

25

1000

# Eddystone User Group

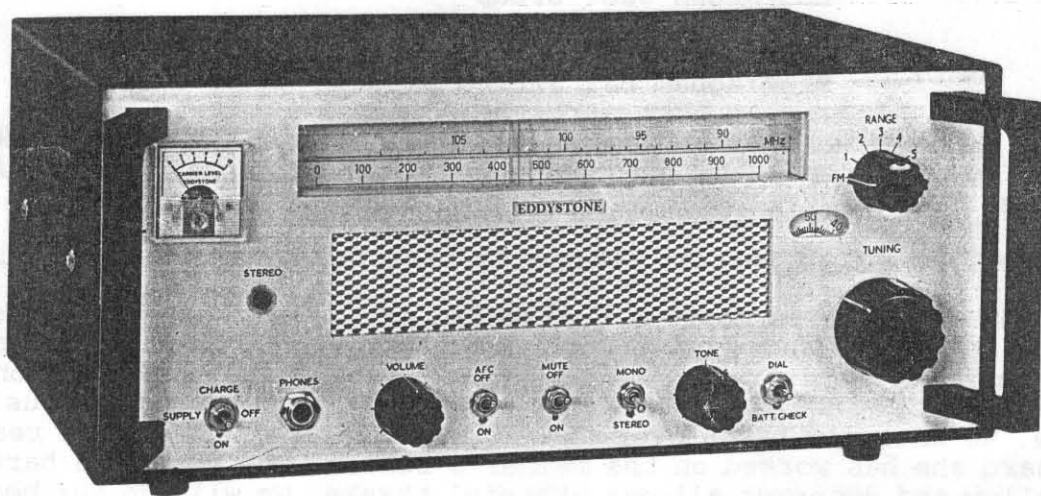


EC 10 p.7  
870 p.9  
680 p.12  
EA12 p.13  
CASCODE p.15  
CORD DRIVE p.17  
ALSO p.3

## Newsletter

Issue No: 25

Featured Model: 1000 series Receiver



\*A non profit newsletter for Eddystone Users

\*Information quoted from Eddystone Literature by kind permission of  
Chris Pettitt, G0EYO, Managing Director of Eddystone Radio Limited

\*Please address all mail to:

Eddystone User Group  
c/o Eddystone Radio  
Alvechurch Road  
Birmingham B31 3PP

FREE MEMBERS ADS - Please make sure that you put all the details, i.e. Sell or Wanted, Model & Suffix, Condition, Collect or Deliver and last but not least your contact details - name, phone number preferably or address.

Any remittances for subscriptions, badges or manuals must be by cheque or money order. A cheque must be for sterling and on a UK bank as otherwise the bank charges to convert foreign currencies is likely to be more than the subscription. May your cheques payable to the **Eddystone User Group**.

The Year for the Newsletter begins with the May/June issue. Issue 24 was the last of year 4 issues and this newsletter is the first of year 5. There are 6 issues per year and if you join after the annual subscription date "May" then you will get back copies from the first issue of the current year to date. Your subscription will end with the March/April issue.

Subscriptions are £10 per year UK. and £11.00 per year Europe. An attractive metal lapel badge specially designed for the EUG is available to members at £2 each.

Copies of Manuals and circuits are available for most Eddystone receivers through the EUG with discounts for members. We are currently pooling the manual resources of the EUG with those of the company and eventually we will publish a price list, hopefully in the next newsletter.

Back copies of all newsletters are available at £2 each post paid.

All mail for EUG to be addressed to

**Eddystone User Group  
c/o Eddystone Radio Ltd  
Alvechurch Road  
Birmingham B31 3PP**

**PLEASE do remember that we cannot answer queries by telephone. THE EUG is run by volunteers at Eddystone and we can only respond to written queries.**

Message from Chris Pettitt, Managing Director of Eddystone Radio

The EUG was Ted Moore's brainchild and he and Kathy have made it what it is today. When they told me that Kathy would be unable to carry on with its administration after year 4, it did not take me long to realise that I should do something about keeping this marvellous idea alive. We have now taken over the admin side from Kathy and I realise how hard she has worked on the member's behalf. She will be a hard act to follow and deserves all our grateful thanks. We will do our best to keep the membership happy and make sure that Ted gets your technical queries and that you get your newsletters. I have promised Ted that I will not interfere with the style of the newsletter but what we will be able to do occasionally is add some additional information which we have here at Eddystone. One such example is included with this newsletter and is the sales brochure for the Model 1650/2 series LF/HF receiver which came out in 1984. It has been superseded by other versions since then and is now being replaced by the Model 6200 receiver, which was launched late 1993. I found these brochures in a store and thought EUG members might like to have a copy for their collection.

Chris Pettitt.

## - Issue 25. -

- Here we are again, the fifth year for EUG, and this issue will be the first one to go out from the 'Bath tub' - the Eddystone factory at West Heath, thanks to the kindness of Chris Pettitt and those - so far - anonymous volunteers. I know that I am repeating myself but please do NOT try to get your queries answered by telephone ! Use the mail, any queries relating to subs or admin; will be answered directly from the factory, all the technical stuff or anything relating to the contents of your newsletter will be sent on to me for, either a direct answer or an answer in the next newsletter. Queries this month range from that perennial one of 'second-user' prices to the devilishly complicated ones where I am asked to diagnose at a distance faults that would be already hard to locate on the bench.

- Andrew asks whether he has been suckered (?) - paying £150 for an 840C ? well depends on several points, how much did you covet this receiver Andrew ? what state is it in, both physically and electronically ? lastly, are you satisfied with it now that you have tried it out ? A set in very good external condition and which is working really well on the air could command that price, especially if it is in its original packing and has the original handbook with it, as you say. No, I think personally that you got a good buy there.

- How much did the 830 cost when new ? asks Roy. Well there were many versions of this set and they were produced for a number of years so it must be assumed that prices varied considerably. As a guideline I can tell you that at one time the 830/7 was being offered at £309 - New ! For that you could almost have bought a new car straight from the showroom, in those days.

- What was the Eddystone 'Orion' model, was it amateur or professional model ? asks Sam. It was a professional radio telephone intended for either mobile or fixed use, HF bands on SSB and with 150 watts PEP over the 2 - 16 Mc/s range, it had the model number '5000'. There were 8 channels switched within that range, either upper or lower sideband, in simplex or duplex modes. It was used by police, government administration, rescue services, survey teams, engineers and military in all parts of the world. I know of some still in use in a safari park in Africa, mounted in landrovers.

- What is the PME earthing system ? asks Tom. So many of the water pipes these days are in plastic that the old method of an earthed mains supply at the domestic user, by a clip on the rising water main (usually an iron pipe), is no longer possible. As a result the electricity suppliers have brought in a system whereby the house supply system is earthed, via

2.

the neutral at the nearest substation. This does mean that your earth is directly linked to all the earths of surrounding premises. A conduit for a vast amount of electronic smog ( QRM or interference, if you will). I have heard of some terrifying scenarios where fault conditions have been blamed for dangerous situations in premises distant from the original fault, whatever the truth in this it remains that the PME earth system is not one to be used for radio earthing. Use a good outside earth in your garden, a 3 foot spike or even as some do, a large buried copper tank ! One member in Devon tells of a recent thunderstorm where a 3 foot spark was produced by a lightning flash. This was between the case of his 640 and a nearby tumble drier, his shack is also the utility room. Later checks when his cardiac rhythm had returned to normal showed that whilst his 640 had a good low Z earth into the garden, all the domestic appliance earths read some 40 ohms different, and yes the flash was from the drier TO his 640. The receiver had not suffered apparently, possibly due to his having disconnected the aerial lead-in before the storm.

- On the subject of lightning discharges, Geoff reminds us that NOTHING will protect you from a direct strike, but that a 'leak' from your aerial lead-in to earth, say a  $\frac{1}{2}$  watt 270K resistor, will bypass to earth all the static buildup that comes over as a persistent crackling noise, without anyreduction in your signals.

- Which rallies are best for Eddystones ? asks one member. Well you are just as likely to find that odd Eddystone at any rally, but I must say that my best buys appear to have come from places like the Leicester Rally, or Elvaston Castle, even the Blackpool rally has produced the odd one. In my opinion it is really a case of pure 'serendipity' - if you don't go there is sure to be somebody who tells you later of the 'bargain' that he got, whilst you spent the morning in bed.

- Don has a 640 bought at a club sale for £45, it has several mods done which he intends to leave, at present, although a later restoration may be done. There are two small 8 ohm speakers mounted in the circular spaces of the front casting, one either side behind the louvres. Wired in parallel to give 4 ohms these eliminate the need for an external speaker and are still cut-out when the 'lids' are in use. (lids = phones to the uninitiated). Another mod is a home-brew LC AF filter which can be switched into circuit as required, seems to be a chinese-copy of the filter in the EA12.

- When the pot in Jim's Eddystone 'S' meter went o/c it proved impossible to locate a 600 ohm replacement. The solution was to use a 500 ohm pot out of the junk box and two 50 ohm fixed resistors, one either side of the pot, the results are exactly as before, at no cost !

- Ian has had problems with MW breakthrough by a local station 'just up the

road' from his QTH. The receiver in use is a venerable 640, with an IF of 1600 Kc/s. This problem was noticed way back when the 640 was a much more common station receiver, a QRO station on 1602 Kc/s used to break-through in many areas. The problem was that the spindle of the crystal phasing control acted as a 'mini' aerial - picking up the QRM at IF and feeding it into the IF chain. The cure as announced at that time was to reverse the connections to the phasing condenser so that, although neither side of this component was actually at DC earth potential, the spindle was now at, or near, RF earth potential, Ian says that the cure is a complete one for him.

- Colin Taylor wants information on all the known variants of the S.358 as he is building up a collection of JUST these sets. He already has the basic 358, the /X, the 400 and the 400X. Any info to me via Eddystone, and I will pass it on.

- Bill Wilson (incidentally the person responsible for the new EUG note paper !!!) wants any info at all on panadaptors, he is 'crazy about them' (his own words). Let me have the info and I will pass it on. Okay now Bill you can stop sobbing !

- One tip from David - after he burned out the tranny on his 940. If your valve set does not come on within the usual warm-up period then turn it OFF again and investigate. It may be only a few minutes but that is long enough to burn out your mains tranny. His replacement cost 'an arm and a leg' - a rewind job.

- When you are re-aligning the IFs DO please remember that for best selectivity the cores must be set to the outermost peak, start with the core halfway out of the former. But then again DO leave the IFs alone unless you are sure that they are off-tune, very few of the 'amateur' sig gennies are calibrated well enough for this task.

- New dial-cords, a diagram is in this issue and it is more or less the same for many of the models with the 'slide-rule' dials. You may use either the steel wire, if available, bronze drive wire as still stocked by Philips dealers, mono-filament fishing line, or the dial-cord as is sold by RS and other dealers. I have tried all these and they work okay. Your local model shop is a good possible source, for pulleys too.

- Tim reminds us that any 'hot' components, except the dropper, are to be suspected. A resistor may run hot because the decoupling condenser is leaky, for instance.

- What aerial to use, an often asked question. Well most of the older models have provision for what is known as a 'doublet' aerial. This is a folded dipole (if you want it to match the LF ranges, or a single dipole for the HF ranges. Remember that it has to match some 3/400 ohms on the

4.

LW/MW bands and 75 ohms on the SW bands. It should be cut for the band most in use but is a fairly wideband aerial when used for receiving. It does have the advantage of balancing out a lot of local QRM.

- A letter from Tor Marthinsen with much info on the 909 series and I shall be doing an item on these sets in a future issue. Thanks Tor.

- 'Electronic Smog' as mentioned on page 2, this issue. The term came up recently and has begun to appear in a number of letters. Very evocative of the actual effect of locally generated QRM, especially that from computers which seems to blank out everything from LF to VHF. Several members have concluded that the only thing is to run their sets from a DC supply unconnected with the mains, plus an outside earth and screened lead on the aerial. Seems that in 1995 manufacturers are finally going to have to do something about the radiated QRM, much too late of course since it will not apply to all the equipment on the market now.

- Alan has a problem with using his valve radios via a 'brute-force' mains filter of '50s vintage. The RCD (residual current detector) keeps dropping out. This problem came up on a 670A that I fixed for somebody, he used it with an ex WD filter box. Leakage current was knocking out the RCD every time. When the box was opened it was found to contain several large value paper condensers, all a bit leaky. Replacing them with new AC working polystyrene types did the trick. Do remember that large value condensers across the mains DO pass current ! A 1 mFd at 50 c/s has an impedance of just over 3,000 ohms, and a 0.1 mFd has just ten times that !

- News of an All World Four, bought in 1935 for use in India and used regularly until after WW II, this set had been relegated to the attic with much other 'jumble' until discovered recently by Simon. It is complete, even to a much sulphated pair of accumulators and several old HT batteries, plus a pair of SG Brown phones. Simon intends restoring this and using it alongside his EC10.

- Several members have written in with plaudits for the good work done on their Eddystones by Dave Tizard in Weymouth, Dorset. (phone number is 0305-772927), nice to hear that. Also have been told that for valves our members have been getting good service from Philip Taylor who is in Billingshurst (phone 0403-785250). There is also Centre Electronics in Birmingham (phone 021-7060261).

- - - - -

- FREE MEMBERS ADS. -

- WANTED, info on the models 780 and 790 receivers of circa 1950 the 790 was also known as 'The yachtsman receiver'. Brian c/o EUG please if you can help.
- WANTED, round diecast speaker to match 680X, prefer grey but any colour acceptable. Also seeking original, not photocopy, handbooks for 840A and 680X. Phone Anthony on 0686-630255.
- SELL 358X in original condition, serial FW3463, original psu for 240 mains, serial KV2353. Full set of coils in original wood rack, copy of manual, no time wasters please. Offers to Philip 0892-543685.
- WANTED? original 7 pin valveholder made by Eddystone, to be used in restoring an All World Two by Tor Marthinsen, can YOU help ? It looks like a Catalogue number \*1024. write Tor Marthinsen. Postbox 2061, 3103 Tønsberg. NORWAY.
- SELL or P/Ex, EA12 receiver in excellent condx but cord drive broken, hence £100 or swop for 990S. P Trembath, 4 Penrose Terrace, Penzance, Cornwall, TR18 2HQ.
- SELL, WRTH books '81,82,85,88,92 and Passport World Band Radio 90 to 93, all at £5 each. Also Home Radio Catalogue, Reprint Nos 5 & 10 at £1 each plus p&p. Callbooks for 85-86-89 at £1 each plus p&p. Call Bill on 041-649-4345.
- WANTED, in GWO either a 1990R or S model, state price please. Phone number is 061-905-3123.
- WANTED, receivers type UR1A, HA800, GC1, UNR30, HA350, HA600, RG1, GR64, GR78, R135, EC10, 960, non-workers welcome, Peter Lepino on phone 0374-128170 or faz 0372-454381.
- SELL, model 888A plus 'S' meter & speaker in good working order with handbook and schematic, price £75. Also 770R working and calibrated and several spare valves plus handbook, at £55. Dave Fowler, G4MDN, The Dees, Cross Lane, Chalfont Common, Gerrards Cross, Bucks; SL90LR.
- WANTED, copy of 1940-50 Brimar valve manual, must be cheap only got my pension, Malcomb c/o of EUG please.

- Featured Model - The 1000.-

- Brought out in 1972 the model 1000 was in fact the forerunner of a series, based on modular construction which facilitated the manufacture since approximately 70% of the circuitry was common to all models.
  - It was a basic HF/MF communications receiver, all solid state and combining bi-polar transistors with the newly emerging integrated circuits.
  - Coverage was from 550 Kc/s to 30 Mc/s in five ranges, with a single IF of 455 Kc/s.
  - Provision was made for reception on all modes of CW, MCW, AM, and SSB with a tunable BFO and 'S' meter.
  - Operation from mains supplies of 100/120 and 200/250 volts AC at a frequency of 40 to 60 c/s. DC operation was by means of an internal re-chargeable NiCd battery of 12 volts.
  - Sensitivity quoted was for better than 15 microvolts on the MF ranges from 550 to 1500 Kc/s and for better than 5 microvolts on the HF ranges. This was with a signal to noise ratio of at least 15 dbs.
  - A small front panel internally mounted speaker gave an output of 800 milliwatts at 5% distortion.
  - Dimensions were 137 x 335 x 242 for height, width, and depth. Weight was 8.2 kilos with the internal battery.
  - Prices in the UK were between £200 and £300 for the table version, rack mounted models were also available.
  - Front panel controls were phone socket, selectivity, BFO tune, main tuning, fine tune, Range switch, AM/CW,SSB switch, and 'S' meter. The slide rule dial had only the scale in use showing, others switched into view as the range switch was operated, a logging scale was provided for resetting to a chosen frequency.
  - Some 20 transistors, 2 integrated circuits, and 30 diodes plus ceramic IF filters made up the model 1000 circuit.
  - A feature quoted in the specification that is of interest is that radiation from the local oscillator was less than 400 picowatts ! This figure betters that given for some of the HiTech models on the market in the 1990s.
- - - - -



- Views from New Zealand.-

- No not the scenic type, Ross Paton is one of the early members of EUG and his latest letter has some comments which may interest other members.

- First off is the matter of EAA91/6AL5 being equivalent to the D77/EB91/DD6 valve types. There was mention of this in issue 14 and Ross comments that the EAA91 and its European equivalent the EAA91 are in the smaller B7G bulb, have lower ratings also. If the 6AL5/EAA91 is used in place of the EB91 in an Eddystone the screen cans will not fit correctly. Okay Ross but I have in my junk box several 6AL5 types which are equal size to the EB91 types in there. Have been loaned a valve data book where they are quoted as direct plug-in replacements, not equivalents I agree.

- Re the EC10 model, Ross mentions having recently repaired one of these which had loud hiss, although it did work to some extent. Replacing R40, the collector load resistor, and also R39 which is the emitter resistor reduced the noise by half. When a replacement OC71 was obtained and fitted this was a complete cure.

- A recent acquisition is a 640, plans are to replace all the resistors - the carbon rod type - with new carbon film types in an effort to lower the noise level.

- Further to the EC10 mentioned above, he comments that it is a good thing to realise - in advance - that there is mains AC on two pins of the plug/socket combination which couples the mains PSU type 924 to the EC10. This is so whether the EC10 is on or not, so long as the mains supply to the PSU is on. ( I wonder how he found that out ? - I had a similar experience on my Model 40A which uses the same power supply.)

- - - - -

- Postage for Overseas Members.-

- The subs charged will not cover Airmail to members in Australia or New Zealand, nor such as Papua New Guinea, South Africa and the Americas. Printed paper rate - as used - is about half the cost of Airmail, BUT the Post Office insist that such envelopes are not sealed, Sorry but that is bureaucracy for you.

- - - - -

- The 1000 Series. -

- This began with the model 1000 in 1972 but continued right up to 1980 when the 1004 version came out of the factory. The 1005 was produced at the same time as the 1004.

- Design was for an HF/MF professional comms; receiver and modular construction was employed, allowing interchangeability of modules amongst the five (later six) versions. Approximately 70% of the circuitry is common to all versions, they are all solid state. The five models are as follows, and prices were in the range of £200 to £300 in 1972.

- 1000, - Basic HF/MF comms; recvr.
- 1001, - as above but with 10 crystal controlled spot freqs;
- 1002, - AM/FM broadcast model, HF/MF/VHF stereo.
- 1004, - Marine receiver, 150-535 Kc/s + 1.6-30 Mc/s.
- 1005, - General coverage, Crystal controlled, recvr with provision for FAX reception.

- A summary of data for the 1000 model is,-

Coverage, 550 Kc/s to 30 Mc/s in 5 ranges.

I.F. 455 Kc/s.

Modes, CW, MCW, SSB.

Supplies, A.C of 100 to 250 volts.

D.C 12 volts internal NiCd battery.

Sensitivity, 15 microvolt MF and 5 microvolt HF for 15 db S/N.

Audio Output, internal speaker- 800 mW with 5% distortion.

Dimensions, 137 x 335 x 242 mm.

Weight, 8.2 Kg including NiCd battery.

- What few realise is that the model 40A interference chasing model as made for the GPO and still in use by DTI last year, is a variant of the 1000, main differences are a calibrated attenuator input, a selection of aerials, from whip to ferrite rod to loop, and a large signal level meter. This version is in a strong fibreglass case & has a strong carrying handle.

- Hollow State Construction Projects. -

- Most of the hobby magazines, i.e. PW, SWM and Radcomm, have been including various construction projects for valve type equipment, either receivers or transmitters.

- Whilst not all of EUG members will be interested in the actual building of these items I do suggest that reading the articles can be of benefit to those with limited knowledge of thermionic valve theory and practice.

- From the mail received here it appears that a number of the less 'wrinkly' EUG members have but limited ideas as to how those 'bottles' work. There was a comment in the latest issue of one of the aforesaid magazines where a reader who had built a valve transmitter claimed that he 'tuned it up by watching the colour of the gas inside the valve' - hope not as there should not be any gas in the valve.

- Valves are basically high impedance, volts operated devices & this is what confuses so many of the younger members. Semicons are mostly low impedance, current operated devices. (okay, not FETS).

- What I am trying to say is that these articles are worthwhile reading material for you should you wish to know more about how the various stages in your Eddystone function. Whilst of a practical nature the articles invariably do include some bits of theory.

- - - - -

- An 870 for Nowt !!! -

- As offered the 870 had seen better days, but most important was the fact that it did work, after a fashion. The main external damage was a liberal splattering of paint on both glass scale and on metal case. One knob was an alien, HMV type if my memory serves me right, of the 60s. The mains lead was but eighteen inches long with two more similar lengths spliced on and taped up liberally with sellotape. Well I suppose it does have some insulating properties after all.

- I decided that a cosmetic clean-up was the first item, and for this I went the whole hog, removing first the case from the combined chassis/front panel and then separating the panel and chassis also.

- The paint came off quite easily with no more than a good soaking in paint remover and rubbing with an old towel. No damage to the original paint work after the cleaning except possibly a little shinier. Slight rust was evident on the inside of the case and this was treated with some of the Rust-Kill product as sold for car use. Both scale glass and scale were cleaned up in soapy water, do not rub the scale figures, a sure way to lose them altogether.

- It was now possible to refit the chassis and front panel back together - for ease of work on the chassis. Although the drive cord system was okay I decided to renew this cord as age would almost certainly have had some weakening effect. The primary step here is to draw diagrams of how the cord is connected and how it travels over the various pullies. Unless you want to cause yourself some very nasty headaches later on. I usually turn the set so that the rear of the chassis is towards me - draw the path of the cord, add diagrams of the relative position of the pointer, tuning condenser vanes, drive pullies and then I can remove the old cord.

- The set had worked okay on M.W and on L.W but neither of the two short wave bands showed any signs of life. Seemed funny that since none of the local oscillator components are common to the two working bands or vice versa. I went for a voltage problem and began a systematic check, not just of the local oscillator though. It had to be done sometime so I began working down the voltage list provided in the instruction sheet for the 870, they are lettered as from A in the RF stage to M in the rectifier stage but I always like to work the other way, starting with some resistance checks at the AC input end, not forgetting the all important C4 which is the isolating component between chassis, potentially live in an AC/DC model and the outer case/earth terminal.

- Since all seemed okay at the mains lead and earth connection as regards insulation I went on to power up the 870, my way of doing it is with a double wound isolation transfo which being tapped for 120 or 240 output allows me to check the operation when a dropper is doubtful. No surprises on the output stage so I checked the AF stage. Here was a problem in that the anode volts should have been around 43 volts, it was over 65 now. A check showed that at some time the 0.47 megohm R11 had been replaced with a 120 kilohm, which in fact measured 145 kilohm. Out it came and a replacement brought the reading to around 45 volts, more like it. No surprises when I used the Avo on V2 the IF stage, so now to the apparent troublemaker V1, the frequency changer stage. Voltages seemed okay here when I

870 cont;-

did my checks on range 4 as suggested in the manual. BUT range 4 was working wasn't it ? Try again on Range 1 and 2, the two Non-working S.W bands. Here the anode volts as measured at point A, the anode of V1 were high, much higher than on L.W. A visual check on the wavechange switch wafers showed that the contacts on all wafers for both the S.W bands were BLACK, jet BLACK. It was nothing more than corrosion but so bad as to indicate that this particular 870 had apparently never been used on anything but L.W and M.W during its long life. A good clean with a liberal coating of switch cleaner fluid and a small stiff bristled brush, originally supplied for cleaning typewriter type, was all that was needed for the 870 to burst into life. I must admit that years ago I had come across something similar with a Philips domestic set never used on anything but L.W. When brought in for repair an un - reported fault was that it did not work on the other band, the M.W band. This was corrosion and was fixed, only to be told by the customer that she never used M.W at all.

- As all bands now worked I decided to check out the alignment, starting with I.F. Not worth touching this as it appeared to be spot on, rare for an I.F to go off on its own anyway, usually if you find the IF off by any measurable amount it will be either a component gone 'duff' or the dreaded 'twiddler' has been at work.

- Next stop the R.F stages, first off I had to correctly re-locate the pointer on the new drive cord, this done I did a few checks. To start with I used a crystal 'pipper' which gives me pips at 1 MC/s intervals. On range 1 and two this showed up very slight discrepancies on the HF end, both frequency wise and as regards peaking of the RF stages. Checks on MW and LW showed that only peaking of the RF and Mixer trimmers was necessary.

- One more check to do, often ignored this one too. I refer to the IF rejector trap in the aerial input circuit. Easy enough to do but in this case it did not require any adjustment, being at 465 Kc/s already. This is a relic of the days when ship to shore transmissions were on nearby frequencies, fact is GLV at Seaforth near Liverpool was a persistent 'interferer' as it was on 464 Kc/s and I frequently caught it on my car radio, as far inland as Sheffield.

- A nice looking and very good operator this 870, actual cost if labour is ignored - who is going to pay ME ? - is that of a resistor and length of dial cord.

- - - - -

- Variations on a Model. -

- All the same under the skin ? don't you believe it. I have two varieties of 680, the old square-ish dial with half round scales, model. The first I got some twenty years back was the original which employed a type 7S7/X81m in the frequency changer stage, no problem with that except that some people had problems getting replacements for that valve.

- Later versions of the 680, I got one of these a few years back at Lincoln Hamfest, used the far more common type 6BE6 valve in this stage. I have compared both versions, now fully restored to original spec; using the same aerial/earth system, on the same signal at the same time, not a great deal of difference, possibly the 6BE6 has the edge as regards noise level.

- One other difference - albeit a minor one - is the arrangement for gain compensation with varying positions of the selectivity switch. This selectivity control is by means of mechanical linkage to the IF transfos, the primary and secondary coils are moved apart physically to increase selectivity, this reduces gain of course & so gain is increased by varying resistor values in the detector circuit.

- Either model is still a 'Best-Buy' for SWL work, in fact I know one G2 who is still using his 680 with a Clapp VFO 6J5 driving a 6V6 buffer/doubler into an 807 P.A stage, wonderful to read his log of CW contacts, nothing else on his operating table except key, 680 and Tx.

- - - - -  
- HELP for owners of 770S, Please. -

- Since I got my 770S, ex Bristol University, some six years ago I have tried to get hold of the schematic for this, had a few false trails, nearest was <sup>HOWARD</sup> Harold Turner of Centre Electronics who DID have a copy but misplaced it, have the manual okay but it lacks the circuits. Now have three 770S owners in EUG who are all clamouring after the Schematic. PLEASE can anybody out there help ? In one case the owner has had the set for two years and is still waiting to get it 'onthe air', so if you have a copy - or can point me in the right direction - then please do write. Make somebody happy for Xmas. ( There Jim - is that good enough ? ).

- Transistor Front-end for an EA12 ? -

- This query comes up so often in the EUG mail, 'can I fit either bi-polar or FET transistors into my valve type receiver ?' Usually the idea is for increased gain or lower noise figures, sometimes it may be that completely replacing the valves with semi-conductors will reduce power consumption, heat generation etc; - well it will do that of course BUT. Valves are high impedance, voltage operated devices, most transistors are low impedance, current operated devices. The circuit parameters for the two differing devices are completely different. A complete swop over would require not just a change of active devices, valves to trannies, but also a complete swopover of resistors and condensers. Not to mention such items as RF, IF and AF transformers.

- In this case Dave has acquired an EA12, for £270, it is in pristine condition and perfect working order - as illustrated by the log of signals heard so far. Dave is enquiring as to the possibility of replacing the front-end RF amplifier, in the case of the EA12 this is a frame grid double triode valve in a cascode circuit, with a new FET amplifier stage. This would need an entirely re-designed front end and I strongly disagree with his idea that the EA12 would be in any way improved. Quite apart from my own personal feelings as to unsuitable mods to these sets, I have never seen nor heard a really successful conversion of this type. The EA12 was top of the line for its day, if you are willing to forgo all the bells and whistles provided by the modern black box receiver then I say that the EA12 will still perform as well as any. My own is frequently used for beacon spotting, as a guide to propagation on the 10 metre band. It is nothing unusual for me to hear beacons coming up through the mush on my EA12 long before they are audible on my R2000, and contrary to what many say, or think, stability on receivers such as the EA12, the 940 or the 830 series is extremely good. Consider that the latter was used for reception of narrow band systems such as 'Piccolo' and you can see that stability was necessary.

- The final answer to Dave has to be 'leave well alone Dave' - you have a good working receiver, so don't spoil it.

- SFERICS. -

- Whilst on the subject of the EA12, the carrier level meter as fitted in this model is calibrated in 'S' units, unlike those meters on other models. Each 'S' unit is taken as a 6 db change of carrier level, above 'S9' the scale is in dbs.

SFERICS cont;-

- A crackling noise on the audio from his 940 was finally traced to a dry joint on the output transfo primary winding, after a whole lot of finger nail chewing and head scratching, so says Peter.

- QRM similar sounding to TV timebase - but not that - was found to be caused by the microprocessor controlled intruder alarm system. This employed a mixture of reed switches, PIR, and ultra sonic sensors but the actual cure came when the control unit itself was 'screened' by an internal coating of spray-on nickel and input output terminal strips all had 0.001 mF decoupling condensers fitted. There is just a faint remaining signal on the crystal frequency of 3.57 Mc/s, only S2 on my 830.

- Calibrators for models such as the 940, had this before I think. Allen uses a 500 Kc/s ceramic resonator trimmed to zero with MSF on 5 Mc/s, this is driving a FET - 2N3819 - oscillator. The power supply is only milliamps and comes from a rectifier bridge of 1N4001 diodes and a 470 mF electrolytic across the heater supply. Gives good pips up the ranges to 30 Mc/s. Since the Standby feature is not used in his shack the Standby switch is used to control the calibrator and to put some 'desensitisation' in the RF stages. Long term drift does not seem to be a problem as some 3 months later the pips are still zero beat with MSF.

- I have an 840A which was modified by a previous owner for AC only operation, rewiring of heaters, fitting of mains transfo, etc; The mods done seem to have changed the operation of this 840A very little. Safety wise I guess it is an improvement, but then if you follow S.O.P you should not have any 'shocking' problems. The increase in HT line of about 15 volts has had no effect, valve types are the 6.3 volt equivalents to those fitted originally. One bonus I got with the set was the almost new set of AC/DC type valves which had been removed. A donation to my junk box.

- On the subject of 'valves for trannies' which comes up so often in EUG mail. I have an 870 which had this done to it, not by me I hasten to add. Performance is nowhere as good as on a similar 870 which I have in original state. Gain on the higher HF ranges drops off and above 12 Mc/s there is far more noise. Annoyingly too the tracking is off and nothing seems to help. I wonder whether this is due to differences in impedance of the trannie circuits, different capacity values for the trannies? Whatever it is, the mod is going to be undone when I get time.

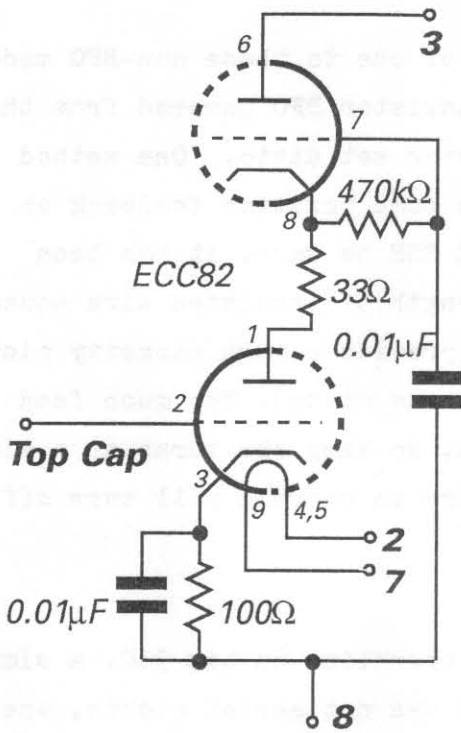
- - - - -



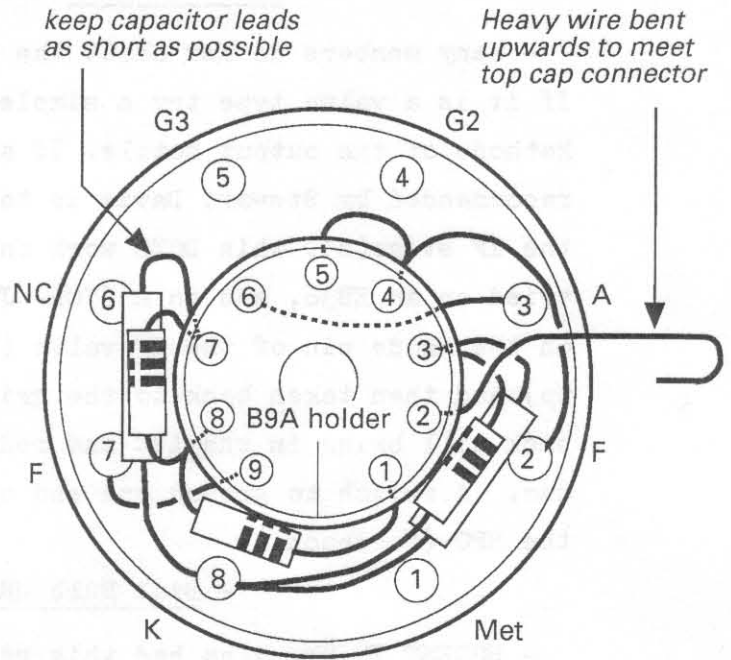
**Converter Base for using an ECC82 cascode stage to replace the EF39 RF amplifier in models S358, S400, S504, S640, S659.**

No wiring changes are needed in the receiver, the socket can be secured to the plug with Araldite or similar. A definite noise reduction will be found, especially on the higher frequencies.

Sent in by **Graham Leese**, who has used this circuit successfully in his S358.



Small figures = ECC82 pins  
**Bold** = Octal Base pins



Octal Plug (pins 1,4,5,6 removed)

**BOTH VALVEHOLDERS SEEN FROM ABOVE**

- WHILST THE ABOVE IS MEANT FOR THE MODELS QUOTED IT IS POSSIBLE TO MODIFY THE PIN OUT AND VALVE TYPE FOR MANY OTHER MODELS.

\* \* \* \* \*

- 1994 Model Update List. -

- Simple, there will not be one ! Instead I am preparing a List of all the known faults on all the known models. This will be made up from my files of faults that I have come across and from YOUR mail detailing those faults that you have found (and hopefully have cured). So, let me know, deadline will be circa September and I hope to have it out for posting with your December Issue.

-----

- Valve Stocks.-

- With the closure of the KEN-Rad valve factory in the U.S of A it is one more sign that shortages will be more and more the thing of the future for those of us who collect valve radios. Why not look to the future yourself and lay in a stock of those used in your Eddystone(s). Prices for most of them are fairly reasonable still, but for how long ?

- BFO addition.-

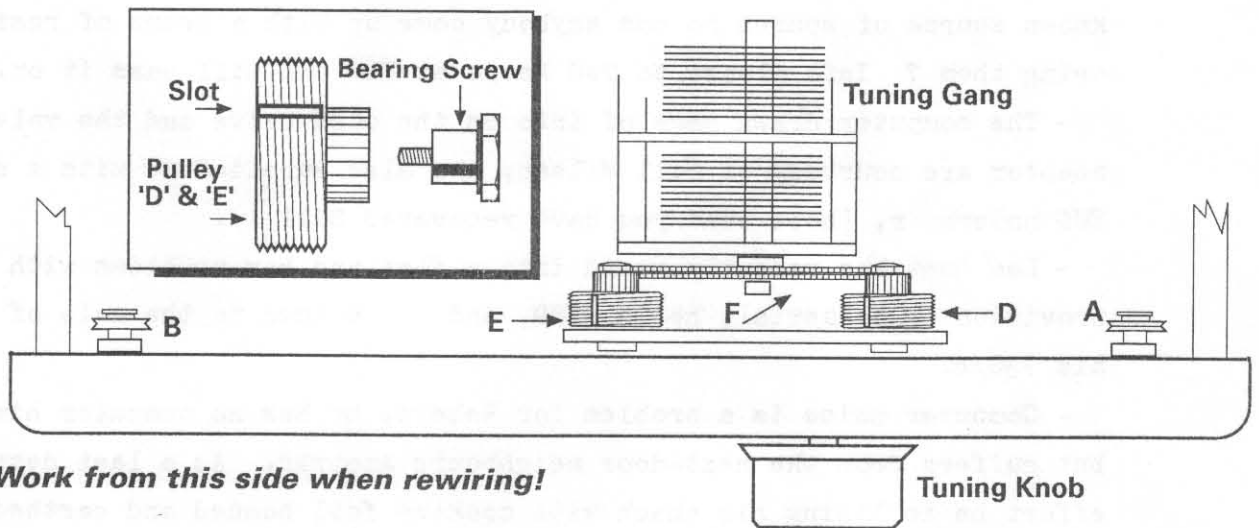
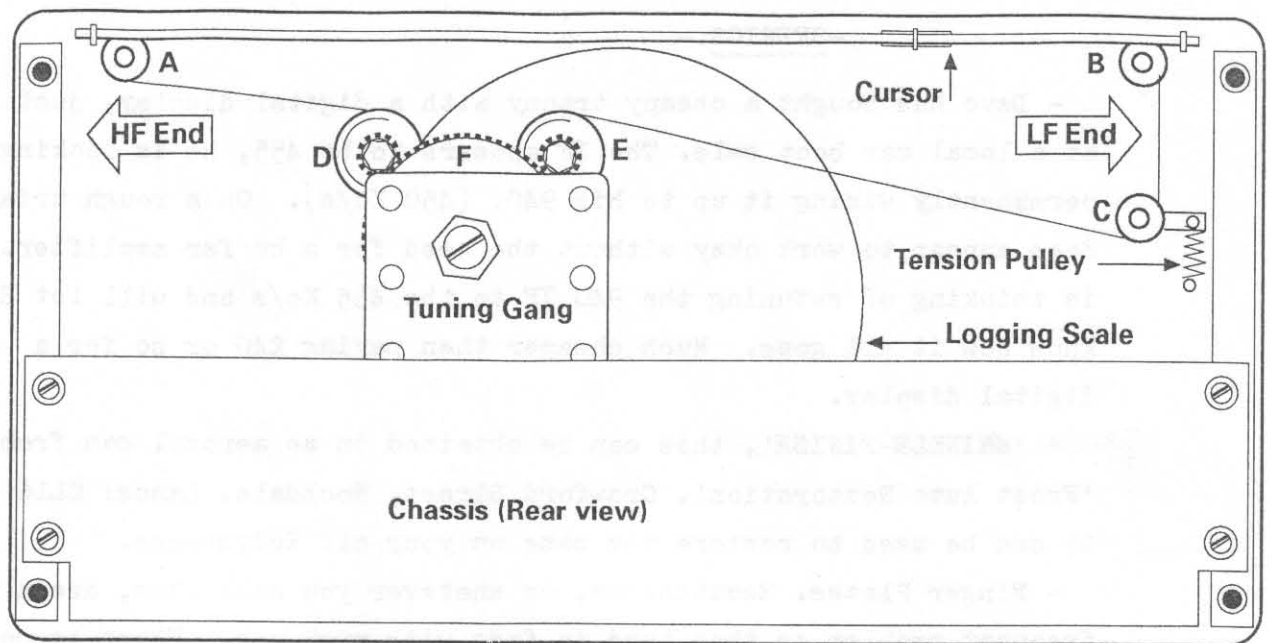
- Many members do ask about the fitting of one to those non-BFO models. If it is a valve type try a simple one transistor BFO powered from the kathode of the output bottle. If a transistor set ditto. One method recommended by Stewart Davis is to arrange some positive feedback on the IF stage(s), this DOES work for CW and SSB he says, it has been tried on an EB36, and on a 670A. Just a length of insulated wire wound on the anode pin of the IF valve (2 turns provide enough capacity pick up) and then taken back to the grid pin (turns ditto). Too much feedback will bring in the AVC and reduce gain, so keep the turns at a minimum. A switch to ground one end of the wire to chassis will turn off the BFO (feedback.).

- Dial Bulb QRM.-

- HONEST INJUN. Alan had this recurring crackling on his 940, a simple test of disconnecting the aerial proved it was not aerial pickup, use of his EC10 on the same socket proved it was not mains derived. After a couple of hours he came up with the filament in a dial bulb, bulb worked AOK, no flickering at all, BUT it produced an intermittent buzz every few seconds, put into his 830/5 it did the same thing ! I have had this sort of thing with a mains operated light bulb which radiated the QRM to be picked up by a battery operated set, but never in a dial bulb.

- Motorboating.-

- In a previously reliable 640 this mo-boating came on when ever a strong signal was tuned in, and incidentally only with the AF gain pot near the bottom of its track. Not too hard to locate when the set was up on the bench, this was C62 a paper type decoupler which was o/c. The fact that it happened with the pot low was pure coincidence (loud signal equates with low pot position).



- 1 If the drive wire is still in situ, then sketch it and memorise its layout.
- 2 Remove all bits of old drive wire, temporarily remove the two pulleys 'D' & 'E'.
- 3 Slacken the tie-off screws on these pulleys, attach new drive wire to them with the wire coming out of the feed slot from the tie-off screw.
- 4 Rotate the tuning control fully clockways to end stop.
- 5 Refit right hand pulley 'D' with the slot at 'one o' clock, ensure the bearing screw is fully tightened. Feed wire into groove nearest to front of pulley (nearest to scale), so that it runs away from the pulley left to right, see sketch.
- 6 Feed wire up and over pulley 'A' and across to pulley 'B' and across pulley 'C' (the tension pulley). **Keep hand tension on the wire from now onwards!**
- 7 Rotate the tuning control till the other end stop is reached, keeping tension on the wire and checking that it feeds into the grooves on pulley 'D', You should end up with three full turns now on 'D'.
- 8 Feed the wire into the rearmost groove of pulley 'E' the furthest from you. Position pulley 'E' as close as is possible to its bearing point without actually engaging the drive cog teeth, tighten the tie-off screw to clamp the wire and rotate pulley 'E' slightly to add tension to wire so that tension pulley 'C' is now about 1/4 inch from its untensioned position, maintain tension and engage pulley teeth into drive cog teeth, screw in the bearing screw slightly.
- 9 Rotate the tuning control to the other end stop, checking that that the wire runs freely without kinks. Leave set fully clockways.
- 10 Set cursor to 2500 on logging scale, solder cursor to drive wire and check the free travel of the cursor from end to end of its travel. Check scale calibration using say, WWV or MSF if no signal generator is available. Adjust slightly by unsoldering if need be. See sketches.

-SFERICS.-

- Dave has bought a cheapy tranny with a digital display, just £2 at a local car boot sale. The IF appears to be 455, he is looking into permanently wiring it up to his 940, (450 Kc/s). On a rough trial it does appear to work okay without the need for a buffer amplifier. He is thinking of retuning the 940 IF to the 455 Kc/s and will let EUG know how it all goes. Much cheaper than paying £40 or so for a digital display.

- 'WRINKLE-FINISH', this can be obtained in an aerosol can from 'Frost Auto Restoration', Crawford Street, Rochdale, Lancs; OL16 5NU. it can be used to restore the case on your old Eddystones.

- Finger Plates, Escutcheons, or whatever you call them, are a frequent problem as they tend to fade with much use. There is no known source of spares so can anybody come up with a means of restoring them ? Info please to Ted Moore at EUG and will pass it on.

- The computer drawn page of info on the cord drive and the valve adaptor are courtesy of Bill Wilson, who also supplied me with a stock EUG notepaper, (hope that you have recovered Bill !).

- Leo Hunt has recently moved into a flat and has problems with the provision of an aerial, he is G4NQ, and is reduced to the role of SWL with his 730/4.

- Computer noise is a problem for Robert, he has no computer himself but suffers from the next-door neighbours Amstrad. As a last desperate effort he is lining his shack with cooking foil bonded and earthed, and running the EC10 II from a car battery, big improvement so far.

- Bill Gibson is replacing all the resistors in his 940, must be a masochist !!! he says that it is a long job, especially in the RF stages, but should make a noticeable improvement.

- From Ross Paton in New Zealand re the 870 as featured in issue 24, Ross has never come across this model over there. He comments that the 19AQ5 output valve must be a hard one to locate and says that he can not see why it was used instead of the more common 35C5 or 50C5. It has been known for 870s to be modded to use these Ross, I owned one myself in the 80s, a very neat professional mod so I left it as was.

- Calibrator PUSH switches, mention in the mail recently from two members of these items arcing over. Very common this on the older models which have been in a damp atmosphere. The insulation on the switch must be hygroscopic, it takes in moisture and then the HT tracks across the insulation forming a carbon path, I have even seen them sparking across, similar looking replacements are available in the catalogues.

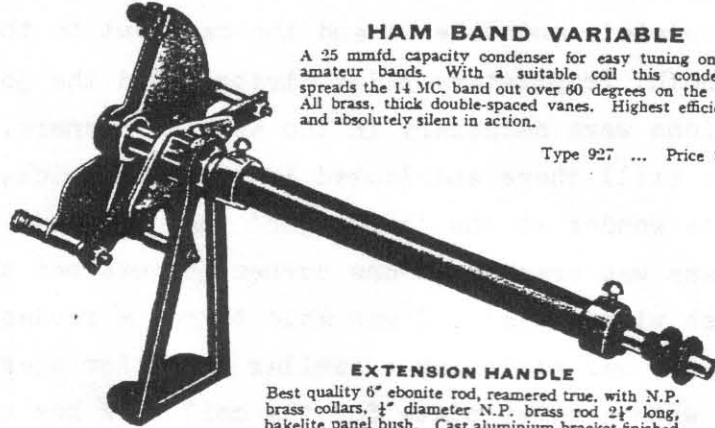
- A very Sad 840A. -

- No I had never seen an olive green 840A either ! This one had been hand done with more enthusiasm than skill and brush marks did not add to its appearance. Some tests showed that it was a oil based paint and that the original enamel was still there beneath the green gooey stuff. I decided that the best thing was to remove the front diecast panel completely and take it and the case out to the garage to work on them both. Proprietary paint stripper did the job , but several applications were necessary in the awkward corners. The original grey was still there and looked in very good nick, all the more reason to wonder at the 'paint job' that had been done.

- The dial glass was cracked in one corner and was not the original one, just thinnish window glass. I was able to get a replacement from an E.U.G member who was stripping a similar model for spares, he also provided me with a cover plate for the coil pack box under the chassis. The only two Eddystone knobe were the range and tuning, some cheap and nasty broadcast type knobs had replaced the others at some time. I was able to get replacements for these from Centre Electronics in Birmingham and just one item was now lacking. This was the output valve. I balked at paying nearly £12 for a new UL41 and remembered that a back issue of the newsletter dealt with just this. In the end I got a 10P13 for £3.50 including P&P and used this in the output stage, it is a plug in replacement for the UL41. The next job was the phones socket, this had been removed from its hole in the front panel, wrapped in tape and tucked back in whilst the hole it normally occupied held a toggle switch. A little bit of sleuthing showed that this was used to diconnect the built-in speaker and connect instead a piezo-electric sounder, must have been a C.W type , the previous owner !! This 'mod' was removed and the phone socket made good. I have heard of this use of a P.E sounder before as with the B.F.O tuned to the resonant audio frequency of it quite good, QRM free CW is possible, if you can stand the rather high pitched note. Most amateur ops prefer a lower note for comfortable listening. The dial bulb, or rather mains on indicator which had previously shone through a green window in the scale had been moved to a higher point and was now parallellled with another both being used to illuminate the scale. This was easily put back to original and the 840A was now ready to be checked on the calibrator. I.F.s were okay and untouched, some adjustment was needed at the HF ends of the top two ranges but otherwise calibration was okay. Boxed up now this receiver is in almost as new condition and performs very well . Colin.

-----

# CATERING for the HAM!



### HAM BAND VARIABLE

A 25 mmfd. capacity condenser for easy tuning on the amateur bands. With a suitable coil this condenser spreads the 14 MC. band out over 60 degrees on the dial. All brass, thick double-spaced vanes. Highest efficiency and absolutely silent in action.

Type 927 ... Price 9/6



### 5-10 METRE H.F. CHOKE

A choke for ultra short wave receivers covering the 56 and 28 MC. bands. Space wound on featherweight former. Mounts easily in the wiring itself. Natural peak wavelength 33 metres.

Price 1/6

### EXTENSION HANDLE

Best quality 6" ebonite rod, reamed true, with N.P. brass collars, 1/4" diameter N.P. brass rod 2 1/4" long, bakelite panel bush. Cast aluminium bracket finished brown.

Type 925 for 1 hole fix condenser.

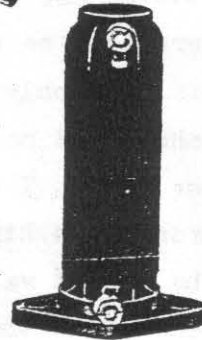
" 926 " 3 " " Price 3/- complete.



### S.W. AERIAL SERIES CONDENSER

A 12 mmfd. fixed condenser for aerial coupling in S.W. receivers, super-hets or adaptors. Brass vanes.

Price 1/-



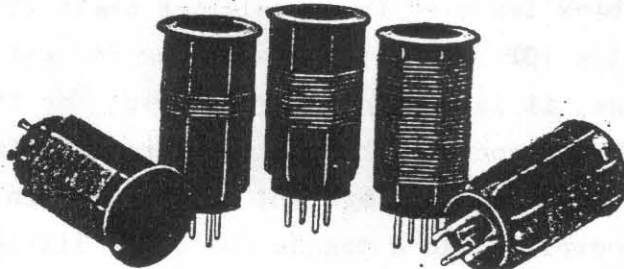
### SHORT-WAVE H.F. CHOKE

A specially designed S.W. Choke consisting of a hollow bakelite moulding with spaced winding on 6 ribs. For receiver or transmitter.

Type 923 — 9-100 metres, carry 25 m/amps.

Type 924 — 3-60 metres, carry 100 m/amps.

Price 2/6



### 4-pin S.W. COILS.

These coils plug into any standard valveholder. They comprise grid and reaction windings. Space wound on 1 1/2" low loss former. Highly efficient, with small field. Wave ranges given are with standard Eddystone .00016 mfd. S.W. Condenser.

Type LB, 10/23 metres, price 3/6    Type R, 33/85 metres, price 3/6

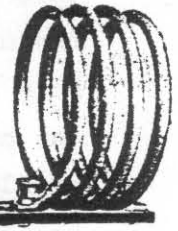
" Y, 18/45 " " 3/6    " W, 80/220 " " 4/-

Type G, 210/550 metres, price 4/6

### TRANSMITTING INDUCTANCES

These are supplied wound from 3/16" or 1/4" bright copper tube lacquered to prevent oxidation. 3" diameter up to 15 turns, flattened and pierced ends.

per turn  
3/16" tube ... 4d.  
1/4" " ... 5d.



### STAND-OFF INSULATOR with Wing-Kut

Price 1/3

# EDDYSTONE

SHORT WAVE COMPONENTS

Sole Manufacturers:  
**STRATTON & CO., LTD.**  
BROMSGROVE STREET  
BIRMINGHAM

London Service Depot:  
**WEBB'S RADIO STORES**  
164, Charing Cross Road, W.C.2  
Telephone: Temple Bar 2944



- A Bit of History. -

- It is generally accepted that the year 1922 really marked the advent of Strattons into the 'Wireless' manufacturing business. A first model, the Eddystone Twin, came out in early 1923 - this was a simple two valve model in a polished wood case. An example of this model is still in the possession of the original buyer, John Alan Peters was a cotton broker in Huddersfield at the time and his early interest in wireless is documented in several daily journals which he left after his death in 1933. One of these 'logs' is of interest to Eug members as it does detail some of the signals which he was able to receive in those early pioneering days, this together with some sketches of the receiving system he had installed show that he was one of the early 'enthusiasts' who expected rather more from his 'rig' than to simply listen to the local station. The local station for him was 2ZY the BBC station in Manchester and of course programmes from there consisted of just the three hours from 6.00 p.m to 9.00 p.m. His receiving apparatus consisted of an aerial which was some 250 foot long and ran approximately SE to NW, the house end being at about 30 foot above ground and the far end some 45 foot high. His receiver was operated from the then normal battery supplies which came from a bank of wet accumulators fitted under the bench & mounted for safety in a lead lined trough shaped box of teak. The HT supply was a nominal 80 volts and LT was in this case 2 volts, although his sketch does indicate the possible use of up to 6 volts for LT supplies. The earthing system deserves some mention as it was taken from the 'wireless room' down the outside wall to an old copper boiler of some 4 by 2 foot which was buried in the garden, at one point he mentions that with no aerial attached and using the earth system as an aerial he got 'fair' reception of 4BA in Newcastle in the evenings. This too was a BBC station which broadcast for a mere one and a half hours per day. His receiver was used with a pair of S G Brown headphones which are still in working order today, no loudspeaker was listed so it is assumed that he was not interested in sharing the delights of wireless with his family. Some of the stations which he mentions as having been received with this station of his are listed below,-

The Hague, Holland. - PCGG. - 1085 metres.

Konigswusterhausen. - LP. - 2800 metres.

Paris Radio-Electrique. - 1565 metres.

Manchester BBC. - 2ZY. - 385 metres.

Cont;-

cont;-

Birmingham BBC.	- 2WP.	- 425 metres.
?	- 2FQ.	- 440 metres.
Newcastle.	- 5BA.	- 440 metres.
London BBC.	- 2LO.	- 360 metres.
Paris.	- FL.	- 2600 metres.
Holland, Haren.	- OPVH.	- 900 metres.
Brussels Weather.	- OPO.	- 1500 metres.
Croydon Aerodrome.	- GED.	- 900 metres.
Le Bourget Aerodrome.	- ZM.	- 900 metres.
Liverpool Docks to	- DOCKS.	
Bar Lightship.	- BARSHIP.	?

- Several unknown amateur stations were heard at various times and it does comment in his journal that selectivity was a problem that he could only alleviate by loosening the coupling of the aerial to the receiver, this however rendered most of the stations too weak to be resolved. It is interesting to note that OPO in Brussels broadcast the time and weather daily in slow morse. A contemporary advert for the Eddystone Twin mentions a range of 'about 50 miles'. It would seem that Mr Peters consistently got much further than that.

- - - - -

- It is interesting to note that in the above Historical Item the station 2ZY in Manchester is listed as a BBC station. My own notes tell me that it was in fact operated by the then Metro-Vick Company in the Old Trafford area. Similarly I have the BBC station in Newcastle down as callsign 5NO and not as 5BA ? (EUG).

- - - - -

- Brussels Weather was in fact the Brussels Meteorological Institute and the weather forecasting was of a very primitive nature. The slow morse transmissions were very often used as a means of learning to receive morse by many aspiring amateurs of the time.

- - - - -

- Errata List for the Model List published last Year.-

- Some of the errors found in the Model List have been listed by Tor Marthinsen and will be found on the following page, Thanks Tor, I am sure that all members will appreciate this list.



- 358/358X Originally 9 ranges from 90kHz, one added range 40-90kHz was probably for the 358X, totalling 10 ranges.
- 640 Range was from 1700kHz.
- 659 This receiver is a scaled down 556 and has very little in common with the 640. Range starts at 520kHz.
- 659/670 My receiver with this marking is equal to the 670.
- 670 Range start at 520kHz, same as 659. The 670 and 659 have so much in common that one might say that the 670 is a marine version of the 659!
- 670A This receiver is very different from the 670! Also the DM70 was introduced in -52, dating the receiver to 52-53
- 670C I do not know this receiver, but perhaps with more bands the receiver covers a larger range?
- 680 There is a 9 valve version exhibited in 1947, WW has a picture of the beast showing differences to both 504 and the 680 from -49.
- 680 This receiver had a X-tal filter, same as 680X
- 680X Electrically this is very close to the 680, the main difference being the new case/scale. Receiver was out in -51
- 700 This must be a comms. receiver and not for the amateurs.
- 710B I'm not sure as to the number of valves, when presenting this receiver in the EUG-mag you say six valves. Also it was called the 'All World six'.
- 720 Since the range is restricted perhaps it's an idea to include this, 130-330 and 480-3750kHz.
- 730 Blueprint for 730/4 is dated -56. Hope you will put back the suffixes (i.e. variations)
- 770M The prototype was exhibited in 1951
- 770R Receiver presented in -55
- 770R/suffix: I miss the suffixes, believe there is a misprint with the 770RII/suffix.
- 770R/II Receiver has 20 valves, 2 semiconductors.
- 770U Receiver also presented in -55
- 770U/suffix: Same comment as 770R/suffix.
- 770U/II Receiver has 19 valves, 1 transistor and 4 diodes.
- 830/5 Don't like the 'As above' as you can be led to believe this receiver to be like the /4. The drawing says that the /5, /6 and /7 are alike, description as the 830(no suffix).
- 840 Receiver out in -53
- 840A Circuit as 840, but the case is new.

24.

- 850/4 Receiver has 11 valves.
- 870 You have earlier referred to this as a four-valver
- 880 You once sent me an advertisement for this receiver dated -60.
- 880/2 Receiver has 22 valves
- 880/3 This receiver has 23 valves! It was out in -64.
- 909 Eddystone consider this to be a communications receiver, with both noise limiter and crystal filter. No BFO though.
- 909A This receiver is both AC/DC and Batts.
- 909A/1 (Misnamed 990A/1).
- 909A/2 ( " 990/A2). The drawing is dated -64.
- 909A/3 ( " 990/A3). New case, type "C". Only date I know is -67
- 960 Receiver has 12 transistors.
- 964/2 5 bands.
- 964/4 Coverage 1.5 to 30 MHz.
- 964/7A Only mode is U.S.B.(and Remote, whatever that means)
- 974/1 Remote control unit.
- 990R Coverage 27 to 240 MHz.
- 990S Coverage 230 to 870 MHz. Receiver out in -65.
- 1004 This may look like the 1002, but the coverage is quite different. This is a Ship's reserve receiver, with BFO and fixed 2182kHz.
- 1590 Receiver out in -80.
- 1740 Frequency synthesizer
- 1837/2 Receiver out in -77.
- 1840 Frequency synthesizer
- 1990R/1: 25 to 235 MHz. Out in -75.
- 1990R/2: 25 to 500 MHz. Out in -75.
- 5000 One channel is standard, up to 8 channels.
- EA12 13 valves and 5 semiconductors.
- EC10A Receiver missed out!

- This Errata list has been compiled by Tor Marthinsen, members can add this to the last Model List which was sent out with issue 20 of the Newsletter. Should any other member have further corrections to that list then do please send them to EUG.

-ENDIT-

- Sorry for the cablese titling, a relic of my murky past. How many of you ex signals or ex RAF remember the old terms like 'as-tic', how many still use QAP or QRX ? you can always tell an old timer on CW or RTTY by the abbreviations that he uses, often from the 'Q' code or the lesser known 'Z' code. Anyway that is it for another issue, coming to you courtesy of Eddystone this time, that is IF you remembered to pay your new subs to them !!! Thanks to you all from Kathy and myself, I shall still be with you of course, so keep that mail coming in.

- If you want to put an item in the newsletter, be it an ad or an article, best to type it on A4 size, same format as this, or write it legibly and I will do the typing. Say whether you want your name on it or not, many don't want the name on, not wise to let all and sundry know what goodies you have at home these days.

- Let us have any ads before the beginning of the month of issue, use a phone number preferably or c/o EUG and I will forward it, you may use your address if you so wish.

- Next issue will be the August one, hope that you enjoy this, the FIRST of year FIVE for EUG.

73,

Kathy & Ted.

Nota Bene. - APOLOGY ! It seems that an item in the last issue, number 24, offended Bill Cooke, formerly Chief Engineer, then M.D and Chairman of the Board at Eddystone. Am not yet sure just what as I am still awaiting his clarifications, which will be published. I apologise to Bill Cooke for whatever item it was, MEA CULPA !

Ted Moore.