



# Chelmsford Amateur Radio Society Newsletter

## November Meeting

Tue 7-Nov-2017, 7.30-10pm  
Oaklands Museum, Moulsham Street

## Urban Noise & SDRs

William Poel G8CYK

Unwanted man-made RF noise is a serious and growing issue afflicting all radio... EVERYWHERE.

Rising background noise is the limiting factor for many radio amateurs – certainly below 10MHz where ADSL delivered by overhead cables.

Mains-borne noise is much harder to identify and trace – and even affects an increasing number of the famous big guns of HF who can suffer like the rest of us.

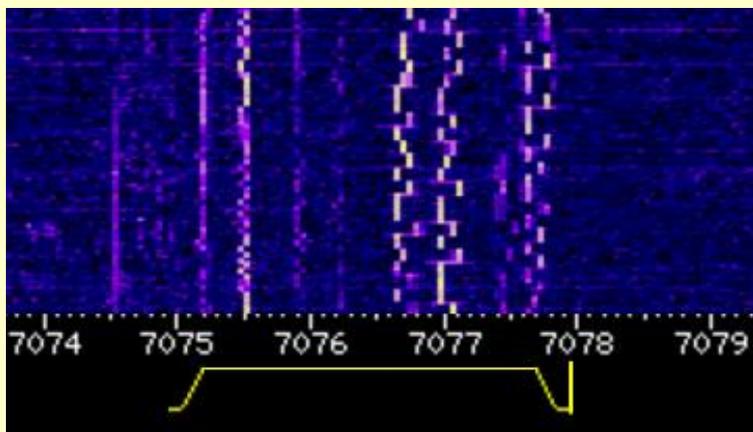
So if you wonder why you don't get called back by YB1IBM in Jakarta – it may not be anything more complex than the fact he has an S9+ noise level that you have to overcome before you can get heard

Don't imagine the growing noise problem does not afflict consumer Digital Radio and TV as well - it does, but it in different less obvious ways. You simply don't get the clues that analogue equipment provides – and so a device to help trace rogue RFI is needed

Ultimately, if you can't solve your local noise problems, then you can use a remote Web-SDR as the return channel. Already most 160m, 80m and 60m nets have many users that rely on Hack Green or one of the other central England SDRs that reasonably reflect reception conditions around the whole country – but without the noise blanket

So expect a topical and thought provoking talk from William G8CYK.

CARS will also have its famous raffle and refreshments - and perhaps more surplus items for sale



Hack Green SDR weak signal reception

### In this issue:-

Club Diary.....	2	Science Day: Report-2.....	6
Club Nets.....	2	An Antenna Tale.....	7
Training & Exam Dates .....	2	October Skills Night .....	8
October Meeting: The CARS AGM .....	3	BBC Memories.....	9
Training - End of Era .....	4	More Help Still Wanted !!.....	9
Science Discovery Day – Space and Beyond!.....	5		

**CARS Membership Subs are now due – Great value at still £15/year. Pay Online by PayPal at <http://www.g0mwt.org.uk/society/membership/e-form.htm> – or see James 2E1GUA, our Membership Secretary**

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## Club Diary

Tue 7-Nov-2017	Meeting: Urban Noise & SDR – William Poel G8CYK	Chelmsford – Oaklands Museum, 7:30pm
Mon 20-Nov-2017	Skills Night	Danbury 7pm
Tue 5-Dec-2017	Meeting: Xmas Social	Chelmsford – Oaklands Museum, 7:30pm
Thu 7-Dec-2017	Advanced Exam session (plus retakes etc)	Danbury 7pm

## Club Nets

CARS meets for talks/events on the first Tuesday of the month. The subsequent Tuesdays have club radio nets as follows:-

- 2<sup>nd</sup> Tuesday in the Month - VHF**  
 The CARS VHF FM Net uses GB3DA from Danbury starting at 8pm (local).  
 GB3DA is 145.125MHz Input and 145.725MHz Output - and CTCSS-only (110.9Hz), 2min timeout  
 If for any reason GB3DA is not available then 145.375 Simplex will be used. Vertical aerials are best for this
- 3<sup>rd</sup> Tuesday in the Month - UHF**  
 The CARS UHF FM Net uses GB3ER from Danbury and starting at 8pm (local).  
 GB3ER is 434.675MHz Input and 433.075MHz Output - and is CTCSS-only  
 Vertical aerials are best.
- 4<sup>th</sup> Tuesday in the Month - HF**  
 The CARS 80m Net on "3756kHz" Night, SSB and starting at 8pm (local).  
 Horizontal aerials are best. The idea is to enable distant CARS Members to join the Net.
- 5<sup>th</sup> Tuesday in the Month (when there is one!) - MF**  
 This is the CARS Top Band Net on 1947/1950 kHz +/-QRM, LSB and starting at 8pm (local).  
 Horizontal aerials are usually used for this Net. A reminder - limit your power to a max of 30 Watts, please.

## Training & Exam Dates

CARS Foundation Course-37 has concluded and the remaining task is the exam session in December which is primarily for Advanced Exam candidates on the distance learning course – but can also accommodate exams/retakes at lower levels as well. Peter M0PSD has taken on the training manager role after Chris G0IPU stepped down

Courses, Morse classes and exam dates for 2018 are also being planned.

Course	Dates	Comment
Advance Exam-20	Thu 7 <sup>th</sup> Dec	Registration for Advance must be asap. The session can also accept Foundation/Intermediate exam-only
Foundation-37	Jan-18 – Feb-15	Provisional dates tbc - but sign up now!

Contact: Peter Davies M0PSD, [training2017@g0mwt.org.uk](mailto:training2017@g0mwt.org.uk) Web: [www.g0mwt.org.uk/training](http://www.g0mwt.org.uk/training)



Follow @TrainWithCARS

## October Meeting: The CARS AGM

Tuesday October 3<sup>rd</sup> saw the AGM held at Oaklands Museum Chelmsford. The meeting was opened by Chris IPU, using a visual slideshow agenda created by Murray G6JYB.

The presentation of Constructors Competition Certificates by Chris G0IPU, opened the proceedings.

- The presentation of the Winners Certificate and the Anthony Martin Shield won by Peter Bridgeman G3SUY for his fine home-designed and constructed SSB transceiver, was held over due to his unavoidable absence.
- The second prize was won by Colin Page C0TRM for his 'Little and Large' Variometer tuned SW Crystal sets. For visual purposes, he was presented with a blank card, as he had left his own certificate in his printer!
- The third prize was won by Andy Kersey G0IBN for RAF Memorial set piece, but again was held over due to his unavoidable absence.



After the presentations, Chris IPU in his Acting Chairman's role gave a report. As part of his address Chris showed a fine collection of pictures outlining the many activities in which CARS members had taken part in the past year. These included events, at CARS meetings, at Skills night's, at training evenings and at Sandford Mill, the latter covered mainly the June Science Day. At which Chris, XYL Rhona, his brother Andy G7TKK and other members of his family provided a whole range of activities aimed at the younger generation, including radio controlled cars, a two way off air

radio network, electronic construction kits and making and firing paper rockets. (The last two particularly enjoyed by my two young grandchildren).

Chris spoke briefly about the financial summary CARS Treasurer Myra had produced, a copy of which was passed round the audience. The report showed CARS finances to be very healthy and **it was agreed the subscriptions should stay at £15 for the coming year.** Myra was thanked for generating the report.

A discussion regarding the Training schedule as currently published by Murray showed a small number Exam-only activities and the next course to be held which will be the 37th Foundation course in February. At the end of Chris' contribution President Tony Gilbey G4YTG took charge of the proceedings and presented his report and spoke of CARS achievements and gave thanks to all those members whom had made a positive contribution to the Club's activities in front of and behind the scenes. Chris IPU was thanked for all his outstanding efforts throughout his tenure as CARS chairman and his extra year beyond that.

It was then time for the elections and Tony stood down the current committee.

All standing members of the Committee apart from retiring Chairman Chris IPU stood for re-election. The proposal they should be re-elected was made by Martin Final G4TOO and seconded by Carl Thomson G3PEM. Motion passed.

James Beatwell stood for election as Membership Secretary; he was proposed by Tony Gilbey G4YTG and seconded by Carl Thomson G3PEM. Motion passed.

After the break and the raffle draw, Vic Rogers gave brief talk on current RSGB activities and future plans which he hoped the members would find interesting. Sadly, due to lack of time a proposed talk by Jim and Glynis on their activities could not be given, it is hoped they will be able to present it on another occasion.

The meeting was then closed.

### AGM Report by Colin G0TRM, CARS Secretary



**Vic Rogers G6BHE, local RSGB rep - and members getting some surplus bargains**

## Training - End of Era

A few days after the AGM on Thu Oct-5<sup>th</sup>, Foundation Course-36 finished and also marked Chris G0IPU stepping down as lead trainer after umpteen years in post (CARS Foundation-1 was Jan/Feb-2002)



A big thank you to Chris! - but he isn't disappearing...

**Science Discovery Day – Space and Beyond!****Fun for all the family on Sunday Oct-22<sup>nd</sup>**

Having been at Sandford Mill the previous day for JOTA – Jamboree on the air, most of the equipment I was using was already there, only the Marconi Hut needed setting up on the Sunday as the JOTA Kit was of Scouting nature. My family (also involved in Scouting) assisted on both days, Just a quick note on JOTA - we had 86 Cubs, 6 Scouts (could have been more) and 15 Beaver Scouts all do there communication badge. Back to the Sunday...

I first setup the Marconi Hut Radio Station on HF where Jim 2E0RMI and Bob G4MDB were joined later on by other society members. From that point on I only managed to get back on the odd occasion, to see if it was running okay, and to escape the 750 paper rockets I and my family were in production of, at the Barn, where it was very popular.

Pictured below is Rhona and Lorna, both have Intermediate licences. Some may remember Lorna and my mother-in-law making the tea back when CARS met at the Marconi College.....

The radio controlled moon-buggy cars and 2m VHF station were in action, I managed to make contact with a JOTA station very early on in the day.

The rockets were extremely popular, with hundreds of children making them, and also incorporating another base in the barn that was making parachutes; they fitted very nicely to the rockets. Pictured bottom right is Ed G8FAX, Dan my son 2E1GQA and in the background Andy G7TKK (my brother). My grandson was there, but having far too much fun to stay in the one place, as it should be.

Again, thank you to my family and Ed for supporting me in this, without their help it would not have happened in the Barn.

**Chris Chapman G0IPU**

## Science Day: Report-2

Traffic filled the roads as a record attendance of over 1300 people flooded through the gates (once they had found a parking space!). Both the main building and the barn were busy places

By all accounts this was the busiest day the organisers had ever experienced for an Open Day, by mid-morning well over 1000 people had entered the grounds and an extra car park was opened. There were opportunities for all, as well as the activities in the Barn, Club members were also kept very busy in the Writtle Hut explaining the ins and outs of Amateur Radio. A number of members and visiting amateurs tried their hand at HF Operating from the Hut using the now famous big antenna. Also in the Hut a small area was devoted to introducing Morse code to youngsters of all ages and to most of the visiting children it was their first experience of hearing the code, but all reacted with enthusiasm. The new display for Marconi TV camera and related broadcasting equipment proved quite a draw as well upstairs on the mezzanine floor



## An Antenna Tale...

In 2015 I downsized from the top of Danbury Hill to Springfield, Chelmsford due to a series of medical conditions with both Pauline and myself. Everywhere we went in Danbury was either up or down hill!

The house in the City is surrounded by house packed with every kind of HiFi, garage door opening equipment etc. – just the sort of environment a Radio Amateur does not want so I simply used my Baofeng UV-5R hand-held and the Danbury Repeater for the CARS Nets.

Time went on and we got a little more established and so I put a ¼ Wave 2Metre and a 70cm Aerial on the roof of the garage but poor reports were received – better on the small whip aerial on the hand-held than my fancy aerials on the roof, so they were abandoned.

Chris, G0IPU dropped off the CARS MFJ295 (UHF model) and this was the stimulus to see if I could find out what was wrong with my new aerial farm.

The 70cm vertical was terminated in a very nice 50 Ohm N-Type plug which needed no adapters to fit the Analyser – a good SWR was observed – great.

This aerial was purchased some 10 years ago as a 70cm aerial and used as such in Danbury. The MFJ has a special button to switch to UHF which MUST be only activated when the Analyser is powered up and steady – so I pressed it to put it back into the “safe” position and to my amazement the MFJ showed a very good SWR on 145MHz! For some 10 years I had a dual band aerial and never knew it.

I then swapped leads to the ¼ wave 2m aerial – nothing – checking around I found a good SWR on 90MHz – funny – went to bed to think about that. Next day extended the frequency search and found it gave a good SWR on 70cms! Again, no wonder I did not get a good report when used on GB3DA.

I then attacked a number of other aerials I had and tuned them to their respective frequencies of CB and 2 metres.

Then it came time to attach the Baofeng to these aerials with various adapter leads – nothing - back to square one. It transpired that I was using an ex professional 75 Ohm adapter on the 50 Ohm aerial N-Type combination and the centres did not connect – luckily this way round it did no damage. The other combination would have destroyed the centre pin. So finally I installed a 50 Ohm adapter – OK then!

On Sunday 16<sup>th</sup> October I had a nice QSO with CARS Member David, G4MUS from Hullbridge and signals were 5 & 9 – so now “on the air” from Springfield.

What a difference the MFJ made – thanks CARS.



John Bowen, G8DET

**October Skills Night**

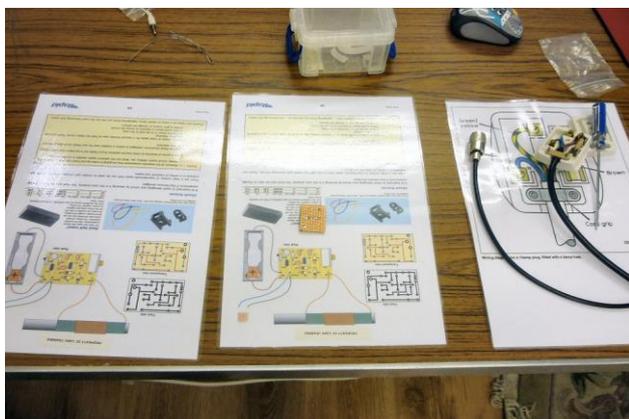
The second autumn Skills night on October saw the Quiz make a welcome return and quite a few radio demos and features inc SDR and intermediate training ones. Those attending certainly found it enjoyable, so why not pop along to the last one of the year on Monday November 20<sup>th</sup>, or offer a demo of your own!



**CARS Training demo and Essex CW were**



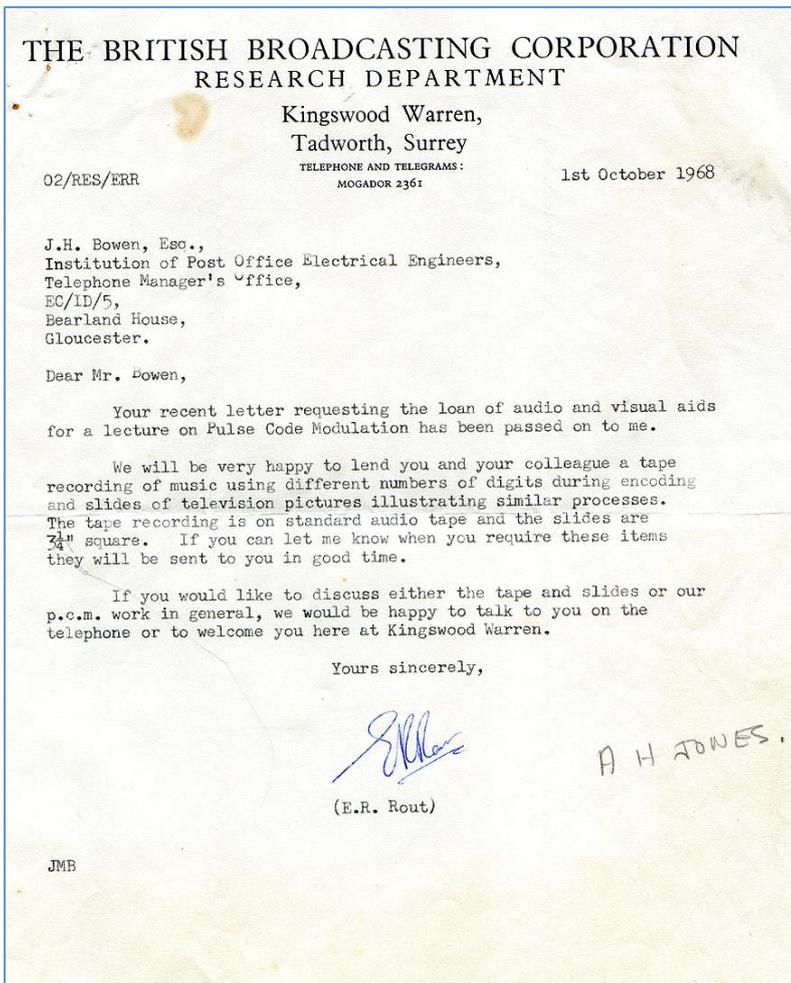
**Essexham demos and two SDR demos by Murray G6JYB**



**Radio kit - and relaxation!**

Our thanks to Peter M0PSX for coordinating and also surveying the format for 2018

## BBC Memories



Whilst getting a second hand folder out of my filing cabinet to put some new document in I came across this letter inserted inside.

Mr Rout was the BBC "inventor" of Sound in Sync used to get BBC Sound to the TX Station. He had written about Sound in Sync in IEE and POT magazines and presents talks at the IEE Savoy House. Prior to that the BBC rented a separate Post Office Land Line.

Indeed Robin Harvey, G4BBR (SK) and myself did take him up on his offer to go to Kingswood Warren and spent a day there with him.

I also put back their installation programme by 6 months as I pointed out that at present if they lose Vision they have a sound channel which says "Please do not adjust your sets – we have a problem which will be repaired shortly" or some words to that effect. Likewise if they lose Sound they flash up a card which states the same thing.

Mr Rout looked at a couple of BBC Engineers and said "Unfortunately Mr Bowen has identified a problem – thank you". The BBC had to design and install at all their transmitter sites a local piece of equipment which did that automatically if they lost the Video coming into the transmitter site.

Our lecture on PCM was very well attended and we both got Brownie Points for giving it. Memories?

John Bowen

## More Help Still Wanted !!...

- **Newsletter Editor**
- **Newsletter Items**
- **PR Officer**



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