



# 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 535

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

October 2010

This Month's Meeting – Tuesday, 5<sup>th</sup> October, 7.30pm at the Marconi Club.

## "Annual General Meeting" By CARS Members, For CARS Members!

It is amazing - it is time for the AGM again - is it that as one grows older the year goes quicker? This is the time for YOU to come and hear how we did during the year and for YOU to say what YOU would like to do and hear during the next year.

2009 to 2010 has been a very busy year, partly because we were awarded the RSGB "Club of the Year Award" for 2009 and went to Bedford to collect it. We have commemorated Marconi 70 years in Great Baddow, two Battle of Britain "On Air" events, International Marconi Day, Dame Nellie Melba, National Field Day, Lighthouses/Lightship Weekend at Tollesbury and Science and Discovery Day but unfortunately, Sandford Mill was not open to the public for August. Our Training sub-group have been very busy at Danbury Village Hall with tremendous success. The CW training personnel have also been busy.

CARS Committee try and make the AGM Meeting a pleasant affair and we hope this October Meeting will be so when John, G8DET shows us photographs about the Airship *America* Event in readiness before we operate from Sandford Mill on Sunday, 17<sup>th</sup> October.

The "Amateur of the Year" and the "M1FDE Trophy" will be awarded.

CARS will have its now famous Raffle with at least 10 prizes - only £1 per Ticket.

### Dates for your Diary

Tues, Oct-12, 19, & 26 <sup>th</sup>	CARS CW Net starts at 8pm on Tues 12 <sup>th</sup> ; SSB Nets starts at 8.30pm (Local)
Wed, 13 <sup>th</sup> October	CARS Committee Meeting – Danbury Village Hall – 7.30pm. All welcome.
Thursday 14 <sup>th</sup> October	Essex Repeater Group "AGM", Danbury Village Hall – inc Refreshments & Raffle!
Sunday 17 <sup>th</sup> October	CARS Operating from Sandford Mill – Airship America Event 10am–1.30pm. CW. 1.30pm to 5pm SSB.
Tuesday, 2 <sup>nd</sup> November	CARS Meeting – "WSPR Mode and 500kHz, 136kHz and 8.97kHz VLF Operating" by Roger Laphorn, G3XBM.
Saturday, 23 <sup>rd</sup> October	Coach Outing to Bletchley Park. Picking-up from Maldon, Danbury & Great Baddow.

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 call-sign, postal or E-Mail address, etc. E-Mail 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) 145.375: (3rd) GB3ER: (4th) 1.947/50: (5th) 28.375. All MHz +/- QRM. **Net Controller for October is Patrick, M0XAP. Thanks to Colin, John & Denis for doing it in September.**

## **Last Months Meeting:- "The Battle for the Bridge at Arnhem, and the problems experienced with Wireless Communications"**

**By Peter Best, G8BLS.**

After Chairman John, G8DET opened the meeting with the usual announcements, Peter was introduced to the large audience. He first asked "Does anyone here know what PLT Noise is? No-one said they did. He switched on a general coverage receiver and tuned around – stations were heard.

He then plugged a small plastic box into a mains outlet on the wall and tuned around again – small QRM. Then he plugged in a second box to another outlet and slowly a loud QRM signal was heard to build up. He could not really receive any but the very strongest signals – then with small noise as well.

***That gentlemen is PLT!***

Peter began his Arnhem presentation with the aid of projected maps to tell the story of the battle and how the operation was planned and carried out. The Allied Generals had ideas of how to speed up the advance to the German industrial centre in the Ruhr but Montgomery managed to get his plan to make a quick dash to take the last bridge on the Rhine towards Germany at Arnhem accepted. The operation was in two parts, Market and Garden. Market was to be the rapid airborne thrust to the bridge and Garden to follow up with a mechanised force to consolidate the thrust asap. The plan assumed that the German resistance would be minimal. This was not the case as history tells us. Why did it fail?

- Mainly because the small number of troops that got to the bridge were unable to hold it.
- Heavy German resistance which was not expected.
- Poor command.
- Poor communications.
- Poor planning.
- The RAF who were delivering the force would not go closer to the bridge. (This was as planned and their plan worked properly)

It was vital that the three groups making the thrust to the bridge were supposed to be in contact with each other - this was not so. The Radio unit chosen for the job was the WS68P and some WS22 sets which needed batteries and were Jeep mounted and only came into use later in the battle.

The "book" range for the WS68s would have just about been adequate under good conditions.

The achieved range in use was much less and was subject to interference and they did not understand what was happening. Peter showed us on the maps

where the communication links worked and did not work using either WSW 68 or modern Amateur Radio gear adjusted to equal the output and sensitivity of the WS68s.

He demonstrated to us a few of the contacts made and came to the conclusion that most of the sites chosen were not able to provide reliable communication. Height, trees and shadow blocking were all eliminated leaving only ground conductivity to be investigated (all using vertical short whips and ground wave propagation on 1.8MHz).

A Dutch Army communications man said to Peter "You will not get anywhere on these sites as the ground is very magnetic".

Peter told us that he now started to investigate soil conductivity and so he took samples from some of the sites and brought them home and compared them with others taken from other test sites, including his own garden. He brought them with him to show us and the figures of resistivity and conductivity of each sample.

It showed that the Dutch sites were virtually non-conductive sand about 100m deep with no iron whatsoever. (Peter's garden was much better conductivity).

Peter then asked if anyone knew of a suite of programs by Reg. Edwards, G4FGQ, one of which was "Ground Wave IV" which uses a formula from 1905 to work out path losses for types of ground. He put the program up on the screen and fed in the relevant figures from Arnhem (and his garden). These showed a very good correlation to the results they were getting on-site.

The conclusions were that the chosen sites for the landings and the drive to Arnhem were on a great big dry insulated sandbank which looked like a forest and scrub landscape.

Peter intends to return with calibrated aerials and signal strength meters soon.

Thanks Peter for a most interesting talk with lots of travel and visit information far too extensive to cover here.

### **Footnote**

Reg Edwards, G4FGQ (now a Silent Key). produced a series of DOS programs for radio and antenna design. These can now be found on line at:-

<http://www.zerobeat.net/G4FGQ/>

**Tony G4YTG.**

## Amateur of the Year Award

Mark Sanderson, M0IEO won Amateur of the Year Award last year – who will get it this year?

CARS Committee received a number of "nominations" and Voting took place at the September meeting.

The Shield will be engraved and presented at the AGM in October.

## CARS Committee and Carl, G3PEM

---

### WORK THE WORLD FROM YOUR ARM CHAIR. (by Internet – no radio needed).

Well you can, and you do not need an Aerial, also there will be no QSB and no QRM.

CQ 100 is the answer. What is CQ 100 you may ask? Well it is the first Software Transceiver designed for QsoNet System. It covers 5 HF Radio Bands, 80, 40, 20, 15 and 10metres.

The computer mic provides voice modulation. CW can also be used, by using the keyboard.

To use this system you must have an Amateur Radio License.

Also, to use the system for CQ 100 it requires Windows 2000, XP or higher Operating System. A Sound Card with speakers & microphone and headset is required.

The system was created by VE3EFC, McCormack. You can download the programme, and you can try this free of charge for 90 days. Some people say they think that it is easier than *Echo Link*.

I must say that I find it very interesting, as there is always somebody willing to have a QSO with you.

You can also send QSL cards. In fact I have received quite a few. I am very pleased with the system.

The screen is as a normal radio, with all the buttons, which some can be used to adjust different functions on the screen.

There is a manual that you can download, which I found very interesting and helpful. I think it is great, but I would not give up my radio.

It is fun, so have a go. You can email Douglas.  
[douglas@qsonet.com](mailto:douglas@qsonet.com)

Also check out the web site: [www.qsonet.com](http://www.qsonet.com)

## Martyn, G1EFL.

Thank you Martyn.  
As we say so often – you heard it here first!

## October Radio Sport (Contests)

All in UTC

**2 Oct**– 1.2GHz to 2.3GHz Trophy–14:00 to 22:00

**2/3 Oct** – 432MHz to 248GHz IARU – 24 hours

**2/3 Oct** - Oceana DX – SSB – 24 hours

**3 Oct** – RSGB 21/28MHz – 07:00 to 19:00

**14 Oct** – 80m Club Sprint – CW – 19 to 20:30

**9/10 Oct** – Oceana DX – CW – 24 hours

**17 Oct** – Second 50MHz – 09:00 to 12:00

**27 Oct** – 80m Club Sprint – SSB – 19:00 to 20:30

**30/31 Oct** – CQWDX – SSB – 24 hours

For further information please email Steve G4ZUL  
[contests2010@g0mwt.org.uk](mailto:contests2010@g0mwt.org.uk)

## Steve, G4ZUL

---

### Radio Path Predictions – October.

Gwyn, G4FKH was requested at the November Meeting to provide an "Only to CARS" Propagation Prediction. Thank you Gwyn.

**Asia: Dhahran** - around 14:00 on 24.9MHz for 75 per cent of days, with fair signals.

**Oceania: W.Samoa** - around 12:00 on 18.1MHz for 49 per cent of days, with poor signals.

**Africa: Johannesburg** - around 22:00 on 10.1MHz for 65 per cent of days, with poor signals.

**South America: Caracas** - around 20:00 on 10.1MHz for 75 per cent of days, with poor signals.

**N. America: Washington** - around 06:00 on 7.0MHz for 72 per cent of days, with poor signals.

Comments are welcome. Please E-Mail Gwyn at:  
[g4fkh "AT" btinternet.com](mailto:g4fkh@btinternet.com)

## Gwyn, G4FKH

---

### CARS Outings – Bletchley Park

The University of the Third Age (U3A), Baddow & Galleywood Branch are running a Coach to Bletchley Park on Saturday, 23<sup>rd</sup> October.

Pick-up is at Maldon, at 8.20am, Danbury 8.45am and Great Baddow 9.00am. It is 83 miles away.

It is essential to go on a weekend as many of the rooms are run entirely by volunteers and therefore not open during the weekdays.

Coach seat and entrance is £19. You can download an Application Booking Form from the Future Events section on the CARS Web Site. **It is fully booked but you may join the "Waiting List".**

## John G8DET

## CARS Foundation & Advance Training

CARS have a four-week 'fast track' Course for the Nov-22 Advanced exam, running from Thu 28-Oct to 17-Nov for which Clive is interested in willing and well-prepared candidates.

The PowerPoint slides used for these courses can be downloaded from the Club website.

The next Foundation Course starts in Danbury Village Hall on Thursday, 14<sup>th</sup> January, 2011. If you know anyone who would like to join – please get them to contact Clive ASAP. The list has already started.

To find out more about CARS courses contact:

Clive G1EUC  
Tel: 01245-224577 Mob: 07860-418835  
Email: [training2010@g0mwt.org.uk](mailto:training2010@g0mwt.org.uk)  
Web: <http://www.g0mwt.org.uk/training/>

Clive has had a spell in Broomfield Hospital – CARS wish him well whilst he convalesces

---

## Microsoft Windows 7 & Office 2010

John, G8DET has 1.1Gbytes of E-Mails on his system – Office 2002, Outlook Express supports only 2Gbytes.

Mark, my paid computer guru has now installed Windows 7, 64Bit and Office 2010 Pro Plus, courtesy of [www.software4students.co.uk](http://www.software4students.co.uk). Being a member of Maldon U3A I was able to save over £400.

Most of the data transfer has gone without a hitch but unfortunately “Outlook” has **NOT** saved who is a Member of CARS!

**If you do not get a Newsletter, please E-Mail me and tell me and I will add you to the list.**

**Likewise if you find you get E-Mails from CARS which you normally do not see – and do NOT want – again, please inform me.**

**Similarly, if you find you do not get normal chit chat E-Mails and you would like to be put on the list again – tell me.**

**Again, if you get more than one Newsletter – please tell me because it means I have you in the system more than once.**

Mark had to download a new set of drivers for my Scanner and Printer. My Dymo LabelWriter 400 proved impossible to find so he went to the Microsoft Windows 7 Compatibility web site and found an obscure link into a section of the Dymo web site where the latest Driver was located – works OK. A cynic may say it is just as though Dymo wanted you to go and buy a new printer!

**John G8DET.**

## Wanted

Multi pin power plug for Marconi CR 300 Receiver or complete lead – Colin G3TRM

---

## For Sale – TX/RX and Vintage Radio

### Kenwood TS530P HF Transceiver

Suitable for SSTV and RTTY with manual £150 no offers and cash only, buyer collects. Also...

### Murphy A40 circa 1940's vintage radio

With some service history and in good working order with a set of spare valves. Offers around £30

Contact Ken G0OSI on 01376 334 110 or Mobile 07800501851

E-Mail [g0osi@12freeukisp.co.uk](mailto:g0osi@12freeukisp.co.uk)

---

### Sold – Kenwood TS570D

Ex Tom, G4IMN's rig.

Miss Frankland says “Thank you very much for advertising it – sold to a CARS Member”.

---

### Sold – Moonraker 2M Aerial.

Dick, G4DJC also says “Thank you”.

---

## What Preceded RADAR?

And see this in Kent from the Napoleonic war.

Napoleonic 'Igloo' Listening Post Unearthed At College In Kent

<http://www.culture24.org.uk/history+%26+heritage/art51617>

Sound Mirrors

<http://www.andrewgrantham.co.uk/soundmirrors/links/>  
[http://www.castlekas.freemove.co.uk/sound\\_mirrors.htm](http://www.castlekas.freemove.co.uk/sound_mirrors.htm)

## 73 Trevor M5AKA

---

### Use “Virtual RADAR” and save £400

Click on the following Internet link to have a surprise.

[www.flightradar24.com](http://www.flightradar24.com)

This displays most aircraft in the sky above you, very nearly as they go over. All browsers work, but some work better than Internet Explorer.

[www.radarvirtuel.com](http://www.radarvirtuel.com)

Tired of looking at aircraft? Try ships instead: -

[www.marinetraffic.com](http://www.marinetraffic.com)

With all three quoted above you can play for hours.

Thanks to

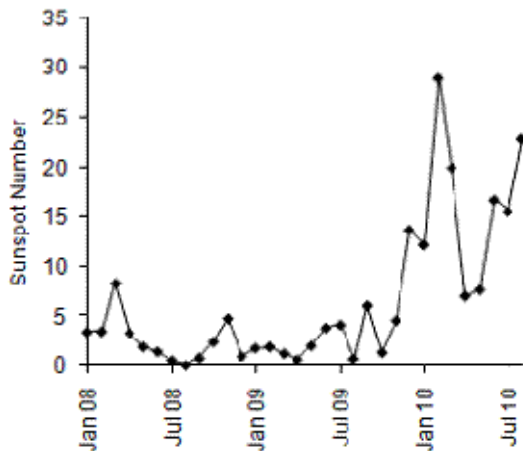
**Richard Creak, Colin Page & Robin Harvey.**

---



## Further increase in Solar Activity

Overall solar activity has increased since the end of 2009 as can be seen in the plot of my monthly averaged sunspot number since the start of current solar cycle in January 2008.



Although activity was a lower in April and May there have been several sunspot groups seen throughout most months with very few days when no sunspots were seen. On the 11th August only there was a high of five groups whilst in mid-September the largest sunspot so far this cycle was seen. So it looks as if this solar cycle has finally started.

## Peter, M0ZBU

---

### Science and Discovery Day

Sunday, 26<sup>th</sup> September dawned cloudy and cold but dry and so 735 persons came to Sandford Mill to enjoy the efforts of Chelmsford Borough Council, Museum's staff hard work together with BBC Essex Radio and CARS. It rained heavily in the afternoon.

In the morning the new Vintage Wireless exhibits were on show to an invited number of persons – very interesting.

CARS had a HF station set up by Brian, G3CVI in the Marconi hut and enjoyed contacts all around Europe. Mark, M0IEO set up a tent with Belinda (wife) and family and found VHF had taken on the "Arnhem Effect" - difficult propagation – where are you Peter, G8BLS?

Colin, G0TRM had his now famous Mechanical Morse table on the upper floor and assisted by Peter, M0ZBU was inundated with junior operators tapping out messages which were then sent to a 100 year old inked printer. They carried away a certificate to show they had sent a Morse message.

BBC Essex set a TV Studio and had teams of young budding "presenters" reading the news etc.

Professor Brainstorm kept 50 persons entertained with Physics Lessons on the Barn throughout the day.

Many people had a good look at Geoff, G7KLV's display of vintage radios – pity none were shown working as that would have added to the atmosphere of the day.

The refreshment hut staffed by Friends of the Museum was very well used – many people were seen coming away clutching a steaming hot drink.

A very successful day – thanks to Dr Bowles for inviting CARS to take part.

## John G8DET

---

### Airship America Event

On 15<sup>th</sup> October 1910 the dirigible *Airship America* took off from Atlantic City, USA and headed across the Atlantic with the idea of landing in England. For a while things went well – Jack Irwin, the Marconi Operator using a Marconi Transmitter (made in Chelmsford) communicated with shore stations and reported progress.

After 38 hour airborne the engines failed and it drifted in the wind in the wrong direction. After another 33 hours the situation became critical and it made contact with the *RMS Trent* on route from Cuba to New York, near Bermuda, initially with a torch at night and later using its Wireless.

On the 18<sup>th</sup> October the crew and Kiddo the stowaway cat climbed into the lifeboat and all were rescued – including the lifeboat.

A number of World Records were achieved

- 1) First time a Wireless was commercially installed in a powered Aircraft.
- 2) Longest time an Airship had remained airborne.
- 3) Furthest an Airship had travelled – 1008 miles.
- 4) First Air-Sea Rescue involving Wireless.

This amazing Double Centenary story will be told after the AGM and **the event will be marked by CARS using GB100MWT** and operating CW up to 1.30pm on Sunday, 17<sup>th</sup> October from Sandford Mill and SSB for the rest of the day.

<http://www.g0mwt.org.uk/events/airship-america/airship-america.htm>

## John G8DET

---

## Essex Repeater Group AGM – Oct-14<sup>th</sup>

Thursday 14<sup>th</sup> October at 7:30 for 8pm start is the time for this years Repeater Group AGM at Danbury Village Hall. As usual the meeting is an excellent opportunity to renew yours Subs, support the repeaters and hear more about how both the FM and the new DStar systems are progressing. Free refreshments, surplus kit and a raffle are all in prospect, as well as the chance to socialise.

**Do come along!**

**Murray G6JYB, ERG Secretary**

---

## Digital TV - The End of Analogue Anglia

As predicted in Murray's recent talk, the dates for switchover at Sudbury have now been released and finally there is the prospect of a decent Freeview signal and HD within a year. **BBC2 analogue switches on July-6 2011, followed by the rest of Sudbury two weeks later on July 20th (inc transmission of Freeview HD)**

Note that due to a conflict with Dover in Kent which doesn't switch till much later, Mux-D will stay at low power until after two further retunes:-

- First on 16-Nov-2011 and
- Second in mid-2012 when the final configuration and power is possible

Even before the switch officially starts a couple of Sudbury's digital outputs will be raised in power this December and on 24-Jan-2011. You can get the fine detail from Digital-UKs website for aerial installers' predictions

Some parts of Essex also get new relays (for the public service broadcasters) at:-

- Burnham on Crouch
- Rouncefall
- Clacton

**Murray G6JYB**

---

## GX0MWT Battle of Britain Station

Bawdsey GB70BRS and CARS GX0MWT marked the Battle of Britain on Saturday September-11. Murray G6JYB, Mark M0IEO, John Blamey 2E0NNQ, Colin G3TRM and Jim 2E1GUA were grateful to BAE Systems ATC and Andy Tyler G1GKN for access to the Great Baddow Chain Home Tower.

Most radio operation was on 40m and 80m using the same antennas that had been left in place from the

very popular February GB75CH event. The morning was spent on 80m working mainly Gs. Following a convivial lunch in the Baddow White Horse, operations switched to 40m which had lower background noise and soon gave excellent reports from further afield.

Jim then managed to tune up the tower on some higher HF bands resulting in some terrific DX, no doubt helped by the brighter weather!

An enjoyable day was had by all. Our thanks also to John Blamey for his caravan for operating from

**Murray G6JYB**

---

## Peter Hale – G4OAD – Silent Key

As the September Newsletter was being finalised CARS learnt that Peter, G4OAD had passed away in Basildon Hospital on Tuesday, 24<sup>th</sup> August 2010, age 82.

Peter was a very active Member of SEARS and CARS and attended every Event and Meeting for a number of years.

A very nice Funeral Service was held at Pitsea Crematorium where SEARS and CARS were well represented. As the curtains drew closed around the coffin the following Morse Code message was heard-

***CQ CQ CQ G4OAD Peter RIP 73 88 from Family and Friends AR SK***

Thanks to Dave, G4UVJ for composing and recording it – very moving and appropriate.

See also the CARS Web Site.

Thanks to Norman, M0FZW for the information.

## The Committee.

A tribute by Justin G0KSC is on Southgate:

[http://www.southgatearc.org/news/august2010/peter\\_hale\\_g4oad\\_sk.htm](http://www.southgatearc.org/news/august2010/peter_hale_g4oad_sk.htm)

---

## And Finally:-

John G8DET edited this edition. Material by; Trevor, M5AKA; Steve, G4ZUL; Gwyn, G4FKH; Murray, G6JYB; Norman, M0FZW; Carl, G3PEM;

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](mailto:editor@g0mwt.org.uk) by Sat, 23rd October.