



Chelmsford Amateur Radio Society

Newsletter

June Meeting

Tue 2-Jun-2026, 7:30pm
Danbury Village Hall

Skills Evening

By CARs Members

For June our practical/social slot returns where you can either just socialise - or be hands on...

This month's topics are based on our popular kits - and other popular items - but please do ask if you are after something else such as connector assembly

- **Kit Building / Soldering:** FM Radio, Morse Tutor etc
- **Mini-Talk:** Paul G4PVM will give a demo of online DX'ng Tools
- **Quiz:** Test your knowledge



All welcome - free raffle and refreshments.

CAR PARKING – take care to register your car in Danbury

Training - Contact John M0JOC re Intermediate / Full Courses

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Club Diary

Tue 2-Jun-2026	CARS Meeting – Skills and Quiz Evening	Danbury Village Hall
Tue 7-Jul-2026	CARS Meeting – Propagation talk by Gwyn G4FKH	Danbury Village Hall
Tue 4-Aug-2026	CARS Summer Social Meal	tbc

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. Our Training page has the latest updates.

Please spread the word to potential candidates. John can be contacted via training2026@g0mwt.org.uk or 07868-004380. Bookings are now open for the autumn.

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 online by MS-Teams

- "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 morse2026@g0mwt.org.uk

 Follow @TrainWithCARS

May Meeting: How Low Can You Go

For our May meeting Andy Tyler G1GKN gave us a brilliantly illustrated tour of the Low Frequency world below the 160m amateur 'Top band'. Amateur radio has allocations at 136 and 472 kHz, where the wavelengths are so long that efficient antennas are not possible and greater innovation is called for. In amateur installations, typically far more power goes into the antenna, than actually radiates.

It is also an area where submarine communications, beacons for aircraft navigation broadcasters, time signals and other specialist stuff can lurk, as well as some natural phenomena such as lightning and earthquake emissions. The ITU define low frequencies in several bands:-

Band	Frequency	Wavelength	Usage / Comments
ELF	3-30Hz	10000km +	Magnetosphere oscillations, Submarine ELF Comms
SLF	30-300 Hz	10000-1000km	
ULF	300-3000 Hz	1000-100km	Earth-mode comms
VLF	3-30 kHz	100-10km	Lowest ITU allocation: 8.3kHz for lightning detectors
LF	30-300 kHz	100-1000	136kHz amateur band, time signals, subs, LW, eLoran
MF	300kHz -3 MHz	1000-100m	472kHz and 1.8MHz Amateur bands, AM Broadcasting
HF	3-30 MHz	100m – 10m	HF !!



Whilst some Broadcasters may be abandoning AM/LW/MW, this is where amateurs and professionals continue to operate and innovate. Indeed some systems such as eLoran are (re)emerging as an alternative to GPS navigation. Cars are adopting ~80kHz for high power chargers (WPT-EV)

The Amateur allocations at 136 and 472 kHz, have seen specialist digimodes, WSPR and slow morse (QRSS) to overcome the challenges and achieve considerable distances. Andy showed his QRP Labs hardware and a LF Antenna



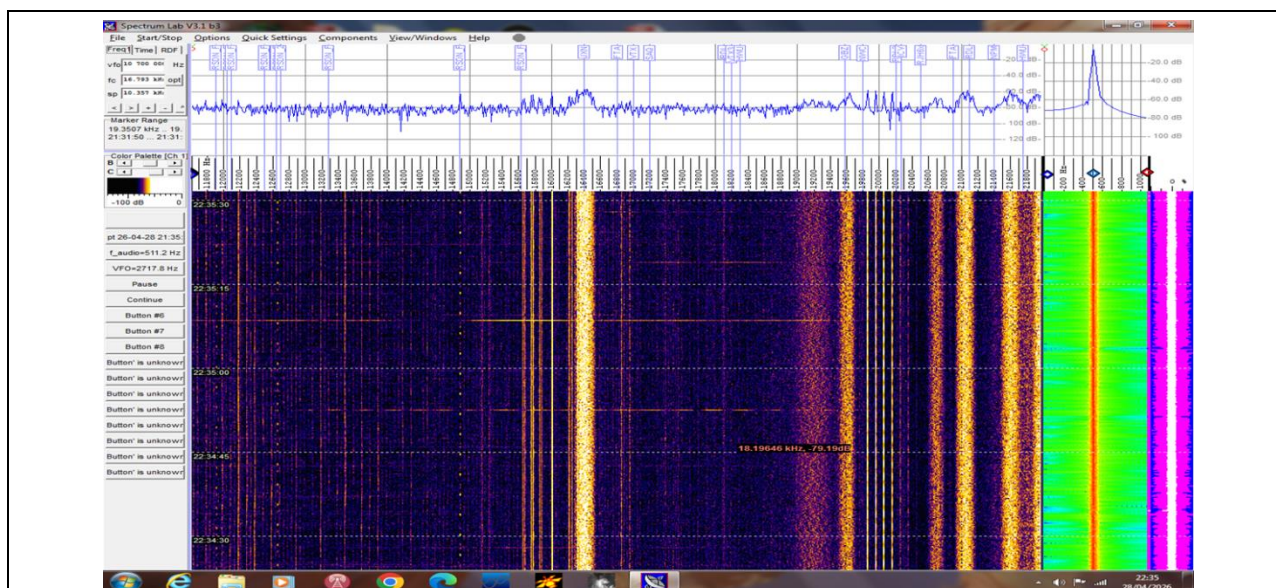
Grimeton , Sweden ~17kHz, 220kW

Transmitters (Amateur Bands and Modes)

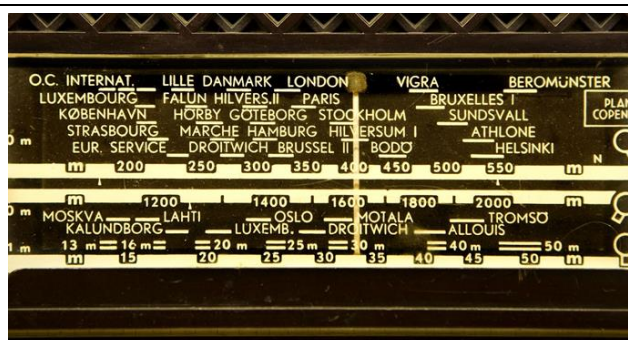
- 472kHz/630m and 136kHz/2200m (narrow Band Modes such as CW or digital)
- QRP Labs Ultimate 3S (kit)
- WSPRLITE from Sotabeams (built)
- One of the above + a PA (300W PA kit by G0MRF)



- Commercial
- There maybe others.....



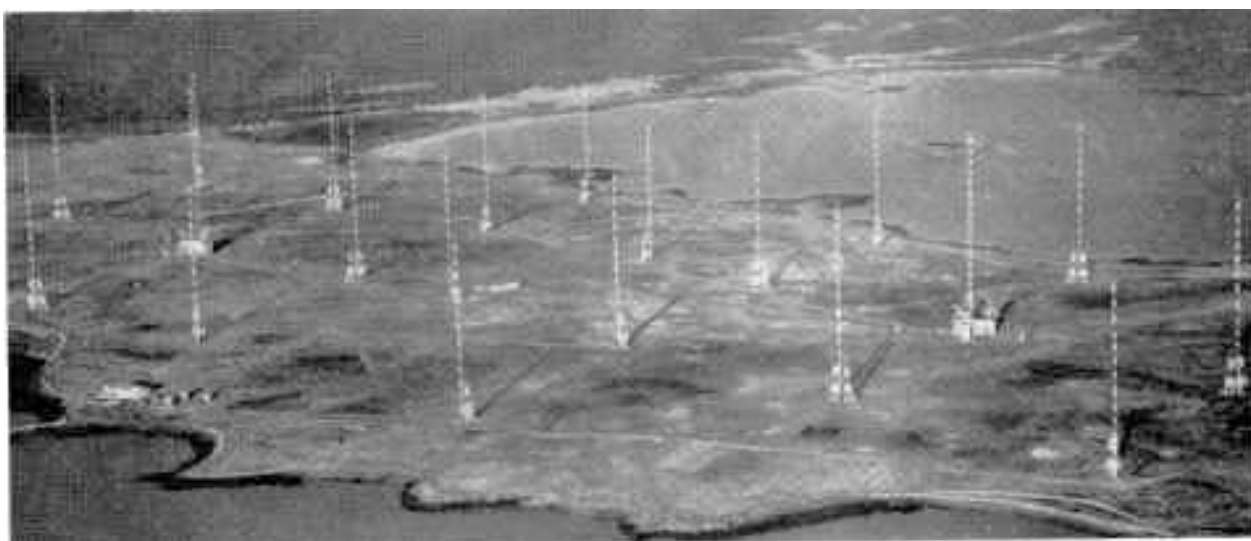
VLF Signal Reception



MF-AM 525-1606kHz – but fewer stations nowadays



A few still exist inc Radio Caroline



Cutler Naval Station – 24kHz, 2 MegaWatts

Radio-4 Long Wave Closure

Radio 4's Long Wave (LW) service on 198kHz will close on 27 June 2026 (at 0100BST / 0000UTC).

The Long Wave transmitting stations: Droitwich in Worcestershire, Westerglen near Stirling in Scotland and Burghead overlooking the Moray Firth also in Scotland, will all be closed down that day.

Droitwich was commissioned in September 1934. Its signals have been used as frequency references for radio calibration, particularly prior to 1988 when the transmit frequency was 200kHz – close to a wavelength of exactly 1500m

The RSGB and the BBC Amateur Radio Group will be marking this occasion on the air and are looking for volunteers to activate a special call sign in the week leading up to and including the day of the closure. In addition three radio clubs have volunteered to activate special call signs to celebrate the almost 92 years of these historic transmitters, on the day that they are finally turned off.

The Droitwich Antennas ➡➡➡



More at: <https://rsgb.org/main/radio-sport/rsgb-contest-club/bbc-long-wave-shutdown/>

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