



Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB Club Call Sign-G0MWT
President-Carl Thomson, G3PEM Chairman- Chris Chapman G0IPU
Treasurer-Peter Davies, M0PSD Vice President-John Bowen, G8DET

[Follow CARS on Twitter: @ChelmsfordARS](#)



Newsletter No 592

Web Address: www.g0mwt.org.uk

July 2015

July Meeting

Tue 7th July-2015, 7.30-10pm
Oaklands Museum, Moulsham Street

"Evolution of Submarine Cables"

By Bernard Logan

The first practical electric telegraph systems went into service in England in 1839 and in the United States in 1844. Only a few years later, by the late 1840s, enterprising promoters in Britain were proposing undersea cables across the English Channel to France. As the years went by little by little, cables spanned the world, very many starting at the Porthcurno cable station near Lands' End in Cornwall. Porthcurno is now a renowned telegraph museum. Come and hear what role Britain played in cable evolution and whether Submarine Cables are still of use today.



Do you know what route your emails take? Come and see the detailed maps. Do they reach you via undersea cable or is it perhaps by satellite. Are all the cables in use fibre-optic these days and are copper cables now redundant? Absolutely not, undersea copper cabling is still very much in use for numerous scientific purposes, we will hear just what purposes on Tuesday July 7th. Examine and compare samples of old and new cables and see examples of some instruments used for early telegraphy, together with examples of punched and inked paper tape.

Our speaker, Bernard, has over 25 years' experience in subsea systems, so expect to hear some interesting stuff!

Geoffrey Lovegrove, G7KLV – Congratulations.

CARS would like to congratulate Geoff on passing his 90th Birthday which was on Monday, 22nd June 2015. As usual he spent the day at Sandford Museum.

John, G8DET. A Vice President of CARS

Advance notice G-QRP Convention 2015.

This will be held this year again at Rishworth School, Rishworth, West Yorkshire (to the west of Huddersfield) on Saturday, 24th October with the usual trade & club stands; "bring & buy" and food/drink facilities.

Dates for your Diary

Tues 14 th , 21 st , 28 th	CARS - Evening Radio Nets @ 8:00 pm (Local). See Website for details.
Every Monday	Essex Ham 2m Net @ 2000h GB3DA
Thursday 2 nd & 9 th July	Intermediate Practicals Workshop Danbury Village Hall
Tuesday 7 th July	CARS Meeting - "The Evolution of Submarine Cables" – Bernard Logan
Monday 20 th July	CARS Skills Night, 7pm Danbury Village Hall

Nets Tuesdays 2000h (14th) GB3DA, (21st) GB3ER, (28th) 1.947MHz,
Also there is the Essex Ham net every Monday @ 2000h on GB3DA

Net Controller for July is Peter, G3SUY & Colin, G0TRM

Thanks to Carl, G3PEM for June.

ALL factual content presented is "as received" from the contributors of the articles; the editor accepts no responsibility for its accuracy, errors or omissions.

June Meeting Tue 2nd June-2015, 7.30-10pm Oaklands Museum, Moulsham Street

The Bodger's Guide to Microwaves John Worsnop, G4BAO

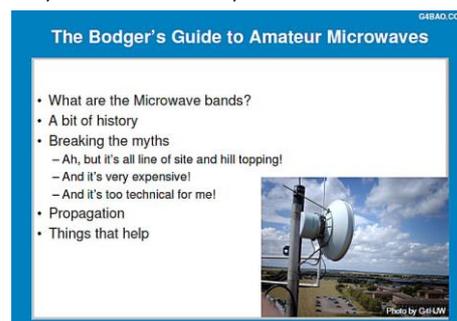
The greatest DX is not on HF but on the microwave bands, which are home to construction and innovation (much of which feeds down to lower bands). Without microwaves there would be no smartphones, Wi-Fi or SatNav.



Dr John Worsnop G4BAO who is the treasurer of the UK Microwave Group and a member of the RSGB Propagation Studies Committee travelled from his Cambridge QTH to enlighten us as to what is now possible.

John's talk first covered a bit of history from the first QSOs in the 1950s, but he was keen to dispel some of the common myths related to propagation and distances. The focus was on narrowband terrestrial DX, but he was also keen to point out other aspects includes data links, satellites/ISS, moonbounce (EME) and amateur TV.

A distinguishing feature of microwave bands is the availability of high antenna gains and the absence of atmospheric noise making it worthwhile aiming for state-of-the art TX stability and Receiver performance. This has driven new GPS-locked sources and innovative modes such as JTxx (initially for moonbounce) that have all rippled down into the lower amateur bands.



Thanks to Murray, G6JYB for photos. A full account is on the website [here](#).

[GB1JSS](#) (click for more detail)



CARS members celebrated the longest day of the year, the Summer Solstice, with a field-event at the usual "portable" location of Galleywood Common just south of Chelmsford. We managed to put up a total of 9 fishing-poles giving us coverage of 80m through 2m. It certainly made for an impressive array - and this image omits the far-right-hand pole that was supporting our 40m Doublet...

Myself and Peter G0DZB arrived on-site at 6:15 and 80m was on-air by 7am which gave us a number of QSOs including down to Brighton, Tewkesbury and up to Stockport. The use of a Doublet 42m in length was a first for the Galleywood location so it was a fun experiment and it took 5 fishing poles to support it: 10m centre and 2x 10m in the middle with a 7m at each end supporting a back-guy. Around 9am we dropped the poles, removed the 2 far-end poles and supports, and put my 40m Doublet up ready for the "main" station. This allowed G0DZB to raise his 30m Doublet and also give us a mounting arrangement for a 2m Slim-Jim.



We were lucky with the weather as it stayed warm & dry through the day with fits and starts of sunshine, but when it was out, the sun wasn't too intense. Here's our acting-Chairman, Chris G0IPU on 40m SSB with James 2E1GUA on 2m FM.

Being event co-ordinator didn't get me out of operating duties - Not content with starting on 80m at 7am, I had a couple of stints on the 40m station running both PSK31 and SSB. Pete M0PSX is sat opposite me operating on 2m. Note the 2 large batteries under the operating table!

Peter G1FOA came armed with a new FT-857 to operate a 6m station with a full-wave loop - the 50MHz Trophy Contest helped us to make good number of contacts on the Magic Band and there was good Sporadic E into central Europe for most of the day. The bands were in good shape and provisional log stats show just short of 300 QSOs across 7 bands and 5 modes - including a 2m SSTV contact.

Thanks to those who visited, brought equipment or simply came along to enjoy the atmosphere.



Charlie M0PZT

For Sale

Martyn, G1EFL has several radios that he no longer uses which he would like to sell. Photos are below with asking prices attached.



If anyone is interested or requires any further information can they telephone Martyn, G1EFL or Val Medcalf on 01245 469008 or email Val on valmedcalf@supanet.com.

Presidential Jottings

Five years ago you voted for me to be President of CARS when Harry G5HF retired, it is now time for me to step down as I have the opinion that no one should hold an office for more than five years. I shall therefore not be carrying on as President after the AGM.

I would like to express my thanks for all of you that have given time to supporting CARS through my period of office especially Chris G0IPU who step into the Chairman's role during this year.

I wish the society all the best for the future.

73

Carl, G3PEM

Special Training Event

**Thursdays 2+9 July 2015 Danbury Village Hall,
"Intermediate Practicals Workshop"
For M3/M6 Foundation Licensees**

The Intermediate Practicals Workshop is a new short training course for those who just prefer to do the practical assessments and take the exam at their convenience anywhere later.

Led by Peter M0PSD, the objective is to complete all the assessments in just two evenings, so prompt arrival and homework are expected...



**Coordinator: Peter
M0PSD
Course Info:**

[Details & Registration Form](#)

Remember, any articles you feel may be of interest to members are welcome as are details of items for sale or wanted. Send to cars.editor1@gmail.com.

***Closing date for items in the next Newsletter –
Sunday 26th July.***

Offered Free to a good home. Realistic DX302

This is an hf receiver which was going to be consigned to a skip but I persuaded the owner to give it to me instead.

There have been some undocumented mods including an FM board and there are problems (mechanical) with the pre-selector tuning – tuning works but display doesn't move.

This receives reasonably but would benefit from some TLC and if anyone would like a restoration project and can collect from Basildon it's available.

Contact alan.gOrth@gmail.com