

The Journal Of Dragon Amateur Radio Club

Welcome From Tony
The Editor



to the Mawrth / March 2019 edition of the Dragon ARC journal, Llais Y Ddraig / The Dragon's Voice.



Our committee has been busy over the last few months restructuring the DARC to meet the needs of our members and a lot of informative ideas and plans for the future have now been submitted and are being put in place.



As editor now, I will try my best to portray through this medium our Members' ideas and suggestions relating to Amateur Radio, so please feel free to submit articles to me for publication. The Committee asked me to thank and pay tribute to Simon Taylor MW0NWM for his excellent service as Newsletter Editor.

I am looking forward to the joint event with the NWRS to Norbreck, being more involved with members of the DARC throughout 2019 and helping to promote Amateur Radio in general through various multi-media related articles and features, and I am so looking forward to the future and my role within the DARC.

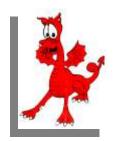
Clwb Radio Amatur Y Ddraig DARC Forthcoming Events: Marconi Special Event Station & trip to Blackpool Rally







Llais Y Ddraig The Dragons Voice n this Issue



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QSO From from your ED:



As your new Editor, I just thought I had better use this bit of space to tell you a bit about me! My Interest in radio communications dates back to the early 80's whilst being involved with the RNLI and then whilst serving in the RWF TAVR, and of course not forgetting GUD OLD Citizens Band radio where I helped to form a local club in Colwyn Bay.

My profession has always been in media while working for various newspapers for over 40 yrs in the photographic & publication sector of newsprint around the North West & North Wales areas,

besides freelancing and preparing multimedia videos for promotional purposes.

I have been an Amateur now for just under 12 months but it seems a lot longer, as having gained so many new friends and obtained so much knowledge that has pushed me towards an enthusiastic approach to his exciting Hobby.

My current part time employment is still involved with photography, working on various PR events as Civic Photographer for Llandudno Town Council. My other major hobbies of interest are: military aviation, drone video filming editing and spending time in my caravan on my favourite island in Rhosneigr, where I take time out to walk, explore and photograph the scenery. As I will be spending a lot of time on the island this year, I certainly hope to make many QSO's with you all. **73's Tony The Ed**





The committee wish to welcome...

Dylan Williams MW1EPI – Our new equipment officer, Dylan lives on Anglesey and is now responsible for safeguarding the club's equipment. Members wishing to use club of equipment for personal use may do so by contacting Dylan directly.

Members wishing to use items of equipment for setting up special event or contest stations on behalf of the club should contact Dylan who will pass their request to the committee. All equipment must be



As you can see by these pictures, a vast array of equipment is available at the DARC



Jeremy Markham MW6XWP – Our new Treasurer, Jeremy is well qualified for this post having run his own business for many years.

The committee wish to acknowledge the work of **John GW3GUX** who held this post for 15 years, Thank you John, all the best for the future.

Carl Kibblewhite MW6PQQ – Carl has been an active member of the club from the moment he joined us. He has been involved with the set-up for GB2VK at Marconi and GB100MCV at Holyhead. Carl has also suggested the purchase of a DX Commander multi-band antenna which the committee have ordered.

John MW0JWP hon. Secretary.



THE NORBRECK AMATEUR RADIO, COMPUTING & ELECTRONICS EXHIBITION BEING HELD IN THE NORBRECK CASTLE HOTEL, QUEENS PROMENADE, BLACKPOOL, LANCASHIRE FY2 9AA.

SUNDAY APRIL 28th 2019





NARSA Blackpool Rally

Building on last year's very successful visit, Dragon ARC and North Wales Radio Club are running a joint trip to the NARSA rally at the Norbreck Castle in Blackpool. There are two immediate pieces of good news: the cost for the coach will be an amazingly low £10 per person. Both Clubs are subsidising the cost. The other good news is we are leaving an hour later, so the first pickup in Holyhead is at 7.30am.

There were about 40 traders and even more organisations and club stands last year. It's the opportunity for you to stock up on PL259s, F plugs and all the sundries you always need. There's an excellent bring-and-buy stall area and you may be tempted to buy that new transceiver you've always wanted or a good DX antenna.

These are the approximate coach pick-up times and last year's collection points:

- 1) Goodsir Depot 07:30
- 2) Pringles overflow carpark, Llanfairpg 07:50
- 3) One Stop, Bangor Services off the A55 0800
- 4) A55 Iron Bridge. Layby on opposite carriageway to the Shell Garage, Dwygyfylchi 08:10
- 5) Premier Inn, off Black Cat island Llandudno Junction 08:20
- 6) Colwyn Bay Railway Station 08.40







2019 Marconi Special Event Station GB4GM & GB2IMB



Once again we're planning for another successful Special Event Station to celebrate this prestigious event right on our doorstep at Waunfawr.

As I am sure you have all seen the video I produced last year it certainly was a great turnout of such enthusiastic Amateurs all working as a team but also enjoying the social side of Amateur Radio as well.

GB4GM/ GB2IMB will be a one-day event this year, so its going to be a hive of QSO activity on the Bands, I CANT WAIT!

In 1913 the wireless pioneer Guglielmo Marconi opened Britain's first long-wave wireless transmitting station on this hillside.

He visited the site many times during the station's construction, staying at Caernarfon's Royal Hotel.

He had come to prominence in 1897 by sending the world's first wireless transmission across wa-

The station provided a unique and vital facility in the First World War and later, enabling official communication with the USA and Australia and with ships on the North Atlantic. You can still see some of the foundations of buildings and masts today. The station closed in 1938.





Over 7,000 tons of materials were moved by train to Llanrug, then by traction engines and finally by a narrow-gauge railway which ran up the mountain.

The facility became fully operational in July 1914 at a cost of £50,000.

The first wireless telegraph message to Australia was sent to Wahroonga, NSW, on September 22 1918.

By March 1920 a commercial service from Caernarfon to New Jersey, USA, was operating successfully.

Please keep up to date for further info on FACEBOOK & Support This Event in Any Way You Can, 73's



SPECIAL EVENT STATION GB2ORM

7 / 8 / 9 June 2019



SITE LOCATION: The Great Orme, Llandudno, North Wales Special Event Station Manager: Tony Mottram MW6TMQ / SES Overseer: John Pritchard MWOJWP

The North Wales Radio Society will be communicating via Amateur Radio, to commemorate the 75th Anniversary of the D Day Landings on 6th June 1944.

As this fascinating geographical location played such a vital role in WW2 with its Gunnery School Positions, RAF Radar Station and, of course, the famous Mulberry Harbour construction site — all within view of the Great Orme Country Park.

The NWRS will be working in conjunction with the Dragon Amateur Radio Club, who are providing their powerful beam antenna system together with manpower, to help run the station throughout the weekend.

The radio operators communicating with our station will automatically be pinpointed to the dedicated Special Event D Day Station QRZ Page which portrays Llandudno's History, Tourism and much more.



Test Firing At the Gunnery School on The Great Orme, Llandudno

A small party of Air Cadets, Army Cadets & Sea Cadets will also be involved to help educate them and hopefully entice them into Amateur Radio. They will join our weekend in remembering and respecting all those who fought and lost their lives during the D Day operations 75 years ago

In conjunction with the Royal British Legion (Llandudno Branch) a dedication Ceremony at the Cenotaph on Llandudno Promenade will also be held for the Saturday, and various Cadets and members of the RBL will also be present to conduct a short service of remembrance, at the same time our Special Radio Event Station



Civil Engineer Hugh Iorys Hughes, of Bangor, North Wales

The Mulberry Harbour

lorys Hughes was an eminent civil engineer and on 1 June 1942, he was instructed by Prime Minister Winston Churchill, to design a floating structure which could be used to land men and vehicles on the Normandy coast when the time came to liberate occupied Europe. lorys accepted this brief, and one of the sites chosen for the construction was Conway Morfa.

The enormous floating structures meant the Allied forces did not need to capture a port first and provided a platform large enough to land vehicles, equipment, supplies and troops.



Mulberry Harbour Construction At Conwy Morfa

Further information available at: https://www.nwrs.info/special-event-station.html



Special Event Station Listings 2019

Airfields on The Air (AOTA) RAFARS Event 6th April 2019

All Radio Amateur Stations World Wide are welcome to take part, and in particular RAFARS Members/ATC/Clubs are asked to take part to put on as many AOTA Stations as possible to make it a great success. All that is needed is either a current or an old RAF Military Establishment which was used during the wars or perhaps may still be in current use. Register at RAFARS AOTA Manager Vince G4DQP QTHr in qrz.com or email comms756@btinternet.com with details of call-sign to be used, the Location/Airfield, Name and Call-sign of person operating or running the SES.



International Marconi Day 27th April 2019

Celebrates the huge part Guglielmo Marconi played in the development of radio. IMD is a 24 hour amateur radio event that is held annually to celebrate the birth of Marconi on 25 April 1874. The event is usually held on the Saturday closest to Marconi's birthday. http://gx4crc.com/gb4imd/



RNLI SOS Radio Week May 1-14th

RNLI SOS Radio Week is one month of fun, non-competitive, operating, an opportunity for amateur radio to celebrate the work of the RNLI and to raise much needed funds for them.

The Royal National Lifeboat Institution is funded 100% by voluntary donations so SOS Radio Week is arranged to coincide with their major fundraising event, Mayday.



Mills On the Air Weekend 11th - 12th May 2019

Denby Dale ARS invite registrations for this year's Mills On The Air weekend that takes place over the weekend 11 and 12 May. Please visit www.g4cdd.net and follow the links



GB2ORM 75th Anniversary D-DAY 7/8/9/ June 2019

Great Orme, Llandudno North Wales (NWRS & DARC) https://www.nwrs.info/special-event-station.html

75 Yrs D-Day 1/8/9 June 201

(Continues on Page 7)

10th World Castles On Air Weekend 8th June 2019

Work on the air from historical places, monuments and the architectural constructions relating to fortification to rise of interest to historical and architectural heritage as well as visiting extant historical monuments.

During the World Castles Weekend there is a good possibility to fulfil a conditions of various award programs and increase your collection by beautiful QSL-cards. Radio hams of all countries and territories are invited. https://cashota.uk/



The museums taking part over the years have included ships, castles, air museums, Napoleonic forts, pumping stations, wireless museums, racing museums and many others. For the purposes of the event, the word 'museum' is loosely interpreted. There really is no shortage of venues in which such an event can be staged, no matter where in the world you might live.

<u>Armed Forces Day 29th June 2019 (Various Locations)</u>

Armed Forces Day is a chance to show your support for the men and women who make up the Armed Forces community: from currently serving troops to Service families, veterans and cadets.

IOTA Islands On the Air Weekend 27th-28th July 2019

British Inland Waterways On Air 25-26th August 2019

The event is open to all Amateurs who are boaters, cyclists, walkers and other users of the canals, rivers, towpaths, riverbanks for work or recreation. Many clubs and individual Amateurs on or near the UK inland waterways obtain Special Event Station (SES) Call signs. Others operate mobile or portable using their own call signs. Many more like to contact the BiWota stations.

<u>International Lighthouse Lightship Weekend - ILLW</u> 17th - 18th August 2019

The ILLW takes place on the 3rd full weekend in August each year and attracts over 500 lighthouse entries located in over 40 countries. It is one of the most popular international amateur radio











Notable Permanent Special Event Stations UK

GB0IBC - Radio Amateur Invalid and Blind Club

GB0IWM - International War Museum

GB0REM - Royal Engineers Museum

GB0SNB - Kelvedon Hatch Secret Nuclear Bunker

GB0SUB - Submarine ARC, HMS Collingwood

GB0SWR - Sir Walter Raleigh Ship

GB1IBC - RAIBC VHF net control

GB2AIR - South Yorkshire Air Museum

GB2ATG - RTTY News Broadcast

GB2BP - Bletchley Park

GB2CPM - Chalk Pits Museum

GB2CW - RSGB Slow Morse

GB2CWP - Lincolnshire Aviation Heritage Centre

GB2DHH - De Havilland Aircraft Heritage Centre

GB2GM - Guglielmo Marconi, Poldhu ARC

GB2GMM - Guglielmo Marconi Memorial

GB2GP - Gilwell Park Scouts

GB2IW - RSGB Monitoring Service

GB2IWM - Duxford Airfield

GB2LD - Lizard Wireless Museum

GB2MC - Muckleburgh Collection

GB2NAM - North East Aircraft Museum

GB2NLO - Norman Lockyer Observatory

GB2NSC - National Space Science Centre

GB2OWM - Orkney Wireless Museum

GB2PLY - HMS Plymouth

GB2RA - RA Firepower Museum

GB2RAF - RAF Neatishead

GB2RGO - Royal Greenwich Observatory

GB2RGM - Royal Gunpowder Mills

GB2RN - RNARS London HMS Belfast

GB2RNR - Royal Naval Reserve

GB2SFL - South Foreland Lighthouse

GB2SM - Science Museum

GB2VHF - RSGB Special Activities

GB2WSM - Windermere Steamboat Museum

GB3RN - Royal Naval Amateur Radio Society

GB3RS - RSGB National Radio Centre Station

GB4HMS - Her Majesty's Ship

GB40RH - Raleigh International

GB4RS - RSGB President



<u>International Air Ambulance Week 7th - 15th</u> September 2019

This year's International Air Ambulance Week will take place between 7th and 15th September with the focus on supporting and generating donations for flying medical services around the world.

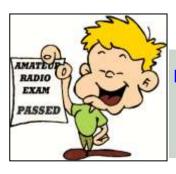
The event covers two weekends, giving amateurs a great chance to get involved and support the event. Amateur Radio Operators / Stations are encouraged to promote the donation causes.



Railways On Air (ROTA) 2019

Railways on the air (ROTA) weekend usually takes place every year on the weekend closest to the 27th September.

This date celebrates the anniversary of the first steam powered passenger railway which took place on 27th September 1825 - the first passenger train ran on a line in the North East of England from Darlington to Stockton. Bishop Auckland Amateur Radio Club coordinates this



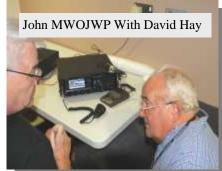
Training

With John MW0JWP



Dragon Amateur Radio Club has a proud history in training across all three levels, this continues to be the case and during the last year many candidates achieved passes in all levels.

As the enquiries for Foundation level is pretty constant, I have no plans to stop taking on one-to-one candidates from home or running courses at the club. At the time of writing I have three Foundation level candidates with one being blind and another



I am in the process of setting up a much needed intermediate course at DARC which I hope to start in May this year.

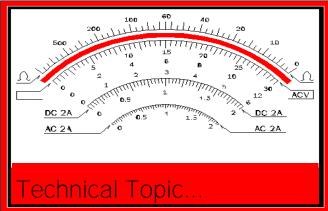
If you think you can help in any way with this course please let me know, you do not need to hold a full, or indeed any licence to assist with training.

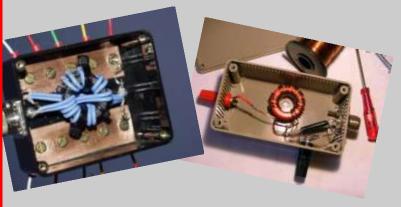
Please contact me If you would like to join this course at : mw0jwp@yahoo.com

I hope to utilise the club prior to meetings along with Skype sessions for candidates that need a little extra help.

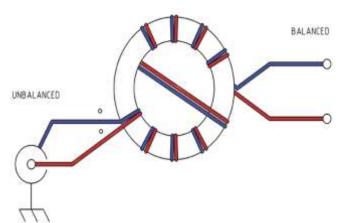


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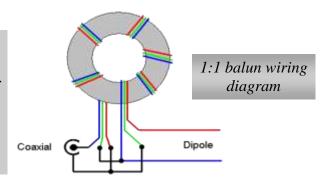
Building an HF Balun



A balun is a MUST for dipoles or similar antennas when they are feed with coaxial cables. Many Radio Amateurs connect the centre conductor of the coaxial cable to one side of the dipole, and the shield to the other. Wrong!

From the RF point of view, the shield can be modelled as two conductors, the internal shield (the real shield, this is, ground) and the external shield. In this way, your dipole has 3 arms, the two from the dipole and the coaxial cable shield (external face).

Sometimes the coaxial cable and that creates a high impedance and a low effect on the dipole, but in others, it presents a low impedance and causes it to radiate. This can cause serious RF feedback in the shack, TVI problems, really poor transmission lobes and directivity in the dipole pattern.



To prevent all these effects, a balun is needed. A balun is only an RF transformer. You can build your own balun, it is quite easy. Use a ferrite bar from a AM receiver or better, a toroid. Turn all the coils at the same time and connect them properly as in the above diagram. The most common baluns for a dipole are the 1:1 (above), or the 4:1 balun (next page).

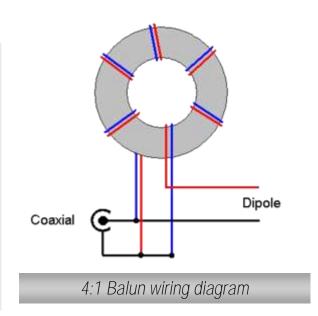
For a 1:1 make six turns of wire around the toroid and keep all wires parallel between them. It's an easy process that can be done in a few minutes. Use a wire appropriate to the power you will use.

Pay attention to the toroid you use. Use only a good RF toroid. Many surplus toroids are from switching power supplies or telephony equipment and are not usable in the HF range. In case of doubt, test the toroid. Use a dummy load (50 ohm for 1:1 and 200 ohm for 4:1 balun) and connect it to the output.

Building An HF Balun Continued......

Connect your transceiver to the balun input with a SWR meter and check the balun on the bands you will use it for.

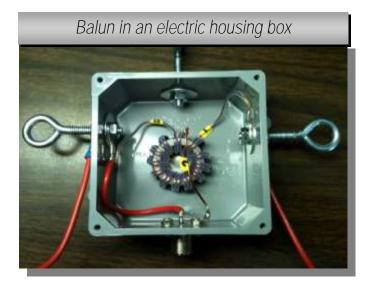
For up to 100 watts, there should not be any problem with a well-made balun, but higher power will require a different kind of toroids or ferrite bars. A stripped ribbon cable can be quite useful for QRP and copper insulated wire for higher power levels.



Some Balun Ideas......













Forthcoming events at the Dragon ARC Clubhouse

March 4th — Projects and Natter Night

March 18th — TX Factor Martin Lynch Film

April 1st — Balun building (John MW0JWP & Danny GW7BZR)

April 15th — Marconi in Wales Peter 'Porridge' (Peter Roberts GW4UWD)

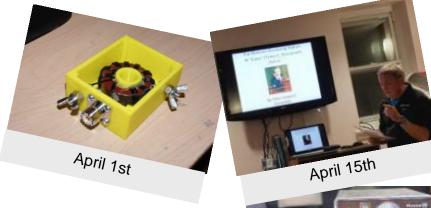
May 6th — The N1MM Call-Logging Program (Danny GW7BZR)

May 20th — "Previously Cherished Radio Equipment Sale" (Not a Junk Sale)





March 18th





May 20th





- Cynhelir cyfarfodydd y clwb yn Neuadd Ebeneser Lon Foel y Graig, Llanfairpwll ar Nos Lun y cyntaf a'r trydydd yn y mis am 7.00 at 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 7.00 for 7.30. Visitors and new members welcome.

"Pob gohebiaeth at yr ysgrifennydd / All communications to the Secretary John Pritchard MW0JWP.Tel: 07515 031025 Email: mw0jwp@yahoo.com

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Cliff Nicholls	2W0CBZ
	Steve Goodwin John Pritchard Jeremy Markhan Dylan Williams Bryn Smiles Carl Kibblewhite Paul Dicken

NEXT EDITIONJuly 2019







Well, that's it until July and I hope my first edition of Llais Y Ddraig / The Dragons Voice has been interesting, so PLEASE, PLEASE contribute your ideas and articles in time for our next edition.

A BIG THANKS to our Secretary John MW0JWP for his help and contribution to this edition of Llais Y Ddraig / The Dragons Voice.

The next edition, number 121, of Llais Y Ddraig / The Dragons Voice, will include reports and pictures of the Marconi Special Event Station GB2IMD, the trip to the Blackpool Radio Rally and the GB2ORM D Day Special Event Station as well as your articles!



NEXT EDITIONJuly 2019



