



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 522

Web Address: www.g0mwt.org.uk

September 2009

This Month's Meeting – Tuesday, 1st September 7.30pm at the Marconi Club.

"D-Star"

by Murray Niman, G6JYB & Clive Ward, G1EUC.

What is this D-Star? It is the latest Amateur Radio communications mode.

Although relatively new, D-Star (a new Digital Voice/Data mode) is proving popular with over 50 Systems licensed so far in the UK on 2m/70cms, including a number replacing FM repeaters; and many new radios being sold with the mode built in.

Many of these new systems can be linked via the internet so it is possible for example to call a specific Radio Amateur elsewhere on the planet, or see others moving on a map (as GPS can be integrated).

Find out more about this new technology for Radio Amateurs which already has firm roots in Essex in the form of GB7ZP in Danbury and GB7SS at Hockley. Live demo on the night !

<http://www.ukrepeater.net/channels/d-star.htm>

Want to know more - come along and hear and see this presentation by two ERG/CARS experts.

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

Dates for your Diary

Sunday, 23 rd Aug	CARS Operating VHF from Sandford Mill. Open to the Public 2pm to 5pm
Tuesday 1 st Sept	CARS Meeting. "D Star" by Clive Ward, G1EUC & Murray Niman, G6JYB
Thursday, 3 rd Sept	CARS Foundation Course starting in Danbury Village Hall. See page 4.
Sat/Sun, 12/13 th Sept.	CARS Operating GB2TAM from Thorpe Abbots Museum, Diss. 10am to 5pm.
Sunday, 27 th Sept.	CARS Operating HF & VHF from Sandford Mill for Science & Discovery Day. Open to the Public 10am-5pm. Light refreshments available – Free to enter & Park.
Saturday, 3 rd October	BAE Systems Family Open Day 10am-2pm with CARS running a station, by invitation.
Tuesday, 6 th October	CARS Meeting – The Annual General Meeting – By The Members.

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 September is Colin G0TRM

Thanks to Geoff, G3EDM for doing it in August.

Last Months Meeting:-
"Where do our Wavelengths come from?"
The work of the IARU.
By Peter Chadwick, G3RZP

Peter who is a well known IARU Consultant, senior contributor in international circles and was ex-Marconi and a past CARS President of the RSGB (1993) came to a well attended CARS meeting.

Chairman John welcomed Barry Tew, G3WFF, Jon Naunton, G8CYI from Tollesbury and Dave Ponting, (ex G8CVM) from Maldon. The group used to meet with Peter 40 years ago, getting Fish & Chips in Willie McClintock's, G3VPK (another CARS Past RSGB President) minivan after a CARS Meeting (which was in Arbour Lane, Chelmsford in those days). Brian Miller, M1HHL, Chairman of the Radio Society in Hereford was also welcomed.

In his talk Peter described how 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 International Telegraphy Union (ITU) in 1865 which later took on Wireless in 1896, later renaming itself to the International Telecommunication Union as we know it today.

The IARU which represents Amateurs at this level was formed in 1925 at the initiative of Hiram Maxim W1AW of ARRL and is based on reps and subs from its member National societies. This was fortunately just in time ahead of the 1927 ITU Conference where RSGB could not get any input to the UK delegation. Fortunately because of the IARU work amateur bands were allocated internationally at:-

1715 – 2000kHz
3500 – 4000kHz
7000 – 7300kHz
14000 – 14400kHz
28000 – 30000kHz
56000 – 60000kHz

At the next conference in 1932 the 'Amateur Service' was formally recognised – the only hobby to have formal recognition in international law. By 1938 IARU was able to field a strong presence of observers and able to limit military demands in Europe, we lost ~3.6MHz and 7.2-7.3MHz – though this proved academic as the new rules were due to come in on Sept 1st 1939

After the war the ITU became a UN agency and held its landmark conference in 1947 in Atlantic City. RSGB had to fight hard to prevent the Post Office reducing 40 and 80m and total loss of Top Band. In the end 7.2-7.3 was lost as was 112MHz,

which was replaced by 21MHz and a new worldwide 144-146MHz 2m band

In more recent times, the threats have continued and increased but hard work by IARU volunteers has resulted in:-

WRC-79: 10, 18, 24MHz HF Bands
WRC-03: Removal of Compulsory Morse
Restoration of 7.1-7.2MHz in Region-1
WRC07: 135kHz

The next conference in Feb-2012 will discuss IARU's request for a band around 500kHz as well as new radar allocations which might threaten HF and VHF

So far there has been no success in getting 5MHz onto the agenda or harmonising the 50MHz band. Each ITU conference sets the agenda for its successor and it is notoriously difficult to win a slot in the horse-trading that occurs for the future Agenda Items.

IARU via its three regional groupings are the originators of the Bandplans, maintain an Intruder Watch service (IARU-MS) in Primary Bands (eg for iffy frequency use by HF broadcasters or Spanish Trawlers etc) and undertake training in Developing Countries. IARU Consultants and reps do their best to also feed info into various key ITU, CEPT etc committees in order to influence policy and technical recommendations.

The talk underlined the fact that Radio Spectrum is a scarce and highly valuable economic resource. Subject o many pressures. Our frequencies need to be defended at national and international level and the IARU do this for amateurs worldwide

So as Peter pointed out, the answer to the question, '*Where do our wavelengths come from?*' or rather '*Who defends our Wavelengths?*' is that it is IARU and its member Societies such as RSGB – and remember that 'Without Wavelengths, there is no Amateur Radio'

After the talk Peter's extensive knowledge was tapped by many questions from the audience on both IARU and other matters

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

And the Region-1 site (Europe & Africa) is
<http://www.iaru-r1.org/>

Murray, G6JYB

CARS Operating and Promoting Amateur Radio.

August has been the busiest for CARS in its long history thanks to the enthusiasm of Richard Beck, M3YLB & Mark Sanderson, M0IEO and associates who have suggested and organised a visible presence in the Chelmsford Town Centre. August is also the time of year when Chelmsford Borough Council invites CARS to attend the public opening of Sandford Mill each Sunday afternoon.

Sandford Mill Sunday 2nd August, 2pm to 5pm.

CARS operated from the Marconi Hut using HF and GX0MWT. Brian, G3CVI arranged a list of operators and hosts. In the event quite a number of children (plus parents) appeared. Radio conditions were not good but a reasonable number of contacts were made; many of those connected with Marconi.

Sandford Mill Sunday 9th August, 2pm to 5pm.

Mark Sanderson's produced a tent as his caravan was out of action. Aerials were erected on guyed poles and a number of direct 2metre contacts were "rung out" of the air – not many people on – most were at the holiday resorts in the county or watching racing on the TV. A number of brochures were given out promoting Amateur Radio – Thank you Mark and helpers.

Meanwhile indoors in the Marconi Hut, Murray G6JYB & John G8DET were projecting the MW and HF radio spectrum onto a screen using a SDR-IQ Digital Receiver which created quite an interest.

Sandford Mill Sunday 16th August, 2pm to 5pm.

Brian, G3CVI operated from the Marconi Hut using HF and GX0MWT. John, G8DET provided the Lottery purchased computer and projector to show on a large screen the log of those stations worked using WinLog32. Computer Logging was a first for CARS from the Marconi Hut – thanks to the suggestion by Carl, G3PEM. It was Lighthouses and Lightships weekend and a number were worked throughout the World.

Note: See also p5/6 for a write up on the Town Centre events on the same weekend

Sandford Mill Sunday 23rd August, 2pm to 5pm.

Mark again brought his trust y gazebo and planted it near the Barn. VHF & the Danbury Repeater were used to provide good quality audio for the many visitors.

As on the 9th August there was a SDR demonstration in the Marconi Hut provided by Murray, G6JYB & John, G8DET using the new Lottery acquisitions.

Sandford Mill Sunday 27th September, 10am to 5pm.

Science & Discovery Day which is open to the public is the last Open Day at Sandford Mill for 2009.

The Marconi Hut will be used for HF with Computer Logging and Mark, M0IEO will have his white Caravan parked near the Barn for VHF & UHF.

Please take part with this event – give your name to Brian, G3CVI at the September Meeting.

BAE Systems Great Baddow, 3rd October

Completing a busy run will be a very special station showing three centuries of radio as part of the 70th anniversary event at the Research Centre in Great Baddow; built by Marconi and completed just prior to the outbreak of WW2 in 1939

Sandford Mill Pictures:

<http://www.g0mwt.org.uk/sandfordmill/sandford-2009-08/sandford-2009-08.htm>

The Committee & Mark, M0IEO

August Radio Sport (Contests)

Reduced information has been agreed and provided by Contest Manager, Steve, G4ZUL.

5/6 Sept: SSB Field Day - 24 Hours

5/6 Sept: 144MHz Trophy - 24 Hours

06 Sept: 144MHz Backpackers - 11:00-15:00UTC

10 Sept: 80m SSB Club Sprint - 19:00-20:30UTC.
CARS Members are requested to Operate in the event.

13 Sept: 70MHz Contest - 09:00 to 12:00 UTC

23 Sept: 80m CW Club Sprint - 19:00-20:30 UTC.
CARS Members are requested to Operate in the event.

26/27 Sept - CQWW - RTTY - 48 Hours

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

Steve, G4ZUL Contest Manager

CARS Operating GB2TAM from Thorpe Abbots Museum, Diss, Sept 11-13

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 now run from 5pm Friday, 11th 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 on Friday 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.

CARS Web Site
<http://www.g0mwt.org.uk/events/thorpe-abbotts-2009/index.htm>

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

Speed up your Broadband

The BT iPlate has great potential for improving your broadband speed, typically by 1.5Mbps

In tests the iPlate has been shown to boost line speeds - typically by 1.5Mbps. The actual change will vary from house to house. Although speed improvements are likely, they can't be guaranteed. Even if it doesn't improve the speed the iPlate can help stabilise your broadband line making it more reliable. It is a plate that goes onto the master socket that should filter off the redundant Bell wire and improve interference issues.

You need to check your socket is a BT NE5 one (split front plate with test socket and old BT Piper or T logos). If you do not have a BT NE5 you will need to contact BT to have one fitted. Brand new Openreach sockets have this built in now

Pictures and more info on the BT Shop site at:
<http://www.shop.bt.com/products/BT-I-Plate-58LT.html>

You can buy one for about £7 inc postage.

A video showing one being fitted is at
<http://www.thinkbroadband.com/videos/iplate-installation.html>

It's a simple self-fit exercise. It worked really well for me (went from 4 to 7/8Mbps) and of course requires, as you should, that the ADSL modem is directly on the master socket and not on an extension.

Geoff Mills, G3EDM also points out that each spur off the Main BT Socket acts like an electrical stub and should really be treated as such when using Broadband. If possible fit the Telephone Filters at this distribution point. Hence putting the filters at the point where the extension wiring commences isolates that wiring and the extension phone. At the down-load frequencies (above 176 kHz), of ADSL, these stubs will look largely capacitive, and hence attenuate the download signals.

Murray G6JYB & Geoff, G3EDM.

Training – Foundation Course – Sept-Oct

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

E-Mail Received.

Hello. This is Peter Moule, formerly M3OJN calling, now proud owner of the new title 2E0MWU.

I am writing to say "Would you pass on/print in the news letter a very big "THANK YOU" to the superb team who ran the recent Intermediate Course at Danbury Village Hall.

You chaps were amazing, it did not matter what role you were undertaking, whether presenting, tea making or supervision during practicals, help and advice were freely given and gratefully received, a few giggles were had and the look of disbelief, at our lack of knowledge during revision sections were priceless! Many a time we heard "You have got to read the book as well".

On behalf of us all once again - Thank You all, we appreciated it".

Regards Peter Moule, 2E0MWU.

Homecoming" in Scotland – 2009 *Explaining the 'GA' call.*

"Homecoming" is a year long celebration aimed at attracting the Scottish Diaspora as well as those interested in Scottish traditions to Scotland. Numerous events have been and will be held throughout Scotland this year.

We thought that Amateur Radio in Scotland should play a part and are pleased to announce that Ofcom agreed to special prefixes for use by Radio Amateurs in Scotland until 30th November 2009. The prefixes are **GA, MA and 2A** and allocated by request to Ofcom for an NoV. The A replaces the M in the usual prefix (A is for Alba, the Gaelic name for Scotland).

The special prefixes are only issued to Amateurs whose main residence is in Scotland..

73 Rob GM3YTS

**Submitted by Patrick, M0XAP
CARS QSL Manager.**

CARS Net – 70cm Proposal

Following a comment by Peter Chadwick re 'Use or Loose', may I suggest that the Club run a 70cm Net on the 5th Tuesday of each Month when it occurs, bearing in mind some Members do not have 70cm. The Braintree Club does the same but on Mondays using their local Repeater. Ideas, comments, criticisms etc, please re 'Simplex' versus the 'Danbury GB3ER Repeater'. One obvious point is that using the Repeater means Vertical Polarisation; I think though that this would apply to most participants anyway.

Patrick, M0XAP.

The Art & Skill of Radio Telegraphy

This 241 page publication on learning Morse Code is available from a free download.

It is described as being "For those who are interested in telegraphy, for those who would like to learn it, for those who love it, and for those who want to improve their skills in it"

Download "The Art & Skill of Radio Telegraphy PDF" at <http://tinyurl.com/LearningMorse>

Using a "Tiny-url" is a very convenient way of quoting a very long URL in such a way as to be short. It is NOT a con!

Anyone can use the facility for free.
<http://tinyurl.com/>

Trevor, M5AKA.

Amateur Radio Demonstration in Chelmsford Town Centre – Aug 15/16

As part of our ongoing programme to raise the public awareness of Amateur Radio, Chelmsford Amateur Radio Society (CARS) set up a demonstration station just outside Starbucks coffee shop in the High Street over the weekend of 15-16 August – a really prominent spot.

My daughter Laura (M3LIQ) and I arrived at 07:00 and with the help of a member of the public, set up the gazebo and signage for the day's event, this took about an hour and by 08:00 we were up and running.

We were operating on 2m only as the town centre is not conducive to operating HF, although we did have an HF rig set up for demonstration using a Buddy-Pole antenna. Contacts were hard fought

on 2m but with the aid of the Danbury repeater we were able to operate with a good degree of success. Richard (M3YLB), Chris (M3YLN), Clive (G1EUC) Jim (2E1GUA) and Peter (G1FOA) joined Laura and I later in the morning.

Amongst the stations contacted during the morning, using the club GX0MWT, call were Harry (G5HF) and Zipy (G4ZPE) who were both visitors to the station later in the day. Although we were fighting for contacts, the main aim of the weekend was to meet members of the public and raise their awareness of amateur radio and to that end we were very successful. There were a good number of people who stopped and spoke to the team and took literature with them for the next foundation course. Other visitors to the station on Saturday were Chris (G0IPU), John (G8DET), John (2E0NNQ), Clive (M0GHH), Murray (G6JYB) and Katherine (M3HPY) from the local constabulary.

Sunday was just as successful as the Saturday had been; I met Richard (M3YLB) and Chris (M3YLN) at 08:00 hrs at our allotted site and we were set up and running by 09:00 hrs. We used the same set-up as the Saturday but this time Richard had borrowed a generator which was almost silent. This was a better bet than the Saturday as we were running both rigs on my car battery for convenience. We had to change call sign for the Sunday to M0IEO/P because the CARS HF team were running at Sandford Mill in the afternoon, using the GX0MWT call. All the team who attended on the Saturday also attended on the Sunday and we were joined by Martin (G1EFL) for the day, although hotter than Saturday, all seemed to cope well with the heat. The High Street was again busy with shoppers and there was a good amount of interest shown in the station. In all I would estimate that we gave out in excess of 40 leaflets for the foundation course in September and raised the profile of both our club and amateur radio in general.

Once again my thanks go to the team, Richard, Chris, Clive, Martin, Jim and Peter, without whose help these displays would be almost impossible.

Mark, M0IEO

Website Pictures:-

<http://www.g0mwt.org.uk/events/town-centres-2009/index.htm>

Sponsorship Requested – James, 2E1GUA.

I am doing the "Cycle for Life" for Farleigh Hospice on Sunday, 13th September. I am doing a 50km bike ride and I am looking for sponsorship from CARS Members, please. Any small amount would be appreciated – see you at the CARS September Meeting.

James, 2E1GUA.

For Sale – Filing Cabinets

Three Black filing cabinets, in very good condition.

Size H 26 inch; D 15 ¾; W 15 ¾ inch.

£10 each. Free delivery.

Further information please contact 01245 469008.

Martyn G1EFL

For Sale - Antenna Rotator

New and unused. Info & Offers to:-
Geoff G7KLV at 01245 473822.

Beginning Of The End For Traditional Light Bulbs (GLS).

As of September 1st, 2009 there is an EU wide ban on the sale of all standard Pearl bulbs as well as any clear ones greater than 100W

As of September 1st, 2010 the ban is on light bulbs with an output of 75-100 watts.

As of September 1st, 2012 only energy saving bulbs can be bought in the entire EU.

Started hoarding for Dummy Loads?
– and think about this if you need to use GLS Lamps on a dimmer switch

And Finally:-

John G8DET edited this edition.
Material by; Murray G6JYB, Trevor M5AKA, Steve G4ZUL, Clive, G1EUC & Graham G7JYD, Geoff, G3EDM, Mark, M0IEO & Patrick, M0XAP.

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, Sept 19th