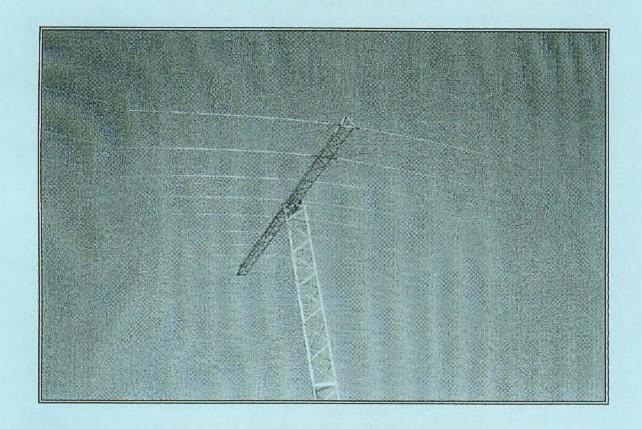
# Lighthouse

Founded 1990

The Magazine of the Eddystone User Group

Issue 93, October 2005





Every EUGer's Garden should have one!

was also plagued by QSB on signals varying from S1 to S9. No good at all for chatting and at 9.30 I stood down and let the other two get on with it.

Ted reported no QSB and no QRN! It's amazing what a good ground-plain of brine does for you.

#### SEDOND SUNDAY, 40Metres

This was on 11<sup>th</sup> September and there were NO signals heard on my chosen frequency of 7140 (to avoid b'cast splatter). No amateur signals were to be heard in the 'new band'.

The 'old band' produced a rather scratchy selection speaking French, German, Italian and (possibly) Serbo-Croat. One of the German-speakers was working an English station, of which absolutely nothing could be heard.

Reports came in on e-mail; first from Chris MØHMR in Gloster who heard no AM but located a strong English voice on SSB. This turned out to be OZ1KGV in Denmark, not an isolated instance of NVIS! He also heard stations speaking French, German and Spanish and noted that this is about what we expect this year.

Peter, DC6BN, who usually reports that he's getting me fine in northern Germany, was, on this occasion, masquerading as GW7IZG in Milford Haven. (The 'new' band is not yet released in DL). He e-mailed that he could hear NOTHING in our nominated part of the band.

It is a matter of some concern that DRM stations have started to operate in the 'new band'. These initials stand for the French equivalent of Worldwide Digital Radio and is a system of producing QRN/QSB-free 'hi-fi' on short-waves. Special Rx needed, of course. But the big deal is that these stations aren't supposed to take up any more bandwidth than an AM

station (≈5 kc/s) but those that have been heard (afternoons at S9 plusplus) cover about 50 kc/s with whitish noise. One has been detected in Germany (DRF) and it would appear that advantage is being taken of the clearing of the band for primary occupation by hams.

On now to the last AM test of the period, the third Sunday in September (18<sup>th</sup>) on eighty metres. (3625 kc/s). I expected a good little net here and was quite taken aback when, after several long "CQ Eddystone" calls the result was one station calling me at 2 & 2 and nothing else!

I couldn't identify the caller so my apologies to him. And the QRN level was quite reasonable; no coke was being shovelled. After a short while a strong carrier netted onto me and I listened expectantly. It opened up on SSB!

However, Ron, G8URU, near Carlisle was back in hospital, (now recovering from hiatus hernia - good luck, Ron!). Ted was on a sandbank scraping "Esselle's" bottom!

I had to move down to 3618 to avoid the sideband splatter (!) and I was quite clear of the regular AM "Boat Anchor" net on 3615. Still nothing and tuning down to the latter I heard one of the members saying that he was troubled by the EUG net on 3618.. (!)

One up for my Eddystone 888A which had no difficulty in separating the channels. So I decided to move down and join them. Two of them were our members anyway!

Mervyn, GW8TBG, (near Swansea) who is always a splendid signal here in Bewdley, issued a block invitation to all our AM members to call in on the Boatanchor AM net, which is on most mornings (3615kc/s). Thanks Mervyn.

#### Avertisement





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# Chris's Column

Welcome to another issue of Lighthouse, a continuing testament to the enthusiasm and hard work of our Editor and EUG administrator, Graeme G3GGL.

When we receive our copies of Lighthouse it is easy to forget the commitment that is put into getting it to you every two months.

The fact that the EUG has been in existence for 15 years and we have seen over 90 issues hides the fact that EUG has had quite a chequered history.

Ted Moore started it off in 1990 and when he could no longer continue its publication and administration, I took over its printing, distribution and administration with the help of staff at Eddystone Radio.

When that got into difficulties caused by my taking over other responsibilities at Marconi, Graeme came on the scene. He got further and further involved as Marconi put Eddystone up for sale and I left the company.

After that Graeme ran it all, including the administration, printing and distribution. He has done a brilliant job and made it a hard act to follow.

And it is on that subject that I would like to keep your attention for a little longer.

Graeme will be 75 next year and like all of us that put more and more into an interest has found that the effects of such a continuous responsibility have started to become a bit of a prison sentence with no known release date.

Accordingly, Graeme has told me that he would like to step down as EUG editor and administrator after April 2006 in order to pursue a more relaxed and less stressful lifestyle.

I am sure we will all agree that he has deserved our eternal thanks and appreciation for all he has done for us over the past eight years and none of us would deny him his quest for a bit of peace in his senior years.

The wise men that effectively control EUG have put their heads together and have decided that we should pursue two possible solutions to the problem that Graeme's departure will give us.

20mv p/p was still there.

The next move was to connect the 'scope probe to various ground/chassis positions around the set.

Depending upon where the probe was placed, it was possible to obtain a reading of up to 20mv p/p.

Strange! All these points are supposed to be directly connected to chassis ground.

It was then observed that the various sections of the metal chassis are screwed/bolted together, and common returns around the power supply area are via these screwed joints rather than wired straps.

Measuring the voltage waveform directly between the previously mentioned scope ground point and the adjacent power supply chassis which is joined by a self tapping screw, showed a voltage of 20mv p/p.

The screw and solder tag were removed, the chassis area and tag cleaned with Isopropyl alcohol, and a new screw fitted. Result, the originally 20mv had dropped by a factor of 10 to 2mv.

Could this also be a problem with other screwed or bolted sections of the

chassis? By carrying out the same procedure a definite improvement was observed on 'scope readings.

I can only assume that over the years some form of oxidation has taken place, which has caused contact impedances to rise.

Now "Crunch time". Re-connect the external speaker, switch on, HOORAY the hum had vanished, it may be my imagination but overall the set sounded better and had a good feel.

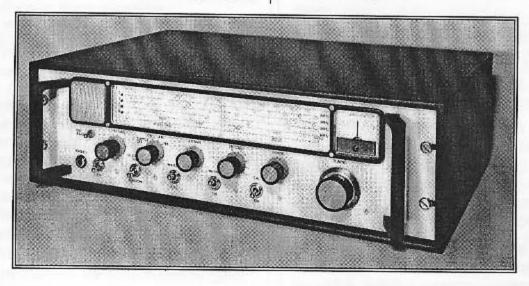
The series speaker capacitor originally fitted to form a high pass filter was then removed. Overall the audio now sounded better, particularly when listening to "Classic FM". There is still a small amount of background hum, but no more than can normally be expected from a mains powered radio.

In future when I am checking over an old set one of the points on the list for testing will be all the grounding/returns by 'scope' measurement.

Trust the original Eddystone design engineers. They appear to have known what they were doing.

Geoff.

G3TPQ



Later-model 990R with 19" rack mounting and cream panel (mounted in desk-top cabinet.)

# The German Connection

## Or how Bill Cooke got On the Air

Bill Cooke, GWØION, former chief engineer and later managing director of Eddystone Radio, didn't become a licensed radio ham until after his retirement from the company in 1985 at the age of 66.

After half a century's service with England's most famous manufacturer of components for the radio amateur this seemed a rather late start. I asked Bill for the story behind it and this is what he told me...

To be perfectly honest, I was so involved in professional radio-communications that radio, as a hobby, provided me with little alternative relaxation.

"As a senior member of the company I had no fixed hours and if something needed seeing to, then I saw to it, even if it took all night (and it sometimes did!). It left little time for pastimes. If I needed a diversion I took it in sport (nobody overtook me on the Rugger field!).

"When I tired of sport I made and flew model aircraft; then I made model boats, then I radio controlled them. I was never short of things to amuse myself when there was time.

(A little note from G3GGL here: I acquired my first job after National Service through an interest in ham radio (with the BBC) — entirely on the strength of my 'ticket'. From then on I worked in broadcast engineering for 8 years, during which time my interest in the bands virtually evaporated.

Within twelve months of moving out of engineering I was back on the air!)

44As the 1960s unfolded and we started to badge our sets for other famous makers we acquired an agent in Germany. This was Hans Landwehr, DJ3DB.

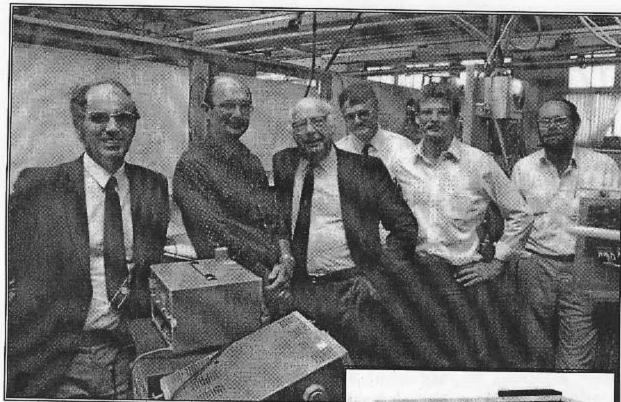
"Hans was a freelance consultant and was responsible for many of our connections. One of them resulted in the famous 830 series being built in Birmingham but carrying the badge of the famous German "Hagenuk" company Then the brilliant solid-state EC958 was badged for both "Hagenuk" and "Debeg".

"Hans became a very close friend and when Sudwestfunk approached him to source a couple of 1kW AM medium wave broadcast transmitters he came to Eddystone. I travelled to Baden Baden in south-west Germany with him to discuss the matter.

"The Eddystone Model B6038E had been introduced in 1980 and was a thoroughly up-to-date solid-state outfit of advanced design which was virtually bomb-proof. The final amplifiers were in quadruplicate and the failure of one module reduced the output from 1,000 to 750 watts, quite unnoticed by the listener.

"Our prospective customer was suitably impressed and a contract was signed between Sudwestfunk, Hans and Eddystone.

"The two transmitters were built at the 'Bath Tub' and when they were ready for acceptance tests a team of German engineers arrived. All went well.



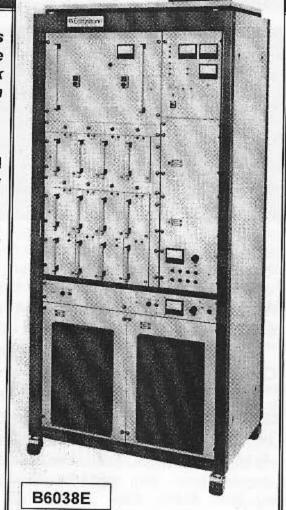
Bill Cooke (third from left) with agent Hans Landwehr, DJ3DB, (first left) and the German engineers from Sudwestfunk examine the transmitters in Birmingham during the acceptance trials.

It was soon after this event that I found myself saying goodbye to Hans at my retirement party.

"How shall we maintain contact?" said Hans. "You'll just have to become a radio amateur!" he declared (without much conviction).

"The seed was sown. A few months later I phoned him. "Get on 40 metres, Hans, and listen for GØION on the key". Yes, I'd finally made it but the Morse was a bit of a struggle. But persistence pays, and I'm a very persistent person!

"We work at least once a week, on the key (it's the only way with the bands in the state that they are at present), and I also have regular skeds with other old friends from the past. At last I'm a true amateur!"

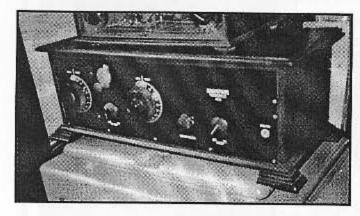


# A VISIT TO AINSLIE TOWERS



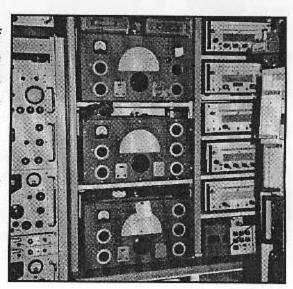
As reported last month and elsewhere in this issue, a delegation from EUG visited the establishment of Alan and June Ainslie, which has now acquired the soubriquet of "Ainslie Towers"!

Their incredible collection of Eddystones, surely a world-beater, is housed temporarily in a former motor-house, the front of which has been adapted to represent a shop, more properly referred to as Aladdin's Cave...



One of the first truly vintage pieces to greet us is the 1927 "Scientific 4" covering 8-2000 metres with plug-in coils. It has a neutralised triode HF stage and cost £21 new.

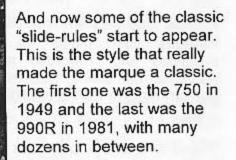
We are then faced with a bevy of World War Two S.400's, to be precise a 400X on top and a couple of 400B's below. These latter are the unique CW-only sets which cover MF and LF bands only and are the first known commercial use of a product detector. They also bear the RAF designation of R1448. Their actual service use has yet to be revealed.





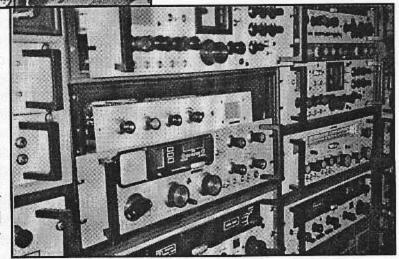
Round the corner we see a fine row of Eddystone "compacts"; EC10's of every variety plus simple cabin receivers from the great Cunarders. Then just visible are some of the 930-series single-band espionage 'bug' monitors.

A group of 'half-mooners' from the late 'forties and early 'fifties loom upon us.



I've said it before and I'll say it again; the later high performance models may be the bees knees for action, but they get nowhere in the beauty stakes!

And there we must leave Aladdin's Cave; the full exploration would take us several dozen pages. Here's hoping for the new building and the full display



Graeme Wormald G3GGL

Many of our members met their first Eddystone receiver in the form of the 730/4 in the CCF (school cadets) during the 1960/70s. The 730/4 had been ordered by the Ministry of Defence to replace the ageing Royal Signals wartime receiver Type R107. Had I been a little younger I should also have met this Eddystone but, as it was, the R.107 was still in service during my schooldays. A few years ago I was asked to write some of my memories of the period for the CCF Signals Magazine. This item recently migrated to the CCF website and I thought it might amuse readers . . .

# The Chess League that Never Was.

By Graeme Wormald G3GGL, Leeds CCF 1949

In the autumn of 1949 the newly-formed CCF (Combined Cadet Force – all three services) was settling into its role of inter-service co-operation. Leeds Grammar School had sported a 'Corps' (first OTC then JTC) as long as could be remembered. Probably since the start of the twentieth century.

Membership was virtually compulsory. Parades took place on Saturday mornings and Thursday afternoons. All those not joining had to attend in the gymnasium during parade times for extra PT.

Together with the late Tony Mountford (who became G4GGQ) I had worked up the signals section into a thriving platoon, and very active on the 'Queen Easy' net on 6400 kc/s.

We worked the W.S.12 from school in the lunch-hour, and both of us had home-loans of one of the school's three No 11 sets. These were predecessors of the WS 19 and 22, and were designed in the late 'thirties. We used them on Sunday afternoons to work into the boarding schools' net.

For the life of me I cannot recall who suggested the Schools Chess League; it certainly wasn't me. But once the idea had taken root it grew like a weed.

King Edward's School, Birmingham, was one of our most regular contacts and somehow they heard of the idea. They requested a four-board tournament.

Somewhat hesitantly I agreed to 'chair' the contest, realising that Morse would almost certainly be required at some time. The 7 watts output on AM R/T was only good for peak conditions. The 25 watts on W/T (C.W.) was much more reliable (I thought).

Somehow or other news of the fixture was leaked to the press and one morning the Leeds-based Yorkshire Evening News sent round a reporter and photographer.

A great flurry of activity produced the chess team, complete with boards and pieces. Tony Mountford wasn't to be found anywhere, and I settled into the operator's chair in front of the large lockable cupboard which housed the 12-set (which was a sender only, not a transceiver as were many army sets) and two R107 receivers.

The team set itself out on a billiard table which was the only other occupant of the room, and the photographer shuffled about for a good shot. As I was completely hidden by



# He has radio lo

RADIO-MINDED vouth of the West Riding is exemplified in these Y.E. News pictures to-day.

Above are seen boys of Leeds Grammar School rehearsing a novel chess match which they will play to-night against a team at King Edward's School, Birmingham, linked by the schools' Cadet Corps radio.

Left to right are R. A. R. Barltrop (captain), A. W. G. Wormald (wireless operator), P. Walker, P. Thursfield and W. M. Wainwright,

The moves made on the chessboards will be passed in Morse code by Wormald and C. A. Mountford, who maintain regular radio contact with other school cadet units, including those at Grimsby College, St. Peter's, York, and Rugby School.

Skipper Barltrop, last year's winner of Leeds Young People's chess tournament, says to-night's match opens up possibilities of a schools radio chess league. Walker he made me "operate" standing up. Hence the Quasimodo appearance of my spine.

When, later in the day at 4 pm, we re-assembled for the match, contact was made with Birmingham on R/T and battle commenced. After half an hour about six moves had been made, dusk was setting in and the QRM was rising. We had to change over to W/T to maintain any semblance of contact.

By five thirty the contest was in total disarray. Every move sent was greeted with dit-dit-dah-dah-dit-dit ('please say again'). At six o'clock it was agreed to postpone the contest.

I went underground and avoided contact with any of the chess team. This wasn't too difficult as they were all in the Upper Sixth and I was in the Lower Sixth.

In the fullness of time the whole affair was forgotten, but it was a black day for the Signals Section.

# Ted's MailBox

## A Review of Mail and Happenings By Ted Moore G7AIR, Founder of EUG

Ted returns to print after missing two issues due to:

- (a) running into a stray dog on his push-bike and,
- (b) having open heart surgery as an indirect result

#### Summer, What Summer?

After having spent most of the winter getting my boat ready for this summer and having my head full of projects the sky fell on my head. Well it felt a bit like that! And all because of a b..... stray dog.

I did get in a few three and four day cruises out into the Wash and North Sea but no more. By the time I am once more able to go "a sailing" we shall be well on into autumn, which will not stop me though. Now in September I have finally been declared fit by the Quacks.

Ærials.

#### As most of you will know both 'GGL and I have a common interest in skywires and between us we must have tried almost all known shapes and sizes. When going /P for the EUGnet I always have in my box a normal 80m half-wave inverted V dipole: a dual band ditto for 40 and 80; a full wave loop which can be either of Delta or Square configuration and one little-used 66 foot endfed random wire. My choice usually depends on the chosen lieux and/or the weather conditions. In bad weather I stay with the easy to erect inverted V which has a centre feed at about 18 feet up and end feeds at about 4 feet up.

All of these skywires are made from the same wire. Ex-BT 'hook up' wire with nineteen strands of tinned copper and Teflon insulation which cost me virtually pennies. The feeder in every case is polythene twin bought from Maplins.

The loops and Inverted V cannot be faulted since they have brought me pretty good reports on many occasions from many varied locations. Now with the arrival on the scene of "Esselle" I have to once more evaluate various types of ærial for the restricted space available.



Any kind of ærial will have to operate in very close proximity to the aluminium mast and stainless steel rigging. Many and varied are the combinations which have been tried out so far. There is no need to leave the town-centre marina for these tests and so several types can be tried in one session.

The almost centrally located mast does seem to tell me that I must use an inverted V configuration and yet it has to be one which will not foul either jib or mainsail although I have tried a sort of vertical Delta loop using one of my 16 foot extendable masts fastened up forward to the pulpit rails and another ditto at the stern fastened to the rails of the 'pushpit'. This appeared to be fairly successful except that it was very directional, not much good for EUGnet use, and it looked horrible.

The present setup consists of an centre fed inverted V dipole for 80 with loading coils at each end. However the results on this appear to be very slightly down compared with results obtained using my combined mast and rigging fed at the bottom of the mast, this 'built-in' ærial system gives me just under 2:1 SWR on 80 metres, varying little over the whole band.

I do use with this one of my DIY ATUs which has two Eddystone tank condensers and a surplus type coil. Tapped at about halfway this coil gives me coverage also on 40 metres. Change over from one ærial to the other is accomplished in a second by means of a huge crocodile clip.

If you should hear me in the future operating /MM then I shall be using one or the other, or maybe even a kite if the wind is good enough. I am reliant upon Mother Nature not only for propulsion but also for my kite ærials!

#### Maritime Mobile

As 'GGL's flash told a few months back we had a pretty good inaugural /MM EUGnet with me on the 'Esselle', EUG's own yacht. It really would be much easier to simply sit at home in a warm shack and operate as straight G3EUG. Travelling about the country operating /P was strenuous and time-consuming enough but going /MM is ten times worse.

As Wisbech is connected with The

Wash by a long straight artificial river 'cut' and there is a swing bridge about half way along it is a logistical nightmare. To organise such an expedition one needs to take account of wind, tide, river current, commercial shipping (try passing a 300 foot cargo ship in a narrow river!) and finally one has to inform the swing bridge operator 24 hours in advance and then one hour before, as one leaves the marina.

It does give one a sense of power to see the main A17 trunk road traffic being held up whilst one sails through, not forgetting to give the operator a thank-you on marine channel 09.

A few more miles out of the estuary of the Nene and into the Wash, still keeping a wary eye open for the possible ship on its way in. By now one is travelling just east of north and can see in the distance the wrecks used by the Brylcream Boys for their weapons target practice.

During their working week, Monday through Friday, there is a constant stream of Tornados, F15s, etc; being vectored in along a line marked by several large RAF marker buoys. The audio noise level can be S9 plus many dBs. Happily for EUGers the weekend nets are not troubled by them. Although the **RAF** photo-reconnaissance Canberra (yes, they are still in RAF use !) does occasion-ally make an appearance.

Not far south of their marker buoys are three large yellow buoys installed for use by visiting yachts who are awaiting a suitable tide and permission from the bridge operator to proceed in to either Port Sutton Bridge or to Wisbech.

It was here that I tied up for the Saturday night so that I could be on for 0900 the Sunday morning. Having been given a rude shock by 'GGL who reminded me that we would be going

over to BST meant that I would not have had the time to get on location if I had waited for the morning light.

It was a pretty calm night and I was still within mobile 'phone range to call 'GGL and tell him I had arrived and moored up. Being alone on the boat means that I really need six pairs of hands but next a.m. I was up at dawn and found a nice breeze which hoisted my kite, with very thin ærial wire attached. This flew at about a 45° angle aiming to the South West. Tuned up by my DIY ATU it produced a reading of about 30 watts output, this from the Orion 5000.



My first call produced an almost immediate reply from EUGer Ron G8URU up in the Carlisle area, then came 'GGL who had been busy scoffing his high energy brekky.

Both of them were solid S9 signals with me and my signals were pretty much the same with them. Chris GØEYO was also a solid signal with me but he was not able to read my signals, possibly an unsuitable skywire at his end.

Then we had EUGer G7JAQ, Roger down in Purley, again good signals both ways but 'GGL had remarked on the fact that my voice sounded a bit 'toppy', not usually said about the Orion. I guess that Ron hit the nail squarely on the head by suggesting I was getting some stray RF rectified and fed into the AF stage.

We found this to be the likely reason when my kite came down into the drink and I had to resort to using the yacht's mast plus steel rigging as an impromptu ærial.

The toppiness disappeared like magic & an annoying 'plop' coming from somewhere at the front of the boat also disappeared. This plop turned out to be coming from the electronic fog siren whenever I keyed the mike, another proof that Ron's diagnosis was spoton.

Anyway using the mast and rigging gave me a worse SWR, lower indicated RF output, and yet a stronger signal with none of the aforementioned toppiness in my voice. We had one breaker from the Sunderland area, MØEXM, to complete the one hour long net and so far but one SWL report from Maurice in Gloucestershire.

Considering the fact that we were not able to inform many of this /MM net beforehand we did very well. And all special QSLs have been sent out.

I shall be doing this again but cannot make promises as to when, the logistics of the exercise are quite horrendous but since the very reason for having the 'ESSELLE' is to further the activities of G3EUG you will hear me on again, soon. 'GGL will have had photos of both the launch operation of the boat from the dockside and of the /MM working by the time you read this. Having Fun ??? You bet I am !!!

The Orion 5000 is of course crystal controlled and I have but three channels centred on 3700 Kc/s, I can take my Alinco along next time and

maybe get a bit more choice of frequency but this, the inaugural /MM net just had to be done with the Eddystone Orion. I also had along my faithful 40A for signal monitoring and an EC10 Mk II.

The boat's power control panel is built into a large Eddystone diecast box. The cockpit control box for the compass light and siren is also built into a small Eddystone diecast box with а genuine Eddystone calibration push switch for the siren, and the built-in charger unit for boostcharging my three batteries is built into another large Eddystone diecast box. It seemed like sacrilege drilling holes all over these boxes but, as 'GGL said, "they were meant to be used".

# Post script

On the Friday following this /MM test I had read up and discarded as impractical most of the stuff I found regarding ship-borne ærials and had worked out two feasible - possible radiating systems.

The continued use of the mast & rigging would not work in rough weather since the deck would be continually wave washed and the ærial ends (the shrouds & mast base) would be under water hence shorted to my earth system (the sea itself).

I came up with a very zig-zaggy random wire which came in at about 60 feet but which went up and down and back and forth to accomodate this in the available 21 feet length of the boat. Using one of my telescopic poles lashed to the pulpit and another lashed to the pushpit I managed to get about half of it some 12 feet above the deck level with a centre going up to the mast top.

Bizarre sounding? Even more bizarre looking! But with a cabin end-loading

coil going to my DIY tuner consisting of two Eddystone tank condensers and a PA coil from a Canadian version of the WS19 (I think) I was able to load up to some 30-40 watts with an SWR of about 1.25:1.

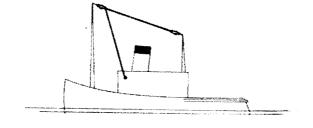
Having made a sked with 'GGL the night before I was down in the marina before 0700 and having a warm up coffee I rigged up this skywire and coupled it up to my rig. I was ready to go by 0815 complete with the mandatory cup of coffee.

A call to break into a QSO brought me contacts with a total of five stations in Glasgow, Newcastle, Appleby (Westmoreland) etc; all getting me AOK with good solid signals. So my second lot of /MM cards all go to none EUGers.

Then at 0900 as per sked up came 'GGL in answer to my call. He was getting me at a good 5 & 8 which considering the Heath Robinson ærial system and the fact that at about half tide only the top ten feet of my mast was above street level, was pretty darned good, I think!

Later on that morning I was only some 5 feet below street level with most of the mast poking up over the dock wall. Signals on both 80 and 40 were quite good until I packed up to nip home for some lunch at 1130.

So who said ærial systems were a SCIENCE ?? It all comes down to serendipity in my opinion. I fully intend to operate /MM for some of the future EUGnets so maybe a few more EUGers will get their /MM QSLs.



#### **NAVTEX**

I have installed one of those dedicated Navtex receivers with an active ærial mounted at the top of the mast. For £240 it is well worth the money. Dual channel for both the International (518 Kc/s) and the National (490 Kc/s) services this dedicated receiver is giving me lots of fun.

Getting a Navtex weather report for the Easterm Mediterranean from Haifa Radio or for the Arctic & North Atlantic from Bodo or Reykjavic is what I call real Dx. Considering that at low tide in the port marina there is barely a foot of the top of my mast above the dockside, the results are impressive.

#### Anon

Both 'GGL and I get notes or letters or even 'phone messages on the 1571 service from people who seem to want to communicate but who simply do not identify themselves. Notes or letters signed simply 'John' or 'Peter' with no surname, address or 'phone number are very poor efforts at communicating.

I must have many Johns in my circle of friends and acquaintances and for the life of me I simply cannot identify the voices or handwriting of more than a few.

So what happens? I simply bin the missive on the assumption that if the sender had really wanted to contact me he would at least have made a fair effort. Selfish? Not at all. I simply do not have the time or inclination to spend hours trying to identify the sender. Think about it, please do make some effort to enable us to identify you and get back to you. The same goes for the unidentified person (EUGer?) who left a nice 870 with my next door neighbour whilst I was at the

hospital *IN JUNE!* No name or other ID with it, no calls or letters to me since then and since it works pretty well, bar running out of puff above 12 Mc/s, like me, I have simply put it to work in the kitchen. Strange folk around!

## Serendipity

At the local Sunday Market I was looking through a box of junk electrical items and I found two chassis from some unknown make of transistorised broadcast receiver, old top hat type trannies too. Not too unexpected really but what was of interest was that both had complete sets of AM and FM IFTs and they were of identical size and shape to those in the EB/EC series of Eddystones.

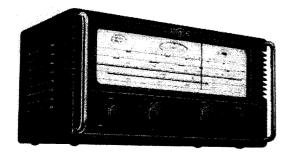
Having often a need for these I paid the asking price of 25p per chassis and carried my loot off home. Some time later I was even happier since they all appeared to have the same pin outs except for one FM discriminator IFT and this when opened was quite easily rewired, just changing over two wires to the pins. It is finds like this which help keep our prized older sets going.

#### **Cross Breed**

This 670A looked quite normal from the outside, it came to me to be repaired after many years of trouble free operation. Only when the case was taken off did I blink twice before digging out the folder with my info on the 670/670A/670C series.

The one in front of me had the slide rule scale etc; but it had the ouput chassis of a 670. Yes even down to the push-pull audio driver and ouput valves. It was obviously not a 'made-up' set but had come out of the factory

in this way, probably a need to use up surplus chassis left over from production of the earlier model.



It worked well with, as expected, the extra audio output from a pair of UL41s. The metal rectifier unit was completely o/c and whilst leaving this in place a pair of series connected silicon diodes were wired in to replace it.

After a couple of days on soak test the condensers in the power unit seemed quite happy and so the set was boxed up. These diodes cost about a penny each and so it was a very inexpensive repair job.

#### Scientific Two?

One of our EUGers has apparently found himself a Scientific Two, not the one with screen grid valves but one with triodes, must wait for more info on this but I have sent him what info I have. The identifying features so far are the Indigraph tuning mechanisms and the large open-wound plug in coils.

# Propagation

Conditions on both 80 and 40 at our EUGnet scheduled time of 0900 have been pretty poor lately, with both 'GGL and I hearing folk when they cannot hear us, or vice-versa. Naturally condx do vary throughout the year and according to the dreaded sunspots.

Whilst convalescing recently I was going through some old QST and CQ mags, they make delightful leisure reading for me and this batch were from the early '60s.

My attention was caught by an article regarding day-long ragchewing on 80 metres. The 'W' who was writing in was located just south of the Great Lakes in a town called Saginaw, running some 400 watts to - get this - a three element rotary on 3.5 and 7 Mc/s.

Even loaded as was described this heavily weighted rotary beam must have been a tremendous edifice. The interesting bit, in so far as I was concerned, was the method of working all day on eighty; we all know that it is only open for a few hours inter-G working in the morning and evening.

Our NVIS system of working is only possible at these times due to the availability of the reflecting layer of the ionosphere and this moves up and down according to the heating effect of the sun, rising in the east and setting in the west.

What Dev (the operator) had worked out was that as the sun will be warming the ionosphere starting in the east, and the warming effect would progress westwards as the sun rose to its Zenith, and declined towards the sunset. For him, his farthest east sked was with a friend in Richmond, Virginia and so between them they had worked out a suitable hour for this sked, but using solar time and not one our egotistically designed human time zones.

No matter what you call it, GMT, BST, EST, CET, these are all artificial in so far as solar time is concerned. His other rag-chewing skeds were set up for a later hour as the QTHs of the stations were either south of him or

going towards the west coast USA.

As one sked ended he would rotate his beam according to a great circle map, and the sun would by then warming up the next patch of ionosphere to the west. Dev claimed to be able to have regular QSOs through out the day on 80m with ranges from 750 miles to a mere 300 miles between stations with the "GOOD" comms signals lasting for up to two hours over any of the chosen paths.

It all seems too good to be true to my sceptical mind but he did make me realise that we in EUG are asking a bit much of the ionosphere to always oblige us with good condx at the same hour (0900A) throughout the year. If we could only forget that fixation with 'human-engineered' time and go with solar time we could get good comms throughout the year.

Deciding to prove my point I began some listening periods at about one hour after dawn and starting with 04.30. Sure enough there was an inter-UK QSO going on with stations located from Scotland to Sussex and across to Bristol.

My next listening period a month later was for 05.30 and again good comms appeared to exist around the UK.

Yes, of course I realise that some EUGers like their nice warm beds rather more than a cold (maybe) shack but it does give one the idea that we should NOT be blaming the band for our lack of results.

Rather more we should accept that being creatures of habit we must put up with the good comms period fading out just before we come on at the very late hour of 09.00. Am I missing something here? It would be nice to find out.

#### O.T.A.

We all know what happens if we ignore our favourite Eddystones for too long. They get their own back by going faulty! Well for one reason or another, but all connected with my health problem, I have used my 2273A hardly at all for some months now.

This set is almost exactly as per the 670A but made for Marconi and it has a top frequency of just 10 Mc/s. This gives a quite fantastic bandspread on range 1 and I use it for listening to some broadcast stations as well as 7 Mc/s AM.

It quite evidently did not appreciate the long rest from May through until mid-September since, when powered up to check my BC221 against RWM on 9996 the darned thing went dead after just warming up for 5 minutes.

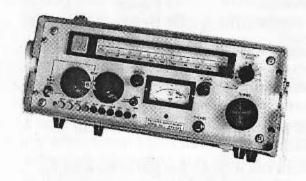
This was soon ascertained to be due to a duff IF amplifier valve. In went a new one and it has behaved itself ever since. This was one of Marconi's so-called 'Cabin Tuners' -- and it has proved itself to be a really potent set and one worth having on standby, very good for monitoring AM be it BC or Amateur, it is almost as good as my 556 which too has no BFO but is a TEN valve BC receiver, one of the Tea-Planter Specials.

## Bugging People?

My 40A was purloined recently by Sasha and I lost it for a full two weeks. Being naturally nosey I checked where it was tuned to when I was eventually able to recover it for my own use.

Sure enough, range 1, and just between 30 and 31 Mc/s. If you do not know what goes on there, then just think 'cordless phones'! I know that

the new digital type cannot be bugged but many of the older analogue types operate around 1.7 Mc/s & 31 Mc/s for base and handset, others use 49 M/cs, others use around 70 Mc/s. These latter she can get on the 990R which she has in her bedroom, my 40A joined it for a while. A young lady (?) who likes to know what her pals are talking about. Paranoid maybe ???



#### Manuals

Recently I have been sending out quite a few manuals, or rather 'my little helper' has been so doing on my behalf.

Not just around and about the UK but a fair few to other parts of the world. Australia, Belgium, Germany, the U.S and Sweden are but a few places where enthusiastic Eddystone owners are doing their own servicing. It makes me realise where some of those sets have got to since leaving the Bathtub.

### Model 1560, aka MARLIN

This month's issue contains an advert offering the Receive only part of the Marlin for sale. This is the open chassis and it is described as non-working. I suspect this is because the programmed ROM which contains the info on the switched channels is missing, I have seen a few like that. I have three receivers myself with but

one ROM between them. Without this ROM they are pretty near useless, just the Long & Medium bands on the built-in tuner.

Both the Tx and Rx parts of MY fully functioning Marlin now have a replacement plug-in board with an Eprom containing a mixture of Top-Band and Eighty channels, courtesy of that Yorkshire computer wizard who is better known for his mods to the 1650 Rxs.

## Normal Service has been resumed

Well almost. I am back riding my bike, driving my car, and have had the "Esselle" out twice. I hope to have her out into the North Sea soon for a few days.

The jobs neglected during the spoiled summer have mostly been completed and I am simply trying to find a full week free from my sundry other commitments, not easy!

I shall have my gear on board and shall try to be on early mornings on 80, on or near 3695 and on SSB with AM if asked. 'GGL will be informed of the times and dates so will probably send off a few of his modern-day telegrams to various interested parties. I shall use G3EUG and G7AIR so that contacts can get several QSL cards if they so wish. Ciao for Now.

Ted, GTAIR/G3EUG/MM

21 Prince Street, Wisbech, Cambs, PE13 2EY Tel: 01945 467 356

## E.U.G. Masters' Crossword News By Colin G4HNH

Some of our readers may have noticed that crossword No. 27 posed the ultimate cryptic at 6 down namely, NO CLUE AT ALL! The clue for this should have been "Multiple units of electrical power, each one equal to 1.34 horsepower (9)". However, every entrant managed to guess the correct answer which was "kilowatts". I must apologize for the omission, it was there in the original copy but seems to have fallen off the page in the conversion from a wordfile.doc to PDF for transmission to Graeme. Amazingly we had 13 entries for this puzzle of which 7 were correct leaving 6 that were incorrect. The main stumbling block seems to have been 21 down, the answer to which was "ANL" (automatic noise limiter) as found indicated on the front panel of the 730/4 among other Eddystones.

Please include an email address in the entry box if you would like to receive any necessary corrections to further puzzles.

Now we come to the results for crossword No. 27, but first I should like to make a special mention of Clemens Stubbe Ostergaard who sent in an email entry from Denmark. Although his entry does not quite qualify for the roll of honour he only made one small mistake (21 down) so I do hope he continues to enter each time along with our other non-native speaking crossworder Tor Marthinsen from Norway. Could there be some Scandinavian rivalry going on here I wonder?

#### Roll of Honour for crossword 27

Tor Marthinsen of Tonsberg, (Norway)

Ted Moore G7AIR of Wisbech (Cambs)

Phil Harris G4SPZ of Bewdley (Worcs)

G. Oakes G3WRK of Congleton (Cheshire)

Roger Bracey G4BZI of Crewe (Cheshire)

Oliver Barnes M1DYW of Wivenhoe (Essex)

Graeme Wormald of Bewdley (Worcs)

Here is the solution for EUG Masters' Crossword No. 27:-

Across	Down
3 Sputnik	1 Epee
7 Speech	2 Meltdown
8 UDI	3 Shunts
9 TTL	4 Unity
10 Lepton	5 Niton
11 Try anew	6 Kilowatts
13 CDROMS	10 Leclanche
14 Cermet	12 Air waves
15 Aconite	14 Ceylon
18 Yeasts	16 Overs
20 Cue	17 Image
21 ANL	19 Trap
22 One way	•

# THE MASTERS' GUIDE (Part 3, final) CHARADES

Part of a clue is for the first part of the word, the second for the second part etc., e.g.: "Composer gives many an offer of a lift" = C hop in; "Each part of a boat is oriental in appearance" = Ea stern (23 across last time)

#### **CONCEALMENTS**

23 Eastern

An answer may be found using part of one word in the clue and part of the next: "Canaletto picture reveals the subject" = To pic; "A transducer, meter and potentiometer could all contain this durable alloy" = Cer met (14 across last time)

#### **HOMOPHONES**

Phrase like "to the ear" "orally" or "one hears" tip off that the solution is a homophone: "Quoted as seen and located by sound" = Cited (from sighted and sited); "Sounds like this atomic particle of small mass was "thrillingly discovered" = Lept on.

This concludes our short foray into the world of cryptic crossword clues. I hope this has been of some assistance in the solving of the EUG crosswords and possibly your favourite newspaper cryptic. For those who are really interested in the subject I recommend:-

Chambers Crossword Manual by Don Manley, (Harrap Publishers Ltd). This is the definitive crossword reference book.

Vy 73, Colin G4HNH

# **EUG MASTERS CROSSWORD 28**

# Compiled by Colin G4HNH

#### **ACROSS**

- 1) Early Eddystone 1-v-2 defined by perhaps, a low value rf component (3,4,4) 6) High flyer chosen oddly via rota perhaps (7)
- 8) The actual power received by a terminating impedance (4)
- 9) A sacred musical work for solo voices, chorus and orchestra (8)
- 11) A good German city to dine in (5)
- 13) Capital of 15 down
- 14) Birth place of J.S. Bach (8)
- 16) Point to point wiring is sometimes referred to as the ---- method (4)
- 17) Scheduled contact expected (4,3)
- 19) A capacitor connected between two stages of amplification intended to eliminate stray capacitance (11)

#### **DOWN**

- 1) Fast scan television over amateur radio (3, abb)
- 2) Elementary, for the inventor of radar (6)
- 3) Trade name used for a toroidal autotransformer the o/p of which is variable (6)
- 4) Colin, centrally located within the Foreign Office, turns over a new leaf (5)
- 5) Airborne measuring device employing data transmission by radio, used by meteorologists (10)
- 7) Sounds like these flowers belong to a certain lady (6)
- 6) MKSA unit of magnetic potential, equal to  $4x10^{-1}$  Gilberts (6-4)
- 10) Consequence of the dreaded non-reversible mods (6)
- 12) Front panel (6)
- 13) Hot stuff, sounds like a cool dish (6)
- 15) Type G perhaps to locate SU land (5)
- 18) Defunct Irish militia (3, abb)

	1			2		3		4			5
6		7						8			
				9		,			10		
11						***					
					12		13				
14			15								
16					17					18	
19											

Please send your entry, to arrive not later than 15th. November, direct to:-
Colin Crabb G4HNH 41 West Drive Edgbaston Birmingham B5 7RR
e-mail (no attachments please):- g4hnh@smartemail.co.uk
Your name(Call sign)Address
•••••
email



# By Graeme Wormald *G3GGL*

Bewdley, September 2005.

Autumnal greetings to all our readers, after a very fair and pleasant summer.

#### KGB at WORK in WOKING?

Whilst basking in the sunshine on the final Sunday in August I was astounded to read the following major headline in the London "Mail on Sunday":-

# "Why was this innocent radio ham locked up by police simply for discussing Islamic terrorism?"

There then followed a full page news report concerning Melvyn Bangle, a G4 from Ottershaw in Surrey, licensed for over thirty years. It seems that shortly after the July terrorist attacks in London he was in a four-way QSO with a group which included a VK ham.

The Australian (named Roger, no callsign given) told him that after the Al Qaeda-linked terrorist attack in Bali, people in Sydney had defaced mosques with paint and pig carcasses. A 'silent listener' rang the police to complain.

Mr Bangle was tracked down through a website which gives contact details of licensed amateur radio operators.

He said: - "The informant told the police that I was suggesting we also do something with pigs, which is grossly untrue. The police turned up, seized my equipment and took me to Woking police station where I was put in a cell for nearly two hours before being

released on bail.

"The officers came back to my house and went through everything. They found no evidence of any racist intent. These are Gestapo tactics."

He said that, shortly after his release, he had been phoned "out of the blue" by Chris Shead, acting superintendent at Woking Police. "He asked how I was and if I had had all my equipment back OK. I said no I wasn't OK, I was bloody furious."

Roger Conway, the VK ham, told the newspaper that the conversation had not been racist. He said that he had told Mr Bangle that Australians were in full support of the English people killed in a "senseless act".

Shami Charabati, director of the human rights group Liberty, described Mr Bangle's case as troubling.

"It is really worrying that we have people running around reporting comments that they have overheard," she said. "It shows what happens if a climate of fear is allowed to develop – people walk on eggshells, watching what they say. It turns every neighbour into a suspect"

A spokeswoman for Surrey Police said: "We follow up on any complaint made which could give rise to a race-hate crime being committed. We will not tolerate any form of hate or discrimination. The allegations were of an offensive nature towards Muslims. The broadcast could have been heard

by anybody listening to the correct frequency." WORDS FAIL ME!

I don't think I've ever heard of a better excuse for pirating someone else's callsign!

#### MORE LITZENDRAHT FOR ALL

After making comments last month in "Duffers' Guide . . ." about that patent low-loss winding-wire, I have had a sudden flood of information.

One set from DC6BN, Peter Nolte in North Germany; another from Gi4CFQ, Gary McSweeney in Belfast (who is a very fair student of that crusty language – sorry, Peter!) and the third from Peter Watson of Edinburgh, who is also a serious student of German.

Now my own claim to fame in that tongue is 'Failed School Certificate' in 1946. I was somewhat molified by the fact that a classmate, who was German and spoke nothing else at home, also failed the same exam. I decided that my German, like his, was too colloquial for the examiners. But I think I deceived myself. I never studied German again.

Interestingly enough, my correspondents produced almost identical

explanations of the meaning of 'Litzen', none of which has anything to do with "Herr Litzen", nor would I have guessed.

But if I'd had the native wit to consult my "Collins Gem German Dictionary", which, along with its French counterpart, lives within a yard of my left

hand, I could easily have found out!

The German word 'Litze' has two interpretations; the first (and traditional) one is 'braid' as in the gold braid on a uniform. The second (and closer one) is 'flex' as in the flexible cable used on an electrical appliance.

What we fondly call 'Litzendraht' thinking we are being very cosmopolitan, is in fact known as "HF-Litze" in Germany (the "HF" referring to "RF").

My correspondents all go into the question of that language's incredibly convoluted grammar but I refuse to be drawn into the debate. Suffice to say that our Anglo-Saxon forebears simplified matters as soon as they crossed the channel!

#### COLCHESTER DISPLAY

An interesting report has just come down the wire from a couple of EUGers in Colchester (a famous name if I ever heard one!).

Late in July the local club held its rally and they were lucky to acquire the free use of an un-booked trestle for the day. Oliver Barnes M1DYW sends us this report:-

"Here are the photos from the EUG stand that I manned at the Colchester Rally on 31<sup>st</sup> July. There was quite a bit of interest, I met a number of existing members as well as a number of Eddystone fans who were keen to join.



# Oliver Barnes, M1DYW, sets up the EUG stall.

"As Colchester is not far from Chelmsford, many people I spoke to were ex-Marconi workers. Some had worked with Eddystone when the two companies were under the GEC umbrella. I was told of several Marconi staff working at the 'Bath Tub' on collaborative transmitter projects.

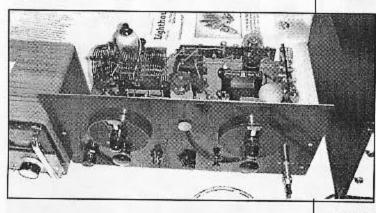
"Several people remembered Eddystone under the command of Bill Cooke and remarked how refreshing the lack of formality was compared with the bureaucracy of GEC/Marconi.

"I tried to make the display of receivers as diverse as I could to show as much of the Eddystone range as possible. The radios on display were:-

770U/2 (Admiralty version) 1837/2 Marconi Pacific (Eddystone 1837/1) 840C EC10 MkII (in a lovely fake wood

'Homeland 4' (on loan from John Gomer G8UNZ

EC958.



finish)

John Gomer's superb replica of the Eddystone Homeland 4 (1931)

"Most interest was shown in John's Homeland 4. A lot of people just wanted to spin the flywheel loaded tuning knobs of the other models."

Many thanks to you both, John and Oliver. It's refreshing to see such initiative. John tells me that using his Homeland 4 without an aerial (as such) he has picked up yours truly transmitting with five watts of carrier on AM (using the "Junk-Box Baby") purely from the "tuned loop" pick-up on those

large tuning coils on the left. John calls it a 'SWAB 8' (obscure Marconi's Wireless Telegraph joke).

#### TRY THE MAILBOX

Some 30 years ago, in the second phase of the City of Birmingham's post-war restoration, the Royal Mail built a huge parcels sorting office about a half mile from the centre of the city.

It was gigantic and readily visible from the old ATV Television Centre beside the (former) Holiday Inn.

Some time around a decade ago the Royal Mail re-sited its parcels centre out of town and the building was converted into a high-class shopping mall named, quite appropriately, "The Mail Box" (nothing to do with Ted's eponymous column).

At the same time the BBC was closing

its old "Pebble Mill" studio centre in Edgbaston, a couple of miles west of the city centre. Their new home is in The Mail Box.

It's somewhere high up in the building; presumably above the shops (I've never visited it). It also has an exhibition in the foyer celebrating Birmingham's industrial history. When it came to finding an early Birmingham-

made radio their historical advisor told them about Eddystone. When they punched it into their search engine it led them to yours truly.

To cut a long story short I've lent them



my 1927 Eddystone Twin for the display. If any of you find yourselves in that city of a thousand trades take a look and see if it's still there! They

tell me it carries a credit plaque.

Vy 73, Graeme, '3GGL

# E Bay Watching . . .

September 2005

# By Chris Pettitt GØEYO

Eddystone radios and artifacts continue to attract buyers attention on E Bay although I would say that past two months have shown a little less activity than in previous periods.

One item that jumped out at me was the offer of the Laughton history "A Century of Achievement – The Laughton Story 1860-1960". There was a copy of this in my office when I took over as MD in 1984 and I found it extremely interesting and vital for anyone with an interest in the history of Eddystone Radio.

I was tempted to take it with me when I left but felt obliged to let my successor have it. I don't know what happened to it after the company closed down but one came up for offer on E Bay from a Kenilworth seller and went for £16 to a buyer who is almost certainly an EUG member.

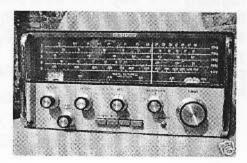




Another piece of Eddystone literature that you don't see too often on E Bay was an original copy of Eddystone Short Wave Manual No 6 with circuits to build various bits of amateur radio kit, especially using Eddystone components, of course.

It was described as not pristine, but quite well used, but it's rare and interesting. It came from a Cornwall seller and went for £5.50 which I think is rather cheap.

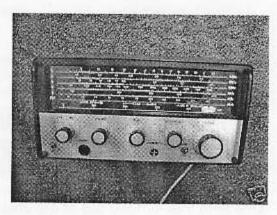
EC10's both Mark 1 and Mark 2 have been popular sellers during the period. This one was a nice one in good clean condition, covering five bands between 1.5 and 30 MHz. and 550 to 1500 KHz. Very smooth flywheel tuner, fine tuner, tuning meter. Mains operated. It has what appears to be a professionally installed mains rectifier in the former battery compartment. The battery contacts are all present, so it could be put back to battery operation if

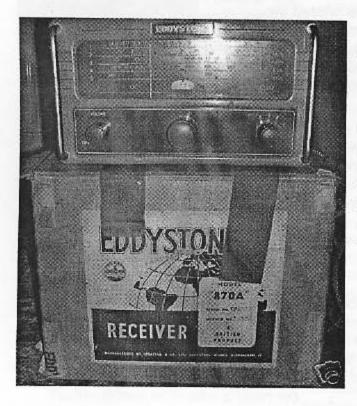


required, but mains would seem an advantage to me! Sold as working for £120. Another one in similar condition sold a little later for £133 so they seem to be keeping their prices very well, however I did note one that sold for only £54 so someone got a bargain.

An Eddystone Statesman is Model EB35 Mk3 is in full working order on all bands came up for sale. This was an AM/FM receiver with an earphone socket and AFC switch.

It has 5 bands covering 150 Khz to 22 Mhz, and an FM band. Not many of these come up for auction and this one got £41 and went to an EUG member.

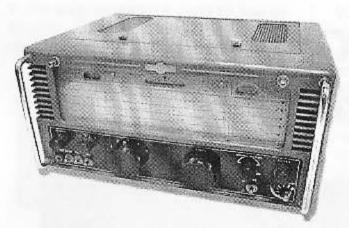




A couple of 870A models came up for sale and both fetched around £50-£60 which I think is a good price to get one for. They were often used at sea. One needed some work doing on it and sold for £52 to an EUG member. The other was in full working order and also came with the original packing case. It went for £57. Both of these were sold from seafaring ports!

Eddystone 730's receivers come up regularly on E Bay. A lot were sold to the MOD and these have been on the second hand market for about 10 years or more. They fetch varied prices. A very rare 730/1A from Falkirk in Scotland went for £150.





Another example, this time a 730/4 went for £120 and this really did look like a nice radio in very clean condition. A couple of these were being sold by sons of the original owners which is a bit sad for those of us of a certain age.

Two other 730/4's sold during the period but these went for only £46 and £66. Condition was not as good as those above, but I think their buyers got a bargain.

Finally a fairly rare 750 model receiver came up for auction and went for £105 which is not a bad price for an 11 valve double conversion superheterodyne communications receiver covering 480kHz to 32MHz. Sold in working order



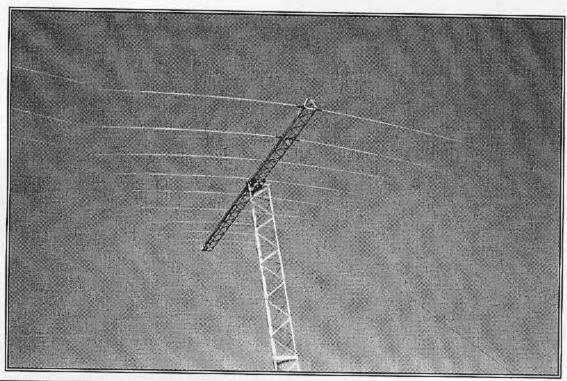
Well that's all from me until the next time. Being an E bay watcher is a bit addictive and I do see some bargains get away from me (nice Marconi CR100 went for £26 a couple of days ago), but there is always the next time!. Good hunting.

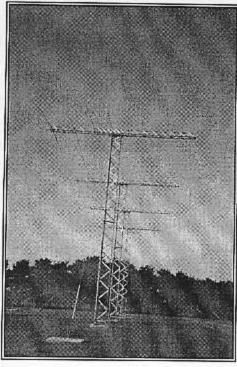
#### 73's - Chris GØEYO

P.S. from Graeme 'GGL: Is it my imagination or are the prices now being realised on E-Bay for Eddystones rather more reasonable than last year? The copy of "A Century of Achievement", the history of the Laughton Empire that had its roots in Birmingham in 1860 and which created Stratton in 1911 and Eddystone in 1925 is as rare as hens' teeth and worth far more than £16 to a true collector.

# Every E.U.G.er's home should have one!

By Peter Lankshear

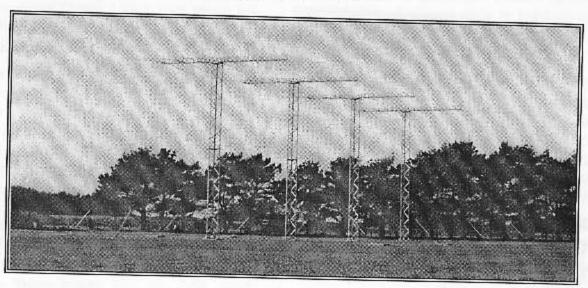




The location is at Awarua, a large area of swamps just south of Invercargill on the historic site of Awarua Radio set up in 1913 by Telefunken for the New Zealand Post Office to cover the south eastern Pacific and initially with a massive spark transmitter.

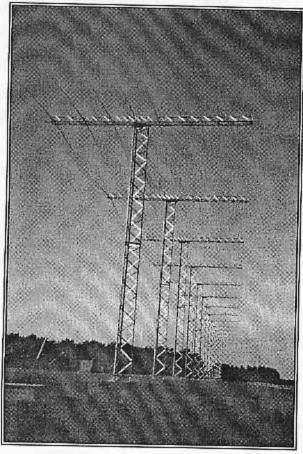
The original mast was 400ft high. Awarua was very important during both World Wars as it covered a large part of the South Pacific and remained an important communications station until quite recently when satellites took over and it was closed.

Although Awarua is the geographical analogue of Eastern Switzerland, New Zealand is, together with South America the nearest sizeable land mass to the Antarctic.



The LaTrobe University in Melbourne has embarked on an ionospheric research programme with the aid of the twenty log periodic aerials shown in the photos. The arrays are steerable electronically and are pointed due south for radar type research of

the Antarctic Ionosphere.



The aerials were made by Sabre Communications in America, are mounted on masts about 50ft high and cover the spectrum from 8 to 20 MHz with a gain variation of plus or minus 1 db. Their gain is such that the ERP of a 600 watt transmitter is 9.6 kilowatts. Operation is 24/7, controlled by satellite link from Melbourne.

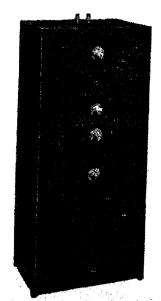
Imagine one of these aerials in your back garden and connected to your favourite Eddystone receiver! Of course, steering it could be a problem. (Not to mention town planning people).

WIRELESS WORLD APRIL 1942



# A WARTIME SERVICE

Since the war short wave radio has become of immense importance and the radio man very often finds his activities restricted. Nevertheless, Webb's Radio can still provide a great many facilities both to amateurs and priority holders. A few of these services are described here:-



Retail Sales and Mail Order. Despite staff shortages and other difficulties we are still able to offer practically any component required by the short-wave enthusiast, at our Retail Sales Dept., 14, Soho Street.

## **Service of Communication Receivers.**

A restricted service can now be given on all types of Communication Receivers. Please do not despatch instruments without first communicating with us.

## **Special Products Department.**

This department offers very useful facilities for the construction of specialised equipment for transmission and reception. One of our recent productions — a 75-watt 'phone and C.W. Transmitter — is illustrated above left.

WEBB'S RADIO, 14, SOHO STREET, LONDON, W1.

Phone GERrard 2089. Hours of Business: 9 a.m.-5p.m. Saturdays 9a.m.-12 noon

I find it amazing that after two and a half years of a war (which was going very badly for us at the time), Stratton's retail radio store still had a full range of components, to say nothing of the chunky-looking transmitter.

This page is edited from the Wireless World of April 1942, courtesy of Tor.

# Eddystone and the Bomb

### By Graeme Wormald G3GGL

One day in the early 1970's an Eastern Bloc pilot decamped to a Japanese airfield with the latest Russian Mig jet fighter. This great prize was whizzed back to the 'States for the experts to unravel and they fell about laughing. Why? Because they took out the radio-telephone and found that it was full of "tubes" as they quaintly called them. We call them "valves". Tubes are things you go down when you've lost the plot. (Sorry, folks!) Anyway, the age of the transistor had arrived and valves were considered very old hat.

But the West had overlooked one crucial matter; the question of electromagnetic radiation from a hydrogen bomb — or any atom bomb for that matter. Concurrent with the blinding flash of light from an atomic explosion is an invisible burst of lower frequency, radio frequency to be precise, which is so powerful that it strips the innards from a transistor. Like a lightning strike, but heavens knows how many times more powerful. Only a thermionic valve would survive. The East was one step ahead.

It slowly dawned in the West that this might be the case. No doubt secret tests were made at Woomera or Easter Island or somewhere. The cat was out of the bag. Valves were back in favour.

Fast forward now to the late years of the 20th century. Yours truly was firmly in the hot seat at EUG and I received a telephone call one morning from Matt Parkes, General Manager of Eddystone Radio in its last year when its owners, GEC-Marconi, were themselves "going down the tubes".

The end was nigh; a big clearout was under way. When Eddystone moved out of the "Bath Tub", the converted Lido into which Göring's Blitz had forced them in 1940, nobody had done a proper sort-out. Many desks and cupboards were transported, complete with contents, the four or five miles to the new rented factory-block at Selly Oak.

Matt Parkes' telephone call was to ask me, on behalf of EUG, if I would like to "filter" the contents of these furnishings before they were consigned to the skip. An hour later I met Matt at the door and was taken to the "assembly hangar" (my words) where they had

assembled and were soak-testing the last transmitter to be manufactured on the site. It was a DAB (digital audio broadcasting) transmitter for RTE in Dublin.

The orders had started to come in, but too late to save the company.

A load of large cardboard boxes stood in the corner. Matt pointed to them. "They'll be in the skip by tonight. Help yourself."

I took one look and loaded the lot into the back of the estate. No way would I sort that lot out before the end of the day. In fact, some of it went to Ted unsorted!

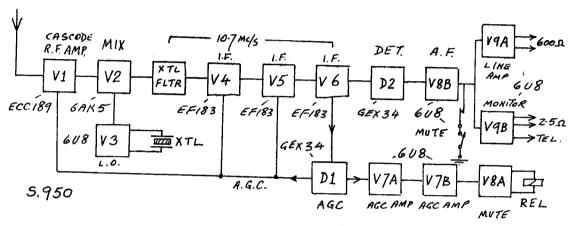
But one box which was sorted contained a dark blue wallet bearing the legend "950 manual & Information". By this time I was getting used to the rather random system of numbers devised by Harold Cox, one time Technical Director. 930: yes, 940; yes, but 950? No, it rang no bells at all.

It contained a "made up" Eddystone manual complete with "Uno" penstencil title "Model S950 crystal controlled V.H.F. receiver. Provisional instruction manual" plus two dyeline prints. One was a block schematic and the other was a circuit diagram.

The circuit contained 9 valves, 2 crystal diodes, no power unit, and the introductory line "The Eddystone"

"Ah," said Bill, "Remember the atom bomb scare?" "No." "Well, they found out that a transistor set couldn't cope with the EMP from an atomic explosion and radio-telephones would be zapped."

"What's EMP, Bill?" "Electro-Magnetic Pulse," he replied. "A man from the Ministry of Defence came along sometime in the early seventies and asked us if we could make a rock-



Model 'S950' is a crystal controlled single conversion superhet for the reception of amplitude modulated signals in the VHF band 110-130 Mc/s." It was undated.

It doesn't need a rocket scientist to immediately interpret this as an airband ground station of the 1950s or 60s. But why had it remained so undercover for so long?

A search of the company's "B.P." (Blue Print) Register was frustrating. No such model was entered at any time in the '50s or '60s. A flash of inspiration found it listed under the dateline 8th August 1974!

But Eddystone stopped making valve sets in 1971, didn't they? The last valve set was the 830/7 general coverage receiver, wasn't it?

A telephone call to Bill Cooke, GMØION, chief engineer at Eddystone in 1974, was indicated.

solid atom-proof air-band ground receiver. That was the 950." "So what happened to them all, Bill?" "We made six of them. They were sent to Northern Ireland for evaluation."

"OK, Bill, then what happened?" "I've no idea, they were never heard of again!"

At this stage I have to admit that since then an EUG member resident in Ulster has been making enquiries at air bases throughout the province, with absolutely no luck.

Now back to the present. In the company of our Patron, Chris Pettitt, GØEYO, together with Dave Simmons and James de la Mare, I made an inspection of the grand Eddystone collection of Alan Ainslie in Surrey (see Chris's report in our last issue).

Whilst prying round looking for something new my beady eyes spotted a rather unassuming rack-mounting

unit about five inches high. "What's that?" I asked of the assembled group. No replies. It was carefully lifted and turned. It bore the legend:

"Model S950, Ser. No. PP 0001"

PP, of course, as all readers of QRG will know, stands for Pre-Production; in other words the original prototype.

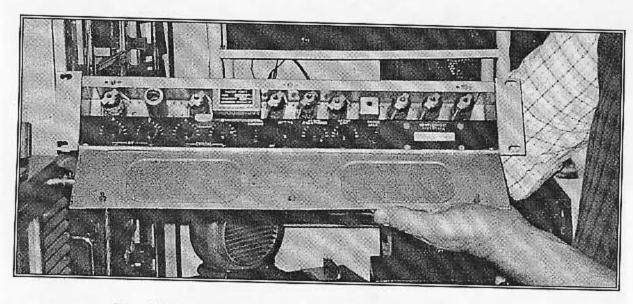
Run to earth at last, this fascinating relic of the Cold War. But what do they use now in aircraft radios?

I do know that the entire complement

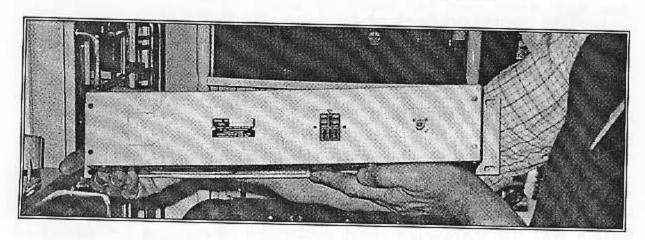
of US tank radios in the first Gulf War in Kuwait had to be replaced with valve sets before Operation Desert Storm could take place. Why?

Because, as they were waiting to attack, a sandstorm blew up. The action of hot, dry, sand moving at high speed across vehicle antennas emulates the action of a Wimshurst machine. Many thousand of volts of static electricity are generated.

Ooops!



The Eddystone 950 air-band atom-beater from the front

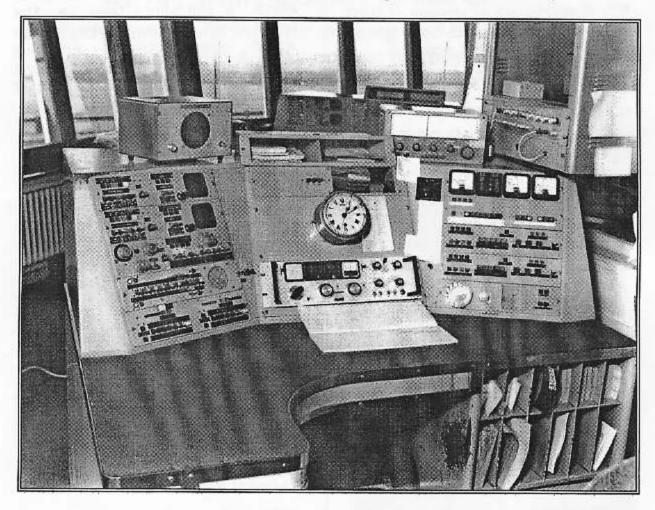


The back is the plainest Eddystone you've ever seen!

Credits go to James de la Mare for holding the set

# ANGLESEY RADIO

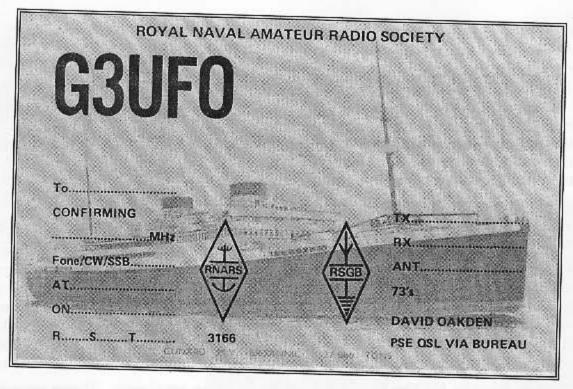
- a Thumbnail Sketch by David Oakden, G3UFO



The operating desk at Anglesey Radio GLV. c.1975. Note the Eddystone EC958 main receiver and EC10A2, 2182 kHz distress channel monitor.

Radio Anglesey, GLV, was operational from 1960 to 12.00z on 19<sup>th</sup> December 1986. Operation was on VHF and MF on the following frequencies:- 1715 kHz, 1911 kHz, 1925 kHz and 2182 kHz.

The Eddystone EC958 solid state general coverage receiver was adopted by the Post Office for coastal stations. Covering 10 kHz to 30 MHz it was the company's most successful receiver of the seventies (and some say of all time). The EC10A2 was a marine version of the popular High Street EC10 but included the marine MF band as well as a pre-set crystal controlled channel of 2182 kHz distress frequency. Rock steady!



You'll never forget this callsign!

Anglesey Radio, GLV, was what was formally called an MF Coast Station with control of about 250 miles radius, mainly for the North Atlantic trade into Liverpool.

It was originally "SEAFORTH RADIO" but was located during WW2 in Rock Ferry, then moved to Anglesey. It had 500 kHz and 447 kHz as well as MF R/T and used to be on Top Band on 1925 kHz. One of the operators was an amateur; I remember working him /P one Sunday and he said he had to get back to work – this was on 1925 kHz. The carrier never even dropped when he went on to call a ship! Happy Days.

The coast station below it was ILFRACOMBE serving Avonmouth and South Wales. Above it was PORTPATRICK serving The Clyde up to Oban. All gone now . . .

Postscriptum from Graeme: when officiating on an EUG stand at a rally some years ago I was approached by two young men. They both said they were the proud owners of Eddystone 958s. As these sets don't exactly grow on trees and were the most expensive set the company ever built I enquired as to the source. After a furtive glance round one of them said their job was decommissioning Post Office Coast stations. All the radio equipment was going into the skip and they successfully liberated a couple of sets. It doesn't bear thinking about, as Miss Lemon would say. (Yes, I AM a Poirot fan!)

# The Duffers' Guide to Valve Set Fault-finding – (part eight)

## By Graeme Wormald G3GGL

I think we may have come to the natural end of this mini-series and I'm going to finish on a new note; aerials. But before I start I'll mention some of the comments that have come in since the last issue.

Several members have asked if the series is to be available on CDROM. The answer is that I think not. The whole run only amounts to thirty-odd pages and I would have thought this would be more convenient as a bound photocopy.

Another request was to produce a version on transmitters. This, of course, would be impossible as there is no standard pattern of transmitter from the era (as there is of receivers). In this field, using "Junk-Box Baby" as a primer, I would suggest that students move forward by acquiring copies of the ARRL Radio Amateur's Handbook, ideally at 5-yearly intervals from 1940 to 1960. They have been published annually without break since the nineteen-twenties.

This goes equally for the continued study of valve receivers. These manuals are "worth their weight in gold" and may be obtained for prices less than the new current edition (which, of course, is of no help whatever to us!).

hat have aerials got to do with Valve Set Fault-finding? You may well ask, and the answer is; more than you think.

Let us first consider the aerial input and earth circuit of a "common or garden" receiver. Look at Figure "One". You will see that it has two terminals, one labelled "A" (aerial) and one labelled "E" (earth).

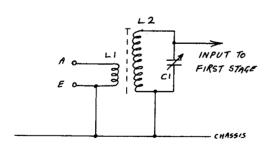


Figure "One"

The one labelled "A" goes (via any bandswitching) to the aperiodic (untuned) primary (L1) of the grid circuit of the first stage, which will be either a radio frequency amplifier or a frequency changer. (Again, all bandswitching, a.v.c. arrangements and

other irrelevant complexities have been omitted).

The one labelled "E" is connected to the chassis of the set which, if a mains set (and the sort we are speaking about are) should be connected to the mains earth lead. (In a 'universal' AC/DC set there are special arrangements for isolating the 'live' chassis from the 'earth', but this is entirely academic and doesn't affect the debate presented here).

In such a set the connection of a 30 ft random wire will complete a circuit via the chassis to the mains earth (or, in the absence of such, via stray capacity to the power wiring, which will work as a counterpoise or capacity earth) and thus induce an R.F. (signal) voltage into the tuned circuit L2/C1. It won't be marvellous but it will work more or less equally across the bands.

Time and again Ted, myself and others have declared in these pages that most Eddystones are designed to take balanced twin feeders. Sometimes 75

ohms. Sometimes 400 ohms. At this stage it's academic. Take a look at Figure "Two", which is a simplified version of such sets as the 640, 740, 840, 940 and most numbers in between.

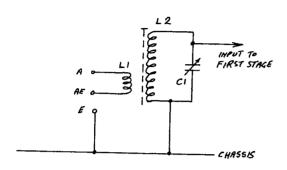


Figure "Two"

You will see that it has two aerial terminals, labelled A and AE, plus one labelled E. Sometimes the first two are labelled A1 and A2. It's of no matter; the set-up is just the same.

The connections to the primary aperiodic winding (L1) are coupled to A and AE (or A1/A2). These are usually of the 'binding post' variety where you press the end of the terminal which is spring-loaded. This reveals a hole through the barrel into which the end of the bare wire is pushed. The post is then released and the wire is held in firm contact.

The idea is to use a "doublet" or "dipole" aerial fed with balanced twin feeders (stuff like 'hifi' speaker leads, which will do the job fine, or 400-ohm ladder twin feeder). The main object of this is that the aerial may be kept well away from the set, which may be in an area of static interference.

On board ship is probably the worst case, as the 110V DC supply was produced from an incredibly 'dirty' dynamo. The arcing on the commutator would do justice to Guy Fawkes Night.

In this day and age the culprits are mainly in the house; the Computer, the

Television, associated remote controls, fluorescent lighting and so on. The twin feeders pick up neither signal nor interference.

If, on the other hand, it is desired to use a random length of wire (which acquires its 'return path' through earth), then AE must have a shorting link fitted to E. This then turns the sets into a Figure "One". It will work but it won't do its best.

Should the set have a 75-ohm aerial input impedance, such as the 888A, and it is desired to feed it from the main station aerial via a tuning unit, then the connection will be via co-axial cable, whatever the actual aerial feeder. In this case AE and E should also be connected.

# And now we come to the state of "Fault Condition".

This occurs when a new owner puts an end fed random wire onto A, without the benefit of a shorting link on the AE terminal to E.

Take another look at Figure "Two". You will see that there is nowhere for the aerial current to flow through L1. In fact it is working purely by stray capacity between L1 and L2. There is no inductive coupling.

This rather inadvertent arrangement tends to favour the higher frequencies due to the reduced impedance. For instance, strong AM broadcast stations on the 19 metre band may still be well in evidence, whereas local low-powered medium wave stations may be down at S2 or 3.

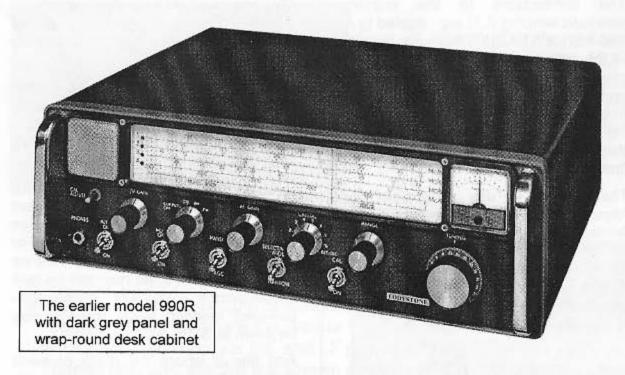
And this is where the really careless Duffer will start to complain that his newly-aligned and re-valved Eddystone is deaf. So if you're going to run your set on an unbalanced random length of wire (as most neophyte SWLs do!), then check that your shorting link is in position!

# **EDDYSTONE 990R**

The Model 990R was Eddystone's first transistorised VHF communications receiver. When introduced in 1967 it was an instant success at a price of £325 (about £4k at today's values.). Covering 27-240MHz in four bands it also provides for 8 fixed frequency crystal controlled channels. Utilising 38 transistors it can handle AM, WBFM, NBFM and CW. It remained in production for 14 years and was a favourite for air traffic control and coastguards. It is rumoured that some examples remain in air traffic use with "third world" countries to this day! It is a popular model with collectors and was the last in the line of classic-design Eddystone slide-rules. EUGer Geoff Harris, G3TPQ, describes a problem which plagued his newly acquired model.

## "A baffling fault, or original design phenomenon?"

This sample was purchased on EBAY about a year ago. The set was in reasonably good condition and worked on all bands.



A copy of the manual was obtained from EUG, and it was decided to go through the set and check all voltages, which generally were within tolerance. Although the AGC required slight readjustment.

The alignment was checked using a wobbulator, to ensure that the "IF" response was o/k. A small amount of adjustment was required to optimise the curve, and centre the FM discriminator.

The alignment of the RF stage again only required a small amount of adjustment to optimise the scale calibration and sensitivity.

At this stage everything appeared to be satisfactory until I connected an external loudspeaker (Eddy-stone) to the 3 Ohm socket on the rear panel, or a pair of low impedance headphones to the front panel jack socket.

The result was a very loud hum superimposed upon the required signal. This was not present when listening on the small speaker mounted on the front panel of the set. It is probable that both the external L.S and Headphones have a much better low frequency response.

At this stage of the game the next obvious step was to check the power supply/smoothing capacitors.

So, up to the attic to find the trusty AVO capacitor bridge. All of the electrolytic smoothing and de-coupling capacitors were checked capacity/leakage/Q. A few which were reading low on tolerance replaced with new stock. In particular the two large main power supply caps were replaced with modern good quality items.

The result of all this was that the hum persisted.

The next move was to disconnect the input to the high level audio amplifier PCB; hum still present.

Another trip to the attic for the 'scope' and check the 12V and 10V DC supply rails for ripple. A reading of 20mv p/p. Is this normal? Not having another set to compare, and no relevant information in the manual it is difficult to decide.

What else to check? 'Ah!' what about the selenium power supply bridge rectifier? The output terminals of the rectifier were disconnected from the set and a resistive load of a few hundred m/a wired across the terminals. The waveform looked o/k full wave rectification and 14V av. on the AVO. Just to make sure change the Selenium Bridge with a silicon Diode Bridge and compare. Result the same.

At this stage no component fault could be found, the voltages across the two power supply zener diodes were within tolerance.

As the set performed well using it's own internal speaker, I was coming to the opinion that the set was performing as designed, and if I wished to use the external loudspeaker and headphones that I had, then I would have to limit the LF response by feeding these items with a capacitor to form a high pass filter.

The result was an improvement, which allowed reasonable listening but still annoying.

After a few months, holidays arrived, and having given the matter some further thought, and thinking well I am using an Eddystone external loudspeaker. Surely the original designers could not have had this problem?

Have a good think about how the power supply works and look at cable routings/returns. All of the wire soldered joints looked ok.

Connect the 'scope' probe ground lead to the point on the chassis where the lower end of the dc fuse connects. Touch the probe tip onto the probe ground point to check for zero reading. At this point to obtain a zero reading on the 2mv range it was necessary to run the set from a mains isolating transformer to eliminate an earth loop via the grounded 'scope.

Look at the 12V and 10V DC supply rails. Yes the originally measured

20mv p/p was still there.

The next move was to connect the 'scope probe to various ground/chassis positions around the set.

Depending upon where the probe was placed, it was possible to obtain a reading of up to 20mv p/p.

Strange! All these points are supposed to be directly connected to chassis ground.

It was then observed that the various sections of the metal chassis are screwed/bolted together, and common returns around the power supply area are via these screwed joints rather than wired straps.

Measuring the voltage waveform directly between the previously mentioned scope ground point and the adjacent power supply chassis which is joined by a self tapping screw, showed a voltage of 20mv p/p.

The screw and solder tag were removed, the chassis area and tag cleaned with Isopropyl alcohol, and a new screw fitted. Result, the originally 20mv had dropped by a factor of 10 to 2mv.

Could this also be a problem with other screwed or bolted sections of the

chassis? By carrying out the same procedure a definite improvement was observed on 'scope readings.

I can only assume that over the years some form of oxidation has taken place, which has caused contact impedances to rise.

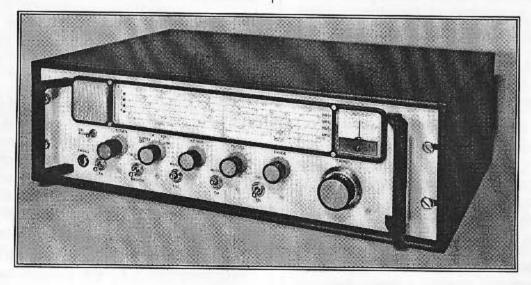
Now "Crunch time". Re-connect the external speaker, switch on, HOORAY the hum had vanished, it may be my imagination but overall the set sounded better and had a good feel.

The series speaker capacitor originally fitted to form a high pass filter was then removed. Overall the audio now sounded better, particularly when listening to "Classic FM". There is still a small amount of background hum, but no more than can normally be expected from a mains powered radio.

In future when I am checking over an old set one of the points on the list for testing will be all the grounding/returns by 'scope' measurement.

Trust the original Eddystone design engineers. They appear to have known what they were doing.

Geoff. G3TPQ



Later-model 990R with 19" rack mounting and cream panel (mounted in desk-top cabinet.)

# In Consideration of Amplitude Modulation

#### Graeme Wormald G3GGL

Once again we have to report the awful band conditions prevailing for 40 metres at breakfast time and, even worse, report the various obnoxious noises on both 40 and 80 which are threatening to disrupt operation on the bands. One good piece of news is the arrival of a full set of characteristics for the TT11 (alias VT501/CV1501). This is the 'miniature 807' RF power tetrode which has become available from John Birkett (Lincoln) for the very modest price of £1.50. You may recall that I was advocating it as the most suitable PA for any small homebrew AM transmitter. Details further down the page.

First of all I'll give a report on the August AM tests. The First Sunday on Eighty (8th Aug) produce Ron G8URU in Carlisle at S9 but readability of only 3 due to (a) the awful band noise and (b) his dreadful modulation! This, I think, was due to maladjustment of his rig. Remember he is using a modern ICOM IC-718 which, in the AM mode, inserts a carrier with one sideband.

Fair enough, you may say; what's wrong with that? I don't quite know but I do know Ron's modulation was downwards and had syllables missing! True. I also know that I have the same rig (which I use on USB in the 60 metre band) with which I also have had readability problems using AM. Some homework needed. (I was, of course, using the KW Vanguard with the Eddystone 888A on the 8th).

Then Mervyn, GW8TBG, near Swansea, always a good signal in Bewdley, came in at 5 & 9 pushing through the QRN. Then Ted G3EUG came in at a miserable 1 & 2. In fact it's amazing that I actually identified him. (Sorry, Ted.)

Then the second weekend was 40 metres on 14<sup>th</sup> August (7143kc/s). Another prime example of long skip and confusion!

I worked Ben G4BXD (as I always do when he's there; at 3 miles distance I

can't help it!). Then after a bit of confusion I made contact with Jim GM4CHX at 5 & 8 in Ross-shire, one of our furthest northerly stations. Must be the best part of 400 miles.

But then Jim made contact with G4JXK in Somerset, from whom I could hear nothing... A little later in the day I had a call from Ron G8URU near Carlisle to say that he also had worked Jim in Somerset but had heard nobody else! This actually pins the skip distance down to very close on 300 miles.

I think I'll make a pause here and talk about the TT11 power tetrode. You may recall that last month I gave some characteristics garnered from the 1949 WW valve data manual. In fact, they were rather misleading because they were not true characteristics, but a set of specific conditions cribbed off the GEC/Marconi/Osram data sheet.

I must admit that I was very unhappy about the quoting of the "maximum dissipation" as being 2.7 watts. It isn't correct, of course. Ignore last month's details and start again here, courtesy of David Pratt, G4DMP, who also used a TT11 in his first top band rig. Thank you David, here goes:-

First of all we are told that above 2 Mc/s it is normally necessary to neutralise the valve. In fact I find that if

it is being driven hard this isn't necessary up to 7 Mc/s.

Max. ratings are as follows:-

Anode voltage	300v
---------------	------

Anode dissipation 7.5 watts

Screen voltage 250v

Screen dissipation 1.3 watts

Typical conditions for anode modulated AM are as follows (these are for unmodulated carrier):-

DC Anode voltage	250v
DC Anode current	35mA
DC Screen volts	160v
DC Screen current	8.0mA

Screen resistor  $11,000\Omega$ 

Screen dissipation 1.28w

DC Grid volts neg. 50v

\*DC Grid current 1.5mA Cathode bias resistor 1.500Ω

RF peak drive voltage 60v

\*Driving power 0.12w

#Audio modulation power 3.75w

impedance offered  $6,250\Omega$ 

Anode load impedance  $3,500\Omega$ 

Anode dissipation 2.7w

Power output (carrier) 4.8w

Anode efficiency 64%

\* Subject to wide variations

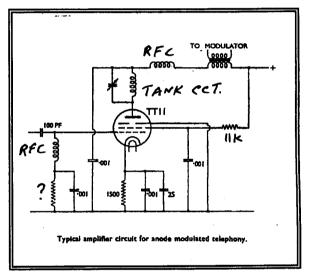
#### # 100% modulation

I think that will do for now. They also give the circuit for the above conditions (shown) and the only thing we are missing is the value of the grid leak. Having said that, the rather high value of the cathode resistor (1.5k) will bias the grid well into class "B" before the drive is applied!! Room for experiment here. Very interesting to note is that the modulation is anode only, not the

traditional "plate & screen" that we are used to with tetrodes.

Interesting also is that the load for the modulator is given as  $6,250\Omega$  at 3.75w. Now the 6V6GT that we are using in Class "A" for modulating this little rig is quoted as presenting a load resistance of  $5,000\Omega$  for an output of 4.5w. With a bit of luck and a tail wind this should just about manage to cope! A clever engineer could work it out. I'll wait to look at it on the 'scope feeding the dummy load!

This is what it looks like:-



Something to kick off with if you're going to stock up with those VT501's (TT11's) from John Birkett.

#### SEPTEMBER FIRST SUNDAY

The pre-SSB AM tests were carried out under very bad QRN static at my end. I likened it to somebody shovelling coke (you know, that stuff they used to make from coal before natural gas was discovered under the North Sea).

There were only three of us; Ted G3EUG/MM riding at anchor three miles offshore in The Wash. He was using a quarter wave (66 ft) wire held up by a kite. Ron G8URU in Cumbria, just south of Hadrian's Wall using his '5RV completed the net. As well as having to combat the heavy static I

was also plagued by QSB on signals varying from S1 to S9. No good at all for chatting and at 9.30 I stood down and let the other two get on with it.

Ted reported no QSB and no QRN! It's amazing what a good ground-plain of brine does for you.

#### SEDOND SUNDAY, 40Metres

This was on 11<sup>th</sup> September and there were NO signals heard on my chosen frequency of 7140 (to avoid b'cast splatter). No amateur signals were to be heard in the 'new band'.

The 'old band' produced a rather scratchy selection speaking French, German, Italian and (possibly) Serbo-Croat. One of the German-speakers was working an English station, of which absolutely nothing could be heard.

Reports came in on e-mail; first from Chris MØHMR in Gloster who heard no AM but located a strong English voice on SSB. This turned out to be OZ1KGV in Denmark, not an isolated instance of NVIS! He also heard stations speaking French, German and Spanish and noted that this is about what we expect this year.

Peter, DC6BN, who usually reports that he's getting me fine in northern Germany, was, on this occasion, masquerading as GW7IZG in Milford Haven. (The 'new' band is not yet released in DL). He e-mailed that he could hear NOTHING in our nominated part of the band.

It is a matter of some concern that DRM stations have started to operate in the 'new band'. These initials stand for the French equivalent of Worldwide Digital Radio and is a system of producing QRN/QSB-free 'hi-fi' on short-waves. Special Rx needed, of course. But the big deal is that these stations aren't supposed to take up any more bandwidth than an AM

station (≈5 kc/s) but those that have been heard (afternoons at S9 plusplus) cover about 50 kc/s with whitish noise. One has been detected in Germany (DRF) and it would appear that advantage is being taken of the clearing of the band for primary occupation by hams.

On now to the last AM test of the period, the third Sunday in September (18th) on eighty metres. (3625 kc/s). I expected a good little net here and was quite taken aback when, after several long "CQ Eddystone" calls the result was one station calling me at 2 & 2 and nothing else!

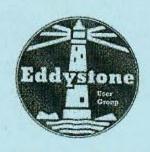
I couldn't identify the caller so my apologies to him. And the QRN level was quite reasonable; no coke was being shovelled. After a short while a strong carrier netted onto me and I listened expectantly. It opened up on SSB!

However, Ron, G8URU, near Carlisle was back in hospital, (now recovering from hiatus hernia - good luck, Ron!). Ted was on a sandbank scraping "Esselle's" bottom!

I had to move down to 3618 to avoid the sideband splatter (!) and I was quite clear of the regular AM "Boat Anchor" net on 3615. Still nothing and tuning down to the latter I heard one of the members saying that he was troubled by the EUG net on 3618.. (!)

One up for my Eddystone 888A which had no difficulty in separating the channels. So I decided to move down and join them. Two of them were our members anyway!

Mervyn, GW8TBG, (near Swansea) who is always a splendid signal here in Bewdley, issued a block invitation to all our AM members to call in on the Boatanchor AM net, which is on most mornings (3615kc/s). Thanks Mervyn.



# "EUG on the Air"

PHOTOCOPY THIS PAGE AND STICK IT UP IN THE LOO!!

The next "First Sunday" nets will take place on 6<sup>th</sup> Nov. 4<sup>th</sup> Dec. 1<sup>st</sup> Jan 2006

Freq. 3695+/- QRM
Times: 09.00 for AM and 10.00 for LSB (local times)
Controller G3GGL

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"SECOND SUNDAY 40 metre A.M. Tests"
Scheduled on 13<sup>th</sup> Nov. 11<sup>th</sup> Dec. 8<sup>th</sup> Jan. 2006
Frequency 7143 +/- if spot in use by other net
Listen for G3GGL on A.M. time 09.00 – 10.00 local



"THIRD SUNDAY 80 metre A.M. TESTS"
Scheduled on 16<sup>th</sup> Oct. 20<sup>th</sup> Nov. 18<sup>th</sup> Dec.
Frequency 3605-3025 kc/s. A.M. only! Time 09.00 -- 10.00 local
Listen for G3GGL

Please send listener reports and comments to G3GGL QTH details below.

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