



# Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB Club Call Sign: G0MWT  
President: Carl Thomson, G3PEM Chairman: John Bowen G8DET  
Treasurer: Brian Thwaites G3CVI Vice Chairman Martyn Medcalf G1EFL



**Newsletter No 541**                      **Web Address: [www.g0mwt.org.uk](http://www.g0mwt.org.uk)**                      **April 2011**

## **This Month's Meeting – Tuesday, 5<sup>th</sup> April, 7.30pm at the Marconi Club "Home Constructed Transmitter for Radio Caroline"**

By Oliver Swain, M0OFR

CARS is pleased to welcome Oliver who obtained his Amateur Radio Licence, M0OFR with us at Danbury. However tonight Oliver is going to explain some of the trials, tribulations and developments involved in building the homebrew Transmitter for Radio Caroline.

The presentation will include a brief History of Radio Caroline in the late 70s, modern day Caroline, and of course all the developments involved in building an AM transmitter (1950s style) with separate plate modulator. The Transmitter is primarily designed for Radio Caroline when we are live from the ship on 531kHz - including this coming Easter (for 11 days).

Oliver will be bringing the Transmitter along and hopefully running it up on a Dummy Load. He will play some tunes through it - show the tune up process, see the output on an Oscilloscope - listen on a radio etc. It uses KT88s in the output - remember them? An interesting evening is forecast.

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

### **Michael Wheaton, G4ZPE (Zipy) – Silent Key**

**Suddenly on Sunday, 13<sup>th</sup> March at home in Rettendon, Essex, Mike, Zipy to many, passed away. He will be greatly missed by many Radio Amateurs throughout Essex and the UK due to his connections with W&S. Details as known – please watch CARS Web Site.**

**CARS extend sympathy to Margaret and Family.**

### **Dates for your Diary**

Tues, 12, 19 & 26 April	CARS CW Net starts at 8pm on Tues 12 <sup>th</sup> ; SSB Nets starts at 8.30pm (Local)
Wed, 13 <sup>th</sup> April	CARS Committee Meeting – Danbury Village Hall – 7.30pm. All welcome.
Sat, 30 <sup>th</sup> April	CARS Operating from the Marconi Hut, Sandford Mill – International Marconi Day
Tues, 3 <sup>rd</sup> May	CARS Meeting. A Beginners Guide to Astronomy by John Greenwood.
Sat/Sun 14/15 May	CARS operating GB5SM from Stock Windmill as part of Mills on the Air event.
Sunday 29 <sup>th</sup> May	W&S Open Day, Hockley
Thursday 9 <sup>th</sup> June	CARS Operating from the Marconi Hut, Sandford Mill – G5RV Anniversary Day

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 April is Colin, G0TRM**                      **Thanks to Ron, M3CAM who did it in March.**

## **Last Month's Meeting:-**

**“quod erat demonstrandum - Q.E.D”**. which is to be demonstrated.

**Or in English “Quite Easily Done, providing you know how!” By CARS Members.**

Unfortunately our scheduled Lecturer was still not well enough to travel to Chelmsford so the CARS Committee decided to continue with the January Meeting which ran out of time and to add a little to encourage our new Members to communicate using Amateur Radio.

Ken Dews G3PMW booked everyone in as Brian G3CVI was otherwise occupied. David and Myra Davis greeted Members and visitors to make them feel welcome.

A number of tables were set up around the room while the central area was for having a social natter. CARS own a SDR-IQ Receiver and this was demonstrated using the Digital Projector and screen. This showed the Waterfall Display of the RF taking place in the room. Unfortunately the antenna on it was a bit too short and the noise level from the building was rather too large but the SDR created plenty of interest. Thanks to Mark, M0IEO for operating it during the evening.



**Left:** Mark, M0IEO discussing the SDR Receiver with Andy, G1GKN with rf waterfall on the projector.

**Right:** Brian, G3CVI (seated) is discussing the Artificial Earth box with Graham Leggett G7JYD, Oliver Prin 2E0WAA, Brian Debenham 2E1RMD. If the large copper wire connected from a rig to the outside RF Earth is a critical length it may result in the rig not seeing the Earth at all. Brian, G3CVI, demonstrated an Artificial Earth. A Member caused a surprise by striking a neon on the Earth Wire!

Thanks to Mark, M0IEO for putting up the aerial for Brian, G3CVI.

President, Carl, G3PEM set up a table and had a go at doing a little soldering. Chairman John, G8DET had a table with a computer and printer connected to the Internet to enable Members to Re-Licence their License. Two were registered but only one was validated due to entering the wrong data! The other was validated with Ofcom help the next day.

On another table David Penny, G3PEN from Braintree had a whole collection of interesting items including a "Peak" Transistor Tester and a LCR Bridge. David tested a number of components including transistors and coils. Colin Page, G0TRM also had an Inductance Bridge to demonstrate and made comparison measurements with David's Peak LCR Bridge. Colin also displayed some Morse Code items, including hand keys, and readers and a mechanical device sending Morse from a punched paper tape. He also had a laptop running showing the internal workings of an Enigma machine.

Peter Bridgeman, G3SUY demonstrated the Hamsoft MMANA-GAL antenna modelling software. Most common antenna types and variants can be modelled using the program and the effect of the ground on the radiation patterns seen. The user defines the wire or elements of the antenna in terms of co-ordinates and then selects the point where the feed point should be. It is useful to see the performance of wires bent around small gardens that can be modelled and performance optimised.

A number of very local QSOs were made but the Radio Noise level was very high, S9 plus 20 min.

A very good evening was had by all – the social natter time was appreciated by many. Luke Halsey from SEARS at Canvey Island drew the Raffle and pulled his ticket first!

## Dengie Quiz

Vice-President Geoff G3EDM organised the CARS table in Maylandsea Village Hall on Monday, 28<sup>th</sup> February. He was accompanied by his YL and then joined by Tony, G4YTG; his YL and two visitors. Peter Franklin, G1FOA and his YL completed the table. Unfortunately ERG did not present a table due to Murray, G6JYB being away on official business. The new Quiz Master provided a visual display which kept everyone informed with the score etc. CARS played their Joker at a crucial point and just beat Braintree. Congratulations to all involved. First time in many years CARS have won this coveted trophy.

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## International Marconi Day at Sandford Mill, Science & Industry Museum

CARS is pleased to see in February RadCom that IMD is now publicized as Saturday, 30th April. CARS will be at Sandford Mill, which is open to the Public from 10am to 5pm. Entrance and parking is FREE. Tea/coffee and light refreshments will be available courtesy of *Friends of the Museum*.

The idea is to have SSB in the Marconi Hut and CW from Dr Geoff Bowles's office upstairs. Peter Bridgeman, G3SUY will be providing his Marconi 1154 Transmitter and 1155 Receiver in Mark's caravan parked near the Barn. This will be on 3.61 to 3.65 MHz +/- QRM transmitting using AM. It is proposed to reply firstly to AM stations but they will switch on the BFO and receive SSB if there is no AM activity.

Ofcom have agreed to CARS using GB100MWT (Marconi Wireless Telegraph).

Additionally Colin, G0TRM and helpers will be manning the famous 100-year-old Mechanical Morse stand that is liked by operators aged 4 to 90 years. There will also be a display of Morse Keys.

*Friends of the Museum* will be staffing the Ships Radio Room and a number of static displays.

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## April Radio Sport (Contests) All in UTC

**03 April** – First 70MHz contest – 09:00 to 12:00

**04 April** – RSGB Club – CW – 20:00 to 21:30 Local

**10 April** – First 50MHz Contest – 09:00 to 12:00 UTC

**21 April** – RSGB Club – DATA – 20:00 to 21:30 Local

**03 April** – RSGB- RoPoCo – CW – 07:00 to 08:30

**09/10 April** – Japan International DX – CW – 30 Hours

**13 April** – RSGB Club – SSB – 20:00 to 21:30 Local

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

**Steve, G4ZUL**

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## CARS Propagation Forecast for April

Prediction engines rely upon smoothed Sunspot Numbers and not day-to-day variations. That is why predictions carry the caveat that they are only correct for 50% of days! Gwyn tries to make his better!

**Asia: Dhahran** - around 16:00 on 24.9MHz for 88 percent of days, with poor signals.

**Oceania: Sydney** - around 20:00 on 7.MHz for 65 percent of days, with poor signals.

**Africa: Johannesburg** - around 20:00 on 10.1MHz for 94 percent of days, with fair signals.

**South America: Rio de Janeiro** - around 22:00 on 10.1MHz for 80 percent of days, with poor signals.

**North. America: Saskatoon** - around 06:00 on 10.1MHz for 80 percent of days, with poor signals.

**Gwyn, G4FKH**

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## Sunspot News

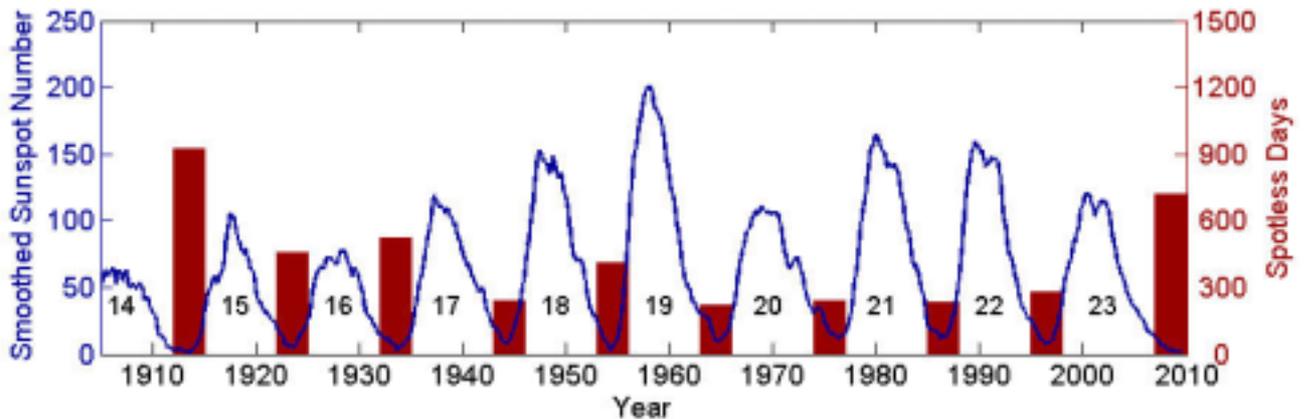
Solar Flares have been detected by Peter and Richard with their Magnetometer.

[www.petermeadows.com/mag](http://www.petermeadows.com/mag). See also: - <http://www.spaceweather.com/glossary/kp.html>

There are two measurements readily available from Magnetometer data--the daily A index and the three-hour K index. The A index is an average of the eight 3-hour K indices, and uses a linear scale and goes from 0 (quiet) to 400 (severe storm). The K index uses a quasi-logarithmic scale (which essentially is a compressed version of the A index) and goes from 0 to 9 (with 0 being quiet and 9 being severe storm). Generally an A index at or below 15 or a K index at or below 3 is best for propagation. From ARRL via Geoff, G3EDM.

Have these Solar Flares been responsible for the many recent Earthquakes around the World?

Patrick, M0XAP also watched it with: [-www.solarcycle24.com](http://www.solarcycle24.com) and enjoyed the improved propagation. Regular sun spot updates are available on the desktop page of the UKSMG web site at <http://www.uksmg.org> Also [www.spaceweather.com](http://www.spaceweather.com)



Interesting graph gleaned off the Internet showing how poorly 2010 served Radio Amateurs. 1956 ish was the period that BBC TV Test Cricket sound was interfered with by taxi transmissions from Sydney and New York (45 MHz).

## Yaesu - Japan

CQ Newsroom reports that production of Yaesu Amateur Radio equipment at Vertex Standard's factory in Fukushima, Japan, has been temporarily halted due to earthquake damage

In an open letter to the amateur radio community, Vertex Standard CEO and President Jun Hasegawa expressed his gratitude for the many "kind words and thoughts about us during this difficult time." He reports that all Vertex Standard employees and their families are OK, although the company has not been able to reach its many dealers and subcontractors located near the coast. "We just hope that they are alive," he writes.

Read the CQ Newsroom story at

<http://cqnewsroom.blogspot.com/2011/03/yaesu-temporarily-suspends-production.html>

It is understood the factory is just 60km from the quake-stricken Nuclear Reactors.

## Trevor M5AKA

*Editors Note*

*Looking at the News on TV it seems the Japanese Reactors were built for maximum efficiency not robustness. Whilst the inner cores seemed quite robust in the immediate face of a Force-9 quake the waste storage ponds and auxiliary but important cooling kit was nothing like as rigorous*

## Michael Wheaton, G4ZPE – Benefactor

The following photograph is of a presentation that took place on Thursday 10th February 2011 at the Foundation License Course run by Chelmsford Amateur Radio Society at Danbury Village Hall, Danbury in Essex.

The lucky recipient was Luke Halsey from Canvey Island who is a member of South Essex Amateur Radio Society. Luke attended the Canvey Rally which is run by SEARS on 6th February where he bought an old PMR radio from a stall with pocket money that he had saved. The radio looked as if it has seen some service but Luke had not realised that it was on the PMR section of the frequency spectrum. Undeterred, Luke went looking for an extension speaker and Microphone combination for his new acquisition, he tried numerous traders and dealers at the rally but was unable to find one.

It was at this point that Luke was talking to Clive Ward, G1EUC, who is the Training Manager for CARS. Clive suggested that Luke have a word with Mike Wheaton, G4ZPE, (Zipy to his friends) who may be able to cobble something together for him.

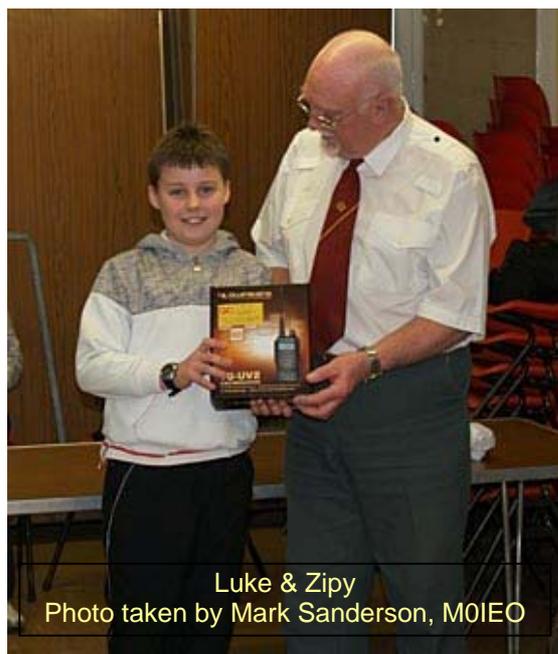
Somewhat despondent that he may have bought something that was not going to be any use to him, but at the same time excited that Mike was willing to have a look at it for him, Luke handed the PMR radio over to Mike, hoping that Mike would be able to help and he would have a radio that he could use. When Mike got the radio home and put it in his bench to test it and see if he could come up with something that would help Luke, Mike discovered that it was going to be more of a job to find a speaker/ mic which would work then he had first thought. Not one to be defeated, Mike came up with a plan to get Luke on the air once he passed his Foundation exam.

So on the evening of Thursday 10th February, the CARS Foundation License Course welcomed a visitor to the evening in the form of Mike Wheaton, G4ZPE. Everyone there thought that as the lecture for the evening was on using repeaters, and that as Mike is the Chairman of the Essex Repeater Group, he must be there to give a talk on using the Repeaters in and around Essex. In fact Mike was there to make one young lad's evening very special, and to give Luke a reason to put that little extra into his revision, as the photograph above shows.

Mike presented Luke with a brand new Quansheng TG-UV2 2m and 70cms Handheld Transceiver, and to make the set-up complete, Mike also made sure that it came with an extension speaker/mic!

Now that must be the best incentive to study hard and pass the Foundation exam next week! I would like to take this opportunity to pass on the thanks of the CARS training team and Luke Halsey to Mike Wheaton for donating the radio and for coming to Danbury to present it to Luke.

**Mark Sanderson, M0IEO, RSGB Deputy Regional Manager, Region 123, Essex.**



Luke & Zipy  
Photo taken by Mark Sanderson, M0IEO

### **Michael Wheaton, G4ZPE (Zipy) – Silent Key**

On Sunday morning 13 March 2011 Mike Wheaton G4ZPE (or Zipy/Zpee to the many that knew him) became a silent key. He died peacefully in his sleep aged nearly seventy years old.

He was known all over the world and was involved in many activities within the radio world and outside it. Locally he was a Mr Fix it who could mend almost any radio related equipment from handholds to large amplifiers. He was also extremely able with microscopic surface mount circuitry and could also fix almost any clock or watch, in some instances where they had been given up as beyond repair.

He was involved with many clubs and societies, one of which was the Essex Repeater Group for whom he built aerials and cabinets from his own design and maintained the on-site equipment. He Chaired the Committee for nearly twenty-three years and was made an Honorary Lifetime Member in 1996 for his enormous contribution.

Latterly in his career he worked at Waters and Stanton in the repair department and also ran their extremely popular bargain table at the company's open days. Whilst there, he was instrumental in setting up the radio installations for the original GB4FUN vehicle.

His other interests included Motorcycle Marshalling and other organisations where he reached senior rank. He also annually set up a radio station at his local flower show, which he helped to organise and run.

He was a larger than life popular, charismatic, helpful character who always helped others without ever expecting anything back. An example just a couple of weeks ago was when he gave one of his own handholds to youngster who was just entering the hobby and didn't have a radio of their own. His diversity was such that the last job on his bench was fixing my classic old 8mm film projector.

Even when he was suffering pain from a medical condition, it was typical of him to soldier on without complaint. It is not just a cliché to say he will without doubt be very sorely missed.

### **Clive G1EUC**

*Clive, thank you – I am sure all CARS Members and those who knew Zipy would agree with your comments.*  
**John G8DET. Chairman of CARS.**

## President Jottings

This month I have been involved in checking our activity hour FUN contest. The winner is Brian G3CVI who took advantage of the maximum multiplier for running just 10 watts. He will receive the Winner's Prize of an M&S voucher for £10.

Reviewing the results the following observation can be made all stations made between 10 and 20 contacts during the operating period and justified the rule of having to obtain the operators name, which forced participants to have a near normal QSO. It was not meant to be a report/serial number contact. Some European stations were worked and regardless of power those of us that have some wire in the sky worked into Europe with the lower powers.

I think that one club night we should have a lecture on TIME as all logs did not show the same time for inter club members QSO's. Sometime ago I bought a cheap (about £ 8) clock from Lidl. It receives the low frequency time signal from Dortmund and is tied to the atomic standard less the propagation delay from the transmission path. At least we could then all show the same time!

I was disappointed not to receive logs from all that took part to my knowledge there should have been twelve logs, there were no CW stations submitting a log. Also there were no Short Wave listener logs, has that facet of our hobby gone out the window?

The question I must ask myself is "Do you want me to organise another Contest next Winter"? Only members of the Committee supported the event - where were all our other Members?

Results: Congratulations to all those that took part.

G3CVI	10 Watts	13 Contacts	Multx5	65 Points	Furthest - Nottingham
G3PEM	50 Watts	20 Contacts	Multx3	60 Points	Furthest - Switzerland
G8DET	48 Watts	14 Contacts	Multx3	42 Points	Furthest - Belgium
G0TRM	90 Watts	19 Contacts	Multx1	29 Points	Furthest - Germany
M0XAP	200 Watts	18 Contacts	Multx1	18 Points	Furthest - The Lizard

## Carl, G3PEM. President

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## Colchester Rally Cancelled

After several years where the attendance in the main hall in particular had declined to perilous levels, and ongoing difficulties in organising the event, the Colchester club has decided to withdraw altogether and concentrate on other activities. Thus the long running Colchester Event (which was due this year on Jul-31) has now been cancelled. Further details are in a recent Colchester Club Newsletter and their website now carries a prominent cancelled notice

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## Training – Intermediate & Foundation Courses

The tenth CARS Intermediate Course at Danbury started on Thursday 17th March and will run until June 2<sup>nd</sup>.

The next course after that will be a Foundation course on Sept-1<sup>st</sup> to Oct-6<sup>th</sup> for which Clive G1EUC would appreciate names and details of those interested.

More information and photos of successful candidates are at: <http://www.g0mwt.org.uk/training/>

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## And Finally:-

John G8DET edited this edition. Material by; - Trevor, M5AKA; Steve, G4ZUL; Gwyn, G4FKH; Carl G3PEM; Patrick M0XAP; Geoff G3EDM; Murray G6JYB; Peter M0ZBU; Richard M0SBU; Clive G1EUC and Mark, M0IEO.