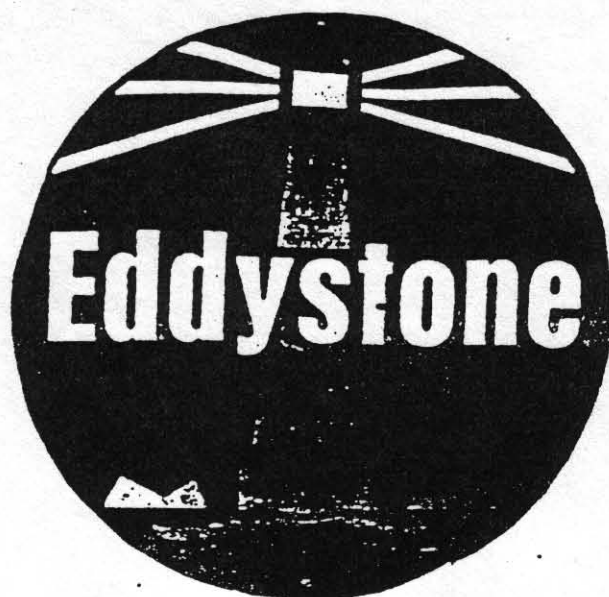
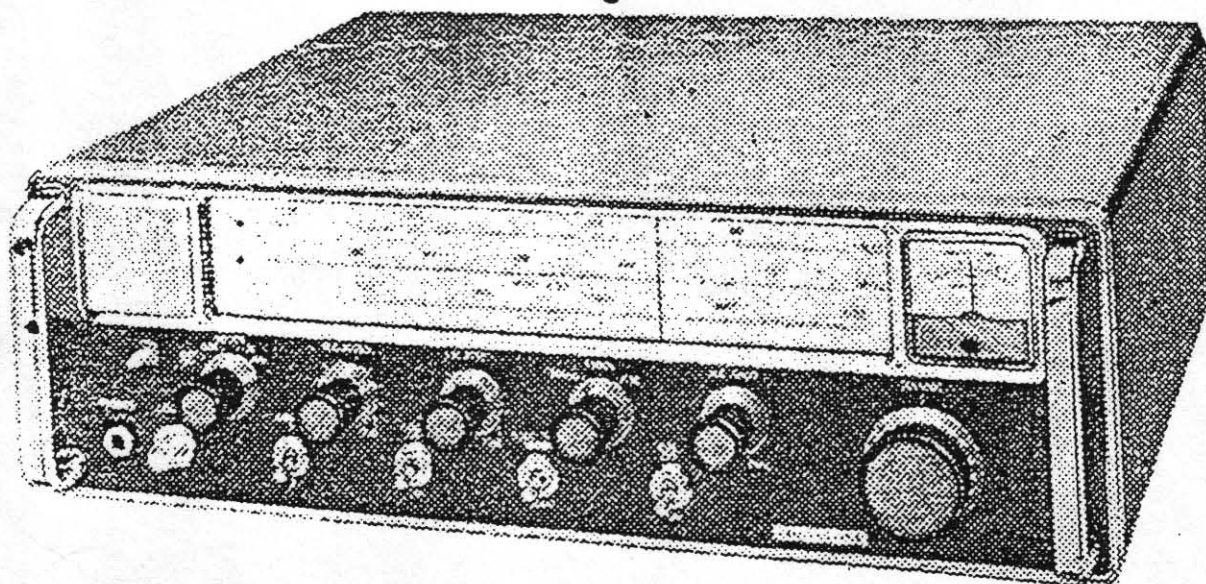


8

990s



Eddystone
Users
Group



ISSUE NO. 8
JULY/AUGUST, 1991

Information quoted from Eddystone Co. manuals by kind permission of
Chris Pettitt, Managing Director, Eddystone Radio Ltd.

Featured Model this issue - 990S

A non-profit-making newsletter for Eddystone users.

Address all mail -

W. E. Moore, Moore Cottage, 112 Edgeside Lane,
Waterfoot, Rossendale, Lancs. BB4 9TR

4. An expensive one this! A 750 which had been left on all day as background, in mid-July 1990, by mid-afternoon the sun shining through the spare room window on to the rear of the 750, a 770R on one side and a 770U on the other side close up against the 750. An external speaker unit mounted on top further blocked ventilation, the first indication was a burning smell, then wisps of smoke from the top of the 750. It was a grilled mains transfo; no spare could be located and it finally had to be rewound locally, cost £28.50.

5. One last example, an 870 not 870A, which is a 4 valve and metal rectifier model, one of the first mini-Eddystones. Once more it was somewhat confined with a W.R.T.H. copy lying atop the receiver, a wood-boxed loud speaker close to one side of the receiver and more books leaning against the other side. The only ventilation holes not blocked were at the rear. Early August last year after several hours of operation on a hot and sticky Saturday afternoon, reception ceased, to be replaced by mains hum followed immediately by that horrible smell which all servicemen learned to dread! The metal rectifier had failed, it was found that the smoothing electrolytic had also blown as a result of having raw A.C. applied across it. These examples given might never have happened if a free space for air circulation had been left around the case of the receiver - those holes in top, rear and sides are not simply for cosmetic effect! In my own "raio-room" where more than twenty Eddystones are wired in and can, in theory, at least, all be on at one time, I have muffin fans to give silent forced air circulation funnelled along behind all receivers, a gap is left between any two side by side and a gap of 2-3 inches above each. This summer already several members have been caught out by the heat and written in to ask for sources of droppers for their 670/840 models. Can any member tell EUG of a source?

CZ1 THERMISTORS

Some members either misunderstand or simply do not understand the reason for, or operation of, this important component which is located in the heater chain of the AC/DC models. Its reason for being is simple, it is a protective device for the series connected valve heaters. Operation is quite simple too, at cold - or rather - at ambient temperatures, it exhibits a high resistance; when hot - at normal operating temperatures it has a fairly low 75 OHM's resistance. When power is first applied the high resistance of the termistor limits the current flow and thus the voltage applied across the heater chain. What current does flow causes the thermistor to warm up, as it does so its resistance reduces until at normal operating temperature it has an approximate 75 OHMS resistance, this drops about 15 volts - 14-16 is O.K.

* IMPORTANT!

A.I.H. OF RUBY HAVE EDDYSTONE 990R
FOR SALE AT £195! THIS IS A SOLID-STATE
27-230 Mc/s MODEL, VERY SENSITIVE TOO.
WELL WORTH HAVING IF YOU CAN AFFORD
THE PRICE.

AN 888A

One member using an 888A for main station receiver from new to present day admits that the most common valve change has been the VR150/30 stabiliser valve. It has been changed on average every 4-5 years! Operation on C.W, on 14 MC/S becomes impossible when this valve is low emission. The drift caused by a non-stable local oscillator and B.F.O. calls for much annoying re-adjustment of both main tuning and B.F.O. Tuning. And, yes, as a matter of interest he does still use a 30 year old home-built transmitter which is a 6J5 V.F.O. 6J5 buffer, 6L6 P.A. and 5U4G rectifier. The tuning dial is an Eddystone model 989. Since he works the world with this rig he does query why hams need to pay £4,000 plus for modern black boxes. Actually his comment re the VR150/30 is important. Despite comments in past issues of this newsletter members still write in to express surprise that this seemingly innocuous valve can cause that bad drift problem on their Eddystone. One member had gone to the trouble of replacing padding condensers in local oscillator circuits to try and cure drift problems, to no avail. A new stabiliser valve did cure his problem. Think about its mode of operation. The voltage drop normally across the gas discharge valve remains stable irrespective of slight changes in current being drawn, in this valve it stabilises at 150 volts when up to 30 MA is drawn through the series feed resistor by the local oscillator valve and if in use, the B.F.O. Ageing causes the volts across the valve to rise and the stabilising effect will now cause frequency changes in either L.O. of B.F.O. or both. Price is about £2.75, not a lot to cure an annoying problem.

AN EDDYSTONE FOR NOTHING?

Well, almost nothing, cost of petrol is hardly a "nothing" these days. Two years back at the Leicester rally I bought an H.R.O. and P.S.U. with combined speaker for £12.00 Reason was that there was but one coil pack, that for 190 to 500 KC/S. A few changed paper condensers and some re-alignment produced a very good working model H.R.O. Mx. since I had four spare coil packs for "ham bands" in my junk attic the whole lot was stashed away for future use. It shared the loft with many other aliens such as AR88, CR150, R1132 and R1155N.

A recent magazine advert asking for an H.R.O. and subsequent phone call produced the information that the advertiser had an Eddystone model 820 AM/FM tuner. What was more to the point he was willing to do a straight swop. The cost of about two gallons of "unleaded" and I was the owner of a mint, little used 820 in perfect working order, including a Belling Lee in-line mains filter unit.

SFERICS - For correct A.V.C. operation the R.F. gain control should be set to maximum! On C.W. or S.S.B. when A.V.C. is switched off, the R.F. gain level is set manually to suit.

SFERICS - colour codes are becoming 'vintage'. Newest resistors and condensers for surface mount technology have values printed on, shades of Philips in the 1930-1940 era!

ISSUE 8

The bumper edition which started our second year seemed to be just what members want from E.U.G., printing on both sides, as suggested by many of you, did allow an increase in the text contents and yet allow us to keep the "vintage" adverts. Just one criticism about the crossword solution being in the same issue, thus making it "too easy". The missing letter in the solution was, of course a "C" as in UCH. The index for issues 1-6 was compiled by one of our members, A. R. Clayton, and seems to be a very thorough job. It was also his idea since no members had asked for one and none was contemplated.

The list of known models, it was intended to produce a printed list but time was short and despite delaying posting of issue 7, it was necessary to go with a hand-written list, question of keeping faith with E.U.G. members. It has aroused interest, many not realising the large number of models which have been produced over the years, nor the variety which cover the spectrum from 10KC/S to 1000 MC/S (850 to 770S). The term "communications receiver" covers a multitude of uses, not merely S.W.L., amateur, ship to shore radio or military communications. Many were used in a measuring capacity in laboratory environments, meteorological balloon sonde data collection and early space research data receiving installations in many countries. Some of the more "serious" uses were for the various surveillance or information gathering agencies of the Government, the 880 and 830 series were built to a very high specification for this, whereas others such as the EA12 or 888 were amateur bands only models designed to incorporate features asked for by active amateurs.

Hopefully issues this coming year will match issue 7, both in contents and size. This will depend on your contributions to some extent.

Badges - the delivery date is about the date of publication of this newsletter!

As mentioned in the P.S. last issue, we are fortunate that Chris Pettit persuaded Eddystone Radio to help out with the cost of manufacture. This means that for £2 inclusive of p. & p. we get a high quality metal badge with hard enamel colours. If sufficient show interest in other items, i.e. tie-bars, then we will have these produced too. Members who expressed an interest in QSL cards or log sheets will be pleased to know that enquiries have been made about these, more in next issue.

RENEWED INTEREST

Surprising how the Gulf War brought so many Eddystones out of the closet! Members who have joined recently include one who was persuaded to resurrect his 358X after 37 years of inactivity and was "hooked" again. Another old timer remembering his days with a signal corps unit went out and bought a 730/4. Many queries from members concern suitable frequencies for hearing specific countries. This is hardly an E.U.G. topic since a copy of World Radio Handbook would be required to adequately cover this subject. If however, anybody does wish to contribute his experiences to the newsletter then by all means do so. A good example of this was the one by Peter Davis on air traffic control frequencies in issue 2.

A SMELLY TOPIC

Does anybody read "Radiophile" by Chas Miller, the acknowledged expert on vintage radios? On page 10 of his summer issue is a vintage ad for marconiphone "non-pong" valve holders, in this case the pong being not a nasal sensation but that very distinctive sound produced by a microphonic "bottle". The old valves were far more prone to this than the later glass based ones. The one I recall as being worst in my servicing experience was the 6K7G. At times replacements in a high-gain stage had to be chosen from a batch of new 6K7G valves - looking for the one showing least microphony. I have a 40 year old 6K7G, unused and unusable, still in its maker's box, on an AVO test it comes up perfect, in use it picks up every slight vibration.

QRT DAVENTRY

The closure of the BBC transmitting complex at Daventry after 66 years of operation is a break with the past for Eddystone in one way - 1925 was the first full year of production for Eddystone radios which had come on to the domestic market the previous year. Daventry was the home of 5XX and later 5GB, later the British Empire Service was beamed out from here for the benefit of amongst others, the many ex-pats who listened to news from home on their Eddystone Radios. In these years many of the factory's products went abroad to owners of tea plantations in India or Ceylon, rubber plantations in such far flung places as Brazil, Burma, Malaya.

OVERHEATING

Whilst not wanting to bring global warming and other similar "scares" into our newsletter, I do want to point out that our "hollow-state" models do need to have a free space around, under and over them for air circulation, the last hot summer brought quite a few letters from members complaining that, in the case of AC/DC models the series dropper had done O/C, or in the case of AC only models either the mains transfo had over-heated or other warm running components had failed! One common factor which emerged was that this, or these failures occurred in sets mounted in a closely confining area. A few examples from the mail which E.U.G. has received will illustrate the dangers involved.

1. An 840A mounted in a wall type cupboard behind a plywood screen which had an aperture cut to exactly fit the frontal dimensions of the receiver, no circulation of air from the room into or out from behind the screen. After two years operating in this position the dropper top section failed last July (hot spell).
2. A 640 which had books close against each end, an ATU and filter unit on top and only one inch space at the back of the receiver cabinet. In August last year after a prolonged afternoon operating session the H.T., failed accompanied by a loud "pop" V7 - the 6X5GT had failed by what I would have thought to be the impossible happening. The glass envelope had softened and sucked in to touch the electrode assembly which punctured the glass causing the "pop". I've seen that happen on a 1625 valve in an 1154 many years ago but to have it happen in a 640!
3. A 670A operated in front of the window in a garden shedshack, with direct sunlight and thus sun-heat falling on to the receiver. On this the scale glass cracked across, this was the original factory item not a replacement window-glass piece.

770R OWNERS

Take heart from Dave Lewis' experience in April this year, the 29th to be exact. Using his recently revalved and re-aligned 770II with a dressler ARA 900 active aerial. He heard the 50 MC/S beacon call sign "LA7SIX", actually it is on 50.051 MC/S. This was heard three times over a one hour period. Now Dave does live in Harwich and I know from my data bank here that this beacon beams just west of south, 190°. Proof that 770R or 770U models need not be deaf! As some members seem to believe! Dave can monitor 2 metre QSOs in France and Holland on a regular basis. Another regular "Listen" for him is the ship to shore and ship to ship traffic on 156 MC/S. The first three valves, V1, V2 and V3 are perhaps the most critical on these models, they must be in prime condition for best results.

SOLAR OPERATED 960

An interesting station is operated by a member in Anglesey, his 960 transistorised model, used in a caravan home year round, is fed from a 12 volts car battery which is on permanent trickle charge from solar cells mounted on a south-facing and angled rack, alongside the caravan. Over a three year period the solar array has needed no maintenance apart from cleaning or de-snowing in winter.

QUERY - Is there much difference between my EB35 and the EB35 MKIII. Phew! There sure is, two entirely different animals. Externally not a lot to see but this member's EB35 was very early model with all discreet tin-can transistors, mostly early Mullard PNP types of the O.C. and A.C. series. Several I have worked on had no input protection on F.M. and blown R.F. and oscillator transistors are common. The MARK III has 2 protective diodes in the aerial circuits. A necessity if the set is to be operated near transmitting equipment, i.e. shipboard use. The Mark III has much improved F.M. performance with A.F.C. as a function of the I.C. used, this is in the I.F. and A.F. stages. However, I do seem to recollect that short wave selectivity was marginally better on the early EB35, although I have never seen one myself, a stereo model was produced and marketed as the EB35 MKIIs. The original EB35 came out in 1969, the last Mark III in 1977.

QUERY - Second hand costs for 770R and 770U models. So many of these were made, all of which have now been disposed of, that prices are quite low. The Mark II versions are a better buy with a built-in calibrator. It is necessary to try them out since the circuit is so complicated that any D.I.Y. bodging is sure to be fatal. From adverts and rallies, I would say up to £100.00 for good specimens and down to £35 for the older Mark I in poor condition.

SFERICS - Why did Strattons use a 6V6 as output valve in the 640? Since from 250 to 500 M/Watt is sufficient audio power for the average den or shack, so said Scroggie! I have seen several 640 receivers where a 6J5 has been substituted with the necessary resistor changes. This cuts down heat production considerably. This mod appeared in a magazine I believe, can anybody locate the article?

SFERICS - Was shown a member's 940 with a boxed cirkit type KC/s digital readout screwed to the top of the cabinet. This receiver also had a small muffin fan mounted externally, screwed to the rear of the case close to the position of the rectifier. Rather spoilt the neatness but was effective.

S.O.S. - For sale 640 restored and working for £100 o.n.o. Wanted 830 or 940, write to G.J. Leese, 15 Ewden Way, Pogmoor, Barnsley, Yorkshire.

S.O.S. A source of 0.3 amp droppers for replacements on 670/840 series. Info. to E.U.G. please, will help many members.

S.O.S. Wanted 888 or 940 models, write to P. Chisholm, 141 Stanmore Road, Glasgow, G42 9AN.

S.O.S. Wanted by J. Reilly, 9 Churchill Crescent, Ballymacconnell, Bangor, N. Ireland, BT20 5RN any Eddystone, say EB35, 888A, 830, 940, EC10, EA12.

SFERICS - Several members querying the terms used in the "List of Models" sent with last issue -

- A.S.W.E. = Astronomical Short Wave Experiments
- M.I.M.C.O. = Marconi International Marine Co.
- C.E.P.T. = European Convention on Telecommunications
- I.T.T. = International Telephone and Telegraph
- F.S.K. = Frequency Shift Keying
- G.P.O. = General Post Office (Now B.T.)
- S.T. & C. = Standard Telephones and Cables
- D.W.S. = Diplomatic Wireless Service
- G.C.H.Q. = Government Communication Headquarters (and yes, two letters queried G.C.H.Q.)

SFERICS - One letter from a member who queried C.E.P.T. also queried S.E.T.I. which I am sure has never come up in this Group's newsletter! This is a long-term U.S. Government project called "Search for Extraterrestrial Intelligence". High powered multi-frequency receiving installations are continually listening out for any seemingly intelligent radio signals from space.

SFERICS - Please! If you want a postal reply to your letter send a stamp or SAE. If you think what you are getting for your £7.50, little is left for extra postage on extra letters.

GRANDDAD'S WIRELESS

Was asked by young neophyte SWL to "get going" a receiver originally owned and operated in the 1960's by a former amateur operator. When first delivered it was in a brown paper and string tied parcel. Opened up, the receiver turned out to be a nice clean looking 740, there was unfortunately a smell of damp. Removing all wrapping I had an externally unmarked and new looking 740, but there was a shock to come. A worrying feature before opening up the set was that the volts selector was on 110 volt. Upon looking inside I found all valves to be missing. The O/C dial bulbs gave a clue. Powering it up on a 240V supply whilst switched to 110V, must be the reason - blown valves! No primary fuse is fitted so I was worried for the mains transformer primary. These original transformers were however very liberally rated and I could see no apparent signs of overheating. A check on all windings with an AVO8 showed continuity and normal D.C. resistance. A full set of valves from my collection were fitted and new dial bulbs inserted. Before powering up I checked insulation between A.C. input and chassis, always worth doing for safety reasons, connecting the mains lead to my safe-block I powered the 740 up. As I did so I was monitoring the A.C. output on the transformer H.T. secondary. I usually do this as it gives a fair indication of the condition of a doubtful transformer. Everything seemed O.K. and after some 20 minutes there were no signs of overheating and the set seemed quite lively. A full check on voltages, as per makers listing, showed several discrepancies. H.T. at the hot end of the A.F. transformer was only 195V. The A.V.C. volts was low too, but I tackled the H.T. first putting a 50 UF 400 volt electrolytic in circuit, and chopping the leads to C57 and C58, brought up the H.T. to about 228V. Although seemingly O.K. these two electrolytics may have been damaged when the valves blew, or simply dried up. I replaced both from components in my junk box and found that H.T. was at 232 volts well within specification. One more component C42 in the A.V.C. decoupling was replaced and the 740 now performed well on all bands. Since the young owner had asked I located a pair of ex-RAF padded 'phones, checked them and totalled up. I could not charge full price (today's price) for the valves, some had prices on the box like 8 shillings and 6 pence plus p.tax! I decided that £15.00 was fair and delivered the 740 back to its new owner. His pleasure was offset by the cost, however we agreed on payment over three months and I threw in an old copy of W.R.T.H. - another new enthusiast!

SFERICS - Seen at Harrogate Rally, a green Ford Zephyr Mark I with an EC10 mounted on a bracket to the left of the steering column. A bumper mounted, ex-tank whip at the rear completed the rig. Only jarring note was a pair of walkman type phones on the dash!

FEATURED RECEIVER 990S

This is a semiconductor replacement for the 770U and is a new style front design, only half the height of standard Eddystones it has the usual slide rule dial and covers 230-510 M/CS and 470-870 M/CS. Two ranges using two separate tuner heads, of the trough-line tuned circuits type, each tuner has its own aerial socket and range is selected by switching power from one tuner to another. I.F. output goes to a common 36.5 M/CS I.F. strip which can accept an external input besides that from the tuners. Input to this I.F. strip is via either a 1 M/CS or a 6M/CS filter, then through six I.F. amplifier stages. A.M. or F.M. can be selected at will from the front panel. Two A.V.C. detectors provide separate amplified A.V.C. to R.F. and to I.F. stages. F.M. output is via a Foster-Seeley discriminator circuit. Two double-s ~~4~~ video amplifiers are in circuit simultaneously and provide video output to B.N.C. sockets, one is A.M. and one is F.M. Output is about 2.5 volts into 1K/OHM load. Audio is taken to either A.M., or F.M., A.F. amplifiers with separate gain pots;

Manufacturer's spec ; data is as follows:-

Input 75 OHM, output 3 OHM and 600 OHM. Noise factor 10-16 Dbs on Band 1 and 8-12 Dbs on Band 2. Image rejection is 50 Dbs minimum, common I.F. is 36.5 M/CS. A crystal calibrator switched from front panel is fitted. Built in miniature front panel loudspeaker, operation is from built-in 240volt power supply or from 13.6 volt source. A.V.C. specification is less than 12 Dbs variation for input variation of 70Dbs. There is a built-in "S" meter-cum-F.M. tuning meter. The tuning is flywheel assisted and very accurate tuning reset is possible. The Eddystone EP96B panadaptor is a matching unit, for visual monitoring of signals. Surprisingly for a 1965 design I do know where some are still in use!

SFERICS - An Eddystone catalogue for 1966 lists the following models - 840C, 940, 880/2, EA12, 770R, 770U, 990S, 850/4, 830/7 and EC10.

SFERICS - Mr. Butler, owner of both a 680 X and an RA17 has compared both under normal operating conditions. He finds very little to note between the two as regards sensitivity and stability. However, he does say convenience puts the 680X on top and it is also a much more "handsome" receiver, more acceptable to the XYL.

SFERICS - Have member asking, did Stratton's ever make a crystal set? I have to say No to this, although I have seen a mahogany boxed crystal and 1 valve receiver using Eddystone plug in coils!

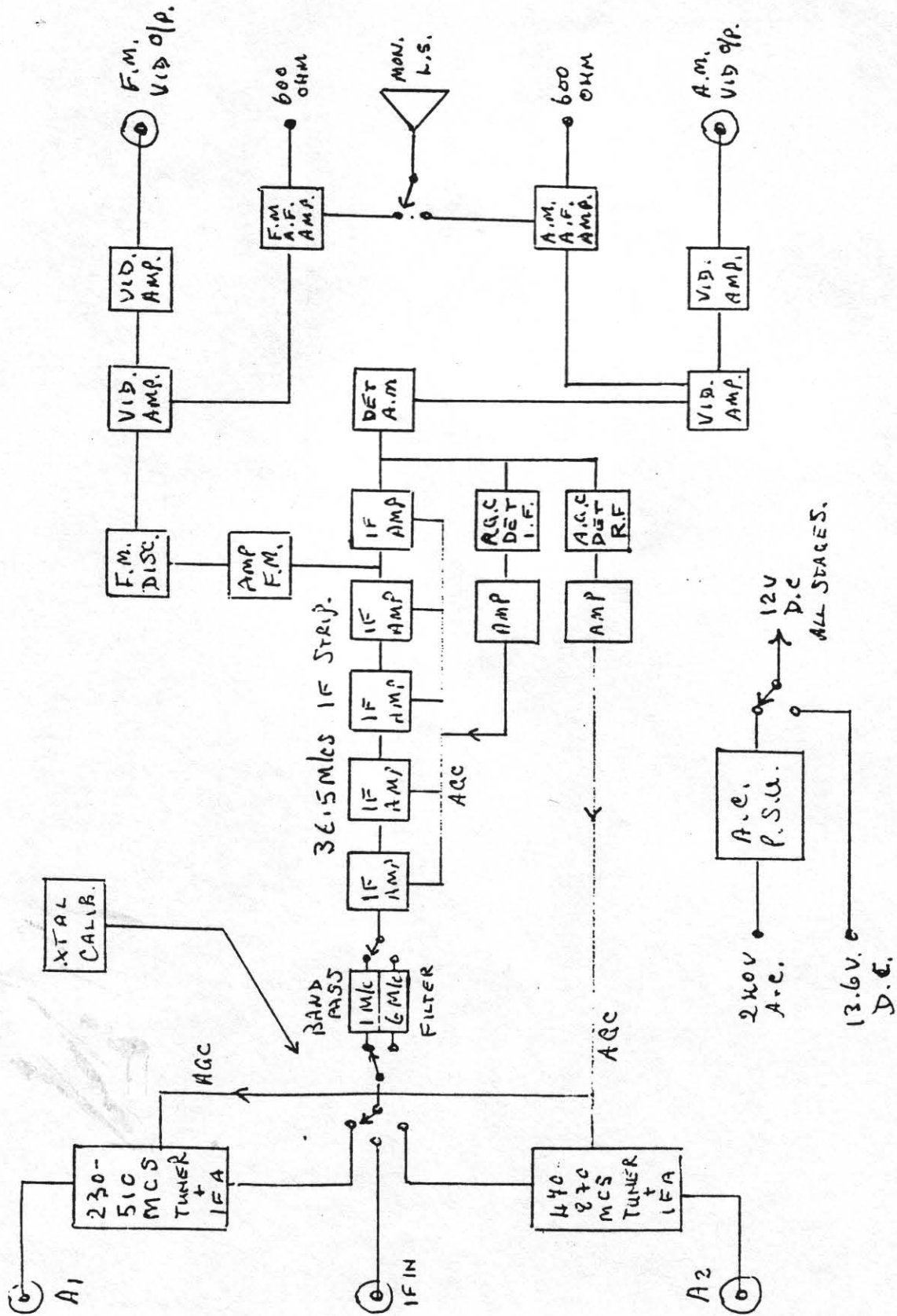
HINTS - If you really want to learn about hollow-state receivers, invest in a copy of Chas. Miller's "Practical Handbook of Valve Wireless Repairs" by publisher of "Radiophile". It's a must if you do your own servicing.

MEMBERS COLLECTION

New member, Ken O'Brien, has begun collecting Eddystones. His beginning is quite impressive with two of 730/4, 770R, 770R Mk.II, 770U, EC10 and 930. Besides these he has several "aliens" which he is interested in swapping for other Eddystones i.e. an AR88, 9R59DS and 2 of FRG7700. He says that he considers his collection hardly worth mentioning in this newsletter! Fooled you Ken.

BADGES (AGAIN!)

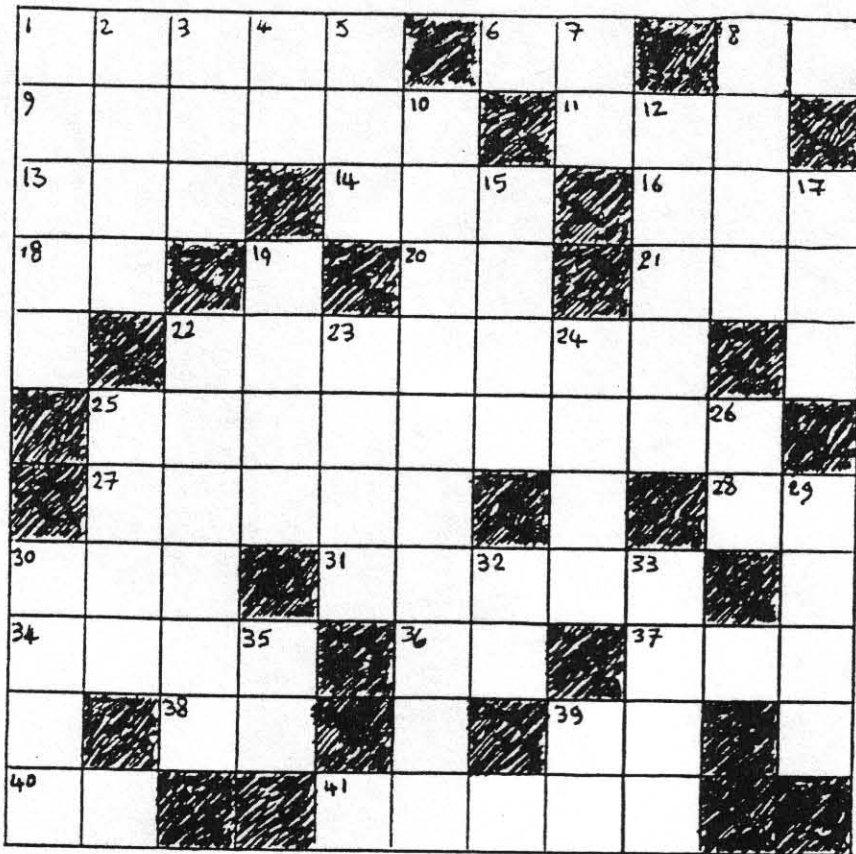
Orders for E.U.G. badges are already coming in from members - a good sign. We have been promised delivery mid-August and will start to fill orders immediately in the order that they are received at E.U.G. Apparently badge-collecting is a big thing these days and one non-member who collects badges has already ordered one for his collection of badges which numbers over 1,100! Wish I had that many Eddystones in my collection.



990 S. BLOCK SCHEMATIC.
E.U.G. ISSUE 8/.

ISSUE 8/
WELL

WELL, YOU
HAVE ASKED
FOR
ANOTHER
X WORD!



ACROSS.

- 1 - FOR SALE ADS.
- 6 - FROG S.W.
- 8 - MEANT THE BEST.
- 9 - FOR INCOMING OR OUTGOING.
- 11 - AN ADAPTOR.
- 13 - BACKWARD CODE.
- 14 - OLD G.P.O. BRANCH.
- 16 - BEFORE DADS ARMY.
- 18 - AND
- 20 - 746 WATTS.
- 21 - PREFIX FOR 5.
- 22 - EDDYSTONES NOT DESIGNED TO LISTEN TO THIS.
- 25 - CHOSE 10 LOGO.
- 27 - POINT.
- 28 - HE'S MANY.
- 30 - SEE 38.
- 31 - PUSH-PULL GIVES LOADS OF THIS.
- 34 - PEAK.
- 36 - AT THE END OF THE RAINBOW.
- 37 - MIDDLE STAGES.
- 38 - SEE 30.
- 39 - WAIT.

- 40 - 840 KIND OF RECEIVER.
- 41 - PROVIDES MORE OR LESS.

DOWN:

- 1 - CRACKLE WAS THIS.
- 2 - FSIG IS THIS TO FOSC, USUALLY.
- 3 - SEE 13.
- 4 - IS RED GOING UP.
- 5 - UNIT.
- 7 - WHERE SOUND COMES FROM.
- 8 - EARTH'S.
- 10 - SOURCE OF VISUAL I.D. (ERRONEOUS!)
- 12 - DO FOR MAXIMUM EFFICIENCY.
- 15 - USE WITH POLISH.
- 17 - DOES AS IT'S TOLD.
- 19 - INTERNATIONAL STANDARD?
- 22 - EDDY'S PEBBLES.
- 23 - MILITARY ORGANISATION.
- 24 - BACKWARDS PEASANT.
- 25 - A 680X FOR £20.00?
- 26 - ONE IN A PENTODE.
- 29 - 3 DOTS.
- 30 - IN & OUT AGREE, OR MULTIPLY.
- 32 - 670A WAS ONE FOR USE ON THIS.
- 33 - NOISE LEVEL.
- 35 - SENDING UP.
- 39 - 88 NOT 73. MAYBE 77.

HINTS - Squelch on your 940? One member has a solid state Darlington transistor, operated squelch which cuts input to o/put stage, operation is via the A.V.C. circuit.

HINTS - 6K8 is marginally better at H.F. than the Mullard ECH35. Checks on several of each type showed slightly higher local oscillator volts at frequencies above 25 M/CS. This was in both an S.640 and an S.358!

HINTS - Use grease, not oil, on geared drives of tuning mechanisms, but use sparingly and make sure none gets on to the drive cords. Graphite grease is ideal. Only place I do prefer oil is on the concentric pointer drive of an S.640.

HINTS - Knobs seized up on to shafts, put knob in position where screw hole is vertical and put in one drop 3 in 1 oil followed by one drop of turps or servisol. Leave overnight. Using the correct size of screwdriver or Allen key loosen grub-screw, remove knob. If knob is still sticking remove grub-screw completely, put another drop of oil in the hole, wait a few hours. This ought to do it. "Tippex" thinner can be used instead of turps.

Have been asked for another crossword. They will never rival the Guardian or Telegraph but if you like it - well here's another. If you have a radio related Xword send it in.

S.O.S. - Model 880, 2 of these for sale by Ray Devereux, 14 Keephatch Road, Wokingham, Berks. RG11 1QL. Must sell before emigrating to New Zealand, September 18th. Address in New Zealand will be 5 Melton Street, Timaru. Would like contact with E.U.G. members out there (Yes we do have several! Ted)

SFERICS - Member Mervyn Wicks takes me to task re differences between 888 and 888A, he adds that 888A uses a 6BE6 in a product detector circuit on S.S.B. This is not done on the earlier 888. He is promising copies of old Strattons SWL guides from which we will print useful bits.

SFERICS - A Cheshire based Hi-Fi amplifier manufacturer is offering a valve type audio amplifier unit using 4 x KT88 in stereo push-pull. A quoted feature is that valves are visible and heater glow can be seen through perspex top.

SFERICS - Gam 1 - the R.S.G.B. Ionosphere Propagation Station is on 3.812 MC/s with 1 KW of power. It is not a "beacon" as such yet can provide a useful indication of conditions being just up from the top limit of 80 metres.

SFERICS - Australians time frequency standard transmitter moved from 15 to 16 MC/S as of 8.5.1991. Reception is good in U.K. - try early mornings.

THUNDERSTORMS

The July storms this year seem to have had a damaging effect on solid state radios. Apart from the publicised ambulance control centre where equipment was ruined as lightning struck and ran down and around the control room, we have heard of several taxi firms knocked off the air. Radio Lancashire was silenced for some forty minutes in this area. Amongst E.U.G. members who have written to us on this subject, an EB35 front end transistors blown, a molten and welded coax feed line to an 840A, a neon discharge lamp across input from a long-wire, to earth, glowing and discharging continuously over a two day period. The most frightening was in Derbyshire where an aerial support tree was struck and little was found of the 66 foot long wire which had - a long established habit - been disconnected and left dangling with the end on the ground. If your solid state receiver does not have back to back paralleled **IN** 4004 diodes from aerial to earth terminal then do fit them! In a storm, before preferably, disconnect and earth all aerial leads.

AERIAL TUNING UNITS

We still get the enthusiastic letters from members who experience for the first time the way in which a signal can be peaked up when an A.T.U. is employed between aerial and receiver. A.T.U. is a misnomer since what the unit does is match aerial impedance to receiver input impedance, thus ensuring a more complete transfer of available signal, no miracles are needed here! One thing an A.T.U. can do is to help reduce QRM since it is in effect a bandpass filter. An ideal arrangement is a 2 way 2 pole switch arranged to give you either aerial applied direct to the receiver, bypassing the A.T.U. or, aerial through the A.T.U. to the receiver. Just a flick of the switch allows an instant comparison of signals - with or without.

FEEDBACK

Members have written in to recommend some dealers for the good service they have given. First seems to be Birketts of Lincoln, John usually manages to unearth those much needed components from the depths of his emporium - another recommended by several is Colomor whose stock of valves seems to cover all needs. Wilson Valves get a mention in our mail, pricewise they do seem to be a little cheaper. A.J.H. Electronics of Rugby usually have the odd Eddystone in stock. If you do get good service from a dealer, let E.U.G. members know. A good source for Eddystone spares was ~~Harold~~ Harold Turner of Centre Electronics in Birmingham, can anybody say whether he is still trading and from what address? The shop has been locked and closed recently. Items that appear to be in demand by our members are 0.2 amp dropper resistors, various types of Eddystone knobs and I.F. transformers which have been damaged by previous owners. Should you know of a source for these then do tell us.

APRIL 1962.

This advertisement invites **YOU**
to contact **HP RADIO** for

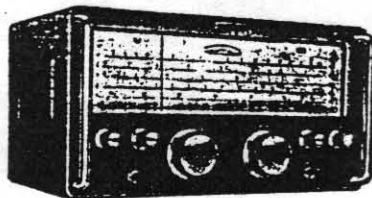
EDDYSTONE

RADIO RECEIVERS



EDDYSTONE 680X

A 15 valve communication receiver with many refinements, including crystal filter, variable selectivity "S" meter, push-pull output and stabilized supply to oscillator stages. 1110 kc/s to 490 kc/s and 2.5 to 30 Mc/s in 5 switched bands. Electrical performance, sensitivity for 50 milliwatts, 15 db signal/noise ratio, 4 microvolts on all ranges. £140.0.0

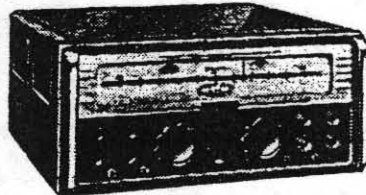


EDDYSTONE 840C

Communication receiver at a moderate price. 8 88A valves in a straightforward superheterodyne circuit. 5 wave bands 30.6-10.5 Mc/s, 10.6-3.7 Mc/s, 30.6-10.5 Mc/s, 10.6-3.7 Mc/s, 3.8 Mc/s, 1.4 Mc/s, 205-620 Metres. Sensitivity better than 10 microvolts. Selectivity 30 db down to 10 kc/s off resonance, AC/DC. Internal speaker. £58.0.0

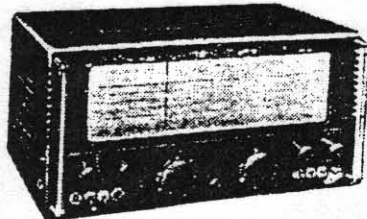
EDDYSTONE 880

The Eddystone 880 high stability communications receiver has been designed expressly for use in professional communications systems. Tuning range is from 500 kc/s to 30.5 Mc/s. Please write for technical specification. £180.0.0



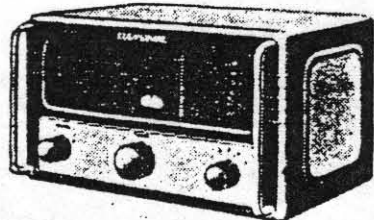
EDDYSTONE 888A

A 12 valve receiver designed for the amateur bands, giving full bandspread. Double superheterodyne with high selectivity and excellent signal to noise characteristics. Crystal calibrator audio filter, separate gain controls, oscillator trimmer. Frequency 1,800-2,000 kc/s, 3,500-4,000 kc/s, 7,000-7,300 kc/s, 14,000-14,350 kc/s, 21,000-21,500 kc/s, 28,000-30,000 kc/s. £110.0.0



EDDYSTONE 870A

A compact, precision built receiver for the home, giving news and entertainment from the whole world. 5 wavebands, vernier device, AC/DC operation, built-in mains filter and loud-speaker. Two tone metal cabinet £33.0.0.



HP

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Model No.	Cash Price	Deposit	12 Monthly of	Model No.	Cash Price	Deposit	24 Monthly of
870A	£32 12 0	£6 18 0	£2 8 8	870A	£32	£6 12 0	£1 5 4
840C	£58 0 0	£12 0 0	£4 2 8	840C	£58	£12 0 0	£2 4 0
888A	£110 0 0	£22 0 0	£7 17 8	888A	£110	£22 0 0	£4 4 4
880X	£140 0 0	£28 0 0	£10 0 8	880X	£140	£28 0 0	£5 7 4
				880	£280		Cash Only

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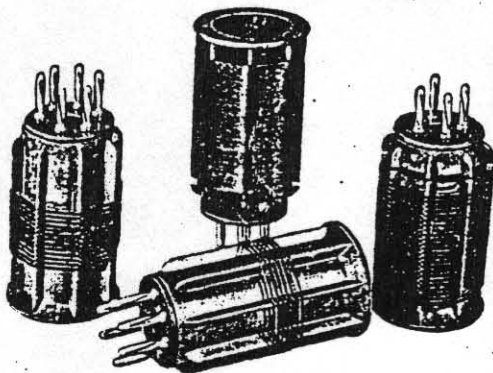
If payments are completed in 6 months

ONLY CASH PRICE WILL BE CHARGED.

EDDYSTONE

9 METRES

2,000 METRES



Interchangeable Coils for all Waves.

D.L.-9. LOW LOSS DIELECTRIC.

These Coils employ formers made from the new low loss dielectric D.L.-9, a dielectric far superior to bakelite for high frequency use. A complete range is available with 4-pin and 6-pin bases, having two and three windings respectively. The short wave coils are space wound with 22 gauge enamelled copper wire on threaded formers, the higher wave coils being single layer wound with enamelled wire except the long wave coil, which consists of a number of windings in a slotted former. The form shape is such that the coils are highly efficient and also mechanically strong in construction. The range of coils is designed so that 4-pin and 6-pin coils can be used in the same circuit. All wave ranges given are with a .00016 mfd. condenser and are approximate figures allowing for circuit load.

6-Pin Type. Cat. No. 959.

Type	Metres	Code	PRICE	Type	Metres	Code	PRICE
Type 6BB	9-14	EXBB	4/-	Type 6P	150-325	EXPI	5/-
Type 6LB	12-26	EXLIB	4/-	Type 6G	260-510	EXGO	5/-
Type 6Y	22-47	EXYEL	4/-	Type 6BR	490-1000	EXBRO	6/-
Type 6R	41-94	EXRE	4/-	Type 6GY	1000-2000	EXDOY	6/-
Type 6W	76-170	EXWO	4/-				

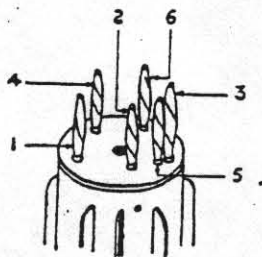


DIAGRAM 1—
Pin connections for 6-pin coil base.

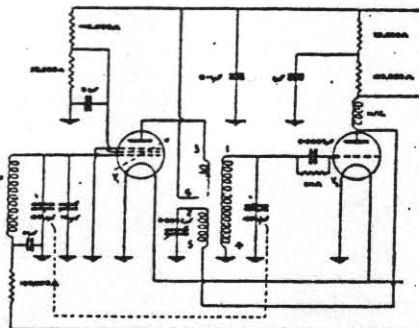


DIAGRAM 2—Tuned H.F. stage using 6-pin coil as H.F. transformer, aperiodic primary, tuned secondary with reaction.



Comment in the last newsletter re the 10P13 being a replacement for the N78, well nuff sed. To all those who wrote in and to the member who wrote in with the original snippet, thanks a lot. Dave admits he confused the N78 and the UL41 which is a direct swop for the 10P13. A 6AQ5/EL90 can be used in place of an N78 but will need a change of bias resistor and pin connections.

Quote from a letter to EUG "whilst agreeing with the present format and make-up of the newsletter, why can you not publish more complete letters from members?" Well your letter of four pages is a good example, not all our EUG members are interested in Pye or Ecko domestic radios. The Eddystone item is going into the next issue but then that is just one part of the letter. Anyway, cost alone would be prohibitive. Some of our members are very active and Kathy and I do appreciate all the good info that we are getting from members. This is all filed and to be used in future issues. Our members Down-under, especially Bryan Marsh, and Ross Paton, are most prolific, sending us lots of info regarding the penetration of Eddystone into New Zealand. Tor Mathinsen has also filled us in on the importation of Eddystone products into Norway. At home we have Richard Baker to thank for much of the data on the pre-war models and many connections to our model list.

S.O.S. Tor Marthinsen. P.O.61.3101 Tonsberg, Norway, has apart from his collection of Eddystones an HRO-MX for which he needs two screening cans for 6D6 valves and any spare coil packs, can any member help.

Bearded Transistors

The AF.....series of germanium transistors as used in some EC10 or EB35 models have a nasty habit of growing collector to screening can, whiskers. A symptom of old age no less. The cure is usually quite simple. These are four legged beasts and by simply cutting the fourth leg which earths the can transistor will function again. Since the can is now at about collector potential it is advisable to put a sleeve of polythene over the can, otherwise a wrapping of adhesive tape.

A De-luxe 750?

I have never encountered this version before but have now seen and worked on it. This 750A has a built-in 'S' meter but is otherwise the same as the standard 750. It does have knobs different, more up-market and distinctive. It was non-functional when received and no glow visible from the valve or dial lamps. First job was to replace the cracked and crumbly rubber mains lead. A new toggle switch gave continuity in the mains primary circuit but still no glow in the stabiliser valve. A closer look showed that three valves were now lit up. Removing the rectifier valve I found a coating of green mould on the pins and on the socket. This was repeated on several other valves and so all were cleaned with switch cleaner and a stiff brush. This time all the valves lit up and the stabiliser valve had a nice healthy glow. Still no dial bulbs though, these were replaced and that was cured. A mass of green mould on the brass rod which carried the dial pointer was now removed and a fine layer of Moly-grease was left on the rod. Hardened grease on the bearings of the variable condenser was softened with the pencil tip of a hot soldering iron and

a few drops of Moly-oil were put on both bearings. The 750A was now working well and some calibration checks were done, these showed that apart from range 1, at the 30 MC/S end all was well. A touch on the trimmer put this right. The set was now ready for return to its owner.

Amongst new models come to light as a result of the model list which went out with issue 7, we have the EC10A/2 which has a 2182 KC/S switched crystal position and a modified long wave band covering 300 to 550 KC/s for NDB use. This has meant a change in I.F. from 465 to 720 KC/S. An early production model was presented to the Principal Keeper of the Eddystone Lighthouse by Mr. A. C. Edwards, a Director of the Eddystone Radio Company, also thanks to our New Zealand members we now know of both a 680/2 and a 680/2A, with serial numbers FA0059 and AA0159. It is proposed to issue a revised model list with the first issue of our third year.

Has anybody heard the beacon GB3RAL on 28.215 MC/S. This is operated by the Rutherford Appleton Laboratory. It is a good signal to look out for on your HF receiver or on your 770R and its purpose is to assist research into propagation effects.

Somebody asked why so few members ads in the newsletter? Well, basically because we can put the 'needy' in touch direct with a source. At EUG we have got on file offers of parts or components and we can quite often match up an ad with a source without the need for an ad.

Thanks to Richard Baker we have now info on pre war models such as the Sphinx and the All Wave Eight. These are going to be used in later issues as featured receiver since so many of our members ask for info. on them. This brings up the point that we do feature a particular model according to the number of requests that we get.

..... S.O.S. M. STEVENSON. 124 GREEN LANE.
EASTWOOD. ESSEX. HAS FOR SALE AN EC10 & A 7704/2
BOTH WITH MANUALS & IN G.W.O.

EARLY PRODUCTION VERSIONS

Having recently got the manual for the early EC958 and 958/1, I was able to compare this with my much later 958/9 - the independant side band model. There are vast differences between the two. Similarly with an early 830/3 and the 830/9, the manuals are quite different for these versions. If you need help with an Eddystone and write to E.U.G. then do not just say 840. If you have an 840A or 840C by quoting model number and suffix plus serial number if known, we can help much more quickly. From one letter in which the model was identified as "covering 10, 6, 4 and 2 metres" I knew it was a 770R but did not know which variety. There are, to my knowledge, fourteen listed versions of this model.

NEW ZEALAND MEMBER

Bryan Marsh of Auckland has sent in the item on his restoration project on a 750. His quest for an 880 may be now over since he has been put in touch with a U.K. member, Ray Devereux, who emigrates to New Zealand in September and who owns two 880 models. Just one way E.U.G. can help members. Bryan makes suggestions and comments on the newsletter - some have already been implemented in issue 7, before his letter arrived! As of now I know of three 940, two 990R, one 990S, one 640, two 830 and one 670A in the Anzac area!

S.O.S. Wanted, I.F. transfos for 840C or defunct 840C for spares. Also wanted "S" meter. Will pay your price for these items. Telephone Dr. Jarrett on 021-705-7626.

S.O.S. - can anybody help Keith Greenwell with Yaxley type wafer switches for his 940? Address is 4 Preston Path, Luton, Beds. LU2 7SD.

S.O.S. Do you know of any source of spares for Eddystones? Have you any available surplus to your own requirements? Please let other members know by writing into E.U.G.

HINTS - The fine stranded steel "drive cord" on Eddystones can be replaced with nylon drive cord if you are not able to get the real thing, however I was able to purchase some very similar and suitable steel "wire" at a hobbies and model shop. Expensive at 85 pence per metre though.

NOISY B.F.O. ON A 750

This 750 was fine in all respects except for a "rushing noise" when the B.F.O. was on and tuned to Zero beat with a carrier. It was remembered that a similar fault had been found on a 640 some years ago. This did help since I was able to immediately go to C59, a 20pF silver mica soldered to the V6 to I.F.3 junction. This B.F.O. feed condenser was faulty and a replacement cured the problem. Now this was a high voltage component operating only a few volts above earth! Why should it have failed in such a circuit configuration? Hard to understand but it does seem to be a dud, it will not "read" on a capacity meter at all!

SFERICS - Whilst on the subject of the 750 model, the fuse is not in the primary A.C. circuit but in the centre tap to earth of the secondary. A point to remember.

SFERICS - "Featured Receiver" items on the following 1930's models are being prepared for future issues of the newsletter. If you want to see these models then ask! That is how we choose next month's model - by the number of requests. Strange thing is that some of the more common models are not asked for. Issue 9 is to feature the 770R with the EB35 in issue 10. After that it is up to you. - **SPHINX, E.R.A., ALL WAVE EIGHT.**

HINTS - Rain static, a continuous popping noise on the signal during heavy rain, it can easily be cured by putting a resistive discharge path from earth to aerial sockets. A good value is $\frac{1}{2}$ meg but it is not critical. This static is usually only a nuisance where no direct D.C. path exists, as where a condenser is in series between aerial and earth for matching purposes.

S.O.S. Ken O'Brien of 18 St. Helens Road, Dorchester DT1 1SD, wants to buy or swap Eddystones with members. Write in first instance.

SFERICS - It is almost a certainty that, after 20-30 years electrolytics will be dried out, low in capacity. In a cathode bias circuit this can cause low bias volts, increased negative feedback resulting in low gain and distortion from varying bias level, they only cost pennies so why not replace them?

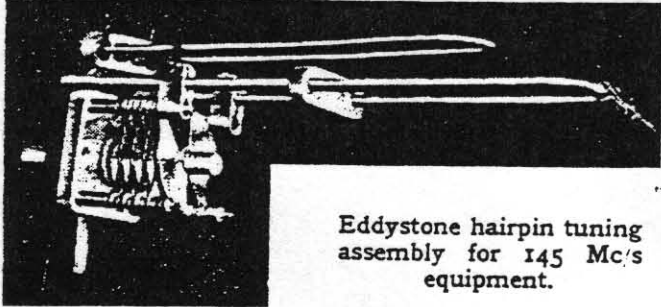
145-Mc/s Tuning Unit

THIS unit consists of a small butterfly-type variable capacitor, a hairpin-shaped single-turn coil and a coupling loop assembled on a single bracket. It is intended for the new amateur band of 145-146 Mc/s and can be used as a local oscillator circuit for a V.H.F. super-het or convertor, as an inter-stage R.F. coupling or as the tank circuit in a 145-Mc/s transmitter.

When used in an oscillator it would seem advisable to anchor the

far end of the hairpin inductor to an insulator, as at these very high frequencies the slightest vibration can cause very bad frequency flutter.

The hairpin loop fitted is 6in long and spaced $\frac{7}{16}$ in. It is secured to the capacitor by small clamps



Eddystone hairpin tuning assembly for 145 Mc/s equipment.

which allow easy adjustment for length.

The coupling loop is supported on a sub-bracket which can be removed from the main bracket and mounted separately if required. Adjustment of the coupling can be made by bending the loop towards or away from the tuned hairpin.

Wide spacing (0.052in) is used in the capacitor and as the flashover voltage exceeds 1,500 R.M.S. no special precautions are needed when the unit is used as the tank circuit in a 145-Mc/s transmitter with anode modulation. The maximum capacitance is about 4pF, but this is more than sufficient to cover the full 145-Mc/s band when it becomes available.

All the metal work, except the bracket, is heavily silver plated and ceramic insulation is used throughout.

The makers are Stratton and Co., Ltd., Eddystone Works, Alvechurch Road, West Heath, Birmingham, 31, and the price is 17s 6d.

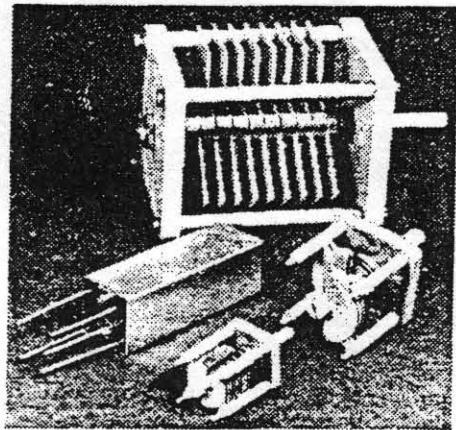
NOV. 1948.

H.F. and V.H.F. Components

A NUMBER of new Eddystone components for short- and very short-wave receivers and transmitters have been introduced by Stratton and Co., Ltd., Alvechurch Road, West Heath, Birmingham, and, together with existing items, will be included in a new catalogue shortly to be issued.

Among the new items is a series of transmitting capacitors in split-stator, differential and plain types ranging from 25+25 pF to 250 pF. The specimen shown here is a 100-pF size with vane spacing of 0.08 in and it will stand up to the highest r.f. voltages likely to be encountered in small transmitters provided the d.c. is applied through a parallel path. End plates are ceramic $2\frac{1}{2}$ in square.

In contrast to the above is a new miniature Microdenser in butterfly, split-stator and plain types. A single ceramic back plate measuring $\frac{1}{4}$ in square is used. The capacitances are 25+25 pF or 50 pF according to type. For comparison of sizes we include in the illustration one of the normal Microdensers of 15+15 pF in split-stator style mounted on a ceramic end-plate 1.3 in square. All metal parts in Eddystone capacitors are heavily silver plated.



Selection of new Eddystone components, comprising 100-pF transmitting capacitor, standard and new miniature Microdensers and 5.2-Mc/s discriminator transformer.

Of interest to builders of f.m. receivers is a range of 5.2-Mc/s i.f. units in small metal cans 0.8 in square and 2.4 in high. Included are discriminator and plain i.f. transformers and a BFO unit.

JAN. 1954

SIGNAL STRENGTH METER.

Connections for an "S" meter have been brought out to a socket at the rear of the receiver (see Fig. 4). The wiring to the socket is shown in the circuit diagram Fig. 1 and the wiring of the meter unit is given in Fig. 9.

It will be noticed that one diode of V8 is in series with the "S" meter. This method of connection prevents reverse current flowing through the meter when the R.F. gain is reduced, thereby upsetting the normal balance of the circuit. The "S" meter can therefore be left in circuit at all times without possibility of damage.

The full scale deflection of the "S" meter is 200 microamperes. Normally, the bottom bend characteristic of the series diode will result in sluggish meter action at low signal strengths. To overcome this the needle of the meter should be set back about $\frac{1}{4}$ inch below zero by means of the mechanical zero adjuster, with the receiver switched off. Then, with the receiver functioning normally for telephony reception and with the aerial and earth terminals shorted, the "S" meter needle should be set to zero by means of the electrical balance control.

The following arbitrary scale of current through meter against "S" strengths is based on a figure of 6 db change per unit:—

S1	7.5 microamperes
S2	16 "
S3	27 "
S4	41 "
S5	58.5 "
S6	77 "
S7	100 "
S8	125.5 "
S9	157 "

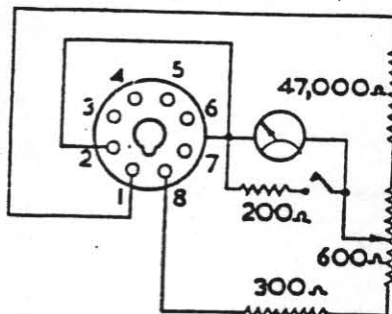
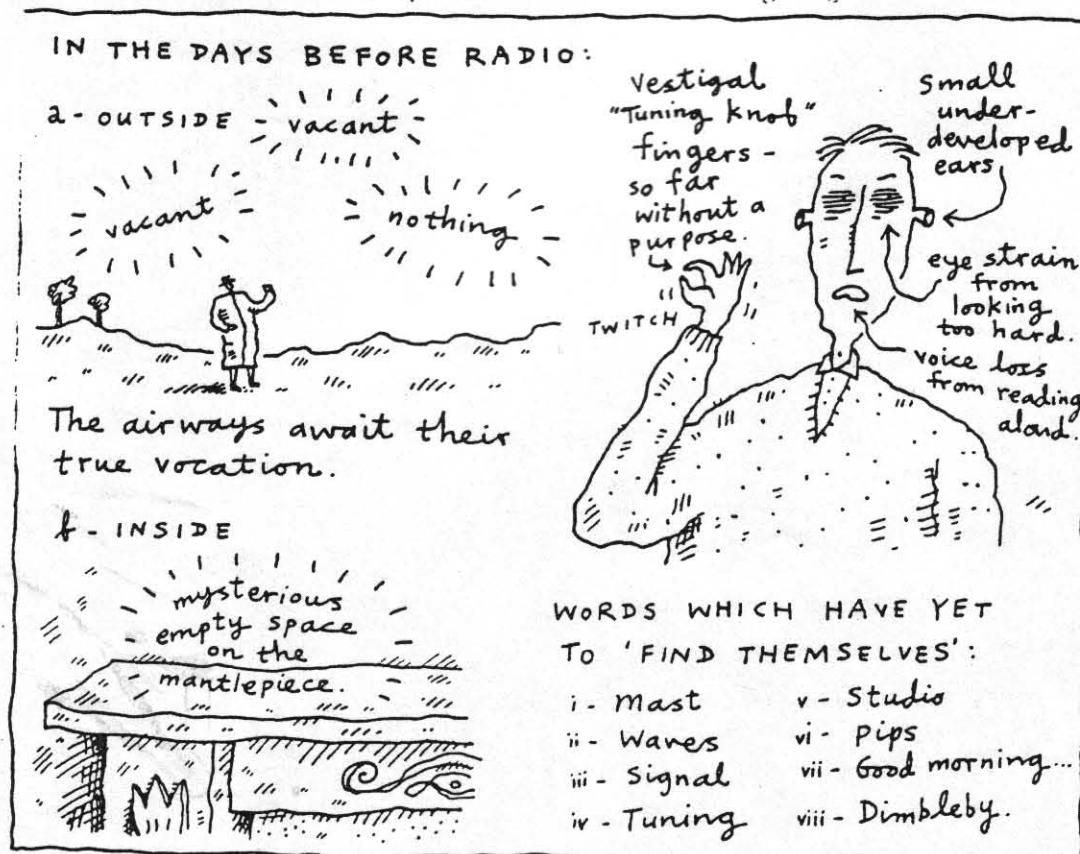


Fig. 9. Circuit of "S" meter.

SUITABLE FOR, - 640 - 750 - 888.



-SFERICS-

A non-member from Devon is offering a VHF 770R Mark II/2 for sale to any EUG member or will do a swop for anything suitable for HF use of equivalent value, a complete set of valves and a manual go with the set. If you are interested please contact him on 03054 3373. ASK FOR PATRICK.

Sam Rees in the United Arab Emirates has been able to get hold of a Hagenuk 958/H which has spent its working life on board an oil barge in the Gulf area. This is in addition to his other 958 which came from the British Embassy in Dubai. The state of the 958/H as shown by his photos indicates that a fair amount of restoration will be needed.

News from Tor Marthinsen in Norway that by 1947 Eddystones were being imported into Norway by 'Heftye & Frogg', an advert in 'Radio-handeleren' offers an Eddy stone communications receiver at the price of sixty one pounds - but does not state which model, Tor guessed at it being a 670.

Ross Paton is curious about the 358 series and the ECR and wonders if any were imported into New Zealand. Some must have got there on Navy ships during WW II as the 358 series saw a lot of use then. Another point that Ross might consider is that Strattons did a lot of business with Australia in the late thirties and that even now the parent company Laughtons are active in Australia. Laughtons PLC of Melbourne is the result of work done in the 1930 era by G.A.Laughton on behalf of Strattons. Whilst this was for the Men's Jewellery side of the business I would have expected some imports of radios.

Dave Parker has a pre-1940 model, the Quadradyne, at present minus all valves, he is doing a leisurely restoration of the set with the help of our only other member with this model.

A recent arrival is a complimentary copy of the book, 'A Century of achievement'. The history of the parent company of Eddy stone. This details the first one hundred years of Jarrett and Rainsford up to 1960. Quite a lot of the book does

deal with the jewellery side of the business, but the history of Eddystone from day one. R.H. Weake the present Managing director of Laughton & sons points out that the company do still have offices in London, Paris, Sydney, New York and Providence. Some further historical info on the radio side of the company will be in future issues.

Have been able to put Keith Seddon directly in touch with somebody offering him a part dismantled 640 to complete his restoration job. Our 'needs' file has come in useful again.

Back to long term use on 240 volts of those older models with a 230 volts tapping. This does constitute an overload on the transformer primary and will eventually cause damage to the transfo, and general overheating. One member has come up with the idea of a 33 ohm wirewound, 5 watts resistor in the primary circuit of the transfo. This drops the extra volts and protects the set.

Time Travel with Eddystone ??? Jens one of our scandinavian members writes to say that living, as he does, on the Swedish-Finnish border where his home is in one time zone and his shack in another, he daily travels back in time one hour to go to his shack and use his 358K and 640 receivers. These are used on C.W with a 6V6-6L6-F/P 807 transmitter built in the post-war era. After going QRT he then travels forward in time on his trip home. This is done some four or five times a week. - Shades of H.G.Wells. His 358K was salvaged from a WWII british trawler used by the R.N and came to him via Kirkenes in northern Norway where it had belonged to a Norwegian SWL. Although re-valved several times no other repairs appear to have been done.

BADGES, It seems that they are already serving their purpose as one member writes that he met up with another at the recent Freston Rally simply by recognising the lapel badge. This enabled them to spend time discussing not only EUG but also their own Eddystone models. Any more 'Close Encounters' let EUG know please and we will publish them.

Rough condition....Fingerplate lettering non-existent.....I.F.Gain not working.....'S' Meter not working..... Poor performance and out of alignment. My big problem was removal of the front panel to renew the I.F.Gain pot. The brass tapered cheesehead screws which held the panel on to the chassis had been 'butchered' at some time or other and could not be removed even after grinding the blade of a large screwdriver to fit what was left of the slots plus some lubricant, the offending screws had to be drilled out. Substitute screws the only type available out here, were ordinary brass round heads which meant counterboring the front panel holes to suit. This was not only my own idea, but also from an experienced radio serviceman. While all this was being carried out the open circuit HT Choke was sent away for rewinding. Bridging it out meant that the operating voltage had been working at about 50 volts above normal. While the front panel was off I decided to clean the inside of the dial glass, which is a job on its own. The easiest way to do this after a lot of thought was to tie the wire dial cord to the pulley with masking tape. Doing this means that the dial drive mechanism can be removed as a complete unit without disturbing the dial drive cord and gears. The dial scale can now be taken off and dusted. Note do not use any cleaning fluid etc. as you may rub off some of the lettering. After cleaning the glass everything can be reassembled and the front panel put back in place not forgetting the washers (spacer) between the panel and the chassis. When refitting the controls, switches etc. make sure that they are back in the same position as originally fitted. Check that there are no broken wires or solder lugs touching each other. I should mention here that I repainted the finger plate and painstakingly put the control names and numbers on with letterset and finished off with a good coating of clear polyurethane. From now on things were more or less plain sailing. Wiring checked, valves which could not be replaced with new ones checked. Here it was noted that the external 'S' meter which was not working had an open circuit valve. The 750 will still go if this valve is faulty. The alignment and peaking up (I.F.s not touched) was carried out, but as the slug in Band 3 mixer stage was damaged it had to be left alone as I had no spares. The 750 now started to really perform. Only one problem with the alignment of Band 2, the calibration was spot on at 5 and 10 M/Cs. but a bit out at the top of the band, the BBC on 12095 was high. Nothing much to worry about and the owner was very pleased to get his pride and joy going again at a cost of \$50, a very reasonable price considering that the choke rewind was \$30. Note, I did not ask much for my labour, just the love of doing it. Not so happy was a new member to the hobby of DXing who had bought an Eddystone 840A for \$450 when a fair price would have been about \$100. Result was an article in the New Zealand DX Times titled "Let The Buyer Beware"

SOLUTION TO X WORD IN ISSUE 8,

1	B	2	L	3	U	4	R	5	B	6	P	7	O	8	G	9	B																												
9	A	E	R	I	A	10	L	11	P	12	A	N	13	K	S	Q	14	R	I	S	15	L	D	V																					
18	E	S	19	C	20	H	P	21	I	S	O	22	S	23	I	N	G	24	I	N	G	25	S	T	R	A	T	T	O	N	S	26	N	S	27	N	O	R	T	H	28	E	29	G	D
30	T	I	N	31	O	O	M	P	H	32	A	33	A	34	A	P	E	X	35	U	V	36	I	F	S	37	T	38	S	39	A	S	H	40	G	C	41	G	E	A	R	S			

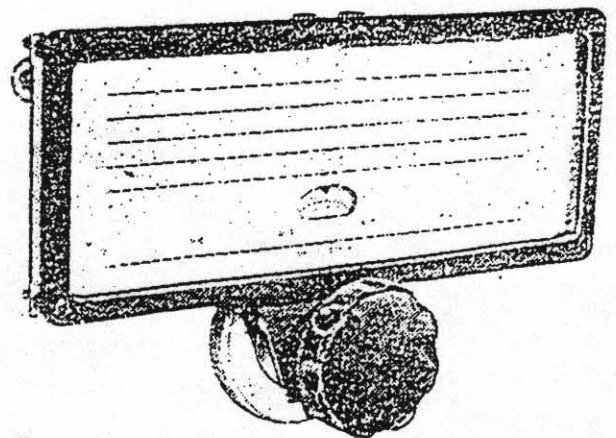
YES, I KNOW ABOUT #10 DOWN SPELLING, BUT READ CLUE AGAIN!

Precision Slow-motion Drive

A WELL-MADE slow-motion drive unit (Eddystone Cat. No. 898), intended primarily for precision instrument applications, but eminently suitable also for home-constructed communications receivers, has been introduced by Stratton and Co., Ltd., Eddystone Works, Alvechurch Road, Birmingham, 31.

A pendant pointer 2½ in long travels horizontally across six scales 7 in in length; five are blank for the instrument calibrations, but the bottom one is engraved 0 to 500 in steps of 100. A circular vernier scale marked with 100 divisions makes five complete revolutions for a single traverse of the main pointer, and in conjunction with the 0 to 500 scale provides 500 divisions for precise calibration, or for logging stations if the dial is fitted to a receiver.

The movement is gear-driven assisted by a loaded flywheel, giving a smooth, positive drive with an overall reduction of 110 to 1. The dial measures 9½ in x 5½ in, weighs approximately 1 lb 4 oz, and is fitted with a Perspex window in a die-cast surround finished in glossy black. The price is £2 18s complete with knob, fixing screws and a drilling template for mounting, and it can be fitted to wood or metal panels of up to approximately ½ in thick.



Eddystone geared slow-motion drive unit with overall ratio of 110 to 1.

FEB: 1959.

SFERICS - The condenser used in grid coupling must be above reproach. It should be a mica or ceramic type, not an electrolytic or paper. Any slight leakage will push up the grid bias volts causing distortion or even complete cut off.

Original advertised "new" prices for some models are as follows:-

670	£51. 3. 0.	960	£135. 0. 0.
680	£85. 0. 0.	940	£125. 0. 0.
888A	£110.0. 0.	840C	£ 58. 0. 0.
640	£27.10. 0.	870	£ 30.17. 6.
750	£68. 0. 0.	ECR	£ 45. 0. 0.
680X	£106.0. 0.	880	£390. 0. 0.
840A	£49. 0. 0.	870A	£ 33. 0. 0.

Do you know any more? Please let us have details.

Some members make do with a piece of wire around curtain rail as an aerial. Michel in Canada has an 800 foot long wire running east to west across a bay! That's about a half wave at 500 metres/600 K/cs.

Sferics - Thanks to Murray Thomas and Mervyn Wicks for the Vintage ads. If you have any send them in. Thanks also to Tor Mathinsen.

S.O.S. Wanted EA12 or EC10 can do part exchange for Heath SB303 amateur bands receiver. Contact J. Reilly, 9 Churchill Crescent, Ballymacconnell, Bangor, N. Ireland BT20 5RN.

QUERY - From a member. The first Eddystone receivers came on the market in about 1922, some say 1923, by 1927 they were being exported in quantity.

HINTS - On a 730/4 modulation hum on stations only was due to R.68, a 22K, going high in value, to 49K. Needs to be a 1 or 2 watt. Also on 730/4, weak calibration pips above 15 M/cs - adjust slug core on calibrator unit, not the trimmer - which adjusts crystal output frequency.

HINTS - Two members with 940 faults - check R44 gone high, to 199K. Also C43 leaky so R₁₉ overheating, gone up to 43K.

SFERICS - July 1991 sees a complete re-hash of Marine Radio frequencies on a world-wide basis. Many will no longer be needed as they have been superseded by satellites.

That's it for Issue 8. Thanks to all old members for re-joining our second year. Thanks also to those who have sent in vintage ads or contributions.

C.U. 73

Kath and Ted