



# Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB Club Call Sign: G0MWT  
President: Carl Thomson, G3PEM Chairman: John Bowen G8DET  
Treasurer: Brian Thwaites G3CVI Vice Chairman Martyn Medcalf G1EFL



Newsletter No 546

Web Address: [www.g0mwt.org.uk](http://www.g0mwt.org.uk)

September 2011

## This Month's Meeting – Tuesday, 6<sup>th</sup> September, 7.30pm at the Marconi Club **"Programming your Modern VHF/UHF Rig"** by CARS Members

A number of CARS Members have mentioned to the Committee that having bought modern rigs – they are faced with making them work. Not that they are faulty but simply (or complex) understanding the Chinglish or Japalese Manuals and procedures.

The idea is that there will be an introduction of the general problems and then a step by step "Follow Through" of typically programming a Rig on the screen. After any Questions and Answers the meeting will break up to a number of tables where computers will be provided along with software capable of Programming the rigs. CARS will provide a PSU and Dummy Load – all you have to do is bring your Rig.

To assist this venture – do YOU know how to program your rig? If so could you help show others, please. Could you contact the Editor and tell him of your rig and what you can do to assist on the night – thanks.

CARS will have its now famous Raffle with at least 10 prizes.

### Dates for your Diary

Sat & Sun 20/21 August	CARS – Invited to Operate on the Lightship at Tollesbury
All Sunday Afternoons in August	CARS Operating from the Marconi Hut, Sandford Mill – GB100MWT, CW & SSB & VHF/UHF demonstration of Internet connected Amateur Radio. Open to the Public, 2 to 5pm, Free to Enter and to Park.
Thurs 1 <sup>st</sup> September	CARS – Start of Foundation Course in Danbury Village Hall.
Tues 13, 20 and 27 <sup>th</sup> Sept	CARS Nets starting at 8.30pm Local.
Wed 14 <sup>th</sup> September	CARS Committee Meeting – Danbury Village Hall – 7.30pm. All welcome.
Sunday 25 <sup>th</sup> September	CARS Operating at Sandford Mill – Science and Discovery Day 10am – 5pm.
Tues 4 <sup>th</sup> October	CARS Meeting – "Annual General Meeting" by CARS Members
16 <sup>th</sup> November 2011	<b>Anglia TV – time to rescans again - Mux D (ARQ B) changes frequency</b>

To be/remain a Member of CARS, send a Cheque for £12 – Adult Membership (16s and under are FREE) to:- Mr Brian Thwaites, 118 Baddow Hall Crescent, Great Baddow, CHELMSFORD, CM2 7BU.  
If you would like a receipt, please enclose a stamped addressed envelope with a 2<sup>nd</sup> class stamp.

Thanks to Geoff, G7KLV for sending the postal Newsletters – could it go by E-Mail?  
Please inform Geoff, G7KLV by E-Mail of any changes to your callsign, postal or eMail address, etc. Email him on [g7klv@g0mwt.org.uk](mailto:g7klv@g0mwt.org.uk) Only by you sending Geoff your E-Mail address, can we ensure **WE** get it right!

Club Nets: Tuesdays 8.30pm: (2nd) GB3DA: (3rd) GB3ER: (4th) 1.947/50: (5th) 28.375. All MHz +/- QRM.  
**Net Controller for Sept maybe Denis, M0FHA, TBC. Thanks to Geoff, G3EDM who did it for August.**

## Last Month's Meeting:- "Constructors Competition" by Carl G3PEM.

Dave, G3PEN told the meeting of how he operated from his Narrow Boat on the canal as part of the "*British Inland Waterways on the Air*" event using GB2FIP during the last weekend of July. Geoff, G3EDM said he had worked him. The Foxton flight consists of two sets of staircase locks, with a limited passing-pond between the two sets. Each staircase consists of 5 directly-connected locks, which all have to be traversed by a canal-boat before any other boat can go in the opposite direction. It can take hours to wait for your turn.

It was nice to see Simon Wilton, G7HCD visit us from Ontario, Canada.

Carl introduced the Constructors Competition by giving the ground rules and distributing the Voting Forms where Members were requested to mark 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> places. He said he was pleased to see we had 8 entries with a total of 9 Home Constructed Items.

John, G8DET started off the evening by showing his 80 Metre Dipole erected from the corner of the house to a Rowen tree in the front garden and an apple tree in the rear. It only resonated at 3.5MHz but with a SWR of 3 to One. The audience were asked "Why". A number of suggestions were made but the answer was given after the meeting by Peter G3SUY who ran a series of computer simulations. As it was only mounted 5 Metres AGL a SWR of 4 to one was typical so 3 to One was good!

Peter, G3SUY showed a complete mobile station for Top Band complete with a Mobile Aerial made from a Rolling Pin (bought from Morrisons not borrowed from the kitchen). He was awarded 2nd Prize.

Colin, G0TRM told the audience that after Louis Varney, G5RV died his Widow, Nelida presented CARS with his Morse Keys. Colin mounted these on a board and wired them to a Sounder (one made by Louis). This made a lovely display which will be loaned to Sandford Mill.

New Member Vic, G6BHE told how he had designed a Folding Over Vertical Aerial using a special Bracket manufactured to his specification. This was to protect it during high winds and to reduce visual evidence he was a Radio Amateur.

Andy, G1GKN produced an Aluminum flight case which contained a FT817 Portable Rig and home constructed ATU, SWR/Power Meter – all the items for operating remote from home. 100s of hours had gone into its construction. Awarded 1st Prize. Below is a photo of Andy standing with Carl seated.



Patrick, M0XAP showed a Die Cast box containing a number of preassembled chips, each one operating on a different spot frequency. Patrick said these had proved very useful when checking Amateur Radio equipment. He also kept true to form using old TV Valves to make a MW/SW Valve Receiver. He was awarded 3<sup>rd</sup> Prize.

Carl, G3PEM held up a piece of stiff looking coaxial cable and said he wanted to find out how many Ferrites were needed to stop RF circulating along the screen. Using a number of different techniques he found it was 10 – effectively he had made a HF Ferrite Choke Balun.

Martin, G4TOO said he needed a simply ATU so he designed the layout to include a strip of PCB with a number of Lands on it. Into these Lands he threaded a pre-wound tuning coil which was then soldered into place making a rigid assembly. He was awarded the Special Prize".

Thanks to Carl for organizing the Annual Event and to all those who submitted entries.

**John G8DET**

## **This Month's Radio Sport (Contests) - All in BST (Local times)**

**3/4 Sept** – SSB Field Day – 24 Hours

**3/4 Sept** – 144MHz Trophy – 24 Hours

**4 Sept** – 144MHz Backpackers – 11:00 to 15:00 UTC

**14 Sept** – 80 Metre Club Sprint–SSB. 19:00-20:30 UTC.

**11 Sept** – 70MHz Contest – 09:00 to 12:00 UTC

**29 Sept** – 80 Metre Club Sprint–CW. 19:00-20:30 UTC.

**24/25 Sept** – CQWW – RTTY – 48 Hours.

For further information please email Steve G4ZUL [contests2011@g0mwt.org.uk](mailto:contests2011@g0mwt.org.uk)

**Steve, G4ZUL**

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## **CARS Propagation Forecast for this month – Just for CARS**

Prediction engines rely upon smoothed Sunspot Numbers and not day-to-day variations. That is why predictions carry the caveat that they are only correct for 50% of days! Gwyn tries to make his better!

<b>Asia: Dhabram</b>	around 16:00 on 24.9MHz for 89 percent of days, with fair signals.
<b>Oceania: Sydney</b>	around 20:00 on 7.0 MHz for 62 percent of days, with poor signals.
<b>Africa: Johannesburg</b>	around 20:00 on 10.1MHz for 96 percent of days, with fair signals.
<b>S. America: Rio de Janeiro</b>	around 22:00 on 10.1MHz for 77 percent of days, with poor signals.
<b>N. America: Saskatoon</b>	around 06:00 on 10.1MHz for 77 percent of days, with poor signals.

**Gwyn, G4FKH**

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## **Sandford Mill in August and Science & Discovery Day in September using GB100MWT**

CARS are operating each Sunday Afternoon in August from Sandford Mill from 2pm to 5pm. Members of the Public are invited and as usual it is entirely FREE to enter and to park. Tea/coffee and light refreshments will be available – provided by Friends of the Museum. Boat trips maybe available – weather allowing.

CARS opened the proceedings on Sunday 7<sup>th</sup> August with SSB from the Marconi Hut. Additionally there was an Internet Connected Amateur Radio demonstrated from the brick Tea Room. Mark M0IEO and John and Norman Crampton M0FZW had computers and discussed Programming modern rigs. It rained in bursts so this room was well suited for Amateur Radio that day. Martyn arrived from Gatwick Airport with Paul Moss, KT1MTW who stayed with him for a few days before flying back to Ma, USA.

Sunday, 14<sup>th</sup> August. Apon arriving at Sandford Mill, Gwyn found the 80Metre Doublet lying on the ground! The halyard had parted towards the lattice tower. The free end was thrown across the pond and rested in the bramble bush. Steve, G4ZUL and Andrew, G0IBN beat a path to it and tied it to the fence – producing a sloping 80M aerial. This loaded up OK with the Palstar ATU on 7MHz as there was a Contest on 14MHz. Plan B produced a Gazebo where a number of CARS Members assembled using Simplex 2M and Echolink.

Sunday, 21<sup>st</sup> will be as the 7<sup>th</sup> with Brian Thwaites, G3CVI co-ordinating SSB from the Marconi Hut. The Internet Radio Gazebo will also be provided. The last Sunday, 28<sup>th</sup> of August will see Gwyn with CW in the Marconi Hut. The Internet Radio will be provided from the brick Tea Room.

Sunday, September 25<sup>th</sup> CARS will be at Sandford Mill for Science and Discovery Day from 10am to 5pm. The day will start with SSB until 1.30pm when CW will take over for the remainder of the day. The Public are invited FREE and the Friends of the Museum will provide other activities to keep everyone interested.

CARS now need Operators, Loggers and Hosts – can you spare an hour of two, please. See Brian or Gwyn at the August Meeting or E-Mail them.

**Brian** [g3cvi@g0mwt.org.uk](mailto:g3cvi@g0mwt.org.uk) **Gwyn** [g4fkh@g0mwt.org.uk](mailto:g4fkh@g0mwt.org.uk)

**John G8DET**

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## **Storm Data**

As shown this afternoon, the website for the storm info is [www.isleofwightweather.co.uk](http://www.isleofwightweather.co.uk)

**Mark, M0IEO.**

## How Do PLL's Work? Suggestion 2.

If you've ever wondered how phased locked loops work then type "How Do PLL's Work" into Google. A mass of very interesting suggestions will be presented.

**Geoff, G7KLV.**

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### Computer Printers

In 1998 Murray suggested I purchase a *HP895cxi Printer* on the basis a number had been purchased at Great Baddow – it has served me well coupled to my then, powerful, Windows 98 machine, I have resurrected a number of Cartridges with specialist Printer Cartridge Fluid.

When I purchased a new computer a few years ago I went to Windows XP and purchased a *HP Business Inkjet 1200d Printer* on the basis it had huge separate ink cartridges (Black was 69ml) and it also printed Duplex (printed on front and then the rear of a page automatically). This did 33,000 copy pages. Unfortunately somehow it became intermittent when I changed to Windows 7 and I also lost HP Toolbox – not supported. I purchased a second hand model which was faulty on delivery. A new Black Printhead and a selection of different chipped cartridges got it going but it seemed to have the same fault although it had only printed 3200 copies.

Trevor, M5AKA suggested I purchased a Canon Pixma iP4850 on the basis it was built for Windows 7 and colour and Duplex. It retailed at over £100 and reviewers said the Cartridges cost a fortune – I found the ink was Pigmented so does not fade like dye based inks but are much more expensive. Also as they were chipped there were no Compatible versions available – so I resisted – struggled on for 3 months and finally bought his suggestion this week. The price has fallen to £58 delivered from Amazon and chipped Compatible Cartridges are now available at less than half price from [www.cartridgepeople.com](http://www.cartridgepeople.com) in Jersey.

My Son, Nigel came and got it going – he has two similar but older Canon models. I have only printed out a few pages – the Black text ink is not as dense as HPs but on "High Quality" better. Photographs are OK but pale compared with the HP. Draft is definitely pale. Duplex works well – warm-up is quick from switch-on. The large Black is now 19ml while a Colour is only 10ml, quite a difference from 69ml & 28ml respectively.

Does anyone want my old Printer and lots of Cartridges? Seems a pity to bin it. Suggest using it only on Windows 98 or XP unless you are a computer guru. Contact me.

**John G8DET**

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### MT2 Calling

*MT2 Calling* is a one hour radio show presented by CARS Member, Jim Salmon 2E0RMI, celebrating music & memories from the 1930's to the 1950's. It can be heard on various community and local radio stations and is also available World-wide via the Web <http://www.mt2calling.co.uk/>

*MT2 Calling* has posted a number of vintage videos on YouTube such as - The Andrews Sisters - Boogie Woogie Bugle Boy of Company B which can be seen at <http://www.youtube.com/watch?v=ugR0wFYJYn0>

**Trevor M5AKA and Jim, 2E0RMI**

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### Tesla coil artist Dr Electric

Australian Peter Terren AKA "Dr Electric" describes himself as a high voltage enthusiast and Tesla coil artist of questionable sanity.

See the amazing videos and pictures at <http://teslardownunder.com/>

Peter Terren, AKA "Dr Electric" on Google + <https://plus.google.com/108941983487083451766/posts>

**Trevor M5AKA**

## **CARS Contacts.**

I made contact with John Yates, GG1UZD/OH last night in Finland. We had a nice chat. I was using 100 watts to my ICOM 746. My Aerial is a Half size G5RV. It works well for me.

The World Scout Jamboree has now finished and home hospitably will take place.

I managed to make contact with them when they were using **SJ22S** on **20 Metres**.

I also had several contacts with **SJ22S** via **Echo Link**.

## **Martyn, G1EFL.**

PS Colin also worked John in Finland. Did anyone else?

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## **CARS Training – Advance Course**

CARS is now taking names for Intermediate licensees wishing to take the Advance exam on Monday 5<sup>th</sup> December at Danbury. Starting on Thursday 27<sup>th</sup> October until December 1<sup>st</sup> there will be a 'fast-track' six-week Revision Course at Danbury. This does assume you are largely prepared and have also been studying at home. Fear not though! The Course is intended to clarify, guide and prepare you.

More information at: <http://www.g0mwt.org.uk/training/> . Please register your interest with Clive G1EUC.

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## **President Jottings - September**

My thanks to all that entered the Constructor's Competition and many congratulations to Andy on winning this year's event. I am always amazed by the diversity of the entries to this competition; I hope other members will be inspired to join in next year.

Our committee has arranged the next meeting to be a how to programme your new rig so please bring along your questions to make this evening a success. Also remember that at this meeting we will be voting for Amateur of the Year, ballot forms will be located at the signing in table; please hand the completed forms to me after the break. Result will be announced at the AGM in October.

Finally Chairman John and the committee have really worked very hard over the past year to make Chelmsford the leading society in the country, but the committee is always looking for new ideas for talks, please put your think caps on so that at our coming annual general meeting we can have a few suggestions.

## **Carl, G3PEM. President**

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## **Olympics and VHF NFD**

Amateur frequencies will be used in the run up to and during both the Olympic and Paralympic games.

The proceeding of the July meeting of the RSGB Board are now available to members on the web at <http://tinyurl.com/JulyBoardMins> .

They show in item 16.5.2 that there may be a problem with the 2012 VHF Field Day because of the Olympic use of the 70 cm band. See also <http://www.rsgb.org/olympics>

## **Trevor M5AKA and Murray, G6JYB (When in South Africa)**

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## **Intermediate Course Videos**

Those wishing to take the Intermediate exam may find these videos helpful.

The 8 films of the Bath Intermediate licence class run by Steve G0FUW in the winter of 2003 and recorded by Robin M0RCR are now available for viewing online

They can also be downloaded to a local PC (file size of each film is about 400Mb) and a mobile version of each is available.

Please publicise the following link to any interested Intermediate students. Links from club web sites welcomed.

<http://www.vimeo.com/album/1666647>

Disclaimer. Although the classes taught were up to date at the time, these recordings are offered in good faith, and while they were believed to be a true reflection of the syllabus as it stood in 2003, there have been changes to the curriculum since then. Neither Steve G0FUW nor Paul G4DCV accept any responsibility for any incorrect information contained in the videos. Students must check the current textbook and syllabus to be sure that they are up to date.

**Trevor, M5AKA.**

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### **AMSAT-UK International Space Colloquium**

Thanks to the hard work of volunteers from the British Amateur Television Club (BATC) 14 videos of the presentations given to the AMSAT-UK International Space Colloquium held in Guildford July 30-31 are now available online.

You can watch the videos online at <http://www.batc.tv/>

Click on the 'Film Archive' icon Select 'AMSAT 2011' from the Category drop down menu Click 'Select Category' Select the video you wish to watch

Click on 'Select Stream' Click the play icon '>' on the player

Clicking on the icon to the left of the player volume control will give you full screen display.

You can copy a video file to your PC by clicking on the 'Click Here' link under the player.

Some of the PowerPoint slides can also be downloaded by following the links at

<http://www.uk.amsat.org/archives/1649>

AMSAT-UK publishes a colour A4 newsletter, OSCAR News, that is full of Amateur Satellite information.

The Spring OSCAR News can be seen at [http://www.uk.amsat.org/on\\_193\\_final.pdf](http://www.uk.amsat.org/on_193_final.pdf)

Join AMSAT-UK online at <http://tinyurl.com/JoinAMSAT-UK/>

AMSAT-UK <http://www.uk.amsat.org/>

**Trevor M5AKA**

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### **For Sale – Co-ordinated by Martyn, G1EFL**

**MFJ Versatuner** Model MFJ MJ-969 - £140.

**Yaesu FT847.** - £450.

**Kenwood TS440s.** - £300.

**NRD S25G Receiver.** -£100.

**Icom Receiver IC7000** - £400.

**AR3000 Receiver.** - £100.

**Midland 3001** Citizen Band Transceiver - £40.00.

There are lots of books etc.

For further info, please contact

**Martyn. Tel 01245 469008.**

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### **CARS Nets**

As can be seen on the CARS Web Site, CARS Nets have changed just a little in the past couple of months to being Repeater based for VHF with GB3DA on the second Tuesday and UHF with GB3ER on the third Tuesday in the month. The August (and maybe September's) UHF Net was held on GB3DA as 'ER seems unreliable.

**John G8DET**

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### **And Finally:-**

John G8DET edited this edition. Material by Trevor, M5AKA; Steve, G4ZUL; Gwyn, G4FKH; Geoff, G7KLV; Mark, M0IEO; Martyn, G1EFL; Jim, 2E0RMI; Murray, G6JYB and Carl G3PEM.

Closing date for the next Newsletter – Thursday 22nd September.