



This month we announce two major events in the Society's calendar which deserve equal billing.

CONSTRUCTORS' COMPETITION

On Tuesday 1st June we meet at the Marconi College, Arbour Lane, to see the results of members labours in the design and construction of various items for this years entries in the competition.

Paying particular attention will be John, G8DET and Chris, G0IPU who have volunteered their services as judges and depending on the number of entries will award the prizes of £10, £7 and £5 to the chosen 1st, 2nd and 3rd winners; as in previous years there is also a prize of £5 for any first time winner.

We like the meeting to be as informal as possible, however, competitors should observe two rules:-

1. For the benefit of the judges and the subsequent news 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.

The meeting will begin at 7.30 p.m. and we can look forward to an enjoyable and informative evening.

DATES FOR YOUR DIARY

- 30 May EAST SUFFOLK WIRELESS REVIVAL - Ipswich.
- 1 June CLUB MEETING - Constructors' Competition.
- 5/6 June HF NATIONAL FIELD DAY - Howletts Hall Farm.
- 6 July CLUB MEETING - Coax Feed - Louis Varney, G5RV.
- 25 July COLCHESTER RADIO & COMPUTER RALLY.
- 3 Aug. CLUB MEETING - Gliding - Brian, G3CVI.
- 15 Aug. SOUTHEND & D.A.R.S. RALLY.
- 5 Sept. DF (RSGB) - Chelmsford/Colchester.
- 7 Sept. CLUB MEETING - Satellites - Pat Gowen, G3IOR.

DX ON VHF - Ela G6HKM

On the 12th May we had E's most of the day on the 50MHz band, stations were active from European Mediterranean countries also CN8ST in Morocco.

The best DX of the day, as far as I was concerned, was on 144MHz, when I worked SV3KH in KM07RQ at 18.13gmt for my best ever DX, this was followed a few minutes later with a contact with IK7UXY in JN90DC.

If you are not familiar with the locator system KM07RQ is in southern Greece, the distance 2269KMs. JN90DC is in the heel of Italy, at 1887KMs.

Sporadic E was early on this band, I have never heard it in May before. This was the first time in 11 years of operating that I had heard Greece on 144MHz so it was quite a day, unfortunately it all happened just before a Committee Meeting, so I had to dash away but was well satisfied with my catch.

COMMITTEE MEETING

The June Committee meeting will be held in the Telford Lodge at 7.45 p.m. on Wednesday 9th June, you are welcome to join us.

NATIONAL FIELD DAY 1993

At 8.00 a.m. on Saturday 5th June we gather together at Howletts Hall Farm to assemble the radio station G0MWT/P which at 4.00 p.m. (15.00 g.m.t.) will go "on air" to represent the CW operating talents of the Chelmsford Amateur Radio Society.

Please note that the site is the same as last year, which is located a little further along the track from the site used in former years. The actual spot on the map is TL623015 and although access looks attractive from the Fryerning end of the track, our host farmer has given a word of caution that the natives can become hostile if their executive lane is invaded by strangers. This Newsletter does not have sufficient space for a detailed map of the area, so if you are unsure of the actual location please ask for directions and see the map at the June Club Meeting.

PLEASE SUPPORT THIS EVENT, particularly at the beginning when lots of hands are necessary to erect the mast and aerial systems.

MEMBERS NEWS - Ela G6HKM

We are pleased to hear that Colin Page has now received his Callsign, so look out for G0TRM on the airwaves, don't forget the Club 28MHz net on Tuesday evenings Colin.

We missed the presence of our Treasurer, Brian, G3CVI at the May Meeting. For those who do not already know, Brian was involved in an unfortunate gliding accident, however, we are pleased to report that he is making a steady recovery and we all trust that his flying machine does not run out of lift again!

LAST MONTHS MEETING - Harry, G2HPF

Again we had the pleasure of having Tony Gilbey, G4YTG, on the rostrum giving another of his excellent talks. This was entitled "Aerials for the Maritime Services". Having been up in the top ranks of BTI this was really something straight from the horses mouth.

Tony started off by giving a resumé of the services provide by BTI in this field, which include coastal radio on HF and VHF, long range Maritime and Aeronautical HF and Satellite links.

HF Maritime use the 4,6,8,12,17,22,& 25MHz bands, with several frequencies in each band. One is the calling frequency; this has periodic identification, so a far distant ships operator can ascertain which band is giving suitable propagation, he can then call and be told what frequency to QSY to for his traffic.

BTI had developed their own aerial system in the late 60's which consisted of six masts ranging from 60 to 187 feet in height, supporting three tier quadrant dipoles and a horizontal triple dipole for the 4 & 6 MHz bands. The feed impedance is 600 ohms and field switches, fed with logic from the TX, are used to select the required aerial for the frequency in use.

Having produced an aerial system which was omnidirectional and with a gain of 8-10dB in the vertical pattern, manufacturers were invited to tender for the supply of a similar system.

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(LAST MONTHS MEETING - continued.)

TCI(USA) offered their TCI-540 Antenna. This comprised four 120ft masts on a 200ft square, supporting two inverted coaxial pyramids. The 200ft base sides of the upper pyramid are hung from the top of the towers, in fact are used as guys and the apex of the lower pyramid hangs in the centre at nearly ground level. The feed impedance is 115 ohms.

Granger (UK division of USA Company) made a computer study of what they called the Spiracone and had such confidence that they offered an installed prototype free of charge. This aerial uses only one 240ft mast and the array is an inverted spiral wire cone with its apex at 30ft. The four start wire spirals outwards and upwards to the halfway point on the mast stays. The feed at the apex is 300 ohms.

Both these aerials were compared with a vertical aerial close by and indicated that the gain figures quoted were correct.

It is very hard to make gain measurements using the ionosphere, which is constantly changing, but comparison tests are quite easy. One way is to use amateur band signals, where location and distance are given by the callsign identification.

In commercial service, the name of the station may or may not be the location of the operator but the transmit and receiving sites may be hundreds of miles away from him.

Thanks Tony for another interesting talk and if anyone cannot understand my descriptions of the aerials, you should have been at the meeting to see the visual aids !!

Researching places to visit for "a Nice day out", Harry, G5HF has followed the progress in the foundation of a Wireless Museum in Essex. After numerous enquiries, Harry has received some copies of a tourist information hand-out, from which the following is an extract. Thank you Harry.

THE NATIONAL VINTAGE WIRELESS MUSEUM

The High Lighthouse, an imposing landmark situated at the entrance to the old town of HARWICH is a Grade II Listed Building and was built in 1818 to serve as one of the two leading lights for the port. The 90ft nine sided tower was built near to the site of the earlier light over the town gate under the supervision of the famous English engineer John Rennie, later responsible for London Bridge.

The building has stood empty for some time, the lease has now been taken by the National Vintage Wireless and Television Trust.

The museum previously housed at Dedham, will trace the History of Broadcasting from Marconi and Baird's early experiments to the present day developments in Satellite communication. The Museum will be set out as an informative and educational exhibition showing much of the Museum's large collection of vintage wireless and television receivers and utilising the latest audio/visual interpretation to create a lively and unique atmosphere.

It is hoped to open the Museum to the general public some time in July, on show will be some of the equipment used by these early pioneers, demonstrating the first wireless transmissions and mechanical scan television. The building will also house the Museum's Sound and Vision Archive.

The Exhibition will be set out chronologically in a series of 'Room Sets' on each floor of the Lighthouse, each with a selection of vintage receivers in a contemporary setting with the decor of each period. Audio/Visual interpretation, utilising period film and taped radio broadcasts from the Museum's Archives, will be provided in addition to the more traditional photographic and text information. In this way the importance of Radio and Television in the social development of the 20th Century can be demonstrated, from the early news and light entertainment programmes of the Twenties and Thirties through to the electronic news gathering and video technology of the present. The last section of the Museum will feature a comprehensive display of the developments in satellite radio and television and the future of broadcasting.

It is hoped that the relocation of the Museum to Harwich will provide a valuable asset to the tourism of the Tendering Peninsular and will enable the living history of British Broadcasting to be presented to the general public in the form of an informative and educational Museum for the generations to come.

By kind permission of the Mid-Sussex Amateur Radio Society we are able to reproduce in a two part serial form, this interesting article by Louis Varney, G5RV.

THE REAL MORSE CODE

In the Century Magazine of April 1886 published by the Century Company, New York, there appeared a most interesting article entitled "The American Inventors of the Telegraph", sub-headed "With special references to the services of Alfred Vail". The article contains a great deal of fascinating information about Samuel Finlay Breese Morse, who had already achieved a reputation as an historical painter and had been appointed Professor of the "Literature of the Arts of Design" by the University of New York in 1835.

In 1832 Samuel Morse, on a voyage from Le Havre to New York in the vessel "Sulley" had conceived and drawn in his sketch book an apparatus for transmitting and recording signals at a distance by electro-magnetism. Until Morse became one of the Faculty of the University, he had been prevented by the nomadic life imposed upon him as a painter and by his straitened circumstances, from making an effort, beyond the molding and casting of a set of leaden type, to develop his ideas into practice. This, according to his original scheme, was to automatically open and close an electric circuit and thereby transmit certain signals in the form of pulses of direct current to which an arbitrary numerical signification was to be given, over a pair of wires.

At this time, Alfred Vail, a son a Judge Stephen Vail who owned the Speedwell Ironworks in New Jersey, was a student at the University after having served his apprenticeship in his fathers ironworks, where he had acquired considerable skill in the design and construction of various mechanical devices. During the latter portion of the time that Alfred Vail had been a student at the University, the chair of Chemistry was occupied by Professor Leonard D. Gale. In January 1837, Professor Morse who, in the privacy of his apartments, had constructed a crude but nevertheless operative model exemplifying the principle of the recording telegraph which he had devised aboard the "Sully", took Professor Gale into his confidence and exhibited his invention to him.

Professor Gale, whose knowledge and acquirements were of a character which enabled him to appreciate the ingenuity of the inventor and to forecast the possible success of the invention, became at once deeply interested in the plans of his colleague and thenceforth the assistance which he rendered Morse in his experiments was of the utmost importance and value.

On Saturday, September 2, 1837 Professor Daubeny of Oxford University, then visiting the United States was invited, with others, to witness the operation of the electro-magnetic telegraph at the University of New York. The apparatus had been set up with a circuit of copper wire, stretched back and forth along the walls of a large room. Among the spectators was Alfred Vail, who then saw the apparatus for the first time. Notwithstanding the crude and imperfect character of the machinery in which the invention was embodied, the results were such as to demonstrate conclusively the possibility of recording signals at a considerable distance by the instantaneous action of electricity.

(continued next month.)

MEMBERS ADVERTISEMENT

I am searching for an old Pocket Watch, the larger the better, in any condition as long as it's not too rusty. It is wanted just for some small screws to repair a Railway Guards Watch. Having volunteered to restore this for a friend, I find that it has been badly treated and some parts are missing! Can anyone assist? Roy, G3PMX.

73 from Roy & Ela Martyr, G3PMX & G6HKM

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