

## QUIZ: 100 YEARS ON

1901 was a turning point when Marconi spanned the Atlantic with his new fangled wireless. 100 years on, the Morse Code he used is being phased out, and the waves are increasingly digital. Pictured is the reverse side of the new £2 coin that commemorates Marconi's achievement.



Its design was one of three chosen by public vote. Your challenge for the Xmas Season - identify ALL the individual radio related features on the coin.

Answers on a postcard or by email to the secretary

*Hint:- Look at a real one*

## REPEATER NETS RETURN

Once upon a time... (Dec2000-Apr2001 in fact) a series of Nets were run on DA and ER to help keep members uptodate on both current and new systems.

Weekly nets will start again on Sunday evenings with Bob M1DTA acting as coordinator. The first session is at 9pm on GB3DA Sun Dec-16. It is possible that on subsequent weeks they may alternate between DA and ER. All users are welcome to join in and we will do our best to answer any questions.

## ERG EXHIBITION STAND APPEAL

Both the last committee and the current one have considered how to improve ERGs presence at rallies etc. At present we have a tubular steel stand which we wish to replace with something a little more swish and portable. If you know of a modern telescopic or other easily stowable system looking for a new home, or available to a worthy cause, please let us know !

## ERG COMMUNICATION CHANNELS

**Hon. Secretary:** Murray Niman G6JYB e-mail: [mjniman@iee.org](mailto:mjniman@iee.org)

**Internet Website:** <http://www.swsystems.co.uk/erg>

Regular news updates appear throughout the year on the ERG website, and on email and packet radio.

### **Frequency Bands:-**

<b>GB3DA</b>	145.125 MHz Input, 145.725MHz Output Channel R5 (RV58)
<b>GB3ER</b>	434.675MHz Input, 433.075MHz Output Channel RB3 (RU246)
<b>GB3DB</b>	51.270 MHz Input, 50.770 MHz Output, Channel R50-6 (CTCSS Access only)
<b>GB3ZP</b>	1291.225 MHz Input, 1297.225 MHz Output, Channel RM9
<b>GB3CMS</b>	Microwave Beacon 10.36896 GHz (keeper - Clive Ward G1EUC)
<b>CTCSS</b>	All the voice repeaters can be accessed with CTCSS Tone-H, 110.9Hz
<b>G7GAN</b>	ERG Packet /Teletext node - contact Clive Ward G1EUC for more info



# Essex Repeater Group Xmas 2001 Newsletter



## GB3DB 6m ESSEX REPEATER

As many of you may now know the long hard work on the 6m project has come to fruition. As we went to press the new Essex 6m repeater GB3DB was on air undergoing extended testing. This has been a while in coming and although it's not quite 100% yet (which it needs to be before we formally NoV it), it is proof of our intent to advance repeater operation in the county. The latest reports seem to show we have achieved good coverage and sensitivity.

Murray G6JYB is pictured right by the 6m Procom cavity set which performed the vital duplexing function. (6 cavities in all, three each on Tx and Rx – 2m tall)

To facilitate testing and signal reports the CW ident currently transmits with CTCSS every 5 minutes, alternating between short and detailed info. Signal reports (inc details of your setup) are appreciated so we can confirm performance and coverage predictions.

*More on p6 inside...*



## ARE YOU READY FOR CTCSS ONLY ???

For a long time little technical change occurred in UK repeater operations. However recent years has seen the pace of both rule changes and new developments quicken. All of you will of course be familiar with the move to 12.5KHz narrowband operation on 2m where we gradually phased in changes to GB3DA. Now the next round of changes is upon us. The new RA guide to repeater licensing specifies that all UK FM voice repeaters be CTCSS access only from January 2004 ie the end of Toneburst access. Whilst two years sound like a long time, do not wait to the last minute, and also bear it in mind when considering secondhand equipment.

The RA's intention was mentioned in last years newsletter and we believe the vast majority of users now tend to have sufficiently modern 'black boxes' with this facility. The committee can be contacted if you have concerns over this, or want to know how to build a simple tone generator. In the case of 6m CTCSS is the only form of access permitted and some new repeaters (especially on 70cms) are also implementing this.

Moving to CTCSS operation can provide benefits as it improves performance in QRM or lifts, as well as making repeater logic systems simpler and more reliable compared to the present dual mode operation. The rules do not specify whether CTCSS be transmitted during idents so we are open to your preferences on this. Tone-H 110.9Hz is used on all ERG repeaters.

## WHERE HAS EVERY ONE GONE ? by Clive G1EUC

It's only four years or so ago that DA was in almost constant use. In the evening whilst people were driving home from work, sometimes up to ten in a group would be on the repeater. All taking their turn to say their piece and make a comment on the current state of radio or some controversial issue.

The repeater was so heavily used, that quite often a second turn wasn't possible before arriving home. During the day we had many characters such as the dent pusher, the van driver, the plumber, Kris from the coal shed, and many more. DA was sometimes so busy that some used to retreat to ER, as it was somewhat quieter. On most nights both repeaters were used for small nets, but on many occasion's you had to wait for a turn before having a go.

So what has changed?

Well the first big change in recent years was the removal of the repeater from Little Baddow to the present site in Danbury. This was due to the closure and dismantling of the 90 ft tower we were using at that time. Its closure had been intimated previously, but nothing had ever happened. So when a decision was made, we were given only six weeks to remove our gear from the site. It then took us six months to find, agree and install the equipment at the site we presently occupy. We were though permitted to go no higher than 30 ft up the tower. We also were given a position where, in some directions, our rf is blocked by microwave drums on the tower. This has resulted in DA being directionally sensitive. ER is also to a certain extent, but it's not so noticeable. Our position on the tower was non-negotiable, even a foot higher would have resulted in a cost of thousands of pounds a year in rent. It was though the only suitable site we could find. Our search was made even more difficult by the microwave/mobile phone scare, therefore all newly sited aerials were regarded with suspicion.

The next thing we encountered was a licensed amateur causing a nuisance on DA, who swore and insulted users, and generally made it uncomfortable to use the repeater. This went on for almost four years. We took recordings, logged calls etc and passed the information to the RA, but still nothing happened. This in turn put a lot of regular users off using the repeater, some of whom have never returned. Eventually the RA took some action and the miscreant was taken to court and had his licence taken away .

Besides the above there has been a general decline in interest in the radio. To some the Internet is more dynamic and diverse than direct contact radio. It seems a shame when it was only a few short years ago, that we had such a lively radio community in Essex and surrounding counties.

The same thing has happened at ERG AGM's. Just a few years ago we sometimes had over 40 attendees, but for the past couple of years only 17 including the committee, have come along to the meetings.

Its seems quite evident that there is a general decline in radio activity and enthusiasm not only in our own area, but worldwide. This surely should not mean we have to automatically follow suit.

We as a committee believe that it would be beneficial to all to regain the radio community spirit that once existed. So we have to find out...

- i) Why has radio activity in general died down ?
- ii) Why repeater activity has diminished to the extent it has ?
- iii) Why have a good number of local amateurs lost interest in the ERG AGM's ?

*cont'd...*

## TEN PIN BOWLING NOV-2001

Once again John G1JJ organised the bowling competition and we thank him for the photo and results table.

All are encouraged to support this and other events he works hard to organise

*Our thanks, ERG*

*From left to right: Matt, Rhona, Denise and Nigel*



Pos'n	Player	Game 1	Game 2	Game 3	Total
1	Nigel G6ZVV	173	122	146	441
2	Den with G1JYI	139	113	149	401
3	Tony G0JYI	135	148	113	396
4	Ian with JYI	117	138	124	376
5	Frank G1HQQ	133	137	101	371
6	Alan G0TTM	120	114	115	349
7	Bernie G0ENN	134	89	118	341
8	Steve with HQQ	84	126	126	336
9	John G1JJ	132	87	106	325
10	Gerry with JIJ	65	130	109	314
11	Martin G7SQL	65	127	116	308
12	Liz with JIJ	80	100	116	296
13	Roy M1RKB	101	84	109	294
14	June with JIJ	116	73	103	292
15	Carol with HQQ	80	88	83	251
16	Laurie G0JAO	57	102	82	241
17	Steve G7RGG	49	106	86	241
18	Lynne with SQL	81	64	94	239
19	Ami with HQQ	64	86	83	233
20	Chris G0IPU	94	60	65	219
21	Hannah with RGG	86	43	89	218
22	Joy with ENN	61	66	84	211
23	Gemma with HQQ	93	68	46	207
24	Jeanette M1CKG	102	60	42	204
25	Gareth with HQQ	72	79	50	201
26	Annette with TTM	49	70	81	200
27	Rhona 2E1GQL	65	51	72	188
28	Matt 2E1GQK	43	43	56	142

*Season's Greetings !*

# Members News

## ERG 2001 AGM & SUBS

The ERG AGM was held on Thursday 18th October 2001 at the usual Danbury Village Hall venue, helped along by free refreshments.

Following the officers reports which were mainly concerned with progress on the new repeaters, the elections results returned the committee opposite to which we welcome Jim M1GUS. *see his article right*

After a number of years where fees have been held, and a healthy debate, a motion to raise the main subscription rate to £9 a year was passed.

## ERG 2001/2 COMMITTEE

*Chairman:* Mike Wheaton G4ZPE  
*Hon. Secretary:* Murray Niman G6JYB  
*Hon. Treasurer:* Clive Ward G1EUC

### *Ordinary Committee Members*

Jim Batchelor M1GUS  
Alan Radley G0TTM  
Keith Wainwright G1NHW  
Simon Wilton G7HCD  
Bob Cheverall M1DTA co-opted for 6m

## CHAIRMAN MIKE WHEATON G4ZPE SAYS . . .

Christmas Greetings !

Here we are another year over and a lot of work still to do for the group. However we have got the 6m unit up and running, and it seems to be doing very well with good coverage around the area and taking reports from stations. Murray and Bob have worked very hard with the new shack and its layout and of course the interior decorations I must admit it does look good and a lot better than other sites I've seen.

Our policy is to make our setup a professional job and upto the standard of some commercial station layouts. We are running under a test period at this moment in time and hope to be soon be running officially. Once we are fully happy with the operation of the 6m unit we will carry on with the 23cms unit which I might add is partly built. The PA stage is well on the way and only needs a good testing, and has a very efficient heat sinking unit with fans to keep it cool, We already have the cavities installed in the cabinet, the antenna is in position, both logic's are built and power supplies are working okay. You can bet the new year will bring on the 23cms system, "slow", but it will happen - so watch this space folks!

I would like to thank all those club members who have supported us over the years and helped us with work. Also, the dedicated committee members who have given me their support over many years - none of this would have been possible without them. So thank you once again and I would like to take this opportunity to wish all of you a Very Merry Christmas.

from Zipy, the Hon Chairman ERG

## M3 SUCCESS !!

Congratulations to committee members Bob M1DTA, Clive G1EUC, Simon G7HCD, and Keith G1NHW as well as ERG member Jim 2E1GUA who helped pioneer the new M3 foundation license by taking morse assessments at RSGB HQ in November. They will be able to access most of the HF bands with callsigns M3RAC (Bob), M3SSB (Clive), M3HCD (Simon), M3DAX (Keith) and M3GUA (Jim). Let us know if you get an M3 !

Chelmsford, Dengie and Colchester Clubs all plan to run local classes. Another initiative worthy of mention is the Chelmsford SCouts Amateur Radio Fellowship (SCARF) in which Chris Chapman G0IPU is a leading light. We hope all these efforts will bring in new blood and increase activity on all the bands

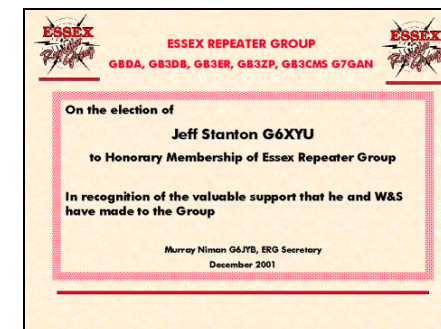
# Members News

## JEFF STANTON MADE HONORARY ERG MEMBER

In recognition of the valuable donations and help that W&S have given ERG, Jeff Stanton G6XYU was nominated for Honorary Membership by our Treasurer, Clive G1EUC, at the AGM. The motion was passed unanimously.

Both new repeaters have W&S PSUs and they very generously donated two Alinco radios for the GB3DB 6m repeater project

*Copy of the certificate is opposite*



## JIM BATCHELOR M1GUS . . .

I agreed to serve on the ERG Committee at this years AGM because you only get as much out of any organisation as what you put in. I also hope to gain a better knowledge and understanding of repeaters

I had been a SWL for many years before retiring whereupon I progressed through novice up to M1 licence, and I am working towards my M0.

My current project - installing a tilt over mast, and also constructing a 6m mighty wide dipole antenna

regards

Jim Batchelor M1GUS

## BOB CHEVERALL M1DTA . . .

Hi lads and ladies!

Well lads its been a busy year for all the group - what with all the DIY, B&Q, testing, wiring, testing and pulling our hair out. I think everybody needs a pat on the back for their hard work and big thank you for Waters & Stantons for donating the 6m radio's and power supplies.

The 6m testing is going well and almost ready. Murray has worked hard upgrading the shed, and we didn't have to raise the roof as the cavities fitted in the end!

I'm starting the nets again on Sunday evenings at 9-00pm. Having it later will give you all time to have your beers ! - *See Back Page*.

Have a Happy Christmas and New Year and we hope it's a good one. 73's all

Best of luck

Bob and family



## GB3DB – 6m

With tests are underway prior to full operation, it seems timely to give a few tips on how to access GB3DB. Some of you may think this is obvious but our recent experience suggests that for others this may prove useful...

- GB3DB is 51.270 MHz Input, 50.770 MHz Output, Ch R50-6. Note the 0.5MHz shift on 6m. Shifts vary in both size and direction on different bands
- Like all 6m repeaters, GB3DB access is CTCSS only - tonebursts or whistles are not permitted and wont work ! The timeout is set to 3 minutes
- 6m Repeaters are on a 10KHz channel spacing (not 12.5 or 25)
- GB3DB is vertically polarised. Many stations seem to get in ok with standard verticals (eg Watson, Diamond tribanders etc). Polarisation from horizontal beams will twist less at 6m than higher frequencies, and may cost you a few S-points
- Mobile operation is practical on 6m - give it a try if you have the kit! ZPE can give you good advice on this.



GB3DB Radios, CUL Logic and PSU in 19" Cabinet – almost complete, but working !

## GB3DA – 2m

After two years of reliable operation GB3DA's output went low and noisy on Mon Dec-3.

On Wed Dec-5 Mike braved the pitch black nighttime conditions to get on site and replace the radio unit with the newer DA-2 (built as a spare) returning service to normal.



**GB3DB Radio Unit**  
Based on 2 Alincos donated by W&S

The Rockefeller Institute of Pennsylvania once published the reasons, from one of their surveys, as to why businesses lose custom. I think they could equally apply to radio, though perhaps not quite literally. Their findings were, as to loss of customers:

- 1% - Die
- 3% - Moved away
- 5% - Formed other friendships
- 9% - Competitive reasons
- 14% - Due to product dissatisfaction

**But 68% -** Because of an attitude of indifference towards the customer by one or more persons representing the supplier.

The first two we can't change. The 5% who formed other relationships and the 9% who left for competitive reasons could be referring to the internet, other modes of radio, etc, etc.

The interesting ones from my perspective are the 14% - due to product dissatisfaction and the 68% - due to an attitude of indifference.

Is there something our best friends haven't told us?

Are there reasons for non-use of the repeaters that we have either ignored, not listened to, or no one wants to tell us?

Are there reasons why the numbers at the AGM's have diminished to the extent they have?

We have tried to encourage use of the repeaters, Bob M1DTA (soon to also be M3RAC) very bravely started to chair regular DA and ER nets. They worked very well for a while, but gradually nobody called in. So they died a death.

We have invited all members to the AGM's and even provided free refreshments, but still the numbers decline almost inexorably. Due to the lack of attendance, we have had to make decisions concerning the repeaters that have been decided by a small percentage of our members.

Can you help either by joining the committee or by giving us ideas as to how to bring about a resurgence in repeater use.

We need ideas and people to see those ideas through to fruition. We also need technical help.

We need more members: We are currently surviving as a result of equipment sales over the past couple of years. The equipment source we had, has now dried up, so we are now almost totally reliant on membership subscriptions. This will not be sufficient enough to survive at our present, membership level.

The new 6m repeater was installed as a result of a donation by a committee member, and equipment provided by Waters and Stanton who have been very supportive in terms of providing us with equipment, a space at their open day, and helping us promote the repeaters.

Can you assist us with any of the above? Have you any ideas as to how we can increase our repeaters funds? It's not only the ideas we want, but help in seeing them through!

**Your Repeater Group needs you! Probably more than you may realise!**