

C.D.A.R.S.

APRIL 2023

CHESHAM & DISTRICT AMATEUR RADIO SOCIETY MONTHLY NEWSLETTER



RSGB Annual Subscription
Set to rise by almost 30%.

2022 Exam Results Released
Not what we expected?

2023 Events and Meetings
in Any Other Business

We meet the 2nd and 4th Wednesdays of the month at the Ashley Green Memorial Hall, Ashley Green, HP5 3PP

SDR Antenna Switch reviewed



Annual Awards

At the 8th of March club meeting at the Golden Eagle the annual awards for 2022 were handed out.

2E0PTH best all-rounder.

M0IHY for the newsletter.

G8FMC for the Whitworth Trophy

Check your coax

You may not have the tools to make your own coax cables and have to purchase what you want, check what you get.

Add a waterfall

This month I review and install an SDR Switch to my rig, this allows me to 'see' and hear the signals.

Bouvet Island DXpeditions

Following on from Malcolms talk I did a little Internet investigating, it seems not all have succeeded.



SPOTLIGHT

This month we visit Barney in North Dakota, a city with just 40 inhabitants!



Want to write something for the newsletter? Then you can contact me on bryanpage1@btinternet.com

If you have anything for sale, why not drop me an email and I'll put it in the 'For sale' page.

Morse links

If you're interested in Morse code, here are a few useful links:



FISTS CW Club

Promoting Morse Code for 36 years 1987-2023

<https://fists.co.uk>

WIKIHOW

How to learn Morse Code

<https://www.wikihow.com/Learn-Morse-Code>

The Ham Whisperer

Morse Code Course

<http://www.hamwhisperer.com/p/morse-code-course.html>

LEARN MORSE CODE

LEARN MORSE CODE in one minute !

<http://www.learnmorsecode.com/>

Welcome to LCWO.net

Learn Morse Code (CW) Online!

<https://lcwo.net/>



Tools for learning Morse Code

<https://www.aa9pw.com/morsecode/>



Celebrating the unique art form of Morse Code

<https://cwops.org/>



Morse Code by Ray Burlingame-Goff (SK - 29th July 2021)

<http://www.g4fon.net/>

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Chairman - Dave Keston (G8FMC) **Secretary** - Malcolm Appleby (G3ZNU) **Treasurer** - Matt Whitchurch (M1DTG)
- Guy Plunkett (M0GUY) - James Stevens (M0JCQ) - Peter Holliday (2E0PTH)
- Roger Fellows (M7RMF)

All the above are members of the committee and can be contacted on cdars-committee@googlegroups.com

Editor - Bryan Page (M0IHY)

Welcome

Firstly, my thanks to Malcolm for his talk on Bouvet Island 2023 on the 22nd of February, a very interesting subject highlighting the organisation and execution of the DXpedition, I hadn't realised there was so much involved. I've covered what I could find amongst the many articles on the Internet. With all the technology available today I was surprised to find that the 2023 DXpedition had problems synchronising the laptop clocks to enable successful FT8 operation!



Bryan M0IHY

My rig is one from the pre-waterfall days so I purchased an SDR antenna switch and using that and my SDRPlay1a I now have a waterfall at what I consider a reasonably cheap outlay, page 6 gives details.

Out of sheer laziness I purchased a coax patch lead to connect the SDR Switch to my rig instead of making one, checking what I got I was quite shocked at the poor quality with no insulation showing through the inspection hole in the PL259 and the centre core frayed. Needless to say, the supplier apologised and has replaced the lead, it does pay to check though.

Snow, yes that white stuff, I think we were all caught out by its arrival. I have a friend in Edmonton, Canada, who I communicate with on a daily basis, she keeps me informed of the weather over there, from past experience I've found that what she has, we get a week later, maybe an early warning system!

The annual CDARS awards were given out during the 8th of March club meeting at the "Golden Eagle", Ashley Green, pictures are in Any Other Business.

The exam results for 2022 are in Any Other Business and judging by the headlines it would suggest the revised syllabus has caused problems at the Intermediate level, the pass rate is at a 10-year low and the progression from Foundation to Intermediate has fallen to 31% from 45-51% on the old syllabus, having said that, progression from Intermediate to Full is estimated at 82% from 42-51% on the old syllabus, does this mean that the Intermediate level is too difficult and the Full is too easy, does the syllabus need revisiting?

I remember attending a National Radio Centre pre-dinner meeting at Bletchley Park 2 years ago when comment was made regarding the increase in interest with amateur radio and that the speaker felt this was only going to increase in the future. I commented that due to the pandemic interest had increased, but also stated that as soon as things got back to normal I felt interest might well fall off, but this was shrugged off. Fast forward to today and we find that some members of our club that joined during the pandemic period have faded into the background.

The R.S.G.B. have increased their annual subscription by almost 30% and like most service providers/retailers the increases far outweigh that of inflation. As ham radio is considered an 'old mans hobby/sport' it would suggest the majority of hams are near, at, or have exceeded pensionable age, these are the people who are hardest hit financially and whom are already finding ways of saving money, does this mean we might see a fall-off in membership?

Jeremy (G3XZG) is in Spotlight this month with Barney, North Dakota, a city of 40 people covering an area of just 0.61 square miles.

Thanks go to Peter (2E0PTH) for his excellent talk on micro-controllers at Ashley Green Village Hall on the 22nd of March (hopefully to be included in a later newsletter), it's certainly 'food for thought' and could be considered a basis for those winter projects.

The March 144/432 MHz 2023 Results are in, congratulations to those taking part.

Bryan M0IHY

Chairmans Ramble

Hi all; my second 'Chairman's Ramble'.

We have now had the second of our 'Pub meetings' at the Golden Eagle, which seemed to go down very well. We discussed various topics, presented some trophies & managed to put together a significant part of the next few months program of meetings & events.

Phil gave us a bit of an introduction into the latest version of the Minos Contest Logging program/software, which is integrated with KST (the web-based messaging service used to set up contest contacts) & AirScout (the web-based virtual radar program used to assist in long-distance VHF/UHF contacts, enhanced by aircraft reflections, especially on 70cm) . We plan on having a full presentation on this at the club, provisionally 26/04/2023 by Phil M0NVS & Anthony G7LRQ?



Dave (G8FMC)

The following Trophy presentations were made:

- The Dennis Kind Shield to Bryan (M0IHY) for all his work on the News Letter every month
- The M0JCQ Trophy to Peter (2E0PTH) for significant progress of a newer licensee
- The G3CLJ Cup (for CW) was awarded posthumously to Jeremy G3XZG.

We have a new Trophy sourced by James M0JCQ, in memory of Jeremy. It is a pewter tankard with lid (photo elsewhere I suspect? - *Ed: last month's newsletter*) Given Jeremy's enthusiasm for the occasional pint we felt that a tankard was appropriate! This will be awarded at the committee's discretion for any operation of special note, or a little unusual. This could be working rare DX, a special effort in a contest, a special event or operating achievement?

I also 'showed-off' the Whitworth Trophy your Chairman managed to win for the highest placed SSB only placing in the 2021 RSGB DX contest. (I won this only because my friend G3RXQ who came 1st by a long way, could not be awarded the trophy as he is NOT an RSGB member! An example of picking the right category to give one the best chance of an award? Most entrants were in the CW or mixed-mode category, with not many in the SSB only!)

We got some provisional commitment from members for the Brill Windmill (Mills on-the-air) event on Sat 13th May & Sunday 14th May. Malcolm & James are both away for much of May so are not available to help this year, but a good cover of volunteers was noted. (details elsewhere I believe? - *Ed: see page 29*)

Future Contest update:

There was general support for CDARS to enter VHF Field day (Sat 1st July – Sun 2nd July) in the Multi-single category again. This category allows just one transmitted signal at any one time (but other receivers may be used to 'tee-up' future contacts on other bands) All antennas must be on a single mast & a maximum of 3 bands to be chosen from a possible 5. We won the 2m category last year & got 3rd place over 3 bands (4m, 6m & 2m in our case). However Oxford won; swung by winning the 23cm band with a single contact of just 26km! No other team entered a 23cm log. We are thus looking to include 23cm this year?!

CDARS is also likely to enter SSB Field Day (on 2nd - 3rd September). Arrangements TBC.

73 Dave K, G8FMC

Don't have a waterfall, then try this...

Most rigs have a PTT pin on one of its rear panel sockets, it may be REMOTE, or LINEAR, check your rig manual for the correct socket, also check which pin if you're making a lead up yourself, eBay sell Linear amplifier keying/PTT/switching cables, check if they make one for your rig, I purchased mine from Technofix on eBay.

I purchased a readymade unit from eBay, [160MHz 100W SDR Transceiver Switch Antenna Sharer TR Switch Box with Cable Set](#) (eBay item No: 275563154133), at the time of purchasing it cost £51.40 with free post.



In the box you get a PTT lead, power lead, SDR SMA cable, and of course the box, no instructions though.



The front panel houses sockets for SDR audio, Audio Out (headphones), TRX audio, an SDR LED to indicate when the antenna is connected to the SDR (on transmit this light goes out) and a TRX LED to indicate when the audio is routed to the transceiver.



The back panel houses 2 antenna connectors, a PTT socket, an SDR SMA socket and a power socket.

Connections are simple, and self-explanatory, I had to modify the PTT lead purchased from eBay, it came with a phono plug (which I removed), I simply removed the 2 wires from the supplied 3.5mm jack and soldered the 3.5mm jack in place of the phono plug. The supplied SMA cable connects the box to my SDRPlay1a, and that's it!

Internally the PCB has J5 shorted out, this enables the audio to only go to the SDRPlay1a, I wanted the audio to go to my transceiver as well, to do this is quite simple:

1. Remove the 4 screws holding the back on.
2. Carefully pull the back away from the case to expose the PCB.
3. Pull the shorting connector off the 2 pins of J5 (I placed it back on just one pin so not to lose it).
4. Replace the back and screws.

If you choose not to use the PTT socket on the back (the Linear amplifier keying/PTT/switching cable will not be needed) then the RF sensing circuit will do the switching for you, do remember however that SSB only has RF when speak into the microphone (no carrier), therefore the internal circuitry will switch out more often, AM and FM present a constant carrier so will switch out only when releasing the PTT button on your microphone and not before.

J5 shorted		J5 open circuit	
SDR LED	TRX LED	SDR LED	TRX LED
Lights on RX only	Lights on TX only	Lights on RX only	Permanently on

The one advantage I've found in using a laptop is the waterfall is more detailed than the usual small screen of the modern rig. Now I'm able to 'see' the signals as well as hear them.

I chose this unit after looking at a review on the MFJ-1708B by a ham on YouTube (he rated it quite highly), his next review was on this box and his comments were "it's better built than the MFJ unit and about £100 cheaper", don't just take my word for it, if you want a waterfall for your rig then do a little research. I hope this helps.

Am I pleased with the unit - DEFINITELY!!

Bryan M0IHY

Ed: Please note, if you have multi antenna inputs on your rig then select the input you wish to work with, (up to 160MHz) I have 4 inputs and chose the HF antenna input (160m-10m) for my waterfall operation.

Bouvet Island DXpeditions

Source: the-earth-story.com

The Most Isolated Island in the World – Bouvet Island

Go to Iceland, turn south on the Mid-Atlantic Ridge and follow it all the way to the triple junction where the ridge intersects the Antarctic Plate, and there you will find... an island. At 2260 kilometers from the nearest inhabited island (Tristan de Cunha with a population of 271, if this counts), smack dab between Africa, South America and Antarctica, Bouvet island is not a very big island, less than fifty square kilometers in size with nearly all of it covered by a glacier, but is considered as the most isolated land mass on earth. Nevertheless, it turns out to be – an island of mystery!

Bouvet Island is a 9.5-by-7-kilometre (5.9 by 4.3 mi) uninhabited volcanic island claimed and administered as a nature preserve by Norway. It is located in the Subantarctic, in the Southern Ocean; amateur radio operators have a long history of operating in these areas. It is one of the most isolated islands in the world, being 2,500 kilometres (1,600 mi) south of South Africa; most of the island is covered by glaciers. This isolation has made the island a highly sought-after location for amateur radio operators looking to contact rare and exotic locations. Currently the island is the second-rarest DXCC entity, after North Korea.

Discovered in 1739 by the French (hence the name), claimed by the British in 1825, and annexed by Norway in 1928, there has never been a war or disagreement about the sovereignty of the island – apparently no one loves it enough to argue over it, and it is, today, a nature reserve (apparently seals and penguins do like the place). The Norwegians take responsibility for it, with the island’s administration managed by their Polar Department of the Ministry of Justice and the Oslo Police. Since the island is uninhabited, the police have little to do there one supposes. Perhaps in hopes that someday someone would like to take up residence, an internet domain has been set up under its name (.bv), but as yet no takers.

Source: [Wikipedia](https://en.wikipedia.org/wiki/Bouvet_Island)

The Second Norvegia Expedition arrived in 1928 with the intent of establishing a staffed meteorological radio station, but a suitable location could not be found. By then both the flagpole and hut from the previous year had been washed away. The Third Norvegia Expedition, led by Hjalmar Riiser-Larsen, arrived the following year and built a new hut at Kapp Circoncision and on Larsøya. The expedition carried out aerial photography of the island and was the first Antarctic expedition to use aircraft. The Dependency Act, passed by the Parliament of Norway on 27 February 1930, established Bouvet Island as a dependency, along with Peter I Island and Queen Maud Land. The eared seal was protected on and around the island in 1929 and in 1935 all seals around the island were protected



The annexation of the island on 1st December 1927



The first hut, built on Kapp Circoncision, in 1929

Source: <https://svarc.us/3y0j-rare-dx-expedition-on-the-air-beginning-january-30/>

What is a DXpedition?

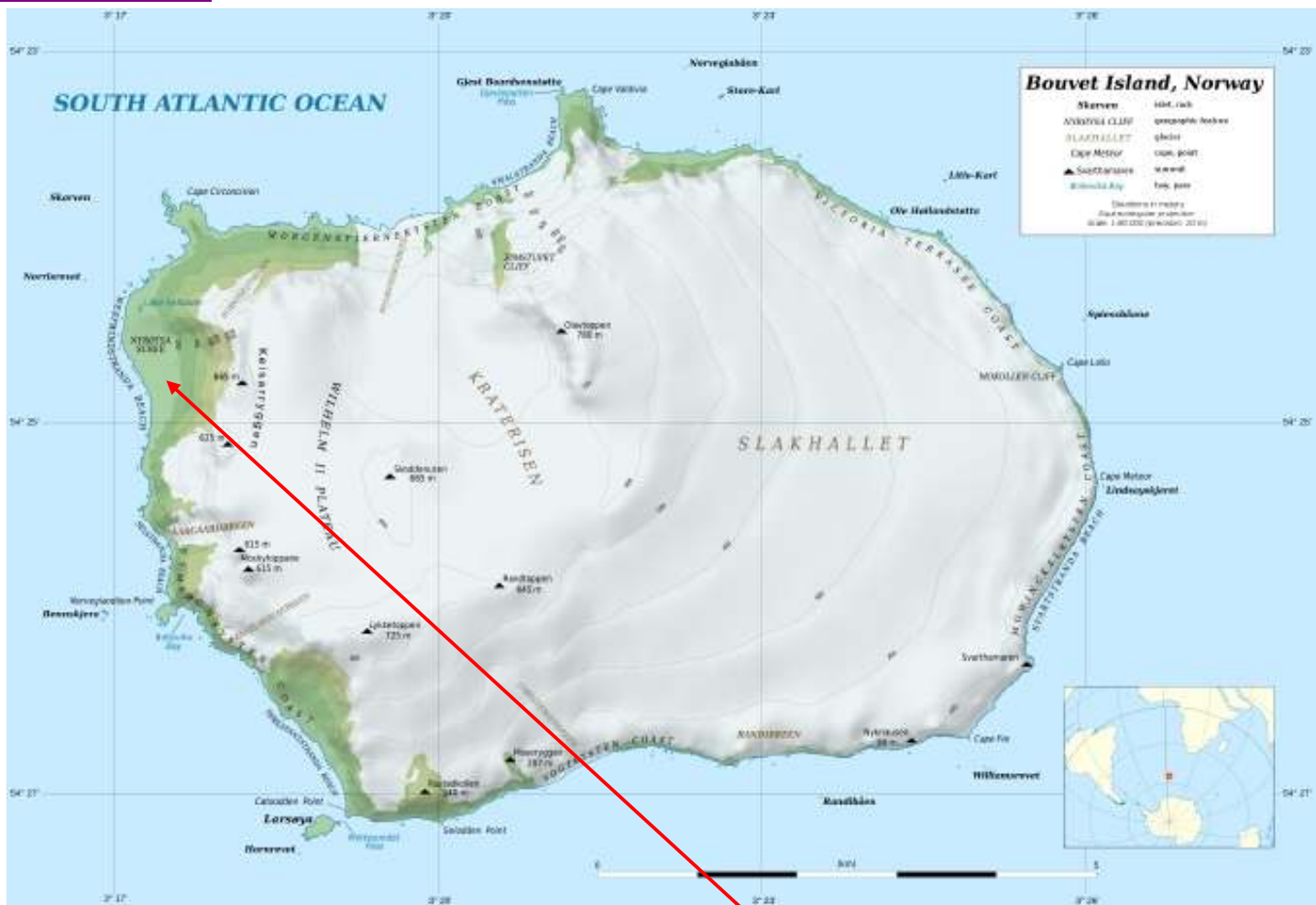
An expedition or Dxpediton is an operation carried out by an amateur radio operator or a group of them from an “exotic” or “weird” place, radially speaking due to their remoteness, their complicated or restricted access, or simply because they do not exist or are very few resident radio amateurs who practice DX.



Bouvet Island, mostly covered by glaciers



Bouvet Island on the globe (Antartica centred)



This map shows the extent of the glacier (93% coverage), Nyrøysa, a rock-strewn ice-free area, the largest such on Bouvet, was created sometime between 1955 and 1958, probably by a landslide.

Past / Previous DXpeditions to Bouvet Island

In 2018 it was reported *“Surprise! There has been only one - yes only one - previous and successful real DXpedition to Bouvet. OK, two, if you count the disputed W4BPD/3Y0 QSO’s”*.

Year	Callsign	Operator	QSO Count
1962	LHC4	Gus Browning (W4BPD)	No Documented landing
1977	3Y3CC	Audun Hjelle	28
1977	3Y1VC	John Snuggerud	27
1978	3Y5DQ	Thor Winsnes	550
1978	3Y1VC	John Snuggerud	1,930
1989/90	3Y5X	Club Bouvet	47,000
1997	3Y2GV	Kare Pedersen	200
2001	3Y0C	Chuck Brady	8,000?
2007	3Y/ZS6GCM	??	??

The Infamous LH4C - W4BPD / 3Y0 “DXpedition” - 1962

Source: the Internet

Famous DXpeditioner, Gus Browning, was purported to have made a solo DXpedition to Bouvet. However, some reports dispute that claim and allege that the entire operation was done from a ship just off shore. I wonder if those QSL’s are still good for DXCC credit?

To RADIO W8UAS Confirming 2 way
 AM CW SSB QSO of 11-29 196 +
 at 2247 GMT. 5-7-9
 UR 3, 7, 14, 21, 28Mc

COUNTRY BOUVET ISLAND
 By ECU
 Equipment: Collins 75S/3 Receiver / Collins
 32S/1 Xmitter / PM-2 AC and MP-1 Pwr Sup.

Sponsored by the
 "WORLD RADIO PROPAGATION
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Gus Browning
 VIA "ACK" - W4ECI



2018

The Bouvet Island DXpedition – 3YØZ

Source www.dx-world.net

Unfortunately, the effort had to be aborted, just offshore from Bouvet, due to mechanical failure.

FEBRUARY 3 @ 21:30z — During the last 72 hours we continued to experience the high winds, low clouds, fog, and rough seas that have prevented helicopter operations since our arrival at Bouvet. No improvement was predicted in the weather forecast for the next four days.

Then, last night an issue developed in one of the ship's engines.

This morning the captain of the vessel declared it unsafe to continue with our project and aborted the expedition. We are now on our long voyage back to Punta Arenas.

As you might imagine the team is deeply disappointed, but safe.



2019

The Bouvet Island DXpedition – 3YØI

Source www.dx-world.net

The 3YØI Bouvet Island DXpedition website has announced that the team of operators — led by Polish DXpeditioner Dom Grzyb, 3Z9DX — set sail on March 19 from Cape Town, South Africa, for the remote Antarctic island on board the MV Atlantic Tuna.

URGENT UPDATE MARCH 27, 2019 : The vessel Atlantic Tuna has been damaged by a severe storm and has been forced to turn back to South Africa. POSTPONED not cancelled.

NEWS UPDATE April 2, 2019 - M/V Atlantic Tuna has made safe return to Cape Town with all hands safe. The 3YØI team will have a further update shortly.

I won't repeat the 2023 DXpedition as this was discussed in last month's newsletter.

Bryan MØIHY

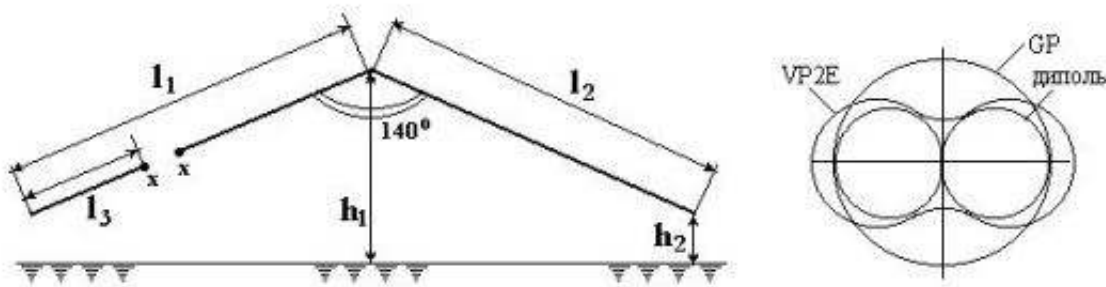
Vertically Polarised 2 Element antenna

I saw this on the Internet and thought it would make an ideal antenna for QRP and /P.

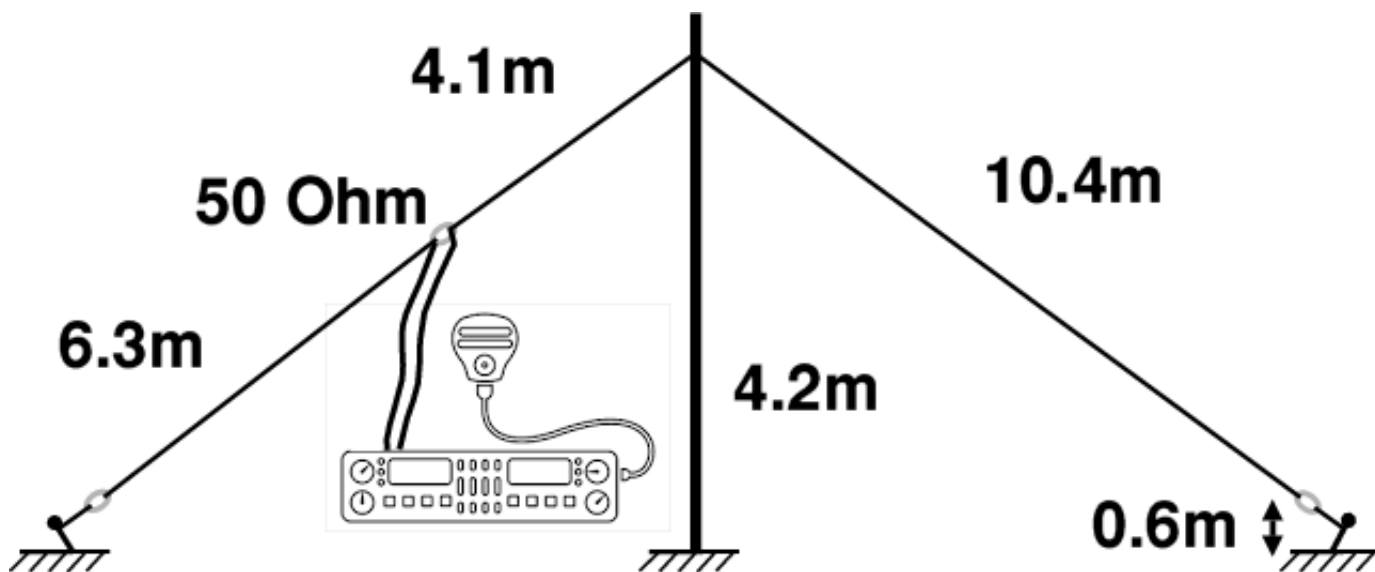
Source: the Internet

The VP2E – A Strange (But Proven) Antenna

From various Internet articles the antenna described here is said to be ideal for long-distance communications on low power, it supposedly wins over a quarter-wave vertical with dozens of radials, an end-fed half-wave vertical and a high dipole. Developed by HB9SL (Fritz Demuth, SK) it's called the "Vertically Polarized 2 Element", or VP2E antenna.

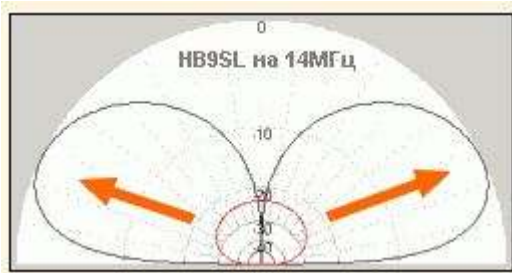


The HB9SL antenna has the following features: it emits at a low angle towards the horizon, about 26° (effectively $20^\circ - 40^\circ$), it has vertical signal polarisation, and the antenna gain is about 3 dBd! The antenna does not require a Balun and, most importantly, high masts. The radiation pattern is almost circular, the maximum radiation/gain point exists in the direction of the longer wire – i.e. away from the feed point. The following article is related to a 14MHz version of "Vertical Polarized 2 Element", using as a mast a 4.2 Metre fibreglass pole.



For 14MHz a run of wire with a length of 20.8 meters is fixed to the top of the mast exactly at the midpoint. Wires go down and are fastened with cords to pegs with antenna ends raised off the ground. On one side, a distance of 6.3 meters from the end of the antenna, a break is made, a plate is inserted to form the insulator

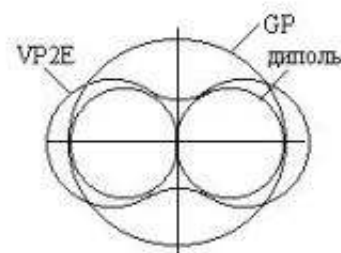
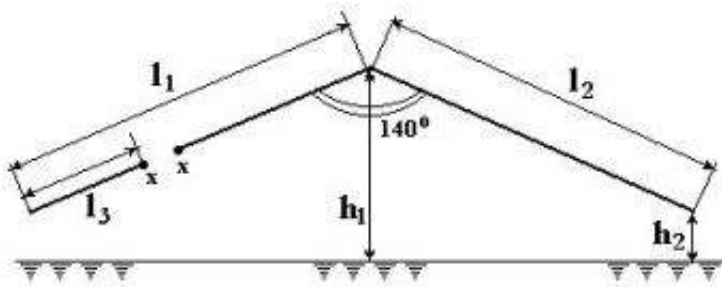
and a 50-ohm cable is soldered there, no Balun is necessary, the centre core of the coax is connected to the longer section and the braid to the shorter one. In this build, the length of the coax was approximately 7 meters (**avoid the coax being a 1/2 wavelength long**). The HB9SL antenna design was tested with the program MMANA, which showed that sometimes the feed point is better moved a little higher than in the author's design. Since the weight of equipment is important when portable, chose a wire which is light, flexible and does not tangle or break easily. Due to the fact that the HB9SL antenna does not need a high mast, its wind resistance is low and practice has shown that if the base cannot be secured it is sufficient to add one guy rope (with the antenna wires forming the other two). Please note that any mast used with this antenna should be non-metallic. A fibreglass mast fits this role perfectly. The red arrows in the diagram below show the angles of maximum radiation.



Measurements of the SWR for this 20m version gave the following readings: 1.5 – 14.0, 1.1 – 14.1, 1.7 – 14.3 MHz. The resonant point is quite sharp, so after constructing the antenna, it must be trimmed to the required frequency range within 20m.

Sizes for other bands. For 7 MHz, you need a mast height of 6 meters, the total length of the antenna wire will be 41.8 meters. The length of the wires to the middle 20.9 meters. The feed point is located at a distance of 15.4 meters from the lower end. The lower ends of the wires must be raised one meter above the ground. Everything else is as described above. For the 3.7 MHz band, a mast height of 7 meters is needed, the total length of the antenna is 79.8 meters. The length of the wires to the middle are 39.9 meters. The feed point is 32 meters away from the lower end of one of the elements. The lower ends of the wires must be raised 1 meter above the ground.

Nadir EY8MM (Tajikistan) – in Jan 2007 built a Vertically polarized 2 Element (VP2E) HB9SL 160m antenna



Elements	Lambda
$l_1 = l_2 =$	0.495
$l_3 =$	0.3
$h_1 =$	0.18
$h_2 =$	0.0285

He used all standard dimensions except the height. In his case, H1 was 55 meters. Top band conditions were not very good. He only had a few QSOs, the highlight was being called by SU9HP located in Egypt for a new country for him. He states that the antenna showed reasonable directivity (see diagram above). Then he tried the antenna on 80 with an antenna tuner and worked over 80 North American stations! Including OK, MS and KY states. Setup was using an IC756ProIII driving an Acom 1000 amp (providing 800W output due to low mains supply voltage).

Bryan M0IHY

It pays to check

I've made so many coaxial cables over the years that I've lost count, I decided for a change I would purchase a 500mm patch lead to connect some of my equipment up, I duly ordered the patch lead and waited for it to arrive. Three days later it arrived.

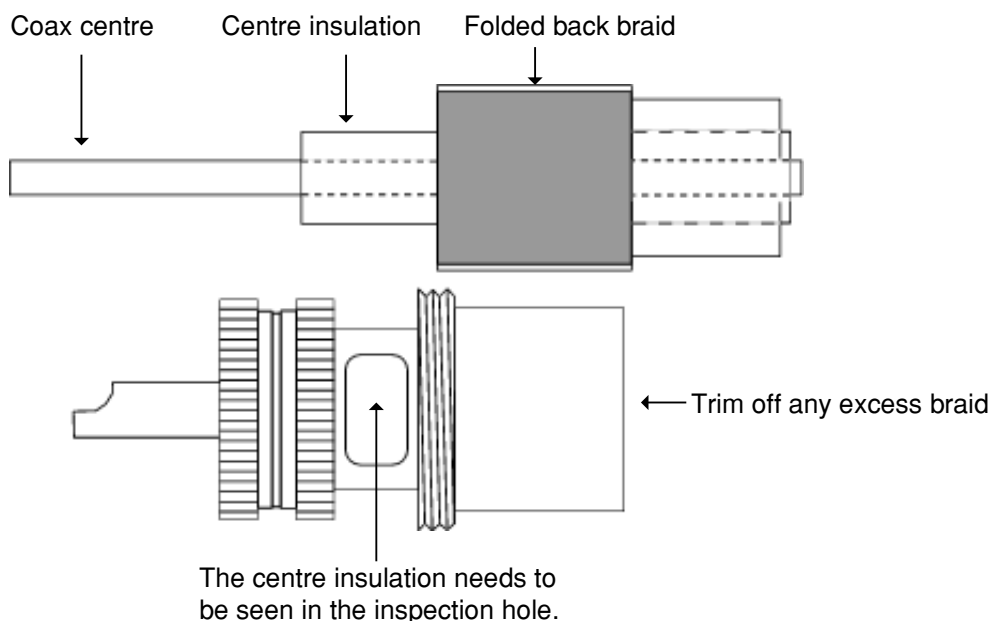
I connected one end of the patch lead to my equipment and noticed the coax moved inside the PL259, this warranted inspection.

On removing the outer ring of the PL259 (simply unscrew it and it will remain on the coax) I checked through the inspection hole and noted there was no centre insulation showing, just the bare inner, and this was frayed. Going further I noted the centre conductor wasn't soldered correctly as the copper appeared corroded (it was black and tarnished) and the solder wouldn't take.

The method described here is for the thinner coaxial cable (RG58 / Mini-8) where you can 'screw' the plug onto the braid, it's not difficult.

Source: the Internet

1. Cut back outer insulation by 30mm.
2. Cut back braid leaving 6mm.
3. Cut back centre core insulation leaving 10mm.
4. Fold back remaining braid over the outside of the outer insulation.
5. Twist centre wire so that no strands of wire are loose.
6. Insert the cable into the plug and screw the braid into the threaded section at the rear of the plug.
7. Solder the centre core wire at the tip and cut off excess.



MOIHY

As the cable lies against the PL259 in the drawing is how it should be with the centre insulation inserted as far as it will go.

I usually slide a length of heatshrink tubing over the coax before inserting the coax into the plug, this is then slid over the end of the plug and heat applied to tidy things up - don't forget to put the outer ring on the coax first!!

The supplier apologised and arranged for me to return the cable and also supply me with another, in my case it was just pure laziness, you may not have the equipment to do the job and therefore would have to buy one, checking is essential.

Bryan MOIHY

CW corner

This month we look at some of the more interesting facts about Morse code.

Morse code revolutionized communications 175 years ago

Credit: Eddie King, the Internet

The first message sent by Morse code's dots and dashes across a long distance travelled from Washington, D.C., to Baltimore on Friday, May 24, 1844 — 175 years ago. It signalled the first time in human history that complex thoughts could be communicated at long distances almost instantaneously. Until then, people had to have face-to-face conversations; send coded messages through drums, smoke signals and semaphore systems; or read printed words.

Thanks to Samuel F.B. Morse, communication changed rapidly, and has been changing ever faster since. He invented the electric telegraph in 1832. It took six more years for him to standardize a code for communicating over telegraph wires. In 1843, Congress gave him \$30,000 to string wires between the nation's capital and nearby Baltimore. When the line was completed, he conducted a public demonstration of long-distance communication.

Morse wasn't the only one working to develop a means of communicating over the telegraph, but his is the one that has survived. The wires, magnets and keys used in the initial demonstration have given way to smartphones' on-screen keyboards, but Morse code has remained fundamentally the same, and is still — perhaps surprisingly — relevant in the 21st century.

Although I have learned, and relearned, it many times as a Boy Scout, an amateur radio operator and a pilot, I continue to admire it and strive to master it.

Morse's key insight in constructing the code was considering how frequently each letter is used in English. The most commonly used letters have shorter symbols: "E," which appears most often, is signified by a single "dot." By contrast, "Z," the least used letter in English, was signified by the much longer and more complex "dot-dot-dot (pause) dot."

In 1865, the International Telecommunications Union changed the code to account for different character frequencies in other languages. There have been other tweaks since, but "E" is still "dot," though "Z" is now "dash-dash-dot-dot."

The reference to letter frequency makes for extremely efficient communications: Simple words with common letters can be transmitted very quickly. Longer words can still be sent, but they take more time.

The communications system that Morse code was designed for — analogue connections over metal wires that carried a lot of interference and needed a clear on-off type signal to be heard — has evolved significantly.

The first big change came just a few decades after Morse's demonstration. In the late 19th century, Guglielmo Marconi invented radio-telegraph equipment, which could send Morse code over radio waves, rather than wires.

The shipping industry loved this new way to communicate with ships at sea, either from ship to ship or to shore-based stations. By 1910, U.S. law required many passenger ships in U.S. waters to carry wireless sets for sending and receiving messages.

After the Titanic sank in 1912, an international agreement required some ships to assign a person to listen for radio distress signals at all times. That same agreement designated "SOS" — "dot-dot-dot dash-dash-dash dot-dot-dot" — as the international distress signal, not as an abbreviation for anything but because it was a simple pattern that was easy to remember and transmit. The Coast Guard discontinued monitoring in 1995. The requirement that ships monitor for distress signals was removed in 1999, though the U.S. Navy still

teaches at least some sailors to read, send and receive Morse code.

Aviators also use Morse code to identify automated navigational aids. These are radio beacons that help pilots follow routes, traveling from one transmitter to the next on aeronautical charts. They transmit their identifiers — such as “BAL” for Baltimore — in Morse code. Pilots often learn to recognize familiar-sounding patterns of beacons in areas they fly frequently.

There is a thriving community of amateur radio operators who treasure Morse code, too. Among amateur radio operators, Morse code is a cherished tradition tracing back to the earliest days of radio. Some of them may have begun in the Boy Scouts, which has made learning Morse variably optional or required over the years. The Federal Communications Commission required all licensed amateur radio operators to demonstrate proficiency in Morse code until a rule change in December 2006. The FCC does still issue commercial licenses that require Morse proficiency, but no jobs require it anymore.

Because its signals are so simple — on or off, long or short — Morse code can also be used by flashing lights. Many navies around the world use blinker lights to communicate from ship to ship when they don’t want to use radios or when radio equipment breaks down. The U.S. Navy is actually testing a system that would let a user type words and convert it to blinker light. A receiver would read the flashes and convert it back to text.

Skills learned in the military helped an injured man communicate with his wife across a rocky beach using only his flashlight in 2017.

Perhaps the most notable modern use of Morse code was by Navy pilot Jeremiah Denton, while he was a prisoner of war in Vietnam. In 1966, about one year into a nearly eight-year imprisonment, Denton was forced by his North Vietnamese captors to participate in a video interview about his treatment. While the camera focused on his face, he blinked the Morse code symbols for “torture,” confirming for the first time U.S. fears about the treatment of service members held captive in North Vietnam.

Blinking Morse code is slow, but has also helped people with medical conditions that prevent them from speaking or communicating in other ways. A number of devices — including iPhones and Android smartphones — can be set up to accept Morse code input from people with limited motor skills.

There are still many ways people can learn Morse code, and practice using it, even online. In emergency situations, it can be the only mode of communications that will get through. Beyond that, there is an art to Morse code, a rhythmic, musical fluidity to the sound. Sending and receiving it can have a soothing or meditative feeling, too, as the person focuses on the flow of individual characters, words and sentences. Sometimes the simplest tool is all that’s needed to accomplish the task.

Spotlight - Barney, North Dakota

QSO with WT0S, Donald J Viele, Barnet, North Dakota

Band: 17m	QTH: Barney, North Dakota
Mode: CW	Coordinates: 46°16'3"N 97°0'1"W
Date: 27 th February 2022	Time Zone: UTC-5
Time: 16:40 GMT	Population: 40

This month we look we take a look at one of Jeremy's (G3XZG) QSO's, in sparsely populated Barney in the county of Richland, North Dakota, U.S.A. I chose this because of its uniqueness, a city occupying just 0.61 square miles and with 40 inhabitants in 2020!

Barney is a city in Richland County, North Dakota, United States. The population was 40 at the 2020 census. Barney was founded in 1899. It is part of the Wahpeton, ND–MN Micropolitan Statistical Area.



The Post Office

According to the United States Census Bureau, the city has a total area of 0.16 square miles (0.41 km²), all land.

As of the census of 2010, there were 52 people, 24 households, and 14 families residing in the city. The population density was 325.0 inhabitants per square mile (125.5/km²). There were 28 housing units at an average density of 175.0 per square mile (67.6/km²).

There were 24 households, of which 20.8% had children under the age of 18 living with them, 54.2% were married couples living together, 4.2% had a female householder with no husband present, and 41.7% were non-families. 37.5% of all households were made up of individuals, and 25% had someone living alone who was 65 years of age or older. The average household size was 2.17 and the average family size was 2.71.

The median age in the city was 49 years. 15.4% of residents were under the age of 18; 11.5% were between the ages of 18 and 24; 17.2% were from 25 to 44; 40.5% were from 45 to 64; and 15.4% were 65 years of age or older. The gender makeup of the city was 48.1% male and 51.9% female.

Jeremy G3XZG

Ed: Historically not the most interesting of places, but given its 'city' status and it's population I think you have to agree, it's different and deserves a mention.

Contest Corner

April			
HF			
Day	Date (2023)	Time UTC	Contest Name
Sat	01 Apr	800-2000	FT4 International Activity Day
Mon	03 Apr	1900-2030	80m CC CW
Wed	19 Apr	1900-2030	80m CC SSB
Mon	24 Apr	1900-2030	RSGB FT4 Contest
Thu	27 Apr	1900-2030	80m CC DATA
Sat-Sun	29-30 Apr	1200-1200	UKEI DX CW Contest
VHF			
Day	Date (2023)	Time UTC	Contest Name
Sun	02 Apr	900-1200	Spring 70MHz Contest
Tue	04 Apr	1800-1855	144MHz FMAC
Tue	04 Apr	1900-2130	144MHz UKAC
Wed	05 Apr	1900-2100	144MHz FT8 AC
Sun	09 Apr	900-1200	Spring 50MHz Contest
Tue	11 Apr	1800-1855	432MHz FMAC
Tue	11 Apr	1900-2130	432MHz UKAC
Wed	12 Apr	1900-2100	432MHz FT8 AC
Thu	13 Apr	1900-2130	50MHz UKAC
Tue	18 Apr	1900-2130	1.3GHz UKAC
Thu	20 Apr	1900-2130	70MHz UKAC
Sat-Sun	22-23 Apr	1400-1400	MGM Contest
Tue	25 Apr	1830-2130	SHF UKAC
May			
HF			
Day	Date (2023)	Time UTC	Contest Name
Mon	08 May	1900-2030	80m CC SSB
Wed	17 May	1900-2030	80m CC DATA
Mon	22 May	1900-2030	RSGB FT4 Contest
Thu	25 May	1900-2030	80m CC CW
VHF			
Day	Date (2023)	Time UTC	Contest Name
Tue	02 May	1800-1855	144MHz FMAC
Tue	02 May	1900-2130	144MHz UKAC
Wed	03 May	1900-2100	144MHz FT8 AC
Sat-Sun	06-07 May	1400-1400	May 432MHz-245GHz Contest
Sat	06 May	1400-2200	432MHz Trophy Contest
Sun	07 May	800-1400	10GHz Trophy Contest
Tue	09 May	1800-1855	432MHz FMAC
Tue	09 May	1900-2130	432MHz UKAC
Wed	10 May	1900-2100	432MHz FT8 AC
Thu	11 May	1900-2130	50MHz UKAC
Sun	14 May	900-1200	70MHz Contest CW
Tue	16 May	1900-2130	1.3GHz UKAC
Thu	18 May	1900-2130	70MHz UKAC
Sat-Sun	20-21 May	1400-1400	144MHz May Contest
Sun	21 May	1100-1500	1st 144MHz Backpackers
Tue	23 May	1830-2130	SHF UKAC
Sun	28 May	1400-1600	70MHz Cumulatives # 3

For sale and wanted

If anybody has anything for sale, or wants anything, then this is the place to ask, photo's and descriptions will help, email me at bryanpage1@btinternet.com.

The following are antenna's being sold by Phil (M0NVS), please contact him if you're interested, his email address can be found on <https://www.qrz.com>

- | | | | |
|---|---|--|--|
| 1 | - | Homemade 70MHz 5 ele LFA design yagi painted Green | £35.00 |
| 2 | - | Homemade 50MHz 3 ele portable yagi | £30.00 or free to club member with donation to Roger G3MEH |
| 3 | - | Homemade 144MHz 10ele DK7ZB design yagi | £50.00 |
| 4 | - | WIMO 432MHz 18 ele 500w+ rated balun yagi | £50.00 |
| 5 | - | JAYBEAM 144MHz 5 ele with spares yagi | £30.00 |

Any other business



Peter (2E0PTH) - for significant progress of a newer licensee



Bryan (M01HY) for work on the newsletter 2022.



The dastardly duo...



Dave (G8FMC) holding the 'Whitworth Trophy' for the 'leading SSB only station' in the RSGB October 2021 DX contest.

Meetings for 2023

Date	Type	Where	Topic
15/03/2023	Club net	GB3TU	
22/03/2023	Formal	Ashley Green Memorial Hall	Raspberry PI / microcontroller projects - 2E0PTH
29/03/2023	5th Wednesday	Zoom	RSGB Online lecture (TBA)
05/04/2023	Club net	GB3TU	
12/04/2023	Informal	Memorial Hall / Golden Eagle	Swapping over the cupboards with G4CZB
19/04/2023	Club net	GB3TU	
26/04/2023	Formal	Ashley Green Memorial Hall	Using Airscout and Minos - G7LRQ / M0NVS
03/05/2023	Club net	GB3TU	
10/05/2023	Informal	Golden Eagle	Mills on the air planning
17/05/2023	Club net	GB3TU	
24/05/2023	Formal	Ashley Green Memorial Hall	Terrestrial TV broadcasting - G3MEH
31/05/2023	5th Wednesday	Zoom	HF Antennas - G8FMC
07/06/2023	Club net	GB3TU	
14/06/2023	Informal		NRC visit? VHFNFD planning?
21/06/2023	Club net	GB3TU	
28/06/2023	Formal	Ashley Green Memorial Hall	NRC visit? SOTA activation?
05/07/2023	Club net	GB3TU	
12/07/2023	Informal		QO-100 demonstration?
19/07/2023	Club net	GB3TU	
26/07/2023	Formal	Ashley Green Memorial Hall	QO-100 demonstration?
02/08/2023	Club net	GB3TU	
09/08/2023	Informal		SSB FD planning?
16/08/2023	Club net	GB3TU	
23/08/2023	Formal	Ashley Green Memorial Hall	
30/08/2023	5th Wednesday	Zoom	
06/09/2023	Club net	GB3TU	
13/09/2023	Informal	Golden Eagle	
20/09/2023	Club net	GB3TU	
27/09/2023	Formal	Ashley Green Memorial Hall	
04/10/2023	Club net	GB3TU	
11/10/2023	Informal	Golden Eagle	
18/10/2023	Club net	GB3TU	
25/10/2023	Formal	Ashley Green Memorial Hall	
01/11/2023	Club net	GB3TU	
08/11/2023	Formal	Ashley Green Memorial Hall	CDARS -AVRS Inter-Club Quiz
15/11/2023	Club net	GB3TU	
22/11/2023	Informal	Golden Eagle	
29/11/2023	5th Wednesday	Zoom	
06/12/2023	Club net	GB3TU	
13/12/2023	Dinner	Lazy Pig in the Pantry	

Events for 2023

Date	Type	What	Where
13 May 2023	Special event station	Mills on the Air	Brill Windmill
14 May 2023	Special event station	Mills on the Air	Brill Windmill
03 June 2023	Special event station	Ashley Green Village Fair	Ashley Green
TBA	Visit	Visit to RSGB NRC	Bletchley Park
01 July 2023	Contest	VHF Field Day	Wiggington
02 July 2023	Contest	VHF Field Day	Wiggington
TBA	Radio activity day	Playing with antenna's	G0ODQ QTH
02 September 2023	Contest	SSB Field Day	Wiggington
03 September 2023	Contest	SSB Field Day	Wiggington
13 December 2023	Dinner	Annual Christmas Dinner	Lazy Pig in the Pantry

RSGB 2022 Exam Results Released - [Source: HamTrain](#)

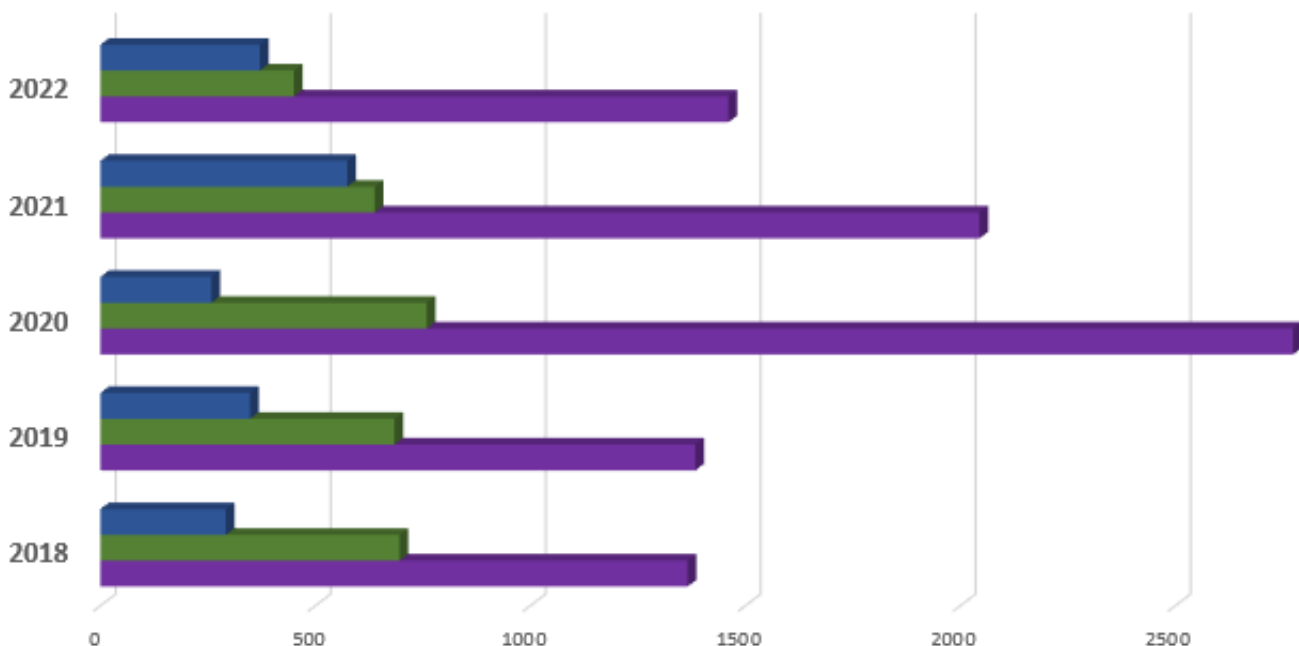
	Foundation	Intermediate	Full
Candidates	1696 (2303)	534 (750)	371 (574)
Passes	1461 (2045)	450 (638)	239 (373)
Pass rate	86.1% (88.7%)	84.3% (85%)	64.4% (64.9%)

Headlines from the results:

- 2,345 took their exams online. 203 took their exams in person at a club.
- Foundation, Intermediate and Full pass rates all fell in 2022
- Intermediate pass rate is at a 10-year low
- Foundation passes have dropped, and is returning to nearly pre-Covid levels

Fifty unique clubs offered exams for 203 candidates in 2022 with the majority opting for paper exams. The total number of club exam sessions was 58 at Foundation, 20 at Intermediate and 9 at Full.

UK Amateur Radio | Exam Pass Trend



Contest Results/Achievements

Contest results/achievements by Dave G8FMC – CDARS Contest Coordinator

Results for the March 144MHz/432MHz contest are now published:

Well, where do we start? “Didn’t we do well”!

This contest is the first in the year to qualify for the ‘VHF Championship’, which has modified rules this year. The main one is that the best 7 out of a total of 11 events is taken for the years individual ratings. (That gives more folks that do NOT have SHF & Microwave kit a chance of featuring in the ‘Leader-board’)

For the last few years there has also been an AFS (Affiliated Societies) table added to what was traditionally just an individual ‘Championship’.

So, for 2023 we (using the Royal ‘we’ from your Contest Coordinator!) summoned the troops from CDARS, Northampton, plus friends, under our free ‘Associate membership’ arrangement. These ‘friends’ contributions, for which we are most grateful, made a massive difference to the overall outcome, resulting in CDARS (+ extras) being 2nd place (behind the almost inevitable Hereford ARS) in a field of 40! Holding that position as we go through the year might be a challenge, but it is a fantastic start; which no doubt has made a few teams ‘sit up & take notice’?

(It is a numbers game for the AFS rating, as ALL contributions however modest, combine to boost the total)

We ‘Fielded’ a total team of 10 participants (possibly a record for us?) which was only beaten by the winning Hereford team of 11. (I told you it was a ‘numbers’ game)

Our 10 consisted of the following:

CDARS; **G0ODQ, M7RMF, G8FMC, M0N (M0NVS)**
Northampton; **G6TVB, G7LII/P, G1MZD**
‘Friends’; **G3MEH, G0SKA, G0XDI (Matt normally with the ‘Black-Sheep’)**

There are 2 bands & many categories to this event, so choice of category & when to operate all come into the tactical decision making. It seems to have paid off quite well for some of us as detailed below.

The overall individual positions of note were:

- Phil M0N - 3rd on 2m & 2nd on 70cm = 2nd overall in the **Single Operator Open** (a tactical decision which paid-off?)
- Matt G0XDI - 2nd on 70cm (& 4th on 2m = 3 overall) in **Single Operator Fixed**
- Roger M7RMF – Leading Foundation station on 2m & overall in the 6hr Single Op Fixed
- **Roger G3MEH - 3rd on 70cm & 6th on 2m = 4th overall in Single Operator Fixed**
- The **Single Op Fixed** for 2m had a nice list of G0XDI, G0ODQ & G3MEH in 4th, 5th & 6th
- Charlie G0SKA (normally Burnham Beaches) got 3rd place on 2m in **6hr Single Op Fixed**
- Your scribe entered on both bands & managed 11th on both 2m & 70cm = 9th overall, also in **6hr Single Op Fixed** (the most popular category – bad tactics?)

I was very happy with that as a 1pt/km scoring system (no multipliers or Bonus squares) & the need for lots of EU contacts, does not suit this location!

73, Dave K, G8FMC

RADIO SOCIETY of GREAT BRITAIN



This is to certify that

MON

achieved

2nd in the Single Operator Open Section of the

March 144 432MHz 2023

President of the RSGB

Stewart Bryant.

Stewart Bryant, G3YSX



RADIO SOCIETY of GREAT BRITAIN



This is to certify that

M7RMF

achieved

35th in the 6 Hour Single Operator Fixed Section of the

March 144 432MHz 2023

President of the RSGB

Stewart Bryant
Stewart Bryant, G3YSX

Brill Windmill weekend (13th/14th May) attendee list

At the last meeting at the Golden Eagle a list was drawn up of possible attendees for the Brill Windmill weekend, if your name is not on the list and you'd like to attend, please contact the committee.

Callsign	Sat	Sun	Notes
Matt (M1DTG)	Y	Y	Key-holder
Phil (M0NVS)	Y	N	
Roger (M7RMF)	Y	Y	
Peter (2E0PTH)	Y	Y	
Dave (GFMC)	N	Y	Playing Biggles on Saturday
Bryan (M0IHY) & Angie (M6WTL)	Y	Y	May be part days