

Committee

Chairman: John Rollason G3WCO

Secretary: Barry West G8NMP

Ordinary Members: Dick Brocks G3WHR, Dave Elwell G8CVI, Bob Purbrick G4JDH and Trevor Stockill G4GPQ

Treasurer (acting): Ian Hart G8IVC

Newsletter Editor: Mike Jones G8MJJ

Repeaters

GB3ER VHF Repeater located at Danbury, near Chelmsford. Operates on channel RB10 (434.850 MHz input, 433.25 MHz output); its wide coverage includes much of Essex.

GB3EL Located at Havering, one of four VHF repeaters in the London area which came into use in December 1979. Operates on channel R0 (145.000 MHz input, 145.600 MHz output) and serves East London and parts of Essex; coverage to the east however is restricted by high ground

GB3DA VHF repeater co-sited with GB3ER at Danbury, using channel R5 (145.125 MHz input, 145.725 MHz output). Coverage (to mobiles) extends to North Kent, Brentwood, Harlow and Colchester.

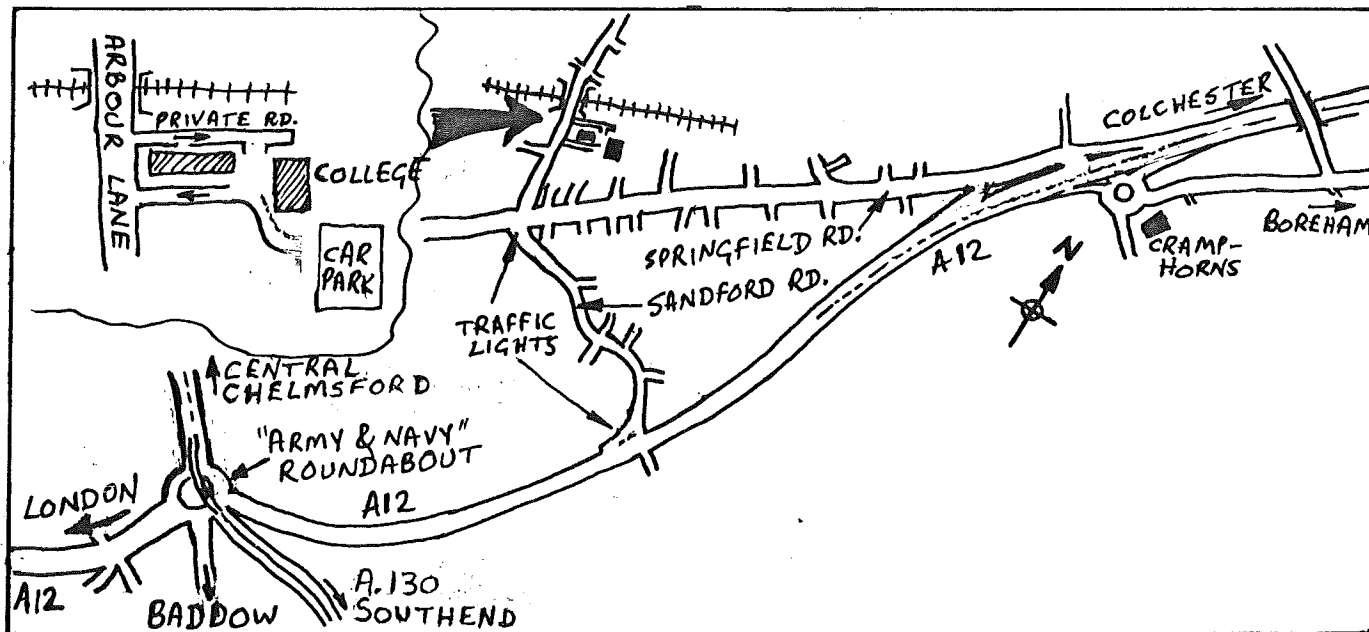
Notice of AGM

The 1981 Annual General Meeting of the Essex Repeater Group will be held on Tuesday 21st July at 8.00 pm, at Marconi College, Arbour Lane, Chelmsford (see map). Access to the College is via a private road off Arbour Lane, and there is a car-park behind the main building. Please do not park in the access roads, which are narrow and must be kept clear in case of fire etc.

Agenda

1. Approval of the Minutes of the 1980 AGM (included with this newsletter)
2. Chairman's Report
3. Treasurer's Report
4. Election of Officers
5. Fixing of Membership Subscription
6. Election of auditors
7. Any other business.

Nominations for the committee may be made in writing to the Secretary or at the meeting.



Wanted.... one Treasurer

John G8NCC moved to Northampton at the end of 1980, and the Committee co-opted Ian G8IVC to take over the Treasurer's duties temporarily. However, Ian does not wish to stand for the post this year, so if anyone feels able to take on this straightforward but important job, he or she would be most welcome to volunteer.

"International VHF-FM Guide"

Members may be interested in the new edition of this book, which contains maps and details of UK and foreign repeaters. It costs £1.50 + 25p post from: J Baldwin G3UHK, 41 Castle Drive, Maidenhead, Berks,

Minutes of the 1980 AGM

The 1980 Annual General Meeting was held on February 14th 1980 at Good Easter Village Hall.

1. Approval of the 1979 Minutes.

It was proposed by G4JDH and seconded by G8CVI that the minutes be accepted! The motion was carried unanimously.

2. Chairman's Report

70 cm! GB3ER Mk 2 was now operational and Mk 1 was to be overhauled by G3WHR.

23 cm! The Home Office still refused to licence our proposed parallel transmission of GB3ER's output at 1296 MHz, as they said it "would promote crossband working".

2 metres! Our licence application for GB3DA at Danbury was with the RSGB (5/79). The antennas had been erected on site the previous weekend and engineering of the electronics was well ahead. Messrs Waters and Stanton had donated FDK transmit and receive sections for use in a 2m repeater! our thanks to them.

GB3EL (East London) was a technical disaster. It had been put together in a hurry to meet the RSGB's request that all four London repeaters should come on together on December 5th 1979, but the receiver had suffered badly from lack of sensitivity. It was removed after Christmas and the transmitter output stages were rebuilt; it appeared better, but problems recurred and it was again removed. It was not clear why it worked on the bench but not on site - possibly PMR interference. Investigation would continue. The repeater being built by ERG members in the Havering area was progressing well, and would eventually replace the GB3EL hardware, which would be needed for GB3DA.

3. Treasurer's Report

Copies of the accounts (audited by G4ELM) were distributed. There was about £100 cash in hand, but much of this would be needed to finance the new repeaters. A subscription of £2 was suggested.

4. Election of Officers

Chairman! John G3WCO (prop. G8RIQ, sec. G8MJJ) was re-elected unopposed.

Treasurer! John G8NCC (prop. G8MJJ, sec. G3AJS) was re-elected unopposed.

Secretary! Bill G4CUE would be moving away from Essex, and so could not continue as Secretary! Barry G8NMP (prop. G8IVC, sec. G8NMO) was elected unopposed.

G3AJS suggested that the rest of the committee (G3WHR, G8MJJ G8CVI and G8IVC) be re-elected, and this was agreed unanimously. Two additional members G4JDH (prop. G3XTX, sec. G8MJJ) and G4GPQ (prop. G4JDH, sec. G3XTX) were elected to represent the interests of the Havering 'end'.

5. Fixing of 1980 Membership Subscription

After some discussion, it was proposed that the sub. should be £1.50 or £2.00. G4ELM suggested that additional funds might be raised by appeal to local clubs, and that we might gain members by representation at local Mobile Rallies. On a vote, the 1980 sub. was fixed at £2.00 by a majority of 18-5.

6. Election of Auditor

G4ELM again offered his services to audit the accounts. Acceptance was proposed by G8MJJ and seconded by G8GYK! the motion was carried unanimously. G4ELM was thanked for his services in auditing the 1980 accounts.

7. Any Other Business

G4ELM proposed a vote of thanks to Bill G4CUE for his work as Secretary. This was carried 'by acclamation'.

G3KPJ suggested that an information sheet on the Group should be produced as an aid to gathering new members. This was agreed.

G3PMX asked whether callsigns could be reduced on GB3ER. There was general agreement, and a new system would be considered.

This concluded the formal business, and the Chairman closed the meeting at 9.10 pm.

The Year's Activities

GB3DA

Possibly the most notable thing that happened this year was the licencing and commissioning of the Danbury VHF repeater GB3DA. The licence was granted in September 1980, by which time the antenna - 4 stacked folded dipoles - was already installed. The electronics had been temporarily installed at GB3EL, and was removed, refurbished and re-called during September. The transmitter and receiver were based on Storno CQM 713 boards, with logic implemented by an 8048-based microcomputer made by G4CUE and programmed by G8IVC.

The cavity duplexer was a 'cheap' design using copper-clad fibreglass board, made by G3WCO/G3WHR to a design published in QST; the stability performance was unfortunately rather poor, tending to drift off-tune.

GB3DA was installed on 2nd October. There were initial problems with water in the antenna phasing-harness, and after several attempts to cure this fault, Ken G3FHG at Hockley came to the rescue with the offer of a collinear antenna which was duly installed on 4th October.

In this form, GB3DA performed adequately for some months. Meanwhile, construction started of a new 2m box based on FDK tx/rx sections donated by Messrs Waters and Stanton. The logic for this was designed and made by Peter G8VCE, and some 'proper' brass cavities plus a ferrite circulator provided the tx/rx isolation. The whole thing was put together at Mike (G8MJJ)'s workshop and went into service as GB3DA in March 1981, the old box being kept as a spare.

The access logic of 'DA requires a 400 ms, 1750 ± 20 Hz tone at >1.5 kHz deviation, PLUS 400 ms of 1.5 kHz deviation speech signal to 'wake it up'. Given this input, it responds with a 'K' and subsequent access is carrier-only. You only get a 'K' if the 1.5 kHz minimum deviation is detected during your transmission. Excessive deviation (>7 kHz) during your over causes a piercing 'bleep' when you drop carrier - or you might drop out of the receiver altogether (in which case you get the bleep immediately). There is a 2 min 40 sec time-out, reset on a 'K' (or the gap after a quiet transmission). On time-out, talk-through is suppressed and callsigns are sent every 10 seconds. Tone re-access is possible after two such callsigns; otherwise the machine shuts down after 16 callsigns and waits for no-carrier followed by a valid tone access.

GB3EL

It had been hoped that a new repeater being made by the Havering members would be ready by the time the original hardware was wanted for GB3DA. The replacement machine was to be based on an IC240 donated by Thanet Electronics. In the event, the new box wasn't ready, but it was nonetheless decided to move the old repeater to 'DA as planned. At the time of writing the new GB3EL is finished and is undergoing tests prior to installation at the licenced site.

GB3ER

The old faithful UHF machine, sadly less populated since the advent of 'DA, has given good service through the year. The original ('Mk I') box was refurbished in June/July 1980, the receiver being realigned and the transmit section PA being redesigned. At the same time the logic was re-hashed, giving a 5 minute time-out amongst other changes. This was re-installed and performed well until recently, when a local oscillator fault caused rx intermittency. At the time of writing, it has been replaced by the Mk 2 repeater pending repair by G3WHR.

Membership

A 'hand-out' sheet on the activities of the Group was produced and distributed via local Clubs; during the year, visits have been made to the Basildon Marconi and the Southend Clubs. Quite a few people have joined during the year, and membership was about 70 at the last count.

And finally....

...a few reminders!

- please leave gaps between 'overs'; the 'K' is there so that brief (or emergency) messages may be passed
- repeaters are designed for MOBILES; if fixed stations use them, they should use low power and beams, to avoid causing interference
- if you should suffer deliberate interference from 'illegitimate' users, try to ignore it - acknowledgement only encourages them!

Well, that's all for now - see you at the A.G.M.



Barry West G8NMP (Hon. Sec.)

ESSEX REPEATER GROUP
c/o 107 London Road, Rayleigh, Essex.

U.K. 2-METRE REPEATERS

- Working
- ◌ Licenced
- ⊖ Planned

