



Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB Club Call Sign: G0MWT
President: Harry Heap G5HF Chairman: John Bowen G8DET
Treasurer: Brian Thwaites G3CVI Vice Chairman Martyn Medcalf G1EFL



Newsletter No 521

Web Address: www.g0mwt.org.uk

August 2009

This Month's Meeting – Tuesday, 4th August. 7.30pm at the Marconi Club.

“Where do our Wavelengths come from?” The work of the IARU - By Peter Chadwick, G4RZP.

The International Amateur Radio Union is the Worldwide voice and source of information.

The Bands we take for granted today were not gifted to us by good fortune. In the early days of telegraphy and wireless there were no standards, allocations or band-plans and chaos soon ensued. This led to the formation of the ITU in 1865 which later took on Wireless in 1896. The IARU which represents Amateurs at this level was formed in 1925.

In his own inimitable way Peter (an IARU Technical Consultant and a past RSGB President in 1993) will tell us the history of how we won or lost our frequencies and what's in store in future.

His extensive knowledge will also provide an excellent background for questions on this or other topics after the break

The IARU Web Site is at:- <http://www.iaru.org/>

CARS now famous Raffle will have its usual table top of Raffle Prizes - only £1 per Ticket

Dates for your Diary

Sunday, 2 nd August	CARS Operating HF from Sandford Mill. Open to the Public 2pm to 5pm
Sunday, 9 th Aug	CARS Operating VHF from Sandford Mill. Open to the Public 2pm to 5pm
Tuesday, 11 th Aug	CARS VHF Net on 145.375MHz at 8.30pm, local. See CARS Web Site
Wednesday 12 th Aug	CARS Committee Meeting in Danbury Village Hall at 7.30pm – All Members welcome
Sat/Sun, 15/16 th Aug	CARS Operating/Promoting Amateur Radio from Chelmsford Town High Street
Sunday, 16 th Aug	CARS Operating HF from Sandford Mill. Open to the Public 2pm to 5pm
Sunday, 23 rd Aug	CARS Operating VHF from Sandford Mill. Open to the Public 2pm to 5pm
Tuesday 1 st September	CARS Meeting. “D Star” by Clive Ward, G1EUC & Murray Niman, G6JYB
Thursday, 3 rd Sept	CARS Foundation Course starting in Danbury Village Hall.
Sat/Sun, 12/13 th Sept	CARS Operating GB2TAM from Thorpe Abbots Museum, Diss. 10am to 5pm.

To become 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 2nd 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 call-sign, postal or E-Mail address, etc. E-Mail him on 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) 145.375: (3rd) 28.375: (4th) 1.947: (5th) 145.375. All +/- QRM.

Net Controller for July is Geoff, G3EDM.

Thanks to Colin, G0TRM for doing it in July.

Last Months Meeting:- "Annual Constructor's Competition " **Organised by Carl, G3PEM.**

This year a new trophy will be awarded, the M1FDE Shield. This trophy has been created in memory of Anthony Martin, M1FDE who passed away last year at the age of 41. Anthony was a pioneer of the Personal Role Radio (PRR) introduced into the British Army in 2002, for which he was responsible for the RF design. Prior to its use the infantry could only communicate with each other via hand signals and shouting. The PRR is now seen regularly on TV news reports being used by UK and Allied forces in Iraq and Afghanistan.

He devoted much of his spare time to Amateur Radio Training and Construction and he always did well in the CARS Constructor's Competition winning several 1st prizes.

There are very few Rules.

CARS Members only can be awarded the M1FDE Trophy but Visitors are encouraged to demonstrate their handiwork but may be awarded the "Special Prize"

One can enter photographs or drawings if it is like a Power Station in size & difficult to bring.

It should be electrically safe. It can be anything remotely connected with Radio (a house brick won it 20 years ago!)

Chairman John, G8DET introduced the Competition by showing the M1FDE Shield which will be presented at the AGM in October.

Patrick, M0XAP was first off to describe a Valve, AM Transmitter he had constructed. He said he would have liked in hindsight to have built the VFO in a separate die-cast box. The TX worked well - it was nice to see Valve equipment again. Patrick said Loading it to an Aerial was easy - the Loading coil was wound on a Chilli Pot ("Hot fire" commented one wag).

Tip, test plastic (not metal!) by putting it in the Microwave oven for 1 minute - if it busts into flame it is no good for RF. If it does not get warm - great for RF. Don't forget to put a beaker of cold water in the Microwave to protect the Magnetron as well.

Kenneth Pallant, G0OSI was next to describe his home constructed 12 Volt 5Amp PSU. He said that nearly all the bits were in his junk boxes except the case which was modified for the PSU - it had cooling holes drilled in the top to let the hot air out. It proved stable & did not suffer from RF Feedback due possibly to its simplicity.

It was the first item he had ever presented to the Constructor's Competition.

Colin then showed the Meeting the triplexer that the Late Anthony had produced for the 2006 Constructor's Competition with which he won First Prize.

Peter, 2E0ZBU, using the Club's Lottery purchased Computer, Projector and PowerPoint introduced the construction and operation of a Magnetometer.

It was based on a pair of custom magnetic sensor chips produced for the Robot industry - to enable the robot to know where it is by measuring the strength and direction of the Earth's Magnetic Field. Richard 2E0SBU then described the construction of the unit which was build in two parts - one part put at the top of their garden to be away from any magnetic fields in the house. A ZigBee link (which uses WiFi frequencies) connected the two parts.

Peter then showed graphs of results including a large transition one day - this was also recorded in other parts of the UK by existing Magnetic Field recording equipment so he said that gave them confidence their equipment was working well. It is run by a 12Volt battery topped up by a 5Watt Solar Panel.

Colin held up an "Electrical snake" in the form of a coiled extension lead used to supply a light at the recent NFD in Sandford Mill. During the dark hours two Amateur Bands suffered considerable local interference which only cleared when this cable was removed from the mains supply in the morning. Colin showed on a MFJ Aerial Analyser that it tuned those Bands and presented a 50 Ohm Load! - Moral - DO NOT USE COILED LEADS IN AN RF FIELD!

Colin concluded the Competition by demonstrating a Morse Display Board he had made for CARS events at Sandford Mill. Colin described the Display Board which used modules from MFJ, a computer keyboard and a Morse Key.

Earlier on in the day he had tried to print out the results on a Dot Matrix Printer but it blew-up the PSU. Fortunately Geoff, G7KLV had the information regarding a spare Regulator so that was replaced with a fiddle! The Morse Key was used by Colin to produce a series of notes which CARS Morse expert, Gwyn, G4FKH said was "rubbish" to the amusement of the meeting!

Next the Keyboard was used with similar results but the "QRK, Ending characters" were deemed "OK". The Meeting was then given 15 Minutes to Judge the entries and to give their results to Carl by 9PM. After the Break, Richard, 2E0SBU was invited to read out the Raffle winner's number with assistance by Chairman John.

Carl totted up the score and announced the winners.

CARS President Harry, G5HF presented the 3rd Prize to Colin and Second Prize to Patrick. The Special Prize went to Kenneth. The First Prize went to Richard, 2E0SBU who will also receive the M1FDE Shield at the AGM in October - Congratulations.

John G8DET.

CARS Operating and Promoting Amateur Radio.

This is going to be a very busy month for CARS.

Sandford Mill

Sunday 2nd August, 2pm to 5pm.

CARS will be operating from the Marconi Hut using HF and GX0MWT. Brian, G3CVI has a list of operators and if you would like to join this – contact him – his details are on the Front Page.

Sandford Mill

Sunday 9th August, 2pm to 5pm.

CARS will be operating from Mark Sanderson's Caravan parked near the large hut and will generally be using VHF. He has a list of operators and if you would like to join this – contact him – his E-Mail address is belinda.sanderson@tiscali.co.uk or Brian.

It is hoped to have a display of the Radio Spectrum using a SDR-IQ Rx, Digital Receiver in the Marconi Hut for the public to see.

**Chelmsford Town Centre – The High Street
Saturday & Sunday 15th & 16th August.
10am to 5pm.**

To promote Amateur Radio, Mark, M0IEO has arranged with Chelmsford Town Council to operate from his Caravan at one end of the High Street. CARS requests Members to come along during the day to Host, to Operate or simply support this tremendous event.

Sandford Mill ,

Sunday 16th August, 2pm to 5pm.

CARS will be operating from the Marconi Hut using HF and GX0MWT. Brian, G3CVI has a list of operators and if you would like to join this – contact him – his details are on the Front Page.

Sandford Mill

Sunday 23rd August, 2pm to 5pm.

CARS will be operating from Mark Sanderson's Caravan parked near the large hut and will generally be using VHF. He has a list of operators and if you would like to join this – contact him – his E-Mail address is belinda.sanderson@tiscali.co.uk or Brian.

It is hoped to have a display of the Radio Spectrum using a SDR-IQ Rx, Digital Receiver in the Marconi Hut for the public to see.

The Committee & Mark, M0IEO

August Radio Sport (Contests)

European HF Championship SSB / CW

Saturday 01 August.

Starts 12:00 UTC Finishes 24:00 UTC

Bands: 1.8, 3.5, 7, 14, 21, 28 Mhz

Exchange: RS(T) + Year first licensed.

Further information from www.lea.hamradio.si/~scc

RSGB 2nd RoPoCo / CW

Sunday 02 August,

Starts: 07:00 UTC

Finishes: 09:00 UTC

Band: 80 Metres

Exchange: RST + Postcode received.

further information from www.rsgbhfcc.org

VHF Contests

01 August, 144MHz Low Power Contest

Starts: 14:00 UTC Finishes: 20:00 UTC

Sections: SF, SO. (25W max).

02 August, 432MHz Low Power Contest

Starts: 08:00 UTC Finishes: 12:00 UTC

Sections: SF, SO. (25W max)

16 August, 70MHz Trophy Contest

Starts: 09:00 UTC Finishes: 15:00 UTC

Sections: SF, SO, M. (Special rules M1)

Full rules from www.vhfcc.org

Any further information please email Steve G4ZUL - contests2009@g0mwt.org.uk

Steve, G4ZUL Contest Manager

CARS Operating from Thorpe Abbots Museum, Diss

Thanks to Mark Sanderson, M0IEO CARS will be operating GB2TAM from the Thorpe Abbots 100th Bomb Group Memorial Museum, Common Road, Dickleburgh, Diss, Norfolk, IP21 4PH. Tel: 01379 740708. It is about one hour from Chelmsford, off the A140 to Norwich.

The station will be run from Thursday 10th September to Sunday 13th but those wishing to see the Museum as well should note that it is only open on the Saturday and Sunday, 12th and 13th September from 10am-5pm.

An advanced party headed by M0IEO will be in attendance from Thursday 10th for erecting antennas and test transmissions.

Camping will not be allowed at the Museum but anyone wishing to make a weekend of the event is advised that there is public camping at a reasonable cost within 2 miles of the museum at The Waveney Valley Holiday Park, Air Station Lane, Rushall, Diss, Norfolk IP21 4QF. Tel 01379 741228.

<http://www.caravancampingsites.co.uk/norfolk/waveneyvalley.htm>

The camp site has ample space for camping with some electric hook-up's on pitches, an outdoor swimming pool and an on site restaurant for those who hate cooking. The cost for this is in the region of £14.00 per night.

We are aiming to be on the air from 09:00 hrs until 18:00 hrs each day (later if the museum will allow us to) and look forward to contacting as many stations as we can in that time.

Thorpe Abbots was a Second World War air station, which was the home of the USAAF 100th Bomb Group from 1943 to the end of the war in 1945 where the group conducted missions over occupied Europe as well as humanitarian missions over Poland and North Africa.. During that time, 753 aircrew made the supreme sacrifice and since then hundreds of veterans have returned to Thorpe Abbots and continue to do so to this day. Although much of the air station has now gone, the Control Tower still stands and has been restored to its former glory by a group of dedicated volunteers over the last 25 years, most of who are still working for the museum.

GB2TAM has been organised to coincide with the weekend of the 100th Bomb Group reunion, which is held each year in Albuquerque, New Mexico. It is hoped that band conditions allowing, we will be able to make contact with the reunion. The station will be operating on all HF bands using SSB as well as 2m FM and will be pleased to contact stations regardless of location.

A GB2TAM QSL card will be available for all contacts which will show the control tower as it is today in a pristine restored condition.

100th Bomb Group

<http://100thbg.com/>

100th Bomb Group Thorpe Abbots Museum

<http://www.100bgmus.org.uk/>

100th Bomb Group Memorial Museum

<http://www.aeroflight.co.uk/mus/uk/1-b/100thmus.htm>

Mark, M0IEO & Trevor, M5AKA

National Hamfest 2009

Brought to you by the RSGB in association with Lincoln Short Wave Club, Friday 2nd and Saturday

3rd October 2009 at the George Stephenson Pavilion, Newark & Nottingham Showground, Lincoln Road, Winthorpe, Newark NG24 2NY.

The RSGB will be in the hall with a book and services stand alongside an *RSGB Committee stand, with HQ staff and volunteers on hand. There will also be a large flea market and car boot area.

Those who purchase tickets in advance will be able to buy their tickets only £3.50 rather than the on the gate price of £4.50.

The dedicated website

<http://www.nationalhamfest.org.uk>

is the central resource for further information and where advanced bookings and ticket deals are available.

Graham Leggett, G7JYD.

3G Coverage Maps

This site has links to each networks detailed maps:

<http://compare3gmobilebroadband.co.uk/3g-coverage-uk.htm>

You can find out what a base station does from Ofcom's Siterfinder system:

<http://www.siterfinder.ofcom.org.uk/>

Murray Niman, G6JYB & Bill Pechey, G4CUE.

For Sale - Antenna Rotator

New and unused. Info & Offers to:-

Geoff G7KLV at 01245 473822.

Training – Foundation Course

A Foundation Course is starting on 3rd September in Danbury Village Hall and CARS would like more candidates. It is important to inform Clive, G1EUC if YOU know anyone who would like to join.

Tel: 01245-224577 Mob: 07860-418835

E-mail: training2009@g0mwt.org.uk

And Finally:-

John G8DET edited this edition. Material by; Murray G6JYB, Trevor M5AKA, Steve G4ZUL, Geoff, G7KLV, Bill G4CUE, Clive, G1EUC & Graham G7JYD.

Items for the next Newsletter, including your experiences with your latest rig or antenna, tips on working DX or your latest project, to be sent to the editor@g0mwt.org.uk by Saturday, 19th August.