



# Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB  
President: Harry Heap G5HF  
Secretary: George Farr G3UTC

Club Call Sign: G0MWT  
Chairman: John Bowen G8DET  
Treasurer: Brian Thwaites G3CVI

Newsletter No 455

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

December 2003

**This Month's Meeting.  
The Radio Amateur Emergency Network.  
A Presentation by Nigel Hull G6ZVV and Associates.  
Tuesday 2nd. December, 7-30pm at the MASC Beehive Lane.**

Fifty three years ago Essex, together with other parts of the UK, experienced the 1953 floods, with vast damage and loss of life. Two years before that the RSGB had offered their services, to the Government of the day, to help in national disasters. Thank you, no, we can cope, they said! After the floods there were second thoughts and the offer by the RSGB was reconsidered! RAEN was formed and, with a name change to Raynet, is now taken seriously by the 'Authorities'. Nigel G6ZVV and his associates will be telling us all about their involvement in the local Raynet group and it should be a very interesting meeting. We might all be very grateful for their support and services one day! Chris IPU AND Martyn VAM will be doing the raffle, so please support them generously! Supporting the raffle helps to keep our subs. so low!

### **Dates for Your Diary.**

- December 2 CARS Meeting. Raynet Presentation, Nigel G6ZVV MASC 7-30pm.
- December 10 CARS Committee Mtg. Danbury Village Hall 7-30p m.
- December 19 CARS Christmas Dinner, The Anchor, Runsell Green. 7-30 for 8-00pm.

### **Subscriptions Due.**

**The Subscription rate of £10 was approved at the AGM. To ensure you receive the January Newsletter please ensure that your Subscription reaches our Treasurer by Wednesday December 10th.**

**Contact Brian G3CVI at the December meeting or send it to him at 118 Baddow Hall Crescent, Gt.Baddow, CHELMSFORD CM2 7BU. His phone number is 01245-471919.**

### **The CARS Christmas Dinner.**

This event is now fully booked. Be sure you return your menu slip to Ken G7RFT or if you have any queries contact him on 01245-257088

### **Get Well Soon!**

Greetings George G3GNQ! Your many friends in the Club wish you a speedy recovery and hope to see you at our meetings again very soon!

### **144 MHz Affiliated Societies Contest - Desperate Plea!**

Chris M5CSM is still looking for Club entrants to this contest on Sunday 7th December. If you are the slightest bit interested get in touch with him on 01621-840923 (you can leave a message if he's out) or 07719-915872.

He's anxious for everyone to have a go and he will help sort out any problems you may have!

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

For details contact our Secretary: George G3UTC on 01277-622707.

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

Newsletter Editor: Geoff G7KLV 01245-473822 or email: [geoff@g7klv.free-online.co.uk](mailto:geoff@g7klv.free-online.co.uk)

Assistant Editor: Colin G0TRM 01245-223835 or email: [colinpage@ukgateway.net](mailto:colinpage@ukgateway.net)

**Please advise changes of address to Geoff G7KLV.**

## Last Month's Meeting. RadCom by Steve Telenious-Lowe G4JVG

Steve Telenious-Lowe, the editor of RadCom treated members to an excellent, well prepared presentation when he spoke at the last meeting. His subject naturally enough covered all aspects of producing and editing the monthly magazine of the RSGB. A few facts were given about the early beginnings of the RSGB and the associated publications. Starting as the London Wireless Club, then the Wireless Society of London and eventually the RSGB. Wireless World and Radio Review carried the first articles but not until July 1925 did the RSGB have it's own magazine known as the T & R Bulletin. Radcom developed from there albeit with a number of name changes, such as the RSGB Bulletin, known for a time as the 'Bull'. In the sixties it became Radio Communication, now contracted to RadCom, a name with which we are all familiar.

In 1995 when Steve took over the editorship there were 8 people in the production team, but since April this year with the new regime in place only two people remain. These are namely Steve himself and Dr. George Brown M5ACN. George takes care of all the technical aspects while Steve has overall responsibility. Since April 2003 advertising and the design and layout are now taken care of by outside agencies, a retrograde step according to some amateurs. In the average monthly edition some 60 pages cover the technical content with 40 pages devoted to adverts of one sort or another. RSGB events account for 6-8 pages, with 32 pages of commercial advertising: without which, the journal could survive.

Having completed the content to their satisfaction the copy is sent by Steve and George to the outside firm for design and layout functions. When the layout is completed a copy is sent to the printers electronically, using CTP (computer to press) software. Pictures are sent as EPS files (encapsulated postscript) using CMYK colours (cyan, magenta, yellow and black). JPG files are not used because the red, green and blue colours, which are excellent for computer screens, are useless for printing.

The magazine is printed in Colchester and costs some £10,000 per issue. Of the 26,500 copies printed each month, 23,500 are sent UK Members, over 2000 are sent to members abroad, the rest are used headquarters for advertising purposes or for issuing to new members etc.

The magazines are distributed by a commercial firm, and contrary to common belief all are dispatched on approximately the same day. Postage costs £9000 per month. Production costs some £228,000 annually.

The content tends to follow a set pattern, such as RSGB matters and advertising, a record of events, an exchange of news and views and technical articles of high repute.

In the forthcoming issues it is hoped to have an articles on 2,4 GHz, NFD results, a review of a BHI, DSP board, suitable for the FT-817. Also some views on the G5IJ antenna, described some time ago in Technical Topics, much new interest has arisen and Steve Hartley will produce an article based on the feed back from many constructors of this interesting antenna.

In the future, an article by Bob Henley on the 80M and 160M EH antennas. These antennas are supposedly based on Maurice Hatley CFA design and physically very small but they have same gain as full size dipole, it is not known how they work but they do. A review of the new Kenwood HF Transceiver is also on the cards. A supplement entitled 'Computers in Amateur Radio' is being considered, but they very expensive to produce and may not materialise.

Articles submitted for by Amateurs for publication are always welcomed and a payment is made for those accepted. Three basic types are required; simple or beginner's projects, so-called weekend projects and much longer lifetimes work articles.

In between times Steve and George also produce the weekly RSGB news bulletins for the 100 or so readers whom bring us the news every Sunday. The scripts are sent out usually on a Friday some by email and some by post. The scripts are also posted on the RSGB website.

Some questions followed Steve's address and a number of adverse comments were made by the Members, such as font size, print on coloured backgrounds, unnecessarily large headlines, wasted space, and poorly drawn circuit diagrams to name a few. Steve said these points would be noted.

Many thanks to Steve for a very interesting and informative talk.

*Report by Colin G0TRM.*

## Changing Times for Amateur Licences.

### The new callsigns

Found.	Mx3ABC	HF to 70cms	10W
Int.	2x0ABC	Almost all	50W
Full	Mx0ABC	All	400W

Where x= D (IOM), E (Eng) (Int. only), I (N Ire.)

J (jersey), M (Scot), U (Guer), W (Wales)

### Older callsigns

Class A = M0/5, G 0, 2, 3, 4, 5

Class B = M1 G1, 6, 7, 8

**Classes NB. From July 2003, 5WPM Morse dropped, Classes A & B merged.**

Dec 1st 2003 sees the last RAE Exam. as C&G have withdrawn as uneconomic and RSGB will administer a new exam (almost on demand) on behalf of RA/OFCOM, based on success of the Found. & Int. schemes. This is a major challenge to trainers to establish their credibility.

The progression is fully sequential (with no short-cuts), starting with the Foundation (25 Q's and simple Morse assessment and Operating) then Intermediate (45 Q's, practical assessment and project) and eventually to the Full/Advance Licence (60-70 Q's, theory only). This replaces the RAE in Jan 2004.

The original RAE syllabus has been revised to avoid duplication at lower levels with extra subjects reflecting trends eg. synthesisers and DDS and more on EMC. High AC and TX/RX theory is retained and now includes F1B Direct Frequency Shift Data modulation. The need to understand the measurement of station performance is retained. BR68/Full, stays in force with Summer revisions due to Morse and mm-Wave Bands.

The Syllabus scope follows the established pattern for the Foundation and Intermediate Courses and includes the following: Licence conditions, AC theory, Semiconductors, PSU's, RX's and TX's inc. architecture, Oscillators, Mixers, Synthesisers, Mod/Demods., Poweramps, Feeders, Aerials including AMU's, Matching and SWR's. Return Loss, Propagation inc. EM Waves, the Ionosphere. EMC, Op'ing Practice & Procedures, Safety and Measurements.

The RA/RSGB considers the term 'amateur' to undersell the hobby and want to raise the status of the hobby with the possibility of an NVQ in Radiocomm. Studies.

The success of these plans will depend to a great extent on the skills of the tutors being educators rather than just trainers.

From what I have seen, so far, the CARS team is fully up to this challenge. From all accounts they are obviously highly respected in the amateur radio training fraternity. Their tireless efforts deserve our full admiration!

Congratulations to Chris IPU and all the members of his dedicated team!

***Report by Geoff KLV, who is grateful to Murray for the use of his slides!***

## **Deputy RSGB Regional Manager's Report by Trevor M5AKA**

**Tel: 0794 103 9832**

With the New Year almost upon us now is good time to reflect on the achievements of our National Society over the past year. The immense amount of work put in by RSGB HQ in preparing for WRC 2003 paid off with Amateurs gaining a 100 kHz extension to our 7MHz band in the face of fierce opposition from some Governments and Broadcast interests.

They were also successful in getting the removal of the Morse requirement for HF operation. Recently there has also been a considerable revival of interest in Morse and it was pleasing to see that one of the Clubs new M3's Ron M3CAM achieving the Chelmsford Award using only CW

contacts. The RSGB and FOC are setting up a new system of Morse proficiency testing. The first tests in this new scheme will be available at the RSGB AGM in December.

As City and Guilds have pulled out of Amateur Radio Exams the RSGB have had to take their place and develop new syllabuses and exams for Foundation, Intermediate and Full. The new Intermediate course and Exam became available this year and pilot courses for the new Full exam will be starting in the New Year. CARS has been one of the UK's leading clubs in development of Foundation and Intermediate Courses and I was glad to see that Chelmsford provided the single largest delegation of any club to the recent successful RSGB "Train The Trainers" event for the new Full Licence course.

Our bands have come under increasing threat from Powerline Internet Broadcasting and the RSGB has been leading the battle against this form of RF pollution.

In all it's been a busy year for the Society. All this work in defending our bands costs money and that alone is well worth the membership fee, let alone the excellent publication RadCom which you also get.

As it's the time for New Year Resolutions can I suggest two for you: 1) Make sure you renew your RSGB subscription and 2) Try and introduce somebody new to the hobby this year

## **QSL Card Design Competition. Devised by Trevor M5AKA and Chris M5CSM.**

M2T is a contest only callsign that can be used whenever the Chelmsford Radio Club participates in an international contest. For example M2T was used in the October CQ WW SSB contest. We made over 1000 contacts in that contest and now need a special QSL card to send out. The lucky winner of this competition will have their QSL card design used for the M2T QSL card.

The QSL card MUST: 1) be postcard size (6" long by 4" wide). 2) must display the callsign M2T and 3) must display the CARS logo.

Other than that you have free rein on the design. You may place any other text such as "Chelmsford the Birth Place of Radio". Please bear in mind like the GX0MWT QSL card all the QSO confirmation information and club address etc. will be placed on the back of the card. This will avoid cluttering up your brilliant design!

Designs may be submitted in electronic format (Powerpoint, Word Document, GIF) to [contest@g0mwt.org.uk](mailto:contest@g0mwt.org.uk) Designs on paper may be handed to any Committee member at a club meeting or by post to CARS, PO Box 112, Danbury, CM3 4DX. Entries must be received by Friday 9th January 2004. Good Luck!

## Inter-Club Convention

Colchester Radio Amateurs will be hosting the Christmas Inter-Club Convention on Thursday the 18th December in the Abbeygate Room of the Colchester Institute, Sheepen Road, at 8:00 pm (guests may arrive from 7:30). CARS Members will be most welcome.

Colchester always lay on a very good spread of food and drink for the event and it provides an excellent opportunity to meet amateurs from other clubs.

For further information see the Colchester website <http://www.g3co.ccom.co.uk> or contact the Secretary, Frank G3FJI on 01206 851189.

## QTH and WAB Locators by Trevor M5AKA

Many newcomers find difficulty in determining their IARU QTH and Worked All Britain (WAB) locators. Fortunately the Internet has made this very easy.

Go to: <http://www.streetmap.co.uk/> and enter your postcode or street name. A map of the area will be displayed and you will then need to get the yellow arrow to point to exactly your QTH. This is done by using the mouse to move the cursor and clicking.

Under the map you will see the text "click [here](#) to convert/measure co-ordinates". Do this and you will see a table giving Lat, Long and LR. The 8 character LR field is the National Grid Reference (NGR) which you should write down.

The WAB locator is the first 4 characters of the NGR. For example if the NGR reads TL678063 then the WAB square is TL67.

Now go to the Practical Wireless QRP Contest website <http://www.ntay.com/contest/NGR2Loc.html>

Enter in the full National Grid Reference e.g. TL678063 and click on "Calculate" and your IARU locator will be shown e.g. JO01FR.

## CARS HF and VHF/UHF Competitions General Rules

1. Contacts must be used using your own callsign.
2. You can operate from any location, fixed, portable, or mobile.
3. You may not count contacts whilst you are operating as part of a team during multi-op contest towards this award. However you may count QSOs from a single op. contest using your own callsign. You may also before or after a multi-op contest operate the portable station using your own callsign.
4. Contacts must be simplex only, use of repeaters and satellites is not permitted.
5. Any mode may be used, CW, Phone or Digital.
6. You must only operate within your own licensing conditions.

7. Competition starts from 1st January 2004 and runs until 30th June 2004 inclusive.

8. Participants are strongly encouraged to enter monthly reports.

9. Last entry must arrive by 31st August 2004.

10. Please send your claimed score, the list callsigns per band, and the list of multipliers per band.

11. Both paper and electronic submissions are accepted in any format. They can be e-mailed to [contests@g0mwt.org.uk](mailto:contests@g0mwt.org.uk) or handed in at a club

### HF Award.

1. All Amateur HF bands between 1.8 and 30 Mhz can be used.
2. 1 point per callsign worked per band. Thus the same callsign can be contacted once per band.
3. 1 multiplier point new country worked per band.
4. A station in the same country as you are counts as 1 multiplier point.

### Example:

20m 15 different callsigns worked \* 10 different countries worked

15m 5 different callsigns worked \* 2 different counties worked

Your claimed score is  $(15 * 10) + (5 * 2) = 160$  points.

### VHF/UHF Award

1. All VHF/UHF bands can be used, these are 50 MHz, 70 MHz, 144 MHz, 430 MHz and 1240 MHz.

2. 1 point per callsign worked per band. Thus the same callsign can be contacted once per band.

3. 1 multiplier point per QTH Locator Square worked per band.

4. 1 multiplier point per country worked per band.

5. A station in the same QTH Locator Square as you counts as 1 multiplier point.

6. A station in the same country as you counts as 1 multiplier point.

### Example:

2m 15 different call signs worked \* 5 different QTH Squares worked \* 2 different countries worked

70cm 5 different call signs worked \* 3 different QTH Squares worked \* 1 different country worked

Your claimed score is  $(15 * 5 * 2) + (5 * 3 * 1) = 165$  points

***Compiled by Chris M5CSM & Trevor M5AKA.***

## Dengie Quiz Night.

Just enough room left to record that the CARS team consisting of Geoff EDM and Sylvie, Tony YTG and June and Trevor AKA, acquitted themselves very well in the face of stiff opposition, but not quite good enough to win! It was a most enjoyable evening with a fantastic buffet, to quote June, and thoroughly enjoyed by all.