

# Chelmsford Amateur Radio Society.

NEWSLETTER No. 264

January 1988

## NEXT MEETING - The Annual Film/Video Show.

Les G4CUT has again kindly offered the loan of his video equipment to show some cassettes for our entertainment, among these will be 'Amateur Radios Newest Frontier' from the RSGB library.

In the supporting programme Dick G3WHR will show another historic film in the series of Field Day Events and to round off the evening we should have time for a cartoon or two.

The meeting begins at 7.30pm, on Tuesday 5th January, at the Marconi College, Arbour Lane, Chelmsford and we look forward to seeing you there for the first meeting of 1988.

## DATES FOR YOUR DIARY

- 5 Jan. CLUB MEETING - Film/Video Show.
- 17 Jan. DF EVENT - The Snowman Hunt.
- 2 Feb. CLUB MEETING - Interclub Quiz, Chelmsford/Braintree.
- 1 Mar. CLUB MEETING - General Servicing & Repair of Amateur Equipment.

## LAST MONTHS MEETING - PACKET RADIO BY PHIL G0ELM, ASSISTED BY BILL G4JUW - Gwyn G4FKH

For those who were not at this meeting, I can testify that they missed a most interesting lecture. The talk/slides coupled with frequent demonstrations made it understandable even to those like myself who only use C.W.

Phil started by giving an introduction into Packet Radio, stating that the strange noises heard on the band (demonstrated) were indeed packets zipping back and forth. Packet is only one of several data modes available to Amateurs; RTTY, ASCII and AMTOR being examples of others. Packet was developed from commercial "X.25" protocols. On V.H.F. it runs at a speed of 120 cps whilst on H.F. it runs at 30 cps. Full error correction is an inherent quality of the protocol. A modem in the usual data comms modes is replaced in packet by a Terminal Node Controller (T.N.C). The T.N.C. has in-built intelligence and it is this unit that constructs/decodes the packets. There are 3 basic packet types, (1) connect/disconnect, (2) information, up to 256 characters in length, and (3) acknowledgement. (I presume a "NAK" is also of this type). The addressing information is loaded into the T.N.C. along with any repeater points in the chain, apparently any T.N.C. can and does act as a repeater station. When all the information is loaded the T.N.C. constructs the packet/s and organises transmission through the station Tx/Rx. It is also a T.N.C. function to handle Ack's and supply re-runs as necessary.

Following the theory we were given a demonstration of a packet radio contact. Two stations in the room had a QSO, followed by a demonstration of one station acting as a repeater, allowing a link to a third station G60QJ. Dave, G60QJ has a mailbox facility which is used to leave messages for other Amateur's. This station had a message on queue for the C.A.R.S. group which Phil listed onto his screen. This was a very effective demonstration enabling all to witness this fast and efficient mode. Another link-up was attempted, but failed, to G1NNB - a mailbox in Witham. This was unsuccessful because G1NNB was continuously busy, proving the popularity of this mode. It was explained that it is possible to leave a message on ones local mailbox for any Amateur countrywide as long as the destination Amateur's local mailbox call was known.

The University of Surrey which runs a mailbox facility also has a regular contact to OSCAR, thus allowing packet mail facilities potentially worldwide. The majority of packet communications is on V.H.F. but H.F. packet is also feasible. H.F. packet uses SSB, but is subject to normal H.F. fading.

The T.N.C.'s that were used were kit built at a price which is about quarter that of a commercial unit. The keyboard and screen necessary could be that of any computer as long as it had the relevant output. In the future it is anticipated that all mailboxes will be equipped with all users calls, allowing the automatic forwarding of messages without the need to know the destination stations local mailbox call. Messages store in the mailbox system until there is a quiet period, typically 3am when transmissions begin in earnest.

A thoroughly enjoyable lecture which was deserved of the applause given at the end.

## REPORT ON SOCIAL EVENT - 5th December 1987

A party of twenty three, including members and their wives assembled at the County Hotel to celebrate the annual social evening.

It was a pleasant affair with lots of happy chat over good food and drink. Ela organised a small raffle for a bit of fun and the ladies did well with the draw, Daphne G8WQZ winning the bottle of sherry and Sally, xyl of G0BDS the box of chocolates.

## MEMBERS NEWS - Ela G6HKM

The Society extends a welcome to two new members who joined us at the last meeting, Harry Heap G5HF and John Dodson, who is working towards the RAE.

## DF NEWS - Future Events

The 1988 season begins with a Snowman Event, weather permitting, on Sunday 17th January. Hunters are requested to assemble at Fordham Heath, ref TL945264 for a 1.20pm start.

## CONTEST NEWS

The HF national Field Day results have been published and the CARS station G4CUT/P were placed 36th in the Open Section.

Congratulations to Mark G6CMS and his team who were 1st in the 10GHz and 2nd in the 24GHz Multi Operation Sections of the May 432MHz-24GHz Contest and to Ela G6HKM who was winner of Zone C, Single Operator Section of the RSGB 144MHz Trophy Contest in September.

## LETTER TO THE EDITOR

Dear Editor, Your article in the December Newsletter "Novice Licence - what is your opinion", has got me and I suspect a few others thinking and brought us a few home-truths.

A similar article appeared in the November issue of "Radio Communication", written by the Secretary of the R.S.G.B. so the subject is obviously one of national concern.

The central issue appears to be that there is no new blood coming into our hobby and questions the reasons for this. From a purely personal point of view, my introduction to Amateur Radio was through the pages of "Practical Wireless" and the relatively simple circuits contained therein, which as a school boy I could understand. Such a wealth of straightforward circuits and ideas now seem to have disappeared - but why? I suspect it is a case of technology having overtaken the capabilities of many.

Again in my case, I once decided to build "Super-Rig", a high power, VFO controlled, multi mode 2 metre transmitter. It slowly occurred to me at the early stages that even if I did finish it, the final unit would never match the specifications of commercial equipment then becoming available (synthesizers were just coming in), whereas a few years earlier, the project would have been very worthwhile.

Early in my SWL days, it was a thrill to tune top band on an old broadcast set and hear people obviously enjoying themselves talking over the air. To be able to talk to others on the air at that time was something available to just a privileged few, there being no CB, Satellites or Packet Radio and to be able to join those few was a real target to aim at. Nowadays, long distance speech communication is taken for granted, and available to everyone, so I think the "Magic" of Amateur Radio has somewhat diminished over the years, your article hits the nail squarely on the head by saying "Todays young are no longer impressed with the ubiquitous Black Box".

I think to a certain degree, Amateurs are their own worst enemies, but only in so far as they are being moulded by the Society in the same way as the rest of the population. In the early fifties, to own a television receiver was a real status symbol, but nowadays to have a colour TV, VCR, Hi-Fi and a car, if not two on the drive is accepted as the norm. Similarly if an amateur decides he wants a new rig, by and large he can get it, plug it in and off he goes on a new band or whatever. He does not have to strive over a hot soldering iron for hours, or cut the wife's housekeeping so that he could afford the P.A. valve as he would have had to do years ago, BUT, and this is the important point, does he have the same sense of satisfaction of putting the modern "black box" on the air as he would have done if he had spent hours coaxing the transmitter into working properly?

Where has the comradeship gone that he would have had in discussing the transmitter with fellow amateurs, and what about his feelings towards other amateurs experiencing the same problems as he did? They are simply not there with todays modern, plug-in, appliance operator.

Co-incidentally, just before your article appeared in the newsletter, I had been looking back at some old Rad Comms of 1974 vintage, about the time I was coming into Amateur Radio, and the difference between those old magazines and todays issues are quite startling. The former magazines are full of advertisements for components and ex-commercial equipment for modification to amateur bands. There are many constructional items and the reader gets the impression that Amateur Radio is very much a "learning by doing" hobby, whereas todays magazines are full of glossy adverts for the latest high-tech equipment and each manufacturer is doing his utmost to increase his share of the consumer market, and the reader gets the impression that Amateur is just another "cheque book" hobby - he who has the most flexible funds gets the most out of the hobby.

There is no doubt that Amateur Radio as a hobby has changed over the years, but I do wonder if the introduction of a "Novice" licence is the right way to encourage younger people into the hobby. If someone is that interested, then the current licencing arrangement will present no problems, but, as the well known saying goes "You can lead a horse to water but you cannot make him drink"! Andrew G4KQE.

Thank you Andrew for taking the time to reply - TIME being the operative word - if only the OFF switch of the dreaded TV was used more often, then many more amateurs, young and old, would have the time for construction! Ed.

## OVERSEAS NEWS

Chelmsford based amateur and former club member Chris Baker G4LDS has written to inform us that he is now working in Salalah, Sultanate of Oman.

While waiting for his A4X call sign to be issued Chris is using the facilities of the local club station A4XCB which has a fine collection of HF rigs and a TH3 aerial at 45 Ft.

Chris is listening for news from Chelmsford stations each Saturday and Sunday on 28.550MHz @ 12.00z, 21.350 @ 12.15z and 14.275MHz @ 12.30z.

## COMMITTEE MEETING

The January Committee Meeting will be held in the Marconi College Residence at 7:30pm on Wednesday, 13th January. You are most welcome to join us.

73 and A VERY HAPPY NEW YEAR from Roy & Ela Martyr, G3PMX & G6HKM

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## MEMBERS ADVERTISEMENTS

### WANTED

Quartz Crystals, HC6U in the 8MHz or 24MHz range to multiply up to the 4 metre band.  
Andrew G4KQE, Tel No. (0376)83094.

### WANTED

John G8DET is looking for a good second-hand FT290R so that he can join in the local activity, especially the 2 metre CARS net.  
Tel No. (0245)414677.