



Chelmsford Amateur Radio Society Newsletter

December Meeting
 Tue 6-Dec-2022, 7:40pm
 Danbury Village Hall

Xmas Social
 By CARS Members

Season's Greetings!

CARS members, other amateurs/clubs and prospective trainees are welcome to join us for our Xmas Social at Danbury

For the last few years we have been unable to hold such gatherings due to Covid, so now is your chance to make up for it!

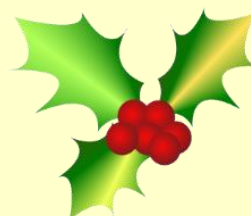
Do come along, so you don't miss out on:-

- **Seasonal nibbles** – inc mince pies, sausage rolls etc
- **Eight Very Special Raffle Prizes** – inc Grouse, Cabernet, Pannetone, Breakfast box, Tiptree Jams etc

Refreshments are free, whilst its £2/ticket for the prize raffle.

If you haven't renewed your membership, it's a great opportunity to settle up on the night – bearing in mind its great value at just £5/yr and you can make our membership secretary Andy G0IBN very happy ☺

NB: Physical meeting, please attend – no Zoom



Volunteers: We still need a Secretary and other roles filled, so please do chat to us and see how you can contribute – whether its special event operating, a talk, training, or some other special interest

SUBS/RENEWALS for 2022-2023 are due now – Just £5pa !

PLEASE SUPPORT THE CLUB - VOLUNTEERS NEEDED NOW!

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Club Diary

Tue 6-Dec-2022	Club Meeting: Xmas Social inc Special Raffle & Quiz	Danbury Village Hall
Tue 3-Dec-2023	CARS New Year Net on GB3DA - note the date switch with 10 th	On air!
Tue 10-Jan-2023	Club Meeting: Brickworks & Amateur radio – note the date	Danbury Village Hall
Sun 5-Feb-2023	CARS at Canvey Rally	Canvey Island

Club Nets

CARS meets for talks/events on the first Tuesday of the month. The subsequent Tuesdays have club radio nets as follows below and dates listed on our calendar at www.g0mwt.org.uk/main/events/categories/net/ :-

- **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 & Morse Classes**2023 CARS Training classes at Danbury:**

The first Foundation Fast Track of 2023 will be on Thursday 2nd & 9th February

If you are interested in these or other opportunities in 2023, please contact **John O'Connell M0JOC** our training coordinator and Exam Secretary. Please also spread the word to potential candidates!

We can also accommodate fast-track courses at Danbury to assist with the Intermediate, Full and the new Direct-to-Full (D2F) exams that start in January-2023

John can be contacted via training2023@g0mwt.org.uk or 07868-004380

More info and other updates are at: www.g0mwt.org.uk/training

Online Morse Classes: Thursday evenings at 7pm. Coordinated by Andy G0IBN who has on-air practice sessions and via Skype too... <https://join.skype.com/clsfKXKminVf>

- contact Andy via morse2023@g0mwt.org.uk - or feel free to enquire about the Essex CW Boot Camp

 Follow @TrainWithCARS

November Meeting: Marconi HR110 HF Receiver



For November, Andy Tyler G1GKN gave a well-attended talk at Danbury on the restoration and demo of the rare and pioneering Marconi HR110 wideband MF/HF Receiver – 0.5-30 Mc/s in five bands.

At the end of WW2 many well-known but quite large war surplus sets were about such as the RCA AR88, National HRO, Marconi CR110, R1155 etc.

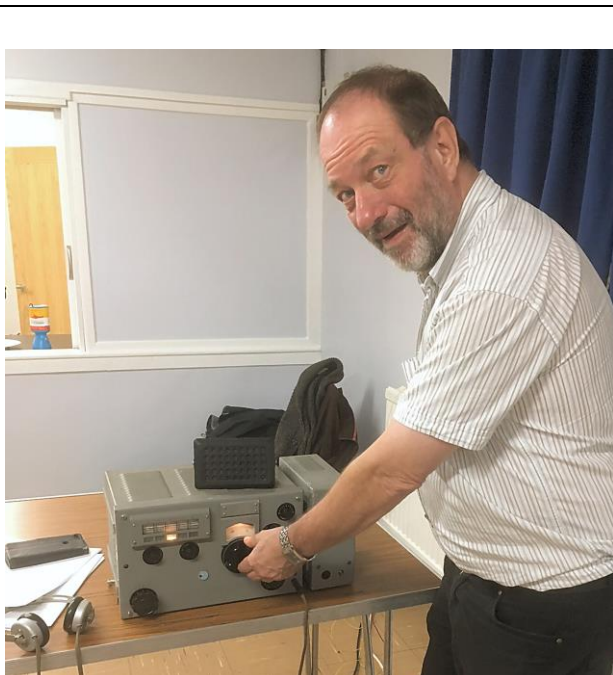
By the early 1950s newer models from Colins and Racal were also appearing, so Marconi developed something far more compact, yet good capability – the HR110

It is believed that only 10 or so were produced, as it did not go into production – so it's a great opportunity to see this rare pioneering design. Andy's restoration work had addressed some very aged resistors and reforming capacitors, helped by an original manual. After a lot of careful work, it almost worked first time (stopped by a simple fault). We were able to have a live reception demo and admire the way the band and tuning scales worked/turned.

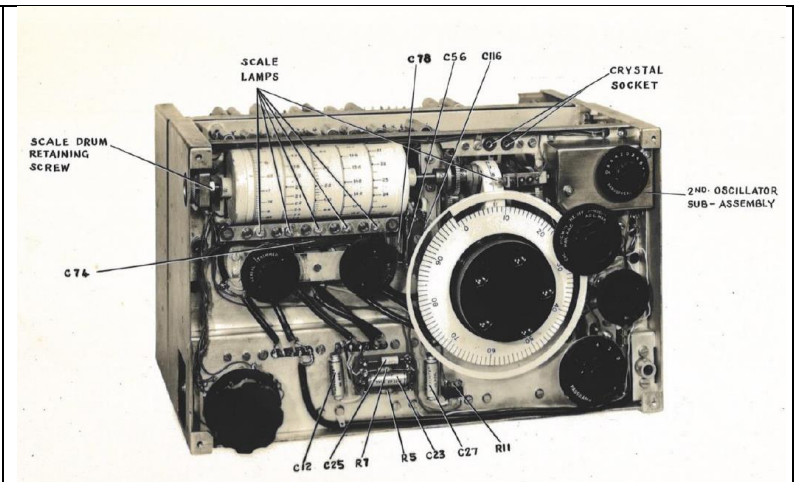
So why didn't such a lovely compact design catch on?

Andy explained that the heavier rivals had far more accurate tuning and stable local oscillators; and could cope with RTTY as well as Voice/CW without changes – winning them Royal Navy orders

Still pretty impressive though - inc its restoration story – Our thanks to Andy!



Live Demo !



From the manual



Receiver and Power Supply unit Labels

Transatlantic Operators needed

The RSGB are hosting the Transatlantic Centenary Tests, on the HF bands to commemorate the centenary of the achievement of Amateur Transatlantic communication, during the Transatlantic Tests that were held between 1921 and 1923.

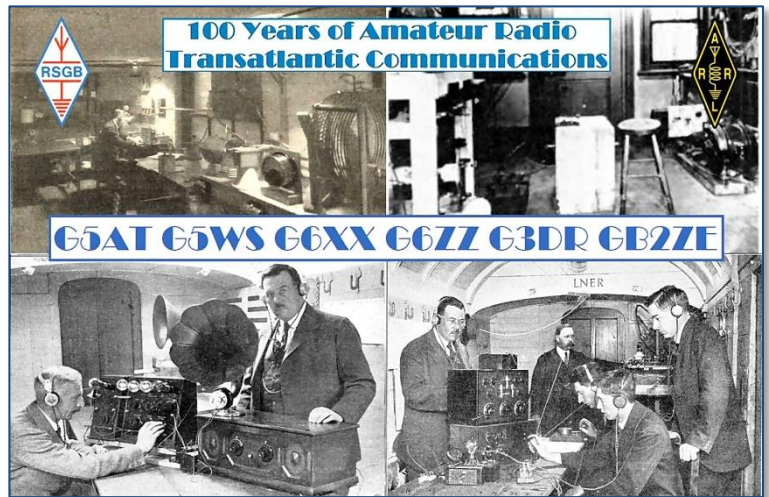
A number of historic callsigns will be activated and there are awards for working them on different bands and modes. The event runs for the whole of December.

The callsigns to be used are G5WS ("the first to get across"), G5AT, G6XX, G6ZZ and G3DR. In particular G#5WS will also be active from the other UK home nations (GD5WS, GI5WS, GJ5WS, GM5WS, GU5WS and GW5WS).

There is more information in recent editions of Radcom, and on the RSGB web site

RSGB members are invited to activate the special calls.

Further info: RSGB website – www.rsgb.org/tct - or **Paul G4PVM** who is the coordinator for **G6ZZ**.



Freeview and Sky/Freesat Changes

During the first quarter of 2023, BBC Regional programs will finally be able to be in HD - a familiar problem on Freeview in particular. This is a key enabler for BBC normal definition to be gradually phased out, so do make sure you have HD compatible equipment next year...

More modern smart TVs/receivers will make this transparent as many can be automatically set to use an HD channel by default, but beware...

Briefly:-

- **Phase-1: Mid-Jan – March 2023:** Standard Definition satellite viewers will lose BBC1/2 local programming such as regional news. Viewers with satellite-HD receivers will automatically get the correct versions on channel 101/102. Meanwhile on Freeview the regional version of BBC1 HD will finally be on 101 - and no more red screen or birdsong after the national news!
- **Phase-2: March-2024:** All BBC Standard Definition channels on satellite will be closed entirely – so make sure you are on a Satellite HD box/recorder by then

Freeview will still retain both SD and HD BBC channels for now, but the above is intended to pave the way for a future third phase as broadcasters save money and free up bandwidth caused by the duplication.

- More info: <https://www.bbc.co.uk/mediacentre/articles/2022/BBC-One-HD-rollout-England>
- Is your TV Ready ? – try test Channel 799

John Yates G1UZD SK

We were saddened to hear that former CARS Chair John Yates G1UZD passed away to become a silent key on 26th August 2022.

John was a keen and active radio amateur and was licensed in 1986. He was QRV from home on 60m to 70cm. He helped with special event stations such as the Great Baddow 70th anniversary open day in 1993 (GB70GB), and the Marconi New Street 96th anniversary in 1996. He also operated as OH/G1UZD when in Finland visiting his wife's family.

John joined CARS in 2003. He volunteered for the committee in 2008 and served several years as programme secretary. He was CARS chairman in 2013/14.

An extended Obit is on: http://www.g0mwt.org.uk/society/g1uzd-sk/john-yates_g1uzd.htm



Northeast TV Mast Replacement

On the 10th August 2021 the Bilsdale TV mast that serves the Tyne Tees area caught fire (via the coax feeders) and had to be demolished.

Some recent pictures show how you put up a decent replacement, all 300m of it – by hauling up one section at a time – by some very skilled aerial riggers!...

And the entire structure sits on a single 6" ball bearing – carefully centred and tensioned by the guy ropes.



- BBC Mast Demolition video: <https://www.bbc.co.uk/news/uk-england-tees-58821271>
- Construction photos: <http://tx.mb21.co.uk/gallery/gallerypage.php?txid=744&pageid=4258>
- Mast Project Restore: <https://www.bilsdalemast.co.uk/>

G3CVI SK Radio Item Sale

CARS have sifted thru a host of items from the sad passing earlier this year of Brian Thwaites G3CVI our former treasurer. Below we are after reasonable offers for the Rig category, but all other items can be obtained based on offering a donation that we will pass onto Essex Air Ambulance.

General terms: CARS Members get first preference if demand is high; Sold as seen; Buyer to collect
Enquiries to Paul G4PVM: g4pvm@g0mwt.org.uk

Rigs etc.

- **Kenwood TS2000** HF/VHF/UHF All Mode Transceiver. S/N 31000042. Plus mic.
- **Yaesu FT817** HF/VHF/UHF All Mode Transceiver. S/N OJ770344. Plus mic, spare rubber duck antenna & pocket guide.
- **Sommerkamp SLB300** HF Linear Amplifier. 1-8-30MHz. 600W.
- **Yaesu YO-901** Multiscope. Oscilloscope, two tone generator, band scope. Matches THE FT901/FT902. S/N 9K020318.

Accessories

- BHI Noise Eliminating In-Line Module NEIM1031 S/N 10312332.
- BNOS low pass filter 6m filter. Part no. F50-L/U.
- CDE Model AR-30/AR-40 Solid state Direction Module Indicator (rotator controller).
- Daiwa PS-30XMII power supply. 1-15V. Rated 24A. Max current 30A. Plus box.
- Datong VLF converter. Model reference VLF. Converts 0-500 kHz to 28MHz band.
- Datong Model FL1 Frequency Agile audio filter. S/N 2304.
- Enterprise Radio Applications (ERA) Microreader (CW/RTTY).
- Hansen DL-20 dummy load. 15W. DC-150MHz.
- Heath Model HD-1234 4-way coaxial switch. SO239. S/N 02621.
- MFJ-260C 300W Dry Dummy Load (0-600MHz). In box with instruction leaflet.
- MFJ-901B Versatuner. 1.8-30 MHz. Max. 200W PEP. SO239 & 400 Ohm balanced input.
- MFJ Artificial Ground. MFJ-931.
- MFJ-461 Pocket CW reader. Plus instruction leaflet.
- Microphone Model DM-300. 50 ohm. Unidirectional. Dynamic. 0.25" jack.
- Seiki TWS-120 two-way coax switch SO239.
- Toyo SA-450 two-way coax switch SO239 3.5-900MHz. Loss 0.02dB. Max. 2.5kW
- Welz SP-10X SWR & Power meter. Freq 1.8-150MHz. Max 200W. Plus instruction card.
- Welz SP-200 SWR & Power meter. Freq 1.8-150MHz. Max 1kW. With box.
- Yaesu hand held mic. 500 Ohms. Black with grey cable.

Books (paper back unless stated) – free, but a donation would still be appreciated.

- Practical Wire Antennas by John Heys G3BDQ, RSGB 1989.
- Microwave Handbook Volumes 1 to 3 by MW Dixon G3PFR, RSGB 1994.
- OSCAR Amateur Radio Satellites by Stratis Caramanolis, RSGB 1976.
- The Radio Amateur's Handbook 1977 by ARRL (700 pages).
- Slow Scan Television Explained by Mike Wooding G6IQM, BATC 1992.
- Radio Communication Handbook volumes 1 & 2, RSGB 1976 (hard back).
- HF Antennas for All Locations by Les Moxon G6XN. RSGB 2nd edition, 1995 (paper back).
- The Amateur Radio Handbook (3rd edition) RSGB 1961 (hard back).
- The GQRP Club Circuit Handbook 1983 (96 pages).
- Single Sideband for the Radio Amateur (1st edition) ARRL 1954.

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Newsletter and Archive: <http://www.g0mwt.org.uk/newsletter>