



Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB

President: Carl Thomson, G3PEM

Treasurer: Brian Thwaites G3CVI

Club Call Sign: G0MWT

Chairman: John Bowen G8DET

Vice Chairman Martyn Medcalf G1EFL



LOTTERY FUNDED

Newsletter No 568

Web Address: www.g0mwt.org.uk

July 2013

This Month's Meeting

- **NEW DATE:** FRIDAY, 12th July. Doors open 7pm for 7.30pm Start
- **NEW VENUE:** Great Baddow Parish Hall, 19 Maldon Road, CM2 7DW.

**“Brief Overview of Foundation Training” by Peter Sipple, M0PSX
and**

“Preparation for CARS Operating G100RSGB”

Peter has produced a new set of Training Slides which set out the basics of the Radio Amateur Foundation Course. It is felt it would be of interest to the new comers and to more experienced members of the hobby.

The second part of the July Meeting will be a number of stations set up to transmit to dummy loads to enable CARS Members to practice using the rigs which will be used when operating to commemorate the RSGB reaching 100 years when CARS have been allocated Saturday 20th and Sunday 21st July.

Computers will be set-up with “Logger32” and the users will be able to hone their skills changing frequency and operator names. Please come along as CARS want to put on a good show that weekend. Besides operators we need loggers as our rigs are not all coupled to the computer. We would also like to know those persons who wish to operate that weekend with their preferred day(s) and times.

G3PEM and James, 2E1GUA will staff CARS now famous Raffle, please support. See you there?

Dates for your Diary

Tues 2, 9, 16, 23 & 30th July	CARS - Evening Nets starting at 7.30pm local time. See schedule below/Web Site.
Friday 5 th July	RSGB Centenary Day at Bletchley Park
Wednesday 17 th July	CARS – Committee Meeting @ 7.30pm in The Bell & Bistro public house. NOT Danbury Village Hall this month.
Saturday 20 th July	CARS - Operating G100RSGB from Sandford Mill
Sunday 21 st July	CARS - Operating G100RSGB from Chain Home Tower, Great Baddow.
Sunday 28 th July	W&S Open Day – 40 Year Anniversary at Hockley – Not to be missed.
Friday 9 th August	CARS Meeting – Constructor's Competition at Great Baddow Parish Hall @7.30pm

To be/remain a Member of CARS, send a Cheque for **£15** – 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 2nd class stamp.

May we remind you that if you have NOT paid your Subscription for this year you may be deemed to NOT be a Member of CARS and NOT entitled to Newsletters, etc.

Thanks to Geoff, G7KLV for sending the postal Newsletters – could it go by E-Mail to reduce our postal costs? Please inform Brian, G3CVI by E-Mail at g3cvi@g0mwt.org.uk of any changes to your callsign, postal or E-Mail address, etc. Only by **YOU** sending Brian your E-Mail address, can we ensure **WE** get it right!

Club Nets: Tuesdays **7.30pm** (1st) 145.375, (2nd) GB3ER, (3rd) 1.947, (4th) 28.375 (5th) 3.756MHz +/-QRM
NOTE – Simplex 2 Metres on **145.375MHz at present – or** GB3DA.

Net Controller is Geoff, G3EDM

Many thanks to Geoff, G3EDM and Patrick, M0XAP for June.

Last Month's Meeting: "Used Royal Navy Equipment for Radio Amateurs"

By Charles Riley of Yacht Radio in Wiltshire.

Charles began his talk with a warning to anyone thinking of buying surplus equipment from Military sources, as there are many pitfalls awaiting the unwary -be sure to check what you are buying or what you think you maybe bidding for. Even when present at a sale there can be unknown factors that only become apparent on completion of a sale. Even worse things can happen if a purchaser is buying from a catalogue and has not seen the goods in person. Quite often many unrelated items are sold as 'lots' which can mean having to buy many unwanted items in order to secure a wanted one. Further complications arise when several items needed for a complete set appear in different 'lots' and on occasion stored at different locations. Charles highlighted such problems by displaying a large number of unwanted Naval mopheads. The handles for which were in a 'lot' elsewhere.

Charles also had on display a number of shipbourne antennas and a few lesser items, but all of necessarilly substantial manufacture. The antennas covering from 24 GHZ down to HF, both loops and verticals. (The writer having experience of the latter during ship yard work for Marconi.) Charles spoke of the many antennas that become available and described their purpose and how they worked in military situations.

Charles spoke of the manpower reduction in all three Armed Forces, this coupled with the changing technologies brings the possibility in the future, of much more equipment becoming available to the public and eventually to the Amateur market; but he issued another warning, buying hardware is one thing but most of the military electronic equipment may of little use to the average Radio Amateur. Would be purchasers such as Charles, when bidding at auctions, often face strong competition from other dealers, particularly scrap metal merchants whom only see stack upon stack of complex sophisticated electronic equipment and other items as just more fuel for the melting down pot. Lots of specialist non-magnetic materials are used particularly on minesweepers, such as aluminium, brass, copper, stainless steel and many interesting alloys.



CARS President presenting Charles with a CARS Mug. 42foot Whip Aerial – look at the Base close-up!

Photo above of Carl by Colin G0TRM – Aerial photos by Charles – thank you for permission to publish.

Charles finished his talk by giving advice on buying and how to buy and that it was essential to do ones homework first to avoid the pitfalls. He also gave some ideas on where further military information may be gleaned such as VMARS and HMS Collingwood.

Afterwards Colin, G0TRM showed pictures he had taken during a recent visit to the Aircraft Carrier HMS Illustrious and Charles was able to point out some of the ships exotic aerials and their use in communications and surveillance electronics.

Thanks to Charles for an interesting evening.

Colin Page, G0TRM

CARS Propagation Forecast for this Month, prepared by Gwyn Williams - G4FKH

Asia	Dhahran - around 20:00 on 18.1MHz for 84 percent of days, with poor signals.
Oceania	Sydney around 20:00 on 7.1MHz for 63 percent of days, with poor signals.
Africa	Mauritius - around 18:00 on 18.1MHz for 88 percent of days, with poor signals.
S. America	Rio de Janeiro - around 22:00 on 10.1MHz for 84 percent of days, with poor signals.
N. America	Saskatoon - around 06:00 on 14.1MHz for 75 percent of days, with poor signals.

Gwyn, G4FKH

This Month's Radio Sport (Contests) - All in Local times, unless stated

1 July – RSGB Club – CW– 20:00 to 21:30 local
10 July – RSGB Club – SSB – 20:00 to 21:30 local
18 July – RSGB Club – DATA – 20:00 to 21:30 local
27/28 July – RSGB IOTA – 24 Hours

6/7 July – VHF NFD – 24 Hours
13/14 July – IARU HF Championships – 24 Hours
21 July – 70MHz Trophy - !0:00 to 16:00 Hours Z

Steve, G4ZUL

President's Jottings

Our last meeting showed that there were still some bargains to be had in the Military surplus equipment market. Prices were a little more than we use to pay for equipment in years gone by, but provided you knew what you were looking at equipment is still available, thanks to Mark for arranging the meeting.

Our Next meeting is important as it is in preparation for YOUR Society participation in the 100 years RSGB celebrations. Looking at the RSGB Web Site all other bodies are making a lot of QSO's across the bands, so we must keep up the momentum. Operators and Loggers are required on both days so if you can give an hour on either day you will be most welcome, **REMEMBER IT IS YOUR SOCIETY.**

Finally thanks to those of you that sent me your ideas on the Society, I will make another appeal for inputs then I will correlate them, the e mail address is g3pem@carlthomson.free-online.co.uk

Carl Thomson, G3PEM CARS President.

Who Invented Wireless?

A BBC Radio 4 show about the invention of Wireless will be broadcast at 9pm on Thursday, July 4 and will also be available for download.

Melvyn Bragg and his guests discuss the invention of Wireless. The Italian, Guglielmo Marconi is often credited as the man who invented Wireless, but other Physicists and Engineers have been described in similar terms, including Nikola Tesla and Édouard Branly. The story of Wireless is a fascinating tale involving some of the most brilliant and colourful scientists and inventors of the late nineteenth century.

Listen to the programme at
<http://www.bbc.co.uk/programmes/b0368knw>

Trevor, M5AKA

Spark Transmitter – (1)

Peter spotted this Internet Video of an American W8 who has rebuilt a Rotary Spark Transmitter.

<http://www.youtube.com/watch?v=6ybYxkt3UxU>

Note, no sound for the first 1minute 20 seconds then some nice sparks!

Peter G3SUY.

Spark Transmitter – (2) This triggered a number of E-Mails received by the Editor.

That brought back some memories!! As you may remember my first employment was as a sea going Radio Officer with Marconi. In 1956 my third ship was an ex WW2 cargo one with a Marconi radio room set up. Brilliant modern gear a "500" Receiver and a Marconi Spark Transmitter !!!!!!!!!!!!!!!

They became illegal on UK shipping late 1957and were already illegal in the USA.

We "ran"on the USA coast and if their shore stations did not answer my calls I geared up the Spark and they soon answered that!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Rick Edmondson, G3YEC.

Spark Transmitter – (3)

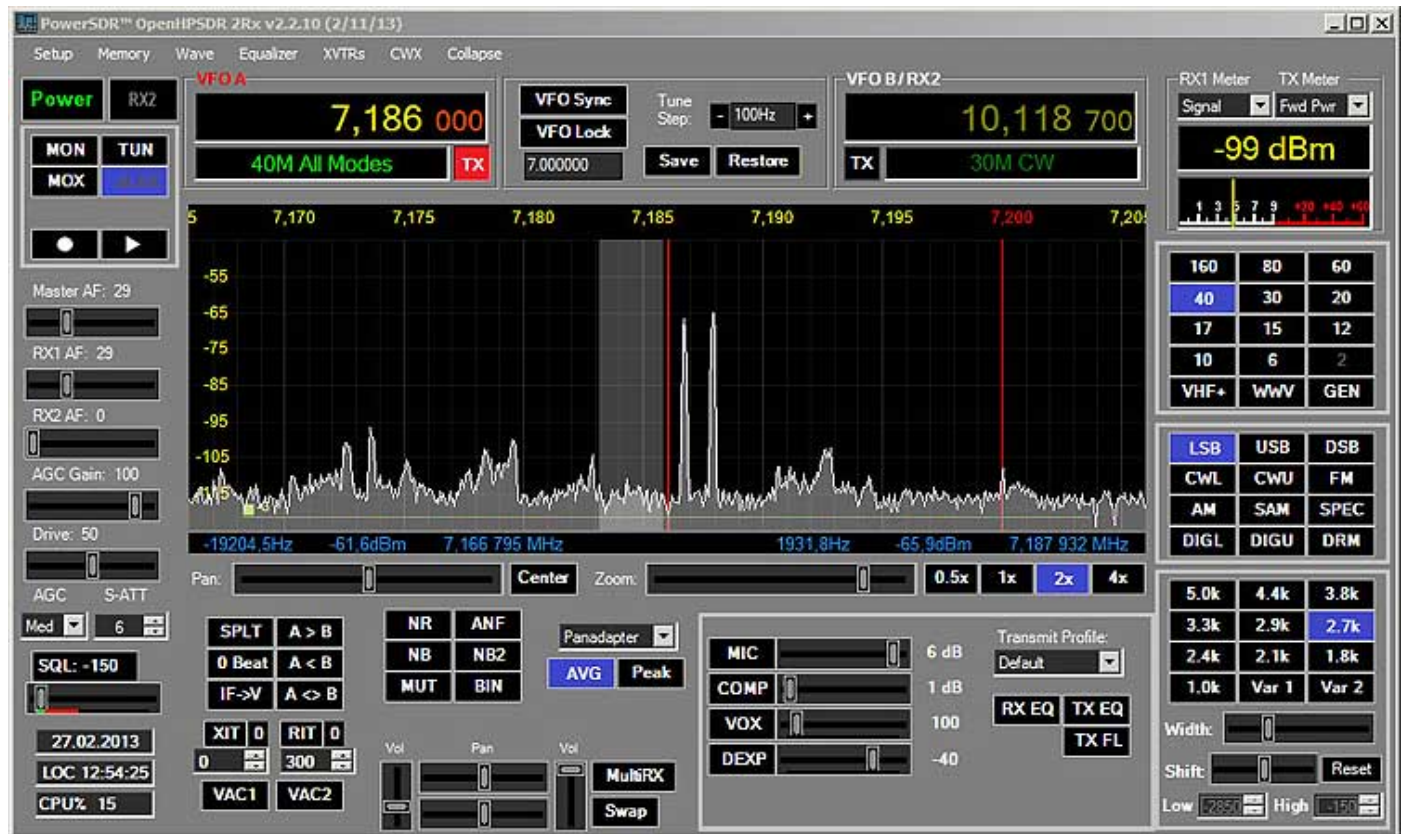
Hi John and CARS,

It is a pleasure to watch the Video and listen to the Morse Code and the Spark Noise.

But I never would like such a signal in my neighbourhood, hi!

I prefer more signals like the 2 tones on the attached picture. A Radio Amateur friend of mine - living 10 km from here -transmitted a 2 tone signal with 600 w PEP with his LDMOS amplifier. Exciter is a HPSDR Hermes board and an early beta version of predistortion included in PowerSDR. Same performance can be seen up to

6m! Direct at the Dummy Load we measured -60 dBc IMD3 at full output. A wish of mine would be that everybody should use this technique. No splatters anymore.



Vy 73s, Peter DK7SP

Recollections of the Coronation in 1953

Firstly your Editor and Chairman would like to say sorry missing the Coronation celebrations. In 1953 Louis Varney, G5RV and CARS put on a tremendous Special Event Station using the first use by a non RSGB Society of a NOV – **GB2CRA** for **Chelmsford Radio Amateurs**. This was in Central Park, Chelmsford. CARS should have done something similar this year, but I forgot!

Colin Page, G0TRM was a Kings Scout stationed on the Fountain outside Buckingham Palace and his duty was to collect each roll of film from the Pathe Cameraman as it was exposed and take it to a waiting dispatch rider who would then tear-off to the processing laboratory so that it could be shown in cinemas around the country.

Eric Lawley, G8ADX/G3MMX was requested by the BBC to join them from Marconi as they were short of Camera Operators. He says *"I can't remember all the details but we had a camera on the Admiralty Arch looking down The Mall focused at the Royal Family on the balcony at Buckingham Palace. It was fitted with an 80" focal length lens, nicknamed "The Dustbin" because of its shape and size. It was so strong we could see into the room behind the balcony. I believe it worked on a system of curved mirrors."*

Where were you on Coronation Day? Please send your comments to the Editor, please.

Thames Amateur Radio Group (TARG)

At 19.30hrs Friday 5th July, we will be hearing from the Essex CW Group. Full details can be found at: <http://www.thamesarg.org.uk/news/>

Meetings are at: Jubilee Hall, Waterside Farm Sports Centre, Somnes Avenue, Canvey Island, SS8 9RA. There is large free car park. The hall is immediately behind and hidden by the main Sports Centre.

Norman Crampton, M0FZW. Tel: 07899 803714; E-Mail: m0fzw@btinternet.com

Danbury Radio Amateur Breaks UK Distance Record – 76GHz.



Firle Beacon Group: L to R. G8BJG Alan 2m, G4EAT John 76GHz (Danbury), G0OLX Denis 24GHz, G0FDZ Chris 47 +76GHz, G8CUB Roger 47+76GHz.

After a preliminary attempt In August 2012, between IOW and Bignor Hill, Sussex, over a 52km path, all operators were able to have QSO's on the bands 24, 47 and 76GHz. Encouraged by this, the Bignor Hill group moved to Ditchling Beacon, Sussex at a distance of 83km which would beat the UK distance record of 79km at 76GHz. Unfortunately despite QSO's on the lower bands, only G4EAT/P was able to hear G8KQW/P signals on 76GHz with a one way report of S2.

On 9th June 2013, the same operators set out for Ventnor and Ditchling. Immediately G8KQW's signals were heard on 76GHz at S9!! QSO's were achieved by all operators and a new UK record established. With such big signals on the day, the Ditchling group moved to Firle Beacon, Sussex to test at 94km. There was some concern as to whether it was necessary to carry all our gear up the footpath a further 2km to establish a clear line of sight path. We tried 24GHz signals from the car park and immediately decided the strong signals would confirm we had sufficient path clearance.

So from the lower sighted car park, one by one all operators had a QSO on 76GHz, further extending the UK distance record. QSOs were in SSB, FM and A1 CW. No further distant hills with line of sight were known, so we finished satisfied we had all achieved our objectives.

On reflection not only had we all improved our equipment performance by typically 6 to 10dB but we had been very lucky with the weather. Millimetre-wave signals are attenuated by the water vapour in the atmosphere. Last August the warm humid weather gave us an attenuation of 0.525dB/k but this June 2013 event was in cool dry air with an attenuation of 0.274dB/km so overall a 20dB+ benefit!

John Wood, G4EAT. Congratulations to all involved from CARS and thank you for the report.

For Sale.

Yaesu FT-1000MP with narrow CW filters, original box, £700.

Flex-5000A original box, £1,350.

Sharman Multicom SPS94000 40A digital PSU £60.

Dell XPS-420, big desktop computer, 19" screen, used with the Flex. £550.

Not going QTH but upmarket!

Gwyn Williams G4FKH. 0798-4073007, g4fkh@sky.com.

CARS Training Courses

Courses are traditionally held at the Danbury Village Hall near Chelmsford on Thursday evenings between 7 and 9pm.

Contact the **Training Organiser Clive G1EUC** on Tel: 01245-224577. Mob: 07860-418835
Email: training2013@g0mwt.org.uk See also our Training page: -

Amateur Radio in Daily Mail archive

The Daily Mail newspaper archive from 1896 to 2004 is now available online and contains a wealth of Amateur Radio stories.

Among the many Amateur Radio stories the newspaper published is Amateur Radio Triumph that appeared on Friday, November 16, 1928. It describes the first Transatlantic contact between the UK and the USA on the 28 MHz (10m) band.

Free access to the Daily Mail archive is only available until July 20, 2013 at <http://www.galeuk.com/trials/dailymail-opentrial/>

Try searching for Amateur Radio or Marconi.

You can save the stories to your PC by doing a right-hand mouse click on the story and selecting Save Image As in Firefox or Save Picture As in Internet Explorer.

Trevor M5AKA

Tetney Radio Station,

I have just been sent this by my Brother and have just started to read and digest it. I've copied to CARS as you might be interested to read the history posted on the link.

<http://tetneybeamstation.blogspot.co.uk/>

Peter, G3SUY

RTL-SDR Dongle on a MacBook Air (SDR for £15)

Nick reports he purchased this Dongle from an e-Bay seller in Jersey and it turned up promptly and has written a very comprehensive guide – too big for this Newsletter. Please contact Nick direct for a detailed blow by blow description of what is involved for a Mac user.

This dongle, which includes the RTL2832U sampler and R820T tuner will tune continuously from 24MHz to 1766MHz and receive any mode you can find a program for. Not bad for <£15.

Hope the guide can inspire other Radio Amateurs working with Apple computers, and I'd welcome any suggestions for other SDR software that can run on OSX.

Nick Malyon, 2E0DVX. E-Mail Nick on nick.malyon@gmail.com

RSGB 100 Year Celebrations – Special Event Stations in Chelmsford. WAB TL70

CARS has been selected to operate G100RSGB on Saturday, 20th July from Sandford Mill and from the Chain Home Tower, BAE Systems, Great Baddow on Sunday, 21st July. These will be nominally 9 to 5pm.

CARS hope to also have a Publicity Presence with VHF/UHF at Oaklands Museum, 10 to 5pm on Saturday and 2 to 4pm on Sunday.

We need Operators, Loggers and helpers. PLEASE, we need YOUR help. The air waves will not be filled with CARS Voices if YOU do not help.

Please contact Brian, G3CVI or any Committee Member at the July Meeting or E-Mail the Editor with your preferred attendance date and time.

And Finally:- John, G8DET edited this edition; Distributed most by email; Geoff KLV posted the remainder. Material by Trevor M5AKA; Steve G4ZUL; Gwyn G4FKH; Carl G3PEM; Murray G6JYB; Clive, G1EUC, Rick, G3YEC; John Wood, G4EAT, Peter, G3SUY, Peter Urich, DK7SP; Colin G0TRM; Nick Malyon, 2E0DVX & Norman, M0FZW.

Closing date for items in the next Newsletter – Friday 26th July 2013.