



# Chelmsford Amateur Radio Society Newsletter

## June Meeting

Tue 4-Jun-2019, 7:30-10:00pm  
Oaklands Museum, Moulsham Street

## Beam Building

By Dave Cutts M0TAZ



Dave Cutts M0TAZ who gave us the Datamodes talk in February, returns to CARS for something different - DIY Antennas

Dave will give a presentation and demo on Beam Building. His larger HF beams may not fit in the room though!...



So you want to build a beam for a portable or field day site – away from all that unhelpful urban noise ?

Dave has had a bit of a go and we can look forward to a nicely illustrated and entertaining talk...

Do pop along for what should be an entertaining and hands-on talk  
The famous CARS Raffle and refreshments will feature too!

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**Club Diary**

Tue 4-Jun-2019	Beam Building – Dave Cutts M0TAZ	Chelmsford – Oaklands Museum, 7:30pm
Mon 17-Jun-2019	CARS Annual Table Top Sale	Danbury Village Hall - 7:30pm
Tue 2-Jul-2019	Three Short Talks	Chelmsford – Oaklands Museum, 7:30pm
Tue 6-Aug-2019	Constructors Competition – with cash prizes!	Chelmsford – Oaklands Museum, 7:30pm

**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**

Our training pages have sessions listed for Foundation, Intermediate and Advance.

The first half of 2019 has busy for Foundation and Intermediate training – see more info and dates online

**Remember that the syllabus changes in Autumn 2019, so contact asap if you want an exam before that!**

We also have exam slots in June/July for Advanced - inc those taking the Bath Distance Learning course

Our training manager Peter M0PSD is keen to hear from candidates for the courses, as well as any needing practicals or other help. We also have other Exam slots available

Course	Dates	Comment
Advance-23R	Thu Jul-11 <sup>th</sup>	Advance - with opportunities of mocks and others before

**Contact:** Peter Davies M0PSD, [training2019@g0mwt.org.uk](mailto:training2019@g0mwt.org.uk) Web: [www.g0mwt.org.uk/training](http://www.g0mwt.org.uk/training)



Follow @TrainWithCARS



Follow @ChelmsfordARS

## May Meeting: Broadcast TV Development

For the May meeting, we were pleased to host Andy Fremont who is involved with the TV collection at Sandford Mill and will take us on a brief tour of Broadcast TV development.

Andy started with the 'Nipkow disc' (patented in 1884 well before TV!), originally developed for scanning photos and later used by Logie Baird for his mechanically scanned system. By 1948 this had been overtaken by the Image Orthicon camera tube and the Marconi-EMI 405 line system.

Early cameras were pretty heavy and a Marconi one from that era features in the BBC Sport Personality of the Year Trophy



**Andy explaining how the orthicon became the key tube for many cameras**

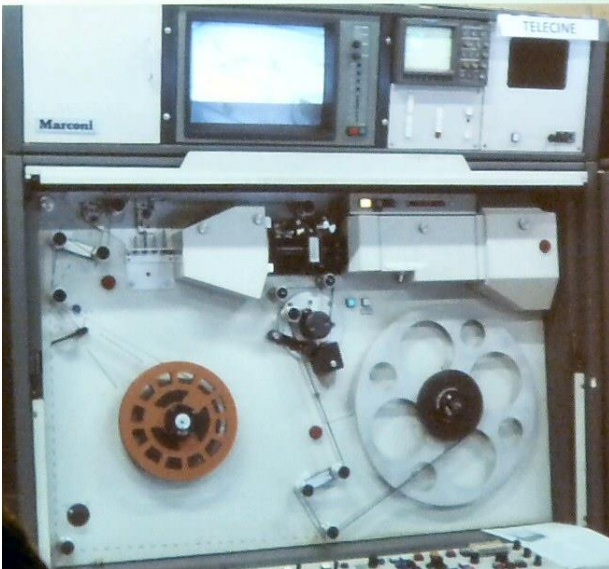
Camera tube development did progress with the Orthicon being key in the early days. The Orthicon saw us through to the start of the 60's when the Plumbicon appeared. The introduction of colour (and 625 lines) added to the complexity for setup, calibration and use of the PAL signal that had to fit it all in (to which NICAM Stereo and Teletext were later embedded as well).

Transistor technology was introduced in newer camera models. Another change was Variable Zoom lenses eventually replaced the rotating turret fixed lenses.



**Some of the Marconi camera models: From turret lenses and valves - to transistors and zoom lenses**

# B3410



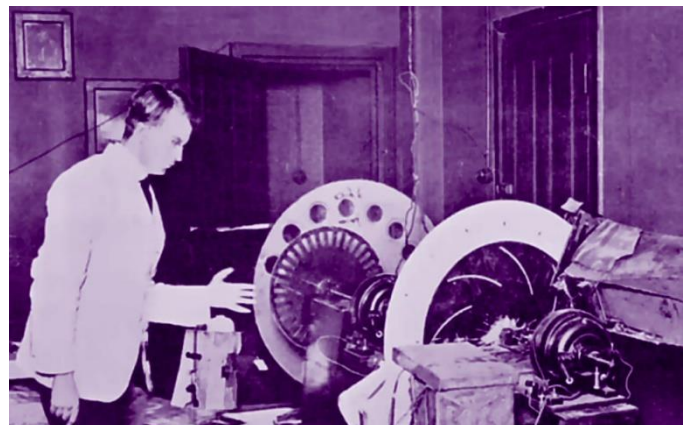
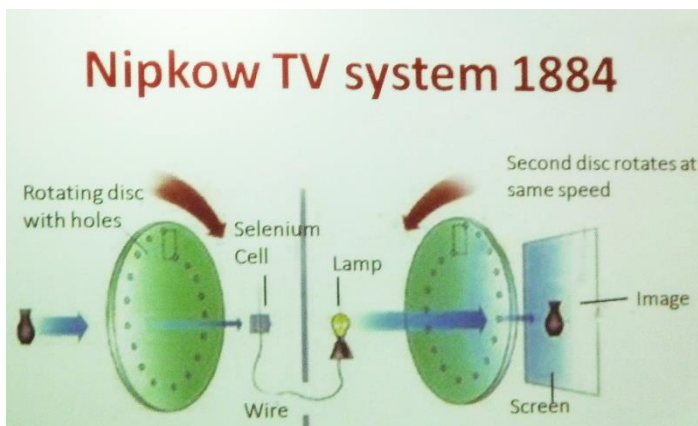
Marconi also did other broadcast equipment inc the B3410 telecine, which lasted until Digital started to appear. However competition from other manufacturers eventually took its toll and resulted in the closure of the Marconi Comms Broadcast Division.

Andy's background in Marconi Comms Broadcast Division provided for a highly informative talk on some of the key developments – our thanks!



Andy (Left) getting his speakers mug from CARS Chairman Elliott 2E0JSE

## Footnote – How it started:-



John Logie Baird tried to perfect the Nipkow mechanical system in the 1920s/30s  
 - But lost out to EMI/Marconi in 1937

**CARS Tabletop Sale – Monday 17<sup>th</sup> June 2019**

The annual CARS Table Top Sale returns to Danbury Village Hall on Monday June-17<sup>th</sup>.

- **Buyers:** Doors Open to buyers 7.30pm and Entrance is Free! - but PLEASE BUY A RAFFLE TICKET
- **Sellers:** Tables £3 each, setup from 6:45pm.

Further info: Colin Page G0TRM – see below



## **CHELMSFORD AMATEUR RADIO SOCIETY**

# **ELECTRONICS TABLETOP SALE**

**MONDAY JUNE 17th 2019**

**DANBURY VILLAGE HALL**

**Main Road, Danbury CM3 4NQ**

**Doors Open to buyers 7.30pm**

**Entrance is Free**  
**But, Please Buy a Raffle Ticket!**

**All Essex Radio Amateurs, SWLs & Other Electronic Enthusiasts are invited to attend as either sellers or buyers or just come and have a look.**

**All Amateur, Audio, Electronic, Electrical, Photographic, Computer & Associated Equipment may be offered for sale**

**TABLES £3**

**ENTRY TO MAIN HALL FOR SELLERS FROM 6.45PM**

REFRESHMENTS AVAILABLE  
Donations Appreciated.

**FOR FURTHER DETAILS OR TO BOOK A TABLE**

**CONTACT: Colin Page G0TRM 01245 223835**

e-mail [colinpage@ukgateway.net](mailto:colinpage@ukgateway.net). Club web site [www.g0mwt.org.uk](http://www.g0mwt.org.uk)

## May Skills Night

Summer is coming and so are lighter evenings. Monday evening, 7pm May 20<sup>th</sup> 2019, was Essex Skills Night, run by the CARS Training Team. It was the last one ahead of the June tabletop sale and the summer break. Radio and practical demos were supported by club members and Essex CW. The club table was welcoming arrivals and had a selection of bargains as part of a mini-tabletop sale.

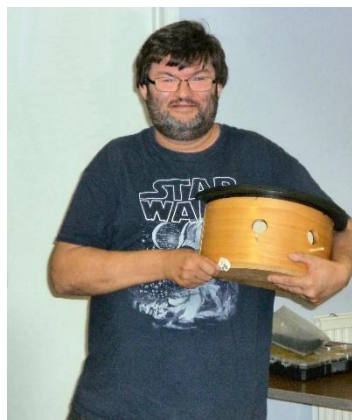
Foundation and Intermediate Practicals were underway in the Hawkins Room, whilst Morse Appreciation was available from Rob M0KCP of Essex CW Club. The evening rounded off by another fun quiz from Murray G6JYB. A big thank-you to the kitchen team for tea, coffee and some really nice cake!



Assembling patch leads – and some relaxed chit chat



Practicals: Foundation-HF with Richard G7OED and Intermediate



Essex CW (Rob M0KCP et al) - and Tom Mann 2E0EUM wins the raffle prize

More Info: <http://www.g0mwt.org.uk/skills>

**NB: No June Event: The Table Topsale is in June – Skills will resume in the Autumn**

**Training & Distance Learning!**

Whilst the main courses have concluded CARS continue to take people thru practicals and exams up to the summer break.

One of the more extraordinary cases was at the end of May when Chika Worka who is a Researcher at University of South Wales travelled miles to take his Foundation practicals and exam at CARS!

Chika travelled all the way from Pontypridd in South Wales and stayed overnight in a B+B in Danbury, doing practicals on Wednesday and the exam on Thursday evening May 30<sup>th</sup>

Congratulations on the exam pass and the effort!

**And more...**

Another pass on May 30<sup>th</sup> was Willem (pictured right). We also have Intermediate practicals going on, as well as one Advanced.

Looking ahead of the July-11<sup>th</sup> exam slot, we look forward to a quite a number of Advance candidates who we wish well with their revision



## Radio Caroline – GB55RC Visit

Please find below an email received from Keith G6NHU of The Martello Tower Group. You probably recall that I was lucky enough to visit the *Ross Revenge* last year with a few other CARS members, and there is now the opportunity again for people to take a trip out to see this iconic vessel on 3<sup>rd</sup> / 4<sup>th</sup> August.

I am happy to co-ordinate this with Keith so can I please ask for this email to be circulated to CARS members.

**If anyone is interested can they please contact me in the first instance - [jimsalmon57@gmail.com](mailto:jimsalmon57@gmail.com) - and I will then see what actual date & time is available. I do have people already interested so can I please ask for a response - if you are keen to visit - over the next 7-10 days please.**

Many thanks.

Jim Salmon 2E0RMI

----- Forwarded message -----

From: Keith Maton <[g6nhu@me.com](mailto:g6nhu@me.com)>

Date: Tue, May 28, 2019 at 2:12 PM

**Subject: Celebrating fifty five years of Radio Caroline - GB55RC - Visit the historic radio ship in August 2019.**

Dear Sir/Madam,

I am contacting you as you are the listed representative for your radio club on the RSGB website.

You may be aware that the Martello Tower Group, based in north-east Essex have successfully operated a special event station from MV *Ross Revenge*, home of Radio Caroline in August for the past three years using the callsign GB55RC (to celebrate five decades of offshore broadcasting).

**I'm very pleased to announce that as 2019 is the fifty-fifth anniversary of Radio Caroline, we have been granted the 'special' special event callsign of GB55RC.**

We will be on-board *Ross Revenge* from the 1st to the 5th August 2019 and will be inviting visitors on Saturday and Sunday.

*Ross Revenge* is located in the Blackwater Estuary, off the coast of Essex. It's about a fifteen minute drive to the parking at Mersea Island from Colchester.

Our fully insured tender will depart from Mersea Island at 10:00 and 13:00 on the 3rd and 4th August for the approximately twenty minute journey to *Ross Revenge*. You will be greeted by members of the Martello Tower Group, offered a drink and then given a tour of the ship, including transmitter and generator rooms, studios and the record library. You will also see GB55RC being operated from the main Mess Room of the ship.

You will spend around two hours on board before being returned to West Mersea.

I have updated our website <http://www.martellotowergroup.com/gb5rc.html> with these details along with <https://www.qrz.com/db/gb55rc> and <https://www.qrz.com/db/gb5rc> so you can see this is genuine.

You can read reports of our activations in [2016](#) and [2017](#).

If you or any of your club members are interested in visiting GB55RC in August this year, please contact me as soon as possible either by replying to this email or you can telephone me on 07595 659457. If I am unable to take your call, I will divert you to voicemail so please leave a message.

**The cost of this trip is just £25 (payable in advance), places are limited and we expect to sell out quickly.**

I look forward to hearing from you and I hope to see you on board MV *Ross Revenge*, home of Radio Caroline in August.

73 Keith G6NHU, Secretary, Martello Tower Group, <http://martellotowergroup.com>

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