



## North Bristol Amateur Radio Club

S.H.E.7, Braemar Crescent, Northville, Bristol BS7 0TD  
G4GCT, M0NBC, G6PNB

February 2020

### **The AGM**

The AGM was to be held on 14<sup>th</sup> February but due to unforeseen circumstances, has had to be **postponed until March 20<sup>th</sup>** we apologise for the inconvenience. This is the one meeting of the year that can make a difference. Don't forget that if wish to stand for Committee, there are forms available.

### **Bletchley Park**

Not long now, remember to book your seat. Just a reminder, the trip is on Saturday 25<sup>th</sup> April see Me Dave G7BYN for your Ticket, the cost is £15.50 for the coach.

### **Christmas Bun Fight**

A mighty thank you goes out to Ben 2E0RBK and his Daughter for the magnificent meal also food Hampers as a Raffle prizes. Ready for next year? I am.

### **Events This Year**

There is just over three months until the first event of the year. Mills On The Air takes place on May 9<sup>th</sup> and 10<sup>th</sup> so It is not long to get everything together. We have a new radio for events, an

Icom IC-7300 so the radio shack can now stay in one piece. All the equipment for events will be in the crates and ready to go. I am in the process of making a new antenna for the club. It is an inverted V so we can use the club's SOTA pole to support it. The advantage is that the antenna will be higher and the pole takes little strain. If you remember at the Mill last year the 20ft poles bent under the weight of the wire and we lost over 5ft of height in the centre. This will be then available in the go kit to use at other events.

### **RADCOM**

The Club had a segment in January's edition but this is bitter sweet. A great disappointment. The Editor's team promised that our ROTA event would be in the December edition but, empty space. An email was promptly sent to the editorial team followed by a phone call from me. A response was to be sent to me as soon as Elaine, the editor, was back off her holidays. The message never got to her and, what's more, she never knew anything about the story. 50 lashes to someone named Giles!! at the RSGB. Good News

Elaine said she would publish it in Around Your Region. (Feb Edition) A bit late and from front cover news to the back pages but, I guess we are in there. There was however a piece on the training we do as a club. As I said earlier that appeared in the January edition. A photograph of yours truly with Nick M7NCK at the Lighthouse event in Avonmouth headed the piece.

**YouTube** There is a small segment of the Churchill recording, go to you tube, type in **NBARC** and look for Churchill. It is well worth a look.

**Club Members HF Antennas.** Rocky has been getting stuck in to making antennas for the HF band. The problem he has is that he's no yard, just a communal area, if he plays his cards right and his neighbours are accommodating, he may put something up on the metal rails that surround the area. Until then, with his indoor antenna he has managed to work Portugal on 40m. Not bad for a bit of wire and 10w. It is good to see that someone is taking an interest in experimenting.



Rocky's Indoor Dipole

Another of us who has been experimenting is Claude M1CEL. He has been experimenting with a Doublet or a ladder line fed Dipole. He tells me that he has not had great success with this set up so has modified it several times. That is what is all about, experimenting and as I have said before, what works for one of us may not necessarily work for you. Feedback on Claude's Top Band and 80m testing was with the help of Dave M0HDJ on the 70cm Band. Well done Rocky and Claude.

**Club's Inverted "V" Antenna.** I wanted to bring you details of the club's antenna setup for our go pack but so far the weather has stopped me. Rocky is giving me a hand set it up as soon as the weather dries up a bit. And we will try it out at the club QTH.

**Club Nets.** The club operate regular nets at the following times.

Saturday GB7BS Time Slot 2  
TG950 SW Cluster at  
19:00 Local

Sundays 80m Net 3.650MHz  
08:30am Local  
(Ends at news time)

Sundays GB3AC at 20:00 Local

Wednesdays GB3BS at 20:00 Local

## TOTA (Transmitters On The Air)

So, here we are at last – Sunday March 28 2021, our new event day out celebrating TOTA (Transmitters on the Air!) all bands and modes. Location:- IO81qf, the hills overlooking Wells Somerset near to the Mendip TV transmitter mast 18 miles from Bristol. It is going to be a lovely day out and the weather is set good. What could possibly go wrong and how hard could it be? After all, we have done this kind of thing loads of times. Our scheduled kick off time is 10.00 UTC. It is 09.00 (plenty of time) and Members with friends & family are beginning to arrive. One (Dave 3), had already arrived and said “At last! I was beginning to wonder if I had got the wrong day”. We all looked a bit baffled but no matter, we set about unloading the vehicles: the Club ‘away day’ equipment crates, Gazebo and so on – you know the usual things!

The Member (Dave 1) who was going to supply the VHF & UHF antenna and mast had not arrived yet but no matter, plenty to do unpacking. One Member shouted: “Who has the other Gazebo leg – I can only find 3 in the pack!”

The silence was deafening – we had only come with 3 of the 4 legs. No matter, a little improvising soon meant that the tent was up. Anyone got the chairs ? “I think that Dave 2 was bringing them and he hasn’t arrived yet”. “No, I distinctly recall that Dave 3 came the response.” “Not me replied Dave 3”. No sign of any chairs. At least we had the generator and cables so could set to connecting up the Club HF and VHF/UHF transceiver on to the table that **had** arrived. Well, we could have done if the 13Amp extension cable had been packed. Who has the antenna coax cables? Dave 2 again.

In the end, by 9.45 we had the chairs and extension lead (Dave 5 arrived with them). No sign of the HF antenna being loaned by Dave 4.

“Can’t wait any longer – rig up some mains wire (that someone found in their boot) said another person standing watching the events unravelling and getting a little exasperated. With the power up and ready, connected to the transceivers the HF unit was fired up. The internal ATU just about loaded up to the long wire on 20 metres – plenty of activity already. Still no VHF/UHF antennae.

10 to 10 and we had a plaintive phone call from Dave 2 asking where everyone was. He said that he had to start very early and did not enjoy the

50 mile trip to Treherbert South Wales (grid reference:- IO81fq) and that the fact that the clocks went forward one hour meant that he was very tired. “That explains why I waited for an hour before anyone else showed up here muttered Dave 3”

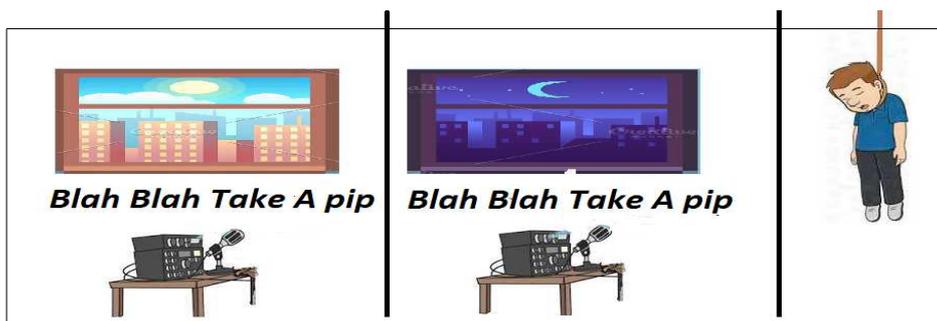
10.00 arrived. “Right, time for the first CQ call”. Problem. “Who’s got the microphone then?”

We never did see the transmitter operating on HF, nor VHF. The generator dies shortly after it had been started due to the spare can of petrol not arriving. It transpired that Dave 1 had gone on holiday and thought it was the following Sunday. We therefore decided to call it a day at 12.00 and went into Wells for a pub lunch. As for Dave 2 he took his family off to Cardiff to visit the Castle .....

The moral of this little bit of fiction is Plan, Communicate and Coordinate to ensure all needed items arrive **ON time** (UTC or BST!) and make sure that the away day kit as well as any items loaned by Members is all there and fit for purpose and do not assume somebody else is responsible! Above all ensure we are all know the location and times (even taking account for UTC / BST!) and who is bringing what.

To help us in our away day events, the Committee has decided to implement a bit of Bureaucracy in the form of a set of check lists and a general kit register which we would like all participants to “sign up” to and I would like to have a session shortly to explain the documentation and process. This will also include a tracking process that assigns responsibility to individuals and where the kit is (e.g. if borrowing Club kit checking in to and out from the Club QTH or volunteering to bring their own kit, help with transport etc.) for the kit. We already have an informal signing in/out book that also doubles up as an “issues” book (e.g. broken or missing items, things that need to be fixed etc.)

Dave Roake M0RKE (Shack Manager)



## The Mystery Of The J pole Made Simple

We all know the J pole, but how does it work? With no radials or ground plane. If I said it is an end fed antenna you may laugh. That is exactly what it is.

I will split the Jpole into 3 sections so you can understand each section.

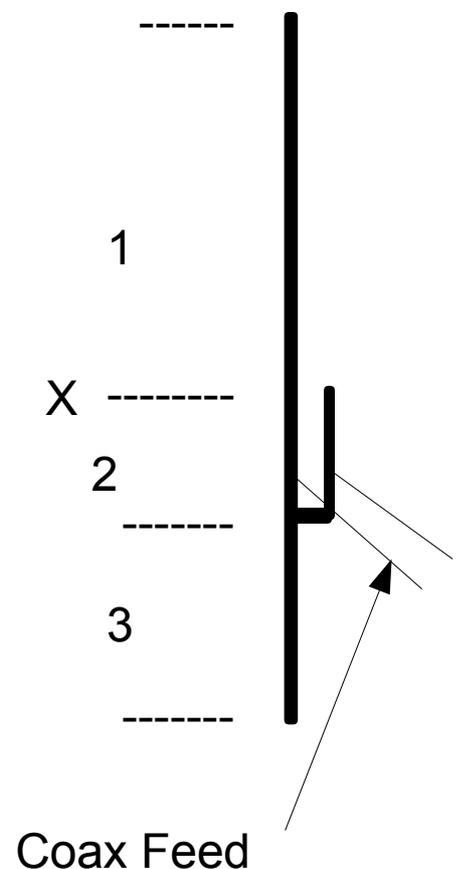
**Section 1** is a half wave section at the operating frequency. It is just a rod or wire. The impedance at the end marked "X" is several thousand ohms. Now we need to match to our rig of  $50\Omega$ , this is where the matching section the "J" comes in.

**Section 2** is the  $\frac{1}{4}$  wave matching section. Shock, Horror, It Is Short Circuit. Well, it is at DC but, we are dealing with AC at Radio frequencies. The section being  $\frac{1}{4}$  wave in length has an impedance at the open end of several thousand ohms and at the shorted end it is well, shorted i.e.  $0\Omega$ . Somewhere between the two ends must be  $50\Omega$ . This is just what we are looking for to attach our coax to the rig. In practice we make the tapping point adjustable. When the correct point is found mark the points, solder or fix the coax feeder by your favourite method.

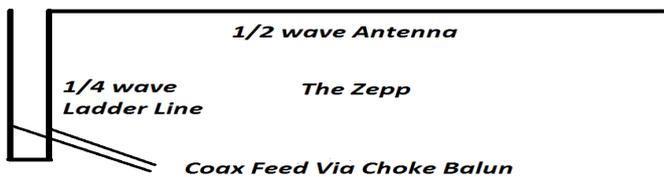
Remember, as it is a balanced antenna don't forget to choke off the RF with a few turns of coax formed into a coil by the feed point.

There are other forms of this antenna, the Slim Jim and the old HF antenna called the Zep. The ZEP, short for Zeppelin was designed in 1909 by Hans Bgerow for use in,

yes, you guessed it Zeppelin Air Ships. The matching section like the J in the Jpole is ladder line and is at 90 degrees to the radiating section.



The advantage of these antennas is you will notice that there are no radials. The Zepp can be hung in place of your long wire. If you use a long wire at the moment hang this one up and give it a try. They are generally tuned for only one band but, experiment and let us know how you get on.



Here is the Zep. You notice it is the same as J-pole. The “J” section is turned through 90 degrees and is generally made of 400Ω ladder line. Again you find the feed point to be at 50Ω

I hope that this has helped you, give these antennas a try, experiment and have some fun.

### **Chairman's Chatter**

2019 was a busy year for the club but a productive one. We achieved 90% of the programme to plan. Many club activities were undertaken too many to mention in detail but provided a lot of publicity for the club.

We pushed the boat out regarding the old radio exam syllabus coming to an end and managed to get a lot of candidates through the Exam thanks to the dedication of the trainers and helpers.

The end of the year was celebrated by our ever popular Christmas party thanks to Ben and his daughter who did the catering. We had a large attendance which seems to be increasing each year (must be the food)!!. The usual raffle was

undertaken and thanks to Alan and June, we sold a lot of tickets culminating into extra income which we put towards the cost of the Christmas party.

Moving forward, we have a lot to do in 2020 getting ready for the new Training Syllabus and planned radio / field day events. All of these will be listed on our new programme that can be found and downloaded from our Website

[www.nbarc.weebly.com](http://www.nbarc.weebly.com)

### **Calendar Of Events**

We advise at the moment to go to the club's web site to get the latest details.

### **Contact Details**

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Next Q5 May 2020

If you have anything to include in the next edition, my contact details are above.