

1997 ERG AGM

The ERG AGM in October provided a good opportunity to take stock of the progress and efforts that had been made since losing the old Danbury Ridge site in Nov-1996 and the successful move to the new sites and restart of operations in Summer 1997. At the meeting the revamped ERG publicity board illustrated much of the refurbished equipment. - also visible if you tour the gallery on ERG's new web site.

A relatively quiet and short meeting saw the previous committee re-elected unchanged. The meeting was also addressed by our recently appointed RMC zonal rep Carlos Eavis G0AKI on the topical subject of repeater abuse. Subscription rates remain unchanged at £8/year

Chairman: Mike Wheaton G4ZPE
Hon. Secretary: Dick Merrell G4GUJ
Hon. Treasurer: Chrissy Merrell G8OIV

Ordinary Committee Members

Jan Swanwick G7UVP
Murray Niman G6JYB
Simon Wilton G7HCD
Clive Ward G1EUC
Jim Mahoney G6FCL
Steve Emmett G7RGG
Brian Lewis-Hill G1EOV

Subsequently, Steve G7RGG and Jim G6FCL have resigned due to heavy commitments. We thank them for all their efforts.



Our Treasurer, Chrissy Merrell at Harlow Rally. She always welcomes Subs & Donations !

ERG COMMUNICATION CHANNELS

Secretary: Richard Merrell G4GUJ e-mail rmerrell@iee.org

Packet Radio: ERG@GB7COS

Internet Website: <http://www.swsystem.demon.co.uk/erg>

Frequency Bands:-

GB3DA 145.125 MHz Input, 145.725MHz Output Channel R5 (RV58)

GB3ER 434.675MHz Input, 433.075MHz Output Channel RB3 (RU246)

GB3CMS Microwave Beacon 10.36896 GHz (keeper - Clive Ward G1EUC)



Novice 2E0APH pictured on site with Mike G4ZPE our Chairman as he received a presentation to mark his success at being the runner-up for the young amateur of the year

12.5 KHZ A REMINDER !

As mentioned in detail in the ERG Spring-97 newsletter and re-stated at the ERG AGM, both the voice repeaters will have their deviation reduced to comply with the new 12.5kHz channel spacing rules at the start of 1998. All users are urged to adjust their equipment as soon as possible. In particular you must get your Tx deviation reduced.

ESSEX REPEATER GROUP VOICE REPEATERS

Steve

G7RGG

The Essex Repeater Group currently run two voice repeaters which are co-located, GB3DA on 2metres and GB3ER on 70cm.

Both repeaters have been around for some years, but in November 1996 the group had the misfortune to loose their site, which meant both repeaters going off the air for a considerable period. The time was not wasted as it enabled the group to carry out some much needed technical work on the equipment.

GB3DA is a Tait T198 transceiver set to Channel R5 (RV58). Although dated it has given good service. It operates through a six cavity Telewave diplexer enabling both transmit and receive from a single Procomm 3dB Colinear antenna.

GB3ER is also a Tait unit - a T196 model transceiver set for channel RB3 (RU246). This was not always the case but a frequency move several years ago was forced due to interference to the MOLD system. More recently the injection crystal was changed so that the required frequency was closer to the centre of the operating range of the transmitter. GB3ER employed a commercial Procomm six cavity diplexer to allow a single Procomm 5dB Colinear antenna to be used.

Despite successive efforts, GB3ER had long suffered from some desensing of its receiver and during the enforced 'off air' period time was taken to rebuild the unit in the hope of cutting down the problem.

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Members News

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Both repeaters were originally housed in an old cabinet with the power supply in adjacent 6ft racks. The new site had only space for one rack so both repeaters were repackaged into 2U 19" units, which would slide into a refurbished 6ft rack. Down time also allowed the logic to be upgraded to the Mark-2 version of the Essex Logic produced by G3XVV. Originally the Mark-1 version was contained in two diecast boxes loosely placed in the cabinet near the radio units. The upgraded logic for both repeaters was repackaged in to a single 2U unit. More recently a backup logic (G8CUL style) has been built into a 1U case, one per repeater.

Part of the work on reducing the desense of ER was directed at the diplexer, making use of an HP Network Analyser to set the notches to the correct frequencies and also take phasing into account. This work was carried out several times and although an 80dB rejection was set, this level soon deteriorated to approx 70dB with changes in position of the cavities and with temperature. An attempt was made to add some extra filters to the system but was not sufficient. Something had to be done, and after much casting around it was the diplexers that were upgraded to a higher spec Telewave set. These were installed in September 1997 and deliver at least 90dB rejection which it is felt what GB3ER needs to combat the desensing of its receiver.

Part of the groups efforts were also directed to spares and there are now spare Tait units for both GB3DA and GB3ER. These have been carefully set so that in the event of a failure only a few leads need to be changed and the unit is in use. No setting is required as both main and spare give identical outputs both in terms of audio levels, deviation and ERP. This was no mean feat but does ensure that any member of the committee can change out a unit if required in the minimum of time. For example the repeaters returned to service with the new DA Unit-2 and the original ER on air, whereas from mid-October-97 DA Unit-1 and the new ER Unit-2 have been in use.

For those of you requiring even more technical information on the repeaters then Dick Merrell ERG Hon. Secretary would be pleased to assist, but hopefully this has given an insight into the equipment and its current state.

NEW GB3ER CAVITIES

The single biggest expense of the 1996/7 year, but worth every penny for the performance that they give GB3ER



COVERAGE ISSUES

ERG welcomes feedback on equipment coverage such as for DA in Southend for example. The committee is considering improvements to the antenna patterns from the new sites.

ERG has decided in principle to design and implement a new antenna to assist the coverage of the 10GHz beacon GB3CMS. The current one performed very well (electrically at least) on the Danbury Ridge Tower which gave us very good take off, but it is not as effective in its new location.

The Hon. Secretary welcomes all suggestions, but should bear in mind the stringent power and licensing conditions that apply.

Other News

BOWLING RESULTS

The third DA Bowling challenge took place on 25th October and as usual a very good evening was had by all. The fight for first place was a close one with Keith snatching the trophy from Malcolm closely followed in second place by Nigel.

We have decided that this event will now take place on the last Saturday in April and October each year, so make a note in your diary - the next one is 25th April 1998

Both myself and Bob will remind everyone closer to the date.

John G1JJJ (The Van Driver)

Name	Scores	Total	Position
Keith G6NHU	156/177	333	1
Nigel G6ZVV	161/166	327	2
Malcolm G3XVV	145/166	311	3
Alan G0TTM	153/153	306	4
Tony G0JYI	106/155	261	5
Ron G0PJZ	114/136	250	6
Jan (Mrs PJZ)	130/116	246	7
Bob G0RSW	113/117	230	8
John (EUC Party)	99/129	228	9
Clive G1EUC	123/92	215	10
Simon M0ASJ	94/121	215	11
Roy (JIJ Party)	112/91	203	12
Dick G4GUJ	92/101	193	13
Susan (Mrs NHU)	83/107	190	14
Dick G0ULU	94/92	186	15
John G1JJJ	95/85	180	16
Hannah (RGG Party)	81/87	168	17
Anna (Mrs EUC)	68/97	165	18
Denise (Mrs JYI)	70/90	160	19
Debbs (Mrs GKH)	79/81	160	20
June (Mrs JIJ)	94/65	159	21
Elizabeth (EUC Party)	72/84	156	22
Chrissy G8OIV	78/73	151	23
Steve G7RGG	78/71	149	24
Nick G7HCO	80/67	147	25
Brian G7MHK	58/83	141	26
Jackie (RSW Party)	70/70	140	27
Annette (MrsTTM)	54/80	134	28
Geoff G4GKH	55/63	118	29
Dawn (Mrs MHK)	62/45	107	30
Gwenda (Mrs HCO)	51/39	90	31
Kath (Mrs ULU)	33/40	73	32