



Chelmsford Amateur Radio Society

Newsletter

April Meeting

Tue 2-Apr-2019, 7:30-10:00pm
Oaklands Museum, Moulsham Street

Canal Journey & Brains Trust

By Vic Rogers G6BHE et al

For the April meeting we have a double feature. Following last months meeting on offshore - we will be on internal waters. Vic Rogers G6BHE will recount his experiences on 'A Canal Journey' up the Grand Union Canal.

This entailed travelling from Harefield to Leicester - 118 miles, 128 locks, 8 swing bridges and 4 tunnels, single handed in 7 days!



After the break there will also be a 'Brains Trust' session, where you can ask the experts on a panel. All reasonable queries answered - apart from future winning lottery numbers!

The famous CARS Raffle and refreshments will feature too! - do pop along

Raffle Volunteer Wanted: We need a new volunteer to purchase a given number of prizes for the monthly Raffle at the Club meeting. Some £12 to £15 is currently being spent each month on prizes. The amount is not fixed and it is hoped that the current small flow of monthly prize donations will continue as always.

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Club Diary

Tue 2-Apr-2019	A Canal Journey – Vic Rogers G6BHE	Chelmsford – Oaklands Museum, 7:30pm
Mon 15-Apr-2019	Skills Night (and Exam Session EX9)	Danbury Village Hall 7:00pm

Club Nets

CARS meets for talks/events on the first Tuesday of the month. The subsequent Tuesdays have club radio nets as follows:-

- 2nd Tuesday in the Month – VHF**
 The CARS VHF FM Net uses GB3DA from Danbury starting at 8pm (local).
 GB3DA is 145.125MHz Input and 145.725MHz Output - and CTCSS-only (110.9Hz), 2min timeout
 If for any reason GB3DA is not available then 145.375 Simplex will be used. Vertical aerials are best for this
- 3rd Tuesday in the Month - UHF**
 The CARS UHF FM Net uses GB3ER from Danbury and starting at 8pm (local).
 GB3ER is 434.675MHz Input and 433.075MHz Output - and is CTCSS-only
 Vertical aerials are best.
- 4th Tuesday in the Month - HF**
 The CARS 80m Net on "3756kHz" Night, SSB and starting at 8pm (local).
 Horizontal aerials are best. The idea is to enable distant CARS Members to join the Net.
- 5th Tuesday in the Month (when there is one!) - MF**
 This is the CARS Top Band Net on 1947/1950 kHz +/-QRM, LSB and starting at 8pm (local).
 Horizontal aerials are usually used for this Net. A reminder - limit your power to a max of 30 Watts, please.

Training & Exam Dates

Our training pages have sessions listed for Foundation, Intermediate and Advance.

The first half of 2019 has both Foundation and Intermediate training – see more info and dates online

Remember that the syllabus changes in Autumn 2019, so sign up early for a course/exam before that!

We also have exam slots in June/July for Advanced - inc those taking the Bath Distance Learning course

Our training manager Peter M0PSD is keen to hear from candidates for the courses, as well as any needing practicals or other help. The 2019 March-June Skills Nights also have slots available

Course	Dates	Comment
Intermediate-18	Thu Mar-21 st – May 2 nd	Intermediate - but with Foundation opportunities as well
Advance-23R	Thu Jul-11 th	Advance - with opportunities of mocks and others before

Contact: Peter Davies M0PSD, training2019@g0mwt.org.uk Web: www.g0mwt.org.uk/training

 Follow @TrainWithCARS

March Meeting: Offshore Radio

The March meeting saw Jim 2E0RMI provide a fascinating insight into the history of offshore radio including both 'pirates' and others



Jim started his presentation with some photographs he had taken on a recent holiday in India. There were shots of Buildings with dreadful construction faults, most left unfinished but still in use and with scaffolding (roped bamboo poles) and reinforcing verticals for further extensions. Being in the building industry he horrified us with the detail! He also showed poles with mains and telephone wires all mixed up in a terrible untidy spider's web saying the power often failed and he would not like to be the poor engineer to deal with it!

Jim told us that offshore radio in its various forms had been attempted much earlier than we all imagined with the Daily Mail (who famously paid for Nellie Melba to come to Chelmsford) sponsoring in 1928 an attempt to broadcast from the vessel 'Ceto'. This did not really work due to bad weather and ended with them using loudspeaker audio for concerts close to the coastline around the UK.

In 1920 Marconi's vessel 'Elettra' was used to carry out experiments and transmit gramophone records on long and short wave frequencies. So was this one of the first offshore broadcasters?

In 1952 the U.S. vessel 'Courier' used a helium balloon to hold up an aerial off the Greek Rhode Island to transmit the Voice of America.

Radio Mercur was the first Scandinavian offshore station off Denmark, using FM with a 20kW transmitter and a steerable aerial to keep the signals towards the shore. Then appeared the 'Bon Jour' vessel for Radio Nord off of Sweden (this vessel later became the Mi Amigo - eventually Radio Caroline South).



Jim gave us detail of the legal laws and difficulties of operators wanting to get into Offshore Radio pointing out that these were not pirates until the authorities passed laws to restrict them or the service vessels keeping them in stores and personnel.

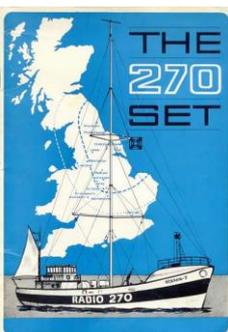
Others followed - Radio Syd off Sweden, and closer to home, Radio Veronica off the Dutch coast and Radio Antwerpen off Belgium. Early attempts to set up UK offshore stations were unsuccessful with GBOK, but in 1964 a young Irishman, Ronan O'Rahilly, became the first person to start a ship based station off the UK coast, narrowly beating the rival Radio Atlanta.



GBOK – aborted attempt



Radio Syd



Radio 270



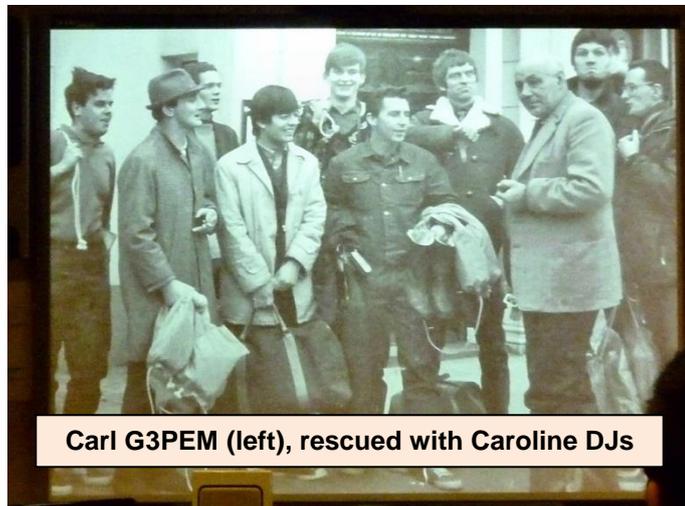
Radio Essex

This started the ball rolling with many others following over the next three years broadcasting from vessels or abandoned army or navy forts around the UK coast. Radio(s) Sutch, Invicta, King, 390, London, Tower, Essex, Scotland, England, Britain Radio, 270, City... and more!

At one point, up to 10 or 11 'offshore' stations were transmitting to the UK.

Jim showed pictures of all the stations including Radio 390, a sweet music station playing light and classical music which was extremely popular with the older generation, Tower Radio from the Sunk Head Tower who attempted TV transmission without success, and Radio Essex from the Thames estuary Knock John fort with a low power station. We also saw pictures of the crew and DJ's after the rescue when Radio Caroline broke loose in a 1965 storm and ran aground on the coast.

After the fateful shooting of Radio City's Reg Calvert and to prevent further unlicensed broadcasters, The 'Marine Offences Act' was passed in 1967 resulting in all but the two Radio Caroline stations closing down. In 1968 Caroline was subject to real piracy with the two ships towed to Holland.



Carl G3PEM (left), rescued with Caroline DJs



Jim continued the story looking at offshore radio around the world and Radio Hauraki on the Tiri-II in New Zealand. In the 1970's & 1980's there was another offshore radio revival with Radio Veronica continuing off the Dutch coast, joined by RNI, Capital, Atlantis, and a returning Caroline. History repeated itself with a similar closedown in 1974 of all these stations with the exception of Caroline until the Mi Amigo vessel finally sank in 1980.

Once again Caroline re-surfaced, this time in 1983 from the ex-fishing trawler 'Ross Revenge', & was soon joined by the brash American 'Laser 558'. We saw pictures of Caroline then and now, with recent shots of the Ross Revenge now anchored in the River Blackwater, and the current transmission mast used by them for 648kHz at Orfordness - ex BBC World Service!

Jim also touched on offshore stations off the coasts of Israel and the then Yugoslavia, the Gunfleet lighthouse, Sealand, & a whole set of pictures of radio ships which had lost their masts! He ended with a recording of a request recently played for him on Caroline, whilst listening in India!

Thanks Jim - you must have taken many hours to acquire all the facts and pictures for your most interesting presentation.

Tony Gilbey G4YTG



Tony taking notes >>

March Skills Night

Monday evening, 7pm March 18th 2019, was Essex Skills Night, run by the CARS Training Team. It saw 37 people attend and included a Bumper Table top sale of SK Equipment raising over £100 for club funds.

Practicals were ran in the Hawkins Room with Elliot 2E0JSE, along with Morse Appreciation by Rob MOKCP from Essex CW Club. Kevin 2E0FEQ used the club IC-7300 for Data Modes, and to finish the evening a 'Murray G6JYB Quiz' which was presented in his absence.

A big thankyou to the team in the kitchen for providing refreshments all evening.



Eyeing up items in the SK sale – and some radio practice on the IC-7300



Intermediate Practicals - and Martin, our raffle winner!

More Info: <http://www.g0mwt.org.uk/skills>

Next Event: **Monday 20-May-2019**

NB: Skills Nights are a great opportunity if you need a Training Practical or even an Exam session!

G5RV Elizabethan Transmitter



Peter Halliday VR2VPH

As CARS Secretary and with my address available on the CARS website I get many emails from far and wide on all manner of topics from training and activity questions to sundry companies advertising material and more asking for information or assistance. One such recent request was from Peter Halliday VR2VPH, an amateur residing in Hong Kong asking for help to find the circuit diagram of the famous G5RV Elizabethan ham transmitter.

As some readers will know the Elizabethan was created by Louis Varney G5RV and others in Coronation year 1953 hence the name. Peter had constructed such a transmitter at the time and it had served him well. Time has passed and Peter thought he would like see the 807s glowing again. It was known that the circuit and construction details were contained in an article written by Louis and published in the July 1953 edition of the RSGB Bulletin, the forerunner of RadCom.

Peter had searched promising websites for a copy but all with disappointing results. He even bought a number of back issues of the Bulletin on eBay but found that the article he wanted had, unfortunately, been cut out (not the fault of the seller, he hastens to add).

During his searches he found the CARS website and noted our strong connections with Louis Varney and his Elizabethan. Peter also found my name as secretary and emailed to see if CARS could help. I too searched the web and found one or two promising sources, which I passed to Peter, but which again proved fruitless. I then spoke to John Bowen G8DET past vice-president of CARS on the topic, who told me that CARS member Dave Bolwell G3JCM had built a model in 1953 and had since passed it and the details for display purposes to Sandford Mill, an off-shoot of the City Museum. The arrival of new management resulted in the removal of the Elizabethan and the details and other artefacts to out-of-town storage and not easily reached.

On John's suggestion I contacted Dave Bolwell to see if he had retained any details but sadly he had not. However Dave did remind me that the RSGB have been actively scanning back numbers of all their publications and they were available on DVD. A quick check on their website showed they did indeed have a copy of the original 1953 article along with 10 years' worth of others. An email to Peter soon followed and his quick reply stated that he had made contact with the RSGB. Just SIX hours later another email arrived saying that already they had responded and he had received a first class PDF of the whole article and he was very pleased indeed; to say the least. [Congratulations to the RSGB for the fast response and in particular thanks to Louise Routh, M6TZH who answered the call so quickly.](#)

Peter tells me he now has a framed copy of the circuit on his shack wall (copy overleaf) and has thoughts of perhaps making another Elizabethan.....Perhaps.

He also wishes me to pass on his 73s to members and to say that if any are passing through Hong Kong in the future, he will be delighted to offer some hospitality. Peter has an entry on www.qrz.com.

Colin G0TRM

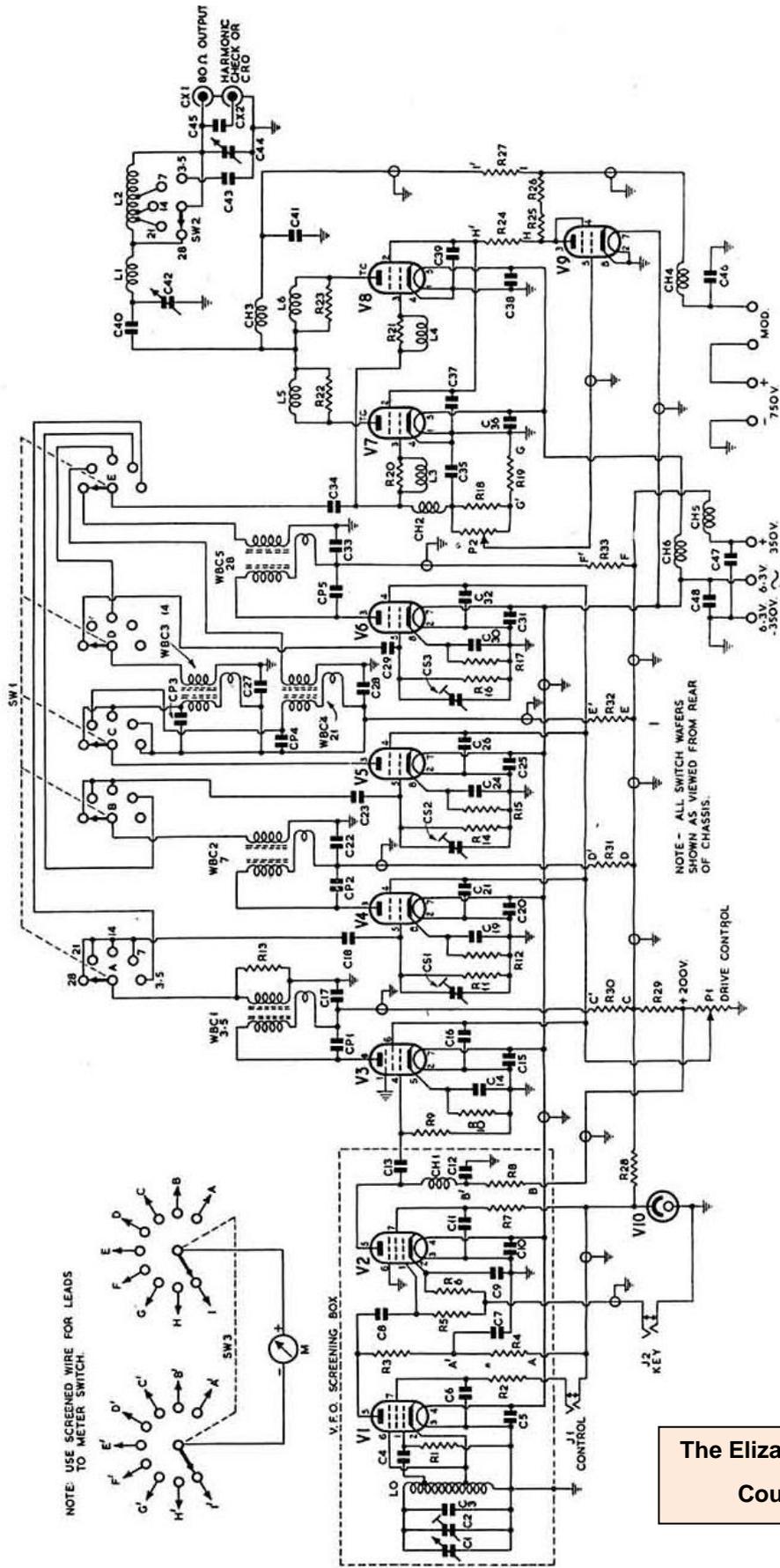


Fig. 1.—Circuit diagram of the 150 W transmitter using parallel 807s in a pi-filter circuit.

The Elizabethan Radio Circuit Diagram
Courtesy of RSGB July 1953

CARS 70cm Net

On 8pm, Tuesday 19th March 2019, Tom 2E0EUM held a nice CARS 70cm Net on GB3ER with the following contacts: -

- 2E0WHB Bryan
- G3WGE Keith
- G8DET John
- M6WER Peter
- G4MDB Bob
- 2E0FBP Alan
- G0TRM Colin
- G4JDS Les

Topics revolved around Tom's rig being a bit weak in the RF and audio but improved when he changed microphones. For some reason the Repeater seemed reluctant to issue the "K" after Tom has finished speaking.

On the subject of soldering irons – Bryan said he liked a small brazing kit he had bought for about £100. Stories were told of gas/petrol soldering irons and those years ago heated up in a gas flame.

John related how the cat had jumped onto Pauline's tray and caused a wall of tea to go up in the air and land on the TV Remote. This turned it into an Engineers Remote with the result the TV channel was stuck and could not be controlled. Turning off the TV – wait 5 minutes – turn it back on with another remote – spend 15 minutes resetting the TV. The now saturated remote has been dunked in a bowl of warm soft water for 15 minutes – dried out with a vacuum cleaner and now in the radiator for a week to see if it will work then. A bit similar to a cat walking across a computer keyboard – sending three or more key presses which can stuff the computer.

Colin had a request for help from an Amateur who could not tune his rig to his aerial with the internal Auto-Tuner – the set had been returned to the supplier – OK. Bob pointed out that the Auto-Tuner in a rig has a reduced SWR tuning range – far smaller than a remote one – such as a SG-231. His suggestion was to start with a Dummy Load and check the rig was OK. Then use an Aerial Analyser (CARS has one) to see what the impedance of the aerial is on the bands required. Les suggested using a remote manual Tuner.

A number on the Net had been to the Skills Night the day before and commented how much they had enjoyed it.

Les reported he had been to his boat today and that he was enjoying his Morse.

John related that now he had the microphone on a lead for his Baofeng. He was missing a 3rd hand so had "invented" a solution. A length of PJ elastic cord was connected to the curtain rail and the mobile's aerial – great. Gave mobility and freed one hand – Dragon's Den next?

The Net closed at 9.15 – a bit of a record. Thanks Tom 2E0EUM.

John G8DET

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