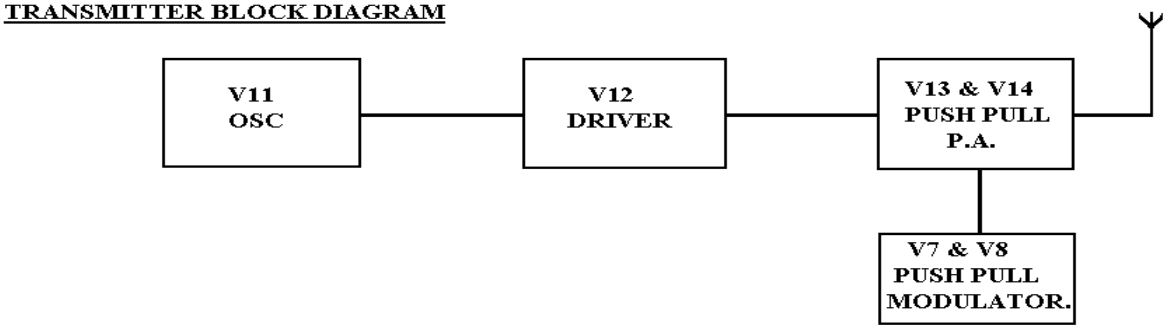
If "Fs" is the received frequency and "Fx" the crystal frequency then:-

$$Fx = \frac{Fs + 2{\cdot}625}{12} \text{ Mc/s}$$

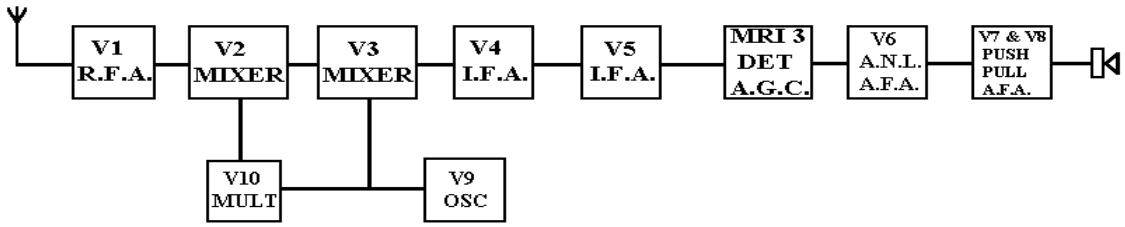
The required crystal frequencies for the edges of the 70 Mc/s band are thus approx. 6·06 and 6·11 Mc/s. Calculations will show that the first I.F. will vary between 15·56 and 15·71 Mc/s and TR3 should be adjusted for as flat a response as possible over the band. A variable frequency oscillator, either valve or transistor covering 6·06 to 6·11 Mc/s may be constructed within the B44 case or mounted externally and its output fed into the RX crystal socket "XL1". There is ample room on the chassis for modifications if one wishes to "hot it up", improvements to the RX RF amplifier might be worthwhile.

It should be noted that the vibrator power unit is of the synchronous type. If it is intended to use the set with the 12v positive earthed, as in most cars, the connections to the secondary winding of TR12 from the contacts of the vibrator must be reversed. If in doubt disconnect the secondary centre tap from L16 and C79 and check the polarity of the voltage between the centre tap and chassis. The polarity of the bias supply will be correct as this is rectified by MR4.

TRANSMITTER BLOCK DIAGRAM



RECEIVER BLOCK DIAGRAM



COMPONENT VALUES B44 Mk II

22K	R1, R25
47K	R2,R15,R22,R24,R27.R30,R31,R32,R36
4·7K	R3,R6,R8,R10,R12,R42,R45
220ohms	R4,R5
470ohms	R7,R9,R13,R23,R38,R51
1·5K	R11
150K	R14,R20
470K	R16
270K	R17
680K	R18
330K	R19
10K	R21,R46
1K	R26,R28
2·2K	R29,R35
100K	R33.R37
270ohms	R34,R39,R56
47ohms	R40,R57
27K	R41
18K	R43,R55
6·8K	R44
220K	R47,R58
27ohms	R48,R49,R50
1·8K	R52
18ohms	R53,R54

3-33pF variable	C1,C4,C7,C41,C56,C60
3-30pF variable	C69
3-19pF variable	C65
2-32pF variable	C74
1-5pF variable	C64

470pF	(C2,C5,C6,C29,C36,C43,C44,C45, (C58,C61,C62,C67,C70,C71,C72
10pF	C3
0·01mF	C8,C14,C18,C22,C32,C46
68pF	C9,C28
2·7pF	C10
0·04pF	C11,C15,C20,C24,C27,C30
56pF	C12
82pF	C13,C17,C19,C21
8·2pF	C16
100pF	C23,C25,C26,C38,C55,C84,C85
0·003mF	C31,C66,C68
10mF	C33,C35
0·002mF	C34,C73
33pF	C37,C54
39pF	C39,C40
12mF	C42
12pF	C47,C49
43pF	C48
36pF	C50,C53
27pF	C51,C52
47pF	C57
0·001mF	C59,C63,C83
0·02mF	C75
0·75mF	C77,C78
8mF	C79,C80,C81

MR1	=	CG5M
MR2)		
MR3)	=	CG4C
MR4)		

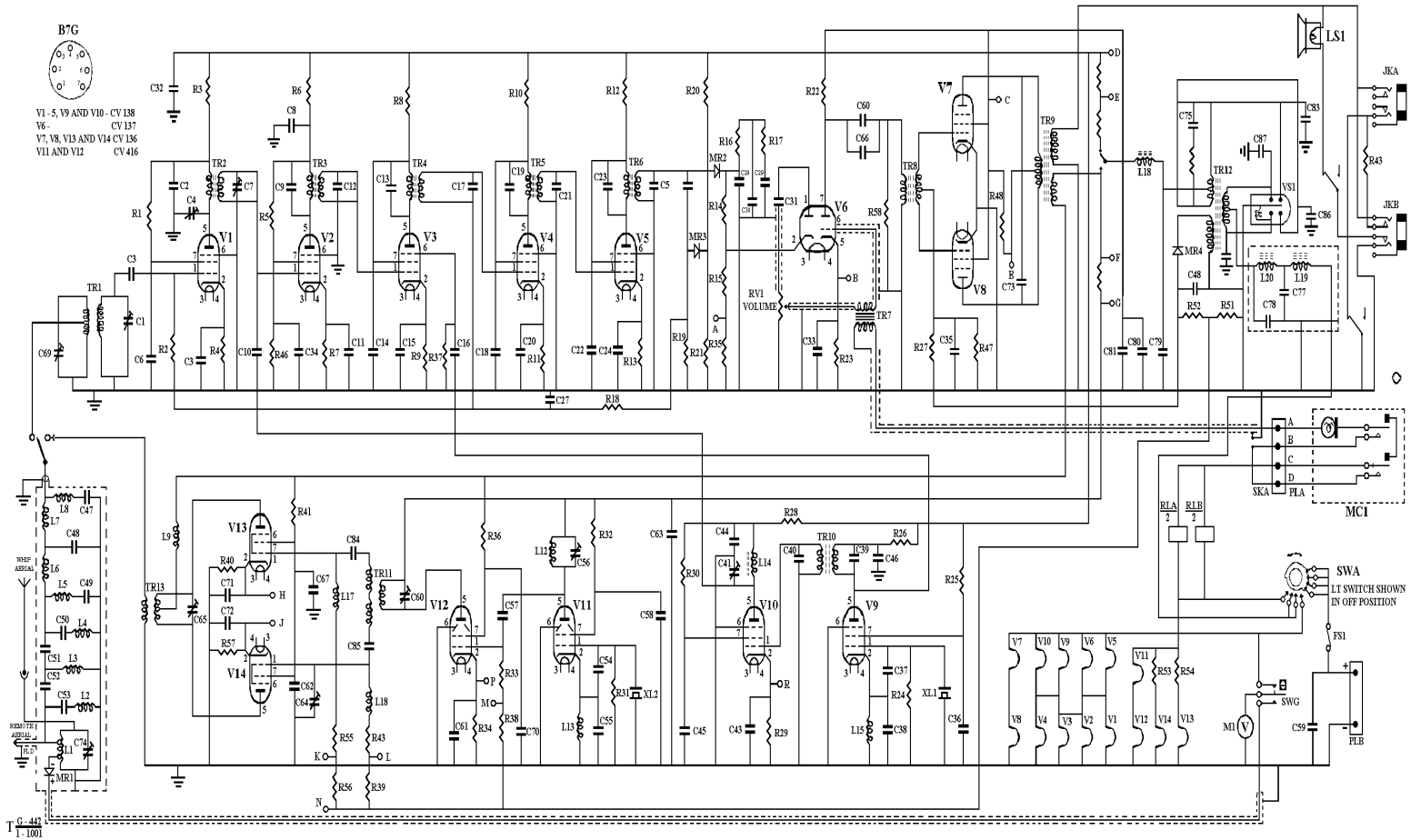


Fig 1001 - W.S. B44 Mk 2 - circuit diagram

A Letter from Catterick

The Ham Shack
Vimy Road

Dear OM,

Well we made it, G3CIO was leading station in the Multi-operator section of the RSGB 21/28 Mc/s Telephony Contest for 1963 and its score would have placed it fifth in the overall UK positions. Everyone concerned has had to visit the QM to get a larger size hat.

Since I last wrote the rising of the sap and the singing of the birds has stirred up physical activity in this neck of the woods. The shack has been spring-cleaned and looks much better for it. Doug, Iain and Val having been dissatisfied with the beam for some time have started work on a Cubical Quad. We've had a Quad up in the past but the wind always seemed to blow it down. With this in mind a mammoth structural engineering project is in hand which should withstand all the Yorkshire moors can throw at it. Whilst the 60 foot tower was down for work on the Quad someone decided it could do with a coat of paint. Didn't look to be much to it at first but it took quite some man hours before it was finally done.

Talking about the Quad, I believe the Field Secretary had a phone call the other week; "Q Stores here Mr. Hodgkins, you must grow b..... great big peas." It turned out the bamboo's had arrived, the sight of a Dormobile with yards of bamboo sticking out of the back caused a few turned heads at Kemmel bus stop.

The powers that be are being kind to us, they sent John Akehurst, G3OAZ, on a course that covers Princess Royal Day. The addition of another operator is most welcome. Other visitors have included GW3RZQ (ex DL2BO) and G3PFB both of whom used the gear to good effect.

Our National Field Day activity was rather limited by sickness and various "exigencies of the service" affecting the operators. We had two stations on the air but didn't do very well. The weather having been wonderful last year decided to get its own back and some spiritual fortification of the operators was needed to keep out the damp over Saturday night.

The shortage of operators meant that very often meals had to be taken at the key. Good job Terry didn't dish up spaghetti, trying to eat that and key at the same time would have been a sight worth seeing. Despite all. these tribulations the gang apparently enjoyed themselves as there was talk of having a crack at VHF Field Day in September.

At the moment preparations for the usual Princess Royal Day and Reunion Weekend operating marathon are in hand. The phone boys are busy laying in stocks of throat lozenges and the brass-pounders are to be seen flexing their muscles in the manner of a fast bowler about to start an over. Let's just hope that conditions are reasonable and we should enjoy ourselves again.

73
Jimmy

SACKCLOTH & ASHES DEPARTMENT

We owe you an apology!! Our April issue was ready for posting before the end of March and it was decided to delay distribution in the hope that the Society QSL cards would be available. It was our intention to enclose a sample and an Order Form with each MERCURY and the estimated delivery date given us by our printers led us to believe that the delay would only be a matter of a few days. However, the cards did not arrive and we decided you would be getting fed up of waiting so the April issue was posted on April 20th. Sorry fellows!!

Printing Error - In Gus Taylor's article on Top Band DX in our April issue there was an error in the twenty-sixth line of the second page. It should have read "VK stations are allowed to use 1800 to 1825 Kc/s". An uncorrected typing error made it look as though we had lost most Top Band in this country.

THINK OF THESE THINGS

The life subscription to Royal Signals Amateur Radio Society is two guineas. Although the annual sub is 2/6d you have to pay 3d for the Postal Order and 3d postage so that makes it three shillings.

Think you've got more than fourteen years life left in you?? If so you'd be better off becoming a life member. What of the P.O. and postage on the two guineas, well surely 14 envelopes and sheets of notepaper cover that.

Next time your subscription comes up for renewal why not become a Life Member and save yourself and the Treasurer a lot of trouble.

H E L P !!

If we are to keep MERCURY going we must have a constant supply of' articles from you, the members of the Society. We urgently need technical articles, news of Amateur Radio activity at home or overseas, in fact anything that you think we could use. If you have built a piece of equipment, done some mods on an ex-government item or had a bright idea for some gimmick for the shack let us know.

The article needn't be ready for publishing so don't worry about style, grammar or spelling, the Editor will knock it into shape. Not an artist? Don't worry, as long as we can understand what the diagrams are about our friends of 24th Signal Regiment will reproduce them in pukka form. You don't need to be a technical genius, most of our readers aren't geniuses either.

Let's be hearing from you, we really do need your help.

CONGRATULATIONS TO :-

Member No 7, Ted Philp, on his promotion to Major.
Member No 33, Ken Threlfall and his wife on the birth of a daughter.
Member No 139, Mike Dransfield, who had the highest claimed score in the 1964 BERU Contest.
Member No 23, Lt Col N.I. Bower, who was the winner of the RSGB 21/28 Mc/s Telephony Contest.

SOCIETY NEWS

What the Society Offers

In addition to the QSL cards offered above the Society can help its members to save money in other ways. Many manufacturers will give us a discount on goods and the amount of discount depends on the amount of business we do with them. If you are contemplating buying a new piece of equipment write to the Treasurer first he may be able to save you money.

To Affiliated Clubs the Society is empowered to make small grants for the purchase of equipment and can also often assist by loaning transmitters and receivers. Several clubs have been issued with AR88 receivers and WS 36 transmitters which although on loan from the Society may be modified in any way necessary for amateur use. This equipment is on a "Unit collect" basis as we have no facilities for packing and despatching. A small amount of exservice VHF equipment is also available and any Affiliated Club wishing to extend its operations to 144 Mc/s is invited to contact the Field Secretary. First come, first served is the rule. Although the question of grants is in the Treasurer's hands all bids for the loan of equipment should be made to the Field Secretary.

How else can the Society help its members?? If you have any ideas please don't hesitate to put them forward. If the idea is practical and not too time consuming we'll be pleased to give it a try.

North Midlands Mobile Rally

Largely at the initiative of the Society there was a Royal Signals stand at Trentham Gardens on April 19th. Members of the HQ group drawn from 8th Signal Regiment and School of Signals manned the stand which consisted of a display of current military radio equipment, A demonstration of I.F. alignment of an AR88 by S/Sgt Derek Pocock, G3TBP, created great interest and many were the earnest discussions on hotting up this well known receiver. Despite atrocious weather the rally was well attended, in fact the crowds were so thick that nobody on the Society stand found time to look round the exhibition.

A number of new members were enrolled during the day and it was a pleasure to meet several members of the Society in person. Both the Corps and the Society gained valuable publicity from this venture which was made possible by the co-operation of the Commanding Officer of 8th Signal Regiment who provided the necessary equipment and transport.

Society Publicity

Do you go to Hamfests or Mobile Rallies? Are you a member of your local Radio Club?

The Society has had some small handbills printed in an attempt to increase the membership. If you think you can assist in spreading these around drop the Field Secretary a line and we'll send you a few.

The Society QSL cards

A sample of the Royal Signals Amateur Radio Society QSL card together with an Order Form is enclosed with this issue of MERCURY. At the price they represent a substantial saving over normal QSL printing costs. You will of course have to get your callsign, name and QTH printed on them, our local printer estimated 15/- for 500 for single colour printing. Our initial order was for 20,000 cards but if there is sufficient demand we shall have more printed.

One final word - please use the Order Form, it makes the paper work so much easier.

Posted Overseas?

We have no article on Amateur Radio in an Overseas Area this quarter so we have turned our gaze to Licence Matters which concern our serving members who are either overseas at present or are expecting an overseas posting.

We recently asked the Radio Society of Great Britain to state the position of the holder of a G callsign who leaves U.K. for a period. The following is their reply.

"In order to keep a licence in force the fee must be paid each year, whether the licensee is in the U.K. or abroad. If the licence lapses for more than 12 months it is necessary to take the morse Test again. The R.A.E. does not have to be taken again but if the original Amateur (Sound) Licence was obtained during the time exemptions from the R.A.E. were permitted, it is necessary to take the R.A.E.

The only exception to the rule that the U.K. licence must be kept continuously in force is that holding a comparable licence abroad which is still current when the U.K. licence is renewed is regarded as "continuous service". In other words, there must be no break in the holding of an amateur licence."

As there are certain overseas postings where there is no amateur licencing, or where licences are not issued to visiting servicemen, members are advised to ensure that their British licence is kept in force.

Photos Wanted

In order to make up a display for publicity purposes at Mobile Rallies etc. we urgently require photos of Club Stations at home and overseas. There must be a keen photographer in your unit who would oblige. Photos should be at least postcard size and if possible should show one of the operators as well as the gear.

CAN YOU HELP??

PRINCESS ROYAL DAY 1964

It is hoped that the October issue of MERCURY will contain an account of Royal Signals Amateur Radio Society activities on the Corps anniversary.

This cannot be done without your co-operation so if you took part in this activity, please write as soon as possible and give us the details.

ANNUAL GENERAL MEETING

The Annual General Meeting of the Society will be held on a date yet to be arranged in September 1964.

Items for the agenda should reach the Field Secretary not later than Monday August 10th 1964.

FOR SALE

Heathkit OS1 scope with mu metal screen, 16 months old and little used, with handbook. Perfect and tested against a standard scope, Price £24 (List £30. 8s).

TW Nuvistor 4 m converter; with PSU, 20-30 Mc/s I.F., output impedance to match HR0, 8 months old, any air test. Price £11. 10s (List £15).

R208 - 10 to 60 Mc/s, a bit rough but working. In home made wood case.
Price £4 collected or plus carriage at cost.

Quantity of spare components, large transformers and capacitors, switches and bits and pieces - all sound, much nearly new. About £3 the lot to any member or Unit Club that can collect.

All the above from Major Dennis Haylock,
3 Norris Gardens,
Warblington.
HAVANT, Hants.

STOP PRESS

It is with deep regret that we have to announce the death in a road accident in Bangkok of Member No. 171 LCpl Gerry Convery. LCpl Convery joined the Society whilst a trainee at Catterick in 1963. No details of the accident which occurred early in June are to hand as this issue goes to press.