



NEXT MEETING

In this age of digital technology it would seem that the last bastion of linear circuits that use analogue amplification, namely the communication receiver, is about to fall.

For our Club Meeting on Tuesday 3rd May, we have invited Richard Eassom of the Marconi Company to describe in detail the development of the Digital H.F. Receiver, which will be our introduction to the new specifications that we must become accustomed to in future assessment of receiver performance.

We are privileged to have this talk arranged by Richard and feel sure that members will enjoy the evening. The meeting opens at 7.30pm, in the Marconi College, Arbour Lane, Chelmsford.

DATES FOR YOUR DIARY

- 3 May CLUB MEETING - Digital H.F. Receivers - R. Eassom.
- 10 May C.A.R.S. FIELD DAY PLANNING at QTH of GØGJS.
- 29 May EAST SUFFOLK WIRELESS REVIVAL - Ipswich.
- 4/5 June NATIONAL HF FIELD DAY - Howletts Hall Farm.
- 7 June CLUB MEETING - Constructors' Competition.

NATIONAL FIELD DAY 1994

The analysis of the signal strength tests at the proposed alternative site at Tiptree have shown that we will be well advised to continue operating at Howletts Hall Farm.

Consideration has also been given to the aerials used in past years and the amount of effort required to erect them, so this year we will change to a multi-band dipole, which is much easier to handle and for which we already have volunteers to construct and test.

For personal reasons, not connected with Field Day, two of our major participants will not be able to assist this year, so we are appealing for members to take their places and keep Chelmsford in the running for a good result in the contest.

If you would like to join in the fun of this event, a 'get together' has been arranged at the QTH of Charles, GØGJS on Tuesday 10th May at 7.30pm. Please call Charles on Chelmsford 256654 if you would like to attend.

DF NEWS-1 Events arranged for 1994 - Dick, G3WHR

13 May	Colchester	
22 May	RSGB Qualifying Event	Slade
27 May	Chelmsford	
3 June	Colchester	
12 June	RSGB Qualifying Event	Rippon
24 June	Chelmsford	
3 July	RSGB Qualifying Event	Salisbury
15 July	Colchester	
24 July	RSGB Qualifying Event	Manchester
29 July	Colchester	
14 Aug	RSGB Qualifying Event	Banbury
19 Aug	Chelmsford	
4 Sept	RSGB Qualifying Event	Torbay
9 Sept	Colchester	
16 Sept	Chelmsford	
25 Sept	RSGB National Final	
16 Oct	Mid-Essex Trophy	
11 Nov	Colchester	

For details of RSGB events - See Rad Com:

Local events use OS map 168 and start at 7.30pm.

Chelmsford events start from Tiptree Heath.

Colchester events start from Fordham Heath.

For further details please see me at one of our Tuesday meetings.

SILENT KEY

Members will be saddened to learn that Denis Whitbread, G4VGS passed away very suddenly on 9th April. We are grateful to his son for providing the information for this obituary.

Born in 1922 and brought up in Leyton in the east end of London; Denis started work at 14 as a Post Office messenger boy.

During WW2 he joined the Royal Signals as a radio operator and served in Persia and Italy, it was here that his love of radio started. Towards the end of war he was stationed near Newcastle-upon-Tyne where he married his wife Lavinia. After the war they returned to Leyton and had a son Hugh (G1MOS).

Hobbies at this time were electronics (he built a TV from surplus radar parts), The British Legion (secretary) and model radio controlled boats (chairman of the Walthamstow Marine Club).

In the early 60's the family moved from Leyton to Billericay and enjoyed more hobbies such as caravanning, photography, listening to music, navigation, playing cards and ballroom dancing.

His work at this time was the administration of the connection licences for private telephone companies to the Post Office system.

While on holiday in Greece in 1977 he slipped a disc and was on sick leave from work for over a year. Two years later he took early retirement due to his back which was still weak.

With much spare time on his hands he bought a lathe and set up a small workshop where he made a petrol engine and 2/3 of a steam locomotive. His back was now getting better and his hobby costing more so he applied for the position of Technician at the Billericay Mayflower school; he worked with the staff and pupils on small electronic projects and maintained equipment such as lathes, drills and the tools used by the technology department.

When CB was licensed, pupils at the school started to use the sets so Denis bought one to join in, this re-triggered his love for radio and in early 1983 he became G4VGS. This enabled him to contact many people and re-establish links with old pals from the Royal Signals, in particular Stan Mercer (G2DPY) and Jim Harris (G2ATZ) with contacts in morse every Sunday morning.

With the exception of video, Denis was involved with all aspects of amateur radio, particularly QRP and morse, and he became a collector of Morse keys.

Seven years ago Denis retired from full time work at the school and became part time.

In 1988 he became a member of our Society and his regular participation in the morning '21 Net' was appreciated by all local amateurs. His cheery and pleasant disposition will be greatly missed by us all.

COMMITTEE MEETING

The May Committee meeting will be held at 7.30pm, Wednesday 11th May, in Telford Lodge, you are welcome to join us.

LAST MONTHS MEETING - Report by Harry, G2HPF

Yet another talk by Marconi Historian, Stan Wood, following on in his series about the development of Radar before and during WW2.

In 1935 Watson Watt first demonstrated Radar to the Admiralty. By 1938 search radar had progressed to a power of 15-20 Kilowatts, using silica valves but only the larger battleships were equipped with it.

The main problem was the sheer physical size of the Atlantic. Fighter, Bomber and Coastal command were all clamouring for more aircraft. What aircraft coastal command had, viz Ansons and Catalinas, only had a limited flying range, hence the German U-Boats had a vast area of the Atlantic to roam in and lay in wait for the Allied convoys. Even if the convoy had escorts with radar the U-Boats could surface in the middle of a convoy and play havoc with their torpedoes, still undetected from Radar.

So only a small percentage of detection was made using 'Asdic' under water sounders by the escort vessels. In 1941/42 the ratio of merchant ships sunk to submarines sunk was about 100/1. In 1943 Liberator B24 aircraft based in Newfoundland began to fill in the gap, and by using Air Surface Vessel Radar (ASV) helped pin-point some of the submarines. By 1944, replacement ships, built in the USA, were being launched faster than the overall losses.

ASV Radar from an aircraft was only good in daylight hours although some aircraft were fitted with searchlights that illuminated the target if detected by Radar.

Another innovation was to fix small flight decks on the larger merchant ships, to enable a Swordfish aircraft to be launched if required, but with not much hope of returning!

So you can see how near Donetz had us to being beaten in the battle of the Atlantic and how much we owe the men of the Royal Navy, Merchant Service and Coastal Command who gave their lives to win the battle.

Thank you Stan for the talk, it was so interesting I forgot to make notes of some of your points, but at least I kept awake!

DF NEWS-2 The Snowman Event - Dick, G3WHR

The Snowman took place on Sunday, January 30th. Five teams set out from the green at Long Melford in search of the two hidden stations. The start bearings were unusual in that both stations were in nearly the same direction towards the South East.

Those who chose to find G4TEB/P soon converged on the old railway track near Hadleigh, 18km from the start, where Peter Larbalestier had hidden the transmitter at the top of a very steep sided cutting.

The second station was provided by Roy Emeny G4JAC/P, who had hidden in woodland near Bentley, some 26km from the start, and close to the lower right corner of the map.

I chose to find Roy first and obtained a good cross bearing; however, as I drove to where I thought Roy was hidden I passed Mike's car parked at the end of another footpath. I thought that the station was nearer the opposite end of the wood and so continued further. Once out of the car I ran down a footpath and found an aerial. My joy was short lived - it was a dummy, the bearing went through the wood back towards where I had seen Mike's car. The undergrowth was pretty thick and necessitated several detours before I came to a clear area. Still no sign of aerial wire and I was becoming uneasy at being a long way from a footpath - the natives are not always friendly. At this point I decided that I was in the wrong wood and returned to the car. I drove back to the other footpath, no sign of Mike's car. I made a second foray into the wood and eventually came to the other side of the clearing. The next transmission pointed straight across to my first wood, where I found Roy snug in a small tent.

I returned to the car and set out for Peter, I hadn't gone more than 1km when I met several DF cars coming in the opposite direction. The journey back to Hadleigh seemed to take ages. Peter was giving me some encouragement by providing long transmissions. When I arrived, the station promptly closed down - clearly I was the last to find him that afternoon.

I stayed to help recover the aerial and then suffered the wrath of the landowner for being two steps beyond the boundary fence - it just wasn't my day.

Afterwards, competitors were kindly invited to a Bring-a-Bite tea at Mike and Pat Hawkins house in Great Cornard.

Results

	Tx A	Tx B
1 Mike Hawkins	2.52	2.14
2 Philip Cunningham	2.29	3.22
3 Andrew Mead	2.29	3.33
4 Dick Brocks	3.41	3.02
5 Peter Graves	2.52	3.44

THE LAW ACCORDING TO MURPHY - Andrew, G4KQE

A few weeks ago, Phil Cunningham, Dick Brocks and myself were invited by Frank Howe, G3FLJ to the Helena Romana school in Colchester to give a presentation about DF to the Novices class and then to the R.A.E. class.

The Novices class started at 7pm with Dick talking about radio wave propagation and how, with the aid of a broadcast receiver, bearings could be taken using "nulls".

I did the second part of the presentation, demonstrating the controls of a DF Set and describing their function.

Phillip continued by explaining how DF contests are organised, both at local and national level.

As part of the preparation for the evening, we had primed Paul at Brightlingsea to stand by on Top Band for a series of test transmissions when requested via a 2 metre link. That way, we aimed to show both classes, DF in action and to give them "hands on" experience.

Phil had prepared a map with the first bearing to Paul from our usual start at Tiptree Heath, and theoretically, the bearing taken from Colchester should cross Brightlingsea. Each student was to be given a turn at taking and plotting a bearing, with a prize to the person whose cross was nearest to Paul.

After Phil's talk, groups of Novices went outdoors to receive tuition in how to take a bearing. I had arranged a headphone splitter on my set so that I could hear exactly what the student could hear, and was able to describe to them what to achieve.

The first session with the Novices went off perfectly, a dozen or so bearings were plotted and a winner declared. That took us to about 8pm and time to go to the R.A.E. class.

The class of 30 students had already listened to a lecture on propagation, so our presentation carried on rather nicely. Once again Dick demonstrated taking a bearing, using the null; I described the set, and showed them the construction of one that I am in the process of building, emphasising the Golden Rule "if a set is working satisfactorily, then leave it well alone", in other words, if it ain't busted, don't fix it!

Phil did his bit on DF Contests, and then we proceeded outdoors for the second live demonstration.

My group of eight students gathered round and I handed the headphones to one of them, put my phones on and told him what to expect. I switched on the set and heard.....NOTHING but audio amplifier noise! I just could not believe it. The set had performed perfectly just a few minutes earlier on the internal loudspeaker in the classroom. The students were sympathetic and I heard several comments of Murphy's Law, and how these things sometimes happen. Murphy's Law had well and truly struck!

There was nothing for it but to return to the classroom and continue, describing the manufacture of PCB's as used in the DF Sets, etc.

Some students went off to watch the others taking bearings with Dick and Phil's sets. After a while, I decided to break the Golden Rule, and take the back off the set, after all, it was busted! I had a poke around inside, and all of a sudden the set burst into life. Either the main I.C. was loose or the pins had slightly oxidised, but whatever, the group were pleased, so I quickly screwed the back on and we resumed outside. Luckily Paul was still on 1950KHz, so we were able to take a bearing, then Murphy struck again...

Paul thought we had finished so he stopped transmitting! A quick dash to the car, a shout on two metres, and we were in business again.

Despite the hangups, I think that both groups appreciated our presentations, we certainly enjoyed giving them.

Prospective Radio Amateurs have received an insight into one aspect of our fascinating and varied hobby.

MEMBERS NEWS - Ela G6HKM

This month we welcome a new lady member, Joan Thomas, G0RLI.

Kenneth Treherne was the lucky winner of the Jackpot raffle drawn at last months meeting, his prize was the RSGB Amateur Radio Callbook and information directory, 1994 Edition.



The Constructors' Competition 7th June

73 from Roy & Ela Martyr,
G3PMX & G6HKM

☎ (0245)360545

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