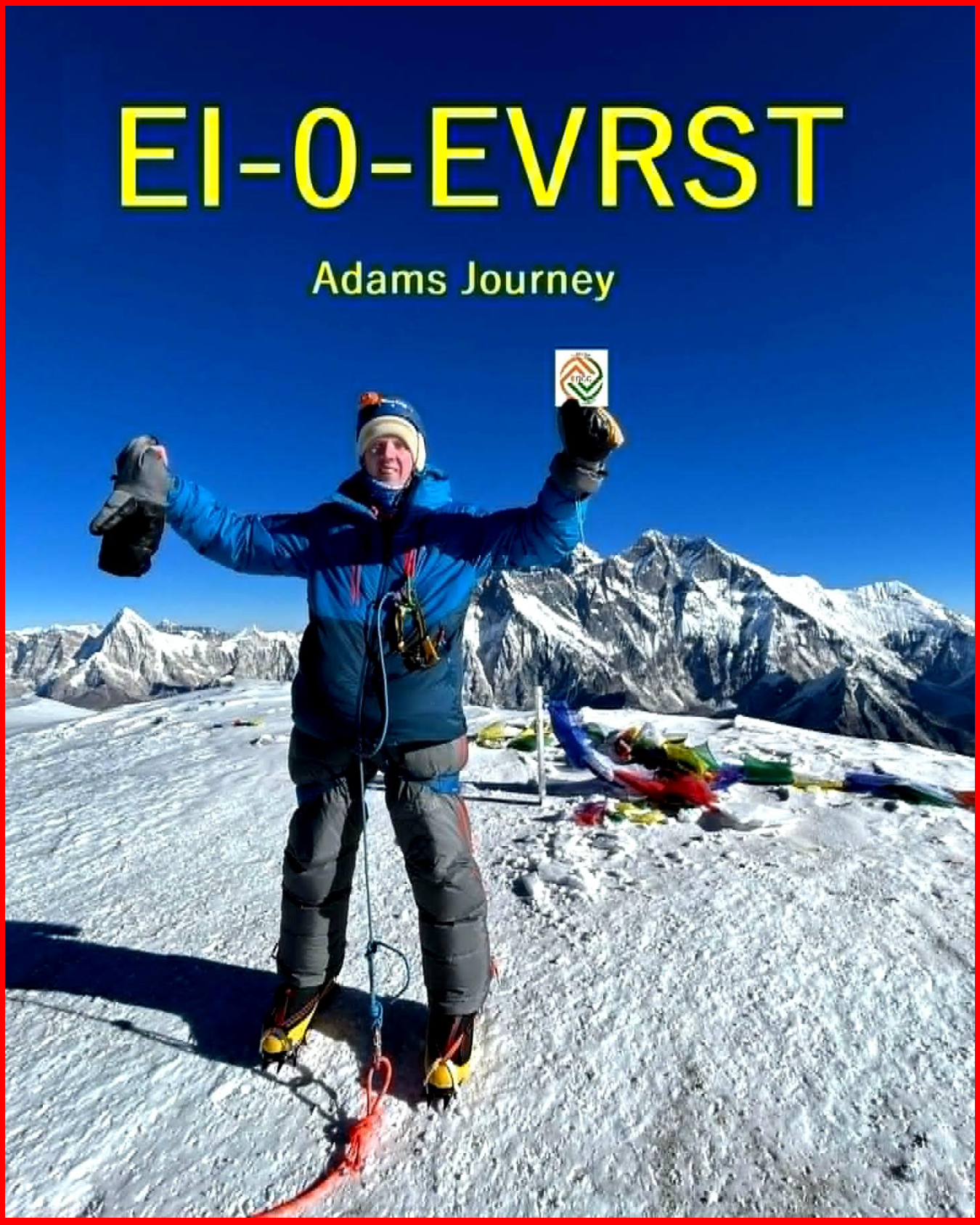
Ham Radio Ireland

Servientes Traditiones et Spiritus Experimentalis Radio

Editor: *Steve Wright - EI5DD* *wright14@gmail.com* **Vol. 3 Issue 01** **January 2025**



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.

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. This magazine is for all radio and electronics experimenters! We remain non political in all respects of the hobby. We wiil endeavour to print any Radio orientated articles submitted to us.

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

Special thanks to the many who have supported this Magazine and encourages us to re-launch it. By popular demand no less!

We will publish bi-monthly and naturally welcome any articles from both Amateur Radio circles and CB or PMR 446 operators.

We primarily seek technical articles covering home built equipment, antennas, outdoor portable operating, VHF, UHF, Microwave and Satellite operation.

If you have never written an article before - NEVER A PROBLEM as we will help in any way possible.

We welcome Feedback
If you enjoyed this publication please email
Steve EI5DD
wright14@gmail.com

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February 2025

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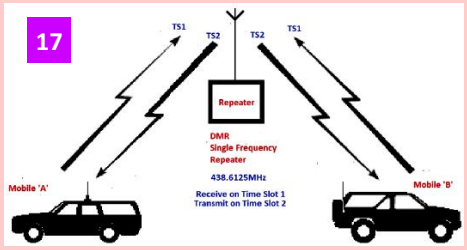
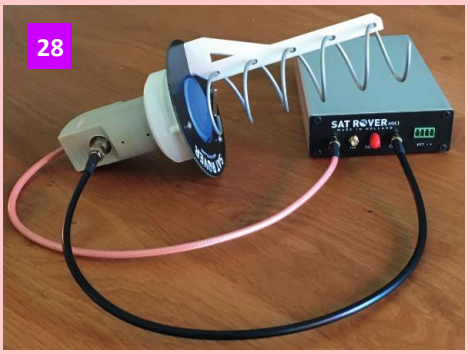
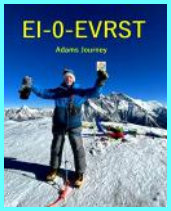
Submitting Items To This Magazine

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.







Cover Image

Adam's Journey to Climb Mount Everest In 2026

Want to become Member

Contact us and we can give you info on the options available.
this year we can now offer public liability insurance per individual.
Standard membership €10.00
Membership with cover €15.00

you can pay via Paypal:
collei3cc@gmail.com
or Revolut: @john83mj6

EURA
EUROPEAN RADIO AMATEURS' ORGANIZATION

Merchandise

Polo shirts Sweat Shirts

Beanie Hats Baseball Caps

Mugs and Stickers

Top Quality

Polo Shirts

all sizes and colours available

Quality Sweat Shirts

Various colours

and sizes available

Outdoor all weather Jacket.

all sizes available

colours Light /Dark Grey and Navy Blue

Beanie Hats

Baseball Caps

With Logo

Mugs And our well traveled EI3CC Sticker.

Contact Sue, on messenger or WhatsApp for all orders

News and Forthcoming Events Planning 2025

Freedom of association: a right in danger in amateur radio

Some **IARU R1** member societies have threatened their members with expulsion if they join **EURAO**, clearly violating freedom of association, a fundamental right enshrined in article 12 of the *EU Charter of Fundamental Rights*.

The "argument" put forward by these societies is that EURAO is a competitor, overlooking the fact that IARU and EURAO are also collaborators in areas of common interest, such as CEPT. And if they don't remember that, they should see the joint statement resulting from the 2017 meeting between both organizations.

For this reason, EURAO does not rule out taking appropriate legal action if the case arises, beyond the crude and stupid threat.

We know that it seems incredible that this mentality is still in force today, but it is and we will do everything possible to unmask and combat it. Some would need to brush up on their **HAM SPIRIT**...

Amateur Radio News...

Spain again authorizes foreign novice licensees transmissions

Spain had been authorizing foreign radio amateurs, regardless of their license class, to use their equipment in the country for a period of 90 days a year, upon prior authorization, until 2023, when the Administration changed the criteria for interpreting the rule and denied all new applications.

The **EURAO** member association in Spain, **FEDI-EA**, has been insisting all this time to the Administration to revert this interpretation to the one it had previously made, finally achieving that goal.

This type of temporary authorization is **free of charge**. Those interested must provide the address of residence during their stay in Spain and the start and end dates, as well as a copy of the ham licence and the passport. It is recommended to submit the application well in advance of the trip (at least six weeks).

The same also applies to those radio amateurs with a full licence from countries that have not adopted the CEPT Recommendation T/R 61-01.

If you need help with the process, you can become a member of FEDI-EA.

World Thinking Day on the Air 2025

WORLD ASSOCIATION OF GIRL GUIDES AND GIRL SCOUTS

On the 15th of February, Girlguiding members celebrate World Thinking Day on the air. The aim of this event is to encourage Girlguiding members to make friendships with those in other units, using amateur radio as the means of communication. Girlguiding members of all ages will have the opportunity to celebrate by communicating via the amateur bands.

South African Radio League Centenery

On 20 May 2025, the South African Radio League (SARL) celebrates its 100th anniversary. In conjunction with the 100th anniversary of the SARL, the SARL Centenary Marathon QSO Party is set to kick off for a year-long operating event starting from 00:00 UTC on Wednesday 1st January 2025 and ending at 23:59 UTC on Wednesday 31st December 2025.

Participating amateur radio operators worldwide (including Short Wave Listeners) can accumulate points and win awards, by working South African amateur radio stations. During 2025, the SARL, with the aid of its members and associated clubs, will be on the air with a special event callsign **ZS100SARL**, as well as the permanent callsigns **ZS6SRL** and **ZS9HQ** and other special event callsigns.

Lagan Valley Amateur Radio Society

RSGB

LVARS GI4GTY

RSGB

Lagan Valley Amateur Radio Society are holding their annual rally on Saturday 1st March 2025

at:

Hillsborough Village Centre,
7 Ballynahinch Road,
Hillsborough,
BT26 6AR

Doors open at 10:30 and the rally finishes at 13:00. Entrance fee £5.00, including free entry in prize draw. Please hold on to your ticket to participate in the draw.

If you would like to book a table at the rally, email rally@lvars.uk

INTERNATIONAL MARCONI DAY

SATURDAY APRIL 26th 2025

Founded & Organised by The Cornish Radio Amateur Club
www.gb4imd.co.uk

Nervous Novices
CW NET

Wednesday's at 20.30 UTC
Listen for "CQ NNCW"
The Speed of the Net is the speed of slowest operator
Net Controller
Eamo EI7LC
Freq 3.555 +/-
So call in and say hello

SOS Radio WEEK

SOS Radio Week takes place during the month of May every year to coincide with the Royal National Lifeboat Institute's (RNLI's) own Mayday fund-raising event. It starts at 00:00 (local) on the 1st May and ends at 23:59 (local) on the 31st May. Registered SOS Radio Week Stations will be on the air at various times during the event.

News and Forthcoming Events Planning 2025

MRD Maritime Radio Day is being held annually **14th to 15th of April** to remember almost one hundred years of wireless service for seafarers. Since its beginning in 1900 it was the most important communication service until the end of 1998. The date of MRD should be a reminder of the Titanic disaster in 1912.

- **Please Read the RULES and Page Instructions.** https://radioofficers.com/mrd-2025/mrd-rules/
- Registration opens on January 1st 2025. You register via the drop down menu on the MRD page. https://radioofficers.com/mrd-2025/registrations/
- Registration Closes April 1st 2025.
- MRD 2025 from **14th April 1200 UTC to 15th April 2200 UTC 2025**.
- Mode: CW only
- Log /Results Submissions by Midnight 30th April 2025.

Final Results published May 3rd 2025.

NORTH WEST ALLSTAR GROUP
Connecting You To The World
BELFAST MB7IBM 145.2875 MHZ CTCSS 110.9HZ

A new 2m gateway for NWAG

MB7IBM is co-sited with our 4m gateway in Belfast. Both gateways have the same callsign. The 2m gateway is on 145.2875 MHz with a CTCSS tone of 110.9 Hz.
The 4m gateway is available on 70.3625 with the same CTCSS tone
Thanks as always to Rickie Mi5DAW and Brian GI0RWO for all their hard work.
https://www.facebook.com/share/g/47f5raHgKdechp58/?mibextid=K35XfP

We Have a Facebook Page

Ham Radio Ireland

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

In November 2012, the **World Wide Flora and Fauna** in amateur radio program was born, when a number of dedicated portable radio operators decided to establish WWFF from the remains of WFF. A website was created and most importantly at that phase, Andrew M0MYA shared his expertise to build a very intuitive WWFF Log Search database.

Rules were written, awards were created, and a number of leading activators joined to develop and grow the WWFF program.

Starting with a core group of mainly European countries more and more countries across the world joined the program. Currently we have 61 countries that run there own national program within WWFF. National coordinators supported by log, directory and award managers run their programs based on WWFF rules.

Our database contains more than 37,000 references in 144 countries across the world and until now more than 21 million QSOs!
As WWFF was established in November 2012, therefore we celebrate its 12.5th birthday with a big activity party – note: this is NOT a contest!

The WWFF 12.5th Anniversary Activity Weekend

On **Saturday the 8th and Sunday 9th of** March, WWFF Team would like to invite all WWFF Activators and Hunters to participate in the WWFF 12.5th Anniversary Activity Weekend.

The party will start at **00:01 UTC on March 8th and finish at 23:59 UTC on March 9th** and hope many WWFF Activators will be on the air from many WWFF areas. We also hope many WWFF Hunters will work them and recommend that all Activators to use the WWFF Agenda and the WWFF Facebook Group to inform the WWFF Hunter community of their plans.
More info: https://wwff.co/2025/01/12-5-years-wwff-anniversary/

Parks On The Air

Currently POTA has 5 official events throughout the year, as detailed below.
Events start at **00:00:00 UTC** and end **23:59:59 UTC** on the days listed:

New Year's Week

First full week of the new year. January 1-7, 2025
Casual contacts to help ring in the new year!

Support Your Parks

This event happens seasonally, on the 3rd full weekend of the month (Saturday & Sunday UTC). These are 'activity weekends' where the main purpose is to get out in the parks, and have as much fun as possible.

Winter - 3rd Full Weekend of January. January 18-19, 2025

Spring - 3rd Full Weekend of April. April 19-20, 2025

Summer - 3rd Full Weekend of July. July 19-20, 2025

Autumn - 3rd Full Weekend of October. October 18-19, 2025

More Info: https://docs.pota.app/

News and Forthcoming Events Planning 2025

Lough Erne Amateur Radio Club
Co FERMANAGH NORTHERN IRELAND
GNØLEC MNØRCF GB3CP

41st Annual Rally

Sunday 18th May 2025

Share Discovery Village, Lisnaskea, BT92 0JZ

Usual facilities for Food, Bar open (Lunch 12:00 to 13:30 Hrs)

Bring & Buy (at your risk, no charge)

Traders as follows initially, Peter Bell, Long Communications,
Jim-Bob Trainor, John Gillyland, Alan Weise, Brian McMahon

We have numerous independent sellers with all sorts of interesting things.

RSGB QSL Bureau/Book Stand

IRTS Stand

WAB Stand

Mayo Radio Experimenters

Collective Communication

Draw for a number of prizes at approximately 13:00 Hrs

Admission £/€5 to include draw ticket.

No charge for tables however everyone pays Entry Fee

Come and meet up with old friends!

Doors open 11:00Hrs (Traders 09:00 Hrs)

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 WI1IDP, QTH Tuscon Arizona, operator Jerry confirmed that the net now also uses the **17m band** operating **on 18.112 MHz** moving up in increments of 3KHz. This move avoids the increased QRM on 20m and taking advantage of improved propagation conditions.

St Patrick's Day Activity

Many people worldwide annually celebrate St Partick's Day by going green, with many radio amateurs, Clubs and Groups running Special event Stations as part of the festivities. This year St Patrick's Day Falls on Monday the 17th of March which would be a Bank Holiday also. This opens up great possibilities of putting a station on the air for the entire weekend, or part thereof. Anyone can participate, whether in Ireland or overseas, licensed radio Experimenter/Amateurs or Shortwave listeners. In the process of operating you may wish to give out your WAI or WAB square. Perhaps as a Club or a Radio Group, you could apply for a Special Event callsign for the occasion and maybe set up a Portable station. The possibilities are endless. In the mean time carpe diem and enjoy the celebrations.

World Amateur Radio Day

Every **April 18**, radio amateurs worldwide take to the airwaves in celebration of World Amateur Radio Day. It was on this day in 1925 that the International Amateur Radio Union was formed in Paris.

Amateur Radio experimenters were the first to discover that the short wave spectrum - far from being a wasteland - could support worldwide propagation. In the rush to use these shorter wavelengths, Amateur Radio was "in grave danger of being pushed aside," the IARU's history has noted. Amateur Radio pioneers met in Paris in 1925 and created the IARU to support Amateur Radio worldwide.

Just two years later, at the International Radiotelegraph Conference, Amateur Radio gained the allocations still recognized today - 160, 80, 40, 20, and 10 meters. Since its founding, the IARU has worked tirelessly to defend and expand the frequency allocations for Amateur Radio. Thanks to the support of enlightened administrations in every part of the globe, radio amateurs are now able to experiment and communicate in frequency bands strategically located throughout the radio spectrum. From the 25 countries that formed the IARU in 1925, the IARU has grown to include 160 member-societies in three regions. IARU Region 1 includes Europe, Africa, the Middle East, and Northern Asia. Region 2 covers the Americas, and Region 3 is comprised of Australia, New Zealand, the Pacific island nations, and most of Asia. The International Telecommunication Union (ITU) has recognized the IARU as representing the interests of Amateur Radio. Today, Amateur Radio is more popular than ever, with more than 3,000,000 licensed operators!

World Amateur Radio Day is the day when IARU Member - Societies can show our capabilities to the public and enjoy global friendship with other Amateurs worldwide.

Events & Activities Planner

World Thinking Day on the Air	15th February
Lagan Valley ARS Rally	1st March
WWFF Anniversary Activity Weekend	8th - 9th March
St Patricks Day	17th March
Maritim Radio Day	14th - 15th April
IARU World Amateur Radio Day	18th April
International Marconi Day	26th April
Mills on the Air	13th - 14th May
LEARC (Enniskillen) Rally	18th May
SOS Radio Week	Ist - 31st May
Friedrichshafen Ham Radio Exhibition	27th - 29th June
Museums on the Air	June
ILLW Lighthouses on the Air	3rd Full Weekend August
British Inland Waterways on the Air	Held in August
G-QRP Convention	30th - 31st August
Newark Ham Fest	Normally held September
Railways on the Air	27th-28th Sept
JOTA Scouts on the Air	17th - 19th October

Carrickfergus Amateur Radio Group

The Club meets every Tuesday evening during normal school term time from 7pm in Elim Pentecostal Church, North Road, Carrickfergus, BT38 8ND. All visitors are welcome. Regular news and updates are provided on the CARG website https://gi0lix.home.blog/ It is expected that the CARG Annual Rally will take place on: Saturday 25th October 2025 in Elim Church, North Road, Carrickfergus, Co. Antrim, BT38 8ND from 11:30 am - the final date to be confirmed (I will advise of the confirmed date in advance).

CARG will participate in the annual International Lighthouse/Lightship Weekend (ILLW) on 16th & 17th August 2025 adjacent to Chaine Memorial Tower, Larne, Co. Antrim (WAI: D40, IOTA: EU-115, IO74CU, ARLHS NTI-004 - see the Club website for further details).

Bush Valley Amateur Radio Club

Meets on the last Thursday of each month at 8pm in the Burnfoot Community Centre, 294 Drumane Road, Burnfoot, BT47 4NL. We now have over 20 members, and are a very active club and we hold a number of events throughout the year. Website: bushvalleyarc.org
Enquiries to: Bushvalleyarc@gmail.com

West Tyrone Amateur Radio Club

West Tyrone ARC GN4OMA, has regular monthly meetings Our meetings take place in Order of Malta Hall, Brook Street, Omagh, BT78 1DE on the second Wednesday of every month at 7.30 pm. Enquiries to: info@wtarc.org.uk

Lough Erne Amateur Radio Club

Meets at the Share Village, Smith's Strand, Linaskea, Co Fermanagh at 19:30 on the first Monday of each month. More info: https://lougherneradioclub.co.uk

Mid Ulster Amateur Radio Club

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 FB page 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 second Sunday of the month except July/ August in Tandragee Golf Club at 3pm.. We organise field days for St Patricks day, Marconi weekend, 145 Alive, Sota weekend and other events. If you're in the region, and would like to take part, the club secretary can be contacted on the following email address:
Email address: muarc.secretary@yahoo.co.uk

Antrim and District Amateur Radio Society

The Antrim and District Amateur Radio Society meets on the 2nd Friday of each month in the Greystone Community on the Ballycraigy Road, BT41 1PW 7:30 - 9:30pm. For More information: Email secretary@adars.co.uk

Ballymena Amateur Radio Club

The Club meets every Thursday night at 70 Nursery Road, Gracehill, BALLYMENA except during the summer months (June, July and August) when we only officially meet on the first Thursday night of the month, but there are some members there nearly every Thursday night. E-mail: HKernohan@aol.com

City of Belfast Amateur Radio Society

The City of Belfast Amateur Radio Society meets on the first Monday of each month a 8pm in the Shorts RecreationClun, Aircraft Park, Holywood Road, Belfast BT4 1SL. Contact Paul Irwin GI6FEN for more information E-mail:

paulirwin@btinteret.com

Lagan Valley Amateur Radio Society are holding their annual rally on Saturday 1st March 2025

at:

Hillsborough Village Centre,
7 Ballynahinch Road,
Hillsborough,
BT26 6AR

Doors open at 10:30 and the rally finishes at 13:00. Entrance fee £5.00, including free entry in prize draw. Please hold on to your ticket to participate in the draw.

If you would like to book a table at the rally, email rally@lvars.uk

If your Club, Group or Society is not listed here, please notify us and we will add to the next issue of Ham Radio Ireland

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Admission £/€5 to include draw ticket.

No charge for tables however everyone pays Entry Fee

Come and meet up with old friends!

Doors open 11:00Hrs (Traders 09:00 Hrs)

FlexRadio

ML&S Exclusive Distributor for UK

NEW Flex Radio 8000 Series In Store NOW!

The FLEX-8400 and FLEX-8400M revolutionise your view of the bands with up to two 7MHz spectrum waterfall displays and independent receivers. These dual receivers can simultaneously operate on any band and mode with instant QSY between VFOs, perfect for digital mode and remote operations.

The **FLEX-8400** and **FLEX-8400M** The ultimate in high-performance direct sampling SDR technology for the most demanding HF/6m DXers and contesters. The **FLEX-8600** is designed for operators who want to use the radio exclusively as a server from a PC, laptop, Maestro™, Mac®, or iOS® clients - whether local or remote.

With screen £3599.99
Without screen £2449.99

The **FLEX-8600M** provides the same client access but also features a stunning 8" touchscreen display and ergonomic controls for a high-performance SDR with a traditional radio interface. Both models offer game-changing band awareness, exceptional receiver performance, and brick-wall filters to maximize your fun during competitive DXing or contesting.

With screen £5599.99
Without screen £4599.00
Optional Auto ATU £399.99

FLEX Power Genius XL
There's power. And then there is POWER! But, one can never have too much power which is where the **Power Genius XL** amplifier comes into play, taking your perfectly good radio and amplifies its performance exponentially. **£5999.99**

FlexRadio Maestro Control Console Confusion Free Controls: Only the controls you need, only when you need them.
The Maestro - An Intuitive Control Console
The Maestro is an intuitive, plug-and-play control console that directs the operation of any FLEX-6000 Signature Series transceiver without the need for a traditional PC. Connect Maestro directly or through your local area network (LAN) to any Flex 6000 series transceiver and you are ready to operate. **£1599.00**

Flex Tuner Genius XL - SO2R or 1x3
An advanced engineering approach to tuner development has resulted in truly highest quality hardware and software solutions.

The software developers have extended the tuner with new functions, and completed integration with Antenna Genius, forming a single system. Very easy to use, uncompromisingly functional, the integration of TGXL into the Genius platform extends both functions as well as protection systems. **£2199.00**

ICOM IC-7760

200W HF/6m50MHz Remote Head Transceiver

The IC-7760 is a 200W HF/50MHz Amateur radio transceiver. The IC-7760 offers a new "innovative shack style" consisting of a full control head with separate RF deck, connected through a control cable for greater installation flexibility. The supplied control cable is 3m (9.8 ft) long and by using a commercially available LAN cable, the RF deck can be installed in a more remote location. Furthermore, the control head and RF deck can be connected through a wired home LAN connection for remote operation. This simple configuration does not require a PC and can be easily operated from nearly anywhere in the home as long as a LAN connection is available.

Main Features

- **Full control head with separate RF deck for greater installation flexibility*1**
- **Supports in-house remote operation through a wired LAN *1**
- **Two displays, 7-inch wide and 2.4-inch, with touch screen operation**
- **DIGI-SEL and the preamp can work at the same time**
- **Advanced RF direct sampling system using FPGA processing**
- **200W full power and full duty *2**
- **DPD (Digital Pre-Distortion) for excellent IMD characteristics and clean transmitted signals**

***1 Communication between the controller and the RF deck depends on the network environment in which it is used. Gigabit Ethernet is recommended. The controller can be used on a different network segment than the RF deck such as over a network switch.**

***2 200W output and 1-hour continuous transmission with 100~200V AC input (at ambient temperature 25°C.)**

ML&S Price only £5699.00

You can choose to either:
Pay in Full and we'll ship it immediately once stock lands with us.
Reserve with a deposit of £250 deposit to secure your unit. We'll contact you for the remaining balance once the stock has arrived.

Shipping early 2025

See HamRadio.co.uk/IC7760

The Phoenix From the Fire - The Birth of EI3CC

As EI3HQB, I have been involved in radio from around the early to mid-70's. I messed with all types of electronic bits and if lucky at Christmas in those days you got an electronic kit. As a youngster I got into listening to any type of radio /Police/Taxi's etc and then the arrival of the CB radio in the late 70's early 80's took off, the process of buying one back then in the UK was head to Tib street pet shop Manchester city center and Whisper out of the side of your mouth I am looking for a CB and with that you handed over £40 which back in the 80's was a week's wage, and my entry into communication had started.

As a youngster I got into listening to any type of radio /Police/Taxi's etc and then the arrival of the CB radio in the late 70's early 80's took off, the process of buying one back then in the UK was head to Tib street pet shop Manchester city center and Whisper out of the side of your mouth I am looking for a CB and with that you handed over £40 which back in the 80's was a week's wage, and my entry into communication had started.

I started serving my time as a joiner and my boss George G8TAZ had a radio in his old land rover. I asked what it was, and he explained this was a ham radio set and so my journey started with ham radio, and I got my license in 1983 and I'm still here.

I returned to Ireland in 1997, and while out on a spin down the coast came across an active station, on enquiring it was a local club SEARG to which I joined and had a few years with them.

I always had a plan to set up a group and have it as such that, if, you were a radio operator of any type be it PMR CB or even two tin cans and a length of twine it would not matter as long as your interest was in communication.
So, I decided to leave SEARG. I wished them well and I put a plan together while on a trip to cork to visit the Skywave radio club.

They were operating a lighthouse activation at Kinsale so myself John EI3HQB, Wayne EI7HKB, and Alex EI1895 headed on a road trip where I discussed that I would be starting a new Radio group, the reaction was positive, but what would we call it.???

I wanted a name that would cover all types of communication and that we were not bias towards other types of radio, so hence, Collective Communication, a Collective of radio interested people and communication being the main interest.

A logo was needed and after a lot of scribbles and drawings our logo gradually came together.

The logo has a meaning too, firstly our national colours, and secondly it portrays two hands wrapped, protecting and embracing the group.
Our club was born and we officially launched at Kilmurrin cove, Co. Waterford and soon our numbers grew rapidly.

We initially operated with my call EI3HQB as we had applied to ComReg for a call, we started operating out of the back of Wayne's van and slept in our vehicles.

We were then gifted a stunning caravan from Daniel McCormick Fairground Company . To us it was a palace on wheels. Now we had a mobile shack and accommodation.

The Phoenix From the Fire - The Birth of EI3CC

Our first outing as a group was to be at the Stradbally Woodland Railway in Laois, Nicola and her husband Nigel invited us up to do the ROTA, railways on the air, this group are the oldest railway restoration group in Ireland. And it was a resounding success.

We then got our call sign and we acquired EI3CC so we were now set up as a group and a great call sign to go with it.

We held a number of events our biggest to come was our JOTA with the copper coast scouts (handy call sign now) which was seen in 2022 as the best yet and was recognized as putting a boost into the scouting world in Ireland.

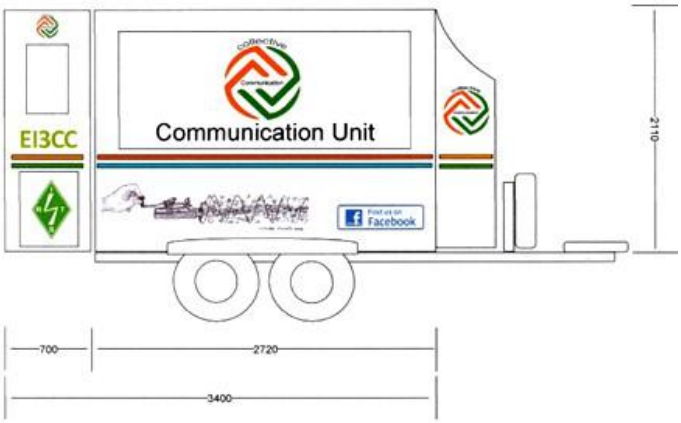
One thing I always wanted was a fully functional mobile radio unit with dedicated equipment, I had drawn up plans and had a caravan chassis that I would build our shack on.

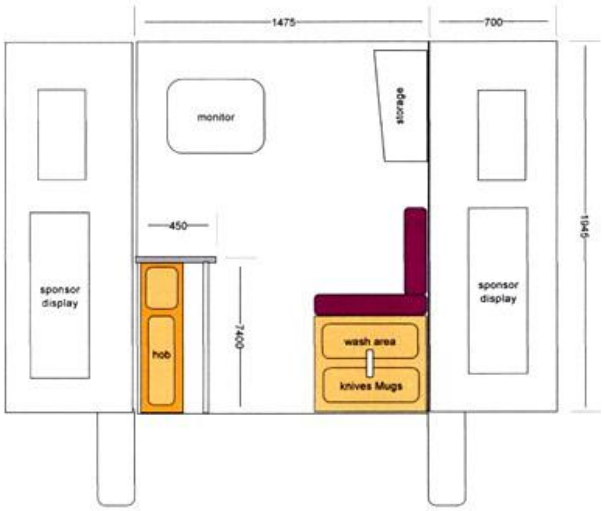
In a conversation I was informed of a unit that had sat for 7 years but was in a very poor state with corrosion and leaks, it was worth a look.

After seeing the box Trailor, it was decided to get it to my workshop where we could assess it further, once stripped down it was indeed ready for scrap but I am always up for a challenge.

Back to my drawing board and a revised plan was drawn up and members noted that we were going to build the best mobile shack on the road.

This was not going to be an easy project but it was great to have everyone involved, whether painting, sanding, scrubbing, even making a cup of tea, it was to be a group project and they could take pleasure in what was to come.





A group gathering was arranged at my workshop and a drawing was shown of what we would like to achieve.

Needless to say, a topic of money would come into the conversation, but I assured the team I had secured sponsorship from a number of sources 18 in total.

When you show your intended sponsors of your plans and that they will benefit youth / scouts / schools etc. they are only too glad to help where they can.

Months passed with hard work from all the group and what we ended up with was an absolute dream of a unit or as we call it an RCU Radio Control Unit, complete with pump up mast, dual monitors, portable fiberglass masts, fully kitted out with a solar setup so no more charging, great storage and complete kitchen for a brew while out on the road,

The last task was to put our colours on and declare the project finished so that task went to Wayne and he did us proud.

We continue to get donations from various sources and we are now building custom Gazebo's for the unit, again with fantastic sponsors.

The Phoenix From the Fire - The Birth of EI3CC

The club has grown immensely which in one part is the fact that we are on the move and get activations on everywhere. We try to cover as much of the country as possible, even two trips over the border into the north and also off the mainland to Bere island, I believe you need to get out and about and bring the hobby to the public, the depiction of many outside the hobby is someone at the bottom of the garden in a shed twiddling a dial and listening to dots and dashes, far from it.

We played a part in the 2023 ISS contact in Dublin

We have been involved in our local St. Patrick's Day parade (which we won) and even in the Halloween scarecrow community (again which we won). We are out at the national steam vintage rally in Laois for 4 days with crowds of 30,000 coming through the gates, we have also ventured into satellite, again a first for us and a learning curve, and now five members of the group are set up for QO-100 after using the system while out on an activation.

So get involved in as many things as you can and your club will grow and also the hobby. If no one knows you are there then you are at a loss we have covered 4000km this year meeting and greeting and letting people know that Amateur radio exists and that it's a fun hobby.

We as a group will continue to grow. It's our goal to be independent and plan our future path, so if you feel EI3CC is for you then check us out on our Facebook / Twitter / and our YouTube channel where you can watch some of the great events, we are involved in over the year.

YOUTUBE

FACEBOOK

TWITTER

Collective
EI3CC
Communication

John Tubritt- EI3HQB

ei3hqb@gmail.com

From SWL to CB to EI4IZB over 50 Years

Here is an outline of my journey through the radio world …. And my observations made along the way

Although like many of my generation, my interest in radio started as a boy, with a LW transistor radio, listening to Radio Moscow, BBC World Service, Radio Caroline and anything else I could pick up, but it really kicked off when suddenly CB Radios came to Ireland.

For those younger than me, you must understand that there were no mobile phones back in those days (the 70's) and all telephones were connected by wires. Two-way communication was the exclusive preserve of the Gardai, Pilots, Mariners and emergency services, but suddenly, we 'young lads' could buy a 'two-way' radio and an antenna, get someone to sort out some witchery called SWR for us, and we were able to talk to each other, car to car, over considerable distances, and house to car as well. It was like magic, and it was very exciting at the time.

We went quickly from simple 4-watt AM 40-channel radios to 12-watt 120 "Channel" SSB radios. This led us to notice that we could now also make very long-distance contacts, often to the other side of the world. Whilst somewhat unpredictable, it was nevertheless manageable, and we could even schedule contacts with like-minded enthusiasts in other parts of Europe, Africa and North America.

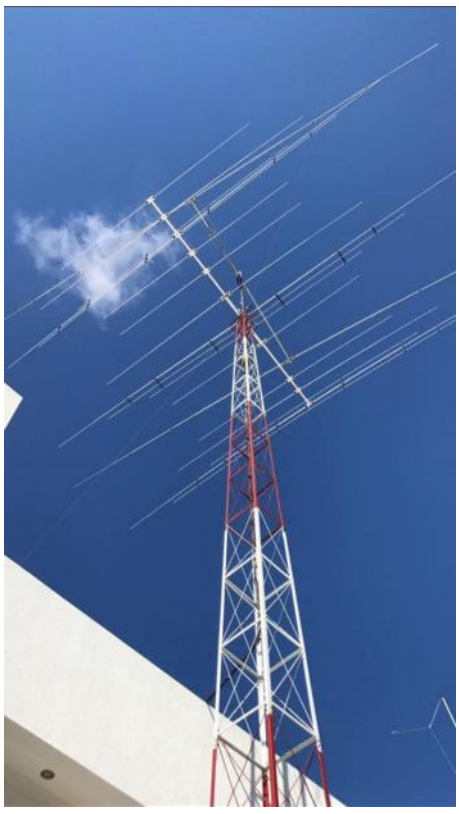
Many such contacts soon taught us about the advantageous effects of being on high ground, working at 'greyline' hours etc. This led to increased curiosity about antennae, propagation, amplifiers, better microphones and such wizardry.

All this in turn led us eventually to the radio ham arena where it transpired that they (Hams) already had access to all this and so much more – in the form of many other bands, all with different characteristics. At that time, however, access to the HAM world was not easy. They (Hams) seemed, to the great unwashed (with our CB's) stand-offish and unwelcoming, and they also had a relatively uninviting exam process which included a mandatory morse code test if you wanted to play.

My Station in Paraguay ZP5BVK

Some did successfully pursue that route and eventually became hams, but many didn't – me included, because I was still young and participating in sports and didn't want to devote that much energy to join a 'club' that seemed so uninviting from the outset. The international ham world later realised that they were effectively excluding new blood from the hobby and dropped the mandatory morse test, which did help.

Rock on some 40 years or more and life found me living and working in Paraguay in South America. I still had my general interest in radio and not knowing anyone in my new country, much of my spare time was just that – spare. So, I started to fool around with my few modest radios and discovered a thriving radio community, who were



Opti-beam 11/5 and 2 ele for 40m

very open and welcoming. Not only that, but their procedure also to become a licensed ham was a thoroughly different business – and very attractive, even if I did have to tackle it in Spanish.

Firstly, the classes were all about hands-on competent operation of a radio. Right from the get-go they put you on a program of twelve, one-hour sessions, operating HF and VHF radios, live on the air, supervised by the licensed ham who owned the station.

You were encouraged to take advantage of various hams in your 12-lesson journey, because each had their own preferences and speciallties, such as DXing, Rag-chewing, HF, VHF, UHF digital modes, CW, SSB, RTTY, contact logging and even contesting. All this before you had attempted any exams.

After your 12-hours of supervised operations were signed off, you joined a group of similar candidates and sat the state exam together – which was basically a walk in the park after your above training. The exam focused on knowing exact band limits, maximum power limits, control of mic gain, tuning of antennae, avoidance of creating interference and knowledge of more common local nation callsign prefixes and there was no CW test.

The icing on the cake was, at the end of the exam, the examiners asked you to write down your 3 first preferences for a callsign suffix. If your choice wasn't already taken – it was yours. This is all a far cry from the HAREC exam procedure in Ireland but more about that later. I was now a B class ham in Paraguay - ZP5BVK and could apply for a test to make that an A-class license after one year. Basically, power limitations are the main difference between A and B in Paraguay

I threw myself into the hobby then and built a station in my house in Asuncion, and over the following years, I I have racked up some 5,000 contacts in 250 countries, achieving various DXCC awards along the way – all on SSB and CW. Yes – the irony of the ZP story – now that I was entitled to use the airways and any modes I liked, I became fascinated with CW and started to 'Spot & Pounce' on stations calling CQ to build up my experience and confidence in that mode. The very thing that had

The EI4IZB Home QTH and Shack

put me off all those years ago, had become a big part of the hobby for me when it was no longer mandatory.

Some years later, another of life's twists resulted in me being back in Ireland around the time the first Covid shutdowns happened, and I started to think about getting an EI callsign for want of something better to do. My investigations quickly threw up a couple of unexpected obstacles. Firstly, the IRTS act as authorized agents of the Irish licensing authority – COMREG, who do not recognize Paraguayan licenses because they are not compliant with HAREC standards. I would therefore have to go through the Irish licensing procedure from scratch. Ok, as a reasonably experienced ham, I thought that shouldn't be too difficult, and I obtained the syllabus and the required material and set about it.

At some point someone in the IRTS did recommend attending classes to have a reasonable chance of passing the exam, but I politely declined, in anticipation of having to go through a lot of ground I would have already covered in ZP, so I set about studying on my own.

Surprise number 1 – a lot of the HAREC required studies clearly relate back to days when amateurs had to build their own equipment – all of which you had to temporarily memorize, to pass this HAREC exam.

Surprise number 2 – There was absolutely no practical training of any kind required – if and when you did pass the exam, you would be on the air with little or no practical training, which seemed odd to me, bearing in mind how much effort the

From SWL to CB to EI4IZB over 50 Years

Paraguayans put into training you to be a good operator, before you get on the air unsupervised.

Surprise number 3 – It would take some time to mark the exams and confirm the results to COMREG, following which candidates would be given a callsign by their computer system. I passed the exam with relative ease and was given EI4IZB .... A callsign which, disappointingly, was quite similar to at least two already existing callsigns, and which has led to unnecessary confusion on more than one occasion.

Surprise number 4 – I hadn't given much thought to the category of license I would get because after sitting the exam, my studies showed me that I would have full privileges on all bands – so I figured there must only be one category and passing the HAREC exam is all you need to do. Wrong. Turned out, the "B" on the end of my callsign signifies I'm a "B" operator – and only if I sit a morse code test, can I become an "A". However, the only motive to do the CW test would appear to be bar stool bragging rights and simply to get a 2-letter suffix (also chosen by the system). I believe there are some differences if you find yourself temporarily operating abroad, but in Ireland, there is no difference whatsoever between the A and B licenses in terms of privileges. Hard to understand the logic or intention there, considering that the point of dropping the morse test years ago was to increase and encourage participation in the hobby.

'Anyways', as they say in Dublin, when exam day came around, it was a 2-hour affair in a hotel in West Dublin, well organized and supervised by IRTS volunteers. There was a surprising number of candidates, and I have no idea what typical fail rates are – but I felt sorry for a number of the guys with whom I was chatting while we were waiting around. One was on his fourth attempt, and quite a number of others seemed unduly nervous. I can only hope that the considerable number of things I had to memorize specifically to pass the exam, and had forgotten a week later, may have seeped into my sub-conscious, where they might become relevant again in the event of WW3 and a subsequent zombie apocalypse. Meanwhile however, I can't see myself dissecting a Kenwood TS990 or an Icom 7610, with aspirations of achieving anything more ambitious than changing a long-term memory battery.

Where all this leaves me now, is in the happy position of being licensed with full privileges, on two sides of the world. I am happily involved with two great clubs, EI3CC in Ireland and ARAI in Paraguay and enjoying the hobby whichever home I'm in. The people are remarkably similar, and Radio Hams are Radio Hams wherever you go. That's what makes this such a great hobby, and I hope to develop and improve my station in Wicklow over the coming years (towers etc) and make a bit more noise on the airways.

Garrett Kennedy - EI4IZB / ZP4BVK

garry.kennedy@hotmail.com

Ten Good Reasons to Go Portable - M0JCQ

Ten Good Reasons to Go Portable according to M0JCQ, a dedicated SOTA Operator

1) Low Noise Levels - As soon as you get away from the electrical noise soup that
makes up the urban environment many of us live in, you start to notice some big benefits when it comes to Amateur Radio. Turning on the rig away from civilisation is a breath of fresh air, often I see the noise levels across the HF bands at S1 and have even seen S0 of noise

2) Great Take off - Portable operation from hilltops and open spaces offer unobstructed take-offs. On HF this means more of your power is being radiated effectively to the ionosphere as there's no building/objects to obstruct the signal. Put a HF vertical on a mountain top and that low angle take-off really starts to do the business!

3) Open Space for Antenna Experiments - Outside spaces away from the restrictions of your home QTH you can experiment with larger antennas. Want to use a half wave dipole for 160m? Go do it! I did recently use one in a large field and did very well for a QRP station – a non-compromise antenna and good ground conductivity for the band helped me do better than QRO stations at home.

4) QRP Operation Becomes Easier - When you have the usual restrictions of home lifted suddenly QRP operation becomes a lot easier. Admittedly QRP can also be a necessity if you need to walk some distance as you can't carry a generator to run that amp! You start to become very conscious of just how heavy and bulky your power source is!

5) It's Healthy - Amateur Radio outside offers fresh air and the chance of exercise. There's nothing like being out in the great outdoors. Activating SOTA summits inevitably means a certain level of physical exertion, but also gets you outside into some wild places.

6) A Sense of Adventure - Camping out in the wilds, watching the wildlife, being at one with nature and nothing like being out on a hill on a fine summer's day. It's a boy's thing.

7) Great Advert for the Hobby - Being outside and visible inevitably means that passers-by will ask questions about what you are doing. I've been able to explain the hobby to many people who would never otherwise have heard of it.

8) Awards - SOTA, WAI, WAEIC, POTA ETC. It is good to give out areas and locations to those hunting for awards and will give them an incentive for operators to work your station whilst out on the hills

9) It's Different - If you're a little bored of the hobby then why not give portable operating a go? Search out your nearest SOTA summit and arrange a visit. Many experienced operators have found a new lease of enjoyment by taking to the great outdoors with a portable rig and a bit of wire.

10) Improve the Operating Skills - portable operation hones your operator skills. If you're a SOTA activator you'll learn how to deal with pile ups, work DX using QRP and you will have to be creative when you've forgotten an important item of equipment. A Swiss Army Knife quickly becomes your best friend!

Configuration of a DMR Single Frequency Repeater (SFR)

The purpose of this article is to explain what a SFR is and how to configure one, as well as how to configure mobile stations that wish to work through a SFR using equipment currently and readily available.

My continuing interest in mobile operation, including pedestrian mobile operation and repeaters, goes back to the first half of the 1970s when I got set up to use the UK's first FM Repeater GB3PI in Barkway, Hertfordshire, that received on 145.150MHz and transmitted on 145.750MHz. My first QSO through the repeater, with my then callsign G8FDN, was fifty years ago on the 17th February 1974 with G8ELA in Bedford. GB3PI like the overwhelming majority of repeaters in the UK and around the world use frequency separation between transmit and receive.

I became interested in digital voice transmission in 2012 getting going on FreeDV (a mode which I still use) and then in 2014 on DMR on 70cm, and the following year on DSTAR on all bands from Top Band to 70cm.

DMR Specifics:

DMR is different to most other digital voice modes in that it uses time division multiplexing for accommodating two voice channels in two separate time slots. The most common form of a DMR repeater uses two frequency two time slot operation giving the ability to carry two simultaneous separate QSOs on the same repeater. The less used mode of operation is called a Single Frequency Repeater (SFR) using one time slot to receive on and the other to transmit on.

I should point out that DMR can also accommodate two simultaneous separate simplex QSO's on a single frequency but this requires one of the four stations involved to be the synchronisation master and the other three stations to be in range of the master. This mode of operation is most commonly called Dual Capacity Direct Mode (DCDM). Normal DMR simplex operation is most commonly known as Direct Mode Operation (DMO). DMR is a mode originally designed for non-amateur private mobile radio and is an open standard of the European Telecommunications Standard Institute (ETSI) and different commercial implementers of DMR radios may use differing nomenclature or terms to describe the same thing, which can be a bit confusing at times when comparing capabilities.

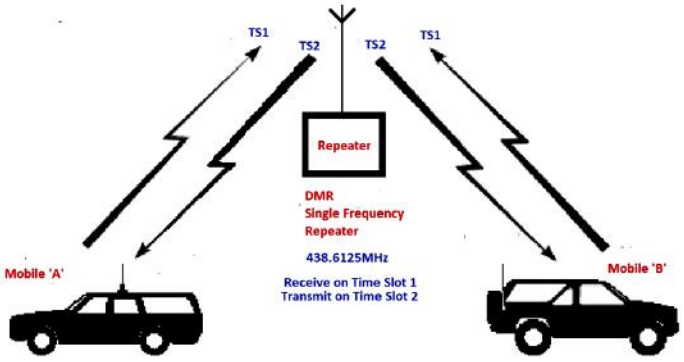
SFR Advantages:

there are three obvious advantages of a SFR over a traditional dual frequency repeater:

1 Only one frequency required.
2 No duplexer/circulator or cavities required.
3 Overall system cost is lower (literally, a single handheld DMR radio can act as an SFR, if it has SFR capability -the Retevis P1 costs around $100)

These advantages also make an SFR an ideal choice for supporting temporary or ad-hoc events with multiple mobile stations who may be out of direct simplex range of each other.

There are currently two licenced DMR SFRs in the UK: GB7VT in Stoke on Trent and GB7EV in Edinburgh. Both are on 70cm on 431.1750MHz.



The diagram below gives a visual representation of a DMR SFR. Please note that the use of Time Slot 1 and Time Slot 2 does not imply an absolute reference frame for timing.`

A DMR SFR can be configured in two separate ways. First where the SFR synchronises to the transmitting mobile station and transmits on the alternate time slot to that it is receiving on. For this, the mobile stations are configured for Direct Mode Operation (DMO) simplex. The alternative way of configuring the SFR is to make it the synchronisation master to which the mobile stations synchronise their transmissions to. This is known as Dual Capacity Direct Mode (DCDM) Split Timeslot.

The first way described above, is I believe, the simplest and most appropriate for amateur radio use and I illustrate the practical configuration of this later in the article.

***NB:** when radios are configured for DMO (Direct Mode Operation) simplex it doesn't matter which time slot is actually set as other radios set for DMO will on receive synchronise to it.

Questions:

One of the early questions I was asked was what happens when mobile stations 'A' and 'B' are within simplex range of each other? In DMO SFR configuration, direct simplex operation on the same frequency is seamless. Say 'A' transmits and 'B' is in simplex receiving range, what happens? As the signal from 'A' will reach 'B' before the re-transmitted signal from the SFR, 'B' will hear 'A' directly on TS1. Should 'B' move out of range of 'A' then 'B' will seamlessly receive 'A's transmission via the SFR. Should the SFR be set up for DCDM Split Time Slot operation then direct simplex reception will not happen as the SFR will be providing synchronisation and 'A' and 'B' will be receiving only on TS2.

For self-learning and testing I have setup temporary SFRs on 2m and 70cm using an Anytone AT-D878UVII Plus, and on 70cm using a Retevis P1 also, and with the help of other local amateurs I have been able to prove correct operation and capability of the configured SFRs.

Configuration of a DMR Single Frequency Repeater (SFR)

Anytone AT-D878UVII Plus VHF/UHF FM/DMR Transceiver

Retevis P1 FM/DMR UHF transceiver

DMR configuration settings for mobile stations: The actual frequencies, Talk Group, and Colour Code are not critical but illustrate what I used in my tests.
Tx & Rx frequencies to be the same as the SFR . For testing, I used 144.6125MHz on 2m and 438.6125MHz on 70cm as most DMR radios in the UK configured for simplex would already have these frequencies.

Channel type to be DMO/Simplex as opposed to Repeater.

Time slot to be 1.

Colour Code to be the same as the SFR. I used CC1.

Talk Group to be the same as the SFR. I used TG9.

Configuration of Anytone AT-D878UVII Plus as a SFR:

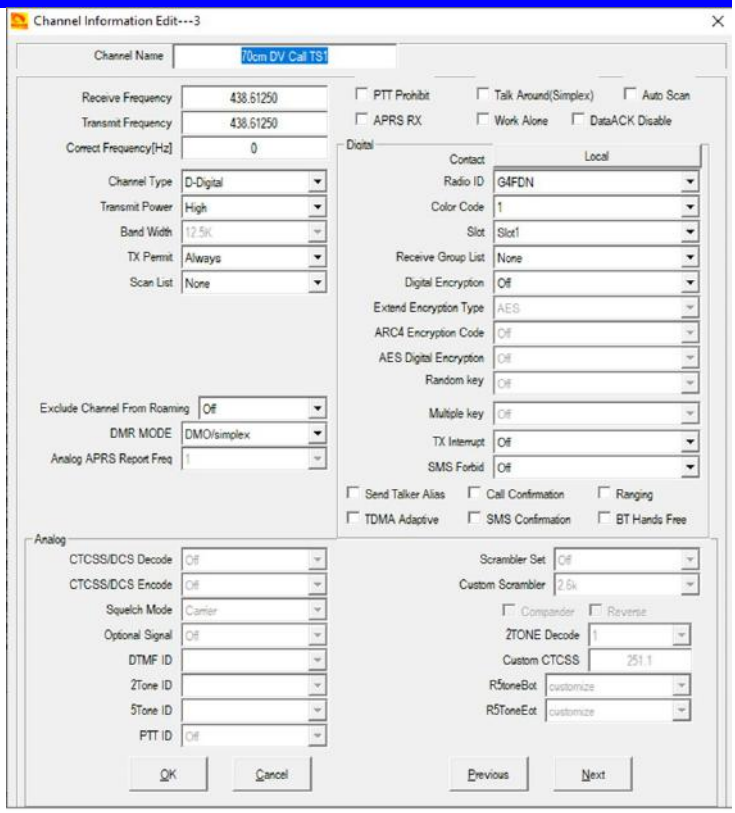
Two channels need to be programmed either directly via key presses on the rig or more easily via the Anytone CPS software which is illustrated here. One channel is programmed for:

Frequency 438.6125

Time Slot 1

Talk Group 9

Colour Code 1



And a second channel is programmed as above but this time for Time Slot 2 as shown in the screenshot below:
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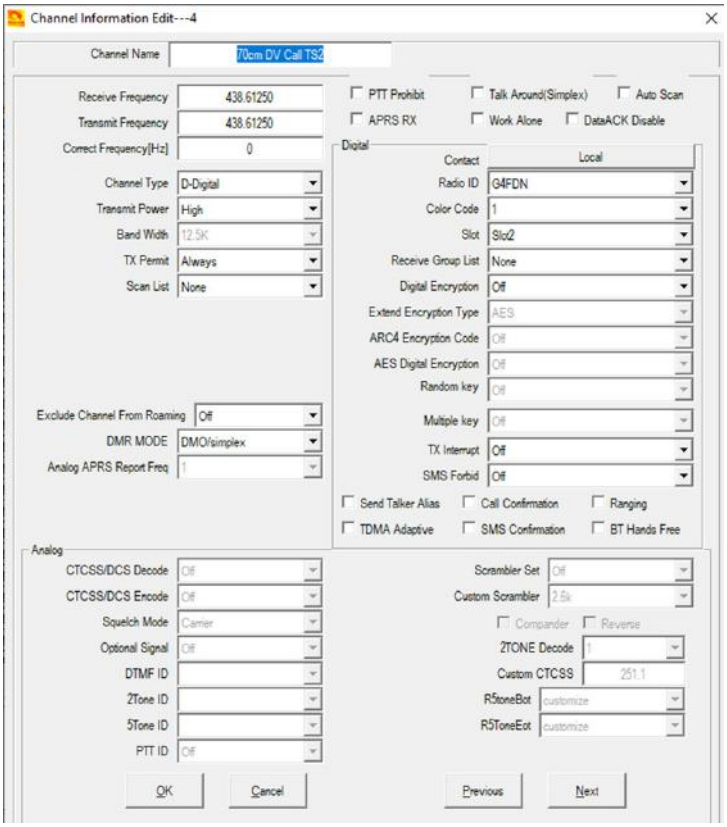


These configurations are saved in the CPS configuration file and then loaded into the Anytone.

Using the Anytone's front panel controls the VFO A/VFO B are set in memory mode and set as shown in the screen shots on the next page

Configuration of a DMR Single Frequency Repeater (SFR)

Repeater mode can't be set in the CPS and has to be set manually via the Anytone's front panel menu system as follows. Press the 'Menu' button which will change the screen to:

Then turn the right-hand selector knob until the 'Settings' option appears:

Press the 'Menu' button and the screen will change to:

With the 'Radio Set' option highlighted press the 'Menu' button and the screen will change to:

The right hand selector knob to highlight 'Other Func' and then press the 'Menu' button and the screen will change to:

Now turn the right hand selector knob several times until 'Repeater' is highlighted as below:

Press the 'Menu' button and the screen will change to:

Turn the right hand selector knob so 'On' is highlighted as shown below:

Now press the 'Exit' button four times and the screen will change to:

The 'RepMode' icon in red can be see just below the date at the top of the screen

The radio is now in SFR mode and ready to go. However, I would suggest the power level is set to no more than 'Medium' as in a high traffic situation the rig will be transmitting close to 100% of the time and the rigs heatsink can't cope with this at higher power levels.

Configuration of the Retevis P1 as a SFR:

Only one channel needs to be programmed using the Retevis CPS software.

Frequency 438.6125

Time Slot 1

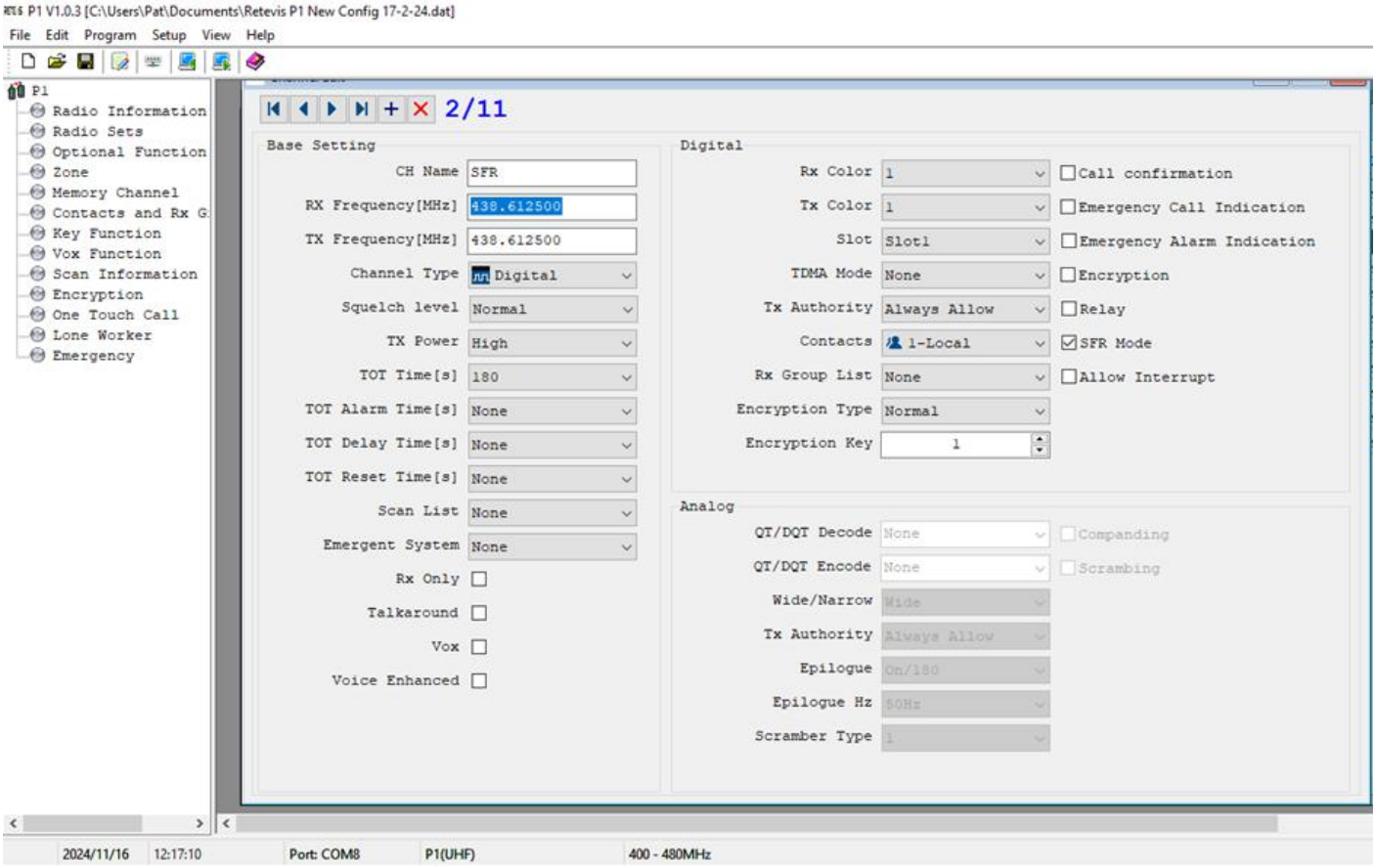
Talk Group 9

Colour Code 1

In the example on the next page the SFR is configured to be 'Channel 2'.

Note on the right hand of the CPS screenshot the 'SFR' checkbox which is 'ticked'. Adjacent to it is a field called 'Contacts' with the value '1- Local'. This is defined elsewhere in the CPS as a label for Talk Group 9. After the CPS configuration is saved and loaded into the Retevis PI, and then rebooted, change the channel switch to '2' and the SFR is ready to go. As with the Anytone I don't recommend running the Retevis P1 in high traffic situations at greater than the medium power setting to avoid overheating.

Configuration of a DMR Single Frequency Repeater (SFR)



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Radio Architectures: the Anytone AT-D878UVII Plus is a SDR based direct conversion transceiver whereas the Retevis P uses the more traditional super heterodyne approach. Both have been found to have very good receive sensitivity in use a SFRs.

Other SFR capable radios: Motorola, Hytera and other commercial DMR radio suppliers offer SFR capability but not in basic 'out of the box' radios. In many cases the hardware additions and software licensing cost are prohibitive for amateur use. However, Chinese manufacturers often provide SFR capability 'out of the box', and other brands supporting this that I know of are Radioddity, Kydera, FDP, and Belfone.

It should be noted that an SFR introduces a minimum retransmission delay of 30mS on receiving TS1 and transmitting on TS2. If the particular SFR processing time exceeds this then the delay between receiving TS1 and transmitting on TS2 will be 90mS.

If anyone is interested in understanding DMR protocols more at the packet level then the ETSI (European Telecommunication Standard Institute) documents:

References and additional material

· General System Design - ETSI TR 102 398 V1.5.1 (2023-11)
· Part 1: DMR Air Interface (AI) protocol - ETSI TS 102 361-1 V2.6.1 (2023-05)
· Part 2: DMR voice and generic services - ETSI TS 102 361-2 V2.5.1 (2023-05)

· Part 3: DMR data protocol - ETSI TS 102 361-3 V1.3.1 (2017-10)

· Part 4: DMR trunking protocol - ETSI TS 102 361-4 V1.11.1 (2021-01)

The above will prove quite a cure for insomnia. The more interesting way to discover what is happening is to use the free DSD (Digital Speech Decoder) and DSD plus applications with an SDR. See:

https://wiki.radioreference.com/index.php/Digital_Speech_Decoder_(software_package)

Summary: The concept of a SFR has been explained and the advantages over traditional duplex repeaters has been compared, and the example configuration of two types of radio have been illustrated.

Patrick McGuinness - G4FDN / EI2JW

patrick@mc-guinness.eu

Parks on The Air - WWFF and Castles on the Air

Parks on the Air is not just about the Certs, which are very attractive and colourful, but more about the challenges associated with the activity both transmitting and receiving whether from home or out in the field.

Using a Pro-Am Whip on 20 metres. Important to have a good earth so employed three radials clipped to base which made the antenna easier to tune

I have been following Parks on the air (POTA) for just under a year and with very little effort, and from the comfort of my own shack, have hunted over 1500 parks between the 40 and 20 metre bands. Unfortunately, my back garden is not suited to antennas due to its small size, nevertheless, a very distorted half sized G5RV antenna has worked reasonably well. In many cases these operations have also counted towards World Castles on the Air and World-Wide Flora and Fauna (WWFF). Castles are situated in many parks, and it is surprising how one can unconsciously end up with increasing numbers after checking with the ECA and WCA sites. I noted that English lighthouses on the air is also supported as many nature reserves, and parks, are situated along the coastline.

Many of the WWFF parks are POTA entities; for example, Galway Bay is listed as EIFF-0216 and POTA reference IE-0177. Another bonus if there is a Castle within I Km then one can claim that as an activation in addition.

You need to register on the POTA site https://parksontheair.com/

WWFF https://wwff.co/

World Castles on the air does not require registration Links are here for reference https://wcagroup.org/

Many operators hike into nature trails off the beaten track where it is necessary to operate QRP equipment from a reasonably lightweight battery. A 12AH Gell cell is about the most convenient size adding extra weight to the radio, antenna system and any additional equipment in the backpack. The alternative is operating close to the car from a park bench or even from the car itself within the boundary of the park.

So, what challenges?

I have a very small back garden at the Home QTH and, apart from a vertical antenna, there is very little choice of antennae that will fit into the relatively small space. From home I have spent several hours listening to QRP stations through the noise floor. Suddenly, and just for a few seconds, their signal strength became readable, and the contact was made. I have sat on a frequency for well over 40 minutes before the station I was hunting appeared for 20 seconds above the noise floor. I spent a whole week listening to white noise trying to get 50 contacts towards a Cert during the current conditions. Many stations were in the noise but I am presuming that I was reaching them with an equally weak signal. Patience is a virtue as they say!

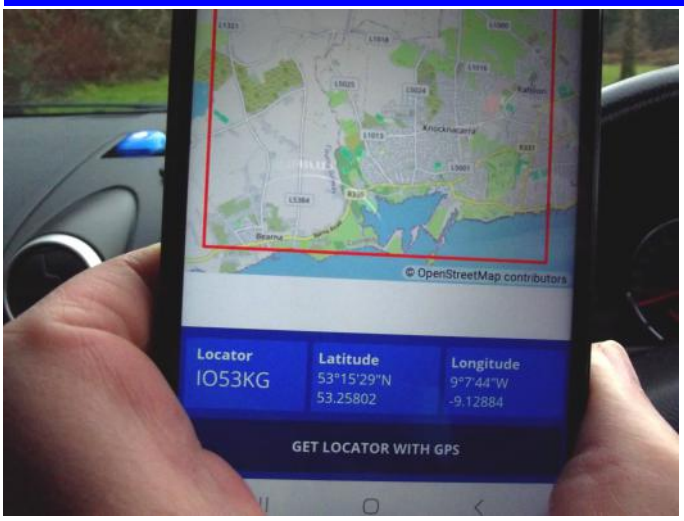
Insurance

Sadly, until recently, this has not been available until I discovered and became a member of EURAO. EURAO Insurance will only cost you 10 Euro if you join EURAO (it won't break the bank). If you are a member of a EURAO affiliated club, you can get a deal on the insurance.

Despite the naysayers, the insurance is valid in all EU Countries and is underwritten by AXA to the tune of €9,000,000.

The ICOM IC-7100 Is an excellent radio for POTA operation. The main body of the radio is mounted in the boot with the MAT Tuner. The tuner is not used with the Pro-Am Whip.

Parks on The Air - WWFF and Castles on the Air



Using the QTH Locator App for the Android phone available from Google Play. WWFF requires proof of location.

A Car Sat-Nav will also provide a good indication where required

You will receive an ID Card and a copy of proof of cover. The alternative would be to purchase a personal policy which could cost a fortune or have to be a member of a club affiliated to the National Society. Even then the insurance is not necessarily available unless you are participating in a Club event.

The real challenge is setting up the station for the portable and activation side of things. Possessing personal Public Liability Insurance is highly recommended.

Firstly, make sure you carry a copy of your license and a copy of your insurance cover. You don't want to be turned away from a location, so possessing a copy of the insurance document can be a game changer. Most park rangers and park workers are both interested and amenable provided you don't upset them. Be diplomatic!

Plan The operation

Before going out, check the maps and ensure that you are fully conversant where the boundaries of the park lie. In some cases, it may not be a case of parking up and operating from the car or from a picnic table. Bring a choice of antennas with you and a backpack station in case it requires hiking into a location and setting up along a trail. Maps are available for most Special areas of Conservation. Have the GPS handy to confirm your location. Take pictures whilst out on the operation as the object of the exercise is to promote an awareness of nature reserves and parks. The POTA social media sites display some fantastic views from parks and the stations employed for the operation.

For WWFF Purposes take a few pictures of the location including park signs and maps.

The Station

For hiking, I use a good lightweight radio that can be transported easily and operated from portable power supply. There are many to choose from.

The ICOM 705 is easily transported in the rucksack and can be hiked to a convenient location I employ an ICOM auto ATU which tunes the antenna with a short press of a button. This set up will operate for a reasonable time from a 12AH lead acid gel cell.

I use the ICOM 7100 in the car and this is set up with the main unit in the back of the car with a MAT auto ATU if required. I have the head unit on the dashboard, and this facilitates operating from the front seat of the car. I generally use a separate 120 AH lead acid battery rather than the car supply. One only drains the car's own battery once to ensure that it never happens again especially if operating from a remote area in Connemara.

For lift out "Al fresco" operation I have a Kenwood TS-50 with Auto ATU which can be plonked onto a Park Picnic Table and operated from a separate Car Battery so there is no need to remove the gear installed in the car.

Additional items for the kit would be spare adaptors, an Antenna analyser or VNA, basic tools and large cable ties.

Antennas

Antennas need to be easily transportable and rapidly deployable. These can be homemade, or one can buy the "McGyver", rapidly deployable, kits such as the JPC-12, obtained from Banggood or elsewhere, the MC-750 vertical antenna, the MCC-599, the MP-1 Super antenna, or a Buddipole. Of course, there is nothing to beat anything homemade such as a EFHW wire antenna, the Dipole or the Inverted Vee. The latter are full sized, and naturally will perform better as they are not a shortened compromise.

My personal favourite is a 20-metre inverted Vee with links in each leg to extend the overall length to a 40-meter antenna. This is a larger antenna and maybe not as convenient in some locations. I support the Inverted Vee from a

A View across the mud flats at Hunters Park which can be thronged with migrating birds depending on the time of year

fibreglass pole with the apex at 22ft. The SWR is good and if I maintain the height and spread of the dipole, it will generally need little tuning.

Other antennas include the Ham Stick which is a single band mobile whip antenna which is tuned by increasing or decreasing the length of the whip section. This seems near impossible to tune at times but, when static, it is possible to clip radials to its base making it far easier to tune. This could be used in some circumstances but not the best antenna. It is a major compromise if one wants to be lazy and the band conditions are good it will work.

Obviously, it is handy to have a choice of antennas depending on the location. Not many places have trees or convenient skyhooks in the vicinity. Where possible I try to use the Inverted-Vee.

I have a 9:1 UnUn for random lengths of -wire, I carry the 49:1 UnUn for the EndFed Half Wave antenna just to be on the safe side. I have also been known to load a sheep fence via the ATU when all else failed.

Kite Antennas

It would be remiss of me not to mention the kite antenna. If there is any breeze a kite can lift most antennas including a top-band EFHW.

I use a sled 24 kite to lift antennas as it is very stable and kept facing into the wind with a drogue chute. It is important to have a bleed resistor in line before the connection to the radio to remove any static build up. It is best to have this positioned just before the ATU and ensure that a good ground rod is driven into the ground. The resistor should be valued around a megohm which will have no effect on RF but will trickle off the static.

A sled kite will keep most antennas near vertical and the very long wires will be slopers. Even at noon in the summer an EFHW on 80 metres will pull in plenty of activity. G4ROJ was often heard on the air using kite antennas and did tours around the UK demonstrating them. G4ROJ suspended a large quad loop antenna using four sled kites. If the breeze is strong, it is difficult enough to reel in the kite.

Logging

Logging is extremely important if you are activating a Park. Adherence to the requirements ensures that you get the benefit of activating and your log must be uploaded to the POTA website to credit your contacts with your park. If push goes to shove you can use paper logging but these will have to be transferred to a computer lof in order to upload your ADIF file to the POTA Site.

Little point going out and not uploading the log. I am sure that next time you go on the air you will hear about it from the hunters if your previous log did not get uploaded. There is a lot of enthusiasm.

You can use a laptop. Tablet or your mobile phone to log the contacts.

HAMRS is a program for Windows or Android and ideal for POTA, WWFF and Castles. You may have to rename the file and change the parameters within to suit Park, WWFF or Castles.

Ham2k Polo is another very good program but does not work on Windows but will work on an Android phone or tablet. Logging is possible on a smart phone, tablet or laptop. Logs must be uploaded to the relevant sites in ADIF format once the operation has been completed.

Note that only those activating parks upload logs to the POTA or WWFF website. Those hunting only need to log into the sites to check their logs. Contacts are automatically credited to an individual callsign worked by the park activator after they have uploaded their logs, generally within 24 hours.

Modes of Operation

It appears that Phone and CW are the most popular but, when conditions plummet, FT8 seems to take over. It is not my place to knock FT8 but to me it seems a bit impersonal but that is only my opinion. When band conditions are poor, there is a noticeable increase in FT8 activity. With the state of the bands of late, FT8 at least offers a way of making contacts rather than struggling for hours to get those 10 contacts minimum. RTTY, VARA and many other person to person keyboard modes seem quite rare. I suspect that this might be cumbersome to operate from a car or out in the field

Operating

Operation from a portable location gives many advantages. Lower QRM levels, better ground, and more space for a more efficient antenna system with radials. I am sure that operation from coastal locations will enhance the signal as a bonus and will facilitate better take-off.

Firstly, place your callsign and operating frequency on the POTA website under the “spots” section. The minute you do this there will be a pileup. If conditions are good, you will get a good 30 minutes before things quieten down. You should, unless band conditions are poor, manage to work the requisite number of stations within 30 minutes but don’t leave until you have worked all that are calling.

Parks on The Air - WWFF and Castles on the Air

Exiting the woodland walk towards the main Park

The initial call is CQ POTA, YOURCALL, and the Park Reference Number. Do this a couple of times and you just need to exchange reports with callers. Be mindful that underneath the strong signals, there are weaker callers. Most of the time they will hold back while the high-power operators get in first. Occasionally you may hear somebody call "**PARK to PARK**". This caller is in another park, and he will want to exchange a signal reports and Park reference with you and you in turn give him your details. This qualifies for a specific PARK to PARK Award. You may encounter 3 or 4 of them anytime you are out and about. Give them priority!

You need to operate a minimum of 10 contacts for POTA for an activation, but WWFF requires a minimum of 44 to complete an activation. If you don't make 44 contacts in one operation you can go back to the same location another day and make up the number. Anytime you contact somebody from a castle, they will upload their logs to the Castles website. If you operate in the vicinity a Castle, you need to upload your logs to the World Castles on the air website.

There are many operators in the UK operating POTA and checking the 40-metre band as well as the DX bands will bring up your totals. Personally, most of my own operating is done on 20 metres but, when 40 metres is open into the UK, there is a wealth of activity from parks and castles. Checking the spots on the POTA site will also reveal activity on other bands. The WWFF site has a cluster so check in there too and additional contacts may be found.

Naturally it would be nice to get local operators to call in so, do publicise your activity via our VHF Group mailing list or via Ham Radio Ireland Facebook page. To date, I have only had contact with EI7LC, from Tuam, operating on two occasions from Tawin Island which has both a POTA and WWFF reference. We do really need more EI operations as Ireland is so rarely heard.

Apart from a bit of fresh air, the occasional necessity to hike a few hundred yards or more, the Parks and Castles operations give plenty of scope to experiment with antennas and equipment which suit your operation. There are plenty of locations to operate from so the choice is unlimited. You will always get a reply to your calls as the Parks operations are very popular in all countries. Ireland would be rare as there are only a few on air and not many that bother to go portable nowadays. After a while you will build up a huge list of friends, on first name terms, anytime you go on the air.

Like many of these operations, people come and go, but as people drop out, more take an interest and fill the void. Worked All Britain has withstood the test of time since 1969 and although the CASHOTA awards ended after M0DOL passed away, English Castles on the Air was formed and amalgamated with World Castles on the Air both of which have a huge following.

In Conclusion

One will only get something out of participation if they put a reasonable effort into the activity. It suits all sorts as, if you are just content operating from home as a Hunter, in the cozy shack, you will be supporting the many operators who go out and activate Parks around the world. As an Activator, you will be providing the Hunters with a new Park anytime you go out you will soon get very well known in the POTA circles for frequent Activations. Without activators the whole scheme would fall flat. Then again, without Hunters there would be very little opportunity for Activators to gain anything by operating from Parks.

No two operations will be the same as propagation varies. You are far more likely to work some reasonable DX whilst out portable than from home unless you have beam antennas and/or a bit of extra power. My operating skills have improved by taking time to pick stations out of the noise floor. If the portable operation bug does bite, then look at this guy's site https://oh8stn.org/ - he just about has everything covered.

In the meantime, many have shown an interest but never signed up to the activity. It takes less time than signing up for Netflix! Maybe try a bit of POTA hunting on 20 metres and get a taste for it but do investigate the portable aspect which is far more interesting and rewarding.

Remember, above all, if operating from a park or Nature Reserve, leave nothing behind except good memories!

Over the next few issues of Ham Radio Magazine, I shall cover some recent activations and a review of the antenna systems used. Why not send in your activity with pictures?

Hunters Park on a fine Autumn day

Steve Wright- EI5DD
wright14@gmail.com

Building and setting up a Meshtastic Project

Creating a reliable communication network for remote or emergency situations can be a highly rewarding endeavour. The Meshtastic project offers an open-source platform for building mesh networks using cost-effective hardware. By integrating this technology with custom 3D printed housings, I was able to create devices that are both functional and durable. Here is a step-by-step account of how I brought this project to life.

Step 1: Getting to Know Meshtastic

The first step was understanding the Meshtastic system: Through research, I explored the Meshtastic website, forums, and GitHub repository to understand its functionality. Meshtastic uses low-power, long-range LoRa radios to enable text and GPS communication through a mesh network.

Gathering Hardware: I sourced the essential components, including LoRa modules (e.g., Heltec or TTGO boards), antennas, batteries, and other accessories.

Step 2: Setting Up the Meshtastic Devices

Once I had the hardware, I proceeded with setup:

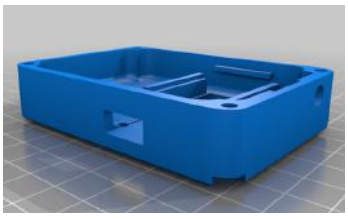
Assembling the Devices: *I* soldered connections and securely attached the LoRa modules to their components.

Flashing the Firmware: using the Meshtastic firmware, I uploaded the software to the devices by connecting them to my computer and following the community's detailed instructions.

Configuring the Network: I used the Meshtastic app to set up device names, encryption keys, and channel settings, ensuring seamless communication between devices.

Step 3: Designing Custom 3D Printed Housings

To enhance the devices' durability and functionality, I designed custom 3D printed housings:



Identifying Requirements: I determined key features for the housings, such as weather resistance, durability, easy access to ports and buttons, and space for extras like batteries or solar panels.

Using CAD Software: I designed the housings using Fusion 360, ensuring precise measurements for a snug fit around the components.

Prototyping: *I* printed several prototypes to test fit and functionality, making iterative adjustments to refine the design.

Step 4: Printing & Assembling the Final Housings

Selecting Materials: I chose PETG and ABS for their durability and resistance to environmental factors, making them ideal for outdoor use.

3D Printing: I carefully monitored the printing process to ensure high-quality results.

Assembling the Devices: Once the housings were printed, I secured the LoRa modules, batteries, and antennas, ensuring proper alignment and accessibility.

Step 5: Testing and Deployment

The final step involved testing and deploying the devices:

Field Testing: I conducted range and signal strength tests in various environments to evaluate the network's performance.

Making Adjustments: Based on test results, I fine-tuned the housing designs and device configurations, including upgrading the antenna for

improved performance.

Deploying the Network: With all adjustments complete and a new antenna and box for outside, I will be deployed the network in its intended location

Conclusion

Building my Meshtastic project and designing custom 3D printed housings was a fulfilling experience that blended technical expertise with creative problem-solving. By combining Meshtastic technology with durable housings, I created a practical solution for reliable communication and practical fun. This project not only deepened my understanding of mesh networks but also demonstrated the power of open-source innovation and 3D printing in addressing real-world connectivity challenges.

Lez Fergusion - EI4GEB

ei4geb01@gmail.com

Hello From Canada

Hello Ireland

I am Debbie, a Canadian licensed Ham Radio operator VE5DGW. Although you don't know me, some of you, may know my husband VE5GGW. His Irish call sign is EI5BUB and his English one is G1COR. His name is Graham Wilson. You would often hear him on 2 metres on via the Galway or Dublin Repeaters and also simplex FM.

Starting front right is VE5GGW (Graham Wilson) Then myself VE5DGW (Deborah Wilson). Right at the back of that column we have VE5HA (Barry Weigoz) and his wife Sandy, who is not a ham. Crossing over the table to the left column is VE5TV (Delbert Smith) next is VE5LS (Linda Seuk) with husband VE5AG (Bob Suek) and at the front is VE5 JHN (John Hummel- Newell). There are a few missing, VE5 BOK (Bayne Opseth) His wife VE5JCO (Jeannine Opseth) VE5 ARJ (Art Lagatt) VE5 FX (Bj Madson) and his wife VE5FL (Kathy Madson).

Graham lived in Loughrea in 1978 and returned to England 7 years later. He set up a trucking company with 30 truck including owner drivers. He owned 20 trucks at the time.

Having travelled around Canada on Holidays in 2008, we decided to settle in Canada and bought a Ranch / Hobby Farm of some 160 acres in 2012.

We now live in Canada in the province of Saskatchewan. How is that for a tongue twister, hey, and our nearest radio group is in a town called Melfort.

The farm is a bit like Noah's Arc as we have 2 Horses, 2 Cattle, 2 German Shepards and 2 Cats. We also keep bees and chickens. We are self sufficient - grow our own vegetables and produce plenty of eggs.

Initially, Graham was driving trucks across America and Canada but nowadays drives more local runs.

Following Graham's interest in Amateur Radio, I decided to study for my licence. The advantages would be manyfold with distant repeaters copyable from the home QTH and given the time Graham spends on the road.

Our regulator in Canada is Innovation, Science and Economic Development Canada.

Having sent away for some study material and with a little coaching from members of the Melfort Amateur Radio club, I managed to pass my exam with honours and quickly obtained my licence VE5DGW. Graham also sat the exam and received his callsign VE5GGW.

All the local radio hams meet up on a Saturday morning for breakfast, where we try to put the world to rights, and occasionally talk about radios. The photo below is one of those mornings just before Christmas 2024.

Our local Yaesu 2m Repeater is the Melfort Repeater. This has a huge coverage area as the majority of the surrounding area is flat.

Another form of communication widely used is LADD Channels. LADD stands for **L**ogging **AD**ministration **D**ispatch, and refers to a group of 4 channels that are widely used in the logging / forestry, oil field and gas sectors in Alberta.

Many of the lease roads in Alberta require you to call your Kms & direction using one of the **LADD** channels - although there are many other channels used throughout the Province..

The **LADD** channels are also frequently used for informal truck to truck communications. In this sense these VHF channels have replaced the use of CB radio in Western Canada. Most truckers are monitoring the **LADD** channels when driving. It is common to hear accident reports being passed on the **LADD** channels.

In 2022 for the summer field day VE5AG (Bob) took his RV (large caravan) to the camping site on the outskirts of Melfort, where we set up his T5-450 Radio with an all band di pole . - 3 band yagi beam Antenna. In the picture below we have VE5AG, VE5JHN, VE5GGW, and VE5DGW.

Summer field day 2023, was held at our QTH up the top of the field near the woodland. We set our station up in a small caravan . The radio was the ICOM 718. We strung a wire antenna, which was a ½ wave end fed, over a strip of land between some trees, using a tire cheater charged with air, it fires the rope up into the trees, to pull the wire up.

Hello From Canada

VE5GGW, VE5JHN and his son Josh VE2BE, Josh has yet to sit the exam, hence the peculiar call sign.

The next three pictures show the antenna launcher, the antenna in the air and the caravan/shack.

It was a pretty hot summer and the mosquitos were a dammed nuisance so we spent a lot of he day crammed in the caravan.

For our winter field days we use our basement because of the extreme cold weather that we encounter here. We get extreme weather warnings when the temperature gets down near the –40C, add the wind chill, and that is when it gets too cold to play outside. I have pictures from the winter field day of 2023. The first picture is of our place, I thought you would like to see the snow.

The main benefit of moving out to Canada was obviously the ability to purchase a place like this. Back in 2012 land was cheap here we paid $400 an acre in euro's that is $278.20 an acre. With the land and the house, the price came to the same as my 2-bedroom end of semi in the UK, ridiculous, isn't it. We love being out in the countryside, with no neighbours and no one to answer too. We have our chickens and a couple of cows for the freezer, a great vegetable garden and this year we are adding a 100-foot greenhouse so we will be practically totally independent.

I worked for the railway when I was in the UK as a train driver on the southeastern. I got tired of my life being run by the minute, always watching the clock in the rat race of life. Living here it is like stepping back to the 80's, it is so laid back here and the people are very nice. The only downside that I have found, apart from the distance of family, is the excessive wildlife that you must be aware of when out in the countryside. We have bears, wolves, coyotes, cougars, skunks, and porcupines to name but a few. I would not like to go riding out here on my own, as if something happened, I could be waiting for help for quite a long time, and out here you are dinner, for some of the animals. So it is a different way of life, but I wouldn't change anything about it. **73's for now and maybe we will catch you on the bands**

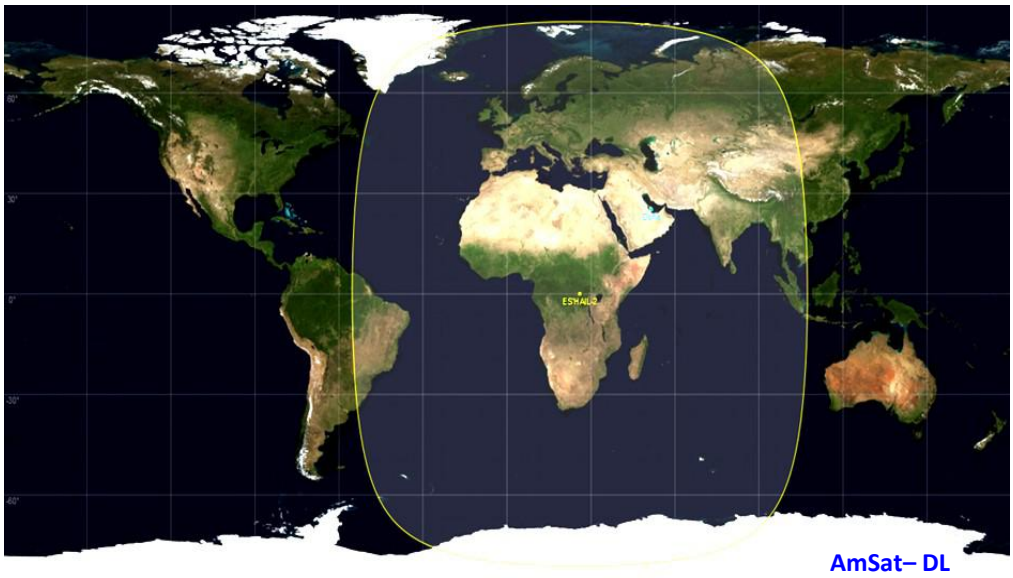
John VE5JHN on the Night Shift

Graham VE5GGW looks half asleep after a long night

Debbie - VE5DGW
&
Graham VE5GGW

Getting Started on the QO-100 Satellite Part-1

AMSAT reported that the geostationary satellite Es'hail-2 carrying amateur radio transponders launched from Kennedy Space Centre at 20:46 GMT on Thursday, November 15, 2018, was placed in a geostationary orbit over Africa. These were the first amateur radio transponders to be put into geostationary orbit and they were expected to link radio amateurs from Brazil to Thailand.



AmSat– DL

Location of the Es'hail 2 above Africa approximately 141.5° magnetic from Galway

Es'hail-2 carries two "Phase 4" amateur radio transponders operating in the 2400 MHz and 10450 MHz bands. These are a 250 kHz bandwidth linear transponder intended for conventional analogue operations and an 8 MHz bandwidth transponder for experimental digital modulation schemes and DVB amateur television.

Narrowband Linear transponder
2400.050 - 2400.300 MHz Uplink
10489.550 - 10489.800 MHz Downlink

Wideband digital transponder
2401.500 - 2409.500 MHz Uplink
10491.000 - 10499.000 MHz Downlink

AMSAT Guidelines

The narrowband transponder is intended for conventional analogue and narrowband digital signals with maximum 2.7 kHz bandwidth.
The major advantage of this satellite is that it is geostationary and is available 24 hours a day with no tracking required.

No transmissions should be made beyond the nominal edges of the transponder passbands. No operation should take place below the lower beacon nor above the upper beacon (now also called experimental beacon).

No uplinks should result in downlink signals that are stronger than these beacons. If such signals are detected, they will be marked by a "LEILA" siren. When they have been marked by "LEILA", operators should immediately reduce their uplink power (ERP).

No FM transmissions should be made to Es'hail-2 as these would use excessive power and bandwidth.

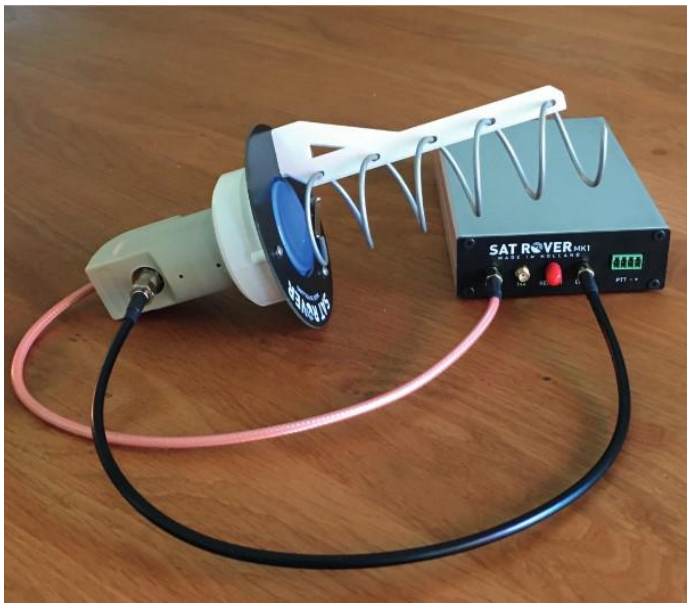
Some say it is way too complicated to set up a station for the QO-100, but this article dispels this myth and provides a very good entry point into this aspect of the hobby

Basic Equipment

The simplest, cheapest and easiest unit is the **Sat Rover** which up converts from 2 metres to 2.4 GHz and down converts from 10GHz to 2 metres from 10GHz. It comes with LNB, 2.4GHz helical antenna and readymade leads required to connect from the unit to antennas plus a power/PTT plug. One must make up the power cable and PTT line which is not supplied. The product retails at €599.00 from the manufacturer in Holland. All that is required is a dish of 80 or 90cms diameter and a mount or tripod. This is basically a simplex system but, although one should have the facility to monitor one's transmission, this can be achieved connecting to a WebSDR provided by BATC to monitor the transmission as it is being made.

The SatRover

The transverter package contains most of the parts to communicate via the QO100 narrow band geostationary satellite as in the downlink converters, the uplink transverter and PA, the LNB, the helical antenna for 2.4GHz and a stable reference TXCO. To make your satellite ground station work.



The Sat Rover Kit as depicted in the SatRover Manual

Getting Started on the QO-100 Satellite Part-1

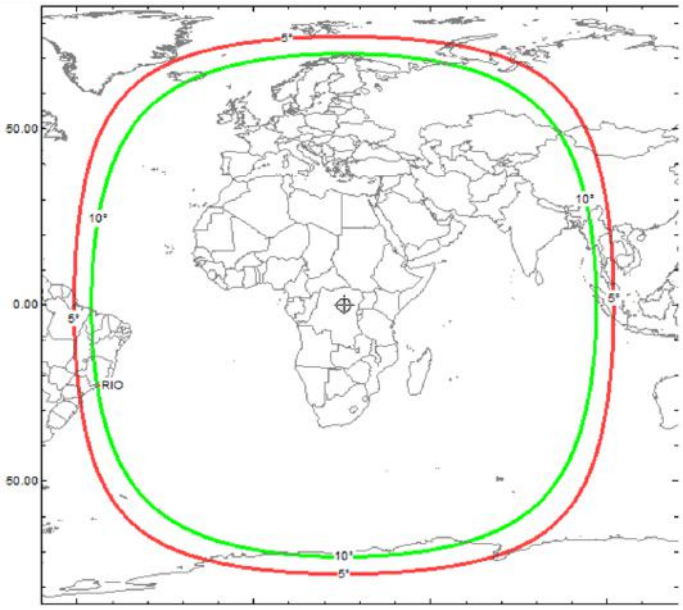
You must add the following parts:

1) A 12V power supply (or batteries) capable of 2A Satellite offset dish reflector 60 to 90 cm diameter. An 80 -90cm dish is ideally suited to local use in Galway.
2) 144MHz all mode transceiver with power level that can be reduced within a range of 0,5 to 4 Watt.
3) Coaxial cable between 144 MHz transceiver and Sat Rover.
4) A transceiver such as the FT-817 or the ICOM 705 are ideal drivers for the system.
The set up to interface with the driver transceiver is simple and it is almost plug and play. Perfect for portable use.
Note that this SatRover is not waterproof and needs to be installed in a waterproof housing before leaving outside in the elements in all weather.

Location and Footprint of QO-100

The QO-100 satellite is located over Africa and is approximately 141.5º magnetic from Galway with an elevation of 21.3º with a skew of 21.1º from vertical for setting the LNB.

Reception of the satellite is possible within the green footprint with higher gain required on the fringe areas between green and red. Beyond the red footprint reception would be almost impossible. Ireland is well within the footprint of the Satellite and a dish size from 80 – 90cms will suffice.



Footprint of QO-100 (AmSat - DL)

Setting up

Tune to receive the lower beacon frequency of 144.500 Which equates to the downlink of 10,489.500.
With your driver transceiver set to FM Set the dish to an elevation of 23.1o move the dish from left to right around the general direction of 141.5o magnetic. As you swivel the dish from left to right of the general direction of the satellite, a point will be found where the white noise becomes almost zero and fully quieting. The dish may have to have slight adjustments to the elevation in the vertical plane and the Skew of the LNB can be finely adjusted.

The system is now full aligned on the Satellite and no further adjustments need be made. It would be wise to ensure that whatever support you use is firmly battened down and secure as dish antennas tend to catch the wind easily. If the dish happens to move every time there is a slight breeze, the alignment will be affected, and you will lose your signal.

Additional Permission is required for 2.400 – 2.450 GHz Satellite Band

It is necessary to apply to ComReg for the additional band 2.400 – 2.4500 GHz for satellite operation only as this is outside the remit of the Amateur Station Licence. This may be done online and there will be a small charge of €30.00 per year to retain the use of the satellite allocation. This should issue within 24 hours.

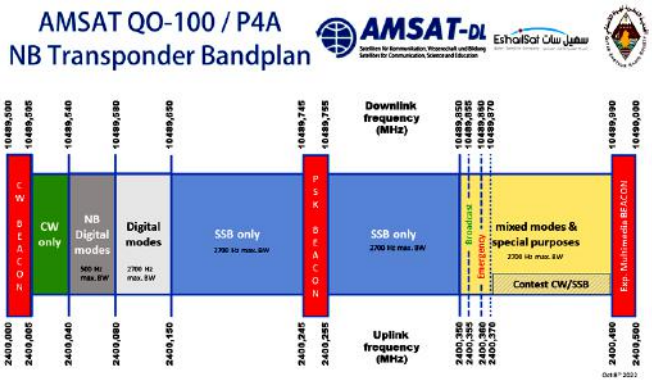
Operating

It is essential to be able to monitor your signal from the Satellite to ensure that your uplink is not interfering with any other operator. This is easily achieved by listening to the downlink of the Satellite on a WebSDR. Select a clear frequency within the SSB allocation. Select the FM mode and ensure the mic gain is turned down.

If using an ICOM-705 when you push the PTT a line will be seen on the waterfall corresponding to your transmission. There is a 0.25 Second latency which is the time taken for the signal to travel to the satellite and back down to earth. On releasing the PTT, and as a result of the 0.25 Sec latency, there will be a split second of a signal received from the Downlink which will appear as a white dot on the waterfall display on the radio. If this is off set from the line of your transmission adjust the RIT until it sits exactly above the line. Your Receive frequency will now correspond exactly with your transmission.

Your power level into the satellite should be set in such a way that, when you transmit, your signal strength does not exceed that of the CW or PSK beacons.

If you receive a signal that is slightly off your calling frequency only adjust the RIT on your radio to clarify it. Do not move your transmit frequency.



Keep within the boundaries of the Band plan of operation for your specific mode. Operation through the Satellite is much like operating through a Repeater although CQ calls are acceptable. Bear in mind that there are a lot listening on the side so a QSO will not be difficult. There are plenty there to tell you that there is a weak station maybe calling you slightly off frequency. All signals through the satellite should be easy enough to receive although those running will lower power levels, or accessing from areas at the edge of the footprint may be weaker.

References & Pictures
Sat Rover Manual
AmSat UK and AmSat DL

Are You Getting the Best from Your Radio?

Good audio quality is essential - are you getting the best from your radio? The quality of transmitted audio is considered far more important than signal strength in amateur radio. Let's face it, if you cannot understand what someone is saying because of poor audio, it doesn't matter how strong their signal is! Conversely, if the audio transmission is good or above average it will still remain highly readable even at a far weaker signal level.

We may take a radio contact for granted, but the receiving station needs to understand what is being said. The transmission should ensure as much as possible that details are received as desired. This is especially important during potential emergency operations, nets, contests, DX contacts and even everyday rag chewing.

It's interesting to note that a good quality audio transmission will most certainly increase your CQ to QSO ratio. It will reduce listener fatigue and make the experience more enjoyable for both you and the receiving station.

QRM can of course affect your received signal and should also be taken into account. Be sensitive to the reports you are receiving, and consider whether QRM is affecting you. A good quality transmission may be heard or picked out above noise and other traffic, but sometimes QRM you cannot hear, will make your signal impossible to copy.

While signal strength is undeniably important for reliable communication, it's just one part of the equation. With low or poor audio quality, a strong signal may not result in effective communication. Therefore, both factors need to be balanced for optimal radio operations.

Here are a few simple points to consider, to make the most of your SSB / AM transmissions.

The fist mic supplied by the radio manufacturer will be optimised for the rig, however, results might be improved with a desk or a studio microphone.

Hold the microphone close to your mouth but not too close (around 2 to 4 inches away). Speaking directly into the mic can cause popping so this needs some experimentation. On a fist microphone, sometimes talking across the mic can reduce the popping effect.

Using a headset or headphones with a built-in microphone can help isolate your voice and reduce background noise. This is useful in a noisy shack environment or multi operator contest station, it will also free up your hands. A noise-cancelling microphone is also an option for noisy environments.

It's very common for operators to use the default radio setting but most of the time the result can be disappointing, audio settings are often overlooked. Correct adjustment of the mic gain, with reference to ALC, and COMPression or PROCessor levels if desired is a must. Too much mic gain can lead to distortion and overdrive your ALC. If too low your voice level will be inaudible. It is desirable to drive the ALC (Automatic Level Control) circuit but remain within the radio's ALC zone. Compression settings can help increase the average "talk power" 2 to 4dB is usually enough.

Some transceivers have built-in audio processing and EQ on both transmission and receive. Better clarity and intelligibility generally come with reduced bass and slightly increased treble.

Check and ensure your equipment is properly grounded. This is standard good practice but can certainly help reduce the possibility of RF in the shack. You can avoid possible mains hum pickup by siting PSUs and linear amps with big mains transformers away from microphones and transceivers.

In recent years the use of a web SDR to listen to transmissions has become popular. This will allow you to hear how you sound to others and make adjustments accordingly. Most web SDR's will allow you to record your transmission and you can use this recording to listen to how you sound.

Often overlooked but equally important is our own speaking etiquette! Speak clearly at a sensible speed, enunciate your words, avoid mumbling and use the correct phonetic alphabet if required. This will help ensure that your message is transmitted in the best possible manner. At the end of the day, it's often all about experimentation. Try different settings and configurations to find what works best for your specific setup. Seek feedback from other hams to get an outside perspective on your audio quality. But be careful as it's quite possible that if you ask ten people about your audio you may get ten different reports.

Remember that achieving optimal audio quality will require some trial and error, as it depends on factors like your equipment, environment, and personal preferences. Take your time to experiment and make adjustments until you're satisfied with the results. Just think of the immense satisfaction you will get, when you receive unsolicited comments on your 'excellent' audio!

Dale McWillliams - EI7HDB

dalemc@gmail.com

SOTA on your Foreign Family Holiday

When packing for a family holiday, the last thing other members of your family want to hear is how you are going to fit your radio gear into the luggage, the potential airline security issues with lithium batteries, or how your wire antenna looks like xplosive det-cord!

In this article, I hope to detail in the simplest form, the main items you need to consider when bringing a portable radio setup abroad, particularly on a flight and family holiday. Being an avid SOTA operator, my experience and advice is through this lens, but anyone travelling with their kit should hopefully gain some takeaways.

Before You Go...

1. Find if there is a suitable summit(s) within realistic reach of your holiday base location.

1. I use Google Maps & SOTA Maps to find a suitable summit(s) and I also find Google Street View is really handy to view trailheads and plan a route to the start of the climb.

2. Plan how you are going to get to the climb starting point, and how you plan to climb it.

1. More online research lets me figure out whether I can walk to the starting-point, or if I need to hire a bike/vehicle to get there. Taxis are of course an option, but make sure that taxi will definitely be there when you finish the climb to take you back!

2. I also look at Trail/Hiking websites and Apps like Outdoor Active to become familiar with the climbing routes and trailhead locations.

3. Make a packing list.

1. If I'm confident I can activate on just 2m FM, then I might simply take a handheld, especially if I'm stuck for luggage space. For most airlines, if the battery is installed on the radio, it can be packed in your checked uggage, but I would recommend taking it in your carry-on bag.

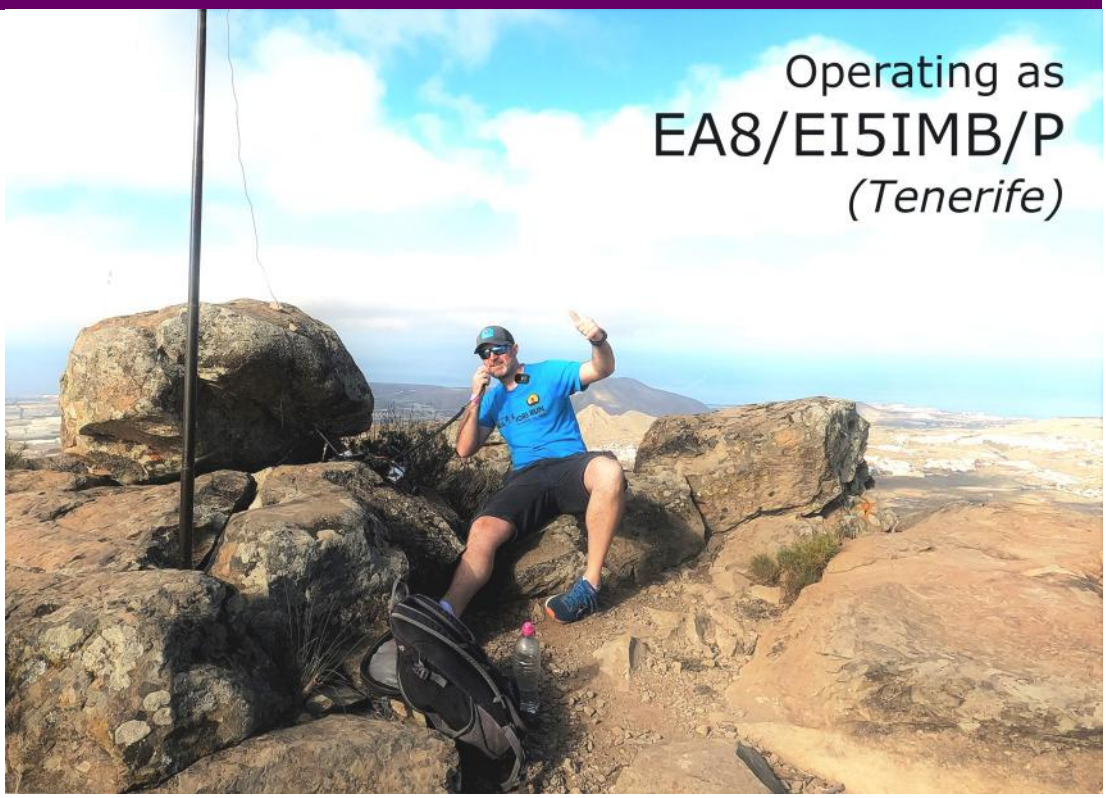
2. If I'm using HF, as well as the radio and antenna hardware (which we'll get into shortly), I use an external Lithium battery, so I need to know the airlines' maximum lithium battery allowance. In most cases it is 100wh, but check with your airline. This stand-alone battery will have to be carried in your carry-on bag and in my experience you may get questioned on it, so have the details and your licence printed and at the ready.

3. With the above decided and assuming you are operating HF, your packing list in general needs to be:

1. Radio with microphone.
2. Radio Power Source.
3. Antenna with coax cable.
4. Antenna support.

SOTA on your Foreign Family Holiday

5. Logbook (electronic or paper).
6. Copy of your licence.
In my case this means:
1. Xiegu X6100.
2. Zippy LifePo 4200mA Battery.
3. SOTABeams Linked Dipole (20m/40m).
4. SOTABeams Tactical Mini Fibreglass Pole.
5. Paper & pencil, or iPad/iPhone running HAMRS.
6. Printed licence copy. The stand-alone battery is likely the only item that must travel in your carry-on luggage, however I also take my radio carry-on. It's usually the most expensive item I have with me, so its worth keeping close! Everything else can go in checked baggage. My antenna support pole just fits diagonally into my "hand-luggage" size wheelie case.



4. Last thing before leaving of course, double and triple check you have everything. Imagine how annoying it would be to arrive with everything except the coax cable!

Once There...

1. Choose a day(s) for the activation(s).
1. Once I have the lay of the land, I usually pick a weekday as it is quieter and plan to leave early in the morning, before dawn, not only to beat the hottest part of the day, but also to get back as early as possible to continue the holiday with my family.
2. Book/Set Up the method of travel to the summit (if not walking).
1. The last thing I do is book my method of getting to the summit. This may be a hire-car, bike, e-scooter or whatever.
3. Put all those plans in motion!
4. Finally, when the day is upon me, ideally with an early night before, I head off and enjoy my activation.
I really hope this article has inspired some of you to take your radio gear abroad and maybe operate in a new country or location. With careful planning and preparation, I believe it is very achievable to operate on holiday with minimal impact on family time. Whether that be as a SOTA Activator, on the beach, or even from the holiday apartment, a successfully operation abroad is very rewarding and you may even make contacts back to EI on higher bands that would have been very difficult from home.

For more on all sorts of Ham Radio antics in Ireland and beyond, feel free to check out my:

YouTube Channel: (Irish Ham Radio)

David Barnes - EI5IMB
irishhamradio@gmail.com

Adam's Journey to Climb Everest in 2026 - Part 1

Adam Sweeney from Dunmore East is hoping to become the youngest Irish person to ever climb Mount Everest at the age of 22.

He is currently preparing for his mammoth undertaking - with training climbs in the Himalayas.

EI3CC will be running a special call EI0EVRST throughout 2025. Our aim is to promote his adventure and our hobby too.

Ama Dablam is a mountain in the eastern Himalayan range of Koshi Province, Nepal. The main peak is 6,812 meters (22,349 ft), the lower western peak is 6,170 meters (20,243 ft). Ama Dablam means "mother's necklace"; the long ridges on each side like the arms of a mother (ama) protecting her child, and the hanging glacier thought of as the Dablam, the traditional double-pendant containing pictures of the gods, worn by Sherpa women.

For several days, Ama Dablam dominates the eastern sky for anyone trekking to Mount Everest Base Camp. For its soaring ridges and steep faces Ama Dablam is sometimes referred as the "Matterhorn of the Himalayas. The mountain is featured on the one-rupee Nepalese banknote.

Adam Returned to Katmandu to start a training climb, this was to help him prepare for what he may expect on climbing in the Himalayas,

This trip was to challenge me mentally and physically and i would need all my strength and energy to complete this climb.

My sherpa Pemba was to be my guardian he was so encouraging and immensely strong, and I look forward to working with him again on future climbs.

The Nepalese people see the mountain as holy and they hang prayer flags and worship the mountain before each climb to help protect all.

Our climb was to test all of our team and give us an insight into what to expect on Everest, a mixture of ice climbing and edge climbing with shear drops into valleys 100's of meters below us.

Every climb to Everest summit involves a Team and I have the best team possible to have with me on my journey.

We had all done the climb and we had learned a lot, we also now knew what to expect on returning to the mountains.

Everest will be a totally different ball

game but these training climbs are needed to prepare yourself for the future climb, so next we head to France and again some high peaks to get under our belts.

One thing that will always stay with me on this trip was to meet 91 year old Kancha Sherpa the only surviving member of the first Everest expedition in 1953! Led by Edmund Hillary. He was so Inspirational.

Exploring Propagation on the 8 Metre Band

On a cool, crisp morning at home, the idea for this project was born. The 8-meter band, a unique and rare allocation in the Irish radio spectrum, had long intrigued me. Spanning frequencies from 40.000 MHz to 45.000 MHz, this band offered untapped potential for amateur and experimental communication. With transceivers ready and a spirit of discovery, I embarked on a journey to uncover the secrets of this lesser-known slice of the radio spectrum.

The journey began with the assembly of my equipment. Two trusted transceivers, the Yaesu 991A and FT DX10, became my companions for this adventure. Both capable of operating within the 8-meter range, they required careful configuration and a special start-up in engineering mode to transmit.

To ensure clear and efficient signals, I employed the Sigma GP 43 antenna and a custom-built band pass filter crafted by Antenna Amplifiers.com. This filter was the first of its kind in Ireland, designed specifically to manage the challenges of higher power levels and mitigate the risk of interference, such as the third harmonic overlapping with aircraft communications.

Bandpass Filter manufactured by Antenna Amplifiers
www.Antennas-Amplifiers.com

First Breakthrough

Early tests revealed promising results. My first contact was with S50B in Slovenia using FT8 and SSB on 40.680 MHz. The excitement of hearing a distant voice through the static was unparalleled. As days turned into weeks, the list of successful contacts grew. I reached ZR1ADI in South Africa, an incredible 10,000 kilometres away, proving the band's DX potential. Each connection felt like a small victory, a testament to the power of experimentation and persistence.

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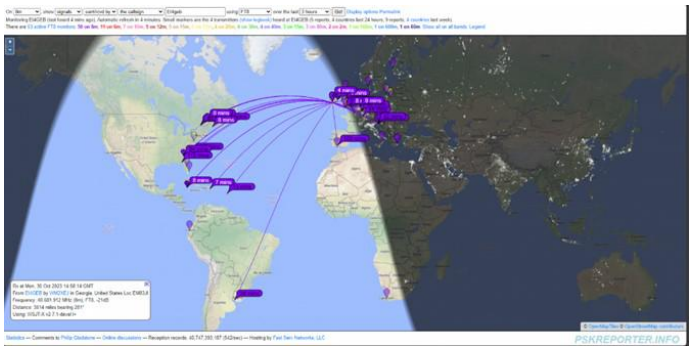
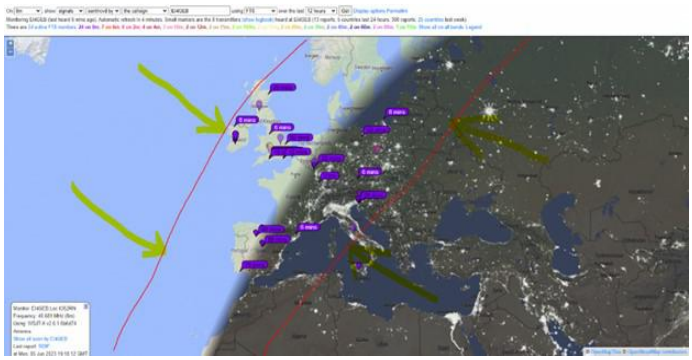


like a small victory, a testament to the power of experimentation and persistence.

Other milestones followed: ZF1EJ in the Cayman Islands (7,160 kilometres), FG8OJ in Guadeloupe (6,104 kilometres), and CX7FH in Uruguay (10,777 kilometres). Operators from Mexico, the United States, South America, Europe, UK (some European countries and the UK only got special licences to work for a limited time and a limited 8meter band allocation) and even Israel joined the list. The most surprising moment was hearing my signals received in Australia, a feat that showcased the band's extraordinary propagation characteristics.

Unpredictable Propagation



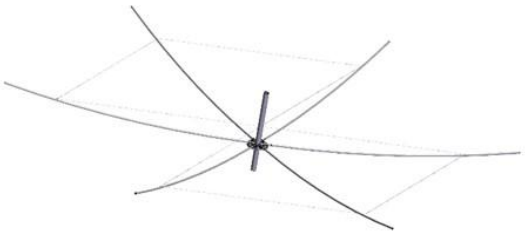
One of the most fascinating aspects of this journey was observing the dynamic behaviour of the 8-meter band. During summer evenings, propagation would often enhance an hour before and after the greyline, extending signal reach dramatically. Sporadic E events, particularly in the summer, enabled long-distance communication exceeding 1,000 kilometres, while tropospheric ducting during high-pressure weather conditions pushed signals beyond 300 kilometres.

Meteor scatter brought another layer of intrigue. During meteor showers like the Perseids, brief bursts of enhanced communication highlighted the potential for creative exploitation of natural phenomena.

Exploring Propagation on the 8 Metre Band

Challenges and Innovations

Of course, the journey wasn't without challenges. Interference was rare but occasionally noticeable, especially from adjacent bands. The quiet nature of the 8-meter spectrum made it easier to identify and address these issues. With every obstacle came an opportunity to innovate. Plans are now underway to enhance my setup further:



1 Modifying my Hex Beam antenna to include an 8-meter dipole wire, a project built and ready to launch once the weather improves.
2 Constructing a Yagi beam antenna using an old TV antenna as the foundation, aiming to achieve greater directional focus and gain.

Irish 40–44 MHz (8 metre) Band Plan for Amateur Service

Frequency	Maximum Bandwidth	Mode	Usage
40.000 40.100	1000 Hz	Telegraphy MGM	Lower Beacon Band 40.013 (Ireland) planned 40.071 (Denmark) and 40.050 (UK) operational.
40.100 40.200	500 Hz	Telegraphy	40.150 CW centre of activity and CW calling frequency. 40.190 – 40.200 future intercontinental CW DX sub-band
40.200 40.300	2700 Hz	Telegraphy SSB	40.200 future CW and SSB intercontinental DX calling frequency 40.200 – 40.230 future intercontinental SSB DX sub-band 40.250 SSB centre of activity and SSB calling frequency. 40.285 SSB cross-band centre of activity
40.300 40.400	2700 Hz	MGM Narrowband Telegraphy	40.305 PSK Centre of activity 40.310 -40.320 future EME centre of activity 40.320 -40.380 MS centre of activity
40.400 40.660	20 kHz	All Modes	40.410 SSTV 40.440 -40.480 Simplex FM Internet Voice Gateways 40.490-40.510 NOT TO BE USED 40.520-40.650 Digital Communications 40.600 DV calling Note: Avoid 40.49-40.51 (3rd harmonic falls close to 121.5 the aeronautical distress frequency)
40.660 40.680	1000 Hz	Telegraphy MGM	Upper Beacon Band (Subject to change) 40.661 – 40.674 Slovenia 40.675 – 40.679 South Africa Applicable for countries where Amateur Service allocation is limited to all or part of the ISM band 40.66 – 40.70 MHz
40.680 40.700	2700 Hz	Telegraphy MGM SSB	SSB frequencies 40.681, 40.684, 40.687, 40.690, 40.693, 40.696 SSB calling frequency 40.681 MHz (Subject to change) Applicable for countries where Amateur Service is limited to all or parts of the ISM band 40.66 – 40.70 MHz
40.700 43.000	20 kHz	All Modes	40.710 - 40.890 FM/DV Repeater Inputs, 20 kHz spacing 1.1 MHz I/P-O/P 41.210 - 41.390 FM/DV Repeater Inputs, 20 kHz spacing (paired with 56.810 – 56. 990 15.6 MHz I/P-O/P) 41.410 - 41.590 FM/DV Simplex 41.500 FM calling frequency 41.810 – 41.990 FM Repeater Outputs, 20 kHz spacing (paired with 40.710 - 40.890 1.1 MHz I/P-O/P spacing) 42.000 - 43.000 simplex 12.5 kHz spacing 42.500 FM calling frequency (12.5 kHz channel)
43.000 45.000	500 kHz	All modes	Could be paired with 52 – 54 MHz and/or 54 - 56 MHz (subject to the outcome of WRC-19 and/or the CEPT ECA)

The 8 metre Band plan created by the IRTS in October 2018

Irish 40–44 MHz (8 Metre) Band Plan

The Irish 8-metre band spans frequencies from 40.000 MHz to 44.000 MHz and is allocated for amateur use under specific guidelines. Below is a detailed breakdown of the band plan as recommended for efficient and responsible utilization:

- **40.000–40.100 MHz**: Reserved for CW (Morse Code) and narrowband digital modes such as FT8, JT65, and WSPR. These frequencies are crucial for weak signal work and international experimentation, helping operators explore the limits of propagation and establish long-distance contacts.
- **40.100–40.300 MHz**: Dedicated to single sideband (SSB) voice communication. This range is ideal for local and DX operations, with regional calling frequencies often established to facilitate contact between operators.
- **40.300–40.500 MHz**: Allocated for beacon operation. Beacons operating in this range play a vital role in monitoring propagation conditions, including Sporadic E, tropospheric ducting, and meteor scatter. These signals provide valuable real-time data for amateur and scientific research.

Allocations up to 2024

Date	Country	Prefix	Frequency band	Allocation
June 1998	Slovenia	S5	40.660–40.700 MHz	40 kHz of spectrum allocated for beacons
February 2025	South Africa	ZS	40.675–40.685 MHz	10 kHz of spectrum allocated
July 2013	Slovenia	S5	40.660–40.700 MHz	40 kHz allocated to the amateur service[1]
April 2018	Ireland	EI	40.000–45.000 MHz	5 MHz of the low VHF spectrum allocated to Irish radio amateurs.[1]
August 2023	Belgium	ON	40.660–40.690 MHz	30 kHz allocated to class A radio amateurs[1]
April 2024	Spain	EA	40.650–40.750 MHz	100 kHz allocated to the amateur service for a period of 18 months.
August 2024	Italy	I	40.660–40.700 MHz	40 kHz allocated to the amateur service up to December 3

Operators are encouraged to adhere to the principles of responsible operation, minimizing interference and promoting harmonious use of the band. Collaboration with international groups ensures that the Irish allocation aligns with global best practices, supporting the broader amateur radio community.

The Bigger Picture

This journey on the 8-meter band has been about more than just making contacts. It has highlighted the band's potential for amateur radio experimentation, emergency communication, and scientific research. Each signal exchanged is a small step toward a broader understanding of VHF propagation, ionospheric behaviour, and the mysteries of our atmosphere. For up to the minute information on the 8meter band and great site to visit is John EI7GL, a world of information on his website:

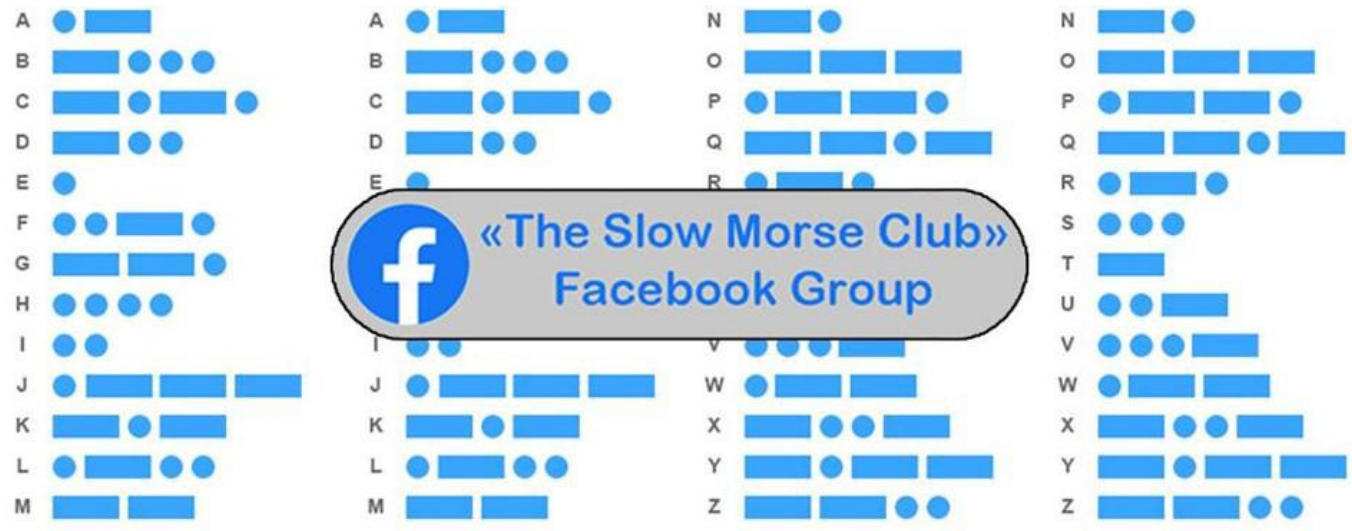
EI7GL....A diary of amateur radio activity: 40 MHz

A Journey Worth Taking

Looking back, the decision to explore the 8-meter band has been one of the most rewarding adventures in my radio experimenters' journey. From the thrill of my first contact to the awe of hearing my signals received across continents, this project has redefined my appreciation for the art and science of radio communication. The road ahead promises even more discoveries, and I can't wait to see where the next signal takes me. So, go on and have a try yourself, you might be surprised.

Lez Ferguson - EI4GEB
ei4geb01@gmail.com

<<The Slow Morse Club>> Facebook Group



Since passing the Morse code test sometime in the 1980s i have always enjoyed sending and receiving the code at a more relaxed pace, although on air contact which i found combatable with was quite random.

I thought it would be an idea to try to bring likeminded operators together on FB for on line and on air "chats" so the slow morse club was formed in 2020, meeting frequency then was 3.552 usually once a week on a Friday evening.

This activity early on found myself Ray G4OKR, Jeff F4IIQ and John, EI3HQB offering slow morse QSO skeds to who and when requested.

This service was set up with a non-bias towards the operator in as much as if you made mistakes, you were not going to be criticized but in fact told ways of how to over come and improve your sending/receiving.

As time went on and the word spread that there was a group out there that would help not only new to CW but also returning operators to CW.

Our audience was growing fast and indeed showed that the need for such a group was very much in demand, so we needed to recruit more to the group from the point of having operators that were available when skeds were requested, Keith EI5KJ, Lynda G6QA, Peter M3KXZ Pete Daniel Mike etc. all offering time to help operators get over the line offered their services and soon we had become a global group.

We held a special event week to celebrate our first year whereby you could QSO with one of the Slow Morse group and receive a special QSL, this proved very popular and we had a lot of operators making the QSL card chase there first QSO on CW just to get the card with special calls TM1SMC, GB1SMC and EI1SMC activated from 17/07/2021 to 25/07/2021.

As of January 2025 our membership still grows we are hitting 22,000 members Keith EI5KJ holds regular daily skeds via our QRS on our Facebook page, we went this route as it is a real time posting site and not looking at a post on Facebook only to realize it was 2-3 hours ago.

We now have satellite groups in various parts of the world now holding skeds for operators in their own country's this is a great help with differing time zones.

We also have satellite groups in various parts of the world now holding skeds for operators in their own countries this is a great help with differing time zones.

Recently, we have set out to help those wanting to learn CW or return to CW and that still happens to this day the resurgence in CW is fabulous lots of great activities have been born from the Slow Morse Club such as the Nerves Novice Net run by Eamo EI7LC on a Wednesday Evening on 3.555 and in the summer 7.035.

Anyone with an interest in CW look us up on Facebook and join the group we are a friendly group and are more than willing to offer our services to those wanting to become a CW operator.

We are always listening or watching for posts wanting Skeds, Keith even has a few before the cornflakes at 7am and will post evening skeds a few days before so you have plenty of time to set up and get ready.

Ray Edisbury - G0OKR

CB Radio and PMR 446

This page is dedicated to CB and PMR 446 operation. It is hoped that this will be a regular feature but will be totally dependent on those who wish to submit something about the hobby. Perhaps some items about forthcoming CB events, rallies, outdoor activities or hill-topping could be announced here. Pictures along with a few paragraphs are always welcomed

Irish CB Radio Facebook Page

I am the admin for that page, Steve and John are moderators. The group has over 2100 members who are mainly Irish based but we have members from all over the world, some are licensed hams but mostly CBers. There are good technical questions asked with many helpful answers. We do not tolerate any bad language or behaviour towards our fellow members. We all started out as newbies and gained our knowledge from other experienced operators - that's the way we want the page to continue. We have had a few call ins over the years and try to include all operators, those with the standard 40Ch AM / FM / USB CEPT frequencies (26.965 to 27.405Mhz), UKFM frequencies (27.60125 to 27.99125Mhz), and the 'freebanders' (25.165 to 27.995) by having different call in times for each band / mode. We have tried on a few occasions to have a dedicated ICB calling channel/ frequency, but because we can't please all the people all the time, a dedicated channel never materialised. We also issue ICB callsigns for new or experienced operators, the member list is kept up to date on the files section of the ICB page. New members always welcome, answer a few quick questions on the 'join' button and your in.

73's De Phil 29 ICB 001

68I CB 089-Marty

Hello folks,

A wee bit about myself, I'm Marty, I'm 35 now but the radio hobby started along time ago way back when....i was probably 12 years old so a good while ago. If I recall properly I had a superstar 3900 ,Sadelta echo master plus, imax 2000, rm klv550 I think I had a good set up for being so young. I eyeballed a few back then who I'm still in contact with to this day even after a long break away from the radios, until recent years were I've picked up the hobby again and have already got quite a collection gathered together, the love of radios has never left. My shack has been kitted out with my collection on display, the main radio I use is the 101MP but I always go back to the old school radio 3900 it never lets me down. It really is a hobby that never leaves you. I've started running a Thursday night net on high ground to try and keep the hobby alive on 27.600 USB. Hope to hear you all at the end of the coax.

73's de Irish CB Marty

World CB and Ham Radio Updates

Hello from 29 Delta Mike 840 AKA David. You would know me from the weekly transmissions on Facebook and the Zello Southern Ireland Radio Room at 8:30 pm on Sunday evenings.

Our regular Sunday broadcasts, which can be accessed on the Facebook Page, have a slot for Buy and sell of equipment, Radio News for both CB and Ham Radio, Special Events and Promotion of all aspects of the Hobby.

Our first broadcasts were as far back as 2011 where we would be live on CB and Ustream from a high location in a caravan. Nowadays we just broadcast from home via Facebook and the Zello Southern Ireland Radio Room. Anyone is welcomed to call in via Zello and give us news and promote their radio activities.

We generally get a few call-ins where the caller gives items of news or announces a special event but many are a little shy and prefer to listen. Our listeners hail from all over the world and not just Ireland

Operating from the Jeep

My dedicated Radio Shack in Co. Cavan

I got into CB around 1990 and started off with a 40 channel FM SC and a Silver Rod 5/8 wave vertical antenna. Over the years I have added to my station and have Short wave receivers and Scanners to my line of Equipment.

I attend a number of rallies including the Coolmine and Enniskillen Rallies. If you see me there do introduce yourself as I am always up for the chat.

Don't forget to listen in to our broadcast at 8:30pm on Sunday Evenings

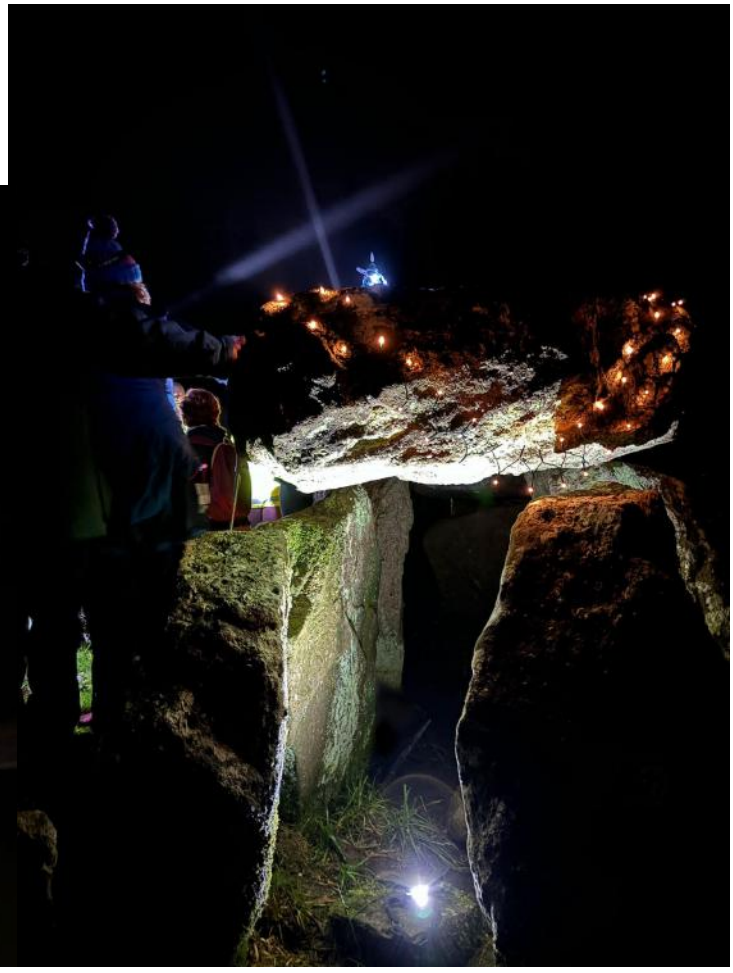
WORLD CB HAM RADIO NEWS & UPDATES ›

Hillwalking Radio Club

Hillwalking Radio Club organised a fundraising walk this Christmas for a local good cause . Based in the village of Galbally on the Limerick Tipperary border we were supported by our backroom team, the Morning Ramblers. This is our third Christmas hosting such an event and this year's beneficiaries were Irish Wheelchair Association Tipperary town branch. Josephine from the branch gave a very emotion talk as one of their beloved service users had just passed away.

Our main event was a climb to Darby's Bed megalithic site which turned out to be a fabulous chance for our photographer Tom to get some great pics. The Lantern Walk suited people who wanted a slower pace. We had a fantastic night , met up with old friends and made some new.

Our club provided a Team leader, three first responders with a Defibrillator and first aid bag and stewards for the event. There was no need to set up a Base as we were able to contact the community centre with hand held in 163mhz.



Jim Smith EI4CP Silent Key Sale

Here is a list of items from the shack of the late Jim EI4CP that we are selling on behalf of his family. If there's anything of interest please contact either me EI3FW or Gerry EI9DZ our details are on QRZ.com

Thanks for taking the time to have a look.

Icom IC 7300	€800	Mobile Speaker / Filtered	€25
Icom IC 9700	€1400	Hi-Mound HK 288 Straight Key	€50
Icom IC 7100 (almost new)	€1150	Dual Paddle Begali Key	€90
Yaesu FT101ZD (with ReCap kit €90)	€250	Single paddle Kent Key	€30
Yaesu FT857D	€550	Watson 30 Amp Linear PSU	€50
Yaesu FL2100B	€350	4 way 12V distribution Boards (2 off)	€30
KW 600 HF Amp	€150	MFJ 993B Auto ATU	€325
Icom MBA-1 (For 7100 etc)	€20	MFJ 5124I	€20
Icom MBF-1 (For 7100 etc)	€30	Hustler Mobile Set (80/40/15/10)	€120
Icom MB62 (For 7100 etc)	€20	Kenwood PS30 Linear PSU 13.8v/25 amp	€50
Anytone AT D578UV Plus	€275	Linear Amp UK ATU – Open Wire 2KW	€600
Kenwood TS870S (S meter issue)	€300	Kenwood TS450 – Book/Mic/No Box	€350
Yaesu VX-8E Handheld	€250	Kenwood/Vertex Speaker with filters	€80
KW match (poor condx)	€25	Signal Link Integrated SC unit	€40
Tektronix 2432A Scope	€200	2 Way Coax Switch	€10
QRP WSPR Kit	€25	4 Way Coax Switch	€35
MFJ ATU 949E	€75	Kenwood Low Pass Filter	€10
AEA ATU	€75	SDRPlay RSP2A Wideband SDR RX	€75
Softrock TX/RX 40mtr Kit Ver.6.2	€25	MX-62M Duplexer	€30
KW 107 ATU	€100	HF Vertical – 80 to 6mtrs Fibreglass	€120
KW Eze Match	€50	Kenwood SP31	
Twin Meter PSU – 30amp switch mode	€75	(BHI noise eliminator built in)	€100
Airmast Drive on Stand never used	€40	Lanex Safety Harness (tower climbing)	
BHI In Line Noise Eliminator	€75	new / unused	€100
Amsat LVB Tracker	€30	RC-28 Remote Control VFO Unit	
Bird Watt Meter with slugs	€375	New / unused	€125
Icom SP21 Speaker	€75	(Yupiteru MVT7100 Portable	
MFJ Analyser MFJ-269	€250	Multiband RX	€50

Friedricschafen

June 27 –29, 2025

As Europe's largest amateur radio exhibition, HAM RADIO provides the perfect platform for radio enthusiasts from all over the world.

Exhibitors and visitors gather in Friedrichshafen from over 59 countries to explore the full spectrum of the radio universe in three exhibition halls and the Foyer West. A unique aspect of HAM RADIO is the combination of commercial exhibitors, internationally networked associations, and the largest radio flea market in Europe.

My name is Adam Sweeney, and in 2026 I plan to be the youngest Irish person to summit Mount Everest, the tallest mountain in the world at the age of 22, with the current youngest being 26.

In February of this year I completed my first big mountain - the highest mountain in South America, Aconcagua standing at 6961m in The Andes. With a success rate of only 30% I was delighted to make it to the summit with no problems with fitness, skill, or altitude sickness. As far as I am aware, at 20 years of age, I am the youngest Irish person to summit Aconcagua, but I could be proved wrong with that fact!!

Summitting Aconcagua in the Argentinian Andes, my first 7 summit, has given me the confidence to move on with my dream.

In November 2024 I plan to climb Ama Dablam with an Irish Team in Nepal. At 6,812 meters which is slightly lower than Aconcagua but it is a step up in technicality and a natural training ground for Everest.

In May 2025, I'll be going to Alaska to tackle Denali, the highest mountain in North America. The approach to Denali is a challenge in itself, where I will have to haul my expedition gear on a sled to Base Camp, taking 3-4 days. The summit attempt itself will take 21 days, with time taken acclimatising to the mountain altitude, before an assault to the top which stands at 6190m. This is a fully self-sufficient trip and a great mental test before Everest.

With your support, we can create human history and be the youngest Irish person ever to summit Everest, the worlds highest mountain.

Thank you ,
Adam Sweeney

You can help by clicking on the link below or by copy and pasting the link into your browser and donating to my Go Fund Me page

https://www.gofundme.com/f/adam-become-the-youngest-irish-person-to-summit-everestfbclid=PAZXh0bgNhZW0CMTEAAaZxMo4nC-TUp0397g_vjJK24WSq1nNqSC6W-egfI0HzXYIQTHxu80UjcXk_aem_i7TyCaN4SJcFBR3vkpmCLQ

DAW Electronics

My business is a comprehensive repair facility now based for the last 6 years in South Wales. I have a country wide client base and special thanks to all my customers so far for that. In the last 6 years I have repaired and serviced somewhere in the region of 2000 radios varying from military Clansman to some of the lates Amateur radio and CB equipment. As a time served engineer for the last 40 years, I have a good knowledge base from VLF to microwave equipment solid state and valved. To new and old clients, I would like to thank you for your support and trust in my service.

Email: dave.g4tiw@hotmail.co.uk
Mobile: 0044 7785294926
(Monday to Friday Business Hours: 9 - 6pm)

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 and 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/

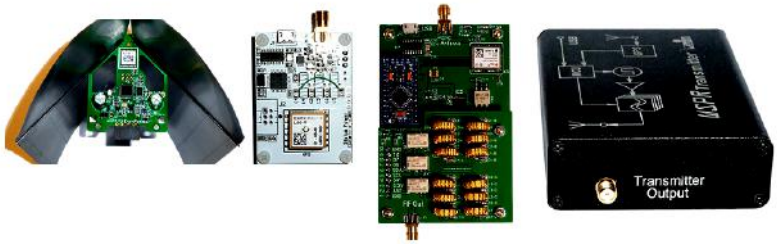
ZachTek

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

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
jmcservv@gmail.com

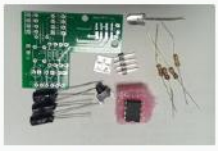
3DPrinter Filament Diameter Width Sensor Assembled
$41.00

SI4735 D60 TFT 2.8" ESP32 ALL BAND RADIO
$70.99

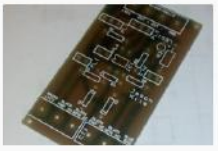
DSP RADIO Multi Band AM/MW/LW/SW-SSB/FM with RDS
$50.99

Portable Micro AVR Programmer
$38.98

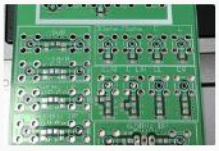
Classic 70's Pong Game
$29.99



3DPrinter Filament Width Sensor Full Kit
$11.00

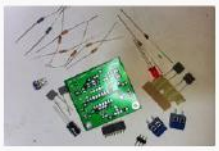


Universal NPN PNP inductive sensor interface board
$8.99



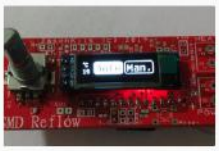
Nano VNA Test Board Demo
$4.99

Reflow Oven Controller Universal Board Ver 2.01
$45.00



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

3D Printer TSL201 Filament Width Sensor
$29.50



Mini SMD Re flow & Filament Joiner Controller OLED
$35.99

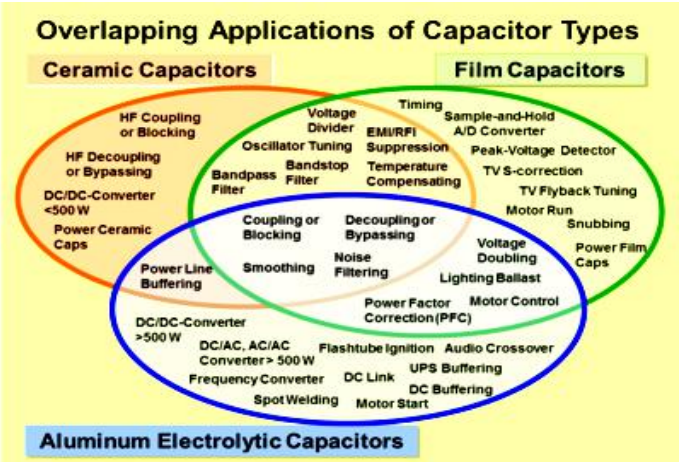
Join the G-QRP Club

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

The G-QRP CONVENTION: 30th - 31st September 2025
The 2023 Convention wil be Saturday 30th and Sunday 31st 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

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



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Hardware for Hardware-Defined Amateur Radio

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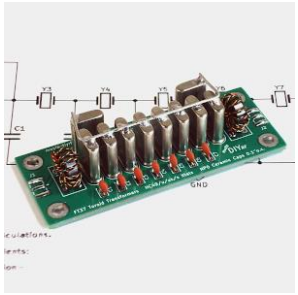
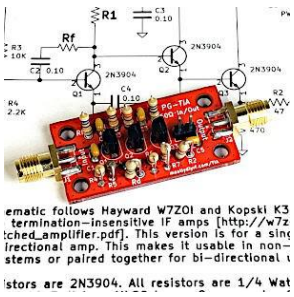
Kits and modules available including :

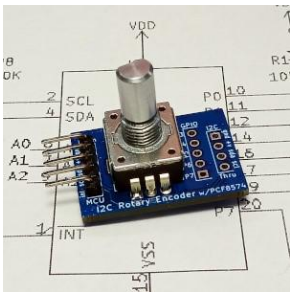


8-Pole QER Crystal Filters

TIA-AGC IF Amplifier



ADE-1 Double Balanced Diode Ring Mixer



12C Rotary Encoder

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

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Books are available from the Lulu Website:

https://www.lulu.com/

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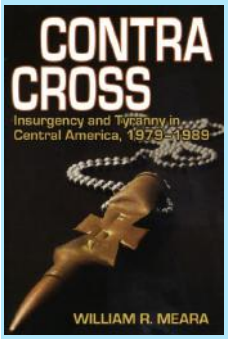
Serving the world-wide community of radio and electronic homebrewers

Host - Bill N2CQR

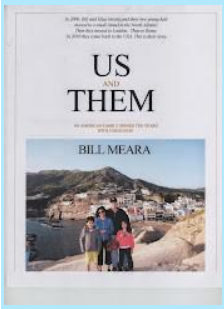
IBEW

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 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.



What happens if you take an American family and send them to Europe for ten years? In the summer of 2000, Bill and Elisa Meara, accompanied by 2 year-old Billy and 4 month-old Maria, left their home in the suburbs of Washington, D.C. and moved to the Azores. There they experienced the highs and lows of diplomatic life on a small distant island. After three years in the Azores, they spent four years 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

KANGA PRODUCTS

Kits and Parts for the Radio Enthusiast

Morse Tutors

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QRP TX, RX and Audio kits

https://www.kanga-products.co.uk/

Walford Electronics

We are suppliers of electronic kits, with very detailed instructions, for home construction, using mainly analogue circuits which are often used in simple Amateur Radio equipment.

You can choose from Simple projects for beginners, or slightly more advanced Intermediate ones, right up to our Advanced projects for skilled constructors, and of course there are also many Accessories!

Get in Touch

Walford Electronics Ltd.
Vedal House, Vedal Drove, Long Sutton,
Langport, Somerset TA10 9FB
e mail electronics@walfords.net phone
0044 (0)1458 241103

RSGB Radio News Services From GI

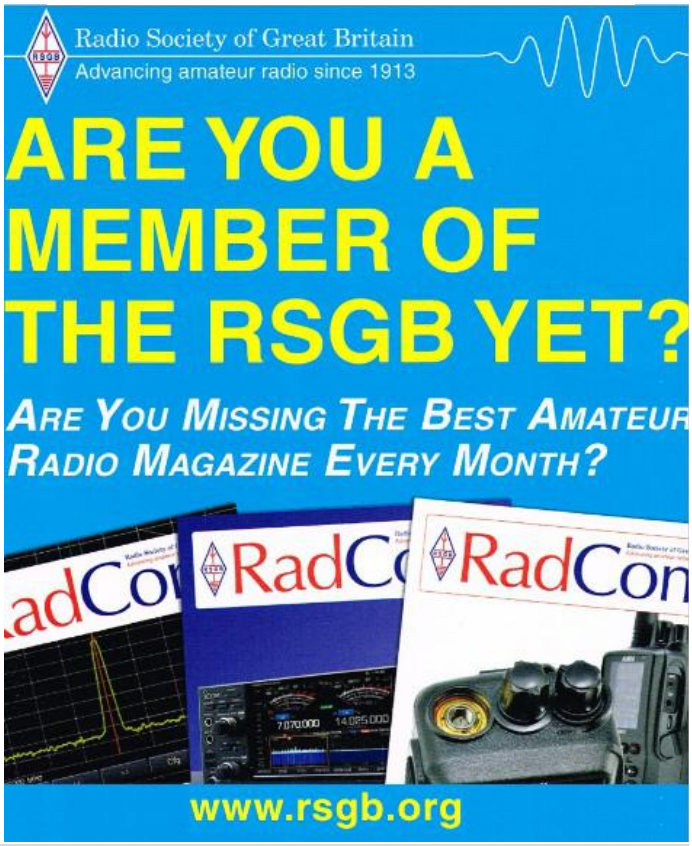
10:00 3640KHz LSB Dungiven
12:00 TG2354 Time Slot 2 BM Network
19:30 TG 880 Time Slot 2 Phoenix Network

bhi Noise Cancellation Products

https://bhi-ltd.com/products/noise-cancellation-products.html

ParaPro EQ20

Enhance your audio experience with the **ParaPro EQ20**, a 20W audio unit featuring parametric equalisation. Tailor your audio to perfection, addressing the needs of those with hearing loss. Connect mono or stereo inputs effortlessly, and choose output options for passive speakers. The EQ20, housed in a compact ABS case, ensures easy control with Power/Volume and parametric equaliser adjustments. Benefit from the precision of parametric equalisation, offering flexibility and accuracy. Ideal for use with bhi DSP noise cancelling units, the EQ20 provides 10W audio per channel, Class-D type amplifier, and user-friendly features, greatly benefiting individuals with hearing loss.



SolderSmoke Daily News

Serving the worldwide community of radio-electronic homebrewers.
http://soldersmoke.blogspot.com/

Providing blog support to the Solder Smoke podcast: http://soldersmoke.com

50MHz UKSMG

UK Six Metre Group

Dedicated to promoting 50MHz activity around the world

An Amateur Radio publication for the Microwave Enthusiast

UKuG

scatterpoint

Published by the UK Microwave Group

ARRL The National Association for Amateur Radio®

https://www.arrl.org/

EURA EUROPEAN RADIO AMATEURS' ORGANIZATION

https://www.eurao.org/en/welcome

Dates for the Diary next 2 months

World Thinking Day on the Air	15th February
Lagan Valley ARS Rally	1st March
WWFF Anniversary Activity Weekend	8th - 9th March
St Patricks Day	17th March

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 tothe development of the science and practice of amateur radio. It works to increase awareness an 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 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 overseas £76.00 and this includes 12 monthly technical magazines. Affiliate your club and get the opportunity for 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/

collective Communication

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
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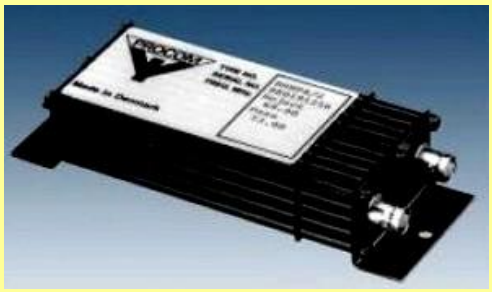
Clearance

My Junk is your GOLD

Antennas - PSUs - AC Adaptors - Voltage Converters - Laptop Power Supplys - Garmin Stuff - Ethernet Switches - Routers

WiFi units - Connectors - Books & more



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FIRST BATCH DUE IMMINENTLY!

The new FTX-1F is a portable 160m-70cm (incl 4m) all-mode transceiver utilising SDR technology, 6W RF output and a 5670mAh Lithium-ion battery pack with up to 9-hours stand-alone operating time.

Announcing the

NEW Yaesu FTX-1F

All Mode All Band Field Transceiver, an FT-817 update for the 2020s

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PLACE YOUR DEPOSIT NOW
Price TBA

- Up to 10W of power output is available when using an external DC power supply.
- Operation in SSB, CW, AM, FM and C4FM digital modes - SDR Technology and 3DSS (3-Dimensional Spectrum Stream) on a 4.3-inch high-resolution full-colour touch display panel
- Two independent receiver circuits provide true simultaneous dual-band operation, whether in the same band or in different bands. For example: SSB communication on HF bands simultaneously with C4FM digital communication on V/UHF bands (*HF+V, HF+U, V+V, U+U, V+U, U+V)
- Two Loudspeakers ensure clear and powerful audio output.
- An optional Automatic Antenna Tuner can be attached to the rear of the transceiver with the 5670mAh high-capacity Li-ion battery pack.
- An optional Cooling-fan, (necessary for comfortable FT8 operation), can also be combined with the Auto-ATU. (All-in-one rear panel design).
- RF front-end and Low Noise Reference Oscillator ensures phenomenal Multi-signal Receiving characteristics.
- Effective QRM rejection afforded via High-speed 32-bit IF DSP including SHIFT / WIDTH / NOTCH / CONTROUR / APF / DNR / NB).
- Compatible with WiRES-X operation.
- PMG (Primary Memory Group) function can register and monitor up to 5 frequently used frequencies.
- MAG (Memory Auto Grouping) function enables Memory Channels to be categorized in each band that can be quickly recalled by band groups, (HF/VHF/UHF/AIR/OTHERS)
- USB ports support CAT operation, audio input/output and TX control