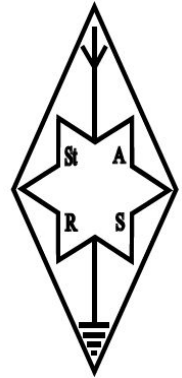


STARLITE

THE JOURNAL FOR THE STOURBRIDGE AND DISTRICT A.R.S.



G6OI



G6SRS

ISSUE: MAY 2024

STOURBRIDGE & DISTRICT AMATEUR RADIO SOCIETY

**INFORMAL MEETINGS ARE HELD AT:
NORTON SOCIAL CLUB,
OSMASTON ROAD, STOURBRIDGE, DY8 2AL
[8:00 TO 10:00 PM]**

**MAIN MEETINGS (3RD MONDAYS) ARE HELD AT:
NORTON COMMUNITY CENTRE
HEMPTON WAY, STOURBRIDGE, DY8 3AP
[8:00 TO 10:00 PM]**

VISITORS ALWAYS WELCOME

RSGB AFFILIATED SOCIETY

STARLITE

Enquiries to:-

Hon. Secretary
Mark Higgins M7ERH

By Email to:-
honsec@g6oi.org.uk
markhiggins6@hotmail.co.uk

StARS Website URLs:-
www.g6oi.org.uk

StARS Facebook Page:-
<https://www.facebook.com/groups/stourbridge.ars/>

All correspondence/enquiries should
be addressed to the Hon Secretary at:-

StARS
c/o 188 The Broadway
Stourbridge
West Midlands
DY8 3HZ

Forthcoming Meetings

May 6 th	Club Meeting at Norton Social Club. 8pm
May 13 th	Club Meeting at Norton Social Club. 8pm
May 20 th	COMMITTEE MEETING & AERIAL RIGGING WITHOUT A SAFETY NET BY GEOFF G0KVK(TIME PERMITTING) @ NORTON COMMUNITY CENTRE. 8pm
June 3 rd	Club Meeting at Norton Social Club. 8pm
June 10 th	Club Meeting at Norton Social Club. 8pm
June 17 th	ANNUAL BARBEQUE @ THE SHEEPWALKS. 7pm
June 24 th	Club Meeting at Norton Social Club. 8pm
May 6 th	Club Meeting at Norton Social Club. 8pm
July 1 st	Club Meeting at Norton Social Club. 8pm
July 8 th	Club Meeting at Norton Social Club. 8pm
July 15 th	Main Meeting @ Norton Community Centre. 8pm
July 22 nd	Club Meeting at Norton Social Club. 8pm
July 29 th	Club Meeting at Norton Social Club. 8pm

The EGM/AGM took place on 15th April 2024 at Norton Community Centre. There were 9 members present and 3 members attending via Zoom.

The minutes of the 2023 AGM were proposed and seconded.

The Hon Secretary reported that we have some difficulty finding a new home. He stated that we are currently using Norton Social Club for informal meetings and Norton Community Centre for main meetings. He, also, commented that Wollaston Scout Hut may be ready in the Spring. The visit to Woofferton radio site was a success. It is hoped that we can raise enough members to continue with SSB Field Day. Finally, the meeting attendance book has been reinstated.

The Hon Treasurer gave figures for this year's club funds. He stated that there was a concern with the bank, but this has been resolved.

It was proposed that any reference to OSH be removed from the Club's name. This was agreed.

It was proposed to increase Club membership fees to £30 per annum. This was agreed.

It was proposed to reduce the number of members from 12 to 10 for a quorum. This was agreed.

Election of Committee members was passed, the only change was that John Clarke M1EJG was stepping down as Hon Secretary and Mark Higgins M7ERH would take up the appointment.

The Trustees were confirmed as Nick G6DQN and Wayne M5LLT.

Any Other Business

Nick G6DQN proposed that John M1EJG becomes a life member due to his service to the Club.

The date for the BBQ was confirmed as 17th June at 19:00 hours, to be held at The Sheepwalks. A fee of £5 will be asked to help with cost of the food.

The next Committee meeting will be held on 20th May at Norton Community Centre. If there is time there will be a talk on Aerial Rigging, but which may be moved to a later date.

In this issue

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Dxpeditons*

MY CONTINUING JOURNEY INTO AMATEUR RADIO

By Richard Darby 2E0IJT

I thought I would keep everyone updated on my continuing journey into Amateur Radio. In May 2023 I took and passed my Intermediate Licence Exam and took the Call Sign 2E0IJT. It's definitely been an interesting experience. There has been plenty of ups and a couple of downs. But on the whole it's been an interesting and exciting experience.

In August 2023 I started on a Full Licence Course with Bath Based Distance Learning. For me it was heavy going, a steep learning curve and a lot to take in. I found the Maths side relatively easy but struggled with other parts of it. I found myself starting to not enjoy things. I have always said that when you don't enjoy something, it's time to stop. I was enjoying the Amateur Radio but not the studying. I didn't want to find myself in the situation of not enjoying the hobby. In October I made the difficult decision to withdraw from the course. I was worried I was letting down all the people who had helped me on my journey into Amateur Radio. The people at BBDL were very supportive of my decision and said I was welcome to return to their next Full course which starts in August this year. This was an extremely kind offer from the people at BBDL. I now have some thinking to do and decisions to make, as with the recent changes OfCom have made to the Licensing Structure I can now do everything I want to with my Intermediate Licence. How cool would it be to operate Aeronautical Mobile from a Hot Air Balloon? I also think the 2E0 and 2E1 call signs will become rare in the future and people will want them in their Logs. Even though spelling mine in the correct phonetic manner is a right mouthful. I also don't think I will ever use 1Kw. But who knows, I may decide I want to in the future. One of the many things I like about this great hobby is the amount of different ways you can go and the amount of different things you can do within it. There is also no pressure from anyone to climb the licence ladder.

After withdrawing from the Full Licence Course I decided to put the books down for a few months and get operating. With the stress of studying gone I became even more excited about Ham Radio. Although I don't want to deter anyone from Studying for their Full Licence, it just wasn't the right time for me to do it. Maybe I'll join the BBDL Full Licence Course that starts in August. Maybe I won't. One thing I do know is that, whatever I decide, I'll find friendly help and support from the people at Stourbridge and District Amateur Radio Society.

I currently work as a Service Engineer and travel all over the country. I always take a handheld out to work with me. I always like to get to my first customer of the day before they open. Nine times out of ten there is a repeater nearby and I find someone to have a chat with whilst waiting for my customer to open up. I have, however, had to purchase a cheap and cheerful mag mount antenna as my new works van is like a Farady Cage going round the stock antenna on my handheld. I also do a fair few nights away with work so its nice to find people locally on the air to have a chat with. I must remember though to bring my spare battery and charger with me. A couple of times I've forgotten and with a flat battery you don't get out very far.

I enjoy operating from a nice warm shack at home, where the kettle is only a few feet away, and have made HF contacts all over the world. I also enjoy having more local contacts on 2m and 70cm. We are lucky in this area and further afield to have some great repeaters for us to use. I'd like to take this opportunity to thank the many Repeater Keepers out there for their time and effort in keeping those Repeaters going. Without them

we wouldn't be able to enjoy the hobby as much as we do.

A few months ago I decided to get out and do some portable operating. Quite a few times I've found myself out on the Sheepwalks on a weekend morning with a QRP radio, sausage butt and flask of tea. There's some lovely views from up there. On a clear day you can see for miles. It's great fun finding a pileup somewhere and breaking through it with only 5 watts power. I've had some great contacts from up there. My favourite comment from an Italian Station a couple of weeks ago, when I told him I was only using 5 watts was along the lines of, "How can that be? I am using 1000 watts to get to you." I've also come across several members of the public who seem genuinely interested in what I'm doing. I could talk the hind legs of a Donkey and about Amateur Radio all day. If it gets just one person interested in Amateur Radio then great. You have to keep your wits about you up there though. As the last time I was up there an escaped Ewe and her Lambs frightened the life out of me when they snuck up on me to say, "Hello." I've seen a couple of Muntjac Deer up there and plenty of other Wildlife too.

It was whilst atop of the Sheepwalks and tuning around the 40m band, I became aware of an organisation called Bunkers On The Air. They're an organisation that Operate from all manner of different Bunkers around the UK. They're similar to SOTA but with Bunkers instead of Summits. There are Activators and Hunters. It's an awards scheme but you don't have to collect the awards if you don't want to. I'm happy just getting out in the fresh air and activating a Bunker. I've done two recently. One in Bridgnorth, twice, and one near Pattingham. They are both Royal Observer Corps Bunkers. It was whilst activating the Bridgnorth Bunker for the first time that I experienced my first incoming Pileup. It was slightly daunting at first but great fun. People from all over Europe wanted to speak to me and get the reference number of the Bunker that I was at. To be fair it's got me hooked and I'll be out lots more over the summer, activating Bunkers and operating portable.

If anyone fancies joining me for some portable operating one Saturday or Sunday morning, you are more than welcome. Hopefully now the weather will be getting better sooner I will be able to plan further ahead of when I'm going out portable. Just fill your flasks and butties with your preferred choice of filling and come enjoy the radio and fresh air. Also if you know of any other locations to operate portable from, I'm all ears.

So here's to Amateur Radio in whatever way people decide to take their own individual hobby. If you're thinking about getting involved or having a go at Amateur Radio, DO IT. You'll not regret the decision. There's something quite cool about speaking to people on a radio whether they be 3000 miles away or just 15 miles up the road. It's a hobby I'm sure I'll be enjoying for a long time to come.

The futility of some good antenna ideas

Daniel Romila, VE7LCG

Antennas are a subject in which a radio amateur can continuously work. He/she can obtain good results. He/she can obtain no results. Anyhow, the eternal phrase coming from academic research is also true for radio amateurs, "Further research is necessary." That being an excuse for more money, more materials, more work and so on. You got the idea. My hobby in 2023 has been to play with big loops, big closed/folded dipoles, big as a full wave-length. For 144 MHz (the 2-metre band) one needs... around 2 metres of wire, in this philosophy.

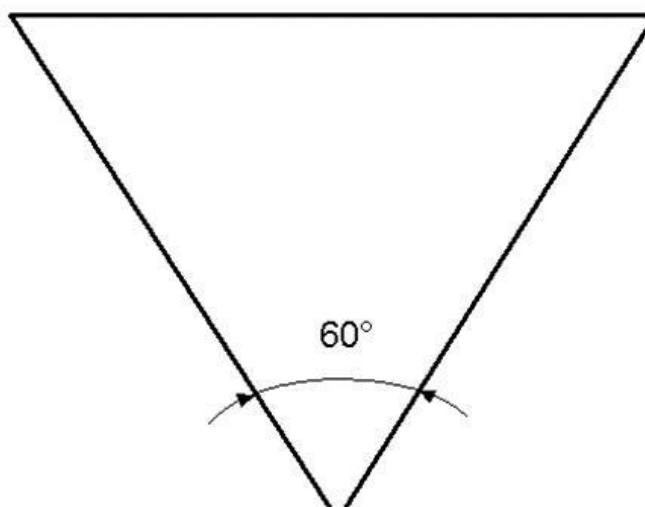
To be honest, at Dollar Stores I first saw the big roll of galvanized wire, 20 gauge, 45,72 metres long and thought how many antennae projects I can make from it.



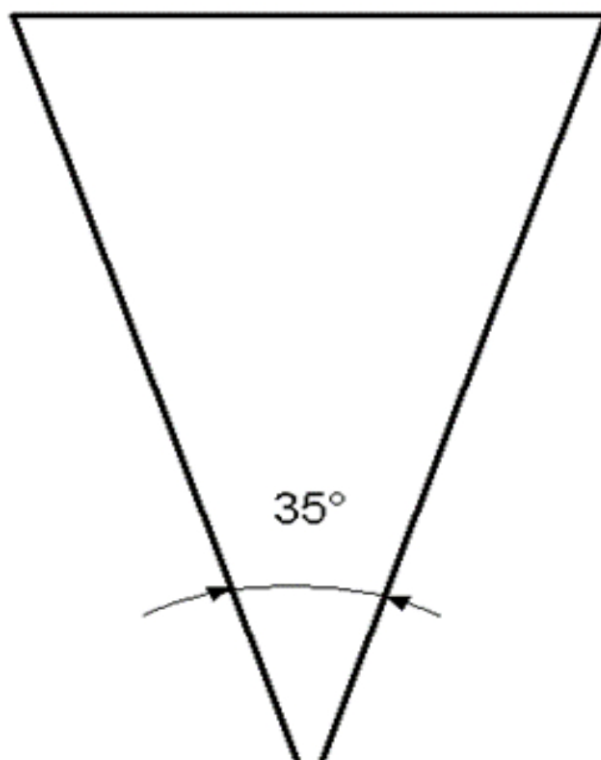
The idea was to put the antennas directly on top of my walkie-talkie and eliminate the feeding line. I cut, bent in different ways and I measured with my NanoVNA v2. I failed and failed, which was to be expected. And when I finally started to obtain results, I found out some French guys already did everything I wanted to do. <http://f6kft.free.fr/spip.php?article183>

So, this article is more a presentation of their work and a note why actually the idea was good, but not worth (in my opinion) to put into practice.

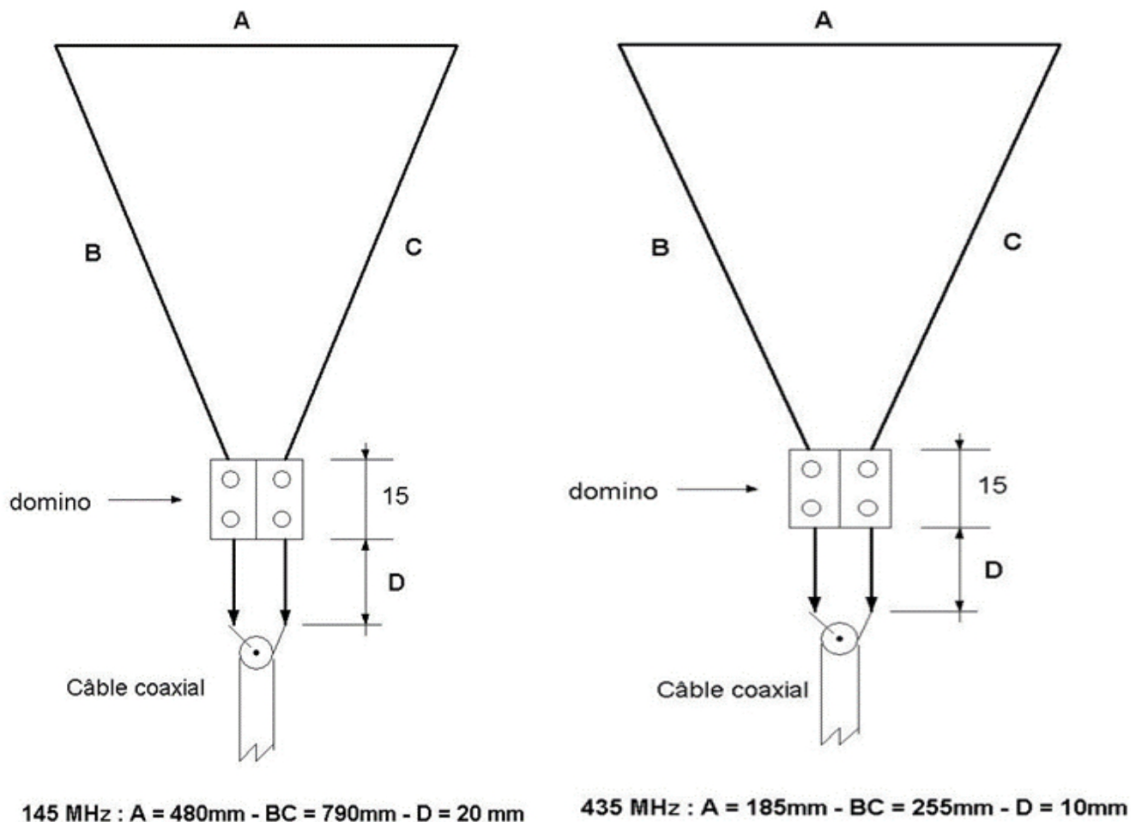
To cut a long story short, the difficult thing for a loop antenna is to adapt its impedance to the 50 Ohm cable. The solution the French got to, is to bend the wire in a certain way, in 35 degrees and the sides of the delta loop not to be equal. My own experiments confirmed this.



120 Ohms



50 Ohms



F5HD made it centred on 145 MHz (SWR under 1,4). F6CNO made it for 435 MHz (SWR under 1,57). Diagrams above.

Generally, they got at the following dimensions: A (in cm) = $6960/F$ (in MHz). B = C (in cm) = $11455/F$ (in MHz).

Jean Matthieu, F5RCT simulated the antenna, he could not find 50 Ohm at the feeding point, but around 37 Ohm. This was to be expected, because the measurements are very dependent on the surrounding objects and of how the measurement instrument itself is connected and positioned in comparison with the antenna. The gain would be just 1,5 dB more than a simple dipole. The polarization is horizontal, the antenna must be rotated 90 degrees for a vertical polarization.

Why I would not use such a delta loop antenna As confirmed by the simulations, the B and C sides of the delta loop antenna do not contribute to the radiation, being in opposition one to another and nullifying. So, it remains from the whole bunch of wire, just 48 cm (for the 2-metre band) to be active, the rest of the construction just adapts the impedance for the feeding line. A good long wire for close to nothing (1,58 metres) and the delta loop is a big surface, a big construction.

If I would go with a $\frac{1}{4}$ -wavelength vertical antenna I would use a 480 mm stick. It is exactly as the above 48 cm active A side of the delta loop.

Why bother with the complications?

It was proved once again that before I reinvent the wheel and I ask a pattern for it, I should look on the Internet for others who eventually already discovered the wheel (LOL).

Foundations of Amateur Radio

The art of troubleshooting the digital world

The lure of digital modes and the opportunities they bring are enough to tempt some amateurs to begin a journey into integrating their radio and computer to make a new world come to life. This isn't without pain or challenge, but the outcomes are so enticing that many embark on this adventure every day.

As a person who has made this trip it's heart warming to see the joy writ large on the face of an amateur who makes their first FT8 contact on a home brew wire dipole rigged together on a Sunday afternoon to take advantage of the latest opening on the 10m band.

On the flip side, it's heart breaking to see an amateur falter at the first hurdle, attempting to make their computer talk to their radio and giving up because it just won't work. At first this attitude bewildered me in a community of experimenters, but over time I've come to understand that sometimes an analogue approach isn't suited to the digital world. There isn't really a place where you can attach your multimeter and see why the serial connection isn't working, nor is there any universal document that can walk you through how to set things up.

So, for you, if you're in a place where you've all but given up, let me see if I can find words to encourage you to keep trying. I'll skip the propaganda about going digital and move straight to making it work.

This might come as a surprise, but in the digital world, things are built in complex layers of interdependence. Said in another way, using an analogy, to turn on a light you need flick a switch, which depends on power to the switch, which depends on power from the fuse box, which depends on power from the street, which depends on power from the substation and so-on.

If you flick the switch and the light stays off, you need to figure out which part of the chain failed. Did it fail at the bulb or at the substation? If the street is dark, do you need to check the fuse box or the bulb? That's not to say that either, or even both, can also be faulty, but there's no point in checking until the street has power.

>From a fault finding perspective, the number of variables that you have control over, in the case of a light bulb not switching on, is strictly limited. You can control the bulb and the fuse and in most cases that's about it, the rest of the chain is outside your direct control.

In attempting to make a computer talk to a radio you can be forgiven in thinking that the level of complexity associated with such a trivial task is just as direct and straightforward. Unfortunately, you'd be wrong. It's not your fault. A popular slogan "Plug and Play" made people think that computers were easy to use and control.

The truth is a far darker reality. One of the hidden sources of frustration in the digital world is the extreme level of complexity. In our quest to standardise and simplify we have built a fragile Jenga tower of software that can collapse at any point. Most of the time this is completely invisible but that doesn't cause it to be any less real. Computers are simple, but only if you control the environment. And when I say control, I mean take ownership of each change.

Updating the operating system? Installing a new application? Adding a new peripheral? Changing location? All these things, innocuous as they might seem, can fundamentally alter the behaviour of your environment.

As an example, consider the location of your device. Let's say that you changed the location of your computer, either physically or via a preference. All of a sudden your Wi-Fi network stops working. The one that you used for years. Turns out that changing location changed the Wi-Fi driver to stop using a particular channel, not permitted in your new location. If you're curious, this happened to me last week.

The point being that troubleshooting is about controlling change in that fragile environment.

So, when you're trying to figure out how to make your serial connection work, you need to stop fiddling with everything all at once and change one thing at a time. Discovering the layers of dependency makes this difficult at times, but not impossible.

For example, a working serial connection requires that both ends are physically connected, speaking the same language at the same speed. That depends on the radio being correctly configured, but it also depends on the computer having the right drivers installed. It also depends on the software you're using being configured correctly to talk to the right serial device and the operating system giving your software permission to do so. It depends on the software using the right radio mode and it depends on the radio being switched on.

Now, imagine the serial connection "not working".

Do you check the radio mode before you check if the radio is turned on?

What about the physical connection?

When you're troubleshooting, you cannot just look at the error message on the screen and follow that path. You need to ensure that all the underlying things are working first. You don't check the bulb until there's light in the street. Same thing. No need to worry about the error until you've discovered that the radio is on, the cable connected correctly, the driver installed correctly, the speeds set right and the mode configured properly. If and only if that's all correct, then look at the error.

This becomes harder if it worked yesterday. What changed between then and now? Did your operating system do an update? Did your radio forget its settings? Did the cat jump on your desk and dislodge a cable overnight? Is there an earth fault that caused the serial connection to cease working?

Sometimes, despite your best efforts, you cannot find the problem.

At that point you need to take a step back and think about how to prove that something is working in the way that you think it is. Multimeter to a light bulb to check continuity - style. In the case of a serial connection, what can you use to test the link if your favourite tool doesn't work or stopped working suddenly?

I've said this before, but it bears repeating, since it's not obvious.

Troubleshooting is all about discovering and controlling change.

Pick one thing to test, prove that it's correct, then pick the next. Eventually you'll come across a "Duh" moment. Don't sweat it, we've all been there. Now do it again!

What's your best troubleshooting moment?

I'm Onno VK6FLAB

DXPEDITIONS

OJ0T Market Reef

OJ0T Team will be active from Market Reef, IOTA EU - 053, 27 April - 4 May 2024.

Team - LA1UW, LA3WAA, LB5SH, LB0VG.

They will operate on 160 - 6m, CW, SSB, Digital Modes.

OJ0T call sign will be used CW, SSB.

On FT8 they will use OJ0/LA1UW, OJ0/LA3WAA, OJ0/LB5SH, OJ0/LB0VG.

QSL via EA5GL.

Address for direct QSL: PEDRO MIGUEL RONDA MONSELL, MAXIMILIANO THOUS 16-24, E-46009, VALENCIA, Spain.

A52P A52CI Bhutan

A52P op SP9FIH and A52CI op SP6CIK will be active from Bhutan, 19 April - 4 May 2024.

They will operate on HF Bands.

QSL via ClubLog OQRS, LOTW.

FT4GL Glorioso Islands

Marek, FH4VVK is planning to be active as FT4GL from Glorioso Islands, IOTA AF - 011, 24 May - 19 June 2024.

He will operate on HF Bands.

QSL via F4FTV, LOTW.

DXCC Country - Glorioso Islands, FR/G. QTH Locator - LH38pk.

Glorioso Islands a group of small uninhabited islands in the Indian Ocean. Geographically belong to the Comorian Archipelago.

Z81D South Sudan

Diya, YI1DZ will be active as Z81D from Juba, South Sudan, starting 15 April 2024.

He will operate on 40-6m Bands, SSB, FT8 and possibly 80 and 60m.

QSL via OM3JW, LOTW, ClubLog, eQSL.

Address for QSL direct: STEFAN HORECKY, MLYNSKA 2, 900 31 STUPAVA, Slovak Republic.

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