



# North Bristol Amateur Radio Club

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

July 2021

Covid-19 Edition

## First Club Meeting Since Friday 13<sup>th</sup> March 2020

Our first meeting on the 11<sup>th</sup> June went well with 18 members turning up. The weather was quite warm and stayed dry until about 9:30. Quite a Chin Wag!! We met Mikey M7LJG and Rik 2E0HFR for the first time, although not members yet, often calling into the net on a Wednesday and Friday. Also another couple of visitors were AJ, wishing take his foundation licence whilst joining the club and Matt, a visitor, from over the pond, sorry I had forgotten his call sign but I think it was W5----?

We then met again on the 25<sup>th</sup> June. A bit colder (Well it is Summer). A few new faces and Some from the past. It is great How the word gets around about The meetings. It is going to be Great when we all get to have Proper meetings at SHE7.



Standing in small groups catching up on old times. It is to be noted that the regulations at the time of our meeting is that we can have a gathering of 30 people or less. Well, we were a maximum of 18 so we fully complied. Many of us haven't seen each other for 14 months or so. Our last meeting was, believe it or not on Friday 13<sup>th</sup> March 2020. We would have been back at She7 if lockdown had not been extended but, I guess with the new Indian variant on the rise it is to be safe. I will say again, have a jab, please have it. "Don't be a coward"

## First Club Meeting With Photographs



Here is our chairman Paul, G8YMM with Mikey, M7LJG. Just in case you forgot what our chairman looks like after all these months, he is the one on the left.

It was good to catch up on old times. I know that we do talk on the radio from time to time but, it is always good to meet face to face.

There is a “Word from the Chair” near the back page of this Q5.

Here is Matt W5? He is currently working here in the UK. He noticed the meeting listed in our Web Pages. It just goes to prove that a good web presence is a must have for any radio club.

Our discussion was alas not so much radio based but, Matt's visit to various places in the UK and mine to the US.

Peter, 2E0PGS is busy sorting the web presents and is moving to another supplier. More of this in latter editions of Q5

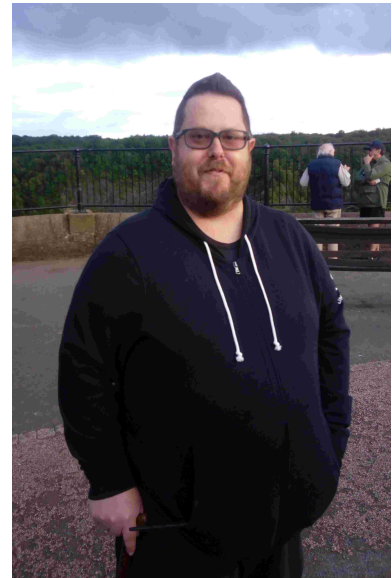


AJ, works in the computer department of a logistics company in Chippenham and can't wait to start studying for his foundation licence.

We learned that AJ was a keen motorcyclist. I know that we have at least 3 or 4 in our club. Something to chat about on one of our net nights so hurry up AJ and get your licence, we wish you well.

Last but not least, here is Rik 2E0HFR. He studied and took his foundation at home during lock down. He then went on to taking his Intermediate also from also home. We followed his progress on our nets over the months and has proved to be a very accomplished operator using his favourite radio, the new Icom IC705 QRP rig. On just 10w he has worked across Europe and parts of the states.

Other hobbies he has is Archery and is so good he's a medal winner in his local club. Wow, keep is up Rik.



## The First Local Radio Rally Since Lockdown

**Chippenham**  
& district  
AMATEUR RADIO CLUB

COVID-19  
SECURE

RSGB

# Wiltshire Radio Rally Electronics Fair & Car Boot Sale

**Sunday 1<sup>st</sup> August 2021  
9am - 3pm**

**Kington Langley Village Hall & fields**  
Church Road, Chippenham, Wiltshire, SN15 5NJ

**Huge 4 acre site available for  
exhibitors, sellers and parking!**

**FREE ADMISSION**

**Seller's pitches from £10 (vans £20)**  
**Only minutes from M4 (jct 17)**  
**Hot/Cold refreshments available on-site**  
**Disabled parking available**

[www.chippenhamradio.club](http://www.chippenhamradio.club)

I hope to see you there. Let us hope the rain stays off and the sun comes out for this one.

Note, the fields are being use as well as the hall, so if you are at all worried about crowds indoors this may allay your fears.

It is unfortunate that our very own local rally in Frome as managed by Shaun, G8VPG and the Severnside Television group had to be cancelled. It was just a month too early for the lockdown restrictions to be lifted. However it will return in 2022.

Please be aware that things can still change and we must follow the government and local authority guide lines.

## My MFJ Loop Problems By Paul G8YMM

Early this year I manage to get some day light hours to visually inspect and check out my HF radio antennas. One aerial that was not tuning correctly was my MFJ magnetic loop that I bought second hand some 10 years ago.



I particularly noticed this issue visually on the Flex Radio Panoramic Display whilst trying to tune the loop for maximum receive peak on the loop's controller. It was very intermittent at certain points on the bands particularly 40m where I was going to use the data mode WSPR.

I initially thought that the geared motor driving the large tuning capacitor was faulty or that the capacitor itself may be sticking on the shaft. See example from an old photo.

So, I decided to remove the loop off the mast and bring it down for servicing. At that point whilst undoing the bracket I could hear significant amounts of water moving around in the large protective casing which houses the capacitor. Straight away I realised that the capacitors veins must be dipping into the water whilst rotating around so the quickest way to resolve this was to simply drill a small drain hole using a battery drill for safety.

Can you imagine how much water poured out when I pulled the drill bit out, nearly 3 mugs full



## Loop Problems Continued

Once drained I decided to check again and hey presto the MFJ tuned correctly. Further inspection revealed that the water must be getting into the loops protective casing at the entry and exit points of the loop itself. I also deduced because the loop is configured horizontally there is no mechanism in the design for the water to drain out. If it was vertical the water would simply drain out the sides where the holes are made for the loop.



A temporary fix using a hot glue gun filled the gaps between the metal loop and the plastic housing using a Black Glue. All this with a view in the summer to give it a proper service. One thing I was concerned with, was the Black plastic glue going to affect the performance of the loop? I checked it and as it happened, I saw no deterioration to the performance. Don't be fooled as some Black plastics can contain carbon and may cause issues at certain frequencies and high RF voltages.

I am pleased to say the loop is still working very effective particularly for data modes due to its narrow selective bandwidth. It's an ideal aerial if you have confined or limited space to work in but it is expensive unless you can find one second hand or make a loop yourself.

73 Paul

G8YMM

Editor's comment

Now may be a good time for everyone to check your antenna system, I have and had found loose fixing bolt.

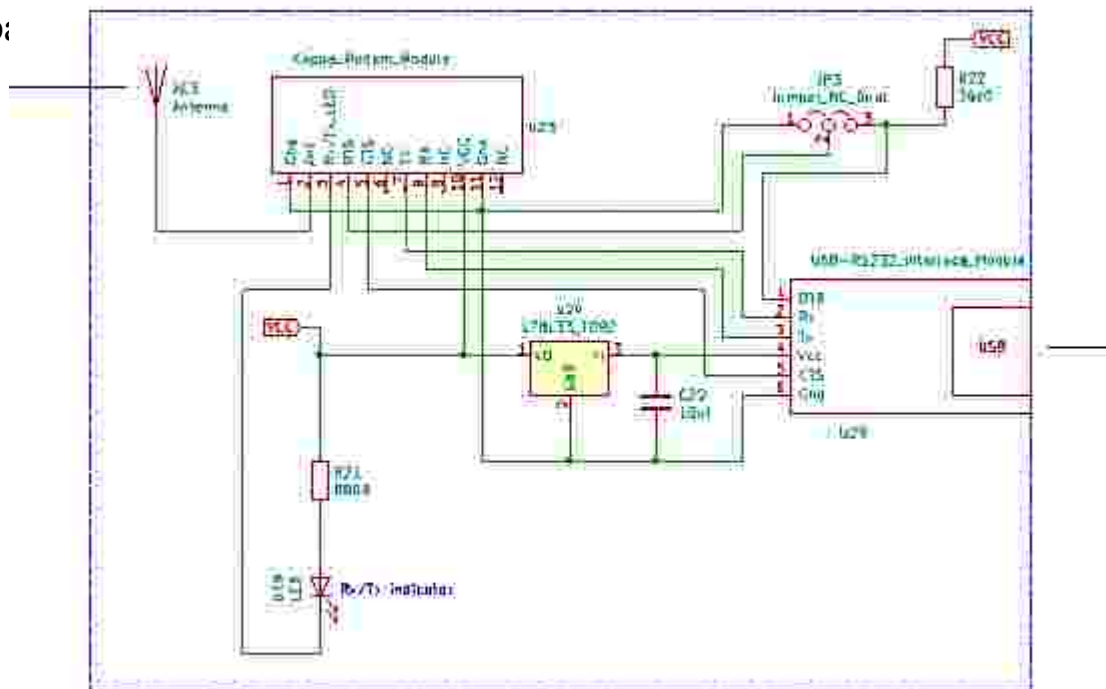
# Remote control Using the ISM Bands By Dennis Bachan

Whilst engaging in another one of my interests, Unmanned Vehicles. I required a RF Modem to control the video camera. The remote control was to operate some hundreds of meters, so a long piece of wire was out of the question. The vehicle uses 40MHz, radio control and the video is 2.45 GHz. So digging around on the web I came across RF solutions that do a lot of products for the 433MHz and 868MHz scientific bands (ISM) and licence free.

After some research I came across the KAPPA range of RF products. The design criteria was that the modem had to be transparent i.e. behave like a piece of wire and this modem gave me this function. A great majority of RF modems need a CPU interface because they get involved in packets etc.

This modem gave a performance of 19200 baud to the source and 56 Kilo-baud over the RF channel. This difference gave the transmission some form of error retries without slowing down the transmission rate. The modem also supports hand shacking using RTS and CTS control (if required).

The RF modem works in both directions (Transceiver) in simplex mode which is ideal for RS232 serial communication. The RF modem for this project comprises of a RS232 interface using a USB connection which is directly connected to the RF modem e with a transp:

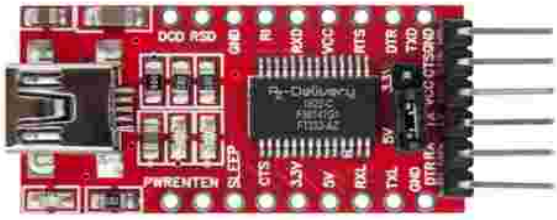


Useful web sites.

USB to RS232 board – AZ delivery -

<https://www.az-delivery.uk/de/>

FT232-AZ USB to TTL serial adapter for 3.3V and 5V



<https://www.az-delivery.uk/de/collections/more-products-4/products/ftdi-adapter-ft232r>



Kappa Board – KAPPA-M686=SO  
<https://www.rfsolutions.co.uk/radio-modules-c10/radio-modem-module-smt-package-868mhz-p389>



1/4 WAVE FLEXI 868MHZ 90  
DEGREE SMA ANTENNA  
<https://www.rfsolutions.co.uk/antennas-c8/1-4-wave-flexi-868mhz-90-degree-sma-antenna-p147>

Footnote:

With good antennas they claim that it is good for 1 kilometre.

Even though the device uses 3 volt supply the inputs are 5 volt tolerant, so no translators are required.

RTS/DTR is shorted to ground by the link.

Example: Is talking to your radio in the shed from the house using your PC over the communication link.

## **A Word from The Chair**

It's been such a long time since we all met up. However, thanks to Dave G7BYN and Matt G7FBD they suggested and organised some club meets outside for the time being until we get back into the club building pending Government announcements. Details are regularly published on the website and sent via email so please check regularly to avoid missing out.

For the next upcoming club meet, we proposed to book some tables at a pub near the club and make it more of a social event plus we can sit down and sip a few beers. So, I do hope you can attend as it's good to see you all and catch up.

For myself, I continue to make the daily unsociable commutes to London and work pretty much isolate keeping London Underground moving. It's a complex job that has required a lot of working practices to change and insuring everyone is safe. The initial forecast is 40% staff will return to the office in September 2021 whilst the rest will work from home for the time being. This is a current reflection at the time of publication. I am considering doing a talk in the future if acceptable, about the challenges and physical complexities we faced behind the scenes during the pandemic not withstanding the sad loss of life, illnesses and destruction this virus has caused.

I am very optimistic we will get the Club open soon after the next Government announcements hence the committee and club members are working in the background to ensure we have everything in place. Details will be published as soon as we know.

In the meantime, let's stay positive and safe whatever the outcomes are. We can only do our best in these challenging times.

See you at the next club meet.

73

Paul  
G8YMM



## **NBARC Nets**

To spice up our nets, the Wed net will be a Technical net. If members have a problem, or just want to know how something works, ask your question here. This came about because some participants of our nets didn't want to spend the night talking about the weather and general chit chat. They said it was boring, so wouldn't come on any net. The Chit Chat evenings will be the club night being Friday and the Sunday net. We hope this will cater for all.

**Wednesday net** GB3BS 20:00 to 21:00 Local

**Friday net** GB3AC (If Working) 19:00 to 19:30 Then QSY to GB3BS  
19:30 to 20:00 more often than not to 20:30

**Saturday DMR Net GB7BS** 19:00 to 20:00 South west cluster TS2 (950)

**Sunday morning 80m Net** 3.65MHz 08:00 has now been suspended.

**Sunday Evening Net** This was on GB3AA for a while but, the Sunday Net now reverts to GB3BS 20:00 to 21:00 clock time.

## **Club Contacts**

### **Chairman**

Paul Stevenson G8YMM

Phone 07921942922

Email [g8ymm@nbarc.co.uk](mailto:g8ymm@nbarc.co.uk)

### **Editor**

Dave Bendrey

Phone 07533933831

Email [g7byn@blueyonder.co.uk](mailto:g7byn@blueyonder.co.uk)

### **Next Q5**

Early Aug (See Note opposite)

Dave G7BYN.

### **Q5 Publication**

During the pandemic I have been publishing Q5 as near to monthly as possible. However, as soon as we start back at the club Q5 will revert to quarterly. It is hoped that I will still get articles sent to me from time to time and I thank all of you that have submitted items over these difficult times.