

# Chelmsford Amateur Radio Society

Affiliated to the RSGB

President: Harry Heap G5HF

Secretary: David Bradley M0BQC

Club Call Sign: G0MWT

Chairman: John Bowen G8DET

Treasurer: Brian Thwaites G3CVI

Newsletter No. 422    Web Address [www.g0mwt.free-online.co.uk](http://www.g0mwt.free-online.co.uk)    March 2001

## The March Meeting - Operator Training and Demonstration Evening.

Just over a year ago we had a meeting devoted to practical matters when Members demonstrated a variety of construction techniques. That seemed to be quite popular. Our next meeting will be devoted to general operating techniques and we trust that it will be equally popular. We hope that it might encourage more Members to partake in IMD - International Marconi Day.

The official title of the meeting is 'Operator Training and Demonstration Evening'. Some of the Club experts have been persuaded to demonstrate a wide range of operating techniques. There will be demonstration of HF aerial tuning procedures and operating and a similar one for VHF. Charles G0GJS will be demonstrating Swisslog. Tony G4YTG (who else?) will be holding an aerial clinic. There will be operator training specifically for IMD. Fred G2HNF will offer tuition in coaxial terminating and Chris G0IPU will be giving an introduction to Novice training and we hope to persuade Murray G6JYB to hold an internet clinic. Geoff G3EDM will be advising on SSB working and Colin G0TRM will be selling the left overs from the Canvey Rally.

Chairman John G8DET will open the meeting at 7-30pm at our usual venue on Tuesday 6th. March. Please support Ela G6HKM's raffle. For an experimental period it will be drawn just before the tea break, so early leavers won't miss out!

### Dates For Your Diary.

- Mar.. 5 Club Meeting Operating Techniques MASC 7-30pm.
- Mar. 14 CARS Comm. Meeting. Danbury Village Hall 7-30pm.
- Apl. 17 IMD Installation Sandford Mill 9-30am
- Apl. 21 IMD Sandford Mill.
- Apl 21/22 London AR & Comp. Show. Alexandra Pakace

The Net Controller for March is Ken G3PMW

## CARS at The Canvey Rally.

Sunday, the 4th. February, at eight o'clock was a cold, wet and miserable day! It was one of those mornings one would have preferred to stay at home by the fire with the Sunday newspapers, after a long, leisurely breakfast. Colin G0TRM and Chris G0IPU were made of sterner stuff and we met at The Paddocks at Canvey at 8-30. We had all loaded up our cars the previous day with the left overs from the January Junk Sale and other items which we had collected over the last few months. With the aid of Colin's little trolley we spent the next hour unloading and setting up our pitch inside the hall. We had more than enough to fill our table and two more. It is customary to do a little horse trading with the dealers before opening time and that occasion was no exception. We had actually broken even before the punters arrived!

Trade was a bit slow at first but with persuasive salesmanship and giveaway prices we were soon doing brisk trade. The tables opposite ours were not taken up and we were able to spread ourselves. Dave G1OGY also shared our table and was selling on behalf of Silent Key Geoff G2AMQ. By 2'oclock the hall was virtually empty and at 2-30 we were clearing up and getting the remains back to our respective cars. We finally totted up our takings which amounted to £140 with all expenses paid. With a few things sold after the rally the total profit was £155 for Club Funds. A thoroughly successful and enjoyable day! My only regret was that I didn't get a chance to browse round all the other stalls!

Report by Geoff G7KLV

## International Marconi Day.

We are looking for new operators as well as experienced operators for Saturday April 21st. Operators and loggers are urgently required to man the two stations at Sandford Mill over this 24 hour annual world wide event organised by the Poldhu Club. Both SSB and CW will be used. Please contact Brian G3CVI. Ring him on 01245-471919.

## Last Months Meeting. World Radio Conference 2000 by Les Barclay G3HTF

As predicted in last month's Newsletter Les Barclay cut through the legal jargon to make what would seem to many amateurs to be a dry and uninteresting subject, to produce a brilliant and informative talk with so much content that all facets of communication by radio were mentioned.

He started by reminding us of Marconi's historic feats of communication across international borders and to ships of all nations from shore stations. Even before this the need for international agreement as to parameters and charges were needed and conferences were set from the 1850's onwards for the agreement of international wired telegraph protocols.

Before giving the early history and present workings of the ITU Les used an amusing story to illustrate the problem. To send a telegram from Berlin to Paris the sender would go into the telegraph office in Berlin, hand in the telegram and pay the fee to the clerk. The telegram would be received at the border, taken across into France, given to a French clerk together with the fee and then sent to Paris. It would then be given to a telegram boy on a bicycle who would deliver it to the recipient. The international problem! How much of the original Berlin fee goes to the boy on the bicycle and how?

With the advent of ship communication, in which Marconi played such a large part, the situation was exacerbated by Marconi owned coast stations and Marconi operated ship stations who would not send or receive other station's message traffic. In 1902 an international incident arose when a visiting Russian dignitary leaving on a Telefunken operated wireless ship tried to send a message of thanks to a USA coast station and the Marconi operator refused to accept it.

In 1903 the preliminary wireless conference agreed to accept each others traffic and in 1907 the use of CQD and SOS priority messages were agreed. The first use of these was in 1908 and the Titanic used them both in 1912. Also in this year came regulations for balloon radios and emergency watch keeping.. The Great War followed and many technical developments were made. After the war many people had an interest in wireless and Radio Amateurs were included in the discussions and agreements from then on

In 1927 eighty countries set up broadcasting stations on

agreed frequencies and systems and the English language was agreed for international communications but not by the French however! Surprise, surprise! Spark transmitters were also to be discontinued.

The 1947 conference in Atlantic City was the first time that a system, more or less like today, was used. In 1980 the International Frequency Regulations Board (IFRB) was set up and allocated frequencies to all broadcasters. However, although the main framework is good there are a lot of transgressions due to the Political and Propaganda pressures by most users.

At present the ITU meets every four years with the conference split into three parts: Radio, Telephone, Telecomms. Development.

Study groups are set up which meet every two years and make their own agreed recommendations and consider questions on how and why we use services, like radio networks and even amateur services.

The study groups are aiming to produce "The Radio Regulations" which lay down details of frequency use, frequency tolerance, levels of spurious outputs, designation of emissions, RF power and antenna gain to be used. These regulations are to be applied in their own particular way to Mobile, Fixed, Radio Comms., Navigation, Location, Astronomy, Met. Aids, Standard Frequency and Time Signals Satellite to Earth, and even Satellite to Satellite services.

In the case of amateurs consideration would be given to techniques together with the qualifications required and the level of Morse proficiency.

Frequencies are allocated for use in bands or "Assigned" on a specific frequency for a special purpose. National Authorities can assign frequencies in allocated bands but must comply with a procedure to avoid interference with other Authorities.

The World is divided into three regions where most of the likely interference is inter regional. The Americas are Region 2 and can do almost as they like for most services. Region 1 is Europe, Africa and Russia and Region 3 is Australasia and Japan. For example, around 7MHz is a problem area for everyone without some sensible allocations and assignments.

A good band for wideband propagation is 4- 6 GHz and although the terrestrial microwave links do not cause problems with each other they are likely to interfere with satellite earth stations at low "look angles" or under reflective or refractive conditions.

Earth stations must submit proposals to have their "look area" protected at their operating frequencies. After 1979 satellite operators were asked to submit usage frequencies and orbit positions for assignment. Many did this and were not able to take them up resulting in what is known as the "Sat paper problem" where new real proposals have difficulty in finding frequencies and orbital positions in space.

Les told us that Geneva was excellent venue for WRC conferences where the accommodation was very comfortable and the paper producing system could turn out papers for 1500 delegates in three languages overnight. Torremolinos was a bit of a disaster, the delays caused the final signing session to run for 18 hours. Concern was expressed about Istanbul but in the event all worked out well and the conference was a success. There was strong police security during the conference.

New items in the last WRC were; high altitude balloon platforms, more frequencies for mobile phones, managing possible interference from non geo-stationary satellites, more channel capacity in maritime VHF by a multichannel digital system. The agenda for the meeting in 2003 is already five pages long and includes; new regulations for the maritime distress services, the

Morse qualification requirement and rearrangement of HF services below 10MHz.

Les concluded by saying as Amateurs 'stand up and fight your corner.

Thanks Les for an interesting talk and keep up the good work for us all.

*Report by Tony G4YTG*

*Incidentally, the RA are advertising for engineers. Anyone interested?*

## **A Test of Your CW Keying Skill.**

I spotted this in OZ, the Danish equivalent to RADCOM. It is a very good test of sending with an El-Bug, single or twin paddle key plus keyer. We have all tested our skills sending "THE QUICK BROWN FOX JUMPS OVER THE LAZY DOG" on our Morse keys.

Try your sending skills on your El-Bug by keying; "THE SIXTEEN KNEELING GREENKEEPERS CEASED WEEDING TO SAY SHES BEEN SEEN SWEEPING GREENFLIES FROM THE SHEETS BESIDE THE BEEHIVE WHERE THE BUSILY BUZZING BEES FOLLOWED THE QUEEN BEE IN HER BREEDING FLIGHT UNDER THE WATCHFUL EYES OF SEVENTEEN BEEKEEPERS STANDING KNEEDEEP IN WEEDS."

No prizes but I would be interested in your honest assessment of how you did at the practice. With acknowledgment to the CW Corner in OZ by OZ1CAR and OZ7ABP.

*73's Carl G3PEM*

## **The June Constructors Competition.**

The evenings are beginning to draw out, which means spring is on its way and summer's not far behind! Summer means June and to CARS Members June means the Constructors Competition. Now's the time to get cracking on your entry. There are cash prizes and a First Time Entrants prize, so do your bit and make it an interesting evening!

## **Proposed Visit to Bletchley Park.**

Possible dates are either Saturday the 12th. or Sunday the 13th. May. If there is sufficient interest a coach will be hired. The cost is directly dependent on numbers. See John G8DET at the next meeting if you're interested.

## **Marconi 30KW Transmitter.**

Quite by chance CARS has been instrumental in obtaining a large transmitter for the Industrial Museum at Sandford Mill. Being no longer required by the Company at the end of an MOD contract, John G8DET heard about it's impending disposal from a friend of his, Curt Brown. On hearing about it my immediate reaction was that it would be just right for the Museum. Luckily Geoff Bowles agreed! It was eventually transported there at the Company's expense.

At an informal ceremony it was officially handed over to Geoff by Bryan Davis MOD Business Manager and two colleagues from Marconi Mobile Ltd. Also present was our Chairman John, Curt and representatives from CARS together with some Friends Of Chelmsford Museums.

We were very fortunate in also having Bill Barbone (one time CARS Member) present, who was responsible for designing the transmitter. He was able to point out some of the interesting features of this one-time state of the art approach to transmitter design, with it's self tuning output stage.

*Report by Geoff G7KLV.*

## **Joint Editors.**

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**Deadline for the next N/L is Wednesday 14th.March.**