



Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB
President: Harry Heap G5HF
Secretary: Martyn M3VAM

Club Call Sign: G0MWT
Chairman: Chris Chapman G0IPU
Treasurer: Brian Thwaites G3CVI

Newsletter No 477

Web Address: www.g0mwt.org.uk

November 2005

This Month's Meeting Rig Testing Evening Tuesday November 1st. November 7-30pm at the MASC

Not getting the DX so well? Think you are losing performance? Problems with your rig?

Then now is your chance to consult the experts! Nigel Hull G6ZVV and friends are spending an evening with us and will give your rig the once over. Nigel is a professional radio engineer and is also the power behind the scenes at Essex Raynet. All you have to do is turn up with your kit but do bring your power supply and microphone and speaker, if separate.

If you don't have any rig problems this is an opportunity to socialise and discuss the many aspects of amateur radio with other Members. We hope to also demonstrate the new Noise Reducing Speaker & ECHOLINK.

We will be holding our usual raffle, run this month by Ron M3CAM and Ann. Please support them.

Dates for Your Diary

Nov 1	CARS Meeting. Rig Testing by Nigel G6ZVV. 7-30pm. MASC
Nov 9	CARS Committee Mtg. DVH 7-30pm. All Members welcome.
Dec 6	CARS Mtg. Christmas Party. Admission by Ticket Only. 7-30pm. MASC

The Club Net Controller for November is David M0BQC

CARS Member receives RSGB Shield

'Big' Jim Beatwell M3GUA was presented with the Intermediate Shield for the RSGB VHF/UHF Contest at RSGB HFC2005 held at Gatwick on Saturday 8th. October. He also won the new CARS Contest Trophy presented to him at the CARS AGM. Our congratulations and well done Jim.

Remember

The December Meeting is the CARS Christmas Party and admission is by ticket only.
Application Form enclosed.

Your Subs. are now due. Please help Brian CVI by paying promptly. Queries 01245-471919.

The position of Newsletter Editor is still vacant.

The Chelmsford Award

The 'Chelmsford Award' commemorates the Centenary of Marconi's 1st Trans-Atlantic Radio Transmission on the 12th of December, 1901 and was devised by Martyn G1EFL/M3VAM with the intention of raising money for the Essex Air Ambulance. To obtain this Award, use any one letter from the suffix of a callsign of a station worked or heard to spell: **CHELMSFORD THE BIRTHPLACE OF RADIO**. Only one letter per Callsign shall be used, a total of 30 callsigns will be required. One Callsign used shall be from a station located in the Chelmsford, UK, Postal District. The Chelmsford Postcode is CMXX. For example:-

The "E" from G1EFL could be used to represent the "E" in THE.

Any bands or modes or a mix will be eligible, no repeater contacts. All QSO's shall be on or after 12th December 2001. No QSLs are required, a log extract certified by another amateur will be accepted. The Award costs 10 IRC or \$10 or £6 Sterling only. Cheques can be made payable to "The Chelmsford Amateur Radio Society".

For every Award issued a donation will be made to "Essex Air Ambulance".

For full details talk to Martyn on 01245-469008.

CARS meets at 7-30 pm on the first Tuesday of the month at the MASC, Beehive Lane, Chelmsford.

For details contact our Secretary: Martyn M3VAM on 01245-469008

Club Nets: Tuesdays 8-30pm: (2nd) 145.375 : (3rd) 1.947 : (4th) 1.947 : (5th) 145.375. All +/- QRM.

Newsletter Editor; Position vacant

Newsletter Postal Distributor; Denis Lewis M0FHA 01245-440788

Newsletter Email Distributor, John G8DET 01245-224677

Please keep our Membership Secretary, Brian G3CVI, informed of any changes to your details etc.

Last Month's Meeting

The AGM by Geoff G7KLV

A recent survey of attendance at Club meetings has shown that two of the least popular events are the Constructors Competition and the AGM. The October meeting was no exception. A pity really because it is a good time to look back over the year and remind ourselves of some of the 'highs' in the Club calendar and to look forward to the coming year with an interesting programme of talks arranged by our Meetings Secretary, Martyn G1EFL/M3VAM

Talking of 'highs' is a convenient point to record that the Amateur of the Year Award was presented to Murray G6JYB for his tireless efforts in persuading us all to examine, criticise and offer alternatives to the flood of restructuring proposals in recent Ofcom discussion documents. And, as if that were not enough he has been very actively involved in the intensive training program and, to top it all, gave us a very interesting talk on aerals. Certainly ample justification for the Amateur of the Year Award, voted by Members and presented by our President Harry G5HF

Following that Harry presented the winners of the Constructors Competition with their certificates, the work of our Graphics Designer Colin G0TRM. In reverse order, they were third to Carl G3PEM for his capacitance bridge, second to Denis M0FHA for his ASTU's and first prize to Anthony M1FDE for his superb TNC. In addition Ela G6HKM also presented him with the Roy Martyr Trophy for Excellence in Amateur Radio. The Special Award for First Time Constructors went to a rather modest Brian 2E1RMD for his immaculate in-line wattmeter. The recently introduced CARS Contest Trophy was presented to 'Big' Jim 2E1GUA.

Our Chairman Chris G0IPU thanked all the Members of the 2004/2005 Committee with a special mention for Murray JYB for his Ofcom and training work, including his world famous slides; for Geoff G7KLV, retiring Newsletter Editor; for John G8DET and his excellent CARS website and the Training Administrator Clive M0SIX, pointing out that the Danbury Village Hall is booked until 2007 with training courses.

On a sad note he reminded us of the sad passing of two Club Members George Cutting G3GNQ, Donald Imber G0VIS and, although not a Member, Bob Boddy G6AKL, a very good friend of CARS. Chris ended on a further sad note in announcing his retirement as Chairman due to his increasing work, and Scouting commitments.

'Two Hats' Brian G3CVI, in Membership Secretary mode, first told us that we have 130 Members although this number tends to be inflated because of the requirement that training course attendees join the Club and may not necessarily continue membership. He then stressed the importance of signing in at meetings and keeping him informed of Members details. He said that average attendance at meetings was 40 with up to ten visitors. He told us that his job is like that of an airline pilot! It's 99% boredom and 1% panic! So says our coolest Committee Member!

With a quick change into Treasurer mode, Brian then explained that the raffles were a steady source of income together with the Canvey Rally and donations. He thanked all those involved. Our biggest expense is the MASC rental, which is likely to increase. He stressed that it would be financially advantageous if more Members took their Newsletter by email. However, taking everything into account he recommended that the Subs. remain steady at £10. When put to the vote Brian's report was adopted! Surprise! Surprise!

After thanking some Members for their services to the Club in the past year, Harry said that the declining attendance at meetings was a problem. In days gone by there were fewer frequency bands and everyone made much more equipment and it was very much easier to find crowd drawing topics for meetings. He said that nowadays there are many specialist areas of the hobby and it was increasingly difficult to please everyone all of the time. He pleaded for ideas from Members.

Having completed their term the Committee then retired and our President, Harry, said he felt like a pilot flying a 'plane when all the engines had failed! To continue with a nautical metaphor, the Club was like a rudderless ship in open sea but being the resourceful sailor that he certainly is, Harry quickly took command calling for a proposer and seconder for the position of Chairman and John G8DET was duly elected!

It was with a distinct sense of *déjà vu* that John took up the reigns again! He paid tribute and thanked Chris G0IPU for all his work over the past year as a very successful and effective Chairman, hopefully suggesting that he would be welcome to return next year! A tribute indeed! He then reported that due to the retirement from the Committee of Geoff G7KLV the position of Newsletter Editor was vacant and thanked Geoff for past services. He suggested that the duties could be split with one person editing and another responsible for postal distribution. He appealed for a replacement but here were no volunteers!

He then thanked Members for their services to the Club. Anthony M1FDE for moving our website to a properly hosted server; Martyn M3VAM for successful promotion of CARS clothing and arranging meetings; Colin TRM for the excellent audio at meetings and finally Jim 2E0JPS for his meticulous recording of Committee minutes. Although Steve G4ZUL, our Contest Manager, and Ron M3CAM had other commitments which precluded attendance at every meeting, they had agreed to stay on the Committee. John pleaded for fresh ideas for our meetings. He said that 2005 had been a good Club year and how do we follow that?

He concluded with the good news that Patrick M0XAP had agreed to join the Committee and on that bright note the formal business of the evening was complete!

Report compiled with the aid of Jim 2E0JPS's Minutes.

Echolink by Anthony M1FDE

Although he was unable to provide a live demonstration Anthony said that Echolink was used very successfully at the recent EuroJam Scout event at Hylands Park. He had been asked if such a link existed locally and as there was not he quickly built one enabling Scouts from the US to keep in touch with their families back home. In its simplest form Echolink consists essentially of two nodes. Each node can communicate with each other and to other nodes via the internet. Access to and from the nodes is via VHF/UHF using, for example, 2m hand-helds. Anthony knocked one up using a Pentium 450 computer running Windows 2000 and using a LAN to an ADSL router, and a Marconi made transceiver.

There are four types of node. 1) Link node radio to PC. 2) Repeater node connects to a repeater, 3) User PC without a radio. 4) Conference server, which can support an unlimited number of users.

At any one time there can be 1,200 link nodes, 1,000 repeater nodes, 500 users and 160 conference servers on Echolink. The following radio performance requirements are necessary: VHF/UHF, 2.5 kHz Deviation, CTCSS, DTMF keypad.

Alternatively to connect as a 'user', a PC is required with headset or microphone and speakers. Internet connection, at least 133 MHz and Echolink software which is free. The Callsign must be registered with Echolink. Once connected to a node, an access code needs to be entered using a DTMF pad. This will enable you to connect to other stations etc.

A new Echolink node is planned for Danbury in the near future, possibly towards the end of October. This will be set up as follows: Frequency: 145.2375 MHz, CTCSS: 110.9 Hz Call-sign: MOSIX-L

The following frequencies are typically used for Echolink 144.8125, 144.825, 144.8375, 145.2125, 145.2375, 145.2875, 145.3375 MHz.

Our thanks to Anthony for a concise description of this new mode.

This report is based on Jim 2E0JPS's Meeting Minutes.

Storage Batteries in the Shack - Some Safety Aspects by Dave G3PEN

I'm building a storage battery system for the shack, with charger(s), power distribution system and two very large (100AH) lead-acid "leisure" batteries, plus metering etc. The aim is to use it in the shack for all the 12V gear, plus small mains equipment via a DC-to-AC inverter, in case of mains power failures. The "powers that be" are forecasting doom and gloom about failures this winter! It will also be useful for field day if I can find some very robust wheels. Several procurement problems became apparent early on, and this note is to advise Members as to solutions, in case anyone else is making a similar power system. The first need was for adequate "primary" fuse provision in the battery leads, to guard against catastrophic failure leisure batteries cannot cope with severe overloads or near-shorts, even if brief, unlike car batteries. Incidentally NEVER use a leisure battery to start a car engine, for instance. High rupture capacity had to be an essential feature of both the fuses and their holders. I also wanted adequate switch isolation capability, with ratings capable of being operated while carrying large currents.

The fuse ratings decided on were around 60A to 80A, to give a balance between the maximum demand envisaged (around 40A, to match the shack AC PSU), and protection without unwanted "popping-off". To cut a long story, after much searching, I found that suitable fuses, holders and switches can all be obtained in your friendly boat chandlers' stores. The safety requirements for canal boats etc nowadays require that these items are of good quality and capable of handling catastrophes, so I have every confidence in their long life and ability to do their job properly.

However, a word of caution. For fuse ratings above 30A, I could find individual "in-line" fuse carriers (which can be screwed onto a bulkhead for safety), but no multiple units. Also, each fuse carrier plus fuse was specific to the intended fuse rating, at 60A, 80A and 100A (they do get much bigger as well). I assume this was so that the wrong sizes could not be used by accident. You therefore have to be certain at the start about the current rating you need. Costs are not too bad. With fuse carriers in the range of about £4 to £7 each, and fuses about £1 to £2 each. Simple one-pole isolating switches are also available, and a big bonus is that these are "keyed", so that the key can be withdrawn after isolation, for added system security. I would like to have some changeover facilities as well, but I haven't seen anything suitable so far.

The second design requirement that has caused trouble is for multiple distribution at lower current levels (5A to 30A max.), to protect the charger supplies and supply various types of outlet and connections. Cigar lighters for instance need a maximum of 10A fusing. I wanted flat blade fuses, as in cars, for cheapness and ready availability, but the problem was lack of suitable fuse-holders. Local bike/car "bits" shops, garages, Halfords - Zilch!

Eventually, I found just what I wanted in B&W Motaquip (branches in Braintree, Witham and Maldon), with a good range of multiple blade fuse holders, with standard large electrical "blade" inputs and outputs (the sort used on mains equipment nowadays). These holders have plastic covers, and can be screwed down to a bulkhead etc. for security. I chose 4-way fuse holders (at £3-71 each), so that each block could carry the same value fuse, marked to avoid errors. The only further requirement is to provide some form of large terminal block to distribute a single feed from the battery supply to each fuse input no problem! Who knows if I don't meet too many new problems, this might be ready for the next Construction Contest, if not this winter! Can I just provide photos, like Carl did for his shack?

Of course you can! Good to know there will be at least one entry!

Subscriptions Are Now Due

The Subscription for the following year is £10.

Please send a cheque payable to 'Chelmsford Amateur Radio Society' to:

Brian Thwaites, (01245-471919)

118 Baddow Hall Crescent,

Gt. Baddow,

CHELMSFORD CM2 7BU

Or you can see him at the November Meeting.

Please be advised that no further Newsletters will be sent to you if your Subscription is not received by Wednesday 14th. December.

If you would like to take part in the famous Dengie Inter Club Quiz on Monday 21st. November see Geoff EDM at the November meeting.

The next CARS Foundation evening course commences on Thursday 12th January and runs for 6 weeks. We are currently taking bookings for the course so if you know of anyone interested in taking up the hobby tell them to contact the

Training Manager Clive Ward M0SIX Tel: 01245-224577 Mob: 07860-418835