



Chelmsford Amateur Radio Society

Established 1936

Affiliated to the RSGB
President: Harry Heap G5HF
Secretary: Martyn Medcalf G1EFL

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

Newsletter No 493

Web Address: www.g0mwt.org.uk

March 2007

Telecomms Over the Years by Alan Copperwaite, M0DDC/G8AQO

A H Reeves, born 2nd March 1902, the inventor of Pulse Code Modulation in 1937, said at an IEE Lecture in 1969 "I see the increase on Communications, and by that I mean all forms of communications be it radio, TV or data, to be expedient with no known ceiling". By good timing the Institution of Engineering & Technology (formerly the IEE) have made Communications the subject of the Feb/March issue of the Communications Engineer Journal, so we are in good company.

Alan will come from Enfield and may expand this story & tell us more about the wonders of communications. Some CARS Members may have assisted with this.

There will be the usual good Raffle.

Dates for Your Diary

| | |
|-------------------|---|
| March | Net Controller: Denis Lewis M0FHA |
| Wed March 14th | CARS Committee Meeting - Danbury Village Hall at 7.30pm - All welcome |
| Tuesday April 3rd | CARS Meeting – Mark Francis, G0GBY – Waters & Stanton |

Clive, G1EUC has been promoting CARS on BBC, Essex Radio, see page 3.

Canvey Rally was a great success, see page 4.

CARS would like to take this opportunity to thank Colin, G0TRM, Geoff, G7KLV & Martyn, G1EFL for the amount of work they put in to enable CARS to have a table at Canvey. A lot of items were shifted which pleased a lot of XYLS, hopefully!. CARS would also like to thank all those who contributed to the Sale by giving equipment, radio sets, etc – thanks a lot.

Our grateful thanks to Denis, M0FHA and Joy for posting this Newsletter. Could it have gone by E-Mail?

Please keep our Membership Secretary, informed of any changes to your callsign or E-Mail addresses, etc.
Further details contact our Programme Secretary: Martyn M3VAM on 01245-469008 or look on the CARS Web Site.
Club Nets: Tuesdays 8-30pm: (2nd) 145.375 : (3rd) 1.947 : (4th) 1.947 : (5th) 145.375. All +/- QRM.

Last Month's Meeting: FT5XO Kerguelen Island Dxpediton by Mark Hayes, M0DXR

Mark started his presentation by introducing himself as one of the twelve team members of FT5XO, this came about as an opportunity for a youngster to join a major Dxpediton as a result of one of the original members dropping out at a late stage.

Kerguelen is located in the South Indian Ocean inside the Arctic Convergence halfway between Africa and Australia, FT5 is an extremely rare prefix and is on the most wanted list for DXCC and this location was well overdue for activation.

Kerguelen Island is IOTA AF-048, ITU zone 68, CQ zone 19.

The Dxpediton was six weeks in duration but with eleven days at sea each way, the team arrived on the island on the 19 March 2005. The sea passage was undertaken in the R/V "Braveheart" and was very rough with most team members feeling very seasick and Mark actually stayed in his bunk for some three days. There was also the boredom factor of being aboard the vessel for eleven days, which caused problems.

Communications on the Braveheart was Iridium Sat Phone and e-mail link via the Amateur bands which also allowed Cluster spotting when on the island. The six crew of the Braveheart were excellent and provided good food & accommodation. The vessel is powered by one large diesel engine and has two separate 3 phase generators for the ships lighting and power services.

The team arrived on Kerguelen and then transferred to their final destination which was "Port Jean d Arc" the operating hut was on the site of a disused whaling station and in a very isolated position. The WX was very cold & windy with lots of snow at times. The radio stations were soon in action after the vertical antennas were erected, the equipment consisted 3 x TS50, Ft1000MP, IC756PRO3, FT897, Quadra Linear Amplifier and Monoband verticals. There was some strange propagation reported on LF with areas being worked well before expected times, 30 metres was open 22hrs a day and 6 x EME contacts were made on 6 metres.

The daily routine on the island was 12hrs operating followed by 12hrs onboard Braveheart, a small RIB made the transfers between ship & shore. The team made a total of 67,954 QSO's in eleven days of operating of which approx 68% were CW, 29% SSB and 3% Data.

Following Mark's presentation we then watched a DVD entitled "FT5XO Kerguelen 2005" which is probably the best presentation of a Dxpediton I

have seen and is available for sale from <http://www.dxvideos.com>

and costs US \$25.

So in conclusion, a good presentation by Mark and followed by an excellent DVD which detailed all aspects of the Dxpediton including equipment, antennas, and team members operating both Phone and CW. A big thank you from CARS to all the team members and especially Mark for the presentation. I believe that the hard work and efforts of Dxpeditons like FT5XO help to keep amateur radio alive & kicking and that can only be for the good of our hobby

Write up by Steve G4ZUL

Feedback.

Brian, G3CVI's presentation about Power Stations caused Eric, G8ADX to think of his involvement with Bradwell in 1962.

The opening of Bradwell was done in parallel with Berkeley. To achieve this the Marconi team was hired to link the two by television. (Telephone lines in those days)

HRH was at Berkeley and the Lord Lieutenant of Essex was at Bradwell. At the Bradwell end a "tent" consisting of several massive marquees was set up to house a stage and the guests. There was a lectern with a big switch purported to be connected so as to start the station at the same time as Berkeley when operated. (No comment!)

We spent several days clambering around the various parts of the station setting up our equipment. I wonder if we would have been so carefree in the light of present day knowledge! There was great publicity about how these stations would provide extremely cheap power for everyone! Anyway, the great day came. Apart from operating a camera, my other job I was told was "Lofty, put the lanyard microphone around the Lord Lieutenant's neck before he goes on the stage". "Does HE know?" I asked. "Oh yes"

So what happened, he marched straight onto the stage and sat down. I marched on and attached the mic around his neck saying "You just might need this!" The opening went according to plan. The dignitaries and guests departed. It was de-rig time with Godfrey's team standing by to take down the marquee after we had taken the monitors down which were supported by the marquee posts.

Now at this stage, yes you've guessed it, the wind started to get up. The tent people wouldn't go near the billowing tent, whilst, fearlessly, we were rushing in and out retrieving our gear.
Just as we got the last monitor out the marquee started to blow away!

Now we live in Devon, we do miss the great landmark of Bradwell which can be seen at least a good 1-2 of sailing hours away.

Thank you Eric, G8ADX.

PS, John, G8DET was mildly involved with the same event at Berkeley, Gloucestershire.

PPS. Do you remember the CARS evening at Bradwell on 19th May 1987 when 20 Members visited Bradwell with Roy, G3PMX?
Cameras were allowed for the first time that evening.

Green Energy

I'm told that planning regulations have now been changed to be more "green" conscious.
Anyway, there are two things worth noting.

1. A method of heating boring down 1 or 2 hundred metres about 5 inches diameter pipe to extract heating from the earth. **It is Geothermal Energy. There's a 35% government grant.**

http://www.earthenergy.co.uk/how_it_works.php

(There's underscores before & after it i.e. _it_)

2. A method of conducting daylight through the roof space to light unlit passages and spaces
This is by a firm called Suntile. (They're on the net)
Looks as if it may be a bit more sophisticated than the old "fanlight"

Eric, G8ADX.

BBC Essex Radio Interview, 12 February 2007 by Clive Ward G1EUC

We have been trying over the past few months to find new and hopefully more productive ways of attracting people to attend our Foundation Courses.

Adverts in the paper have had a limited success, as have various posters that have been sited in what was thought to be strategically advantageous areas. So it was decided that perhaps we should try radio, after all that is what we are meant to be good at.

I received a call from Renee Hockley-Byam at BBC Essex Radio, saying that she been speaking to Trevor M5AKA and that could I be on the air the

following Tuesday. I agreed, but the stations plans and priorities changed and this was changed to the following Monday.

On Monday 12 February I arrived at the BBC Essex Radio studios and the receptionist at BBC Essex told me I would be on at 13.45, ten minutes later than I was expecting. At 13.44 I was led into the studio and was given a very brief few moments to explain to the DJ Steve Scruton, what our hobby was all about. I had in mind to talk about the hobby and all its different modes and characteristics, that it was open to all, whatever age or gender etc. I also intended to could go into depth about the Foundation Course content; how it just wasn't all theory and that it included a good deal of fun practical sessions etc.

The first question came, what is Amateur Radio? I started to get into the answer and then the next questions came like a rocket. This meant I had to curtail my answer and start answering the next question, before finishing, the previous one. This continued throughout the interview with Steve indicating by hand signals when I should finish talking. As a consequence, I could not relay all the information I would have liked to. Though to be fair to Steve my interviewer on occasions he could see I was determined to answer some questions fully, which he let me do.

I was very impressed with BBC Essex. The receptionist, the lady that led me through to the Studio and Steve Scruton the DJ were all very professional, helpful and polite. During my short stay in the studio I felt comfortable and reasonably relaxed. I don't think I coughed once! I would though if there is a next time, hopefully with a little more time to answer the questions.

An MP3 recording of the broadcast can be downloaded from Dial-up users beware – 2Mbytes.

<http://www.essexamateurradio.org/interview.mp3>

BBC Essex

http://www.bbc.co.uk/essex/local_radio/

Profile of Renee Hockley-Byam

http://www.bbc.co.uk/england/essex/staff_profiles/renee_hb.shtml

Profile of Steve Scruton

http://www.bbc.co.uk/england/essex/staff_profiles/steve_scruton.shtml

Chelmsford Amateur Radio Training Courses

<http://www.g0mwt.org.uk/training/>

To join a Chelmsford training course contact Clive on Tel: 01245-224577

Mob: 07860-418835

E-mail: training2007 at g0mwt.org.uk

Canvey Rally

It's all in the Genes by Geoff G7KLV.

About seventy years ago I was a Boy Scout in the Peewit Patrol and my Mother used to organise jumble sales to raise money to buy camping equipment. Two or three of us would take the trek cart and go from door to door collecting jumble. It would all go up to our attic where Mother would sort it. She was a good needle-woman and would mend items she thought would sell and launder other items of clothing and clean up bric-a-brac. She enjoyed doing it and was quite successful at it. There was a succession of ladies who came round to our house to get the first pickings always at top prices, I may add! Apart from the considerable sums of money raised Mother gained great satisfaction from it, just like the Wombles of Wimbledon Common,

"Making good use of the things that we find.
Things that the every day folk leave behind."

As you will have realised, this all leads me into the Canvey Rally! I have obviously inherited this trait as I also get great pleasure from helping Colin and Martyn do the Canvey Rally. From early January my garage, and Colin's also, is the repository for all manner of electrical, electronic and mechanical cast offs. We spend endless hours testing, checking, mending and generally cleaning up! Three weeks or so before the great day I always panic, worried that there isn't enough stuff to justify our table fees, and then one week before I panic even more wondering just how we are going to get it all there, but we do!

We three synchronise our watches and arrive down at Canvey at 8-30am sharp to unload and set up shop in good time for the 10-30 rushes! This gives us time to look around the other stalls and do a little profitable horse trading, usually covering our expenses before opening time.

There follow a few hours of slick salesmanship with Colin suggesting the prices we charge. He always strikes a fair bargain and we like to think we have satisfied our customers. It's always hectic for the first couple of hours but by one o'clock we start reducing prices and by two o'clock we're giving it away, dreading the journey home with all the unsold clobber. We take a selection to the next Club night and do a little more business there, but we have a strict policy with all that is left. Nearly all of it goes to the dump but we do save a few items for later sales. This year we made a grand total of nearly £300, our second best effort!

None of this would have been possible without the generosity of Members who supplied all our wares and a special thank you to new Member Norman G8GWB who had an almighty garage clear-out, one full car load! Colin also received some very fine donations from Fred G6FXM and the two Brians 2E1RMD and G3CVI which he collected or were delivered to his home.

Thanks also to all the generous punters for supporting our efforts.

The Canvey rally is organised by the South Essex ARC and although they are a very small club their organisation is always excellent! Unlike any other clubs, who organise rallies, their members always help with loading and unloading, and they are not youngsters either! This invaluable service is offered to individuals and traders alike! It is much appreciated. They also have a good range of sandwiches and toasted sarnies as well, all at very keen prices. The Canvey rally is one of the best around, long may it continue!

Geoff G7KLV

March Contests from Steve G4ZUL

RSGB Club Championship (80 metres)

Dates for March as follows:

DATA 05 March. 20:00 - 21:30 Local

CW 14 March 20:00 - 21:30 Local

SSB 22 March 20:00 - 21:30 Local

RSGB VHF Contests

3/4 March: - MARCH 144/432 Mhz (24HOUR)

Starts 14:00 UTC Saturday

Finish 14:00 UTC Sunday

Please refer to the RSGB website

<http://www.vhfcc.org>

for full details of all VHF contests.

ARRL International DX / SSB

3/4 March, 48HRS

Exchange: RS + transmitter power.

Categories: Single op. = all band, single band, high power,

Low power, QRP.

Multi op. = single TX, two TX, multi TX..

Scoring: 3 points per QSO.

Multiplier: sum of states/provinces worked.

Final score: QSO points x multipliers.

further information & rules from

www.arrl.org/contests

RSGB Commonwealth / CW

10/11 March, 10:00 - 10:00 UTC, 24HRS

Bands: 3.5, 7, 14, 21, 28Mhz

Exchange: RST + serial number

Sections: Open, 24HRS

Restricted: 12Hrs

Scoring: Contacts with commonwealth prefixes 5 points and a bonus of 20 points for each of the first 3 contacts with each commonwealth call area on each band.

further information and rules from www.rsgbhfcc.org

CQ WW WPX / SSB

24/25 March, 48HRS

Exchange: RS + serial number

Categories: Single operator (single band & all band)

Multi operator (single TX, Multi two,

Multi TX)

Scoring: 3 points on 28, 21, 14Mhz / 6 points on 7, 3.5, 1.8Mhz

if on different continent and if same continent then

1 point & 2 points respectively.

Prefix multipliers: The number of valid prefixes worked.

for full details please refer to February issue of CQ Magazine or

<http://www.cq-amateur-radio.com>

For any further information please email Steve G4ZUL - contests2007@g0mwt.org.uk

RPF Communications Event

RPF organised a *Systems Improvement & Best Practice Event* for the 8th Feb but as snow blocked a number of roads, it was rescheduled to the 22nd February.

Gail, M3XRF & Phil, G4RPF met everyone at the door of the large room in the Danbury Sports & Social Centre on a wet & miserable evening. It was nice to see a number of CARS Members, new faces from around the district including Southend on Sea & Jonathan Mitchener, G0DVJ from Harwich & Partner.

After introductions, BHI gave a PowerPoint presentation on Digital Signal Processing (DSP) and then spoke about their range of sound equipment which was also on display.

A break to sample some of the lovely buffet was followed by Phil who presented a "teach-in" on Reflected Power & SWR. Phil used dBs to show how much power is wasted on an incorrectly matched installation.

Another break followed as Phil said "Look, you have to eat the food as I cannot take it home".

Gail then took the floor to explain what was behind the modern name *PowerGizmo* range of products produced by RPF Comms.

It transpires this is a Master Unit which can monitor up to 126 Sensor Units connected between the TX & its Aerial to check continuously what the RF conditions are. If for whatever reason the Reflected Power rises to a predetermined value, an alarm is

given. If the power is not reduced manually or the Reflected Power increases, the Master Unit can switch off the power to that particular TX and so save it from potential damage. Maybe water had got into the coaxial feed cable.

The writer considers there is potential for using this equipment at communications centres such as Police Headquarters. However Phil went to lengths to say that the range had been conceived from comment & feedback from Radio Amateurs.

Steve, the Software Engineer and Michelle, M3KNU were introduced as part of the team.

An Amateur from Southend won a bottle of Champagne in the free raffle, (see what you missed). This was followed by a lively Question & Answer Session. There was plenty of technical talk but this was handled in a pleasant and sometimes humorous manner.

In closing the event Phil said he would like to repeat it, watch this space.

Contacts:

Phil Osborne (G4RPF) – 07905 587743

phil.osborne@rpf-comms.com

Gail Osborne (M3XRF) – 07952 014245

gail.osborne@rpf-comms.com

Blog: <http://rpf-communications.blogspot.com>

Report by John G8DET.

BBC DRM Transmissions

The BBC has increased the power of the DRM signal from Crystal Palace to 4.5kWatts on 25.695MHz. It uses Vertical Polarisation.

It appears that Test Transmissions of DRM are going to be made in the Plymouth Area. Eric Lawley, G8ADX, our representative in Newton Ferrers, near Plymouth will report in due course!

Who is receiving DRM?

Please tell the CARS Newsletter Editor.

Eric, G8ADX did a search to find out what all the fuss was about. He found a Web Site which seems to give explanations about everything wireless and electronics.

<http://www.radio-electronics.com>

Trevor M5AKA.

Freeview turning into Payview

Sky to Encrypt on Freeview

Sky News, Sky-3 and Sky Sports News are going to be withdrawn from Freeview and the capacity used for a new subscription service....

...for a new 4-channel service for Sky-1/Sports/Movies based on new MPEG-4 boxes

<http://www.dtg.org.uk/news/news.php?class=countries&subclass=0&id=2233>

Murray, G6JYB.

Antarctic Weather Station

Do you remember a few months ago a request to help assemble a weather Station in the Antarctic was made. Well, this is the update.

We had constructed the weather station as Planned. We used an AAG weather instrument, which was light portable, but not very durable but was taken by Adam Hyde to the Antarctic in December. They reached the base the day before Christmas. The Antarctic team was lead by Tom Mulcair and Adam Hyde plus to or three others. We did not actually receive much data from this unit it turns out the internet pipe was very flaky and only a 1-kilo bit stream was possible as this was being used for mail and web access. There was nothing left for the permanent recording of data at hi-resolution to the UK, this is what we needed to conduct our data jam.

Despite this we found another way around the problem, we have done this completely off our own backs with absolutely no funding of any sought just for fun and to see what if anything, would happen.

We have as of 3rd February completed our first Antarctic Data Jam, which got my ugly mug in the Southend Evening Echo. Additional we are about to run another Antarctic Data Jam at the Junction in Cambridge for the Workshop with a Public Performance on 17th February 2007.

We have managed to get live data from the Antarctic but the data we received came from about 73 different bases, this is what we actually used and are continuing to use. We would have liked to setup a permanent base with the data streaming to the UK for data to be used by Artist and Media Programmers but the cost of such a fully functional

device turned out to be astronomic (the AAG would not have lasted long), let alone the cost of maintenance and the cost of getting it there.

Derek Shaw - Southend on Sea Linux User Group

RSGB QSL Bureau News

After an 11 year spell as QSL Sub-Manager for the G3RAA-TZZ series of callsigns, Mrs Pat McVey G3GMC, has decided to stand-down.

With immediate effect, the following newly appointed Sub-Managers are now responsible for the following callsign ranges:

G3RAA-RZZ
Mr Derek Moffatt G3RAU
Mill House
Middle Street
Glentworth
Gainsborough
Lincs
DN21 5BZ

E-mail g3rau@aol.com

G3SAA-G3SZZ
Mr Roger Western G3SXW
7 Field Close
Chessington
Surrey
KT9 2QD

Tel: 020-8397 3319
E-mail: g3sxw@btinternet.com

G3TAA-G3TZZ
Mr Nigel Cawthorne G3TXF
Falcons
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KT13 0BS

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E-mail: nigel@g3txf.com

G8DET Edited this Newsletter with assistance of Colin, G0TRM, Trevor M5AKA & Murray, G6JYB.

Cut-off date for entries in March NL - 20th March.