

Chelmsford Amateur Radio Society.

NEWSLETTER No. 255

April 1987

NEXT MEETING - Short Waves and Beams.

This month we are pleased to welcome for a return visit Mr. J.S. Wood, to give the second lecture in his series on the History of Radio Communication.

Stanley recently retired from Marconi's and in recognition of his services to our heritage has been appointed Honorary Consultant to the Marconi Archives,

The meeting will commence at 7.30pm on Tuesday 7th April at the Marconi College, Arbour Lane, Chelmsford.

DATES FOR YOUR DIARY

- 7 April - Short Waves and Beams - Mr. J.S. Wood.
- 26 April - RSGB VHF Convention, Sandown Park.
- 5 May - How to work VHF-DX by Meteor Scatter - Ken Willis G8VR.
- 19 May - Visit to Bradwell Power Station.
- 2 June - Constructors' Competition.

LAST MONTHS MEETING - Kite Antennas - Martin G4T00

The February meeting featured a lecture on Kite Antennas given by Mr. Tony Gilbey, G4YT6. Tony who is Chairman of the Essex Kite Group and who will shortly be returning to his former department, appointed as head of British Telecom's Maritime Aerials Group, has been flying kites for many years and combines his interest in kites and amateur radio by lifting various antennas high into the wild blue yonder.

Tony began the evening's lecture with a talk on how a kite flies requiring a lifting surface at an angle to the wind and stability provided by line tension, illustrating this using an Indian Fighting Kite whose design dates back over two thousand years.

Many eminent people have been involved with kites over the years including Alexander Graham Bell, Bleriot, Cody, Benjamin Franklin, Marconi and the Wright brothers. The uses to which their kites were put included man-lifting, weather investigation and highly dangerous experiments in electricity by Benjamin Franklin using the kite line as a conductor and a handy thundercloud as a generator!

Next Tony described some suitable and not so suitable kites for lifting antennas. The Box Kite has a tendency to drop very quickly when the wind slackens although the Cody War Kite, which resembles an early biplane will glide down. The more modern Rozallo kite is an entirely flexible kite held in shape by its bridle lines and this design was developed into the Delta Kite which is the usual choice for lifting antennas because of its good glide characteristics.

The Jalbert parafoil kite is also a flexible kite which has an aerofoil shape inflated by scoops in its leading edge and had excellent lifting qualities, flying at a high angle. This kite has the disadvantages of high cost if purchased and being very difficult to make, there being a strong likelihood of leaving the sewing machine inside. In its larger form it is used as a parachute.

Following the tea break, Tony described how he flies an antenna, usually a G5RV although Windom and Vertical half wave antennas are also used. In order to allow the kite to climb or descend in varying wind conditions without letting the antennas fall to the ground, the G5RV antenna is attached to the kite line by tape at least one hundred feet from the lowest end of the kite line which is tethered to a tree or post. The feeder is also tethered a considerable distance downwind and the kite flies well above the antenna/feeder junction thus forming a triangle between the feeder, ground and kite line and keeping this taut.

The vertical antenna is a half wave, end fed from one side of a quarter wave length of 300 ohm ribbon and then 50 ohm coax to the rig. The length of these in inches is $5540/\text{Freq (MHz)}$ for the half wave and $2420/\text{Freq (MHz)}$ for the ribbon feeder.

The Windom antenna has 90 and 44 feet legs and is fed with 300 ohm ribbon feeder into a 4:1 ferrite balun.

Tony, who flies these antennas on the first Sunday in May and October at Biggleswade Aerodrome using the callsign GB4EKG, where he has clearance to fly to 3000 feet, says that the first few QSO's draw some clever comments and that these are followed by an enormous pile-up! This proves that the low ground effect and low radiation angle attainable by these antennas can give spectacular results.

To round off the evening, Tony gave the following safety rules:-

- Don't fly near power lines.
- Don't fly above 200 feet.
- Don't fly in a storm.
- Don't fly within 5 miles on an airfield.
- Do use an earth stake on all equipment.

Many thanks are given to Tony for a well presented and very interesting lecture.

JACKPOT RAFFLE

At the March meeting the draw was made for the Jackpot Raffle, the lucky winner of the choice bottle of wine was Les G4CUT.

CLUB NETS

Remember that for up-to-date information on the activities of the society between meetings join in the Tuesday club nets.

The 2 Metre FM Net begins at 7.45pm, on 145.225MHz (or nearby if this channel is already occupied) and the 10 Metre SSB Net on 28.325MHz starting at 8.30pm.

VISIT TO BRADWELL POWER STATION

Taking advantage of the C.E.G.B. offer for conducted tours of nuclear power stations, our chairman has made a reservation for a party from CARS to visit Bradwell on the evening of Tuesday 19th May, at 7.00pm. Members are requested to make their own travel arrangements and to offer a lift to those without wheels. If you are interested in joining this extra activity arranged by the Society, please give your name to the Hon. Sec. Andrew, G4KQE at the next meeting or by phone.

REPEATER NEWS - Dave G8UUD.

The 2m South Anglia Repeater G83PD presently located at Martlesham Heath, Nr.Ipswich has given satisfactory service since it was originally installed in 1975. However, in recent months it has suffered interference from other equipment installed on the British Telecoms Research Station site. Therefore in an effort to improve matters the South Anglia Repeater Group propose to move G83PD to a new site possibly co-sited with the 70cms repeater G83IH on roof of Ipswich Hospital.

In order to estimate feasibility of the new site, field tests will be conducted on Sunday May 10th 1987. Though Chelmsford is not actually in the coverage area of G83PD any reports of signals will be very much appreciated by the South Anglia Repeater Group.

The exact frequency will be advised nearer the date, however it will possibly be the same 145.675MHz (R3) with G83PD switched off while tests are conducted from the new site.

Finally, if it is decided to move the site it could be up to a year before approval is granted by the DTI.

CONSTRUCTORS' COMPETITION

How are you getting on with your entry?, only eight weeks to go for one of the valuable cash prizes at the June meeting!

MEMBERS NEWS

Congratulations to C.Shelton who is now G0GJS after going straight for an 'A' licence.

MORSE TUTORS

One of the clubs two DATONG Morse Tutors has developed an intermittent fault and has been returned to the makers for repair. Meanwhile the other one is available for loan to members. When not in use, they can be collected at the meetings, or contact Ela G6HKM.

CLUB LIBRARY

Brian, G3CVI, has some additions this month, see the notice board at the meeting.

If any member would like to contribute a book to the collection, Brian will be glad to add it to the list.

COMMITTEE MEETING

The April Committee Meeting will be held in the Marconi College Residence at 7:30pm on Wednesday, 15th April. You are most welcome to join us.

73 from Roy & Ela, G3PMX & G6HKM

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

1, High Houses,
Mashbury Road,
Great Waltham,
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MEMBERS ADVERTISEMENTS

FOR SALE

Computer Equipment (Property of the late G3CUH).

ACORN 'ELECTRON' with 'PLUS-1' and 'PLUS-3' Expansion Units. These incorporate one 3" Disc-Drive and interfaces for Centronics Printer/Joystick/Plug-in 'ROMPACKS'/External Disc-Drives also Bell and Howell Cassette Recorder and 2 'ROM-ADAPTORS' (for 'PLUS-1') Software includes 'VIEW' (ROMPACK), 'VIEWSHEET' (ROMPACK), and 'DATABASE' (DISC), with 'MINI-OFFICE-2' and others on Cassette. There is also a selection of Technical and Programming Books, £180.

SINCLAIR 'SPECTRUM' 48K with 'ALPHACOM 32' Printer (3" wide paper) and Bell and Howell Cassette Recorder. 25 tapes including Amateur Radio, Games, Machine-Code, Database, 'FORTH', Ed-Assem, Wordproc, Tape copiers. Various Technical/Programming Books, £80.

'Job-Lot' of Three ZX81's + Two 16K 'RAMPACKS' + Cassette Recorder + a few Cassettes and Books, £50.

Another Unused 'ALPHACOM 32' Printer, £20.

OKI 'MICROLINE 80' Printer (80 column, Centronics interface), £100.

All prices are 'Negotiable', bearing in mind that I am trying to be fair to BOTH sides!

Arthur G3KPJ (Chelmsford 460147).

WANTED

To borrow for short time only, 'HAM RADIO TO-DAY' September and October 1986.

Brian G3CVI, QTHR.

WANTED

Would anyone lend or hire out a 2m mobile rig for two weeks in June.

Brian G3CVI, QTHR.

WANTED

To borrow 'RSGB T&R BULLETINS' prior to August 1938 for research into D.F. contests.

Ian Butson G4HKC, QTHR. Tel. 0206-860724.