



# Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB Club Call Sign-G0MWT  
President-Carl Thomson, G3PEM Chairman-John Yates, G1UZD  
Treasurer- Roland Taylor M0BDB Acting Vice Chairman-Geoff Mills, G3EDM



Newsletter No 584

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

November 2014

## This Month's Meeting

**OAKLANDS MUSEUM, MOULSHAM STREET, CHELMSFORD, CM2 9AQ**

**Tuesday 4<sup>th</sup> November, Raynet talk, Roland Taylor, M0BDB.**

Roland Taylor M0BDB will be talking about what [Essex RAYNET](#) do for our hobby (and the local community and nationally). You can also find out how APRS and D-STAR play a vital role in communications at RAYNET events.

The usual CARS Raffle will take place with proceeds going to club funds.

Carl Thomson, G3PEM and James Beatwell, 2E1GUA, (hopefully well enough) will run the Raffle.

## Dates for your Diary

Tues 11 <sup>th</sup> , 18 <sup>th</sup> , 25 <sup>th</sup>	CARS - Evening Radio Nets @ 8:00 pm (Local). See Website for details.
Every Monday	Essex Ham 2m Net @ 2000h GB3DA
Monday, 17th November	Cars Skills Night 7:00 pm Danbury Village Hall
	<b>NB No Skills Night in December</b>
Tuesday 2 <sup>nd</sup> December	<b>Club meeting for a Social Evening</b>

**Membership subs are now due**, send a Cheque for £15 for Membership (FREE if in Full Time Education) to: - Mr James D Beatwell, Membership Secretary, 36 Hunts Close, Writtle, Chelmsford CM1 3HJ

**To receive your membership card, please enclose a stamped addressed envelope.**

**No SAE no membership card!**

### Nets

Tuesdays **2000h** (11<sup>th</sup>) GB3DA, (18<sup>th</sup>) GB3ER, (23<sup>rd</sup>) 1.947MHz  
Also there is the Essex Ham net every Monday @ 2000h on GB3DA

**Net Controller for November is Carl, G3PEM**

**Thanks to Colin, G0TRM for October.**

## **The CARS AGM took place on Tuesday 7th October 2014**

It was standing-room only with the following agenda:

**Review of the Year** - Two presentations covered: 1 CARS Meetings and activities over the past year, 2 CARS Training and Skill Nights – with [Slides](#) available on the website.

**Awards** - Presentation of the 'Constructors Competition' certificates. David and Myra Davis (G3SVI and M0MYR) were deserving recipients of the CARS 'Amateur of the Year' award - well done!

**Chairman's Report** - John Yates G1UZD gave his report for the past year as Chairman.

**Treasurer's Report** - Brian Thwaites G3CVI had retired after 25 years. Acting Treasurer Carl G3PEM presented the club's incomings, outgoings and current financial state. The membership fee was retained at £15 –

**Election of Committee** **Break and Raffle** **followed by a Brief Talk** –

After the AGM, the CARS meeting had an extra feature. As recently appointed RSGB Spectrum Chairman, Murray G6JYB was in a position to give attendees an overview and pointers to quite a complex [Ofcom 35 page consultation](#) on the proposals to change amateur licences.

Dave de la Haye, M0MBD, also led a short discussion on whether the GB4FUN callsign might be useful for special events and ideas for new promotional material

A well-attended meeting with the usual raffle and refreshments.

## **CARS Skills Night October 2014**

On Monday the 20<sup>th</sup> of October, over 50 amateurs gathered at the Danbury Village Hall for the most well-attended Skills Night of the year. A wide range of demonstrations was on offer for the tenth informal get-together, covering topics requested by recent attendees.

Those interested in D-Star were able to see a demonstration of a DVAP and D-Star on handhelds, courtesy of Joel G0URK.



Chris M6EDF, fresh from a two-day stint as a JOTA event in Basildon where two high altitude balloons were launched, brought along some HAB payloads, as well as his 3D printer,

allowing attendees to see how items are designed on a laptop and printed in 3D. Those looking for HF advice were able to get some fresh ideas from CARS President Carl G3PEM, and a demonstration of weather satellites was given by Steve M0SHQ. Steve G4ZUL, Rob M0KCP and other members of the Essex CW club set up a 40m CW station and despite the QRM, made contact with Romania, Germany, Slovakia, Slovenia, Russia, Italy and Chelmsford!

The regular quiz, hosted as ever by Clive G1EUC, featured questions by John Macrae 9H5G from Malta, and those coming along were once again able to get a callsign badge printed for a small fee courtesy of Jim 2E0JTW.

Special thanks go to David G3SVI and Myra M0MYR, winners of the CARS Amateur of the Year 2014, for their continued support of the Skills Night, and their hard work looking after the attendees.



The final treat of the night came from Aydin M6WYZ, who obtained his callsign earlier this month on the CARS training course organised by Clive G1EUC. Aydin brought along a Phantom Vision 2+ flying drone, which is an impressive piece of hardware. Everyone in the hall followed Aydin out into the street and watched in amazement as the drone shot off to the South. Within minutes, it was 1.2km away, sending video images over the 2.4GHz link back to the controller. After a short flight, the drone was summoned to return, and using GPS, was able to make a precise fix and safe landing. For a short video of the flight, go to

[www.essexham.co.uk/skills-oct14](http://www.essexham.co.uk/skills-oct14)

Thanks to all who attended and showed their continued support. The Skills Night is a true team effort and the record attendance for the October get-together proves that the team is doing something right. The next Skills Night is set for Monday the 17<sup>th</sup> of November 2014.

**Pete, M0PSX**

## **Shack Damp-Proofing and Dehumidifiers**

Nowadays, many shacks are indoors, as rigs have become smaller and easier on the female eye, but some of us are still using the shack in the garden. The major problem is always how to keep the equipment in good order and free from damp. Also, if one has library of books and magazines, these are very prone to ending up with mildew, making them useless very quickly.



I now have a block-built workshop, with single-thickness walls (complete with damp-proof course) and a boarded ceiling and felted roof. It seemed OK initially (I moved to this QTH last year), but eventually I found that cardboard boxes stored against the walls were just slightly damp to the touch at the back after several months, and although nothing seemed to be harmed, it seemed prudent to take steps to combat the damp.

My first step was to add another coat of masonry paint to the outside walls - ideally, I would like to fit external plastic boarding but this would be far too expensive. My second step was to buy a dehumidifier and start running it in the workshop. These are not particularly cheap, so I have started with a medium-sized unit, which is stated to suit a volume of about 30 to 45 cubic metres. My workshop is about 70 cubic metres, so eventually I may need to get a second unit if I find it really necessary.

So how is it doing? Frankly, I was amazed (and horrified) at the initial results. The dehumidifier runs continually, until it fills the reservoir to the 2-litre point, when it shuts down until the reservoir is emptied. So far, I have visited it every day and always found the tank filled and the machine shut down - I don't know therefore how long it is taking to reach maximum capacity. All I can say is that currently it is taking 2 litres of moisture out of the air daily. This may reduce with time - I hope so! Perhaps a second machine will be worthwhile? Technical points - The model is WDH-1012EA, made by Blyss (Chinese, no doubt), 220-240V 50Hz, with facility to drain directly outside, so it can run continuously if needed. My unit came from B&Q, costing about £97 (with 10% off on Wednesday for the over-60s). If anyone has suggestions for alternatives, with costs, please let me know.

My third step in keeping the shack dry is in progress. This week I bought a large roll of material from Aldi, which basically is two layers of aluminium foil, separated by a very thin double layer of something like bubble-wrap. It seems very durable. The size is 60cm x 750cm, or 4.5 square metres. I intend to put this in vertical strips on the wall, with the over-lapped joints held by vertical slotted support bars that will then carry the usual horizontal shelf supports. The horizontal spacing of about 60cm is ideal for this purpose. This will hold my books etc, and provide a fully-waterproof backing. The stated purpose of the material is heat insulation in lofts etc. The cost is £10 a roll. As offers in Aldi only last a few days, if anyone knows of other sources for this, information would also be appreciated, in case of further need.

**Dave G3PEN**

### Foundation Exam Successes

All nine candidates who took the Foundation exam passed (and some with very good marks), marking a very successful end to the

landmark 30th course - including some hectic last minute organisation by Clive re invigilators and readers.

The happy group are pictured below.

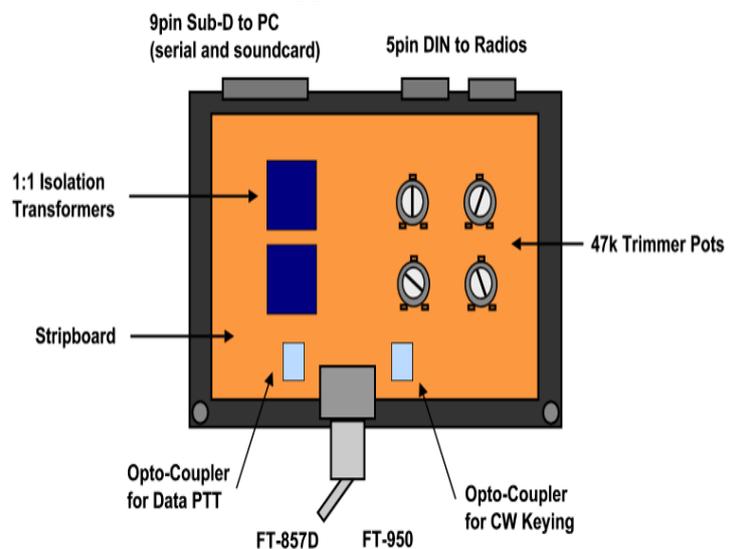


**Murray G6JYB**

### Winter Projects

For me, the winter months mean virtually-zero /P and about as much light as there is dark, which makes 40m a non-starter after 5pm - never mind that exotic DX on 12m/10m while the XYL watches "Eastenders". Traditionally it's the time of year that normal people spend with their families or, in my case, hiding in the Shack and melting some solder.

Last year's project was a re-working of my digimodes interface. A simple switchbox to handle my FT-950 (HF+6m) and FT-857 (2m/70cm) via a single soundcard. Inside the interface is a set of TX/RX trimmer pots and on the front is a 4-pole toggle switch.



I can now switch the RX/TX audio, PTT and CW keying between either radio and not have to worry about levels or reaching around the back of the radio to plug things in.

Total cost came in at around £10 whilst a USB solution from RadioArena is around £25. Soldering Iron 1 : Online Shop 0.



You can see details of this project on my website here: <http://www.mOpzt.com/?interface>

It wouldn't make me a true Ham unless I had more than 1 unfinished project on the go - There are parts for a "small" 20m beam that have been sitting here since the summer. Also under the desk is a prototype microphone processor. It's an all-in-one audio IC with noise-gate and compressor/limiter, the same chip that MFJ and W2IHY use in their off-the-shelf audio conditioning units costing silly money. The chip? Just £4 from RS Components and requires minimal discrete components.

A final "winter-project" (and I'm only writing it here to encourage me to do it) is an EB-104 solid-state amplifier. Using 4x MRF150 MOSFETs in push-pull, it gives an "on-paper" of 600w with just 6-8w of drive. That's enough power to be competitive in pile-ups when half of Europe (aka: The Kilowatt Club) are calling. The fun aspect would be the metal-bashing, sourcing 50v at 20amps, building the low-pass filters and SWR/protection/switching circuitry. If I don't go too mad with the cooling, at least it'll help keep the Shack warm!

**Charlie - M0PZT**

## Presidential Jottings

We held our AGM last month and I was honoured to present the prizes to our winning constructors and also the Amateur of year award to Myra and David Davis for all their hard work in being the face of CARS at our public events.

Thanks to all our outgoing committee for the work they put in last year. I also welcome and thank all the new committee members who agreed to support CARS in this coming year. I was extremely disappointed by the apathy shown by the membership regarding volunteering for the vacant positions; we will need more people to come forward and support the events being planned by your committee during this coming season.

I took Murray's talk to heart and looked at the OFCOM consultation documents, it was a lot to wade through and to complete the response document took an hour.

Please look at your spare time and if possible offer some of your time to support YOUR radio society.

**Carl, G3PEM**

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## Offered Free to a good home ☺

A recently dismantled Hustler 6BTV vertical antenna. Covers 6 Bands: 10, 15, 20, 30, 40, & 80m and comes complete with a stainless steel DX Engineering Tilt base plate. This is courtesy of Fred, G6YUY who is slowly disposing of his station and it is in a good condition. Ideally it could use a slight clean and when reassembled some anti corrosion Aluminium paste should be used.

All parts are present and all you need is a ground mounting post (1<sup>3</sup>/<sub>4</sub> inch pole) and preferably some radials.

This is worth £330 new and they sell (used) for between £150 - £200 on the well known online auction site so it would be nice if the recipient makes a donation of their choice to CARS funds.

To be collected from Alan, in Basildon.

Contact [alan.q0rth@gmail.com](mailto:alan.q0rth@gmail.com)

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## A view from the USA



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## **And Finally:-**

**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).**

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***Closing date for items in the next Newsletter – Monday 24<sup>th</sup> November***