



Chelmsford Amateur Radio Society Newsletter

March Meeting

Tue 4-Mar-2025, 7:30pm
Danbury Village Hall

Practical Skills Evening

By CARs Members

Following the popular FM radio kit evening (pictured from January) we are now able to run another opportunity where you can either just socialise – or be hands on...

Kit Building – more choices!

- Morse Tutors
- FM Radio Kits
- AM Radio Kits
- Light-barrier intrusion alarm (Tx and Rx PCBs)

SK- Sales

We will have many of the smaller items left by Tony G4YTG
– offers to John M0JOC

Quiz - held over from last time

Raffle – great prizes!

As usual tea, coffee and biscuits will be available together with the free raffle!



Training / Exam Technique – Enquire re our March Course

CAR PARKING – take care to register your car in Danbury

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Club Diary

Tue 4-Mar-2025	CARS Meeting – tbc	Danbury Village Hall
Wed 19-Mar-2025	Last day to operate GB9OCH	On Air
Tue 1-April-2025	CARS Meeting - Constructors Competition - Cash Prizes	Danbury Village Hall
Sat 26-Apr-2025	IMD – International Marconi Day	

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

If you are interested in either training/revision or exams, please contact **John O'Connell M0JOC** our training coordinator and Exam Secretary. Please also spread the word to potential candidates. John can be contacted via training2025@g0mwt.org.uk or 07868-004380

More info and other updates are at: www.g0mwt.org.uk/training - and the updated RSGB Course Finder

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>

- "Beginners" classes are available,
- Other courses available are an "Improvers" class, 10 to 15wpm:
- "Morse Development Group" 15wpm+ : "Advanced" class for the techniques of "Head copying"

- contact Andy via morse2025@g0mwt.org.uk



Follow @TrainWithCARS



Follow @ChelmsfordARS

February Meeting: Radar-90 by Andy G1GKN

The February meeting had a great turnout to hear all about the 90th anniversary of the Daventry Experiment on the 26th February 1935, which quickly led to the Birth of British Radar and many related innovations.

The 360ft tower at Great Baddow (originally at Canewdon, until it was moved in 1956) was an early result of this work, as it formed part of the Chain Home radar system for the Battle of Britain.

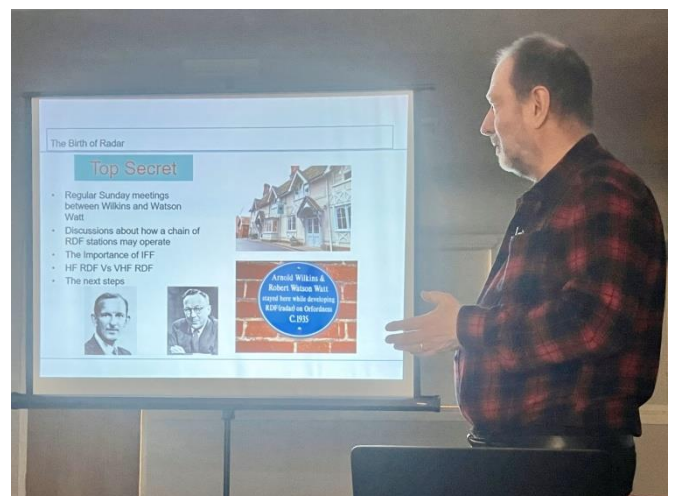
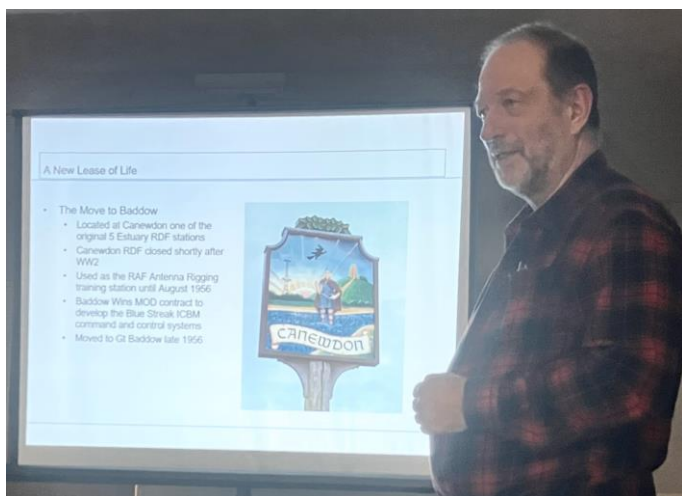
RF Expert **Andy G1GKN** began with the early history and fear of air attack following WW1 and early attempts at aircraft detection. Following wild suggestions for a Sci-Fi death ray, Robert Watson-Watt suggested that the power was not available for that but should at least be able to detect enemy aircraft and provide useful early warning.

The test performed near Daventry used a pair of Dipoles arranged to null out the direct BBC broadcast signal – but as the plane flew by its body reflected and scattered the signal which could be reliably detected. From that basic demonstration the team set up at Orford Ness (and then Bawdsey) on the Suffolk coast to develop not only Chain Home in record time, but related systems for IFF, VHF radar and eventually microwave systems.

The Chain Home original system was on HF and locked to the 50Hz of the national grid with metal towers holding the transmit arrays and wooden towers for the receivers. The low frequencies confounded early German reconnaissance who were expecting a more conventional microwave radar system.

Our thanks to Andy G1GKN

The enjoyable evening was rounded off by Andy G0IBN who ran another great raffle.



GB9OCH – Radar Special Event



Following on from the talk, CARS marked the anniversary day itself on Wednesday February 26th to commemorate the 90th anniversary of the Daventry Experiment and the Birth of British Radar in 1935, Chelmsford-ARS operated special event station GB9OCH (GB 9-Oscar Chain Home). We were joined on air by stations GB9ORE at Daventry and GB2BRS Bawdsey.

We were grateful to Andy G1KN who had arranged access and antennas and were able to operate from BAE Systems Great Baddow, next to where the last wholly intact 360ft high Chain Home radar tower is still standing.

Fittingly, one end of the EFHW HF antenna was supported by the nearby smaller Chain Home Extra Low tower. The combination of this and a Diamond-X30 enabled HF-40m and VHF 2m stations to be on air. In addition Paul G4PVM had warmed up the call in the days before and John M0JOC was running on 20m.

Operating ran from 10am to lunchtime (and a free lunch!) followed by a shorter afternoon session. Around 50 QSOs were made. This included a planned 11am slink up with Daventry and Bawdsey – and a bit later with GB3RS at – (RSGB NRC at Bletchley Park) – thanks in particular to Andy Kersey G0IBN.

The special call remains available on request for members to use from home. Please contact Paul G4PVM - it is valid until March 19th - you will need to send us a copy of your log, preferably in ADIF format.

QRZ:-

- **GB9OCH** - Chain Home tower, Chelmsford
- **GB2BRS** - Bawdsey Radar Museum, Suffolk
- **GB9ORE** - Daventry Radio Experiment



Outside the operating hut by the CHEL and main Chain Home towers
(photo taken in the afternoon - after the rain stopped)

Inside the warm and dry operating hut...



GB90CH Great Baddow Team: Norman M0FZW, Murray G6JYB, Andy G0IBN and Andy G1GKN



Andy Kersey with a Microphone and Morse Key - HF QSOs were a mix of SSB and CW on 40m

CARS Exam Course – March 2025

CARS is now taking bookings for the next 2025 training course at Danbury which we hold on Thursday evenings. Contact: John M0JOC via training2025@g0mwt.org.uk or M: 07868-004380

Intermediate and Full:

We offer a three week course focussing on exam techniques, revision and exam preparation. This course is ideal for candidates who have undertaken self-study and who wish to consolidate their knowledge with face-to-face training. The fee for this course is £15.

April Constructors Competition

Get ready for our Constructors Competition Meeting Tuesday April 1st

Our annual competition - complete with Cash Prizes!

Electronics, metalwork or even software are all valid entries.

The only entry rule is that it must be safe. The Prizes and certificates are for:-

- 1st Place - £30
- 2nd - £20
- 3rd - £10
- Newcomers - £20

You will need to present your entry to the audience, who will vote during the break. Dont be shy! - bring your effort along - both hardware and software are eligible

Danbury Car Parking – Reminder

If you are using the Danbury Leisure Centre car park opposite the village hall, then please be aware that it is now a managed zone. In the evening you need to register your car number plate if you need to stay longer than two hours (or risk a fine).

Fortunately the village hall has a tablet device where you can do this, rather than struggling in the dark

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