

# Chelmsford Amateur Radio Society.

NEWSLETTER No. 312

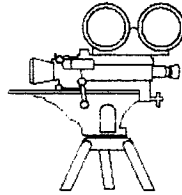
Callsign GOMWT

January 1992

## NEXT MEETING - The Video/Film Show

For the start of our new year we will present a selection of Video Films and slides of general interest.

We also hope to sell off the remaining items that have been donated to raise funds towards the purchase of Club Equipment.



PLEASE NOTE DATE is the 7th JANUARY.

The meeting will begin at 7.30pm in the Marconi College, Arbour Lane, Chelmsford.

## DATES FOR YOUR DIARY

- 7 Jan. CLUB MEETING - The Annual Video/Film Show.
- 26 Jan. SNOWMAN DF HUNT - Contact Dick, G3WHR.
- 2 Feb. SOUTH ESSEX A.R.S. RALLY - Canvey Island.
- 4 Feb. CLUB MEETING - First Aid for Radio Operators.
- 3 Mar. CLUB MEETING - Marine Electronics - G8ADX.

## THE CHRISTMAS SOCIAL - E1a G6HKM

The weather played it's usual trick with us, THICK FOG, but unlike last year it did not clear for the homeward journey, as far as we were concerned it was not quite so foggy for the return home. There should have been 25 guests but unfortunately 6 did not make it, not wishing to risk the tricky driving conditions, our condolences to our absent friends, better luck next year.

The evening was very pleasant, a nice atmosphere, tables decorated with Christmas posies and lighted candles, crackers etc. The food was good and plentiful, a good choice of starters, and deserts, plus a choice of 2 wines, ending with coffee and mint chocolates, not forgetting the large serving of turkey and all the trimmings.

I organised the raffle, which included several donated prizes, our grateful thanks to the donors, the winners were Harry, G5HF, Harry's wife Pippa, Andrew, G4KQE (I have your prize Andrew you left it behind), Murray, G6JYB and myself (no fiddling!).

A big THANK YOU to Harry, G2HPF who organised the evening.

## MORE ABOUT THE BIRD

The response to our questionnaire regarding the purchase of further elements has been rather poor!

Only one reply was received, this suggested elements to cover the 2 metre band for hand-helds and low power mobiles. This matter was discussed in committee and it was proposed to purchase a 25 watt element which on the expanded meter scale will conveniently display power levels down to 1 watt.

We publish the chart again this month just in case it promotes any further thoughts.

Freq: MHz	5W	10W	25W	50W	100W	250W	500W	1KW
2-30	-	-	-	*	Yes	*	*	*
50-125	*	*	*	*	*	*	*	*
100-250	*	*	Yes	*	*	*	*	*
400-1000	*	*	*	*	*	*	*	*

The meter is not in use at present, bookings for further use should be addressed to Roy, G3PMX, who will draw up a list of names and dates, bearing in mind that priority must be given to any applications to the preparation of 1992 Field-Day and verification of the performance of our FT-747-DX Transceiver.

## COMMITTEE MEETING

The January Committee meeting will be held in the Telford Lodge at 7.30pm on Wednesday 15th January, you are welcome to join us.

## LAST MONTHS MEETING - Dick G3WHR

The meeting began with the presentation of the Chelmsford DF Trophy. We were pleased to welcome Philip Cunningham and his daughter Tabytha to receive the trophy.

Our Chairman then introduced Stan Wood for his illustrated talk "Find, Fix and Strike", the early days of Radar.

The fact that radio waves could be reflected from a surface was demonstrated by Hertz in 1886 but he made no practical use of this discovery. The earliest patent for a radar was granted to Christian Hulsmeyer in 1904 for his Telemobilescope. Little remains of the apparatus, but a study of his patent application shows a startling resemblance to modern equipment. Astonishingly, despite a successful demonstration to the public and press, all this innovation failed to find a market.

It required the invention of powered flight and the development of the heavy bomber to provide the funding for radar research and development.

In Britain, radar came into being when A.P.Rowe, assistant to the Directorate of Research at the Air Ministry, discovered in 1934 that the existing sound mirrors erected on Romney Marshes were virtually useless for early warning purposes. His report resulted in the setting up of a committee for the Scientific Study of Air Defence chaired by Sir Henry Tizard which met on 28 Jan 1935.

A practical demonstration was authorised, and on 26 Feb Watson-Watt used the BBC empire service transmitter at Daventry and a receiver coupled to a CRT, to show how the signal reflected from a Heyford bomber could be detected for a range up to 8 miles.

The success of the Daventry Experiment led to the establishment of a research station at Orfordness and later expansion to Bawdsey Manor near Felixtowe. In March 1936 a 240ft tower enabled them to detect an aircraft at 75 miles.

Further developments produced the Chain Home early warning system operating on 12m. The transmitters were connected to aerials strung between three 240ft towers. This produced a 'floodlit' area stretching for 120 miles with a beamwidth of 120 degrees. The receivers used separate aerials supported by wooden masts. Five stations were established at Dover, Canewdon, Bawdsey, Gt. Bromley, and Dunkirk. During the period of the phony war additional stations extended the radar coverage along the South and East coastline with a Northern station to cover Scapa Flow.

However, the success of the Chain Home system in the Battle of Britain was not solely due to technology but also to the information processing carried out in the Filter Rooms; here ambiguous or misleading data was screened out before the plots were presented to fighter controllers.

Stan had also brought along some valves from his collection, so we were able to see some of the British and German radar valves from this period.

The meeting concluded with a vote of thanks to Stan for yet another interesting and informative talk.

## DF NEWS - Dick G3WHR

### The Mid-Essex Trophy

Once again we made use of the Bury St Edmunds map, with the start at Great Green which is about dead centre. Six teams took part, including Andy Collett - with his arm in plaster following a fall when playing badminton.

This time both bearings were southerly, passing to either side of Sudbury. I chose to find the A station G4PQY/P first (its a brave team that starts with G3WMM/P). My bearing passed close to Clare village with its country park, but at 2pm the cross was further West. I investigated the old railway track but there wasn't any cover. A further transmission took me to a footpath, uninteresting on the map - but much more interesting with a car parked nearby. After an uphill run I found a small copse with an aerial wire and lots of climbable trees (popular with Alan). Careful examination of the aerial led me 50m along a hedge to find the transmitter + Alan concealed in a ditch.

The downhill return to my car was much easier - now to find Mike. A bearing taken en-route took me to Arger Fen near Bures. Here I found a wood full of people playing Dungeons and Dragons - and taking it very seriously. Unspoken thoughts from role players and DF hunters; what ARE you doing, and why are you dressed like THAT. I guessed that Mike would not be near the road, and was soon joined by Peter and Roy in bush-beating. The 4pm transmission led us to the correct bush and to the TX. By coincidence the role players were also drawn to the same area; so while we were finding Mike in one side of the bush, there was a great commotion - shouts and a simulated battle going on just the other side. Also it was getting dark. We stood and watched while Tabytha beat her dad to finding the TX.

Afterwards we were guests of Pat and Mike Hawkins for our bring-a-bite tea, this was of a very high standard. The results showed a very close finish, requiring the operators watches to be compared - they were within 5 seconds.

Our thanks to Alan and Mike for operating the stations and to Pat for the start and for hosting our tea.

### Results

	TxA	TxB
1 Andrew Mead	4.04	2.52
2 Dick Brocks	2.45	4.05
3 Roy Emeny	2.46	4.06
4 Peter Larbalestier	2.29	4.07
5 Andy Collett	3.24	4.27
6 Philip Cunningham	----	4.19

### The Chelmsford Trophy

This is awarded to the team with the best overall performance in Chelmsford events (its best 4 out of 5 - but nobody scored on the final event). This year 11 teams scored points, however despite my and others best efforts the runaway winner was Philip Cunningham from COLCHESTER. Congratulations Philip, the cup is yours for another year.

### Higher Placings

1 Philip Cunningham	27
2 Dick Brocks	15
3 Mike Hawkins	14
4 Peter Graves	10
5 Alan Williams	6
= Andy Collett	6

### Future Events - The Snowman

The Snowman will take place on Sunday 26 January 1992. For details of the start contact me nearer the event.

## FUTURE MEETINGS

Our Secretary, Gwyn, has tried without success to arrange a talk and demonstration on Satellite Weather Information. Although there are a number of companies in this market, non of them are willing to display their wares to our society.

If any member has knowledge and equipment for this interesting form of communication and is willing to provide a talk on the subject, please contact Gwyn or any member of the committee.

### MONTH ON THE AIR - E1a G6HKM

There has not been a great deal of dx on 2M, 70 and 23CMS, but during the evening of 2nd December two well known Swiss amateurs were out portable, working as a pair, HB9MIN was 5-9+ on 70cms and HB9AMH was 5-6 on 23cms, I received 5-3/5 with QSB on 23cms, I have only 5W at the antenna, unfortunately no other activity.

Apart from the odd CW heard, 6M has been dead, I worked TI2HL and YN1CC on the 23rd November then nothing until the 16th December when the band surprised us all with a very good opening to the States and Canada, the band was unbelievably crowded for about an hour working into the east coast of the States and the Nova Scotia area of Canada.

I monitor 28.885MHz all day long in the house, this is the world wide co-ordination frequency for 6M, you get first hand news of all the activities, when I hear stations in the States reporting they can hear UK beacons I know it's time to go to the shack and keep a close ear on 6M.

73 from Roy & Ela Martyr, G3PMX & G6HKM

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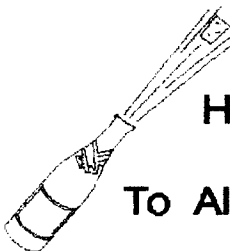
## MEMBERS ADVERTISEMENTS

**FOR SALE** Bargain of the century - Computer System comprising:-

ACORN BBC model-B Computer fitted with ROM/RAM expansion board which includes word processor WordWide Plus and WordEase, ROM utilities for Disk, Basic and system editing, RAM for printer buffer or Solidisk ROM's.  
ACORN 6502 Second Processor, for extended memory.  
CUMANA Dual Disk Drive, 40/80 Track Disk, double side.  
MICROVITEC 14" RGB Colour Monitor (metal case).  
TRACKMASTER Adjustable Monitor Stand.  
ACORN model ALF03 Cassette Data Recorder.  
MARCONI model RB2 Tracker Ball (for BBC model-B).  
MFI Computer Desk (Teak), fitted with customed shelves for all units and cluster of eight 13A power sockets.  
Accessories include many interesting programs on disc and tape, books, magazines, etc. etc.  
Major units in original boxes.....The lot, £350  
Enquiries to Roy, G3PMX.

**FOR SALE** YAESU FT757GX Mk1 H.F. Transceiver and General Coverage Receiver, complete with lambic paddle key, microphone, operation & technical service manual, together with FC700 Matching Manual Antenna Tuner.

All in excellent condition £650 o.n.o.  
Enquiries to Phil, GOELM, Tel: 051-424-2466.



Happy New Year

To All Our Readers