

NOW WHO IS THIS JOKER . . .

As you may have noticed, this edition has a Mad Hatters theme to it.



There are no prizes for the name, but there could be for really good captions – send them in please!

Factoid: The term Mad Hatter was made popular by its use in 'Alice in Wonderland', and dates back even earlier to 'mad as a hatter' in 1837. In those days hatters really did go mad. The chemicals used in hat-making included mercury nitrate, used in curing felt. Prolonged exposure to the vapours caused mercury poisoning. Oh dear...

ERG COMMUNICATION CHANNELS

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Internet Website: <http://www.essexrepeatergroup.org.uk>

Regular news updates appear throughout the year on the ERG website, and on e-mail.

Frequency Bands:-

GB3DA	145.125 MHz Input, 145.725 MHz Output, Channel RV58 (R5)
GB3ER	434.675MHz Input, 433.075 MHz Output, Channel RU246 (RB3)
GB3DB	51.270 MHz Input, 50.770 MHz Output, Channel R50-6 (CTCSS Access only)
GB3CMS	Microwave Beacon 10.36896 GHz (keeper - Clive Ward G1EUC)
CTCSS	All the voice repeaters can be accessed with CTCSS Tone-H, 110.9Hz
GX7GAN	ERG Group Callsign for events and tests - contact Murray G6JYB for more info



BE PREPARED ! - TIME'S UP FOR TONEBURST...



BRIEFING:-

CTCSS: Continuous Tone Coded Squelch System
This uses one of several sub-audio tones in the 67 to 120 Hz frequency range.

Toneburst:
A short 1750Hz audio tone at the start of a users transmission into a repeater's input.

CTCSS-Only Access:
As first used on 6m repeaters, this requires that the tone be continually present to maintain access.

NB: Repeater that support both access modes just use CTCSS to initiate access only, in order to keep compatibility with toneburst.

CTCSS-Encode/Squelch:
Repeater Logic filters out all incoming access tones and encodes its own CTCSS tone to signal to users radios – e.g. for Idents etc.

All ERG repeaters use Tone-H - 110.9Hz

As discussed at the October 2005 AGM, the time has come to move forward in reliability and technology. As part of this, **Toneburst access will be withdrawn during the Summer of 2006** and GB3DA (2m) and GB3ER (70cm) will become continuous CTCSS-only access. This will be the same as is already the case on our 6m repeater GB3DB, and the 70cm Braintree repeater GB3BZ. This should greatly improve reliability when lifts occur and other transient problems. One side effect is that it will also mean that the Logic Timeouts will also be more strongly enforced.

Since January 2004, CTCSS has been the mandated for new repeaters with toneburst being relegated to being at the option of the repeater keeper - where permitted by the specification.

ERG has promoted CTCSS for many years. In August 2002 when the trend was already clear GB3DA ran a trial of CTCSS-only access for a few weeks. The test proved valuable, raised awareness and the benefits of lower QRM and fewer lockups when lifting became very evident.

For new licensees, Repeater Access and CTCSS get a special mention in the Chelmsford Training Courses. We are also confident that the vast majority of users are already well familiar with programming 110.9Hz into their radio/memories for DA/ER use. We don't expect many problems, but do bear this in mind when looking at old equipment at rallies or on eBay.



MERRY XMAS FROM CHAIRMAN MIKE G4ZPE / 2E0ANV. . .

Hello everybody! Yes, another year has gone by and an AGM as well. So you have me for another year as your chairman for the repeater group. I must now be the longest standing chairman in decades it seems nobody wants the job or you all are happy for me to carry on. I lost track of the years but it has been mostly as Chairman, and I was the Secretary before that for at least 5 years.

I remember struggling to keep the repeater on the air at the old Danbury Ridge site with PIN-Diode logic on the 70cms unit. It had heated cavities, very crude, but it did help and some old Tait radios well past their sell-by date. I felt like a doctor running up to site and sitting there freezing to death trying to keep the units working. The cavities of the day were very prone to changing frequency and causing de-sense with temperature. As the shed we were in was not very well insulated the temperature differential was changing all the time. I even packed the cavities with polystyrene to stop the varying temperature affecting them. It worked a little but it still de-sensed when they did alter.

After every winter and sometimes in the winter we had to climb the tower. This was to remove the feeder from the antennas and drain out the water from the heliax. On one occasion we had a half gallon can full of water drain out of the 2m feeder. This was due to the fact that the birds would attack the self-amalgamating tape. I wasn't sure why but I have noticed this at home, so I guess there must be some oil in it or they just like the taste.

Later on in the summer we used to get some very kind people putting bugs up in the trees to lock the repeater. So life was always full of joy - but not with my missus as divorce was very near the top of the list of things happening. Being a good wife she decided to stay with me and not have to live out in the street as it gets very cold in the winter. So just a little insight to what has happened over a few years of tearing my hair out on site and at home. Its left me a little wiser (and with less hair) as to the pitfalls of being a chairman of a repeater group.

So at this point I would like to wish everybody
a Very Happy Xmas and Healthy New Year

from Zipy G4ZPE. Your Chairman.

From BOB CHEVERALL M0DTA. . .

Hi there ladies and gents

First we wish you all a Merry Christmas and a happy new year. Congratulations to all the new M3's and all the lads that help them. I wish you all good luck in the coming year. As for me, we are into some home construction ourselves at the moment as the shack is being stripped and decorated. So sorry if I'm not on the radio as much at present...

So Seasons Greetings from all the Cheverall family
down Twitty Fee

Bob and family



ERG WINS DENGIE QUIZ

ERG has supported the annual Dengie Club Quiz for many years. It is always an enjoyable occasion with catering generously provided. The weather on 28th November 2005 was particularly kind and a good attendance level resulted, enjoyed by all. Though trailing for much of the evening, a noble effort led to ERG reaching a tie at the end of the main rounds. Fortunately we gave a closer answer to the tiebreaker question;

"When was the first Eurovision Song Contest ?"

Answer: 1956

2006 CALENDAR

21 st Canvey Rally	Sun Feb 5 th 2006
W&S Open Day	Sun May 28 th 2006
Colchester Rally	Sun Jul 30 th 2006
2006 ERG AGM	Thu Oct 19 th 2006



Left to Right:

Question Master Dave Sampson M1DOZ,
Murray G6JYB holding the winners shield, and
Mike G4ZPE Dengie & ERG Chairman.

A number of other events including talks are in the offing and will be confirmed in due course. We also look forward to a repeat of the very enjoyable 2005 AGM, which had a high attendance.



In deep thought...



...and more relaxed

The ERG team, shown above, consisted of Murray G6JYB, Clive G1EUC, Trevor M5AKA, Carl G3PEM and his wife Frances. The photo credits belong to John Bowen G8DET. The pictures here and many more can be found in an excellent write-up of the 2005 Dengie Quiz on the Chelmsford Club webpage at:-

<http://www.g0mwt.org.uk/events/dengie-quiz05/quiz-05.htm>

TRAINING cont'd...

Moving onto Melbourne the only place I could find an Internet Café was in McDonalds. The keyboard was so bad I asked for my money back and had to wait until arriving in Singapore for my next access. With the four-day gap I had fifty mails, ten training, seven from Murray, five from Trevor, the CARS newsletter and the rest from other sources. During my time in Singapore I visited Malaysia, where I found one Internet Café, but the queue was over 50 yards long so I didn't bother and in Bahat Island, Indonesia, e-mail didn't seem to exist. My access to the Internet in Singapore wasn't that easy as I had to queue, but at least I could sit in an armchair in my hotel/hostel, but I had to try and work out when my turn was. A bit difficult when the only English some of the others queuing knew was goodbye and they had been waiting their turn in another room.

When I finally arrived back in England end of January 2005, to have broadband back and to be able to use my own PC was almost liberating.

During my two and a half-month trip I accessed my home phone and received forty plus calls re training. I simply took down the details and e-mailed the information to Murray, who kindly dealt with them on my behalf. I received around ten or so calls direct on my mobile, which as I was paying for the international part of the call, I asked the caller to e-mail me, which made life a lot easier and a lot less expensive. In Singapore I received one call from Dave one of our Foundation passes, asking for information on the Intermediate Course, just as I was leaving the duty free, to board my plane! He was quite shocked, when I told him where I was. I asked him to ring me back at least eighteen hours later!

In June 2005 I got itchy feet again and travelled to Southern California where I stayed for seven weeks. Broadband was everywhere and I had free use in the public libraries and at friends houses, so I found it easy dealing with the multitude of general radio queries and those concerning the remainder of the 2005 courses. As before I accessed my home phone took down the messages, but with calls to England at two pence a minute, I didn't need to rely on Murray. Not all the calls/e-mails are about our courses some are just radio-related queries, generated by articles/adverts in radio magazines, journals and papers.

More recently I have spent time visiting my daughter in New York and travelling to Italy. In New York I found it difficult to get on the net. My daughter used the facilities where she worked so didn't have a PC at home and the one public library that had Internet was closed. I eventually found an Internet Café in 37th Street where my daughter lived, but it meant queuing and the usage charge was ridiculous. The one time I used the café I had over 100 messages. So with the other would-be users breathing down my neck to use the facilities, I waited until I returned home and just dealt with the few urgent ones. New Yorkers are not the politest people. My recent trip to Italy was even worse, no e-mail at all, I was though up in the mountains, so I once again waited until I arrived back home.

The above shows that with a lot of help from your friends, e-mail and good phone links, you can do anything (well almost) anywhere. Training going Worldwide doesn't stop there. The CARS Training Slides reach all over as well, but that's another story that can only be told by one person, Murray...

ALLSORTS AT CANVEY...



Some strange headgear in use by the ERG team at the 2005 Canvey Rally...

SPACE STATION HOOK-UP FROM CANVEY - MIKE G4ZPE...

I was invited along to help out with the setting up for the Space Shuttle hook up from Canvey by the Furtherwick School and my old mate Carlos G0AKI who is in charge of the RSGB's GB4FUN vehicle. Waters and Stanton, my company, gave me the job to install the equipment in it some years ago. Its been updated over the years since I was involved in building the equipment into a very well organised station. Its self-powered by its own generator built into back of the vehicle and capable of running a very strong RF station with linears on HF and 2m through a variety of different antennas.

Anyway back to the Space Station hook up with the School children. We had a chance to run through the set-up and the children's questions to the astronauts. On the dummy run through I had the job to time the girls and boys question times and the answers coming back to them. We were able to get twenty girls and boys through the time permitted as the station only had 9 minutes 58 seconds in our contact pass so everything had to be right on the button.

Come the evening and everybody was getting excited. The selected girls and boys had won a competition in the school to be one of the twenty lucky people to talk to astronaut Bill McArthur on the station. So those who won were a little bit worried and excited at the same time. This was a once in a lifetime chance for them. We were monitoring the shuttle as it came into sight over the horizon. A projector on a very large screen on the stage let all the audience see it as well. As the shuttle started to come into range it was all like clockwork. The children started to ask their questions and the answers came back all to time schedule. Then the station jumped frequency and had to retune back. As I was keeping the time of the pass I was motioning Carlos to speed up. We were going to loose the shuttle before all the children had a chance to ask their questions. Just as the shuttle was going out of range we only had two children who could not make it in time.

After all the excitement we had a phone call from a school in Sweden telling us that they had heard our questions and answers and wished the school all the best for the future. I was relieved after the link-up as earlier we had some trouble from a nearby telephone mast close to us. I had to rush round to fit a very large DCI filter to keep the noise out and it worked perfectly. So all's well that ends well.

Finally we had to clear the site up and reload the van with antennas and the gear used for the night. It was worth the effort overall and I went home really pleased that we had done it with no hiccups from our end. The evening hook-up with the station had taken over a year to organise it with ARISS and the Station Control Centre and all for a nine-minute contact. That does not leave you much time to make mistakes, so it was a great relief to everybody involved when it all went well.

As for the two boys who did not get a chance to talk to the astronaut, a message was sent back to the station in Sweden saying the astronaut was going to send them mementoes anyway. This was also relayed to us by phone from Sweden.

I hope you find this article interesting
-I did, being there when it all happened.

From Zipy, G4ZPE Chairman ERG.



OFCOM – MORE CHANGES

From January 2006 Ofcom takes over NoVs from the RSGB. At the time of writing considerable uncertainty surrounds the new regime. One thing that is expected is higher costs. Repeater NoVs were renewed annually for free by the RSGB and it will be interesting to see what happens under Ofcom.

Another change due in 2006 is on the spot penalty fines for breaches of licence conditions. This is something that we welcome, given the effort spent in the summer of 2005 in a hi-tech tracing exercise of repeater abuse.

Also planned are the moves to lifetime licensing and a reform of BR68.

In addition to the 23cms clearance issues (right) we have been monitoring moves on 70cms. This may lead to a partial lifting of the freeze on developments, but may also result in moves to 12.5kHz narrowband FM becoming more common place.

Finally, can't remember your F3E from your A1A? Watch out! Repeaters now use a longer 9-digit code. For example, GB3DB emits 8K00G3WWN. The Australian amateur schedule also uses these ITU codes as well. Something new learn...

GB3DB RETURNS

One thing that did progress in 2005 was the 6m system. At the start of the year we were asked to re-clear the frequency which we successfully did and whilst off air we did some more construction as you can see in the photo below.

Finally on Saturday 20th August 2005 at 3pm, the system formally commenced. Sadly it didn't take us long to notice a strange pattern of noise and de-sense, which at the time of writing is still under investigation.

GB3ZP DOESN'T

We regret to report that during 2005 new objections by Primary Users have led to a total block on the 23cms repeater. Whilst we sort out other engineering issues, we continue to lobby for greater band sharing on 23cms.



The new GB3DB 6m Spare Radio Unit constructed during 2005

TRAINING GOES WORLDWIDE – CLIVE G1EUC

In addition to my ERG Treasurer's hat, my role as the CARS Training Co-ordinator is to deal with requests from those who may want to join Foundation, Intermediate and Advanced Courses and to process them. Although it may seem so, it's not as easy as it sounds when some would-be course attendees forget to inform you of their contact detail changes, or I'm out of the country.

I was lucky to be able to leave my old company BT at the age of 49, on early voluntary retirement. After carrying out a few consultancies for them in Malawi and Guyana, I really got the travel bug. So I made up my mind that from 2004 onwards, I was going start travelling, to places that had I always wanted to visit. My dilemma was how to carry out my training role and at the same time travel. With a little help, or more accurately a lot of help, from my friends this was quite simply achieved.

I have to be led all the way when it comes to computing. Firstly Murray G6JYB set me up with remote access e-mail and placed all my important files on it, so that they could be remotely accessed easily and securely. Chris G0IPU said he would look after the remaining January 2005 Foundation course proforma returns and Trevor M5AKA agreed to check my post for course payments. Carl G3PEM and Anthony M1FDE offered any support I needed. You have to work with the aforesaid to realise, what real team players they are.

As my daughter Susie was travelling with her boyfriend Robbie for a year and after being invited to join them for Christmas in New Zealand, I started my journey in late November. I arrived in Thailand and found five Internet cafes in the street I was staying. Internet Cafes were outnumbered by massage parlours and stands selling food. I avoided one of the aforesaid; can you guess which one? I may talk of my fear of food poisoning in another article! I went into my first Internet Café; the PC keyboard had mixed English and Chinese lettering. Very confusing. After working out what to do I accessed my e-mails, seven training, six from Murray four from Trevor, two from John Bowen and one from my daughter. The rest were from other friends. All dealt with, I went for a Thai breakfast. It was fascinating watching the Orientals eating bacon and scrambled eggs with chopsticks. I used a knife and fork and had Thai.

After a few days in Thailand I travelled onto Sydney and found an unbelievable number of Internet cafes in the main thoroughfare, George St. So more messages from Murray and Trevor and two more queries about the Foundation course, which were quickly answered. I then went into a pub for a pint of XXXX. The chap that served me had just moved from Chelmsford to get married, knew Danbury and said yours is the house with the aerials on it! Amazing!

Onto New Zealand to meet my daughter. Using the net wasn't so easy in Rangiora where I stayed. The only access was in the local public library where it was necessary to book or queue and it was poorly lit and expensive. Still all training issues were dealt with and I began to look forward to my daily mails from Murray and Trevor. As my daughter would say, sad or what! In total I stayed in New Zealand for seven weeks. For one of the weeks I went backpacking around South Island and in Milford Sound the PC I used was powered via a generator, but I was still able to pick up my emails, before the electricity went of at ten in the evening.

Cont'd...

Photo Right: January 2005 - Clive, (not) looking forward to his first ever skydive near Lake Taupo in New Zealand

