

Ham Radio Ireland



Servientes Traditiones et Spiritus Experimentalis Radio



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Vol. 2 Issue 08

August 2023



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Ham Radio Ireland

Ham Radio Ireland was the logical progression from what started as a Magazine covering the Province of Connacht in the West of Ireland.

In point of fact we are the only Independent Radio Magazine in Ireland geared towards the Radio Experimenter.

All clubs and groups are welcomed to submit reports and promotions of their activities and special events. If you are a homebrewer and designer we would welcome your articles.

The format and content of the Magazine will remain the same and we will naturally continue to support Home Brew projects, QRP Radio, Antenna Projects, HF, VHF, UHF, SHF Portable operation, SOTA, POTA, Short Wave Listening, Digital Voice and Data Modes, Hints for the shack, New developments in Radio and Electronics, Radio experimentation, Current technology CB Radio, PMR 446, and much more.

We repeat forthcoming events in our News Section right up to their date of operation. In this way we hope to encourage as many groups or clubs to take part. If you have an event planned feel free to promote it through our Magazine

We are not affiliated to any Group, Club, or Society and therefore remain unbiased and inclusive. This magazine is for all radio and electronics experimenters! We remain non political in all respects of the hobby.

We welcome any articles submitted for publication and encourage those who have never written for a magazine before.

We welcome Feedback
 If you enjoyed this publication please email
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Submitting Items To This Magazine

We are always delighted to receive any radio related material for this magazine.

Please E-mail us in advance of submission so that space can be allocated.



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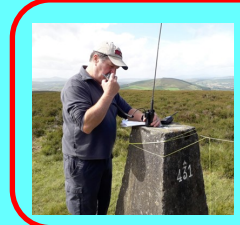
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Cover Image
*SOTA Operation
 In
 Glendalough*

Views expressed in this publication do not necessarily reflect the views of the Editor, those of the Carrion Press or the Galway VHF Group

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For more details see HamRadio.co.uk/JPC

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 - 1 x MR642 Radial Set for 6m-4m Bands
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For operation in the 5-55MHz frequency range. The operating frequency is continuously adjustable giving you a full-size portable, horizontal dipole antenna. The antenna was designed with portable operation in mind. £71.95



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Diamond RHM-10 Portable/Mobile Antenna. 7-430MHz, 130W, SSB, Telescopic. £199.95

Windcamp WA-4 HF Portable Windom Antenna. 4 bands 7/14/28/50MHz QRP. £50.95



Comet HFJ-350M 9-band 3.5-50MHz portable Antenna with plastic carrying pouch. Ideal for use with FT-891 and similar radios. Intended to go on your vehicles' antenna mount when you are parked up (Mobile use not recommended). £89.95



Wonderwand Widebander MK2 Widebander QRP Portable Antenna System. Latest design from the masters of rig-placed Wide band antennas. The new Widebander is a compact Antenna covering a massive 1.8-432MHz. £129.95

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★★★★★ 4.9

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 - 1104 Memory Channels including 5 "Home" channels,
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News and Forthcoming Events Planning 2023



Welcome To EI3CC

What ever your interest in radio is then maybe we can help you.

Our aim is operating stations outdoors and getting involved with as many groups as possible.

Scouting, youth clubs etc are all welcome.

So come join us and enjoy the world of

Collective Communication



Collective Communications EI3CC will be manning their station at the Stradbally National Steam Rally over the weekend of the 6th and 7th of August with their new Radio Communications Unit and interactive displays. The location for the Steam Rally is approximately 10 minutes east of Portlaoise along the N80. As this event is over the Bank holiday weekend it will be an excellent family outing with plenty of attractions at the Steam Rally as well as the Collective Communications Station.

G-QRP Convention 2nd - 3rd September 2023

The 2023 G-QRP Convention will be held on Saturday the 2nd of September and Sunday the 3rd of September at the Harper Adams University Campus, near Newport North of Telford, TF10 8NB.

An Saturday afternoon the Buildathon will take place at 3pm followed by a social gathering with a buffet supper.

The Buildathon Project is a version of the Stockton bi-directional wattmeter/SWR indicator.

The Following Talks are booked:

Operating QRP, Club Activities and Awards ny Enzo, M0KTZ

The T-41 SDR Transceiver by Jack W8TEE and Al AC8GY (Live Via Zoom)

Building and Using the PAC12 and other portable antennas, by John VE1IPs (Live Via Zoom)

Sunday will running in parallel with the Telford Hamfest and the doors open at 10:15 am

More info from:

<https://www.gqrp.com/index.htm>

<http://telfordhamfest.org.uk/index.php?view=home>

The 59th NATIONAL STEAM RALLY STRADBALLY, CO. LAOIS 6TH & 7TH August 2023

STEAM & VINTAGE PARADE
SATURDAY 5TH AUGUST @ 7PM
STRADBALLY VILLAGE

PET FARM
FOOD TENT
AMUSEMENTS
TRADE STALLS
CRAFT VILLAGE
SAWBENCH DISPLAY
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& MUCH, MUCH MORE



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News and Forthcoming Events Planning 2023

British Railways Amateur Radio Society

During 2023, the British Railways Amateur Radio Society will be marking 55 years since the withdrawal of steam from British Railways in 1968. Special Event Callsigns GB0LMR and the Club call GX4LMR will be active throughout the year operated by Mark G1PIE active from Preston. QSLs via the Bureau, eQSL, or direct to Pam, 2E1HQY enclosing a SAE. More information from <https://www.qrz.com/>



We're delighted to announce that we will be holding our annual RSGB Convention from 13th – 15th October at Kents Hill Park hotel and conference centre in Milton Keynes. With lecture streams, forums, special interest groups, presentations and all the usual activities, there is something for everyone. Join hundreds of others at the RSGB Convention in October for one of the best social events in amateur radio. Bookings are open now and you can take advantage of early bird pricing until the end of August: rsgb.org/convention

RSGB News Services

For your weekly fix of GB2RS, from 80m to UHF DMR. Full schedule available from rsgb.org.uk/gb2rsschedule.

09:30 145.5250 FM

10:00 3.6400 LSB

12:00 DMR BM TG2354

19:30 DMR Phoenix TG880



All Tonight @ 8 webinars start 20.00 UK local time

7th August – OfCom Consultation: Pt 2

Focus: Foundation and Intermediate topics including call sign and exam changes, as well as the Consultation clauses that might lead to new opportunities for outreach activities for everyone

RSGB expert panel: Board Chair Stewart Bryant, G3YSX; Spectrum Chair Murray Niman, G6JYB; Examinations Standards Committee Chair Tony Kent, G8PBH; Board Director and Region 1 Representative Tony Miles, MM0TMZ

Instead of the usual webinar-style, these events will be forums where, after a short introduction, a panel of RSGB experts will answer your questions.

Part 1 of the OfCom Consultation was held on the 31st of July and maybe found under the heading of Archived Webinars at: <https://rsgb.org/main/tonight-at-eight-live-webinars/>

4th September – MINOS Contest Logging Software by Peter, G3ZPB

The presentation

Peter will cover the following points in his presentation:

1. An introduction to what MINOS does in terms of contest logging
 2. Additional features
 3. How to obtain the software and how to install it
 4. Setting it up for first use
 5. Hands-on using it in a contest
 6. Some additional contest features
 7. Installing Rig Control and Rotator Control
- Setup and use of Rig Control

Tonight @ 8 webinars are livestreamed for free on our [YouTube channel](#) and [special BATC channel](#), allowing you to watch the presentations and ask questions online.

News and Forthcoming Events Planning 2023

International Lighthouse/Lightship Weekend



The ILLW weekend takes place over the weekend of August commencing from **00:00 19th to 23:59 on the 20th of August 2023**. August seems to have become the international weekend for lighthouses. Countries all over the world have become involved in one for or another of lighthouse activity. Some years ago the United States Congress declared August 7th as their National Lighthouse Day and during that first week in August amateur radio operators in America set up portable stations at lighthouses and endeavour to make contact with each other. This event is known as the US National Lighthouse Week.

In Britain the Association of Lighthouse Keepers, ALK, conducts International Lighthouse Heritage Weekend on the same weekend as the ILLW in August. Their objective is to encourage Lighthouse managers, keepers and owners to open their lighthouse or light station and related visitors' centres to the public with a view to raising the profile of lighthouses, lightvessels and other navigational aids, and preserving our maritime heritage.

The ILLW usually 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 events in existence probably because there are very few rules and it is not the usual contest type event.

List of Irish/Northern Irish Participants As of the 21st of July

Participating Irish Stations

EI0NDR	Baily Lighthouse	Dublin	IE0025
EI0SW	Old Head of Kinsale		IE0007
EI1E	Ballycotton		IE0015
EI2WRC	Hook Lighthouse		IE0003
EI3CC	Ballinacourty Point		IE0018
EI0MRE	Broadhaven/Ballyglas Lighthouse		EI0006
EI9CJ	Dundalk Lighthouse		IE0028

Participating Northern Irish Stations

GB1RP	Rathlin Rue Point	UK0185
GB2WL	Rathlin West	UK0217
GB2EL	Rathlin East, Low & High	UK0055-56
GB5BL	Blackhead Lighthouse	UK0032
GN0LIX	Chaine Memorial Tower	UK0033
MN0JQS	Lightship "Petrel", Ballydorn	UK0092

British Inland Waterways On The Air 2023

Saturday 26th to Monday 28th August

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) callsigns. Others operate mobile or portable using their own callsigns.

Many more like to contact the BIWota stations.

It is also a good chance for WAB enthusiasts to get some rare WAB squares.

If you are interested in taking part in the event please register at

www.nharg.org.uk/biwota

We look forward to hearing you on the air.

Photograph courtesy of Kev Driver, MTKSD

Irish Net

Active not only on Sundays, but most weekdays starting at around **16:00 UTC**, the **informal gathering on 14.156 MHz** frequently suffers from QRM during contests and DXers unaware of this long standing net of North American operators with an Irish connection. In a recent contact on 20m with W11IDP, QTH Tuscon Arizona, operator Jerry confirmed that the net now also uses the **17m band operating on 18.114 MHz**, avoiding the increased QRM on 20m and taking advantage of improved propagation conditions



Episode 29 of TX factor is currently available with an excellent review of the ICOM IC-905 all mode VHF, UHF and SHF transceiver. In fact they test two of them on each of the bands and also demonstrate ATV on 5GHz with the picture displayed on the IC-905's own screen. Also featured is a trip to the UK's last remaining shortwave transmitting station in Woofferton, near Ludlow.

Link: <http://www.txfactor.co.uk/>

News and Forthcoming Events Planning 2023

Jamboree-on the Air JOTA Friday 20th to Sunday 22nd October 2023



Jamboree-on-the-Air, or JOTA, is the largest Scouting event in the world. It is held annually the third full weekend in October. JOTA uses amateur radio to link Scouts and hams around the world, around the nation, and in your own community. This jamboree requires no travel, other than to a nearby amateur radio operator's ham shack.

Many times you can find the hams will come to you by setting up a station at your Scout camporee, at the park down the block, or perhaps at a ham shack already set up at your council's camp.

The Purpose of JOTA

- Promote and support Amateur Radio, science, technology, engineering and mathematics (STEM) activities in a fun and interesting way across the scout and guiding troops of Ireland, particularly the annual global JOTA-JOTI scouting event
- Provide a focal point for amateur radio equipment donations and distribute on loan or on a permanent basis such donations to scout troops who wish to take part in amateur radio and radio scouting activities
- Contribute to IRTS, Scouting & ComReg consultations in order to help promote Radio Scouting activities in Ireland

Special Interest Badges

Radio Scouting Ireland have resources to help scouts and scouters devise an implement amateur radio related programs for Special Interest Badges.

Facilitation

RSI have resources, training videos and equipment available for loan to help yourt scouts learn about radio communication.

Facebook Page

<https://www.facebook.com/RadioScoutingIreland/>

At this point in time there is plenty of time to make arrangements with you local scouting group and assess their needs and what type of special event callsign they would like to use for the occasion.

In addition to the operation of the amateur radio station with both voice and data modes, one can set up a morse key and oscillator and maybe operate a treasure hunt over PMR 446 radios.

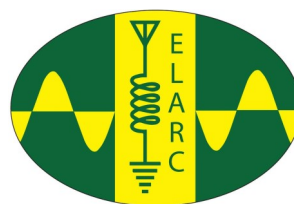
In the last few years, there were basic electronics projects available to give the opportunity for scouts to wield a soldering iron. This courted great interest amongst the scouting groups in Galway. Indeed it also appealed to Galway Radio Club members.

It is possible to find a scouting group in your area at the Scouting Ireland site at <https://www.scouts.ie/>

Online Amateur Radio Community (Northern Ireland)

The Online Amateur Radio Community runs a 40m slow-to-medium speed CW net every Monday evening at 7pm. All are welcome to join in. For more information see morse.oarc.uk On the first and third Saturdays of the month, the group holds a virtual social night called 'The Rubber Duck' on Zoom. For more information, see oarc.uk The Online Radio Club has a virtual radio club night at 7.30pm every Thursday via Zoom. It is suitable for all radio enthusiasts regardless of individual skill level.

East Leinster Radio Club



Members of "East Leinster Amateur Radio Club (ELARC) EI0EL" plan to activate Claremont Cairn (EI/IE-021) on Sunday 30th Aug starting about 11.30. 2m, 4m and HF. Hope to catch up with some of you then.

Would You Like to Promote Your Club and its Activities?

Is your club planning an event in the next month?

Are you planning a club activity?

Are you setting up a new Repeater or Gateway?

Drop us a line or two and we will include your item in the Ham Radio Irelandletter

**We Have a Facebook Page
The Ham Radio Ireland
Magazine**



<https://www.facebook.com/groups/1437072523434876>



Northern Ireland Radio Club Meetings

The Strangford High Frequency Enthusiasts Group is accepting UK-wide enrolments for the next UK Full licence training programme. They also use Google Meets on Monday evenings. It is completely free, email GI0VKP@gmail.com for details or see the [QRZ.com](#) entry for GI0VKP.

Carrickfergus Amateur Radio Group continue to meet for Club nights on Tuesday evenings from 7pm in **Elim Pentecostal Church, North Road, Carrickfergus, BT38 8ND**. All visitors are welcome. Contact the Club: carg@hotmail.co.uk

Bushvalley Amateur Radio Club has a club net on Tuesdays at 8.30pm on 145.300MHz. On Thursday, the club meets at The United Services Club, Roemill Road, Limavady. Contact Jason, MI3UIW, via email to Bushvalleyarc@gmail.com

West Tyrone ARC holds regular monthly meetings on 2nd Wednesday each month at 19:30 in Strathroy Community Centre, Omagh, BT79 7XE. Contact: info@wtarc.org.uk for more information

Lough Erne Amateur Radio Club normally meets at 7:30pm on the first Monday of each month at the Share Centre, Lisnaskea. More information from: <https://lougherneradioclub.co.uk/>

The Mid Ulster Amateur Radio Club (MUARC) has been active since 1965, our Club call sign is **MN0VFW**. Please take time to look through our website, where you will find information on our club, activities, events and members as well as a great gallery full of images of our latest activities. Mid-Ulster Amateur Radio Club meets on the air weekly on the GB3WT repeater every Monday evening at 7.30pm. There will always be a net controller from the club but everyone is welcome to call in and join the conversation. The club meets socially on Zoom twice each month. If you're in the region, and would like to take part, the club secretary can be contacted on the following email address: muarc.secretary@yahoo.co.uk

You can go to www.youtube.com/muarcmedia and that will bring you to our YouTube channel with all our previous lecture videos and much more content in the pipeline.

The Online Radio Club has a virtual radio club night at 7:30 pm every Thursday via Zoom. It is suitable for all Radio Enthusiasts regardless of individual skill level. To to the website for the meeting link <https://onlineradioclub.org/>



Ballymena Amateur Radio Club meets every Thursday at 70, Nursery Road, Gracehill, Ballymena except during the summer months (June, July, and August) when we only officially on the first Thursday of the month, however there are some members there nearly every Thursday Night. Details from Hugh Kernohan GI0JEV (Secretary) HKernohan@aol.com

City of Belfast Amateur Radio Society meets on the first Monday of each month a 8pm in the Shorts Recreation Clun, Aircraft Park, Hollywood Road, Belfast BT4 1SL Contact Paul Irwin GI6FEN for more information. paulirwin@btinternet.com

Mid Ulster Amateur Radio Club meets on the second Sunday of Each month in the Brownlow Resource Centre, Craigavon, Co Armagh. For more information contact muarcsecretary@yahoo.com

If your club is not included on this page please notify us and we will add it to the next issue

Contact ei5dd.steve@gmail.com



BUSHVALLEY AMATEUR RADIO CLUB

ANNUAL RADIO RALLY

Bushvalley Amateur Radio Club are pleased to announce that this year their annual rally will be on Sunday 5th November at the usual venue. Limavady United Football Club, Rathmore Road, Limavady, BT49 0DF. Several traders will be in attendance along with a bring and buy stand.

Car parking is available on site and on Rathmore Road.

Doors open at 11:00am

We look forward to seeing you there.

This Year's Chosen Charity



Lifeboats

bushvalleyarc@gmail.com



bushvalleyarc.org

A Memorable Weekend of SOTA in Glendalough and Wales

Over the weekend of Friday 7th to Sunday 9th, 16 enthusiastic Irish ham radio operators embarked on a delightful journey of Summits on the Air (SOTA) activities from the scenic IMC hut in Glendalough.

A map of about 40 summits within a 1-1.5hr drive of the IMC hut was created as well as an online spreadsheet to help the activators decide and let others know which summits they were planning to activate.

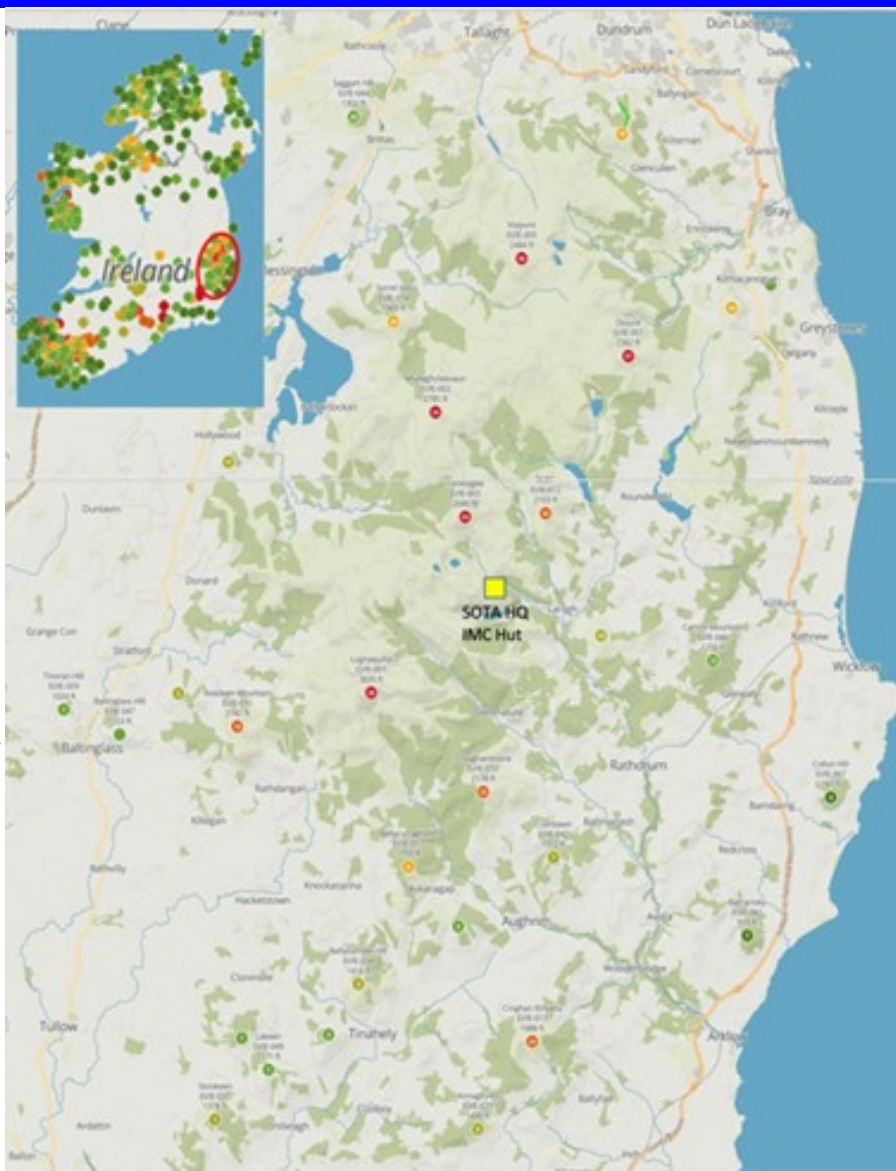
Over the same weekend a similar SOTA event was happening in Wales, providing an excellent opportunity for Summit-to-Summit connections and camaraderie among our fellow amateur radio SOTA enthusiasts in Wales.

The weather forecast for the weekend was looking spectacularly bad for the weekend, however being a hardy bunch, no one was going to drop out over a bit of torrential rain and savage winds!

The Irish hams gathered at the IMC hut, as the sun began to set behind the picturesque hills of Wicklow. An army marches on it's stomach as they say, so we all sat down for a dinner of fresh tagliatelle with chicken, chorizo and sundried tomatoes in a cream sauce to plan the weekends activities. Everyone enjoyed putting faces to well-known names and callsigns from many SOTA activations as we discussed who would do which summit with who.

The pros and cons of different portable radio equipment, batteries, antennas and loggers were discussed and shared in detail as the plans for the SOTA activations were solidified. Declan EI6FR gave a short talk on mountain safety, with a number of the group sharing experiences and essential outdoor kit such as survival shelters that also greatly enhance the longevity and comfort of winter activations. As we retired for the evening, the weather forecast had greatly improved, everyone was in great form and the stage was set for a fun-filled Saturday of SOTA activations.

It was lashing out of the heavens Saturday morning, but



The Map of 40 Summits within 1.5 Hours drive of the IMC hut in Glendalough

by 8am the skies cleared and ideal weather conditions for the summit climbs arrived. A big breakfast was had and packed lunches were prepared, and by 9.30 everyone had set out to conquer the beautiful Wicklow peaks surrounding Glendalough. Each group found its way up the mountains, and once on the summits, they quickly set up their radio gear to connect with fellow operators all across Europe. The radio frequencies buzzed with activity early on, particularly on 2m with many Summit to Summit (S2S) QSO's completed with the many Welsh

operators. HF conditions were variable, but with the low noise mountain environment and such a large community of activators and chasers, pileups from all over Europe were guaranteed! It was great to hear that many of the regular chasers like EA2DT, SM5LNE, G4ZPL, G0FEX, IK2LEY, EA1DHB and many other chasers and activators were on a 1st name basis with most of the Irish activators, fostering a real sense of camaraderie within the international amateur radio SOTA community.



A Memorable Weekend of SOTA in Glendalough and Wales



Some of the Irish activators chose to do a 2nd summit, while some decided the 2nd summit should be the Laragh Inn! The slagging and the craic was mighty and all had a great day on the mountains enjoying the great hobby that is ham radio!



A Memorable Weekend of SOTA in Glendalough and Wales



Saturday evening we had a big BBQ and some well earned beers with lots more opportunities to chat, chill, show and tell gear, and make a few more QSO's from SOTA HQ.

Most headed for home next day, nursing sore feet, legs and heads after cleaning up the IMC hut to leave it spic and span. A few hardy bucks did a few Sunday activations, naturally enough the pile ups were smaller after the flurry of activity the day before.

The weekend of SOTA activities in Glendalough was a delightful experience for the 16 Irish ham radio operators. With determination and enthusiasm, they conquered the summits, enjoyed the beauty of nature, and connected with fellow hams all over Europe. This coinciding event added a special touch to the adventure, as international connections

were made, emphasizing the universal language of amateur radio. The memories of this weekend will undoubtedly stay with them as they continue to explore new summits and nurture the bonds within the SOTA community. There was lots of discussion of where to do the next one.

Watch this space and if interested join us on the **SOTA Ireland Facebook group**.

John Holland - EI3ISB

ei3isb@gmail.com



Summits on the Air is an amateur radio awards scheme. To participate in this scheme you do not become a "member", there are no dues to be paid or membership cards to be issued. You can join in straight away! Just go to SOTAwatch to see what is happening right now in SOTA. To post to SOTA facilities you will need to [register an account](#). Then you will be able to add alerts and spots on SOTAwatch (which will likely help a lot, if you plan to activate) and upload your chases or activations to the SOTA database. There is no charge for registering. The [SOTA Reflector](#) uses a separate user account system; so to join in with discussions there simply click on the "Sign Up" button. We recommend that you save a copy of your passwords in a safe place - every week

we have to help people who have forgotten their passwords!

You can then Chase or Activate when you feel like it - SOTA is global, activations can take place throughout the 24 hours of the day. Once you transfer your log to the database there is a permanent record and you can check your entries against those of the stations that you contacted, and keep track of your progress towards awards. Later you might wish to purchase awards, trophies or goods from our on-line shop. These purchases and the occasional donation are the means of financing the SOTA facilities.

More information:

<https://www.irts.ie/dnloads/sota.pdf>

<https://www.sota.org.uk/>

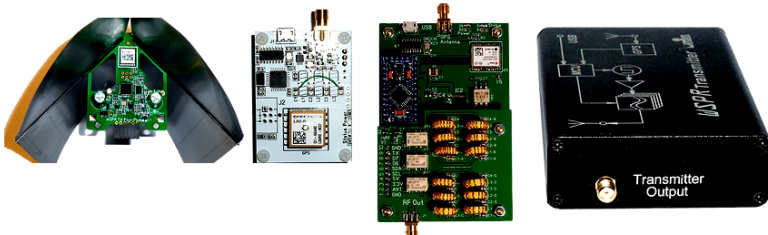
ZachTek

Handmade products for radio amateurs and RF enthusiasts.

Welcome to ZachTek, here you will find RF related products and information.

Some of my more popular products are different models of WSPR transmitters that is made for the radio amateur that wants a standalone transmitter for mobile or stationary use.

With these in your shack you can run WSPR 24/7 without tying up your regular transceiver.



QRP LABS

<http://shop.qrp-labs.com/>

Check us out
Many projects here
are capable of
transmitting and receiving
WSPR

Collective Communications - EI3CC C.O.T.A Operation

This was EI3CC's first Castles on the Air (COTA) and we decided to pick Dunhill castle Home of the Powers. Built in the early 1200's and it is said to be situated on the site of an earlier fort.

Dunhill castle now overlooks the Anne Valley and is a splendid walk from Annewstown Beach over to Dunhill village.

As usual we arrived at the site where we set up our station, the Radio Communication Unit, RCU as we call it again being the main station and with the club caravan for accommodation and gazebo for our public interaction displays.

Once set up after the usual "cuppa", we got the radio's up and running (ICOM7300) HF and a Yaesu FT8800, on VHF, and we soon began to get contacts in the log.

Not sure on public footfall but we were to find out this was to be a busy spot and soon we had plenty of enquiries as to what we were up to. One couple in particular, whose father had an interest in CW back in the 60's, asked if he could be brought down to see the set up. Within the hour, the family had returned his father was amazed with the RCU set up and what we were doing.



than getting them to stand and have a picture taken.

We also had visits from other operators, David, EI7BR, having a QSO in fluent French.

Our display table again attracting lots of interest Wayne, EI7HKB, had made up a vertical electronic buzzer type tree which you had to climb with a loop without the buzzer screaming on contact with the wire. The Del-la-Sal scout group, out on a trek, made good use of the puzzle before moving on with the trek.

This was to be the first overnight outing for the RCU, and it performed to perfection all internal and external LED lighting having no effect on the radios.

Sunday morning was, again, a sunny welcoming day and the overnight crew only looking forward to the traditional breakfast. We are now graced with a fully functional external kitchen apart from the mini kitchen in the RCU so soon the smell of breakfast filled the valley below the castle.



We also had an elderly passerby who worked as a radio operator in the merchant navy he described the radios in his day were the size of wardrobes I at that time was working a DL station on the paddle which again they thought was fantastic as they had spent their time on chunky straight keys.

Our selfie frame was again proving to be very popular and seemed to ease people into a photo opportunity easier



A good number of contacts in the log at this point, and nice to be able go into the RCU at 5.30am without waking anyone up and work some grey line contacts, again Alan VK3XXY being added and many others.

Midday was a turning point as the forecast of thunderstorms became a reality. We could hear in the distance rumbles and a decision was made to break camp and it proved just in time too as the heavens opened with heavy rain.

Another great weekend with the RCU and the EI3CC group and again spreading the word of Amateur Radio, or as we put it, flying the flag of the hobby.

Check out our YouTube channel, our twitter and Facebook pages for updated as to what EI3CC will be up to next.



John Tubritt - EI3HQB

ADX: Digital Communication with Transceiver Excellence

In early 2022, Barb Barbaros Asuroglu (callsign WB2CBA), introduced the ADX digital radio kit. It was designed to be an easy-to-build kit with through-hole components. Next Barb introduced a smaller version of the original ADX called the ADX-UNO that was designed as a hat board that fits onto an Arduino UNO. To shrink the circuit board size, the ADX-UNO used surface mount components, but these components were placed by the board manufacturer so in fact an ADX_UNO kit was easier and faster to complete than the original ADX.



In August of 2022, Scott Baker (callsign KJ7NLA) received an ADX-UNO kit from Barb and that kit inspired Scott to create a new ADX version called the ADX-MINI. The primary difference between the ADX-UNO and the ADX-MINI is that the ADX-MINI is a single board (75mm x 55mm) radio. While the ADX-MINI shares many similarities with the ADX-UNO, it includes some improvements including a change to the PA stage which results in increased power output.

The ADX project has continuously evolved and received regular firmware updates. As of July 14, 2023, the latest ADX firmware is version 1.6, which include features such as CAT control and improved FSK TX code. The ADX-MINI firmware was forked from the mainline ADX firmware. The primary reason for forking the firmware was to encode the band selection display so that a single ADX-MINI radio can support up to 11 FT8 bands. There are also some other minor differences in operation. For more detail on this the user can refer to the ADX-MINI User's Manual.

Overall, ADX radios perform exceptionally well, delivering excellent reception when paired with a properly tuned antenna. On the transmit side, power levels may vary depending on the chosen band and antenna setup. ADX radios support multiple bands by inserting a band-specific low pass filter (LPF) board. It is of utmost importance to ensure that the correct LPF is installed before transmitting

on a specific band to maintain proper signal filtering and to avoid damage to the PA finals.

As for my personal adventure with digital modes, In January of 2023 I ordered ADX-MINI circuit boards and components, and within a week I had built my first ADX-MINI radio and a band filter module 20 meters, I connected my Rybakova antenna, and to my delight, the ADX worked flawlessly right from the start. I could instantly see the traffic flowing in, and with a quick learning curve to familiarize myself with the WSJT-X software, I made my very first digital QSO.



From that point forward, QSOs became a regular part of my amateur radio experience, with contacts spanning across Europe and even reaching stations in distant continents like Japan. The ADX had truly opened a whole new world of possibilities, and I eagerly looked forward to making more QSOs with fellow radio enthusiasts worldwide. With the assurance that everything was working well, I began working on assembling an inventory of ADX devices, making both Barb's and Scott's models available in my store for others to embark on their own digital mode adventures.

The ADX setup

In the quest to embrace digital modes and unlock new possibilities, the ADX unit offers a versatile solution. In this enhanced review, we will explore the essential components required to transition to digital mode seamlessly. From the HF antenna to the software configuration, we will guide you through the setup process, enabling you to harness the power of digital communication with the ADX unit.

Crucial Components for Digital Mode: To embark on the digital mode journey with the ADX unit, several key components are necessary:

- HF Antenna: A high-frequency antenna is fundamental for effective digital mode communication. A well-tuned antenna optimizes signal reception and transmission, enabling reliable communication across various digital modes.
- ATU (Antenna Tuning Unit) - ATU-100: The ATU-100 acts as an impedance matching device, ensuring efficient power transfer between the antenna and the

ADX: Digital Communication with Transceiver Excellence

ADX unit. With the ability to handle a wide range of frequencies, the ATU-100 offers flexibility for diverse digital mode operations.

- c) ADX Unit with Filter Boards: The ADX unit itself serves as the core of the digital mode setup. Equipped with filter boards, it enables precise filtering of signals, minimizing interference and enhancing reception quality.
- d) Computer or Raspberry Pi or Android: To interface with the ADX unit and run digital mode software, a computer or a Raspberry Pi or an Android device is required. These devices provide the necessary processing power to decode and encode digital signals, facilitating seamless communication. Software will be explored in the next article.
- e) Power Supply: A reliable power supply is essential to ensure stable operation of both the ATU and the ADX unit. It is crucial to select a power supply that can meet the power requirements of both devices while maintaining a clean and stable power output.
- f) USB Sound Card: To enable audio input and output between the ADX unit and the computer or Raspberry Pi or android tablet, a USB sound card is necessary. This component ensures accurate audio transmission, facilitating the digital signal decoding process.

Seamless Integration and Configuration: Once all the components are assembled, proper integration and software configuration are key to a successful digital mode setup:

- a) Connecting the Components: Connect the HF antenna, ATU-100, ADX unit, power supply, USB sound card, and computer/Raspberry Pi/Android tablet together following the manufacturer's instructions. Ensure all connections are secure and well-matched.
- b) Software Configuration: Launch the digital mode software, such as WSJT-X or JTDX on your computer or Raspberry Pi or FT8CN in case using an android tablet. Configure the software by selecting the appropriate band and mode settings. This step allows the software to align with the ADX unit and optimize its functionality for your desired digital mode.
- c) Monitoring Traffic: With the software configured, you can now observe the traffic on the left side of the screen. Incoming signals will be decoded and displayed, providing valuable information about active stations and communication opportunities within your selected digital mode.

Conclusion: By integrating the ADX unit into your digital mode setup, you unlock a world of possibilities in communication. From establishing reliable connections to decoding signals with precision, the ADX unit, combined with the necessary components and software configuration, enables seamless digital communication. Embrace the power of digital modes with the ADX unit and embark on a new era of connectivity in the world of amateur radio.

The way forward

Barb's continuous evolution in the realm of digital mode transceivers brings us the latest addition to the ADX family: the ADX Pocket. Building upon the foundation of the ADX and ADX Uno, the ADX Pocket inherits the renowned Arduino Digital Modes Transceiver design, available at <https://github.com/WB2CBA/ADX-POCKET>

The ADX, which stands for Arduino Digital Xceiver, is a remarkable mono-band (quad-band) HF transceiver optimized for digital modes. It operates on the 80m, 40m, 30m, 20m, 17m, 15m, and 10m bands, allowing users to engage in popular digital modes such as FT8, FT4, JS8call, and WSPR.

The ADX Pocket, consisting of two boards, represents a significant advancement. The ADX Pocket Main Board combines a USB Hub, USB-to-Serial converter, Atmega328P/AU microcontroller, and CM108 USB Soundcard into a single compact unit. On top of this, the ADX Pocket RF Transceiver board provides all the necessary circuitry for the ADX's RF section. By plugging the RF board onto the ADX Pocket controller board, users can enjoy a feature-rich, CAT-controlled HF transceiver optimized for digital modes.



One of the standout features of the ADX Pocket is its versatility and portability. With its compact design, it can be easily carried in a shirt pocket, making it ideal for on-the-go operations. Furthermore, the ADX Pocket offers two powering modes. In USB-powered QRP Transceiver mode, it draws sub-1-watt RF output (around 700mW) from a USB 5-volt source, such as a PC. Alternatively, in DC 12V external power mode, users can apply a 10 to 12V DC power source to achieve up to 5 watts of QRP RF power. Power management can be easily selected via a convenient slide switch.

Barb's dedication to evolving the ADX series, culminating in the ADX Pocket, showcases a commitment to innovation and user-friendly design. By combining cutting-edge technology, compact form factor, and multiple powering options, the ADX Pocket sets a new standard for digital mode transceivers. Embrace the power of digital communication with the ADX Pocket, a game-changer that puts versatility and performance at your fingertips.

Scott on the other has recently unveiled his latest creation, the MI:2. This remarkable advancement introduces a host of integrated features, including a USB hub, a USB sound card, and a USB serial adapter, all thoughtfully designed to enhance convenience and reduce wire clutter. In this review document, we will delve deeper into the MI:2's evolutionary design, highlighting its compactness and improved functionality while maintaining familiar operations. The project is available at : <https://github.com/scottlbaker/ADX-MINI>

Streamlined Connectivity: With the MI:2, Scott has

ADX: Digital Communication with Transceiver Excellence

taken a significant leap forward in simplifying connectivity. By integrating a USB hub, a USB sound card, and a USB serial adapter directly onboard, this device eliminates the need for multiple individual peripherals. Users can now enjoy a streamlined experience with all the essential features seamlessly consolidated into a single, compact unit.



Uncompromised Operation: Despite its advanced integration, the MI:2 ensures that users can continue to operate it with ease. The device retains its familiar functionality, maintaining the same intuitive user interface and controls as its predecessor. Users can effortlessly navigate through their tasks and enjoy a seamless transition to the enhanced MI:2, minimizing the learning curve associated with new devices.

Liberating Your Workspace: One of the standout benefits of the MI:2 is its ability to declutter your workspace. With all the essential connectivity options now consolidated into a single device, the MI:2 significantly reduces wire clutter. This not only enhances the aesthetics of your workspace but also improves efficiency by eliminating the hassle of tangled cables. Enjoy a clean and organized setup, allowing you to focus on your work without unnecessary distractions.

Versatility in a Compact Design: The MI:2's compact form factor is a testament to Scott's commitment to efficiency and portability. Its sleek design takes up minimal space, making it an ideal companion for both desktops and on-the-go setups. Whether you are a professional in need of a compact and powerful connectivity solution or a digital nomad seeking versatility in your travel kit, the MI:2 offers the perfect balance of functionality and portability.

Embracing the Future: The MI:2 showcases Scott's dedication to embracing the future of connectivity. By integrating essential peripherals into a single device, he has created a forward-thinking solution that anticipates the needs of modern users. As technology continues to evolve, the MI:2's adaptability ensures that it remains a relevant and reliable companion, even in the face of ever-changing connectivity standards.

With the growing popularity of digital modes in amateur radio, 9H5BM.QRP has emerged as a go-to destination for radio enthusiasts seeking a comprehensive selection of radio kits and board projects. In this enhanced review, we

will explore the unique offerings of 9H5BM.QRP, with a particular focus on the expanding ADX range. Discover the joy of customization and diverse filter options that cater to the needs of digital ham operators.

A Haven for Radio Enthusiasts: Since its inception, 9H5BM.QRP has been dedicated to serving the needs of radio enthusiasts. As a digital mode operator, you can find a vast array of radio-related kits and board projects carefully curated to enhance your radio experience. From QRP solutions to innovative components, the store offers a diverse range of products that cater to the evolving needs of the amateur radio community.

Embracing the ADX Range: At the indie store 9H5BM.QRP, the ADX range has become a cornerstone of the digital mode offerings. Recognizing the importance of flexibility and customization, the store continuously expands its stock to carry all three versions of the ADX unit. This commitment ensures that digital ham operators have access to the latest advancements in digital communication technology.

A Plethora of Filter Options: One notable feature that sets 9H5BM.QRP apart is the emphasis on offering a wide selection of filters. The store understands the significance of filters in optimizing digital mode performance, and as a result, provides a range of filters with different configurations. By catering to the preferences of digital hams, 9H5BM.QRP ensures that operators can operate on their preferred frequency ranges, resulting in a happier and more engaged user base.

Customization for Enhanced Satisfaction: Recognizing that every operator has unique preferences and requirements, 9H5BM.QRP strives to offer customization options within the ADX range. This commitment allows users to tailor their ADX units to their specific needs, further enhancing the satisfaction of digital mode operators. Whether it's selecting specific filters or requesting personalized configurations, 9H5BM.QRP goes the extra mile to cater to individual preferences.

Support and Community Engagement: Beyond its extensive product offerings, 9H5BM.QRP fosters a vibrant community of radio enthusiasts. The store actively provides support to customers, offering guidance, troubleshooting assistance, and a platform for sharing knowledge and experiences. By engaging with the community, 9H5BM.QRP creates an environment where digital hams can learn, grow, and collaborate with like-minded individuals.

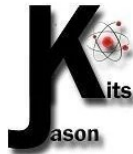
Conclusion: For digital mode enthusiasts seeking a one-stop shop for their radio needs, 9H5BM.QRP stands as a reliable and comprehensive resource. With an expanding ADX range, a wide selection of filters, and a commitment to customization, the store caters to the unique preferences and requirements of digital ham operators. Embrace the opportunity to enhance your digital mode experience by exploring 9H5BM.QRP, your destination for all things QRP and beyond.

I wish to thank and acknowledge both barb WB2CBA and Scott KJ7NLA for making these project available to the ham community and contribute with the advancement achieved so far.

[See Links and resources on next page](#)

ADX: Digital Communication with Transceiver Excellence

Resources and Links



<https://github.com/WB2CBA/ADX-POCKET>

<https://antrak.org.tr/blog/adx-arduino-digital-transceiver/>
<https://github.com/scottlbaker/ADX-MINI>

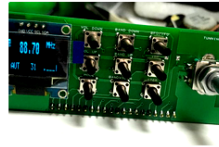
JasonKits

Visit my webpage at <http://freesolarenergy.1colony.com>
 Visit my webshop at <http://jasonkits.bigcartel.com>
 Visit my Tindie Page at <https://die.com/stores/JasonKits>

Jason Markham - 9H5BM
jmcsevv@gmail.com



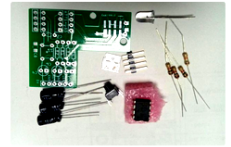
SI4735 D60 TFT 2.8" ESP32 ALL BAND RADIO
\$69.99



DSP RADIO Multi Band AM/MW/LW /SW-SSB/FM with RDS
\$50.99



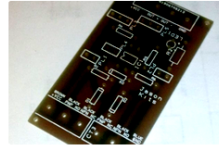
Classic 70's Pong Game
\$29.99



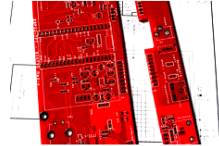
3DPrinter Filament Width Sensor Kit
\$12.99



Portable Micro AVR Programmer
\$38.98



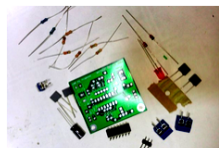
Universal NPN PNP inductive sensor interface board
\$8.99



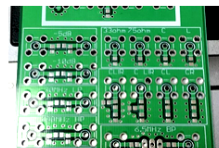
SI4735-D60 All Band radio - ESP32- TFT -P.C.B
\$7.99



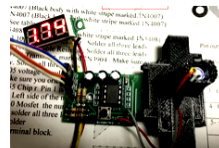
Reflow Oven Controller Universal Board Ver 2.01
\$45.00



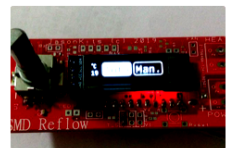
3D Printer Piezo Sensor Z-Min Auto Level KIT
\$9.99



Nano VNA Test Board Demo
\$4.99



3D Printer TSL201 Filament Width Sensor
\$29.50



Mini SMD Re flow & Filament Joiner Controller OLED
\$35.99

Join the G-QRP Club

The G-QRP-Club is an organisation run entirely by volunteers to promote Low Power Radio (QRP).

The G-QRP CONVENTION: 2nd - 3rd September 2023

The 2023 Convention will be Saturday 2nd and Sunday 3rd September at the Harper Adams University Campus, near Telford, TF10 8NB. More information to follow as plans develop.

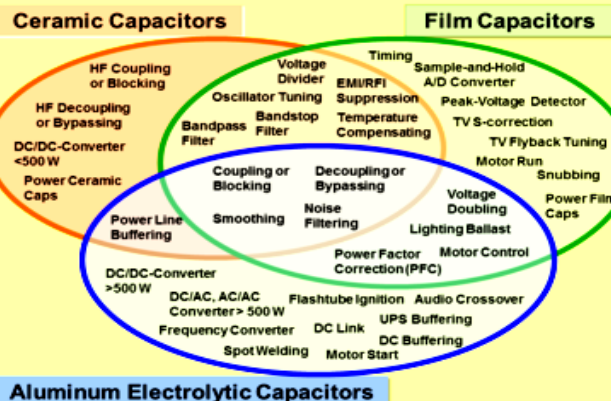


The quarterly magazine, SPRAT, provides interesting reading. Articles covering Antennas, Test gear, Transmitters and Receivers of varying complexity. More information: <https://www.gqrp.com/index.htm>

In this issue:
 RF Generation for Superhets - The Matchbox Radio Line
 yuTriMAS Transceiver - 455kHz BFO - FSLVQ Regen RX
 New Way of Constructing Beavets - High Gain LM386
 Subst News - Value Day Report
 Antennas Anticodes and Awards
 Communications and Contests - Member's News

Membership Service include a QSL Bureau, component supplies books and reprints

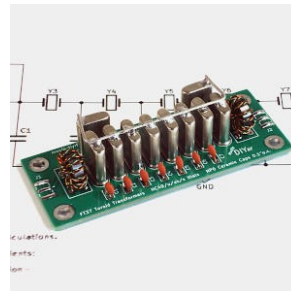
Overlapping Applications of Capacitor Types



Hardware for
 Hardware-Defined
 Amateur Radio

Check out our site: <https://mostlydiyrf.com/>

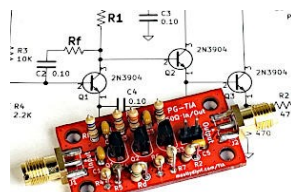
Kits and modules available including :



8-Pole QER Crystal Filters

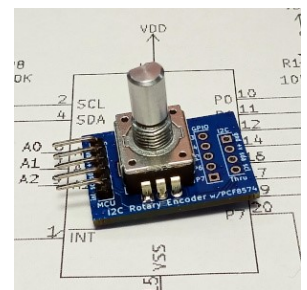


TIA-AGC IF Amplifier



ematic follows Hayward W7Z01 and Kopski K3 termination-insensitive IF amps [http://w7z01.ched.amplifier.pdf]. This version is for a single directional amp. This makes it usable in non-stems or paired together for bi-directional. All resistors are 1/4 Watt.

ADE-1 Double Balanced Diode Ring Mixer



12C Rotary Encoder

There is more coming so subscribe to be alerted of our new products

From Experimental Radio to Commercial Radio - Part 1

From Experimental Radio to a Commercial Radio Undertaking - a simple story - Steve Wright, EI5DD, Interviews with Michael Higgins, EI0CL



Steve Wright - *Michael, you have written a number of articles for the magazine to date but we have heard little about your involvement in commercial communications network from the past—how about an overview of the system for our experimental friends out there where did this all begin?*

Michael Higgins - Well Steve, it's a long story. Goes back to an avid interest in all things radio, encouraged by my father, who taught me basic Morse Code and initially back around 1952, listening to short wave radio broadcasts on old battery powered valve radios powered by our wind chargers Pye, Phillips and Marconis and around 1955 a wonderful Pilot Mariner 7 valve radio arrived that worked on 220 V AC.

Intermixed with old WD sets as 19 and 22 sets and the like powered by rotary inverters, we spent countless hours setting up antennas, getting the things to work, helped by gurus at the time who understood such things. Listening to American hams on first AM and later by beating two AM radio VFOs together deciphering the first SSB signals, listening to trawler and shipping off our coasts - so radio was a natural for me

Steve Wright - *Well bring us in to the future, where did the commercial idea come from?*

Michael Higgins - Well probably a total accident in one way and frustration with the telephone system at the time - a wind-up handset, party line and the knowledge that there was a better way to communicate and a need for this.

I was involved with the FCA in Ireland 1960 and the TA later in UK and was very aware of the power of both HF and VHF communications. So why not make it more available and more economic. I had gained a great

background in physics-maths engineering so began exploring the possibilities of the business aspect.

Steve Wright - *around what time was this?*

During the mid-60s and onwards.

I was also at this time very involved with the experimental group in Athlone and got a lot of help for the likes of Mike Burke, Army Signals, Paul Quast, quite a genius in radio design and building, Bobby Williams and earlier than this, Josie Kerrigan who ran a radio shop in Roscommon. Here I spent countless hours of lunchtimes in his workshop/den.

Mike Burke allowed me, under his supervision, to operate his station EI4AL for several years and then encouraged me to get my own license; which I did.

This had a big influence on my going to Japan and speaking with Yaesu Musen. Mr. Hasegawa, its president back then, welcomed me to Japan. I spent 2 weeks there visiting Trio, Kyodo, Furuno, and more. I came back with the Yaesu agency for Ireland.

Steve Wright - *how did this become a commercial two-way radio enterprise then?*

Michael Higgins - Well Steve, Yaesu began to make a system of PMR radio - Crystal Controlled - 6 channel radios with tone board control CTCSS and DCS available on frequencies 66 - 88MHz, 134 - 174 MHz and 400 - 480 MHz FM in 25 and 12,5 KHz bandwidths.

This was the holy grail at the time, and we jumped at the opportunity presented.

Steve Wright - *So experimental radio brought you not commercial radio, is that the case?*

Michael Higgins - Yes, it is Steve and what a roller coaster this has been!

Steve Wright - *Will you describe this roller coaster for our readers.*

Michael Higgins - Sure will, but let's keep that for the next issue -I don't want to bore anyone with too long an "OVER" In any case I have to write up a new article for the mag and that takes time also.

Marconi Radio Group - EI0MRG

wescomradio@gmail.com



A "Poor Mans" Spectrum Analyser for Filter Alignment



A double section LC bandpass filter is a type of LC bandpass filter that consists of two cascaded LC sections. Each LC section typically includes an inductor and a capacitor. The combination of these two sections provides additional filtering characteristics and allows for more precise control over the filter's passband and stopband.

The basic idea behind the double section LC bandpass filter is to achieve a narrower and more selective passband compared to a single section LC filter. By cascading two LC sections, the overall frequency response becomes steeper, resulting in better rejection of unwanted frequencies outside the passband.

The resonant frequency of an LC circuit is determined by the formula:

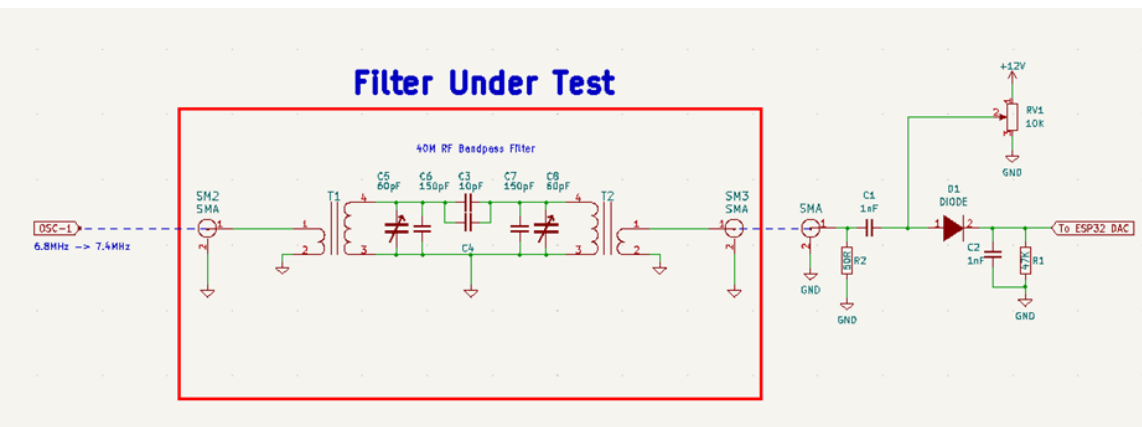
$$f_{\text{resonance}} = 1 / (2 * \pi * \sqrt{(L * C)})$$

where: $f_{\text{resonance}}$ = Resonant frequency in Hertz (Hz)
 L = Inductance in Henries (H) C = Capacitance in Farads (F)

The tuning of the centre frequency of a double section LC bandpass filter can be achieved by adjusting the values of the two capacitors in the LC sections. To set the desired centre frequency, you can adjust the capacitance values in both LC sections. Increasing the capacitance will lower the resonant frequency, while decreasing the capacitance will raise the resonant frequency.

Aligning double section bandpass filters to achieve best performance is generally done with a spectrum analyser, a signal generator and oscilloscope, a network analyser or by ear. The easiest method is a spectrum analyser but not every Ham has one of these on their workbench.

The RadioLab can be used to align filters using a variable frequency oscillator and a



A "Poor Mans" Spectrum Analyser for Filter Alignment

simple AM diode detector circuit. The AM diode detector circuit simply gives a DC voltage proportional to the amplitude of the RF signal coming out of the filter.

1. An oscillator is set up to sweep between min and max frequency (Span).
 2. This signal is fed into the input of the filter.
 3. The output signal from the filter is rectified and converted to a DC voltage. The DC voltage is read using an analog to digital converter (ADC).
 4. A plot of the voltage amplitude vs frequency is displayed on the LCD.
- By adjusting the two variable capacitors the filter can be peaked at the desired frequency.

power transfer and optimal filter response.

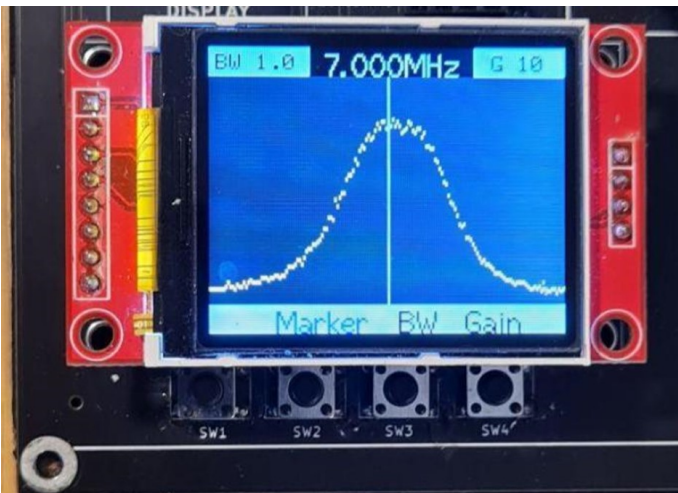
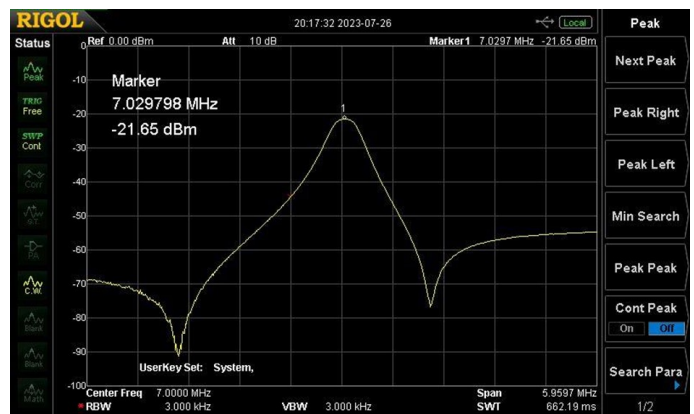
Additionally, the bandwidth of the filter can also be adjusted by manipulating the coupling between the two LC sections. A tighter coupling will result in a narrower bandwidth, while a looser coupling will widen the bandwidth.

Performance of the Spectrum Analyzer.

This filter frequency and shape matches that of a spectrum analyser making this a very useful tool. It should also work for finding the frequency of crystals for those who want to design their own crystal filters but this has not been tested to date.

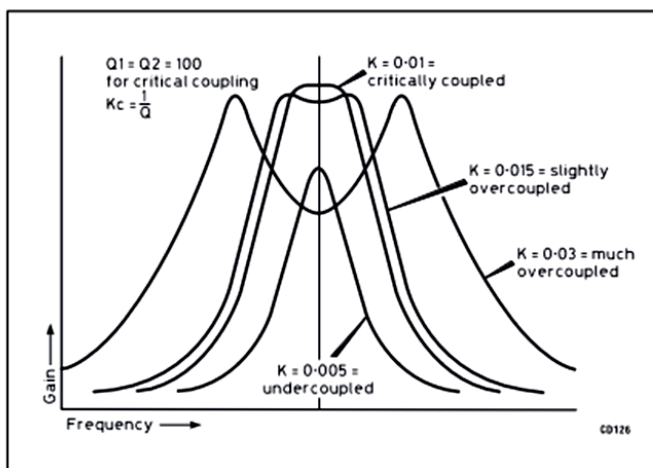
However, the additional component cost is approx. 1 Euro so don't expect the performance of a Keysight or Rohde & Schwarz. It is linear and not logarithmic and the dynamic range is limited. The output is not calibrated so all measurements are relative.

Having said that, it is perfect for setting up filters. Here is the same filter measured on a Rigol spectrum analyser.



In this specific filter case, a 10pF capacitor is used to couple the two filter sections.

It's essential to ensure that both LC sections are critically coupled to achieve the desired performance. Critical coupling between each LC section ensures maximum



Frequency response of a filter consisting of two resonant circuits tunes to the same frequency as a function of the coupling between them (after Terman). Under-coupling provides one sharp peak, critical coupling gives a flat top, mild over-coupling widens the top with an acceptably small dip and gross over-coupling results in two peaks on two widely spaced frequencies. All these degrees of coupling have their application

Image from Radio Communication Handbook, Eighth Edition, RSGB

For updates information and projects for the RadioLab, the best place is our Facebook Group:

<https://www.facebook.com/groups/217136744230409>

To order the Radio Lab Kit :

<https://radiobuilder.org/>

Order The Complete Kit - €249.00

- Main PCB – All SMT components soldered
- 40M RF Bandpass Filter
- Variable IF Filter
- ESP32 Controller
- Color TFT Display
- 5 x Large Prototype Boards
- 5 x Small Prototype Boards
- 1 x Prototype Breadboard
- Hardware Components
- RF Connectors
- RF Cables
- Enclosure



Louis - EI8KI

Hillwalking Radio Club - Galtee Challenge

On the 24th of June last our Club supported one of the major events of the hill walking calendar year, The Galtee Challenge. It was a logistic nightmare but with the hard work and dedication of our volunteers we got through it.

We started out the previous Friday evening setting up our Support Unit, generator and solar panel in the village of Anglesboro in Co. Limerick. Our First Aid woman and Treasurer Anne ensured that our first aid sports bags were well kitted out. Then there was the arduous task of getting the community hall ready for signing in and the laying of tables for tea and coffee at 7am for all the participants.

We were back again for 6am meeting and greeting the early risers as they arrived. The first two women in the door came all the ways from the valley of Knocknagree on the Kerry Cork border, they had left home around 3am.



had to miss out this year. The Galtee Walking Club also held a shorter Challenge event spanning 18km and 1200m of ascent.

We had excellent coverage on 163mhz between leaders sweepers on the mountain with Eddie EI-3FFB. Comms started to deteriorate due to rain wind and with only 4 meters visibility Denny who was driving the Rescue car and Breege, from the Galtee walking Club, helped to bring back seven climbers off the mountain. Three of those from another event became disorientated in the fog when their teammates left them behind.



The Challenge covers 31 km with 1700 m of climbing involved and is considered to be one of the best challenge walks in Ireland with 240 participants registered. Tickets went on sale in early March, and the scramble for places in recent weeks and months left many disappointed that they



Denny did blood pressure and sats check and arranged to have them transferred to our base quickly to warm up and get some hot food inside them. We had three of our own First Responders on the Challenge along with support from two Red Cross paramedics who completed the Challenge.

The last of the climbers struggled into the hall around 7pm exhausted wet and hungry but glad to have another Challenge under their belt. Overall all the 240 participants came back safely with only some having minor cuts and bruises. Here's looking forward to next year when we will do it all again.



Denny O'Dwyer

Friedrichshafen Ham Radio Exhibition

If you have never visited the Ham Radio Exhibition and are wondering what it is all about, this article is for you.

It is held in the Messe Friedrichshafen. Messe means Fair. Friedrichshafen is Friedrich's harbour on Lake Constance, South Germany.

Friedrichshafen is known as the home of the Zeppelin airships named after Graf (Count) Zeppelin. To the Radio Ham, it is the home of the biggest ham radio rally in Europe.

The fair is a large building complex on the outskirts of Friedrichshafen adjacent to a small airport which includes an airship port. It holds many other exhibitions from boat to motorbike shows. For three days at the end of June it houses Ham Radio.



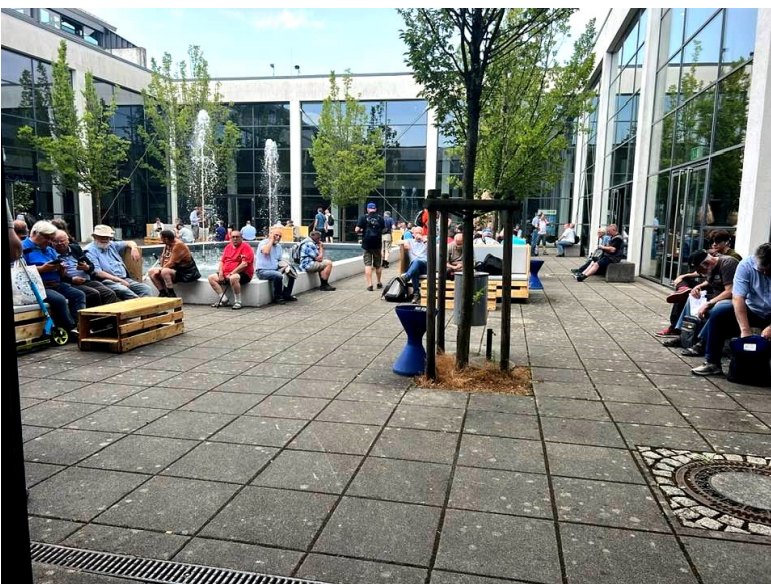
The photos show the size of the place. Two rows of exhibition halls with a central outdoor area for food and drink. An uncovered enclosed area provides a fresh air escape and cool down fountain.



The main hall is at one end and houses the greater part of the exhibition.

The flea market is held in the halls, reduced to one and a half halls this year.

With press accreditation I was able to obtain admittance to the Fair on the day before it was open to the public. I saw the great amount of work involved in setting up the displays and stalls in the flea market. Something not seen by the visitors. I gained a new perspective of the rally.



The main hall housed stalls of national radio societies and special interest groups.

DARC, the German national society had the largest presence followed by the ARRL.

The RSGB were absent, so no book stall for those of us who like to flick through the pages before purchase. I



Friedrichshafen Ham Radio Exhibition



thought DARC might have expanded their English language book range to compensate but no. Brexit and the consequent import problems cause too much trouble.



I also noticed an antenna workshop for the popular end fed halfway.



Some history/ nostalgia displays caught my interest.



Antenna fans were well catered for with everything they might need.

Plenty of test gear suppliers had stalls. One of the best points of the show is seeing manufacturers hardly known in Ireland but are well known elsewhere. We have a very

Friedrichshafen Ham Radio Exhibition



limited outlook being restricted by English language Ham publications.

My main reason for attending the show is the flea market. I know everything can be bought by online shopping these days but the retail therapy aspect of seeing and handling the goods is lost. As is the pleasure of discovery and haggling.



Plenty of test gear suppliers had stalls. One of the best points of the show is seeing manufacturers hardly known in Ireland but are well known elsewhere. We have a very limited outlook being restricted by English language Ham publications.



The major equipment suppliers were there as usual. The main one being ICOM. Yaesu did not attend this year which surprised me.

I don't want to buy an enigma machine or a vacuum capacitor but seeing them in 3d and touching them is a worthwhile experience. The flea market is an Aladdin's cave for the home brewer with everything I didn't know I needed, until I saw it.

Friedrichshafen Ham Radio Exhibition



A few observations. The number of attendees seemed to be considerably down on last year. The first year I attended it was difficult to move in the lanes between stalls. This year I could have driven a golf buggy along. Next year I expect only one flea market hall, down from the two on my first visit. Before then there were three but everything was better the time I wasn't there, as usual.

Tourist numbers in Lindau, where I stay also seemed down and as throughout Europe, prices up. People don't have the spare income as before to spend on the hobby. The age profile is heavily weighted to the middle aged and retired.

The future of radio rallies and ham radio does not look good to me. I encourage Irish hams who can afford it, to visit at least once for the experience. It is really worth it.



Photos By Philip - EI8JT

Additional photos from :

<https://www.hamradio-friedrichshafen.de/>

Philip Pollock - EI8JT
philipcpollock@gmail.com



BUSHVALLEY AMATEUR RADIO CLUB

ANNUAL RADIO RALLY

Bushvalley Amateur Radio Club are pleased to announce that this year their annual rally will be on Sunday 5th November at the usual venue. Limavady United Football Club, Rathmore Road, Limavady, BT49 0DF. Several traders will be in attendance along with a bring and buy stand.

Car parking is available on site and on Rathmore Road.

Doors open at 11:00am

We look forward to seeing you there.

This Year's
Chosen Charity



Lifeboats

bushvalleyarc@gmail.com



bushvalleyarc.org

Galway Radio Experimenters' Radio Club

In the early hours of Saturday 15th July, 3 brave members of the Galway Radio Club (GREC) set off from Galway heading to Finny Community Centre. The occasion was the Joyce Country Challenge - a set of 4 walks, with the first one being the challenge - a 30Km walk across the mountains in the area.

The weather was terrible, it had been raining from the previous day, and the forecast was not looking good - with strong winds predicted for the afternoon.

The Joyce Country Challenge (see <http://www.lakedistricthwc.com/JoyceDetails.aspx>) was celebrating its 15th year with traditional West of Ireland weather - terrible rains and strong winds. The event consists of a number of walks, with the main one "The Challenge" being 30Km in length, with an overall ascent of 1.750Km. In other words, this is mainly 30Km across the ridges of a number of mountains that surround Lough Nafoohy. This challenge is not for the faint hearted at all - you are on your own, and you must be experienced both in distance walking as well as navigation by map and GPS. And the walk can take up to 12 hours to complete - starting at 6:30am.

Finny Community Centre is the centre of all activity, where the walkers start from and arrive back. All walkers must check in here before starting so that they can get both a map as well as other pieces of information (wrapped up in waterproof plastic). It is also very important that all walkers report back to the centre so that (a) timings can be provided and most importantly (b) everyone is accounted for!!! In addition to this, Theresa, Maura and Rita provide very important nourishment to all walkers before they start and when they finish. Early in the day (from about 6am onwards), there is tea/coffee, toast and other goodies to get going. Around midday, the soup arrives so that anyone finishing can get plenty of hot soup and homemade brown bread. These 3 ladies play a key role in ensuring everyone has plenty to eat and drink during the day!!

There are 3 checkpoints set up - one near the top of Maumtrasna, one near the top of Knocklaur and a 3rd at Ail Dubh where there are also refreshments. At all of these checkpoints, everyone is "ticked off" when they pass so that it is clear if someone is late or missing and it is easier to "track" the areas they may be delayed in. The Ail Dubh checkpoint, is really critical for a few reasons:

- 1) it gives people a chance to get something hot (tea/coffee/soup) and a sandwich to rebuild energy
- 2) it gives people a chance to take a breather
- 3) it is also an opportunity for people to assess if they can complete the challenge, and if not stop at this point and arrange a lift back to the centre.

The last bit is important - up to, and after the Ail Dubh checkpoint there are no roads for easy transport - if there is a problem it requires access on foot (or worse - by helicopter).

The 3 "brave" members of GREC (Tom (EI3ER), Gerry (EI8EXB) and Paul (EI5IPB)) thankfully were not actually taking part in the walk, rather they were providing radio coverage for the walk. Because of the terrain, mobile communications are often impossible. In fact, from the

base station in the Finny Community Centre, you need to cross the road and stand by a particular gate to get a mobile signal. So you can imagine what it is like for those walking across the mountains!!

The day for the GREC members really starts about 2 weeks previously, with a discussion on what needs to be done, what radios are to be provided (including an "Inventory" which describes all that is required and where some of the radios go) and who is going to be able to support the event. We have also taken into account learnings from previous events and improved the way information is captured - especially at the base station. The radio communications are vital in keeping the organisers aware as everyone passes the checkpoints or decides to pull out (this usually only happens at Ail Dubh where there is transport back to the Centre).

About 2 days before the event, Tom (EI3ER) met up with the event organisers (Patsy) and he provided 2 pairs of handhelds (wrapped in waterproof bags - one being the main, and the other the backup). The pairs were for the first 2 checkpoints (Maumtrasna and Knocklaur). That is 4 handhelds in total - all fully powered and locked to the same frequency so that they can not be accidentally changed.

On the morning of the event, the three of us headed to Finny, keeping in radio contact as we made the journey which takes about 1 hour from Galway. Once at Finny, we quickly set up the base station which consists of a Yaesu Dual Band FT-8800 transceiver tuned in to a general frequency used for normal communications with handhelds, and a second frequency tuned in to the Mountain Rescue Team - just in case!! Naturally an antenna is also set up, using the club Bazooka mast with the VHF Antenna on top connected to about 25m of coax to the base radio. Ropes and cable ties are used to secure the antenna and safety tape is put around the antenna to warn people to stay away.

After we had the station set up (usually taking about 30 minutes at this stage) a radio check was done with the first checkpoint on Maumtrasna. Alex (manning that checkpoint) came in loud and clear so we knew that he was in a good spot for the communications.

Once that was completed, and after a quick breakfast of tea/coffee and toast, Tom and Gerry took down a list of all of the walker names and their numbers so that we would have it "just in case" there was a need - Tom then headed for the Ail Dubh checkpoint. Tom made use of his car radio as the main transceiver, but also had a handheld as a backup - just in case. Tom did a radio check with the base station using both the car radio and also the handheld,



Galway Radio Experimenters' Radio Club



Our base station manned by Paul (EI5IPB) and Gerry (EI8EXB)

making sure that we could easily communicate - from Ail Dubh to the base station the signal came in loud and clear.

At this stage, Tom also did a radio check with the checkpoint at Knocklaur making sure that the communications work from Knocklaur. This checkpoint is rather "finicky" from a signalling perspective compared to Maumtrasna - 5 metres one way and there is no signal to Ail Dubh, but go 5 metres "the other way", and the signal is loud and clear. So it is important to get this correct. Today, because of the terrible weather, it was a little more difficult to get the initial communications working, but once the "spot" on the checkpoint was found all was good. Interestingly, as the day goes on, the signals from Knocklaur can be heard at the base station as well as Ail Dubh, but Knocklaur can not hear us from the base station.

While Tom was heading to Ail Dubh and preparing everything there, Gerry (EI8EXB) and myself (EI5IPB) sorted out our "table" where we had the radio. Gerry and myself worked the station the previous year, and we learned a lot that day which helped us to make things easier. We had a new template checklist for tracking walkers, where we had columns for the walker number, each of the checkpoints, one for the base station and one for comments as shown here:

Date:		Checkpoint Tracker				Sheet: .../...
Walker #	Maumtrasna	Knocklaur	Ail Dubh	Finish	Comments	
1						
2						
3						
4						
5						
6						

This new checklist made it easy for us to get started as we only need to track the walker number at each checkpoint - we don't need to track the names. This way, we can tell how many have passed a given checkpoint, and can also note anything of interest for a given walker during the day. For example, at the first checkpoint we were told that walker number 9 had passed twice. We noted this in our new checklist and then checked with the organisers and we confirmed with Alex who the two "nines" were, and then confirmed that one of the walkers had their number on upside down on their backpack. This might sound obvious,

but we need to make sure that two different people were not given the same number as this might cause confusion later in trying to make sure everyone had completed the challenge. We then relayed this to Tom, who in turn relayed this to the second checkpoint so that there wouldn't be any confusion. It should be noted that our table is right beside the organisers table, so it is very easy for us to talk to each other and keep everyone in the loop!!!

We maintain a standard message log (as shown below), tracking the communications between the various checkpoints and the base station, noting the Time, the Origin of the call and the message. This allows us to look back on anything that has happened earlier in the day, noting when the communication occurred, who initiated the communication and what the response (if any) was.

Date:		Message Log	Log Sheet: .../...
Time	Origin	Message	

From this point onwards, the work is relatively easy - we get updates on those walkers that have passed a given checkpoint, and once all walkers have passed that checkpoint it is closed down about 10-15 minutes later. The 10-15 minutes gap is important as it caters for anyone that might turn back. Once the checkpoint is closed down, we note this in our message log and let the organisers know.

Gerry (EI8EXB) was listening in on all the communications back to base, and as I was noting them in the log, he was also keeping notes himself and then comparing with the organisers. These notes are really important as well because it allows us to collectively look back on what happened and when to make sure we have a good understanding. For smooth operation of the base station, 2 licensed people are required so that the radio is manned at all times.

By 09:06, all walkers had gone through the first checkpoint (Maumtrasna) and this was relayed back to us at the base station where we told the organisers, and at 09:16 the Maumtrasna checkpoint was closed down.



Our club banner with Gerry (EI8EXB) and Tom (EI3ER)

The Galway Mountain Rescue Team (<https://www.gmrt.ie/>) are on hand at the base station so that if anything happens, they are ready to spring into action.

Galway Radio Experimenters' Radio Club

Along with their own equipment, we provided them with a handheld tuned to our frequency and also a "package" containing route information, maps and other information - they also get additional information from the organisers. The Rescue Team also uses the opportunity to do training in the mountains which is great as they are already "out there" if anything happens, and they do radio checks using our handheld so that they can remain in contact at all times.



Tom (EI3ER) and Gerry (EI8EXB) noting the names/numbers of all the walkers

At 09:45, we heard that 7 were already thru' the Knocklaur checkpoint heading to Ail Dubh - both Tom and ourselves at the base station were able to hear this report from Knocklaur - showing the inconsistency of the signal propagation!!

At 09:56, we got a call from Tom - a serious problem had occurred at Ail Dubh!! It turned out that while refreshments are provided at Ail Dubh, there was no sugar - something which is important for helping with increasing energy levels. As this was serious we went to the organisers pointing out this emergency. Once a bag of sugar was procured, we went to Mountain Rescue as they were heading to Ail Dubh to check on things and we



The Ail Dubh checkpoint manned by Tom (EI3ER)

pointed out this emergency situation. So yes - Mountain Rescue saved Ail Dubh with a bag of sugar. While we all had a laugh over this, it did highlight the importance of the Galway Mountain Rescue team along with the radio communications between the checkpoints and our base station - something that was going to become important a

little later.

At 10:20, we heard that 2 more were thru' Knocklaur, and the first 2 were in sight of Ail Dubh. At 10:43, they arrived at Ail Dubh, had a quick break and were on the way again. One of those walkers was actually running so this was proving to be interesting. We heard Tom trying to contact the Knocklaur checkpoint from 10:49 onwards, but seemed to have trouble - we couldn't hear anything this time from Knocklaur either. However, at 11:13, we got word that all walkers had gone through Knocklaur by 11:00 and the checkpoint was closing down. This left the Ail Dubh checkpoint and the base station.

Over the next few hours, Tom was reporting on the numbers that were leaving Ail Dubh and continuing with the challenge, or those that were finishing at Ail Dubh and



Rita, Theresa and Maura who looked after everybody with a big welcome and plenty of food

making their way by car back to the Centre. Out of 35 people that started the walk, 7 decided to not continue the challenge at that point and were able to get lifts back to the centre. Joe (EI3HM) had gone to the Ail Dubh checkpoint, and brought 3 of the walkers with him to the centre. One walker decided to wait for a later walking group and come back with them - so 8 in total. As this message was taken at the base station, Gerry was working with the organisers to arrange transport. To be honest, I could not blame them for stopping at Ail Dubh - the weather was absolutely terrible, and as we saw everyone come back to the base station they were absolutely drenched to the skin and cold to the bones. But, everyone that did make it had a big grin on their face and regardless of how they got back to the centre they were greeted with a big cheer, congratulations and a big bowl of soup!! Ray and Maria McHugh must not be forgotten - they provide hot food (tea/coffee, sandwiches and soup) at the stand by Ail Dubh so that the weary walkers can get a respite and recharge before heading onwards.

By 14:20, Tom indicated that all had either passed through Ail Dubh continuing the challenge, or had gone to the centre by car - his last message was that he saw the last of the walkers go over the hill and he was closing down the Ail Dubh checkpoint.

During the day Mountain Rescue had gone on a training exercise, and had kept in radio contact with us either directly or via Ail Dubh. Earlier I had mentioned the "rescue" of Ail Dubh with the bag of sugar, but we did have a real scare. When the first walker arrived back at the

Galway Radio Experimenters' Radio Club

Center, he asked what time the first walker came in at? This was news to us as he was the first!! He indicated that another walker had passed him and should have arrived about 20 minutes earlier - but there was no sign. Immediately the Mountain Rescue team were informed, and they got together with the walker and organisers and were tracing routes on the map. They were able to see where that other walker was last seen, and from there traced a possible route that was taken by mistake. Given the timing, the missing walker on this incorrect route would have been coming down a particular section of the mountain near us, and the rescue team were immediately scanning that area with binoculars to find the person. Luckily after about 10 minutes, they could see the missing person - it seems that instead of turning left at a fence, they stayed going straight and this brought them on a longer route home. But they did get home safely!!! So, it is really important for the Mountain Rescue team to be on hand and to be contactable at all times!!



Joe (EI3HM) with Maura after bringing 3 back from Ail Dubh to the centre

The last of the walkers arrived back at around 19:00 and everyone was happy to see them safe and sound.

As always, there are learnings from each event and we were already talking with both Mountain Rescue and the organisers about how we need to do things differently next year - always furthering the safety of the walkers.

It was a long day, but a great day. Our thanks to Theresa, Maura and Rita for looking after us - while we were relatively dry and warm, we were plied with tea/coffee/toast/sandwiches/soup and biscuits - I think we need to join that walking club!!

I would also thank the Galway Mountain Rescue Team for working closely with us on the day, and also to the organisers of the Joyce Country Challenge for allowing us to be a part of their special day and allowing us to support them with the radio communications.



Galway Mountain Rescue training with their radio equipment and antenna

The Galway Mountain Rescue Team is a voluntary organisation providing a 112/999 emergency response service to the upland and remote areas of counties Galway and Clare.

Our service is available 24 hours a day, 365 days a year. Galway MRT is a registered charity in Ireland.

Our team comprises of over 30 active volunteer members, who dedicate their time and energy to the service of their fellow mountain users (from Ireland and further afield). Our skill-set focuses on the provision of the following emergency response services:

- Casualty Care
- Rope Rescue
- Search Management
- Search & Rescue (SAR) operations

Our team membership is diverse. We have both male and female volunteers who range in age from 24 to 66, and live right across our area of operations, from Letterfrack in North-West Connemara to the Burren in County Clare. While our team members come from all walks of life, from farming to engineering to teaching, they all are dedicated to helping others in need. This desire to help others is at the very core of what we do and what we expect from each other.

Galway MRT acknowledges the vital role that the families, friends and employers of each team member play in enabling our volunteers to provide an effective emergency response service. Without their support (and often times, sacrifice), Galway MRT would be unable to operate effectively.

Shannon Basin Radio Club



Keith EI5IN (left), Enda EI2II (centre), and Owen EI4GGB (right) erecting the telescoping mast for the event

Shannon Basin Radio Club was active as EI3Z/P as part of the IRTS VHF/UHF field day weekend. Conditions weren't ideal on the day, but we had a good height advantage operating from Cairn Hill in Co. Longford, Ireland. We mounted an antenna for 6m at the trig point on the hill and vertical and horizontal beams for 2m on a telescoping mast at the station itself.



Owen EI4GGB and Enda EI2II preparing the coax for the portable station

The operators were Enda EI2II, Owen EI4GGB, Marty EI2IAB, Keith EI5IN, John EI6BHB, and Brian EI2IU. We got our best results pointing towards the south-east.



Our 2m horizontal and smaller 2m vertical beams next to the Cairn Hill mast

Luckily some UK stations could hear us off the back of their beams. We were delighted to make some 600km+ 2m SSB contacts with G4ZAP/P, G6IPU/P, G8BGV/P, and TM5R (over 800km).



Owen EI4GGB on the mic as EI3Z/P using the IC-9700

During the event, we noticed quite a few aircraft scatter or meteor-related events resulting in short duration signals that indicated the high level of activity on the band at the time. Unfortunately, the bursts were too short to attempt voice QSOs.

Shannon Basin Radio Club

Forthcoming Events

The club take to the sea again and head to Inishbofin for the IOTA contest over the weekend of 28th to 30th of July. It is an exciting trip each year to bring all the kit to the small island and set up a radio station. The club will be calling as EJ3Z on HF and 2m. Last year, the club was able to establish communications with their own repeater back in Roscommon making it possible to check in easily regarding how they were doing.

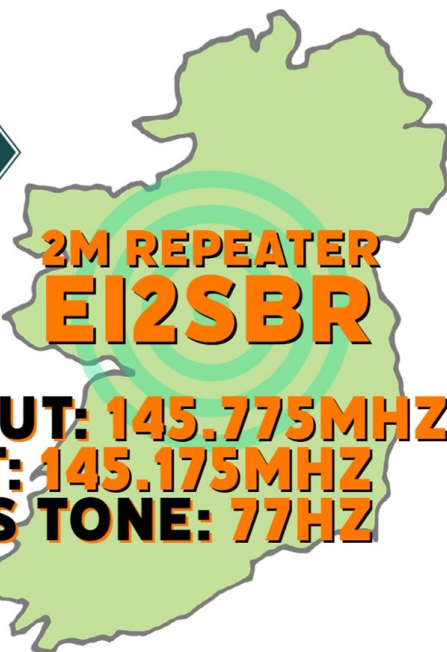
About Shannon Basin Radio Club

Shannon Basin Radio Club has a very active and growing membership. Activities range from construction, special events, youth activities, contests, and all mode and band radio-related operation.

If you are interested in learning more about the club or becoming a member, you can contact the club by email to admin@sbrc.ie or find more information on the club's website at www.sbrc.ie.

You can also find information and updates about the club activities via Facebook, Twitter, and Instagram. The club has a 2m repeater located on Sliabh Bawn in Co. Roscommon.

It has excellent coverage into the west of Ireland, north of Fermanagh, east as far as the outskirts of Dublin and south into the Laois area.



**2M REPEATER
EI2SBR**

**OUTPUT: 145.775MHZ
INPUT: 145.175MHZ
CTCSS TONE: 77HZ**

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Our Next Meeting

The Mayo Radio Experimenters Network will hold



their next club meeting on Wednesday evening 2nd of August at 9pm in the Breaffy House Hotel, Breaffy Co. Mayo. Everybody is welcome to come along for the evening.

The IRTS News Bulletin is read on Sunday at 9pm by a club member. Do call in and give a signal report on the reception of the bulletin. The club is hoping to be active for "The International Lighthouse Lightship Weekend – ILLW" from the Broadhaven/Ballyglass Lighthouse, North Mayo, (ILLW No: IE0006, possible from early on Sunday morning the 20th August 2023. Using the club call sign: EI7MRE. WAI: F73. MaidenHead Locator: IO54BH.

What's the Frequency?

Here are the worldwide frequencies for Amateur Radio on the International Space Station

Crossband voice repeater
437.800 down / 145.990 up (PL 67.0 Hz)

Packet Radio - Currently APRS
145.825 up and down

Educational Contacts
145.800 down



RADIO BUILDER

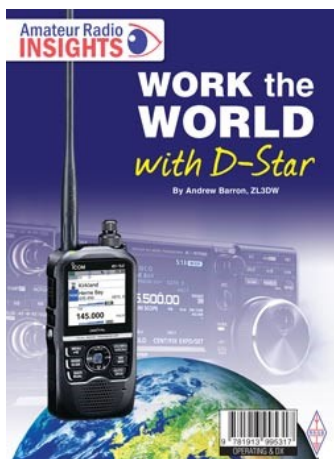
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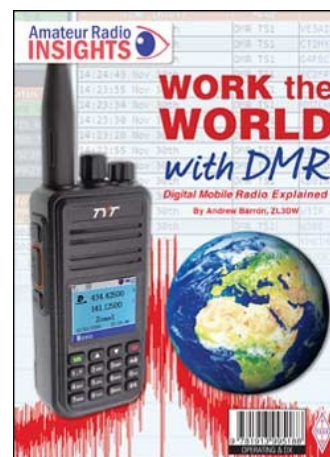
By Andrew Barron, ZL3DW

Work the World with D-Star is a practical guide that explains the steps that you need to follow to make your new D-Star radio work through your local repeater or hotspot. There are terms to discover, including dashboards, reflectors, gateways, hotspots, and Echo. Also, acronyms like AMBE+2, DR, DV, CS, and MMDVM. The book covers how to link to a reflector and what to say when you are making your first calls. If you are using a hotspot you can link to a reflector using the hotspot's Pi-Star dashboard or using the functions on the radio. Or you can use PC software or a phone app. There is guidance on MMDVM (multi-mode digital voice modem) 'hotspots' and step-by-step instructions for configuring the Pi-Star modem. Information on the D-Star data structure and the advantages and disadvantages of digital voice technology over FM, and other digital voice modes such as System Fusion, DMR, and P25 is also discussed. Work the World with D-Star even includes programming instructions for some popular Icom D-Star radios such as the ID-52A, ID-51A +2, IC-705, and IC-9700. As always, not forgotten is Andrew's guide thoughts on "which is best," and "what should I buy?"

Work the World with DMR

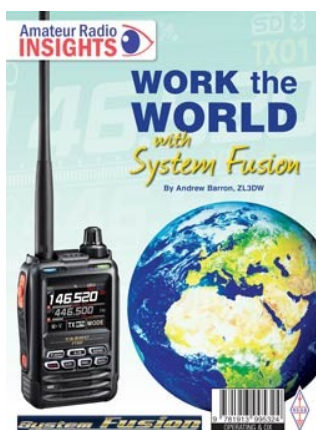
By Andrew Barron, ZL3DW

The Work the World with DMR practical approach explains the steps that you need to follow to make your new DMR radio work on your local repeater or hotspot, and for worldwide contacts. Amateur Radio DMR is not as simple as entering a couple of frequencies and setting a CTCSS tone the way you would for an FM radio. So, you can expect a steep learning curve but of course that's where this book will be the most helpful. You will discover lots of new terms including dashboards, zones, receive groups, colour codes, code plugs, hotspots, Parrot, talk groups, and time slots. Also, acronyms like MMDVM, CPS, IPSC2, DMR-MARC, TGIF, and DMR+. MMDVM (multi-mode digital voice modem) 'hotspots' are very popular accessories and there is information here about their uses and configuration. You will also find coverage of duplex hotspots and the perhaps more familiar simplex hotspots, including a section on how to assemble a hotspot from a kit, a Raspberry Pi, and an SD card. There is even step by step instructions for configuring the Pi-Star hotspot operating system.



Work the World With System Fusion

By Andrew Barron, ZL3DW



System Fusion and Wires-X are exclusive to Yaesu. Although you have to use a Yaesu radio to access Yaesu Wires-X 'rooms' anyone can access thousands of YSF and FCS reflectors using a hotspot, a DV dongle, or a non-Yaesu repeater. Many of these reflectors are in turn linked to DMR talk groups, D-Star reflectors, Wires-X rooms, and other digital voice modes.

As usual Andrew explains in Work the World with System Fusion the base technology from the C4FM (continuous 4-state frequency modulation) which is similar to the 4FSK modulation used by DMR and the GMSK modulation used for D-Star. The DN digital narrow mode and what happens when you press the Wires-X button. For example, if you are connected to a genuine Yaesu repeater or a PDN or HRI-200 Wires-X node, the search function on the radio will list the available Wires-X rooms. If you are using a hotspot, multi-mode repeater, DV dongle, or non-Yaesu repeater, the search function will list YSF and FCS reflectors. A powerful set of features indeed. There is much more besides in this book, with using the various reflectors explained, alongside Hotspots, Troubleshooting and there is even advice on 'What should you buy!'

DV SCOTLAND PHOENIX WEEKLY NETS

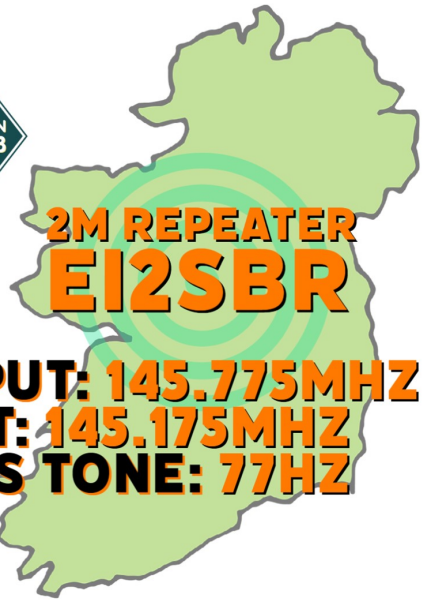


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SATURDAY NIGHT
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9PM TILL 10PM

STATIC ON TG 23555 & 23556

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HAMS OVER IP : 25001



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INPUT: 145.175MHZ
CTCSS TONE: 77HZ



Handmade Ham Radio Gadgets

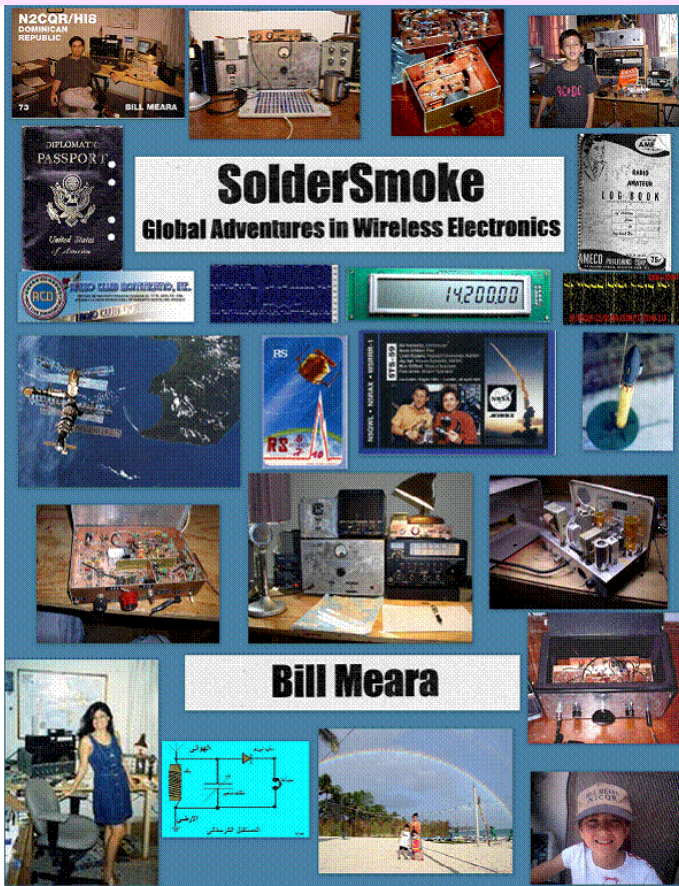


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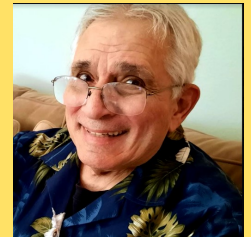
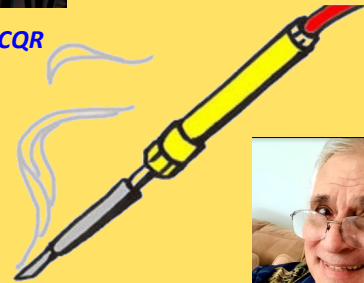
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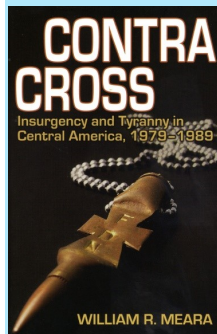
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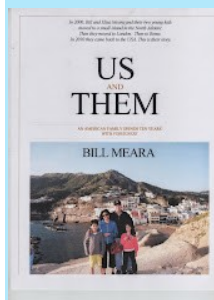


Co Host - Pete N6QW

<https://soldersmoke.blogspot.com/>



A journey through the Central American wars of the 1980s as seen through the eyes of a young American officer who worked on both sides of the insurgency in the region: In El Salvador Bill Meara supported efforts to defeat insurgents; with Nicaraguans he worked to keep an insurgency alive. One of very few Americans to see both sides up close, he takes readers into his world as an advisor struggling with cultural differences and human rights violations while trying to stay alive in murderous El Salvador. We join him on dangerous helicopter rides into contra base camps on the Honduran-Nicaraguan border and into a U.S. Embassy under attack. From Special Forces school at Ft. Bragg to Joan Baez's back-stage party in Managua to a contra POW camp deep in the jungle, we get a taste of Meara's world up close.



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London and three years in Rome. Overseas they lived in two houses and two apartments, went to five schools, used four different health care systems, experienced one earthquake, 9-11, the terrorist attack on London, tea with the Queen, the election of Barack Obama... and all the ordinary things that families go through. They lived mostly with the locals, learned Portuguese, Italian, and a bit of Cockney, and made many friends (foreign friends!) They returned to the United States in 2010 with a changed view of the world. This is their story



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Dates for the Diary

National Steam Rally Stradbally 6th - 7th Aug

British Waterways on the Air 16th - 17th Aug

International Lighthouses on the air 19th - 20th Aug

G-QRP Convention 2nd - 3rd of September

RSGB 2023 Convention 13th - 15th October

Jamboree on the Air 20th - 22nd Oct

RSGB



The Radio Society of Great Britain (RSGB) is the national membership organisation of amateur radio enthusiasts. The society was founded in 1913 and incorporated in 1926. The Society is dedicated to the development of the science and practice of amateur radio. It works to increase awareness and understanding of amateur radio and to make the hobby accessible to everyone. Amateur radio licences were issued to the first UK radio amateurs in 1934. The RSGB represents the interests of UK licensed radio amateurs and is a not-for-profit organization that:

- Promotes the general advancement of the science and practice of radio communication or other relevant subjects.
- Facilitates the exchange of information and ideas on these subjects among its members.

The RSGB aims to obtain the maximum liberty of action consistent with safeguarding the interests of all concerned. RSGB membership is open to all who have an interest in radio communications. The national governing body (The Board) is elected nationally. The regional governing body (The Regional Council) is elected on a regional basis. The day-to-day management of the society is under the control of a small team of full-time employees who are based at the society's head office in Bedford. *RSGB Membership is just £59.00 and this includes 12 monthly technical magazines.* Affiliate your club and get the opportunity for all members to log in and read the online publication of RADCOM, RADCOM Basics and RADCOM Plus as well as receiving a hard copy of the Magazine for the Club. Apply here: <https://rsgb.org/main/join-us/join-the-rsgb/>



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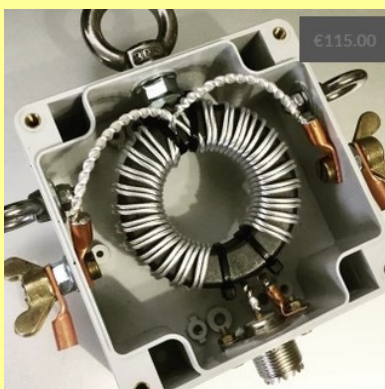
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