Chelmsford Amateur Radio Society.

NEWSLETTER No.317

Callsign GOMWT

June 1992

NEXT MEETING - Constructors' Competition

One of the annual events that we all enjoy in our Club calendar is the opportunity to hear the description and see the results of the endeavours of members who prefer to construct rather than buy their radio equipment.

Another attraction to the meeting is the element of surprise because no one knows how many entries there will be or the range of objects competing for the honour of winning.

The judges who have kindly agreed to give their services on this occasion are Charles, GOGJS and John, G8DET; who depending on the number of entries will award this years prizes which on the recommendation of the committee have been increased to £10, £7 and £5 for 1st, 2nd and 3rd respectively with the special prize of £5 to any first time winner.

We like this meeting to be as informal as possible, however, competitors should remember two simple rules: -

1. For the benefit of the judges and the subsequent Newsletter report, please provide a short written description of the entry, together with your name and callsign.

2. For the benefit of all, please be prepared to give a short talk on your entry. On past experience, this should be an interesting evening. The meeting will begin at 7.30pm on Tuesday 2nd June, in the Marconi College, Arbour Lane, Chelmsford.

NATIONAL FIELD DAY 1992

Equal headline status is given in this Newsletter to our entry for Field Day.

So far, the planning has been concentrated on improving our chances in achieving a better position in the league table of winners. A new site has been selected and tested for radio propagation, fresh aerials have been prepared and tested; all that is needed now is the support of as many members as possible on the weekend 6th and 7th June.

We still have the generous use of land on Howletts Hall Farm, but compared with the past few years the actual location is about ½ mile south east of our old site, ordnance survey map reference TL623015; this has the added attraction of easier road access via Fryerning (on the A12). PLEASE NOTE: Limited space in this Newsletter will not provide room to reproduce a map of the area. If you are unsure of the new location please ask for directions and see the map on display at the next club meeting.

Regarding the details for 'helping hands' on Saturday 6th June, there are so many unknowns in the layout of tents, aerials, etc, that we shall need as many bodies as we can muster at 8.00am PLEASE! For those who really cannot attend, please face east and pray for fine weather and low wind speed.

SILENT KEY

It is with sadness that we announce the passing of Sir Geoffrey Worthington, CBE, CB, KBE, G4CNB, at the age of 89.

Geoffrey is remembered for his very distinguished and heroic service in the Royal Air Force from 1923 to 1961 for which he was latterly rewarded by his appointment to Air Vice-Marshal.

In retirement he lived in Essex and enjoyed his love of sailing with the Royal Burnham Yacht Club.

We are proud that he was also a member of our Society. A message of sympathy has been sent on behalf of our Club to his family.

THE CLUB LIBRARY SERVICE

Geoff Lovegrove, G7KLV who has recently accepted responsibility for our library has also kindly agreed to be seconded to the Committee.

Geoff is hoping to expand the scope of the library but in the mean time would like to update the loans list . . . THERE ARE STILL SOME BOOKS MISSING!

COMMITTEE MEETING

The June Committee meeting will be held in the Telford Lodge at 7.30pm on Wednesday 10th June, you are welcome to join us.

DATES FOR YOUR DIARY

2 June CLUB MEETING - Constructors' Competition.

6/7 June NATIONAL FIELD DAY - Howletts Hall Farm.

27 June BRENTWOOD INTERNATIONAL RALLY - Held at the Brentwood Centre, Doddinghurst - AR and Computers.

7 July CLUB MEETING - Satellite Weather Pictures.

4 Aug. CLUB MEETING - Details next month.

LAST MONTHS MEETING - Dick, G3WHR

The Test Equipment lecture was delivered with sparkling clarity thanks to Roy's experienced presentation and the radio microphone that he was wearing.

Roy gave a quick list of his accessories for the radio shack - VSWR Meter, Dummy Load, Oscilloscope, etc. He placed the oscilloscope high on his list because it is such a versatile instrument.

Using diagrams and some historic scope manuals Roy showed how the CRT was developed from the simple triode to modern tubes employing post deflection acceleration techniques. A look at the manuals during tea break showed me that the cost of oscilloscopes has also been accelerated. A number of second hand scopes are available at rallies, Roy's tip is to check the illumination in the CRT; scopes are often discarded because of poor brilliance and replacement CRT's may be very expensive or impossible to obtain.

Roy then demonstrated how an oscilloscope can be used to display AF and RF signals and how to interpret the amplitude and frequency scales. >>> More >>>

LAST MONTHS MEETING - (continued)

For higher frequencies, beyond the bandwidth of the Y amplifier, it is possible to access the Y deflection plates directly. If the DC coupled deflection amplifier is isolated by high value resistors, then the internal shift controls will still operate but AC signals can now be coupled in via series capacitors. For single frequency measurements a parallel tuned circuit can be used to increase the sensitivity; Roy showed a 4cm deflection from a Sig: Gen: output of only 1 milliwatt.

Using a homebrew capacitive coupler inserted in the output co-ax of the club rig. Roy was able to show AM, including Trapezoidal Display and SSB using a two tone source (loaned by G2HPF), via an acoustic coupler.

For antenna tuning, Roy introduced a sensitive VSWR Meter designed by DK7SP and explained its use and how it could be calibrated. A handout sheet with all the circuit details was well received.

Roy also mentioned how a quality attenuator could be made using a small box, toggle switches and metal oxide type resistors, values are in the ARRL handbook.

Once again we thank Roy for providing us with an informative, yet entertaining lecture.

THE DUCKS' CONVENTION, ST. JOHN'S AMBULANCE FUN DAY IN HYLANDS PARK - Charles GOGJS

It was billed as a Fun Day but He who controls the elements obviously had a macabre sense of humour on that particular Saturday. The exhibits of a boot sale, international wrestling in a very large marquee, orime prevention, fire brigade, country pursuits (it was just past the 1st of May), hot dog stands, kiddies' bouncers and numerous bric-a-brac sideshows together with the Club Rig, gradually threatened to subside into a sea of mud as the incessant rain continued well into lunchtime.

But to begin at the beginning. I arrived at 8am to find Gwyn already hauling up his worthy tent with his fevered brow being cooled by a relatively light fall of rain and we quickly assembled tables and the FT-747 which was to work into my CAPCO 3000 ATU. We also had on display Dick G3WHR's "Are you sober?" steady hand tester with which we hoped to rake in a few shekels from a generous public. The antenna was an 80 metre dipole designed for multi-band working by the diligent use of 50Ω coax, 300Ω ribbon feeder and the suitable insertion of John The Balun's (GOLSH) "gold brick". It was virtually 1:1 across the bands with a minimum of 80 watts RF output. But this of course was after we had erected the beast.

We decided that the centre point of the aerial would be attached some 35 feet up in the trees and the arms would be tied off as a sloper. I organised a wellbuilt lad whose Dad said "he's good at everything " and sent him up the best of some rather crumby trees. I turned my back for a moment only to hear a crash and a yell as Big Ginge picked himself out of the nettles complaining that the bark was wet and slippery and he limped off to get some first aid from Dad. Gwyn surveyed the scene rather pensively, murmured "I used to be able to climb them things" and before I knew it was ascending the trunk like a monkey going up a pole. The tree was pretty rotten and as Gwyn made his way relentlessly up through the Rain Forest I was showered in pieces of broken branch. As I peered up rather anxiously the inevitable happened - there was a rip from Gwyn's Levis and I had a view of the 'King of CW' I had never seen before but which must be a common sight to the English playing at Cardiff. On returning to terra firma Gwyn was muttering about ruining his jeans, but a glint returned to his eye as John G&DET, pointed out that with the backside torn and a substantial hole in the inner thigh their value was considerably enhanced and if modelled in the King's Road he would undoubtedly get some quite remarkable offers.

By now the taps had really opened and John G&DET. the supreme optimist who had arrived without a raincoat turned into a Sandwich board style man by converting a Sainsbury's plastic bag into a mac. But we kept dry in Gwyn's tent and settled down to tuning up the rig prior to achieving QSOs. We had been supplied with a superbly quiet Honda 650 generator but although we had excellent equipment that tuned copybook style the rig was somewhat deaf and only a few stations were heard. The AF gain control was almost at maximum and nobody wanted to work GXOMWT. One received station was the exception - an LA on 18,070KHz that was 599 plus 10dB, an extraordinary result in the circumstances, but he was QRL and I couldn't attempt a QSO. In desperation and in order to try and form some sort of conclusion I motored back to my QTH in Springfield and gave Gwyn his first QSO by working him on 7MHz - I reported him "a very generous 329" and a cooperative G2 station at Winchester whom I had been working joined in and said GXOMWT was "RST 319 and very difficult to copy". The G2 reported my Springfield QTH (Corsair2/Mag loop) as a "599+" which I reciprocated.

I returned to 'Hylands Marina' to find Alan GOLSH returning from an underwater Hot(?)Dog stand and in the act of wringing out a Big Mac before handing it to John, G8DET. John, ever resourceful, had boiled up some soup on the Calor Gaz stove using water that he had collected from the roof of the crime prevention exhibit which was floating next door (we expect so much from our Chairman). I had brought back from Springfield my Sony 7600-HF receiver which is very sensitive and rigging its aerial around the tent we compared signal strengths from the FT-747. The 7600 was also very deaf, for example we obtained identical results when monitoring 4722KHz, RAF VolMet Station. We concluded that our present Howletts Farm NFD site to be superb compared with Hylands Park and Club members know how we feel about the former.

The organisers called it all off by noon and thankfully it stopped raining for a while as we swiftly took down the aerial, packed up the gear and gave Gwyn's tent to John to dry in his garage. It was a bit tricky driving out of the field through the mud.

The plan then was to establish GOMWT at my Spring-field QTH and after hot baths I was joined by Gwyn and we knocked off 52 QSO's as a gesture towards St. Johns' which means that the 23 good people, who sponsored us on an almost disastrous occasion, will hopefully make their individual donations to enable our total contribution of \$34.32 towards the new ambulance fund. Even the 52 contacts were not easy because an aurora was brewing with the consequent effects to the HF bands. Only eight people put their heads into the tent and that was undoubtedly to get out of the rain.

We felt sad for St. Johns' especially as they could not afford to insure against adverse weather.

Fun Day? Believe it or not we had quite a hilarious time which was undoubtedly due to the positive attitude of the four people who turned up. However, a bout of laughter which I indulged in later, as I recalled a certain pair of jeans, was suddenly interrupted by a steel whiplash across my back - lumbago!.

DF NEWS - Dick, G3WHR

Report on local events, next month. Future Events

5 June Colchester 14 June RSGB Dartford Heath 19 June Chelmsford 5 July RSGB Rippon

73 from Roy & Ela Martyr, G3PMX & G6HKM

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