

Chelmsford Amateur Radio Society.

NEWSLETTER No. 304

Callsign G0MWT

May 1991

NEXT MEETING - Archaeology in Chelmsford.

This month we are pleased to welcome Mr Patrick Allen to describe in an illustrated talk the scientific study of the remains unearthed from ancient habitation of Chelmsford.

This subject has a wide appeal in the category of general interest, therefore members wives and friends are cordially invited to attend.

The meeting will be held on Tuesday 7th May at the Marconi College, Arbour Lane Chelmsford, starting at 7.30pm.

DATES FOR YOUR DIARY.

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| 7 May | CLUB MEETING - "Archaeology" by Mr. Patrick Allen |
| 1/2 June | HF FIELD DAY - Howletts Farm - Details below. |
| 4 June | CONSTRUCTORS' COMPETITION - Is your project nearly ready? |
| 18 June | VISIT TO HARWICH HAVEN - Afternoon tour for members. |
| 2 July | CLUB MEETING - "Amateur Satellites" by Pat Gowen G3IOR. |

LAST MONTHS MEETING - John G8DET.

To explain the work of the Radio Investigation Service (RIS) and it's makeup John Taylor and his colleague Richard showed us a very upbeat video accompanied with "Starcy and Hutch" type music. Since April 1990 the RA has been operating as an Executive Agency of the DTI. It has about 120 Staff throughout the UK in 5 Regions, Essex being Region 4. This indicated that the role of the RIS has changed considerably from say 10 years ago when the Interference Service was run as an agency by the Post Office (Telephones). It now is only a shadow of the PO Telephone days. Averaging out the available staff time it came to 99 mins per Amateur, per year.

In hindsight, the days of the yearly "Amateur Station Inspection" were generally rather nice even though at the time they may have been sometimes dreaded! They did at least indicate that someone cared.

The RIS concentrate now very much on providing back-up for the "safety of life services" Fire, Police and Ambulance etc. They also carry out site checks at PMRs and ensure the use of the correct aerial, output power etc., 25% failed the inspection. This has been effective in reducing interference to the mutual benefit of all concerned. This effort is to the exclusion of the Amateur even though the new increased Amateur Licence Fees will bring in something around £900,000 per year from 32,288 Class A and 27,336 Class B Amateurs (as at March 1990).

Due to the staffing levels the tasks undertaken have also changed regarding the public. Partly this is due to historic changes. TV transmitters are now all UHF and the signal strengths are really quite high, even in rural areas relay stations provide an in-fill. The RIS require the customer to provide a high signal at the TV Set Aerial plug of 56dB/micro volt???? before they will look into an interference complaint and only then after £21.00 has been paid. This is non-refundable even if the interference is caused by someone else and in breach of the law! If the interference is proved and the addition of a filter would solve the problem then it is fitted for no additional charge. This is to prevent the RIS being used by the radio/TV rental businesses as a cheap first line fault diagnosis service. Previously, if there was no interference but a set fault, the dealer had all the details provided free of charge.

Fluorescent lights, motors and central heating thermostats still provide a base source of interference. The EMC Standards which are thought to be considered for 1992 will require TV and HiFi to be less susceptible to interference and not generate it themselves.

The German DIN standards have always been far tighter than the UK, 1992 may even things out. Any new requirements for Type Approval will only apply to new equipment - this in it's self will take 10 years to have a major effect.

To assist the RIS a multifunction Test Set was brought along and shown working, unfortunately there was not a hand held available to test. John and Richard had their eyes on the black rig on the front bench but this produced £9.17 and a Spanish pesetas - it was the Equipment Fund money box. The test set had a spectrum display, frequency counter, power meter and more devices all in one portable case, it must cost a fortune.

The question of /A was raised and it was stated that this suffix is no longer valid. If you are away from home and are moving or capable of moving then /M is appropriate; if permanent then /P. If on inland waterways then /M (for Mobile not Maritime).

Questions had been requested from the Radio Society beforehand so that the speakers would be prepared for "loaded" questions.

Many excellent Information Sheets were provided covering all Amateur and Interference aspects and giving the address for other sheets to be obtained, if required.

A good interchange of ideas and information which would have been more appropriate if the local Regional RIS Representative could have given it as John and Richard were from Cambridge. Many thanks for their effort.

COMMITTEE MEETING.

The Committee will meet in the Telford Lodge at 7:30pm on Wednesday, 15th May.

WHAT ARE YOU DOING ON THE WEEKEND OF 1ST/2ND JUNE? - Gwyn G4FKH.

It is that time of year once again and NFD is almost upon us. During the year some meetings took place to analyse last years results and to take suggestions, this led to some work on the aerials.

We need volunteers - for the setting up and taking away of the station, the more the merrier. Of course the main reason why we enter this competition is to have fun for a weekend doing something different. It always turns out amusing I can assure you.

Last year the station was ready only 5 minutes before the start of the contest, not really what is needed! What the NFD sub-committee would like to achieve is to have everything ready by 1pm at the latest. To do this we need workers, we have a scheme to do this and appeal to everyone to help with its execution. We need 14/15 people on site at 9am, they will be split into 2 working parties, one headed by Arthur G3KPJ, to put up sky hooks and the other by myself, to erect the Telomast and string the aerials. Putting the station together etc., will be a joint effort. Dick G3WHR will be Station Manager.

If we can achieve this, we will have time in the afternoon for operator equipment and logging familiarisation. There will also be time for a Bar-B-Q etc. (if WX permits). Tea and coffee will be available throughout.

I have put together a preliminary list of ops/loggers which still has some ominous holes, so if you fancy helping on this side let me know.

Directions to the site are included with this Newsletter.

DF NEWS - THE FIRST CHELMSFORD EVENT - Dick G3WHR.

My plane landed at Stanstead at 4.30, just time to get home and have a bit to eat before joining the others at Tiptree for our first Chelmsford event.

Mike Hawkins ran the hidden station so we could not predict the whereabouts of G3WMM/P.

The initial bearing went towards Coggeshall, this is always a difficult direction. I chose the Teys route and obtained a cross on a footpath in a wood. By 8.05 in fading light and regretting that I had left my torch back in the car. However the next transmission indicated that I should move to the edge of the wood. A further transmission indicated "he's not near here" so it would have to be back to the car now three quarters of a mile away. I met Richard and cadged a lift. My footpath bearing was badly out and it took two more transmissions before I convinced myself that G3WMM/P was still some way away. Mike was becoming thirsty and announced half a mile from Greenstead Green to speed up latecomers. I arrived at the correct footpath which was obvious from the number of DF cars parked at the entrance. I hurried along to find everybody plus children clustered around a hedge/ditch, I just made it to Mike before 9pm. What? last! - must be jet lag.

Results:-

1 Philip Cunningham	8.25	6 Roy Emeny	8.58
2 Alan Williams	8.40	7 Richard Witney	8.58
3 Andrew Mead	8.44	8 Dick Brocks	8.59
4 Ian Butson	8.50	9 Peter Graves	Impeded en-route.
5 Peter Larbalestier	8.57		

Future DF events. 3 May Colchester 2. 12 May RSGB Chelmsford/Colchester.
 17 May Chelmsford 2. 31 May Colchester 3.

QSL CARD DESIGN COMPETITION.

Progressive steps have achieved our club callsign and a brand new HF Transceiver (ready for field day), now we need to consider an appropriate QSL card.

We had hoped to obtain sponsorship for producing cards with a design appropriate to the historical significance of G0MWT to Chelmsford but the reaction to our appeal was predictable considering this time of deep recession.

At the last committee meeting our own funding of QSL cards was discussed, we should be able to afford a double sided card. The design of the "picture" side will be opened as a competition for our members to submit their own models for the committee to select and judge at their meeting in the week following the Constructor's Competition.

As well as the honour of a "designed by" logo the winner will receive a £5 prize.

VISIT TO HARWICH HAVEN.

Brian G3CVI has once again negotiated and planned an outing for Club members, this time to the harbour facilities at Harwich.

The visit has been scheduled for Tuesday 18th June at 2pm, this provides the opportunity of viewing the action during normal working hours. The size of the party must be limited to 16 which will be divided into two groups for the tour, which is expected to last about an hour.

At the May club meeting we will make a list of those members wishing to form the party and coordinate the journey which will be by car.....more details at the meeting.

73 from Roy & Ela Martyr, G3PMX & G6HKM

Telephone, Home (0245) 360545
or Office (0245) 353221 Ex.3815

1, High Houses,
Mashbury Road,
Great Waltham,
CM3 1EL.

MEMBERS ADVERTISEMENTS

FOR SALE. YAESU FV-901DM External VFO Unit, mint, boxed with manual. £110.

Gwyn G4FKH QTHR (0245) 260831.

FOR SALE The UHF Mobile sets advertised last month to raise funds for club equipment have been selling like hot cakes, hurry, there are just a few left! Andrew G4KQE, (0376) 83094.

Chelmsford Amateur Radio Society.

SUPPLEMENT TO NEWSLETTER No. 304

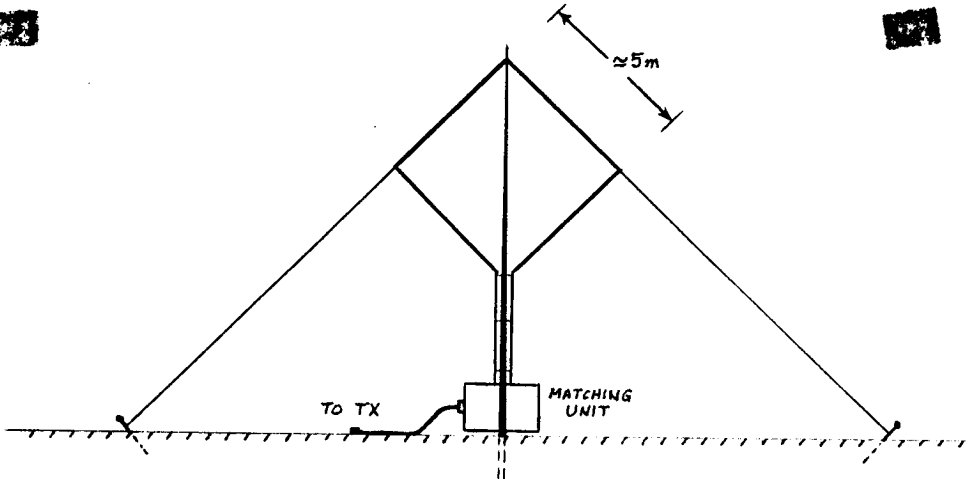
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Our good friend Peter in Backnang has given his permission to publish in our Newsletter the details of an HF Wideband Antenna that he designed for portable operation. Ed.

SMALL PORTABLE ANTENNA FOR 3.5MHz to 30MHz - Peter DK7BP.

The loop is approx: 5m per side, supported by strong nylon cord; loop and tuned feeder are made with 1mm copper wire. The fibre rod mast should be as long as possible, mine is 9m long. The spacing of the tuned feeder is about 5cm. The best would be, to install the matching unit on the bottom corner of the loop and operating without tuned feeders.



MATCHING UNIT.

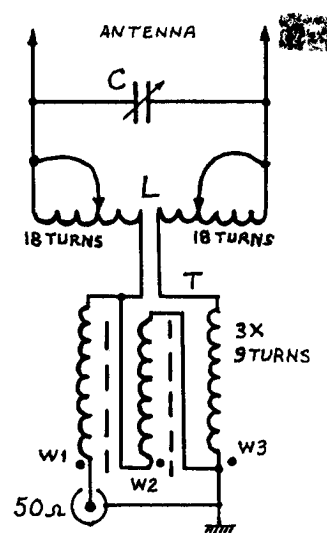
Tuning capacitor C, approx: 120pF, with at least 2mm spacing between rotator and stator plates for 100W RF output.

Coil L, two sections of 18 turns to diameter 13cm, length 16cm, mine is an air coil made of 1mm copper wire.

The shorting cables are soldered to the ends of the coils, the free ends have alligator clips.

The 50 ohm Balanced to Unbalanced Transformer T, has the 9 turn coils wound on a ferrite core 35mm o/d, 22mm i/d, 9mm thick, unknown grade. W1 is the inner conductor of a teflon co-ax RG174, W3 is the co-ax shield, W2 is an additional teflon insulated wire.

This arrangement results in useable frequency range from 1 to 50MHz with swr less than 1.20 in 50 ohm co-ax feeder to the transmitter.



TUNING FOR RESONANCE.

For the chosen frequency move the alligator clips symmetrically about the centre of coil L and tune capacitor C for swr minimum. I used this coil from 3.5 to 30MHz; an improvement would be to use two coils, one as described for 3.5 to 10MHz and the other a smaller diameter coil for 10 to 30MHz, try it if you have the time.

FIELD DAY LOCATION

The site is at NGR TL617018 and is by the kind permission of the owner; access is via the Highwood-Blackmore road, about 3/4 mile from Blackmore.

Turn off the main road at Howletts Hall Farm, go past the farm buildings, turn right at the pond and then 1/4 mile down the track.

