



# Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB

Club Call Sign-G0MWT

President-Carl Thomson, G3PEM

Chairman-John Yates, G1UZD

Treasurer-Brian Thwaites G3CVI

Acting Vice Chairman-Geoff Mills, G3EDM



LOTTERY FUNDED

Newsletter No 573

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

December 2013



## A Merry Christmas to all our readers



### This Month's Meeting

**TUESDAY, 3<sup>rd</sup> December.** Doors open 7pm for 7.30pm start, with 10pm finish.  
**OAKLAND'S MUSEUM, MOULSHAM STREET, CHELMSFORD, CM2 9AQ**

**"Circuit Design using Computers" and "Social Chat"**

**Peter Bridgeman, G3SUY and CARS Members**

Peter will describe how to draw and design Amateur Radio Circuits using Circuit Scribe and other uses for the Radio Amateur. Afterwards we will have a Social Chat to enable everyone to meet and enjoy the Amateur Radio company.

Remember, warm mince pies will be served!

Carl Thomson, G3PEM and James Beatwell, 2E1GUA will run the Raffle.

### Dates for your Diary

Tues 10 <sup>th</sup> , 17 <sup>th</sup> , 24 <sup>th</sup> , 31 <sup>st</sup> Dec	CARS - Evening Radio Nets @7.30pm (Local). See Website for details.
Every Sunday	CARS - Backnang (Germany) Net at 2100 (UTC) on 3.750MHz +/-QRM. Peter DK7SP chairs it - please join in as he's feeling lonely!
Friday, 6 <sup>th</sup> December	CARS – Advanced Training Course – Exam in Danbury Village Hall. TARG – Xmas Club Night, Jubilee Hall, Waterside Farm Sports Centre, Canvey
<b>Saturday, 7<sup>th</sup> December</b>	<b>CARS – Christmas Lunch in the refurbished Lodge Country Inn near Battlesbridge. Booking details <a href="#">here</a>.</b>
Saturday, 14 <sup>th</sup> December	W&S, Hockley – Christmas Open Day Sale - CARS Training & ERG present
Tuesday 7th January	CARS - Building a Remotely Operated Station John Regnault, G4SWX
Tuesday 4th February	CARS - A Hundred Years of Amateur Aerials from RSGB Archives, Tony, G4YTG
Tuesday 4th March	CARS - Digital TV, Radio & Amateurs – What's Next? Murray, G6JYB

To be 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 2<sup>nd</sup> class stamp.

Postal Newsletter – could it go by email to reduce our postal costs?

Also, you will see all photographs in glorious colour using an email subscription ☺

Please inform Brian, G3CVI by email at [g3cvi@g0mwt.org.uk](mailto:g3cvi@g0mwt.org.uk) of any changes to your callsign, postal or email address, etc. Only by **YOU** sending Brian your email address, can we ensure **WE** get it right!

**Nets** Tuesdays **19.30h** (2<sup>nd</sup>) GB3DA, (3<sup>rd</sup>) GB3ER, (4<sup>th</sup>) 1.947MHz, (5<sup>th</sup>) 3.750MHz  
Sundays @ 21.00 Backnang net on 3.750MHz  
Also there is the Essex Ham net every Monday @ 2000h on GB3DA

**Net Controller for December is Patrick, M0XAP. Thanks to Carl, G3PEM, for November.**

**Net Controllers needed for February, March and April 2014. Volunteers please.**

## Last Month's Meeting — Tuesday, 5<sup>th</sup> November 2013.

### Video Editing using a PC by John Yates, G1UZD.



John used his laptop to give a presentation which showed that video recording, like many other technologies, has seen major developments over the years. He briefly covered some of this development starting with the first professional video tape recorders in the 1950s together with the difficulties in editing - this was quite a memory lane travel as most persons had been involved in this at some time - remember the Betamax Video Recorder?

The arrival of digital video opened up huge possibilities in the manipulation of video by computer to produce video effects, transitions, titling and editing. The camera and recorder became the integrated camcorder and software soon became available to

home users to carry out tasks which were previously only available to professional users. Like digital still photography, the benefits digital video brings are huge. The home personal computer can carry out all of the tasks that professional users now do and most of the talk demonstrated some of these basic tasks using Sony Vegas Pro software.



John then proceeded to demonstrate in real time how to produce and edit a short video film from shots he had taken when CARS attended the G4WAB Olympic Torch event when the Torch passed through Oaklands Park in July 2012. CARS Publicity Members, David Davis, G3SVI and his wife, Myra, M0MYR demonstrated Amateur Radio and engaged with the public.

Having shown how to create a video film John then burnt a copy to a DVD and presented it to David and Myra to applause.

Thanks to John, G8DET for the photos & article. More detail available on the CARS [website](#).

#### **CARS Officers:**

President

Vice Presidents

Chairman

Programme Secretary

Assistant Committee Secretary

Treasurer

QSL Manager

eQSL Manager

Newsletter Editor

Training Co-ordinator

ERG Representative

Raffle Organisers

Public Liaison

Merchandise Manager

Sandford Mill Liaison

RSGB RadCom Publicity Member

Carl Thomson, G3PEM,

Geoff Mills, G3EDM, Tony Gilbey, G4YTG and John Bowen, G8DET.

John Yates, G1UZD and Acting Vice Chairman: Geoff Mills, G3EDM.

Vacant

Colin Page, G0TRM (also Essex Chronicle & Weekly News Liaison)  
*assisted by Peter Bridgeman, G3SUY*

Brian Thwaites, G3CVI, (also Meeting Room and Membership)

Patrick Xavier, M0XAP PO Box 112, Danbury, CHELMSFORD CM3 4DF.

Peter Sipple, M0PSX

Alan, G0RTH.

Clive Ward, G1EUC

Murray Niman, G6JYB

James Beatwell, 2E1GUA & Carl, G3PEM

David Davis, G3SVI & Myra Davis, M0MYR

Martyn Medcalf, G1EFL

Geoff Lovegrove, G7KLV.

Trevor, M5AKA

*Co-opted Member*

*Co-opted Member*

**Christmas Lunch note.** There are still some places left for the Christmas Lunch.

Time is getting short so please send your booking form and cheque to Martyn, G1EFL as soon as possible. At £11 per head it is too good to miss. Booking forms can be downloaded from the web site. Hope to see you all there. John G8DET.

**Remember, any articles you feel may be of interest to members are welcome as are details of items for sale or wanted. Send to [cars.editor1@gmail.com](mailto:cars.editor1@gmail.com).**



## **MORSE CLASSES**

Morse classes will be starting again in the New Year on Thursday 9th January, 7pm, at The Bell public house Danbury.

Details can be found on the Chelmsford ARS web page or contact Andrew, G0IBN, at [g0ibn@kersey1.freemove.co.uk](mailto:g0ibn@kersey1.freemove.co.uk) or telephone 01621 868347.

Due to popular demand there are now two classes: Andrew, G0IBN, tutors the complete beginner up to the RSGB 10wpm test and the correct way to use the straight and twin-paddle key.

Colin, M1OCN, helps those that wish to improve their CW speed; to boost confidence on the use of the key and how to carry out CW QSOs with confidence on the bands. If you have an interest in CW come and join us on the first evening and see if we can help you in any way.  
**Andy G0IBN**

## **Presidential Jottings**

Firstly our thanks to Alan for taking over the editorship of the newsletter, it means that the CARS newsletter can continue and grow. Our last meeting was very well supported for the talk by our new Chairman on the editing of videos.

I found the talk very informative as I learnt that my PC already has a program for editing the bits of videos I have taken with my digital camera.

Refreshments consist of tea, coffee, orange squash and hot chocolate. If you have a preference for another type of refreshment (non-alcoholic) please mention it so we can provide it.

Your new committee has already put together an interesting programme of talks for the first part of next year, if you have any suggestions for talks please mention them to a committee member.

The next meeting will be of great interest to those who like home construction so I will see you there.

**Carl, G3PEM**

## **CARS Training Courses**

CARS is currently running its fast-track Advance Course-12R on Thursday evenings for the Fri Dec-6 exam which will be using the new Optical Marking sheet system.

Our best wishes to the candidates.

Clive is now accepting names for the January-2014 Foundation Course starting Thurs. Jan-9<sup>th</sup>

Contact the Training Manager Clive, G1EUC on Tel: 01245-224577. Mob: 07860-418835  
Email: [training2014@g0mwt.org.uk](mailto:training2014@g0mwt.org.uk)

## **Training webpage**

<http://www.g0mwt.org.uk/training/>

## **Thoughts about propagation on HF**

Our present solar cycle, no. 24, is now declining which means that HF (high frequency) working will become more difficult as the number of sunspots decline. At the time of writing (10/11/13) there is around some 150 sunspots active and one of these is particularly large and is producing a number of flares. The material from these flares takes several hours to reach Earth even when it is ejected in our direction. When it arrives at the Earth it disrupts the normal working of the ionosphere. The F layer is the one which normally facilitates DX working at HF. Flare material not directed towards the earth causes little disruption.

As I am interested in working stations worldwide I use the 20 metres band. However, 40 metres is often open when 20m is closed. But it does require double the space in your garden and rotatable beams are mostly out of the question because of their size compared to 20m beams. Vertical aerials, although under-rated, are very effective as they take up little space in the garden. However, their guy ropes do need to be spaced well apart. I often work mobiles, in Australia and New Zealand, using low power and vertical aerials on their cars, which shows that large verticals, although better, are not necessary. An amateur near Blackpool uses a vertical attached to his bicycle! He is not mobile but does place himself as near to the water on the sea-front as he can get. (A good earth nearby helps). The power he uses is well under 100 watts.



With any aerial the most challenging thing is to get as much energy from the transceiver as possible into the aerial and this means matching the transceiver to the feed point

impedance of the aerial. This is the key to making long distance contacts. Or, in fact, any distance.

Don't think that dx is impossible with a small aerial. It's always possible when the station at the other end has a beam ☺. Try it.

**Geoff, G3EDM**

## A newcomer to satellite operating

Ask any Foundation Licence Holder what they thought of about their first radio contact, and the most probable answer will be, 'it was great', and so it was for me too. However, my first contact via satellite some nine months later was a bit better than 'great', it was fantastic!

After a few months of making contacts, I discovered that it was possible to make contacts via satellites.

The thought of talking to other Hams via something no bigger than a shoebox orbiting the earth was intriguing and a challenge I had to take on.

The first thing I did was to acquire two excellent books on the subject, 'Radios to Go' and 'The ARRL Satellite Handbook' by Steve Ford WB8IMY.

I also liked the idea of perhaps a contact with the crew on the ISS, or even just a contact via the FM repeater, so ISS Zarya was the first choice along with Saudisat 1c (SO50) both satellites having a cross frequency FM repeater.

Now I was entering the world of Azimuth, Doppler, Acquisition and Loss of Signal. Not having much in the way of construction skills I opted to buy an off the shelf antenna, and went firstly for a 2m/70cm single feed. The first few attempts at contact with the satellites did not go at all well. Each time either ISS or SO50 went over there was silence. With so many variables in the set up to account for, I sensed an orderly approach to each one was needed. At this stage I naively thought that just switching between uplink and downlink and pointing the antenna in the right direction would be enough.

So, on 15<sup>th</sup> September armed with two radios, antenna and all the information I needed to make a QSO, I took myself off down the shed, set up the rig and antenna and waited.

The prediction was for a North Westerly pass starting at 11.06 from 312.55 degrees (NW) travelling through 239 degrees (SW) with a maximum elevation of 34 degrees at 11.10 and disappearing at 166.35 degrees (S) at 11.16. Lo and behold at 11.10 on the Saturday morning with the antenna pointing high in the sky I heard 'CQ, this is G6AHX listening on SO50'. Music to my ears! It was Simon in Tewkesbury who had given me a wealth of information on this satellite.

I responded with a quick 5/9 and QTH locator square, just before a more powerful French operator took over the airwaves.

This truly was an achievement, my first QSO via satellite. I felt so proud after the trials and

tribulations that had gone before, I had finally got it right and it was a great learning curve getting there.

I would say this, if you are a Foundation Licence holder and thinking of trying this, then go for it. It takes a little bit of preparation but once you have mastered it and made your first contact, it's all worthwhile.

I would like to thank all that have given me encouragement and information along the way, and look forward to many more contacts via satellites.

**Joe, M6JNJ**

*(Ed – this is a précis of Joe's article, if you would like to read the full article please [email me](#) and I'll forward it to you.)*

**Offered FREE** a 4 element, 6m Yagi, might require some new bolts but nothing very great. New owner to collect and I will help dismantle sufficiently to get the beam into a car.

Phone me on 01245 471919 to arrange things.

**Brian, G3CVI**

### And Finally:-

As the new editor I would be grateful for feedback on the content of the newsletter as a great deal of this is duplication of what is present on the CARS website (e.g. Meeting Information & Committee Structure) and the website is a much more immediate means of gaining access to this.

Should the newsletter contain this duplication?

If no then more space could be devoted to items from members. [Comments please.](#)

**Alan, G0RTH**

Distributed mostly by email by John, G8DET.

Many thanks for the numerous contributions to the CARS newsletter over the years by Steve (G4ZUL) and Gwyn (G4FKH).

**Closing date for items in the next Newsletter – Friday 20<sup>th</sup> December.**

**Q:** How do you greet a fellow ham radio operator?

**A.** With a short wave of course ☺

WATERS & STANTON  
**OUR FAMOUS  
CHRISTMAS OPEN DAY**  
SATURDAY 14<sup>TH</sup> DECEMBER 9AM - 5:30PM  
The NEW Yaesu FT-DX1200 & FTM-400DE  
Transceivers will be on demonstration @ Hockley

APACHE LABS FlexRadio Systems  
ELECRAFT Transceivers will be on  
Demonstration!

We will be joined at Hockley  
by Yaesu UK, Chelmsford ARS,  
Essex Repeater Group &  
Essex CW Club.

New bhi British "Desktop"  
DSP speakers  
on demonstration

Come visit  
Waters & Stanton Hockley  
or Jaycee Glenrothes for  
free food and great deals!

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

A reminder about the "Christmas Open Day" of our local emporium.

Well worth a visit.