

# CHELMSFORD AMATEUR RADIO SOCIETY

NEWSLETTER No.236

October 1985

**NEXT MEETING - Annual General Meeting and transmitter check.**

As usual every October, it is time for the AGM. After the main part of the programme, a variety of test instruments will be available for members to test any transmitters they wish to bring along, but more of that later.

The AGM will start promptly at 7:30pm in the Marconi College, Arbour Lane, Chelmsford on Tuesday, 1 October 1985.

The Agenda is as follows:-

- Minutes.
- President's Report.
- Secretary's Report.
- Treasurer's Report.
- Membership Secretary's Report.
- Election of Officers for 1985/6.
- Matters Arising from the Minutes.
- Set subscription rate for 1985/6.
- Other Business.

After the main business of the evening is over, a transmitter test session has been organised to give you a chance to see if your rig is performing up to spec....

There will be a spectrum analyser covering from HF to microwave frequencies (18GHz), a Bird Thruline wattmeter, a 50 watt dummy load, a 12V/10A power supply and a Marconi Instruments 2955 Mobile Radio Test Set. This is most suitable for checking out VHF and UHF sets, especially hand-helds! Bring a cable with one of your microphone plugs at one end and a BNC plug at the other, or the microphone itself, to get full benefit from this.

## DATES FOR YOUR DIARY.

- 1 Oct. - CARS AGM and transmitter output check.
- 5 Nov. - Satellite TV: GBMKX.

## LAST MEETING - Lecture by Louis Varney, G5RV - Gwyn G4FKH.

We were honoured by a visit from G5RV who came to talk to us about antenna systems (Aerials and their associated feeders). Louis started off with a demonstration of a transmitter he had built back in the days when he was first licenced, 55 years ago. It was CW only, of course, and still in fine working order. The signal he produced was picked up by a "black box" in the corner of the room, proving the transmission. Following this light-hearted start he moved on to the main topic of the evening - antenna theory.

We were taken through the basic theory of standing waves, and the feeding of single band dipoles. At this point Louis explained where and where not, when and when not, how and how not to install a balun in a system. In particular it was explained that a balun is essentially a single band device. If multi-banding is required on a dipole system, care should be taken when choosing the length of the coaxial cable whether or not open wire feeder is also employed. It was pointed out that the ideal place for an ATU or, as Louis prefers, an ASTU to be positioned is at the bottom of an open wire section, or at the junction if coax only is used. If this is unfeasible, the shack is an acceptable alternative, lucky being the ham with open wire feeders into the shack. Long wires were also discussed and Louis showed the results of an experiment proving that appreciable gain is obtainable only when a relatively high number of wavelengths are employed (5-8). With such a large antenna maximum radiation is in the direction in which the antenna is pointed. A large number of 2-D and 3-D slides were shown of dipole polar diagrams. In this way Louis was able to point out the effects upon radiation patterns caused by the height above ground of an antenna and the effects as the wavelength is varied. To conclude, Louis imparted some history and gave hints on the mechanical construction of antennae. It appears that the name "black box" actually originated from "young Marconi" carrying a black box around during an early demonstration.

It only remains for me to thank Louis and his XYL for their time and to commend his professional approach to the evening. I am sure the pearls of wisdom will all be put to very good use in the coming weeks.

## VISIT TO A NOT-SO-LOCAL RALLY - Andrew, G4KQE.

I was disappointed to miss the Colchester Rally this year, but delighted to report that on the same day, in the middle of my holiday, I visited the Cornish Rally at Redruth in Cornwall.

On our holiday we spent much of the time visiting various attractions, driving from our hotel in Newquay. It was on one such trip, to a large stately home at Trerice, that I decided to stay in the car and chat to the locals on 145MHz FM, while Daphne and the children trooped round the mansion and grounds. I soon discovered that the Cornish terrain does not do anything for VHF propagation and that most QSOs take place via repeaters. As it was a Friday, the repeaters were fairly quiet and I spent a very pleasant hour or so chatting through GB3INC (North Cornwall) on R5. During the conversation I established the exact location of the rally on my Ordnance Survey map, found out the times, and how to get there.

Straight after breakfast on Sunday we set off for Redruth, which is a large town about 15 miles or so from Newquay. My navigator took us straight there and, true to form, it started to rain just as we arrived. We entered the hall of the Technical College by the first door we could see, which turned out to be a side door, but admission money was being collected at the main door! How were we to know? Still, more to spend at the rally...

It was strange to be at a rally so far from home. Firstly, there were no familiar faces. Usually, a lot of time is spent talking to others you know and comparing bargains with other club members, but at Redruth I paid particular attention to the people there but did not see one person I knew. Secondly, the traders... no Bamber, no Eurover, and no Mr What's-his-name selling the same old things at every rally we go to in this part of the country. Instead, all the stands were West Country traders with names I've never heard of. I think the one nearest to here was from Bristol!

The rally was run on the same lines as most, that is a large hall with a stage at one end for the raffle and P.A., and all the traders around the edge of the hall and up the centre. Goodies were similar too, with some stands selling bits and pieces, and others selling complete equipment. One trader was trying to shift Pye Cambridges at £3 a go, or £15 for the lot, but they looked as if they had spent some of their time in a pond so I didn't bother! Everyone seemed to be selling heat-shrink sleeving, so I had some of that. I had to be mindful of the transport problem, as all of us plus suitcases had to fit in the car to come home, so I restricted my purchases to a couple of battery clips and a few LEDs.

The catering facilities at Redruth were superb. Tea and coffee were cheap and there was a good selection of sandwiches and cakes on offer. A feature of our holiday was that we had a very good meal in the evenings (or midday on Sundays) at the hotel. We usually found a café or restaurant for a snack during the day so we decided this time to buy our snack from the rally, eliminating the need to find a restaurant on Sunday as well as helping the Cornish club's funds. At about five minutes to midday, an announcement came over the P.A. that I have never heard at a rally before: that at 12 o'clock Cornish pasties would be on sale at the canteen. Numbers were limited so it would be first come, first served. Needless to say, we were first in the queue! The pasties were excellent, and a bargain at 40p each.

All too soon the time came to leave and set off back to the hotel for dinner. It was still raining. The afternoon was one of the wettest all holiday, but we still had a good day.

#### COMMITTEE MEETING.

The first meeting for the incoming Committee will be in the bar of the Marconi College at 7:30pm on Wednesday, 9 October 1985.

#### CQ DIXIE - Bill, G4JW (Late Report)

Well, the first on-air contact between the Central Georgia club and our Society has taken place on June 30th; at least it would have done if conditions had been better. Unfortunately contact could only be made with N4BHB(Pete) in Georgia; WZ4M(John) and KC4WU(Bill) were on frequency, but could not be heard here.

The Net was reconvened one hour later, at 1730GMT, when conditions were found to have improved. By then only N4BHB was still around, the others had gone about their Sunday morning chores.

My thanks to Ron, G2AGY; Geoff, G3EDM; George, G3GNQ; Roy, G3PMX and the members of the Central Georgia club who supported the net.

I shall be in contact with Bill Atkins with a view to setting up a further contact. Until then both clubs have the opportunity of reading each others' newsletters.

73 from your Secretary,  
Ian, G4BYR.

Harlow 441244 (ex.307) (day)  
(0279) 33049 (any other time)

40 Great Leylands,  
Harlow, CM18 6HR.

#### WANTED.

One Marconi's Wireless Telegraph Company Morse key, P.S.No.213. This key has a black base. Wanted in good condition with or without cover. Fair price paid.  
Gwyn, G4FKH, Chelmsford (0245) 260831

#### FOR SALE.

25" Colour Television Receiver, good condition. Gwyn, G4FKH (as above).

#### FOR SALE

Imperial 'Good Companion 3' Portable (Heavy Duty) electric typewriter, features include variable line space, tabulator, carriage return, half space and correction keys. £80. Ela Martyr, G6HKM, QTHR, or Chelmsford 360545.