

LLAIS Y DDRAIG - THE DRAGON'S VOICE

CYLCHLYTHYR CLUB RADIO AMATUR Y DDRAIG NEWSLETTER OF THE DRAGON AMATEUR RADIO CLUB Gaeaf 2012 Winter Rhif/No. 101

PWYLLGOR/COMMITTEE

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Aelodau/Members: John Jones MW0BER. Richard Zieba MW3RWZ. Bill Williams GW0IQZ. Tony Wright

GW0LIS

Web site: http://www.radioclubs.net/dragonarc/

Cynhelir cyfarfodydd y clwb yn Neuadd Ebeneser Lon Foel y Graig, Llanfairpwll ar Nos Lun y cyntaf a'r trydydd yn y mis am 7.30 ar gyfer 8.00 o'r gloch. Croeso I ymwelwyr ac aelodau newydd.

Club meetings held at Ebeneser Hall, Lon Foel y Graig, Llanfairpwll on the evening of the first and third Monday in each month at 7.30 for 8.00. Visitors and new members always wecome.

Pob gohebiaeth at yr ysgrifennydd. All communications to the Secretary, Stewart Rolfe GW0ETF at: Tyn Lon, Minffordd, Bangor, Gwynedd, LL57 4DR Tel: 01248 362229. e-mail: gw0etf@btinternet.com Acting Editor, John Brimecombe GW3GUX. Llwyn Onn, Glanrafon, Llangoed, Anglesey, LL58 8PH. Tel: 01248 490762. email: taidjlb@mypostoffice.co.uk

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<u>My apologies</u> for this edition being rather late; it is now well past the time for wishing everyone a Merry Christmas, (although I hope that you did have one) but not yet too late to say 'Happy New Year – Blwyddyn Newydd Dda' to all our readers.

Edgar Milburn - SK

I am sad to have to inform you of the death of Edgar Milburn GW8YUJ of Marianglas. Although not a member of this club he was well known to many amateurs in the area. A number of club members attended his funeral, which was held on 4th October at Marianglas.

If only!

James Bowman Lindsay was born in 1799 near Arbroath, and was a pioneer in the field of electrical engineering, developing and demonstrating an early electrical lighting system in Dundee in 1835. He later turned his attention to telegraphy, proposing a scheme for constructing and protecting transatlantic telegraph cables in 1845. In 1854 he was awarded a patent for a method of wireless communication across bodies of water, which he demonstrated across the Earl Grey Docks in Dundee, and later across the Tay from Dundee to Woodhaven. Members of the Dundee Amateur Radio Club have attempted to replicate Lindsay's experiments on several occasions — with varying degrees of success!

In April 1834 he said "Houses and Towns will in a short time be lighted by electricity instead of gas, and heated by it instead of coal; and machinery will be worked by it instead of steam – all for a trifling expense".

His forecast was correct about the universal use of electricity, but oh, how wrong about the ever increasing cost of all forms of energy.

2 meter 'head bangers' - By John 'VVC

Listening to the way things have developed on the Amateur Bands generally in the last few years and on 2 meters in particular I'm saddened at the way some recent licencees behave. Evolving from the Citizens Band onto the Amateur Bands has been a great opportunity for many to regularly work the world and meet many more like minded people than they ever would down on the CB frequencies. Most of those who have 'come across' behave responsibly and will prove a credit to the hobby BUT sadly we have also inherited the 'headbangers' onto our bands – headbangers of course being a CB term for idiots... We've all heard the jammers, mike clickers, those who play music on 2 meters and the animal noises – we know who you are! I'm reminded of some scribblings on the GB3KD website...

"Jammers are lower forms of life that have not yet evolved the power of speech. The best they can do is mess around with DTMF, blank carriers, guttural noises, computer voices, and tape recordings of people who CAN speak. They do their best to disrupt life. Like mosquitoes, they are a fact of life we have to live with. Luckily most of them are so weak that we're able to squash them. Whilst jammers come in all shapes and sizes, the archetypal jammer is likely to be fat, because he spends so much time on his backside next to his radio. He won't be flying the skull and crossbones or have an eyepatch, a hook, or a wooden leg. More likely he'll live in a council house on a high spot, read The Sun, vote BNP and fly the St Georges flag. Rather than a parrot, he'll have a chip on his shoulder. He's more likely racist, sexist, homophobic, nationalist, bigoted, and all round misery guts who hates everyone except like minded types and Staffordshire Bull Terriers (he'd prefer pit-bulls though).

Jammers are masters of disguise, and you probably wouldn't know he was a jammer, even if he was sat next to you in your works van all day. On the surface, he may even seem to be a genuine radio amateur and all round likeable person. But don't be fooled by this. He's able to maintain multiple personae, one or more of which he uses for his jamming activities."

If someone jams your qso, or does anything else contrary to the licensing conditions do not engage him in conversation. Ignore him and if you're unable to continue the qso sign off. If you constantly refer to him and the mayhem he is causing he'll feel he's achieved something – ignoring him totally will leave him looking and feeling stupid. Incidentally in engaging someone who is causing problems you may be contravening your own license so threatening to go 'round and breaking both his legs is NOT the thing to do.

Notice I've referred to the headbanger as a 'he', no lady would stoop to such behaviour now would they...? (with grateful thanks to Paula and the gang at GB3KD).

GB3KD, to which John 'VVC refers, is the call-sign of the Kidderminster Repeater Group. They have a very interesting and informative web site, well worth looking at. – Ed.

Visual CW Plans Thwarted by Moon

Plans to flash Morse code messages from the Japanese FITSAT-1 satellite have been delayed until January due to moonlight!

Controllers had hoped to send the visual Morse messages in mid-to-late December, but determined that waxing Moon (full on Dec. 28) would make the sky too bright for most people to be able to see the satellite. Other, earlier, attempts were cancelled due to cloudy conditions over the target areas. Culled from the CQ Magazine – I'm not sure if they have succeeded yet!

RSGB News and Centenary

We have received the following note from our RSGB Regional Manager – Mark Harper MW1MDH regarding a new Deputy Regional Manager, plus a request for more clubs in this region to operate a station under the Centenary call-sign of (for this Region) GW100RSGB.

The Gx100RSGB Call-sign is being operated in four-week blocks in each region of the U.K. throughout the year. The date slot allocated to our Region (No.6) is the period 13th August until 9th September. The Committee is open to suggestions and ideas for a suitable event at which to use this unique call-sign, just let any committee member have your ideas ASAP. Full details of all the participating clubs with date slots, etc. can be found on the RSGB web site.



There is also a special Centenary logo (see left) that can be used by affiliated clubs, such as the Dragon ARC, and also by RSGB members. This can be downloaded from the Member's section of the RSGB website and can be used on QSL Cards, etc. Now over to Mark...

"1) - We have a new DRM on board, in the form of John Martin MW0VTK - John will be looking after Meirion, Dragon and Porthmadog clubs, I feel John will bring a lot to this role, and its good to have him on board, I trust you'll all make him feel welcome!

John will be in contact with the clubs in his district soon.

2) - Centenary

I'd like a couple more clubs to take up the reins on this (as we only have Meirion ARS at the mo) - we can also allow for SOTA operations as well - The centenary Working Group are looking for clubs looking at doing more 'out of the ordinary' - i.e. LF, EME, but also CW, voice and data - if anyone has any vintage kit that runs, and they would like to use at such an event, then please feel free to do so!"

We look forward to meeting John in the near future.

Amateur Television Repeater GB3TM - by John Lawrence GW3JGA

Early days

In 1993 a group of local Radio Amateurs interested in Amateur Television transmission met to discuss the building of an ATV Repeater for North Wales. They were Brian GW4KAZ, Barry GW8FEY, David GW8PBX and me, John GW3JGA.

We met initially and then continued to meet, each Wednesday lunchtime, in the Electronic Engineering Department in Dean Street, Bangor, where Barry and I were on the staff. We discussed the technical design, allocated tasks between ourselves and set target dates for completion.

Brian concentrated on site work and aerial installation, Barry on building the driver/modulator, David became the Repeater Keeper and developed the technical specification and I built the logic control and rack system We also had help from John GW3MEO. Very sadly, Barry died in February 2010 after a long illness

ATV Repeaters

ATV repeaters are different from audio repeaters in that they transmit continuously, in beacon mode when not repeating. The transmit frequency allocated to GB3TM is 1316 MHz and the receive frequency is 1249 MHz, a separation of 67 MHz.

In Beacon Mode a series of captions are displayed for identification and test purposes. There are two news pages. These can be updated remotely by keying an input audio tone. An audio morse code identification is also provided on the outgoing signal

GB3TM comes on air

The repeater and its aerial were completed, installed on site and GB3TM came on air in July 1994. The station has proved remarkably reliable and has been operating continuously since that date. We have replaced the cooling fan and a couple of components during that time.

Location

GB3TM is located on the North East coast of Anglesey at SH 471 906 which is almost opposite the old Anglesey Radio site. GB3TM started life in a metal cabinet, outdoors and was much affected by the weather. It also made servicing difficult and virtually impossible in the rain. At present it is located in a stone built building which it shares with some commercial radio link equipment.

GB3TM utilises two omni-direction vertically polarised aerials, one for TX and one for RX. They are positioned to minimise cross coupling and filters are fitted to both the transmitter and the receiver to virtually eliminate any coupling between them.

The first 15 Years

For the first 15 years of operation the output transmission was frequency modulated with video. The accompanying sound was carried on a 6 MHz f.m. sub-carrier. This was most convenient because many of the analogue Sat. receivers of the day could receive and decode the transmission with only minor modifications. At times, up to 12 ATV amateurs were regularly using GB3TM. Under good propagation conditions ATV signals could be sent to and from stations in EI, GI, GD and G. For a short period a receiver on 3cms 10.340 GHz was provide for experimental purposes. A 2m receiver carrying the ATV chat channel on 144.750 MHz was connected to the alternate audio channel to provide talk-back.

Digital ATV Transmission

In 2009 it was decided to build and install a digital ATV transmitter. Funding was obtained from the Arfon Repeater Group and encoder and modulator boards were obtained from a German University ATV Group and work started on a Digital ATV transmitter.



Fig. 1.

Transmitter

The transmitter was designed and built by members of the 'technical group' comprising Brian '4KAZ, John '3JGA and David '8PBX they are seen here in Fig.2, alongside the GB3TM equipment rack. The Digital ATV transmitter was completed by the end of 2009 and is shown in Fig.1. above. It generates a digital ATV signal on 1316 MHz having a Symbol Rate of 4.167 MS/s and includes stereo audio. New digital test facilities were also installed on site.



Fig. 2.

GB3TM digital came on air with DATV early in 2010. Initially, both transmitters for f.m. and digital were available to transmit on 1316 MHz and were selected by a DTMF tone on the audio input.

By March 2012, as the analogue transmitter was in little use, it was decided to close it down and retain a single DATV transmitter on 1316 MHz. The analogue receiver on 1249 MHz remained in use. This is the situation today, January 2013.

The future

Work is under way to provide a reduced bandwidth (2MHz) digital ATV input to GB3TM on 70cms, 437 MHz. The receiver will incorporate an up-converter so that a digital Sat-Receiver can be used. Two local ATV amateurs are preparing to use this new channel when it becomes active.

Many thanks to John 'JGA, for a very interesting and informative article, on what I believe to be the longest serving ATV Repeater in Wales – Ed.

Do you have an article or story to fill an empty space? Please share it with other club
members by sending it – paper copy or by email - to me at the address at the start of the newsletter. John GW3GUX.