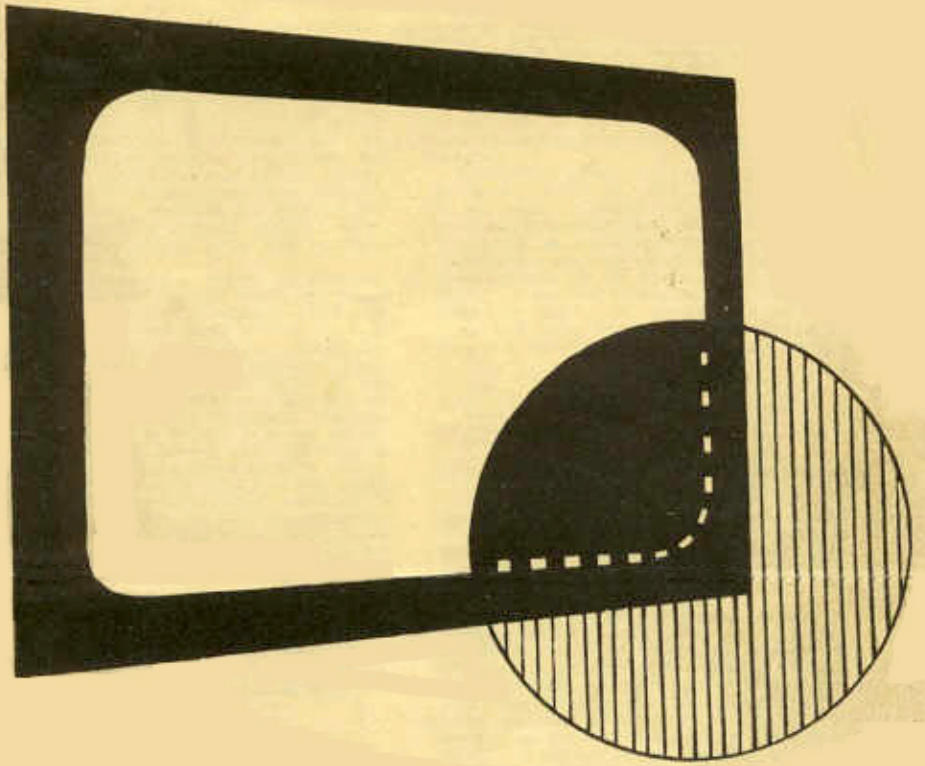


cq-tv

March 1964

Number Twenty

Five Shillings per annum.

Fifth Year.

CQ-TV is published for the British Amateur Television Club at 29, Loftin Way, Chelmsford, Essex, and appears quarterly.

The British Amateur Television Club is affiliated to the Radio Society of Great Britain.

CQ TV

LM/L

This edition is the first to be printed entirely by the Rotaprint system. General comments received from members as a result of the last edition trial have been unanimously in favour of this style of production, with one or two complaints that perhaps the print size was excessively small. In actual physical size, this print is actually no smaller than fine newspaper print, but the typewriter 'face' is, of course, not so legible in small sizes. In any event, the reduction in size has been lessened this time, making the print some 8% larger than in the last edition, and your comments are invited.

Readers will also note that the covers have been cut down to size, upsetting the layout somewhat; however, we have a fair number of the old size covers in stock, and must use them up before reprinting.

The idea of renewing all subscriptions on January 1st seems also to have met with approval, several members having sent in up to three years subscriptions at once. Normal subscription reminders being sent out with this edition are for the sum of 4/6d only, represent--ing a subscription to cover three issues of CQ-TV only. The Club is still just in the black financially, but only just, and each new member who joins means an increase in the services we can provide.

Some members will already know that the Post Office is currently overhauling the sound transmitting licence. No final date has been announced for this, and no details have been released. The vision licence is also being replaced, and members are reminded to let the Hon. Secretary know if they are interested in a vision licence not involving a morse test. Any such licence would not, of course, be valid on the lower communications frequencies.

Finally, a word of warning. Due to certain domestic changes at G3CVO - see last edition, P2! - the next edition of CQ-TV may appear very late, or rather early. Similarly, there will be an even longer delay than usual to mail around the end of July and beginning of August.....

Kind regards to you all,

Yours sincerely,

M.Barlow, Editor.

CHELMSFORD MEETING

A BATC Meeting will be held at the Marconi College, Arbour Lane, Chelmsford at 7.45 pm on

WEDNESDAY APRIL 29th

There will be a lecture and demonstration of Marconi Image Orthicon equipment, and members will have ample opportunity of examining the gear at close quarters.

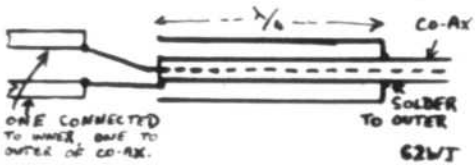
There is a good train service from Liverpool St (55 mins approx). The College is 20 mins walk from the station, or buses to Springfield, Witham or Colchester pass the end of Arbour Lane (1½d). Please come if you can; the success of this meeting governs whether or not similar ones can be held elsewhere. In any case here is a fine opportunity of seeing the professional gear - no free samples of Image Orths, however!

Notes:

Back Copies of Nos. 18 and 19 ONLY are in stock @ 1/6d each from G3CVO.
All technical enquiries relating to Staticon camera tubes should be addressed (with SAE) to J.Russell, 85, Beaufort Rd, Southborne, Bournemouth, Hants.
Technical queries concerning Monoscopes should similarly be sent to Norman Harris, 95, Fawe Park Rd, Putney, London SW15. The Hon Sec has passed on all data to these members, so please write direct to them. Order forms for both tubes are still obtainable from G3CVO.
Jim Brumhill G8BKI, 8 Honeycroft Hill, Uxbridge, Middx wants to contact 9.5mm telecine types.
931A and resistor network and base, 8012, 832, 316A and 8019s: offers to William McCann G3PS, "Sominar", Leckhampstead, Newbury, Berks. (Tnx on).
Radiospares make low capacity heater transformers.
Self-contained 2m tx 832 o/p incl mod and PSU on 8" x 4" chassis: offers to J.Woodfield G3HZK at 77, Manchester Rd, Wilmslow, Ches. Or will exchange for 70cm gear.
Alkathene film, 0.002" x 24" wide 1/3d yd from Plastics Ltd, 11 Whitworth St, Manchester 1.
AR77 for sale. Good order, case shabby. £15 or swap for GOOD binoculars. C.H.Banthorpe, 156 Fairholme Cres, Hayes Middx.
Dichroic mirrors or firm making them? Dixon, 25 Wye St, Ross on Wye.
Pressed Ali louvres from your builder: trade name "Univec", 2/6 each: ask for Ventilators.
UU8, 6AM6, 6AT6, 12AT7, 6AQ5, 6AL5, EF80, ECL80 about 9/- each. Ask May, 20 Whitehall Rd, Leicester.
Circuits data of SCR549A air-ground TV /after. ex USAAF available on loan from Russell, address above.

County Corner: Sussex: Messrs. Lord, Manser, Miller, Robinson and Wineford. Contact Lord.

Wanted: CV962/NC14 or CV1391/ACR15 6" CRTs; will exchange for right arm. G3AST 59 Lewsey Rd, Luton.
Correction: P5 last edition, Eccles-Jordan switch grids should be returned to a negative rail. The ends of the converter troughs are, of course, metal. Detail of balun below:



FOR DISPLAY AND EXHIBITION USE: The Hon. Sec has some vivid flame red posters overprinted in black with the large words "Amateur Television". The posters are 30" x 20" and there is plenty of room to add your own details.
Frank Lee suggests the use of VT61As instead of 6SN7s etc in pulsers; very cheap but 12V heater.
ZL1QS is asked whther his EF50 o/p valve in his telestill scanner circuit is correct. Meantime, an EF55 will be found less liable to overheat.
VK6BC finds the signal/noise ratio from his 931As increases in the same proportion as the output signal as the scanner CRT brilliance is increased and this does not depend on the volts/stage. Any ideas?
MANY THANKS to Asst. Editor Fred Steed, who did the better drawings....
Wanted: 4.6 Mc/s FT243 Xtal. G3CVO. (4.5 - 4.7).
DON'T FORGET THE TELEVISION SKED ON ALTERNATE SUNDAYS AT 1430 GMT on 3612 KC/S. There is always someone there to discuss tv with.

SEE YOU AT THE CHELMSFORD MEETING? APRIL 28th 7.45 p.m.

NEW MEMBERS

Dave Morris	19, Upland Rd, Upton, Wirral, Ches.
J.B.Fullarton	14A, Montgomerie Cres, Saltcoats, Ayrshire.
M.Lambert G3PYI	68, Lower Rd, Rotherhithe, SE16.
R.W.Eldred	51, Hill Rd, Chelmsford, Essex.
D.P.Shaw	18, Marriott Rd, Muswell Hill, London N10. Tel Tudor 4159.
J.Keen	Rose Cot, Scrubs Lane, Bledlow Ridge, Nr High Wycombe, Bucks.
J.Millan W3KLB	217, Northway, Baltimore 18, Maryland, USA.
R.S.Page.	"Leonville", Bonney Rd, Green Point, Cape Town, S.Africa.
Albert Saunders	Saunders Radio Service, 41, Bolton St, Dublin, Eire.
Cecil Dorrity	4, Seaview Terrace, Ailsbury Rd Dublin, Eire.
W.Stapleton	49, Grace Park Rd, Drumcondra, Dublin, Eire.
J.Profaze G3FYA	40, Seafield Rd, Arnos Grove N11.
G.Flanner	194, Aston Brook St, Birmingham
F.Hambling	287 Cleethorpe Rd, Grimsby. (6.
P.G.Visser ZS1EQ	PO Box 68, Piketberg, C.P, South Africa. (295)

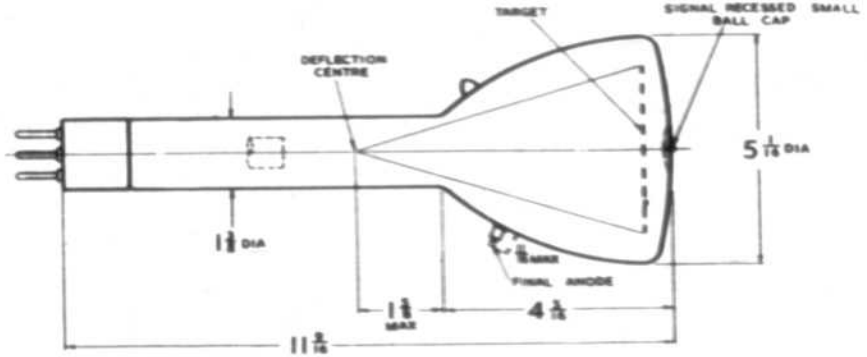
Changes of Address:

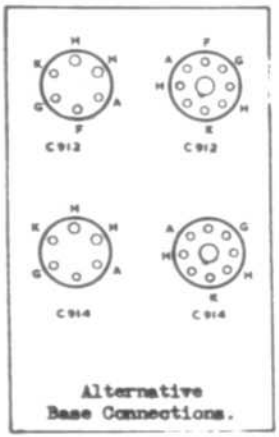
Alan Lord G3DSK 22, Elizabeth Cres, East Grinstead Sussex; Brian Ellis GM5GUC 162, Peverel Rd, Cambridge; 2576670 J/T Fox G3HII, 16 Sqdn, RAF Celle, 2TAF BAOR25, Germany.

"MONICON"

Monoscope Signal Generator Tubes

OUTLINE DIAGRAM





Alternative Base Connections.

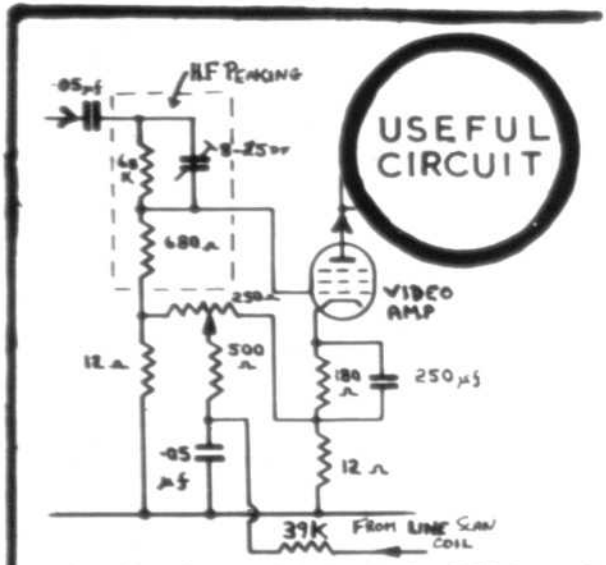
Recommended Operating Conditions

Heater:	6.3V 0.35 amps.
1st Anode:	950 volts.
Final Anode:	1000 volts.
Target:	950 volts.
Control Grid:	15-60V negative.
Beam Current:	0.5-1 microamps.
Signal Current:	0.4-0.7 microamps p-p.
Signal Polarity:	Negative.
Heater-Cathode volts:	60V peak.
Resolution:	Better than 600 lines.
Focus Coil:	200 ampere-turns.

Standard deflection yokes as used in domestic TV receivers can be used, as can standard focus arrangements, but for best results permanent magnet focusing devices are not recommended. The tube should be kept away from stray magnetic fields. It is recommended that a negative EHT supply be used, with the target earthed through the load resistor. Type C912 monoscopes are rejected for faulty electrostatic focusing, and these types should be operated with magnetic focusing, the focus anode being joined to the first anode.

As supplied, these tubes are normally Test Card 'C', but other types occasionally available on request (and with possible delay) are patterns: 'B' - a half-tone pictorial subject (Kings College Chapel, Cambridge); 'D' - based on the RTMA 525 line test chart; 'F' - a geometric pattern of cubes and definition wedges; 'G' - based on Test Card C, but for 625 lines, and with definition bars up to 5 Mc/s. Special patterns are made to order, so you might get a "Normal Service Will Be Resumed..." pattern!

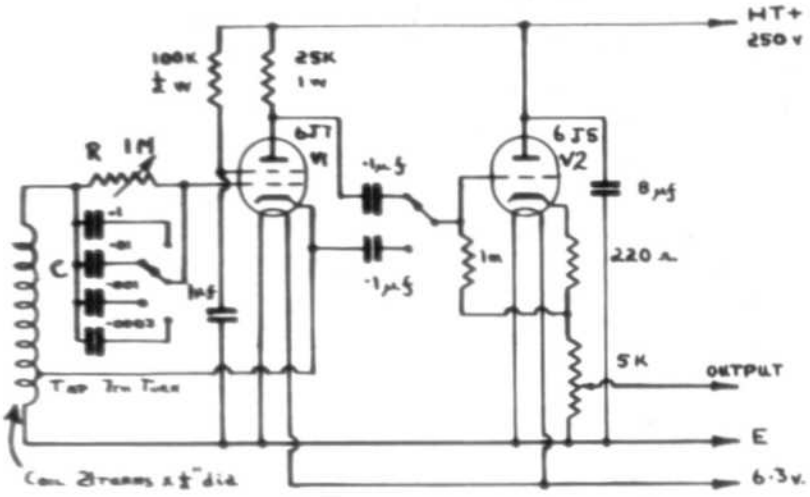
These tubes are available to members of the BATC who are resident in the United Kingdom ONLY. The cost is £7-10-0, and order forms may be obtained from the Hon. Secretary. No correspondence is allowed with the manufacturer; all technical enquiries should be addressed with SAE to Norman Harris, at 95, Pawe Park Rd, London SW16.



Here is a useful circuit for 5527 fans and others troubled with shading of the picture. Grant Dixon culled it from Fink, P571 and can recommend it; by increasing condenser C to about 2 mfds, and using the vertical coils, vertical shading can be produced.

A UTILITY PULSER

By FRANK LEE.



0.1mfd	5 c/s to 50 c/s.
0.01mfd	50c/s to 500 c/s.
0.001mfd	500 c/s to 5000 c/s
0.003mfd	1.5kc/s to 12.5kc/s.

Many members will have felt the need for a simple pulse generator for general testing purposes. Here is a simple unit capable of giving a short pulse of either polarity at any frequency between 3 c/s and 20 kc/s. The circuit is given below.

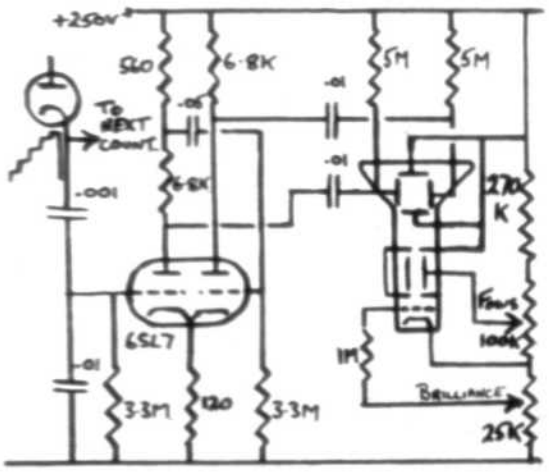
V1 is a Hartley oscillator running at about 25 Kc/s; its grid circuit components R and C are chosen to cause it to act as a Blocking Oscillator. A large negative pulse of some 90 V peak-to-peak is obtained at the anode of V1. and a smaller positive pulse at the cathode. V2 is a cathode follower to isolate the output. The pulse frequency varies with the time constant of C and R, being roughly given by:

$$t = 1.6\ CR.$$

For a given CR product, a higher value of R will give a longer pulse duration. The pulse frequency is reasonably independent of HT variations, and is given approximately in the table. The valve types are not at all critical.

---

ml.



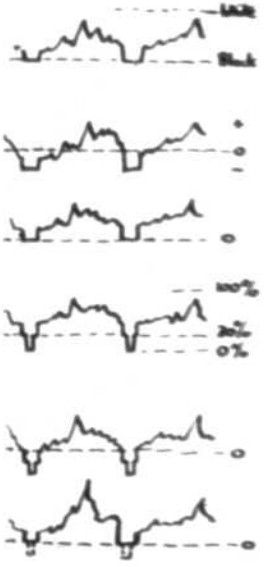
A SIMPLE COUNTER-CIRCUIT MONITOR UNIT

When setting up counter circuits, it is almost essential to check the counts with some visual indicator, such as a CRO. However, a useful monitor can be built into the pulser in the manner shown. The input to the 6SL7 is taken from the counter output; the circuit shown is for a multivibrator counter using diode coupling but the principle can be extended to other types of counter. Push-pull output is obtained from the 6SL7, and this consists of an amplified "stair-case" waveform, originally present at the cath-ode of the diode. This is applied to the X plates of a small 1" or 2" CRT, the Y plates being taken to the 3rd anode. A series of elongated spots in a straight line are seen on the CRT screen, the number of spots being the same as the number of "stairs", and hence the same number as the count-down ratio.

Reference: Fink, "TV Engineering".

THAT D.C COMPONENT

Members will already be quite familiar with the application of DC restorers to television receivers, although it may not be quite so clear as to how we go about retaining the "D.C Component" in the transmitter, nor even, perhaps, just why we bother about it at all. First then, remember that if any two valves in an amplifier are coupled by a condenser in the usual way, the DC is blocked, and the AC appearing at the grid of the next valve adjusts itself so that the areas of the waveform above and below zero level are equal. In our case this means that all scenes are reproduced with the same average level of illumination, which is governed by the setting of the receiver brilliance control. No matter whether the studio lighting engineer has all his lights on, or is doing some crafty night effects, the viewer will see no difference in his picture, and a great deal of realism can easily be lost. This is particularly important for closed circuit studio work.



Photocell output, with scanner tube correctly blanked.

The same after AC coupling in the video amplifier.

After clamping the black level to zero.

After adding the sync pulses.

After another AC coupling.

After DC restoration or further clamping.

If we could ensure that some portion of the vision signal, say black, was always at some particular level at the receiver CRT, then we could set the brilliance control and then leave it alone; any further changes in brilliance would then be entirely due to the transmitted signal, provided this transmitted signal contains the information necessary to establish this Black Level.

The DC component is introduced at the trans-mitter by taking a signal that is known to be black - such as the output from a flying spot unit when the scanner is completely blanked out during flyback - and arranging this Black signal to occur always at the same potential in the video output waveform. This is done by a clamp circuit, as shown in the diagram. Once this has been done, ordinary DC restoring diodes can be used to obtain the same effect, since they can be arranged to conduct during the black portions and so return the black level to earth. It is better to do this after the sync pulses have been added, as otherwise the diode is required to conduct on black but be cut off on dark grey - which will be very difficult for it with normal valve tolerances. However, mixing the sync pulses introduces a further complication, as it is essential to retain the relative levels of sync, black and white signals at zero, 30%, and 100% carrier respectively. If the vision waveform is examined on an oscilloscope, and there is 1 v peak to peak amplitude visible, we must ensure that 0.3 v of this is sync, and 0.7 v is signal. The division between the two is the black level; the sync pulses are negative with respect to this and the picture signal positive, for what is termed a "positive-going" signal. It is at once apparent, therefore, that the Black Level must be clamped or restored immediately before ANY pulses are added to the waveform. (If this is not done, the equal-area principle occurs again). The waveforms will make this clearer.

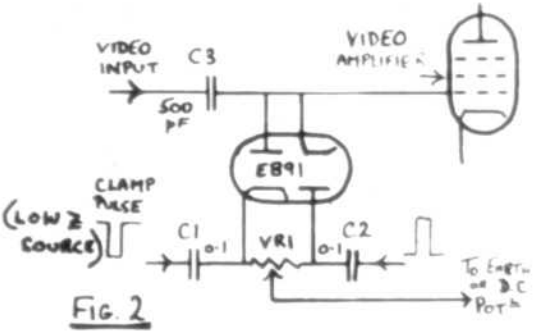
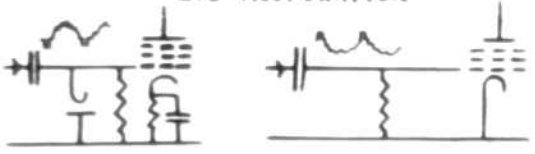


FIG. 2

A very effective clamp circuit, originally given in "CQ-TV" no. 15, is shown in Fig 2. For effective operation, the condensers C1 and C2 should be at least 50 times as big as C3, but as no grid leak is used, C3 can be quite small without causing a deterioration in the LF response of the amplifier. The clamp pulses in professional equipment occur during the back porch of the blanking period, but for amateur work the line sync pulses will do very nicely. VR1 sets the level to which the grid is clamped.

A simple DC restorer is just a diode which conducts on sync pulses, so "clamping" one part of the vision signal (black, in fact) to the potential of the diode electrodes (usually earth). If the video amplifier has no bias on it, its own grid-cathode will act as a DC restoring diode for negative going input signals. In the same way, care must be taken with vision signals of the 3 or 4 volt level if the DC component is present. A positive going signal requires the valve to be biassed almost to cut-off, whereas a negative going signal must be applied to a valve with very little bias if grid circuit limiting is to be avoided.

D.C RESTORATION



One final point is demonstrated in the block diagram of Fig 3. Here it will be noted that an extra blanking input is shown feeding the video amplifier. This is included because if we are to transmit negative transparencies and therefore reverse the picture polarity, the blacked-out flyback lines will correspond to peak white and not black. In this case, therefore, we must put into the video amplifier, say on a convenient suppressor grid, a sufficiently large pulse to ensure that this period always yields a black signal. It must be as small a pulse as possible consistent with this feature, and must be of constant amplitude, or the DC levels will again be upset in the system.

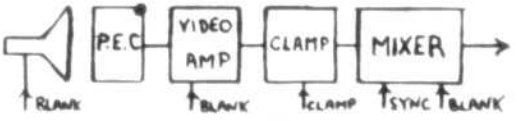
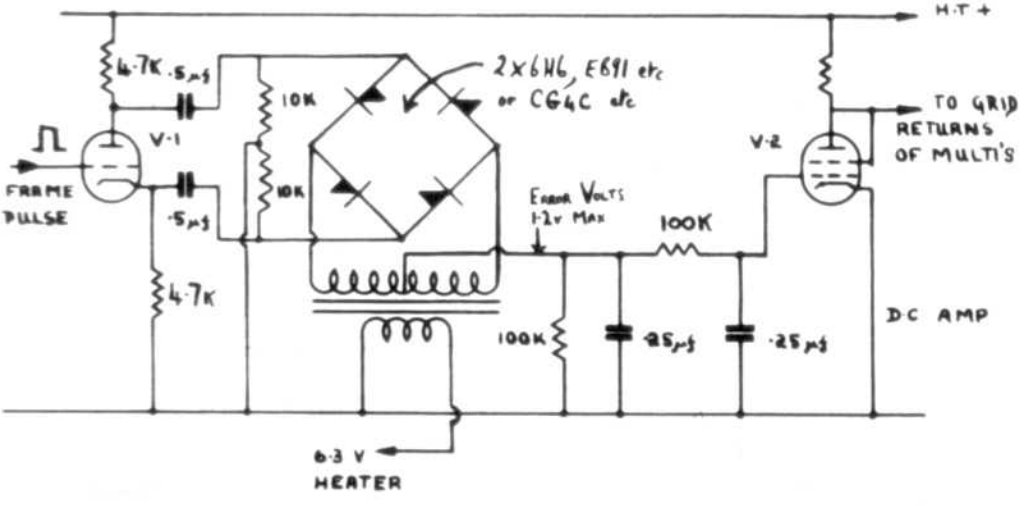


FIG. 3

To conclude, then - if your blacks aren't black, or if you have clipping of the whites no matter what you do with the contrast controls, its DC trouble, friend, and that applies to the modulator and receiver as well.

USEFUL CIRCUIT



"Fluff" Plowman G3AST sends in his new and improved mains comparator circuit for comparing the locally generated 50 cycles from the pulse generator with the mains 50 cycles. Frame sync, or preferably the longer frame blanking pulses, are applied to the grid of V1. A Wearite type 251 transformer is used by G3AST, but any audio transformer of 3 or 4 to one step up ratio would do. The anode of V2 is used as the return potential point for the 20kc/s master oscillator multivibrator.

"WHAT THE OTHER FELLOW IS DOING...."

Normal Service will be resumed as soon as possible

By [illegible] McFIDDLESSKOOTH.

Hullo, there! Your Editor has given me some more space this month, so lets get right in with the reports.

Here's an interesting one from G.Flanner of Birmingham, who is the brother of G3AVK. This on suffers from bad health, and cannot at the moment get his own ticket. However, closed circuit tv is well advanced; his interlace is produced by shock exciting the 20250 cps tuned circuit with frame pulses (shades of G3BTI!), and then counted down. At the moment there is some jitter due to the frame pulses refusing to lock to the mains. Also in use is a 9.5mm telecine scanner - can we have more details, om? There are hopes of a Vidicon, too. And complaints of lack of activity in B'ham area.... Hmm?

D.E.SAUNDERS (Weymouth) has been doing his Radio Amateur's exam. Good luck, oc. Allen TIMBRVE (Newbury) has a 405 line telestill unit with ACR1 and 931A under construction, and hopes to include telecine and live gear later. George HAYLOCK (S515) is now Hon Sec of the BTDC and Chairman of the RARC in addition to his other activities. Anthony BAKER (Woodford, Ches) has exams coming up in the summer, but very kindly offers help in between times... J.A.JEFFERIES (Oxford) has had a visit from Grant Dixon, and says he is now "much wiser"! The 70cm tx using QQE06/40s is now complete, but during the cold spell one of the seals gave out....

A.P.HARDING (NIL, WELF17) has a keen squad at work, and they hope to do something in the Canal Zone. A telestill unit and the necessary pulsing gear is under construction. Two racks full of gear is planned eventually. Dave HOOPER G3IOU (WM10) is rebuilding his NPPP telestill scanner, and has ideas on a Staticon camera. RF-wise he is still dormant, but has an AR81 and RF105A unit to hand. Johnny WOODFIELD 2SHBK (Wilmslow) is going great guns at Manchester University, but has not yet met G3BTI. His tv activities are at a stand--still whilst a) work is done and b) the 2m gear is overhauled. John also wants to get on 70 cms, but finds gear scarce up that; he is also getting a car. Now, this we MUST see...!

Our friend Gianfranco SINIGIGLIA ILBBE (Bologna) has his 17" tv rx in operation now. Giorgio PASQUALI has been doing some work with surplus CV79 magnetrons, and continues his V.F activities. Don DAVIDSON (Ottawa) wants some 1 - 1.2cm magnetrons or data, new or surplus. It must be catching? J.A.HEDGES (Greenford) has just moved house, and so has had to dismantle the rig temporarily. Rebuilding shortly. John ANGLIN G4GZ (Grimsby) has a 405 line pulser working, and has now received his Staticon camera tube. John is anxious to meet other TV-ers in the area. ??.

Hendrik de WAARD PA0ZX (Groningen) is by now in Sweden, where he is working for several months. He adds a few notes to the tale of the Jeep-borne TV tx mentioned previously and illustrated in Wireless World. The 5527 camera was mounted on a triped in the Jeep; it uses a binocular optical viewfinder. The 70cm link tx was on 432Mc/s, with a QQE03/20 power trebler in the final running at 15 watts. Grid and screen modulation is used, with sound on a 5.5Mc/s subcarrier added to the 5Mc/s video. The converter (up a church tower) was a simple 6J6 osc 6J6 mixer in Lecher lines affair, made by PA0BE. This fed the video signals to the main 2m tx. The jeep towed a 700 watt motor generator in atrailer, covered in leaves to deaden the noise! An 80m service channel was in use, and pictures were relayed as the Jeep drove slowly through the streets of Groningen. Since then, the gear has survived a fire in the storage shed, and although covered in tar, still works. Hendrik is at the moment very busy writing his thesis on something quite incomprehensible to do with radioactivity, and a "spherical square well." Any takers?

Ron RADIE GM4JO (Glasgow) is very busy professionally, but has managed a 12" and most of a 17" rx, plus ¾ of a caravan! He says he thinks tv tx activity in Scotland is zero. Come now, we know of at least one telestill unit - I think... Ray HILLS (Harrow) is making the G3GDR converter. Bill HOWARTH (Ches) has received his monoscope; Alan LORD G3DSK (E.Grinstead) has now moved house and is back on construction, 70cm and tv, again. Frank MAY (Leicester) has got his monoscope and staticon, and has the pulser partly built. He enquires what coils are used in the pulser descr--ibed in the Oct. 55 CQ-TV. Well, om, a bit of elementary AC calculation will give the right values, or you can pick a condenser and run thro' your stock of old coils, using the BFO and tuning the beat note against the piano! Very handy for LF frequencies in the absence of test gear!

Two of our regular stalwarts are now away doing their National Service. IAN WATERS (Kly) came back from a business trip to Cairo, and is now an AC2 in the RAF near Lincoln. JEREMY BOTLE (Dunmow) is at the Army School of Surveying at Newbury in Berkshire. He manages to get home at frequent intervals to help RALPH G2WJ/T with the camera gear. Ralph's new high power 70cm TV tx is now in operation, running 40 watts input to an air-blown QQE06/40. The signal strengths in the London area are now considerably increased, and on one occasion G3BKQ at Leicester - 100 miles away - received a strong enough signal to resolve test bars perfectly satisfactorily. Unfortunately without Jeremy, Ralph was unable to use the camera but on several occasions when all the G2WJ crew have been at home, viewers such as G3GDR at Abbots Langley (35 miles) have been taken on a conducted tour of the G2WJ QTH. Duplex phone working has greatly added to the enjoyment. The vision carrier is on 436 Mcs, and the sound on the 145 Mc/s band. With a new length of camera cable, trips round the garden are being arranged for the summer!

L.H.PROFAZE G3FIA (N11) is organising a Radio Exhibition in N.London at the end of July, and hopes to give the BATC a corner. Robert BUCHANAN (Newark) is "still pottering" with the telestill unit, but his medical studies are now severely curtailing his spare time. Frank LEE (Beverley) is building the ZL1/S pulser using 7193s in the counter chain. He's also working on a circular time base calibrator device. Ian MACWHIRTER G3ETI (Manchester) complains of varaible definition along lines in his camera tube, getting 3Mc/s at one side and only 2 at the other. Any offers? Ian hopes to televise an amateur dramatic group to help their rehearsals. Work on colour TV goes on. C.H.BAYTHORPE (Hayes) has had his pulser oct published in Electronic Engineering. He says that G3CTS/T has made several test transmissions on 427Mc/s, generally on a Tuesday evening, but to date no regular schedule has been announced. Norman HARRIS (SW15) and Peter WASPE (Chelsea) have seen the light and are collaborating. A new pulser and telestill unit (with CRL71 scanner ! shortly to be replaced by a 5FP7) are in action, and a monoscope is to hand. Norman has kindly offered to look after the Monoscope gen, see P2. J.B.FULLARTON (Saltcoats) has the telestill unit running fairly satisfactorily, but is troubled by clipped suppression pulses somewhere. He has tried reflection scanning with the ACR1 but finds the pictures very weak. He uses a 2 x 2 test card C stuck on the face of the tube, and the 931A at 10" range, as recommended.

Borje Cederqvist OH2NL (Helsinki) has most of the Vidicon circuitry completed, but is not quite sure where the tube is to come from! He wants to borrow all the gen, Jim Russell! Grant DIXON (Ross) sends in his usual comprehensive report. He was unable to afford an MW14/35, and so is still stuck for a 5" magnetic tube. URGENTLY required for his colour experiments. Must be white face. Colour rendition is now pretty good, and Grant finds the colour balance is better checked on the monitor scope than by eye! Some hum still causes trouble, but the frame non-linearity was cured by a Haynes transformer in the camera. Grant asks WHAT the other colour people are doing; demonstration given in return for correspondence! Grant says that he has now done the donkey work on his gear, and only the details remain to be perfected.

BILL STAPLETON (Dublin) writes in to say that the Irish Amateur TV Club is temporarily in abeyance, although at least three of the lads are very active. Time being limited, Bill is building up his gear a unit at a time, and hopes to have a 405 line camera chain and slide scanner in operation. Bill and the lads send their warm regards to George SHORT (E.Heckington, Lincs).

ERIC CORNELIUS VK6EC (Wagin, W.Australia) is hundreds of miles from the nearest TV amateur, but is highly enthusiastic. His job is with the ABC station 6WA (10kW on 560 kc/s), but he thinks there cannot be more than half a dozen active TV experimenters in VK. His own gear runs 94 tubes in a flying spot scanner (VCR112 at 3 kV), CCIF standard waveform generator, mixers, picture and waveform monitors (VCR97s and 139s) and video rx with a 5BP1. White screen tubes, and magnetic tubes and deflection components are virtually unobtain-able, hence the VCR97s. Standards are 245 line 25 picture double interlaced at present, but if suitable CRTs become available, a 625 line system will be used.

TONY SALE (Rayleigh, Essex) is now fully settled in at his new home, and has been neglect-ing the garden to get the TV gear in operation again. A new pulse generator, camera amplifier and 70 cm converters have all been constructed in the last few months, and several tests have been made with G2WJ to receive his TV pictures. G3CVO/A is on the air from the same house to provide RT communication. So far, the tests have not been very successful, but a new aerial is being installed for which GREAT THINGS are prophesied; the garage, meantime. lacks some vital supports...

John PLOWMAN G3AST (Luton) is MAD about gas tetrodes for linear scans - type 2050, 1/- and good. The new gear, Plowman FB finish, plated etc is well on the way. Robert TORPENS GI3PWP/T (N.I) has been working on various types of video amps.

And that's it for this month, men. Keep send sending in your news, especially reports of 70cm reception of G2WJ/T or G3CTS/T (or others!). 73s