

# Chelmsford Amateur Radio Society.

NEWSLETTER No. 278

March 1989

## **NEXT MEETING - Amateur and PMR Repeaters.**

This month we welcome Malcolm Salmon, G3XVV, of SAMAIR SYSTEMS LIMITED, to talk to us about the differences between amateur and professional repeaters and some of the problems encountered in their use.

The demand for more and more personal communication has put a strain on frequency allocation. We will learn how channels are made available and how Band III is being used in this regard.

The lecture will begin at 7.30pm and we look forward to meeting you all on Tuesday 7th March 1989 at The Marconi College, Arbour Lane, Chelmsford.

## **DATES FOR YOUR DIARY**

- 7 March CLUB MEETING - Amateur and PMR Repeaters - Malcolm G3XVV.
- 4 April CLUB MEETING - Computers, Some Amateur Radio Uses - Harry G2HPF.
- 16 April RSGB VHF CONVENTION - Sandown Park.
- 2 May CLUB MEETING - KW Communications for Ten-Tec.

## **LAST MONTHS MEETING - History of Marconi 1902-1914 by Stan Wood, Honary Consultant to the Marconi Company. - by Brian G0BDS.**

This was the second lecture in the series about the life of Guglielmo Marconi, with edited highlights of his progress on the development of 'RADIO'.

At the turn of the century all the telegrams sent around the world had to be relayed at some point in their transmission along a 'sumbarine' cable. Naturally any method that could be used to break the monopoly that the telegraph companies had would, it appeared, have a great future. With this in mind Marconi had begun tests to increase the range that signals could be guaranteed to be received. Tests from a ship in the Atlantic had given a range of 1500 miles which encouraged the development to obtain distances of 2000 miles and over. This would then allow the Atlantic to be spanned.

It became obvious as well that the greatest benefit of any radio system would be derived from its use in the Marine communications sphere, where up to then semaphore and carrier pigeons had been used. This, of course, is why all the best ships radio operators were Marconi trained, so we are told.

At this point in the lecture, we were shown several slides which illustrated the typical ships wireless cabin, with all the latest equipment installed, like wooden boxed Inductors and Leyden jars.

Magnetic Detectors invented in 1906 were made at the Hall Street Works in Chelmsford, which up until that time had been a furniture factory and silk mill.

The Canadian Government had become interested in trans-atlantic radio communication and asked Marconi to build a radio station on the east coast to aid communication back to the U.K. This station was originally going to be 25KW, but was then raised to 50KW and finally to 75KW.

Night time effects of propagation were being encountered during the tests so far carried out, but nobody was quite sure of what was happening because there had been no conclusive receiving experiments to prove any pattern in effects. The new station in Canada started using four towers 410ft tall, and results were monitored on a ship called the "Philadelphia" which had a 150ft mast and had previously been used to monitor signals from Poldu in Cornwall.

Marconi was very fortunate in being loaned the cruiser "Carlo Alberto" by the King of Italy and with the King and Marconi on board, the ship sailed to the Baltic carrying out tests en route, when once again it was noticed that night time signals were always better than daytime due to the still unknown propagation factor. In Russia, Marconi was introduced to the Russian radio inventor Popoff. The cruiser then went over to Canada for the opening of the Canadian station, when it eventually returned to Italy plans were drawn up to build a large station in Italy as well.

The Irish were next to follow with a station at Clifton which was powered by peat burning steam engines and boasted 6000 2 volt cells to provide emergency power.

By 1907 a new trans-atlantic telegraph service was opened, although reception was not always 100%. Marconi at this point had to put a lot of his own money into the research he was doing and not all the salaries were paid some weeks, but he never gave up and his fellow Directors gave what support they could.

At one point, however, Marconi issued standing orders that 'Marconi' operators should not communicate with anybody other than fellow 'Marconi' operators to avoid Industrial Sabotage, except in emergency of course.

Work with the Military also continued and in 1910 a large mast was erected on Salisbury Plain to assist in manoeuvres. The next slide to be shown was of the Army in Africa using the latest 1911 technology to communicate back to H.Q.

Also there were several slides of the construction, in 1912, of the New Street Works in Chelmsford, including the packing and dispatch sheds which could have railway goods trucks shunted right up inside the building. The story after that is of course the subject of another lecture.

The evening was as would be expected thoroughly enjoyed by the 37 members present and our grateful thanks went to Stan, with the open invitation to return in the future.

## CONSTRUCTORS' COMPETITION

Now is the time to promote our annual display of ingenuity; how is your project coming on? Taking shape we hope!

The committee have no idea how many entries there will be, so please let us know. Not only is there the honour in winning.....The prize money comes in very handy!

## MEMBERS NEWS - E1a G6HKM.

The Society extends a welcome to George Civil, G1TVY.

## 10 METRE DX

With the dramatic increase in the MUF during this solar cycle, the CARS 10 Metre Net, held on the Tuesday evenings between meetings, is now having to find a clear frequency to operate in between all the DX stations.

You may have to tune around our usual frequency of 28.325MHz to check in at 8.30pm local time.

## CLUB LIBRARY

The library book "H.F. ANTENNAS FOR ALL LOCATIONS" by Moxon is long overdue. Will the member who has this copy please return it, otherwise we will have to buy a replacement out of club funds to reimburse the person who kindly loaned it to us for library use.

## MOSELY ANTENNAS

You may remember that we asked in the August 88 Newsletter for any information leading to the recovery of missing kit for Field Day, namely:- The U bolts and fixing accessories for the Mosely Triband antenna and the multi-way coaxial switch.

Unfortunately these items have not been found and in anticipation of this years event the committee have obtained a quotation of £40 to replace the antenna accessories.

We now have an up-to-date price list of spares for the 'Mustang' and 'TA33 Junior'. If any member would like to make use of this price list it will be available from E1a, G6HKM at the Club Meeting.

## COMMITTEE MEETING

The March Committee Meeting will be held in the Telford Lodge (Marconi College Residence) at 7:45pm on Wednesday, 15th March. You are most welcome to join us.

Please note the new starting time.

73 from Roy & E1a Martyr, G3PMX & G6HKM

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## MEMBERS ADVERTISEMENTS

### FOR SALE

Three aluminium poles, 2" dia x 12' to 15' long and one square section 12' long, worth £1.50 per foot or offers, also one 70cm aerial for offers.

Ron G2AGY, Tel No. Chelmsford (0245)259883.

### WANTED

Have you any Meccano - the red and green type - lying around anywhere? I used to have some and would like to build up up a collection for my junior op, to start him off in the constructional way.

Andrew, G4KQE, Tel No. Silver End (0376)83094.

### WANTED

Input for your Newsletter, dateline for the next edition is Friday 24th March.