



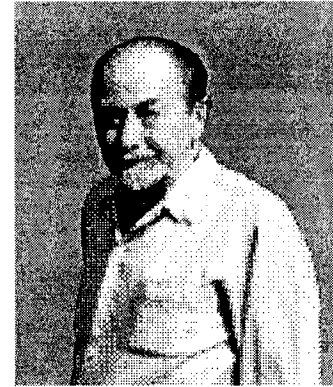
## NEXT MEETING

With great pleasure we announce that Louis Varney, G5RV will return to the Marconi College on Tuesday 1<sup>st</sup> August to describe his latest research on Amateur Radio Antenna Systems. For the introduction to our club meeting Louis has advised us that his talk will be in two parts:-

1. A computer-aided analysis of the G5RV antenna with open-wire feeder, in order to determine the reactive load presented to the essential ASTU on the various HF bands and, in particular, to prevent the unwanted  $1/8\lambda$  effect.

2. A vertical, helically-wound Whip Antenna for 3.5 and 1.8MHz bands.

We can look forward to a most interesting evening, commencing at 7.30pm.



## DATES FOR YOUR DIARY

1 Aug. CLUB MEETING - Aerials - Louis Varney, G5RV.

6 Aug. RSGB WOBURN RALLY - Woburn Abbey, Beds.

5 Sep. CLUB MEETING - to be announced.

9/10 Sep. RSGB HF CONVENTION - Nearby Windsor.

10 Sep. SOUTHEND & DRS RALLY - New Venue!

## LAST MONTHS MEETING - Geoff, G7KLV

Although our last meeting was one of the few "non-radio" evenings it was certainly very topical with the forthcoming Club presence at the first Museum open day, the recent International Marconi Day and the widely publicised return of the original piano to the Writtle hut. I'm afraid it wasn't all part of a grand plan. If ever I have a grand plan it's bound to backfire with a capital B!

It was just a happy coincidence that we were able to welcome our guest speaker Dr. Geoff Bowles, Keeper of the Science and Industry section of the Chelmsford Museum to our July meeting. I had spoken to him about a year ago and he readily agreed to tell us something about the Museum. So, I can justly claim credit for inviting him but not for the brilliant timing of his visit to the Club!

With a carefully selected range of slides our guest gave a brief outline of Chelmsford's industrial history and some of the Museum projects underway.

Chelmsford always had agricultural and associated service and processing trades. In 1765 a canal to the sea at Maldon was proposed but it was not until thirty years later that the Chelmer and Blackwater Navigation was completed. Its outlet to the sea was altered to Heybridge, Maldon having given it the cold shoulder. It carried coal, iron and timber. With the new outlet to the sea Chelmsford grew apace, supporting a growing range of agriculture based industries including milling and farming machinery. Christy's were active in this sphere from 1850. The Darby walking digger for light soil was an ingenious idea to prevent compacting light soils but was not a commercial success. Horse drawn cultivators were made in large quantities by a number of local firms.

The railway came in 1843 but was not an immediate stimulus to local industry.

It was towards the end of the 19<sup>th</sup> century that the modern high-tech industries started to outstrip the farming based industries. Cromptons started in 1878 outgrowing their original site in 1888. This was the first major industry not directly connected with agriculture. Marconi came to the town in 1899, moving to the new larger site in 1912. Hoffmann's were marketing their first ball bearings in 1901.

The Museum engine house is built over an early mill and the site was used by the Borough as a water works. Following re-organisation of the water industry the works was taken over by the Essex Water Co.

They transferred operations elsewhere and the site reverted to the Borough who initiated the industrial museum project.

Geoff then illustrated some of the Museum activities including the restoration of the barge Susan, the Writtle hut and the successful Science for Schools weeks with their hands-on exhibits.

His last slide was one of a respected Club member with a view through the window of the Writtle hut and the Tim Hunkin figures in the background. A reminder of the present and the past!

Gentle reader, don't be misled by our guest's kindly, benign manner. Kindly and benign he certainly is but he is also an utterly ruthless slave driver (as his loyal band of Museum Friends will readily testify). We thought we were going to have an easy evening but it wasn't to be. He had brought along a collection of ten objects and we had to try and guess what they were. We also found that he's crafty with it, as he wasn't sure what some of the things were himself! However our members came to the rescue and would you believe, instantly recognised a flash point liquid tester and opinions on some other electronic artifacts. Luckily we didn't have to stand up and reveal our score but I happen to know there was at least one nine out of ten on the front row.

Judging by the lively audience reaction and exchange of information it is felt that the evening was a success.

Our thanks to Geoff Bowles for an interesting and informative insight into Chelmsford's industrial history and to the Museum activities.

## CHAIRMAN'S GARDEN PARTY - John, G8DET

Sunday 9<sup>th</sup> July had some very hot sun with a welcomed north easterly cooling breeze to greet the 20 plus amateurs and friends who attended the Radio Garden Party at the 340ft ASL Danbury QTH of G8DET. Visibility was impaired by the heat haze (on a clear night the flashing light on top of Canary Wharf and Queen Elizabeth Bridge at Dartford can be seen). Sun shades were erected and deck chairs positioned to gain advantage of what little shade there was in the garden - the lawn being the colour of straw due to the heat and drought.

The Club HF rig was attached to a 30ft + 30ft multiband wire dipole aerial kindly provided by Pat, GØSBQ. This was hung at 35ft between conveniently placed trees in the garden earlier in the week when Pat and Harry G2HPF made contacts with France, Spain and Italy. A 432Mhz, 14 element long yagi at 15ft faced south the whole day as no one brought a rig to power it!. An 8 element 2 metre beam at 21ft was used by the portable station of Roy G3PMX and Ela G6HKM with 25 watts of SSB. The "armstrong" method of rotation being used, guided by a strip of sticky tape on the pole as the aerial was hidden from the operator by leaves on the copper beech tree to which it was attached.

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## CHAIRMANS GARDEN PARTY - continued

All bands were very quiet - propagation was poor and the good weather had driven many persons to the beach!. Contacts were made with French stations commemorating VE day, on 2 metres.

Operators on the HF bands included Harry G2HPF, Pat G0SBQ and John G3VMJ (who first came as the result of a contact from the 1992 Garden Party).

Cheese and salmon sandwiches were provided, coffee, chocolate and ginger cakes, sausage rolls and white wine were donated and finished off with strawberry gâteau and fresh raspberries from the garden - to keep cool lots of tea, iced drinks and Cornish Ice cream. Many thanks to all who came, to my Wife Pauline and Sarah (having just completed her Law Degree) who were on the go all day looking after everyone.

*On behalf of all those attending, Roy and Ela would like to thank John, Pauline and family for a most enjoyable afternoon.*

## GARDEN PARTY AERIAL TESTS - 3 DAYS LATER

As a VHF amateur I am very aware of feeder losses which affect radiated power and receiver signal strength. Before we took Pat's aerial down I swapped his 20+ yard length for a short length of RG58U (as Harry G2HPF forecast) it made no difference 2-28MHz. However, replacing the coaxial vertical feed section with some commercial ribbon cable allowed an interfering signal from my special 53KHz fluorescent light unit in the house to be heard; also tuning across the bands with the feeder disconnected from the dipole brought in plenty of signals. With the last few metres of coaxial cable's screen disconnected the levels all went up. We concluded that it was advantageous to use coaxial cable if there was any inference/interfering signals nearby since the open wire feeder becomes part of the aerial system.

## NEW QSL CARD FOR OUR SOCIETY

Sponsored by GEC-Marconi, we now have an appropriate QSL Card to confirm radio contacts made with the Club Station transmitter when used at special events and the Tuesday evening club nets.

The design on the front of the card is illustrated below; the reverse side has been left blank to accommodate a computer generated label specific to the occasion when the station is in use.

Club members who have joined the 28.325MHz net can expect to receive a card in due course, confirming the first QSO with the station.

Our grateful thanks have been expressed to Peter Turrall, MBE, for arranging this publicity of mutual benefit.

### CHELMSFORD AMATEUR RADIO SOCIETY

☐ GØMWT  
☐ GXØMWT



G. MARCONI 1874 - 1937

CHELMSFORD is the County town of ESSEX. It was here in 1897 The Wireless Telegraph and Signal Company was established. The name was changed in 1900 to Marconi's Wireless Telegraph Company Limited. Today, GEC-Marconi continues to produce Radio Communication, radar, satellite, Marine and other equipment for world-wide use.

## QUICK FIX - John, G3KRZ

I needed to switch a light on and off independently from four locations. Problem - the "upstairs/downstairs" principle effectively only works with two switches. Solution - use an impulse relay (which toggles between on and off on a pulse) and as many momentary switches as required. RS Components stocks a suitable relay: momentary switches (identical to regular light switches but spring loaded to 'off') are available to order.

## THE MUSEUM OPEN DAY - Geoff, G7KLV

Since writing the account of last months meeting the Museum Open Day has come and gone. The Club had been invited to man a 'phone station and demonstrate Morse. Charles G0GJS had accepted on the Club's behalf but it turned out later that he would be on holiday at the time.

Brian G3CVI, as Technical Manager, and Pat G0SBQ as Station Manager had installed the antenna on the previous Tuesday. The antenna was built by Brian, being a doublet of overall length 66ft. strung approx. east-west, tuned on all bands using his ASTU (G5RV please note!). He used an open-wire feeder with specially selected spacers made of top quality drinking straws giving a very low loss. He agrees that open wire feeder picks up slightly more noise but claims that this is more than offset by the low loss (G8DET please note!). The halyards, previously installed for the second IMD antenna, had been left in position, having been erected by Arthur of bow and arrow fame.

Pat had assembled a team of operators who kept the Club rig on air from 9-30am until closing time at 5-30pm. When not actually operating the team were kept busy talking to the constant stream of interested visitors.

Pat did grand work with the Museum's Marconi CR150, finding suitable signals to feed Tony G3YTG's Morse reader. This evoked much interest from the visitors including one ATC member who had persevered to achieve 6 wpm and a lady who had been trained at Bletchley Park and who, in her prime, could read 28 wpm. Another lady immediately recognised the letter F, as this was allocated to her boss on the Crompton paging system of yesteryear.

Propagation conditions were not ideal and Brian noted thunder and deep fading. No exotic DX was worked but a wide range of European stations on 80, 40, 20 and 15m provided plenty of interest for the spectators. During the afternoon peak there were forty people in the hut at one time, I'm told.

Our thanks must go to Geoff G3EDM, John G3VMJ, Alan G0LSH and Chris G0IPU for operating station GXØMWT in quite warm and humid conditions.

One of the many other attractions was provided by Tony G3YTG who had his own star billing "Next Flight at ...". Although the wind was not ideal he managed to get the replica Marconi kite up a number of times during the day, having previously carried out a few technical modifications to make it air-worthy.

Ralph G3NAA and I were on hand all day employed as traffic controllers, museum attendants and general dogs bodies, both being Friends of the Museum. All are welcome in return for a subscription of £7 pa!

The event was generously sponsored by Ridleys, of brewing fame, with attendance by the Mayor and Mayoress and Dr. Michael Clark MP for Rochford, Chairman of the Museum Patrons together with invited guests from Town and Gown and local industrialists.

The event was well patronised by an estimated 1300 visitors (including some Club members). This was a very comfortable number, effectively determined by the available parking spaces.

Judging by the comments I heard, the event was a great success. Many people asked when it would be open again but one could only look vague and mumble, perhaps next year!

## COMMITTEE MEETING

The next Committee meeting will be held at 7.30pm on Wednesday 9<sup>th</sup> August, in Telford Lodge, you are welcome to join us.

73 from Roy & Ela Martyr,  
G3PMX & G6HKM

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