

Newsletter

Chesham & District Amateur Radio Society

www.g3mdg.org.uk

December 2020

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

Welcome

The festive season is with us yet again, so without further ado Angie (M6WTL) and I wish you all "Season's Greetings".

For the past month we've been in lock-down due to COVID-19 so meetings have been via GB3TU and Zoom, and to great effect. Unfortunately we have been designated as a 'tier 2' area which means club meetings in December cannot be held at the village hall, Zoom meetings will replace club meetings with the usual net on GB3TU on the Wednesday evenings between.

As it's Christmas I trawled the Internet for something radio related, KN4AQ came to the rescue with 'Twas the night before Christmas, my thanks for the use of his poem.

Some companies go above and beyond to get things right, XGGComms fell into that category when I dealt with them this month.

My thanks go to Malcolm (G3ZNU), Dave (G8FMC) and James (M0JCQ) for their articles this month, without these it would have been a 'blank' canvas.

I've been busy this month with a WSPR Raspberry Pi project, Digital Modes for the Yaesu FT-847 and a box to carry 2 inputs with 1 output to the Yaesu FT-847 to enable phone and digital modes at the push of a switch. I'll report back next month on how I see the above performing.

Bryan M0IHY

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Contact details

Chairman - Jeremy Browne (G3XZG) Secretary - Angie Page (M6WTL)
Treasurer - Matt Whitchurch (M1DTG) Editor - Bryan Page (M0IHY)

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

Chairman's Ramble



On the 27th November I am sitting here wondering where the month has gone. I have been trying to do an audit of the good and bad results of this latest lockdown. I can't claim that its great to get out and enjoy nature as most of the paths through woods are just muddy and unpleasant to walk; It's not possible to enjoy birdsong, because they are understandably silent for the most part, unless you like pigeons.

On the other hand we are not suffering this year from Black Friday and what I've just heard is its follow-up of Cyber Monday, and things on the DX bands on CW are definitely looking up. My best DX this month is YBOECT in Jakarta, but have also heard a couple of Mexican stations which are not common, and have had some good reports from the southern states. It was particularly good to have conditions which enabled me to have a longer chat with a station in Dallas, which makes a change from the formulaic QSO that conditions usually allow.

Many thanks to those who have run the two successful meetings this month on Zoom. Realistically I was not expecting to be able to meet up personally in December and now that we are in tier two, that won't be possible, unless we fancy standing around outside in groups of 6, and I, for one, don't. I suppose we could hold a meeting and discuss radio whilst running on the spot, thus claiming to be an exercise class, but I think the meeting would be very short. Still we can hold our usual nets and a meeting on Zoom again on the 9th of December.

The hall have simply taken our bookings forward so that we are not paying for meetings that we can't have. We have also now had permission to use space in the room in which tables and chairs (and a broken fridge), are kept, for equipment storage, so when we are able, will need to find either a double-door cupboard, or a couple of filing cabinets, which should mean we can empty the cupboard at the Whitehill centre. I think that will be for the new year now.

Sadly, but understandably, Angie is standing down as secretary for health reasons. She has done a great job over the last couple of years, and we will all be able to give more formal thanks at the AGM in January. We do though need a new secretary and are looking to expand the committee, back to 5 people if possible, so, volunteers? Also, if anyone would like to have a go at chair, please let me know. Its not an oligarchy.

Looking at our first year's joint efforts with the Northampton club in contests, these seem to have been a success and the first results in the Affiliated Societies contests which are done in CDARS name are also very encouraging. The next one is the 144 MHz contest on 6th December, for which we had contemplated booking the hall, though as I write, I doubt if that will be possible. Let's hope the propagation for that is better than it was on 80 meters for the CW last evening.

Take care all.

73, Jeremy.

The Editors Mumble

With lock-down imposed upon us for a 2nd time life has certainly moved into the 'slow' lane (again), hopefully by the time this goes to press we may have some form of 'normality' (if it will ever be normal again!).

I've been busy this month sorting out digital modes on the Yaesu FT-847 and building my Raspberry Pi WSPR transmitter. Unfortunately the postal system has been hit hard by COVID-19 (more people ordering by mail than normal during the lockdown) and so the parts have only just arrived (27th November), I'll be putting the Raspberry Pi, FT-847 and SignalLink through their paces next month.

Next month I'll also share how I overcame two microphone leads but only one socket on the Yaesu FT-847.

Bryan M0IHY

As it's coming up for Christmas I decided to trawl the internet for something to put in the newsletter that was to do with both radio and Christmas, thanks to KN4AQ, this is what I found:

'Twas the night before Christmas,
And all through two-meters,
Not a signal was keying up
Any repeaters.

The antennas reached up
From the tower, quite high,
To catch the weak signals
That bounced from the sky.

The children, Technicians,
Took their HT's to bed,
And dreamed of the day
They'd be Extras, instead.

Mom put on her headphones,
I plugged in the key,
And we tuned 40 meters
For that rare ZK3.

When the meter was pegged
By a signal with power.
It smoked a small diode,
And, I swear, shook the tower.

Mom yanked off her phones,
And with all she could muster
Logged a spot of the signal
On the DX PacketCluster,

While I ran to the window
And peered up at the sky,
To see what could generate
RF that high.

It was way in the distance,
But the moon made it gleam -
A flying sleigh,
With an eight element beam,

And a little old driver
Who looked slightly mean,
So I thought for a moment
That it might be Wayne Green.

But no, it was Santa,
The Santa of Hams,
On a mission this Christmas
To clean up the bands.

He circled the tower,
Then stopped in his track,
And he slid down the coax
Right into the shack.

While Mom and I hid
Behind stacks of CQ,
This Santa of hamming
Knew just what to do.

He cleared off the shack desk
Of paper and parts,
And filled out all my late
QSLs, for a start.

He ran copper braid,
Took a steel rod and pounded
It into the earth
Till the station was grounded.

He tightened loose fittings,
Resoldered connections,
Cranked down modulation,
Installed lightning protection.

He neutralized tubes
In my linear amp...
(Never worked right before –
Now it works like a champ).

A new low-pass filter
Cleaned up the TV.
He corrected the settings
In my TNC.

He repaired the computer
That wouldn't compute,
And he backed up the hard drive
And got it to boot.

Then, he reached really deep
In the bag that he brought,
And he pulled out a big box.
"A new rig?" I thought!

"A new Kenwood? An Icom?
A Yaesu, for me?
An Elecraft, TEN-TEC
Or Flex, could it be!"
(If he thought I'd been bad
It might be QRP!)

Yes! The Ultimate station!
How could I deserve this?
Could it be all those weekends
I worked Public Service?

He hooked it all up
And in record time, quickly
Worked 100 countries,
All down on 160.

I should have been happy.
It was my call he sent.
But the cards and the postage
Will cost a month's rent!

He made final adjustments,
And left a card by the key:
"To Gary, from Santa Claus.
Seventy-Three."

Then he grabbed his HT,
Looked me straight in the eye,
Punched a code on the pad,
And was gone - no good bye.

I ran back to the station,
And the pile up was big.
But a card from St. Nick
Would be worth my new rig.

Oh, too late, for his final
Came over the air.
It was copied all over.
It was heard everywhere.

The Ham's Santa exclaimed
What an old ham expects:
"Merry Christmas to all,
And to all, good DX."

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I came across the existence of the GRAVES radar only recently, but some of you may have been aware of it for some time. GRAVES stands for Grand Réseau Adapté à la Veille Spatiale and is in France, just east of Dijon. The radar transmitter was set up in 2005 by the French Air Force to monitor satellite trajectories, but we can use its signal too.

The GRAVES transmit frequency of 143.050MHz is just below the 2m band, and many rigs will tune down that far to receive it, so it's a great beacon to use for an indication of propagation. But because of its power level, it can be used for other observations too.

First off, it transmits a constant carrier wave, unmodulated (no Morse code ident), but the signal is switched between antennas to scan in azimuth from 90 to 270 degrees with a scan period of 19.2s. Hence it scans the southern sky like a lighthouse. The elevation angle of the beam is 25 degrees. Although the radar antennas are facing south, there is enough signal coming in our direction to receive it on a reasonably sized beam – in my case a 7 element. Point your antenna at locator JN27 (136 degrees azimuth) and tune to 143.049 and you should be able to detect a 1kHz tone. Because it's pointing south it's not particularly strong under flat conditions, so I've been using the waterfall in WSJT-X to monitor the signal. In Figure 1a, the first trace is taken with the setting N Avg set to one – in other words the fastest vertical rate. You can tell the vertical rate from the time indications on the left – one block equals one minute. At this speed you can see the antenna switching – it looks like dashes on the line.

At a slower speed – N Avg set to 20 – some other artefacts become noticeable – see the second trace in Figure 1b. Firstly my own station “errors”. I had set my receiver to an indicated frequency of 143.049, so I expected to see the carrier as a 1kHz tone. In fact you can see its frequency is 1180Hz, so my rig is 180Hz wrong. The other thing to notice is the “wobble” towards the top of the trace. This confused me for a while until I noticed the rig cooling fans turning on and off at the same time – this was causing a frequency shift of over 10Hz. Not a problem in real world cases, but could be an issue for extreme narrow band work. Note to self – get a GPS locked 10MHz frequency reference to lock the rig to at some point.

Now for other artefacts. In Figure 2b you'll see a lot of streaks across the main signal, going from right to left (on a waterfall, time goes upwards!). These are reflections from satellites passing through the beam of the radar, and the frequency difference results from Doppler shift from the fast-moving objects. As there were so many reflections whilst I was making this observation, I am assuming they were from Starlink satellites. A look at the Heavens Above website will show where the satellites are, but there are now so many it's not trivial to work out which one might be each reflection! In Figure 2b the short diagonal streaks are aircraft reflections – you can see that the path between Bucks and Dijon is on a busy air corridor, and Air Scout confirms this. This trace also has some extra reflections – look about two-thirds down and there are a couple of bright horizontal streaks. Horizontal because they were very brief reflections, bright as they were strong reflections, and wide as the Doppler shift was large, all the indications of very fast moving objects – meteors.

The final series of pictures, Figure 3, show reflections from a rather more distant object, the moon. The GRAVES radar is powerful enough that moonbounce reflections can be picked up on quite modest antennas. WSJT has a handy moon data panel – after all the program was originally designed for moonbounce contacts. This shows you the direction of the moon and, even more usefully, the expected Doppler shift at the selected frequency. Figure 3a is a fairly high speed recording – N Avg set to a value of 4 – and shows the dashes from the scanning nature of the beam, confirming this is from the GRAVES radar. The Doppler shift of -193Hz has to be taken off our known frequency error of the TS2000 of 180Hz, so the trace is about 100Hz below the “intended” 1kHz tone. Figure 3b shows a stronger reflection, but a signal that comes and goes, possibly due to polarisation shifts during transit. Note the extra meteor pings on the nominal GRAVES frequency too.

A final point on these observations. Virtually all the signals received were inaudible! Without the signal processing advantage from the WSJT software I wouldn't have been aware of the signals lurking just below the noise level. The same goes for receiving beacons on the amateur bands, such as the mostly inaudible (from my location at least) GB3MCB in Cornwall. WSJT reveals it is there, with the tall-tale signs of aircraft reflections. Give it a try.

Do something new: the GRAVES radar - Malcolm G3ZNU

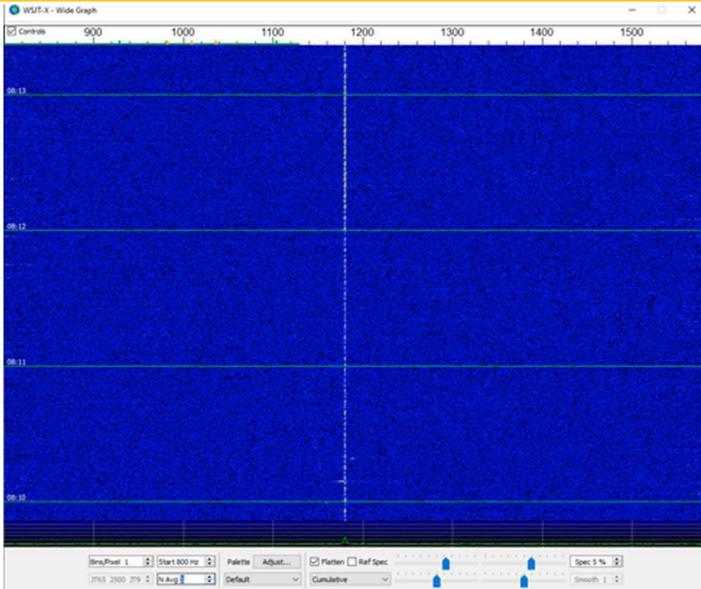


Figure 1a High speed recording showing antenna switching

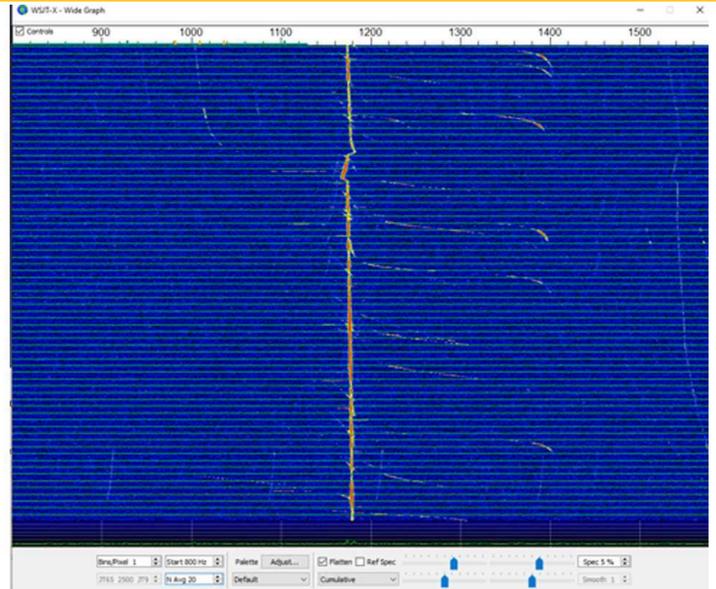


Figure 1b Low speed recording showing various artefacts

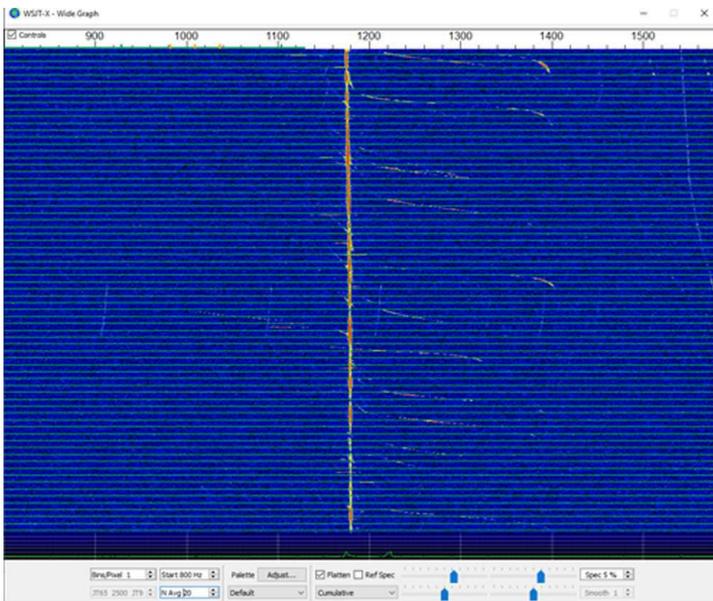


Figure 2a Satellite traces - maybe Starlink

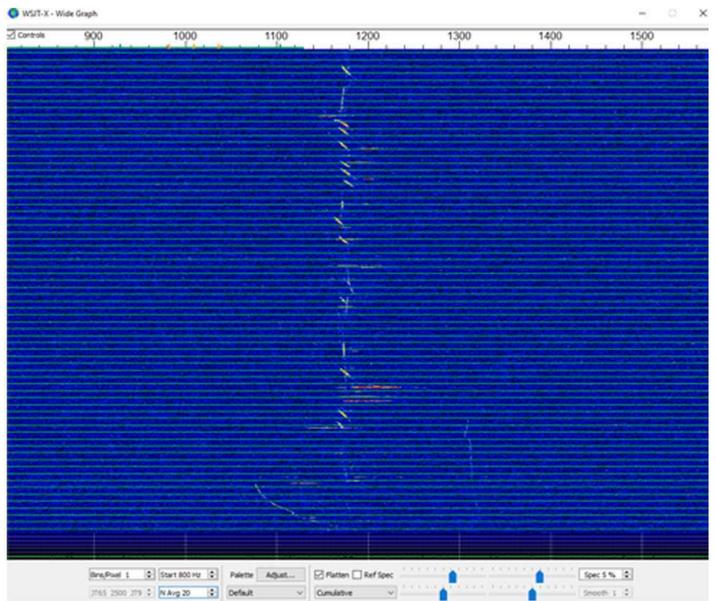


Figure 2b Aircraft reflections + meteors

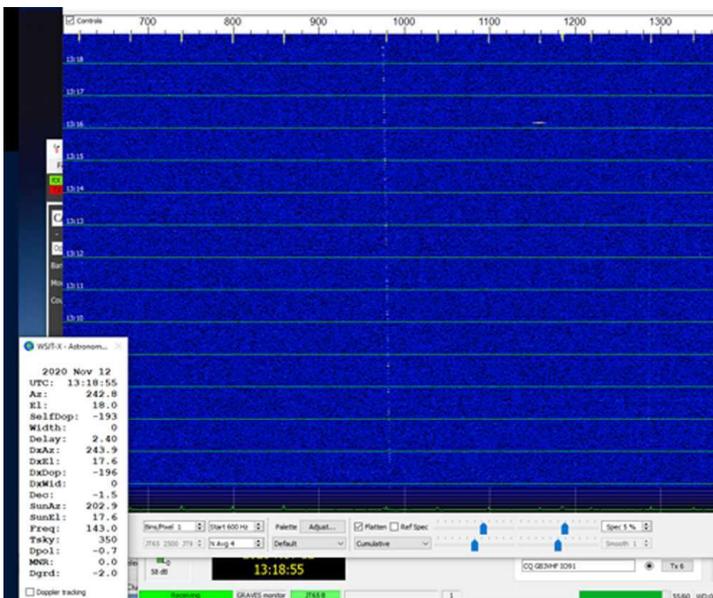


Figure 3a Moon reflection - note Doppler shift - 193Hz

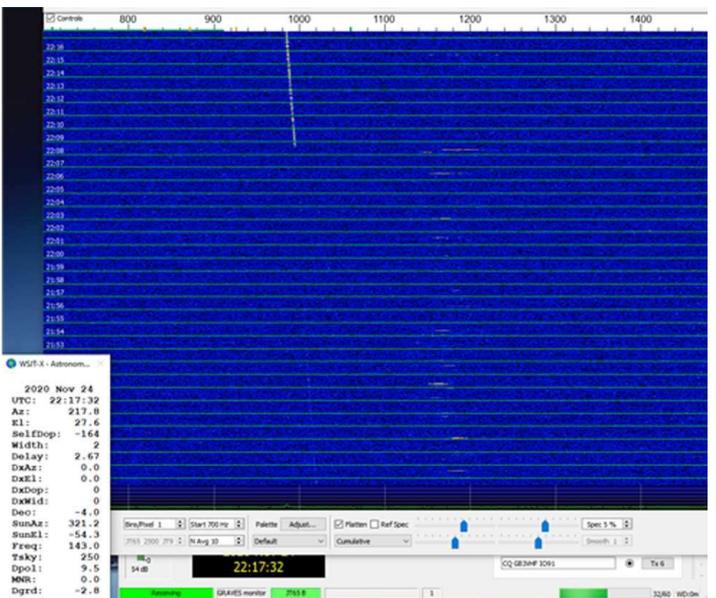


Figure 3b Moon reflection - Doppler shift = 164Hz + meteors

Some companies go above and beyond...

As I needed some form of hardware to get digital modes up and running on my FT-847 (unlike most modern rigs, it doesn't have an internal soundcard) I trawled the internet looking for suitable candidates. Before I carry on I must point out that I have 4 antenna inputs (160m-10m, 6m+4m, 2m and 70cm) and several ways of working digital modes, HF only is via the "Data" jack at the rear, FM is via the "PKT" socket at the rear but there's no 'all purpose' socket for all bands/all modes, so looking for that "elusive" hardware seemed a daunting task.

I came across <http://www.xggcomms.com>, their "About Us" page stated:

We are a UK Based Company and have been selling CAT and Digimode Products. We are like minded Amateur Radio Enthusiasts and so fully understand your requirements. We offer a personal level of service giving full support to our customers for the products that we sell and are happy to offer advice if you are unsure if a product is right for you.

If you have any questions about our range of products or if you require a bespoke cable solution, please use the Contact Us page and we will be happy to discuss your needs.

Thank you.

The XGGCOMMS.COM Team

Having read the above statement I thought I'd give them a try. It's surprising how many rigs they support, the FT-847 is one of them, all you have to do is use your inbuilt computer soundcard and you 'should' be able to work digital modes.

The unit duly arrived, it looked more like an octopus with the leads coming out of the box! One lead for the data jack at the rear, the 'D' type plug for CAT control, a USB male plug for the computer and 2 audio leads for the rear audio sockets on the PC, it looked like something out of 'Star Wars'.

My main concern has always been that whatever I use it must be compatible with my ham software, it was with relief that all seemed to work when I ran Ham Radio Deluxe, at least on receive. The waterfall showed what I expected it to with decoding of signals being correct. On transmit it was another thing, with the rig going in and out of transmit rapidly and no visible output on the power meter. I contacted Steve at XGGcomms, he gave me a few hints on what to try but this was to no avail, he then asked me to return the unit for him to check.

The next email I received from Steve was to say the unit checked out okay but that he'd put a ferrite on the USB lead in case it was picking up RF or anything untoward. I asked him to bill me for the postage because there was nothing wrong with the product, to which he replied, "*don't be silly, it's all part of the service*", something I've not experienced before.

I tried the hardware again but the problem was still there. Contacting Steve again I explained that I was going to try to interface the hardware with the microphone socket, this he understood, ending the conversation with "*you can still return the unit for a full refund*", which, unfortunately I'm going to do, it seems some FT-847 owners have had to go the 'front of the rig' route, which I am about to do also.

By the time this goes to press I would have picked up a TigerTronics Signalink unit with the 8-pin microphone lead from Martin Lynch & Son, a little inconvenience as you have to unplug the microphone to work digital modes, but if it does the job, that's all I can ask - maybe that would be an ideal project for me to combine both digital and microphone into a single switched box.

I feel that XGGcomms deserved a mention for "*going the extra mile*", not all companies would do what they did.

Bryan M0IHY

Antenna switching

Since I acquired the FT-847 I found switching from one rig to another a pain as I had to pull the FT-847 out, disconnect the coax and connect it to the TS590SG, something had to be done!

Initially I had antenna control outside on the decking with a single coax cable back into the shack, at the time it suited. Now with the extra rig in the shack I needed to redefine how things were to be done.



I have 3 incoming coaxial cables, the vertical (160m-10m), V2000 (6m, 2m, 70cm) and cobweb (20m, 17m, 15m, 12m, 10m, 6m, 4m), these feed a 3-way coaxial switch with the output to a 2-way coaxial switch (inverted), one side to the TS590SG, the other to the 6-way coaxial relay, 4 of whose outputs feed the FT-847.

Switching between rigs is now quite simple with your chosen antenna switched to on the 3-way, then select the rig on the 2-way, if switching to the FT-847 there is a further switch...

cont'd...

Antenna switching

This is a small project box I knocked up to switch to whatever element of the coaxial relay I wanted. I purchased the relay from Greece on eBay a couple of years ago for the princely sum of £99, it came complete with crimp SMA connectors and is superb value for money.

I have 2 spare positions on the box to match the 2 spare connectors on the coaxial relay, one of which I will use for the WSPR project I'm currently looking to build.

It's a pain having 4 antenna's into the FT-847, but no more coaxial cable swapping!

I prefer coaxial switching as it will deal with all frequencies whereas switch boxes (if they're the rocker type) will only deal with HF and are unsuitable for VHF/UHF, my coaxial relay is rated at DC to 12GHz, I believe it was out of an aircraft.



Bryan M0IHY

WSPR - The Raspberry Pi way.

After having had success on one hand with FT8 on 160m and total failure on the other on the SSB contest I've decided to build a Raspberry Pi WSPR (Weak Signal Propagation Reporter) to find out where my signal gets to and what time of day is best.

The parts list:

- Raspberry Pi Zero 'W' with header
- Case for the Pi
- SD card (I'm using a 16GB card, which is more than enough, 8GB will do).
- Micro-USB male to USB female lead (essential for first time booting)
- Micro-HDMI lead for the monitor
- Power supply
- Monitor
- Breadboard with 20-way * 2 header socket
- Low Pass Filter Band kit

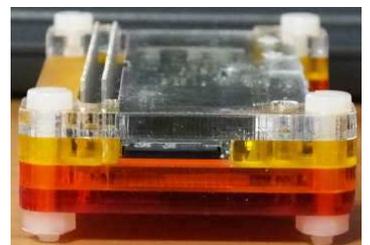
Web sites such as PiHut and Pimoroni will get you everything you need with the exception of the low pass filter kit, this you can get from Sotabeams.

I chose the 'Rainbow' case as it offers easy access to the GPIO pins. The case needs the yellow slice modifying to clear the SMD's on the right and also to allow access to the SD card without having to undo the case each time.



The green dashed lines denote sections removed from the yellow case slice.

The picture on the right shows the SD card access, now you don't have to take the case apart to access the SD card.



WSPR - The Raspberry Pi way.

Instructions can be found at <https://github.com/JamesP6000/WsprryPi/blob/master/README>. Whilst the documentation talks of 'Jessie-Lite' things have moved on somewhat with 'Raspberry Pi OS' being the latest incarnation. Go to <https://www.raspberrypi.org/software/operating-systems/#raspberrypi-os-32> and download 'Raspberry Pi OS with desktop', I used balanaEtcher to populate the SD card.

The first time you boot the Raspberry Pi you'll need a keyboard and mouse, and an Ethernet cable connected, I used the micro-USB to USB lead with an Ethernet/USB hub. The SD card will adjust its size, this is followed by updating to the latest version of everything, **be warned**, this could take over an hour (or even longer), so be patient!

Once all the software is updated you will be invited to reboot the Pi, remove the Ethernet lead and reboot.

Open a terminal window and type:

```
sudo apt-get install git
```

it may tell you that you have the latest version, that's okay.

Now type:

```
git clone https://github.com/JamesP6000/WsprryPi.git
```

followed by

```
cd WsprryPi
```

A change has to be made to one of the files, otherwise it won't compile.

Type:

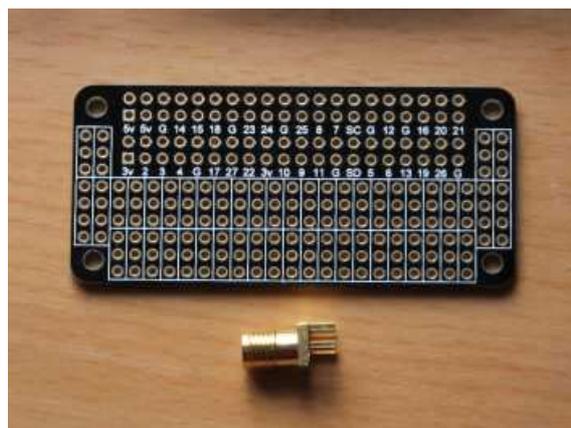
```
sudo nano mailbox.c
```

Using the down-arrow key, move down to the group of commands starting with **#include**, insert a new line and type **#include <sys/sysmacros.h>**, now press CTRL and O, press return to save it and then CTRL and X to exit.

Type:

```
sudo make install
```

Now the software is compiled and ready to run, I would advise reading the README file as it points out a few anomalies and suggested fixes that could prove useful.



Breadboard and SMA connector

WSPR - The Raspberry Pi way.



Pi + Breadboard + SMA connector

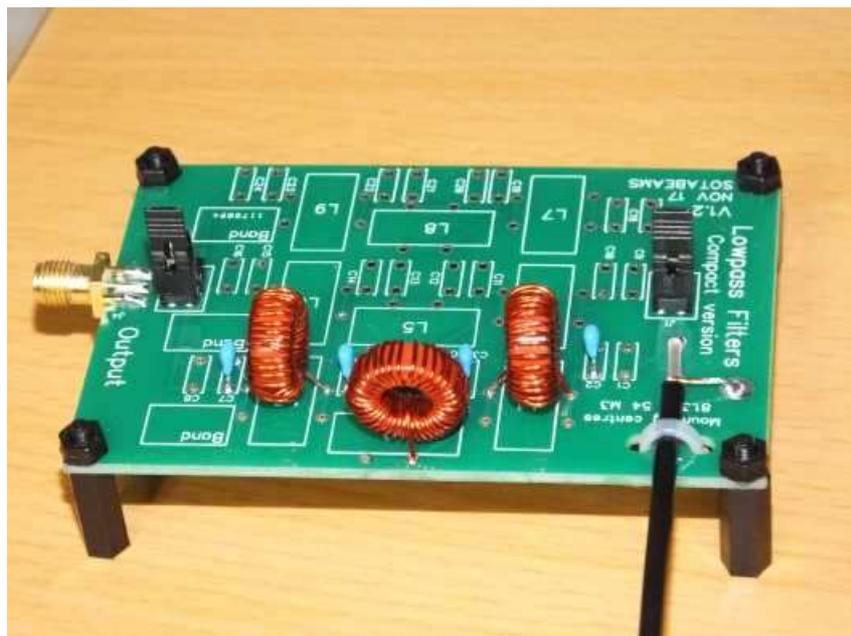
I've chosen not to mount the Low Pass Filter onto the breadboard, this is purely from the fact that I would require a breadboard for each filter, this way I have one breadboard for all the filters.



3-Band Filter PCB kit



160m Low Pass Filter



The finished item.

The 100nF capacitor has arrived in the post, this will be added to the breadboard output. I've chosen the Black Friday option at Sotabeams and ordered the 80m and 40m filters, I'll test and report next month.

James claims his 100th...

DXCC Finally Achieved (after 7 years!)

After 7 years of being licensed, I've finally come of age and worked 100 countries (and had them confirmed on Log Book of the World!). I knew I was close, having worked a string of all time new ones (St Lucia, South Korea, New Zealand, South Africa, Kenya) due to a recent station upgrade.

Your Logbook DXCC Account (M0JCQ - ENGLAND)					
Account Status					
DXCC Award	New LoTW QSLs	LoTW QSLs in Process	DXCC Credits Awarded	Total (All)	Total (Current)
Mixed	100	0	0	100	100
Phone	58	0	0	58	58
Digital	91	0	0	91	91
160M	?	0	0	?	?

Why so long? Well, I'm not exactly an HF DXer, my interests are broad and breaking pileups was neither something I had an inclination to do or the ability to do! I've spent a lot of time in the hobby on SOTA, VHF and Worked All Britain (WAB). I also joined the hobby at the height of the sunspot cycle, but I also didn't really have a home station for a few years. I've made up for it since and FT8 was a boon, during the recent sunspot minima.

If any of you have used Log Book of the World, then you'll know that sometimes you'll need to work a country many times before just one person confirms the contact. Kazakhstan was one of those countries for me, I must have worked it 10+ times, but it only got confirmed in the last few weeks.

Here are my confirmed DXCC entities worked on LoTW:

DXCC Entity	Mixed
ALAND ISLANDS	OG0Z
ALGERIA	7X3WPL
ANDORRA	C37URA
ANTIGUA & BARBUDA	V26B
ARGENTINA	LU3MAM
ARUBA	P40AA
ASIATIC RUSSIA	UC0A
AUSTRALIA	VK7AC
AUSTRIA	OE2GEN
AZORES	CU5AQ
BALEARIC ISLANDS	AM70URE/6
BELARUS	EW4AA
BELGIUM	ON6NL
BONAIRE	PJ4DX
BOSNIA-HERZEGOVINA	E75C
BRAZIL	PY2TWI
BULGARIA	LZ8E
CANADA	N2WQ/VE3
CANARY ISLANDS	EA8CYQ
CEUTA & MELILLA	EA9ACD
CHINA	BH4IGO

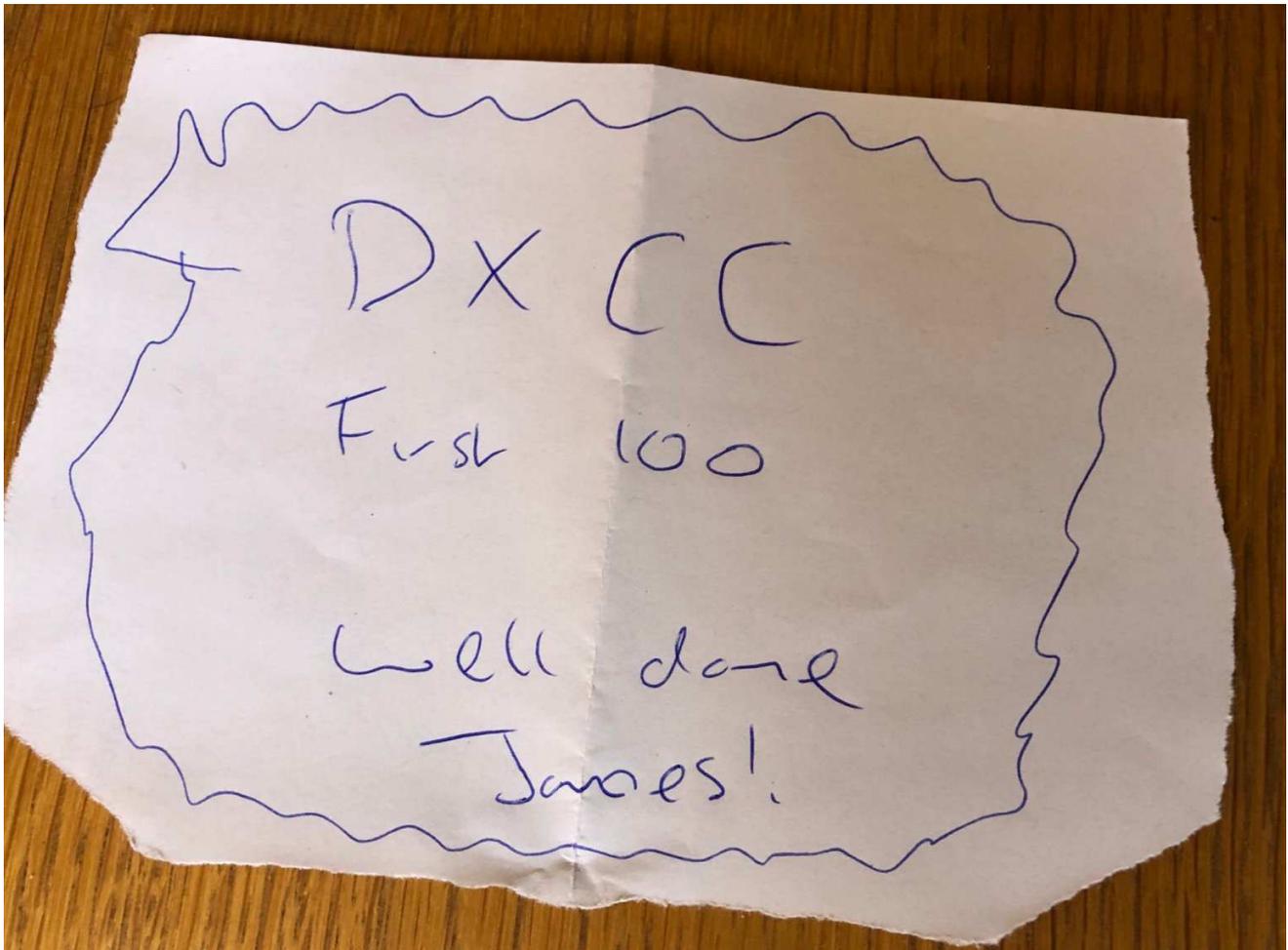
James claims his 100th...

DXCC Entity	Mixed
CHINA	BH4IGO
CRETE	SV9FBG
CROATIA	9A1A
CURACAO	PJ2T
CYPRUS	5B4ALX
CZECH REPUBLIC	OK/G4OBK/P
DENMARK	OZ5AGJ
DODECANESE	SV5DKL
DOMINICAN REPUBLIC	HI3CC
ENGLAND	2E0HEF
ESTONIA	ES5RW
EUROPEAN RUSSIA	RK4FF
FAROE ISLANDS	OY1OF
FEDERAL REPUBLIC OF GERMANY	DL2LDE
FINLAND	OH2MQ
FRANCE	F5NMK
FRENCH GUIANA	FY5KE
GEORGIA	4L8A
GREECE	SZ1A
GREENLAND	OX3DB
GUADELOUPE	FG1PP
GUERNSEY	GU0UVH
HUNGARY	HA5KN
ICELAND	TF2MSN
INDONESIA	YB1HK
IRELAND	EI3GC
ISLE OF MAN	GD0TEP
ISRAEL	4Z5JJ
ITALY	IT9BLB
JAPAN	JA1CLW
JERSEY	GJ2A
KALININGRAD	UA2FT
KAZAKHSTAN	UN9LBB
KENYA	5Z4/G3AB
KUWAIT	9K2HN
LATVIA	YL2CI
LEBANON	OD5KU
LIECHTENSTEIN	HB0/ON4AN
LITHUANIA	LY9Y
LUXEMBOURG	LX7X
MADEIRA ISLANDS	CT3DZ
MALTA	9H3SQ
MARTINIQUE	TO4FM
MAURITANIA	5T5PA
MOLDOVA	ER5LL
MONTENEGRO	4O7CC
NETHERLANDS	PA6NB
NEW ZEALAND	ZL3IO
NORTH MACEDONIA	Z37M
NORTHERN IRELAND	GI7AXB
NORWAY	LA2VRA
OMAN	A41ZZ
POLAND	SP9KR
PORTUGAL	CT1EHK
PUERTO RICO	KP4JRS
REPUBLIC OF KOREA	DS4NPL
REPUBLIC OF SOUTH AFRICA	ZR6CV
ROMANIA	YO6HSU
SAINT LUCIA	J69DS

James claims his 100th...

DXCC Entity	Mixed
SAN MARINO	T77C
SARDINIA	IS0BSR/P
SAUDI ARABIA	HZ1SK
SCOTLAND	GM0AXY
SERBIA	YT2U
SLOVAK REPUBLIC	OM8LA
SLOVENIA	S57ZT
SPAIN	EA3AYQ
SURINAME	PZ5K
SVALBARD	JW7QIA
SWEDEN	SM0LPO
SWITZERLAND	HB9CRV
TAIWAN	BV1EK
THAILAND	HS0ZIV
TURKEY	TA4ED
UKRAINE	UT4NY
UNITED ARAB EMIRATES	A61EK
UNITED STATES OF AMERICA	W4PKU
VENEZUELA	YY5FRD
WALES	GW4BVE
WESTERN SAHARA	S01WS

Will I apply for my ARRL DXCC certificate? I looked at it, and saw the cost and that made the decision for me. \$51 for a paper certificate (including fees and shipping) is a bit steep! To this end one of my Twitter followers (Simon G7SOZ) made me a counterfeit one:



That'll do! Here's to the next 100 DXCC!

Mountain Goat



On top of the world!

Congratulations to James Stevens M0JQC for achieving the Summits on the Air (SOTA) Mountain Goat status.

James finally achieved this remarkable feat on 23th September during a trip to the Lake District, on the summit of a rather wet Skiddaw (931m ASL).

It took James a total of 5 years, 243 SOTA activations, 143 unique summits and 3,504 QSOs.

James says thanks to all the chasers and to his patient wife Christina, M7CID, who he says deserves half the trophy!

Mountain Goat



He looks pleased, and so he should, well done James.



This is what it's all about, what next James?

'Air Miles', how far have we gone? / results

For me this month has been exceptionally quiet radio-wise, at total of zero QSO's. A couple of projects and a hospital visit for Angie have taken priority, hopefully next month I can get back into using the radio again!

So, how have we done this month?

(Running totals in red)

General

Most Miles

M0JQCQ		263,330	1,421,972	
G3ZNU		118,116	975,100	
G3XZG		108,711	463,699	

Most QSO's

M0JQCQ		193	704	
G3ZNU		76	1,083	
G3XZG		42	352	

Longest QSO

M0JQCQ		VK2WJ(10542)	ZL3IO(11584)	
G3XZG		YB0ECT(7298)	YB0ECT(7298)	
G3ZNU		W6UC(5374)	JR3NZC(5909)	

Shortest QSO (miles)

M0JQCQ		6	6	
G3ZNU		9	0	
G3XZG		22	2	

Average per QSO (miles)

G3XZG		2,588.36	1,317.33	
G3ZNU		1,554.16	900.37	
M0JQCQ		1,364.40	2,019.85	

Maidenhead Squares

M0JQCQ		103	467	
G3ZNU		60	579	
G3XZG		39	293	

By Band

160m

M0JQCQ		1	1	
M0IHY		0	19	

80m

G3ZNU		2	14	
M0IHY		0	23	

40m

G3XZG		8	27	
G3ZNU		7	22	
M0IHY		0	126	

30m

G3XZG		3	14	
M0IHY		0	100	

20m

G3XZG		22	116	
M0JQCQ		18	325	
G3ZNU		18	38	
M0IHY		0	186	

17m

G3ZNU		24	112	
M0JQCQ		9	123	
G3XZG		9	31	
M0IHY		0	186	

15m

M0JQCQ		53	96	
G3ZNU		3	15	
G3XZG		0	4	
M0IHY		0	25	

12m

M0JQCQ		29	32	
G3ZNU		2	5	

10m

G3ZNU		1	131	
M0JQCQ		0	4	
M0IHY		0	14	
G3XZG		0	25	

6m

G3ZNU		2	546	
M0JQCQ		0	40	
M0IHY		0	11	
G3XZG		0	135	

2m

M0JQCQ		53	53	
G3ZNU		17	193	
M7CKP		0	3	

70cm

M0JQCQ		30	30	
M7CKP		0	2	
G3ZNU		0	7	

'Air Miles', how far have we gone? / results

By Mode

CW

G3XZG	 42	350	
G3ZNU	 10	144	

FM

G3ZNU	0	2	
M7CKP	0	2	

MFSK

G3ZNU	0	123	
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FT8

M0JCQ	 163	660	
G3ZNU	 64	891	
M0IHY	0	671	

SSB

M0JCQ	 30	44	
G3ZNU	0	39	
G3XZG	0	2	

MSK144

G3ZNU	 2	14	
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JS8

M0IHY	3	
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Olivia 8/250

M0IHY	1	
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By Country

M0JCQ	 43	165	
G3ZNU	 31	174	
G3XZG	 14	126	



December

VHF

Day	Date (2020)	Time UTC	Contest Name
Tue	1 Dec.	1900-1955	144MHz FMAC
Tue	1 Dec.	2000-2230	144MHz UKAC
Sun	6 Dec.	1000-1400	144MHz AFS (AFS Super League)
Tue	8 Dec.	1900-1955	432MHz FMAC
Tue	8 Dec.	2000-2230	432MHz UKAC
Thu	10 Dec.	2000-2230	50MHz UKAC
Sat/Sun	12/13 Dec.	1400-1400	2nd MGM Contest
Tue	15 Dec.	2000-2230	1.3GHz UKAC
Thu	17 Dec.	2000-2230	70MHz UKAC
Sat	26 Dec.	1400-1600	50/70/144/432MHz Christmas Cumulatives Contest
Sun	27 Dec.	1400-1600	50/70/144/432MHz Christmas Cumulatives Contest
Mon	28 Dec.	1400-1600	50/70/144/432MHz Christmas Cumulatives Contest
Tue	29 Dec.	1400-1600	50/70/144/432MHz Christmas Cumulatives Contest
Tue	29 Dec.	2000-2230	50MHz MGMAC
Tue	29 Dec.	2000-2230	144MHz MGMAC

Contesting joint venture between Chesham & Northampton - the first year – progress so far?

It was about this time last year that I first floated the possibility of CDARS (Chesham) cooperating with another club for contests, with particular interest in Northampton being the 'partner'. I am a full member of both clubs, mainly doing UKAC's with NRC (Northampton Radio Club) & 80m CC's, AFS & several weekend events with CDARS.

I have found both to be very friendly & inclusive small clubs, with a similar ethos, hence very compatible in my opinion?

'Club' contesting is all about the numbers game. (reinforced by a presentation at the RSGB convention, explaining why Camb-Hams always seem to win the AFS series!)

A big club, more members, more likely to put a good team together? Small club - ? Then combine with one or more other small clubs to potentially double-up ones numbers; Simple?!

Even for AFS, where 'Teams' are limited to just 4 (which in theory levels the playing-field?) CDARS has struggled to get a full team of 4 for some sessions, e.g. 40/80m CW. In spite of this CDARS has done remarkably well in recent years, managing a reasonable showing on all bands & modes from 160m to 70cm. Well enough for a certificate on several occasions.

So, after some initial discussions with key members of both clubs, I gave a presentation/proposal to CDARS that NRC & CDARS help each other out in some way.

The result is that for most of 2020 we have been running a semi-formalised 'Informal Agreement', if that is not a complete contradiction in terms?

cont'd....

Contest Corner

Members join their 'local' club in the normal way, but have honorary or associate member status of the other club, which means they can legitimately enter contests on behalf of the 'other' club.

Granted for most of the year it looked a bit one-sided, as everyone (including some returned & new members) seemed to be 'helping-out' NRC in the UKAC's. However it is now payback time, as we are quite mob-handed (compared to previous years) in the AFS series, with a number of members from both clubs contributing. Enough to muster 2 teams so far. The 80m CC's & now the 'Autumn Series' have had a major boost from John G4CZB (contest manager at NRC) a consistently high scorer on all modes & a great chap. Always very grateful for any contributions, but he will not pressure anyone.

So the friendly local club ethos is maintained, unlike a lot of dedicated 'Contest Groups' where there is a three-line-whip & a lot of expectation, which can impinge on domestic harmony! Great for some but possibly not 'our-bag'?

Most club contests are split into 'Local' & General' categories; where most dedicated Contest Groups are in the 'General' category & we are in the 'Local' category, along with mainly other local clubs. To qualify for 'Local' status all members must be QTHR within 80km of the VMP (Virtual Meeting Point), but can operate /P (when allowed!) outside that limit, e.g. when on holiday? I did a 70cm stint from IO84, just round the corner from my daughters house in N.W. Cumbria.

For 2021 John is moving the VMP from the present location of their actual meeting place in N.E. Northampton to a point farther south, possibly at or near to the QTH of Dave G1MZD? This will guarantee that all CDARS members (including our recent acquisition of David G8LZE – welcome David) will be well within said limit.

So how have we performed so far? Far exceeded my expectations is my summary!

Success seems to breed success, with more folks from CDARS entering all sort of events, producing a combined effect of more than the sum of the separate parts?

UKAC's – The monthly evening VHF events covering 6m, up to SHF, under the NRC banner (Tuesdays & Thursdays throughout each month):

Currently in 3rd place out of 38 other clubs, i.e. top 10%! With a decent performance in December we should hold this position? Very few do SHF, our weakness?

AFS series spanning Sept 2020 through to Feb 2021:

Sept – 4m: Chesham A = 4th out of 26
Chesham B = 18th out of 26, but 3rd 'B' team listed.
The B team was just 3 men including yours truly, having NOT made-the-cut!

Oct – 6m: Chesham A = 6th out of 32
Chesham B = 12th out of 32, but 3rd B team listed

Nov – 160m: Chesham A = 5th out of 50
Chesham B = 30th out of 50, but 5th B team with just 3 members

Dec – 2m: will take place Sun 6th December, again 2 teams I hope?

Jan 2021: 40/80m CW, SSB & Data

Feb 2021: 70cm

So, pretty damned good so far? John (G4CZB) & I are immensely grateful to all those that have stepped forward & hope that we continue to make a mark? More importantly I hope all those involved are enjoying themselves.

cont'd...

Contest Corner

To any potential new recruits, every little extra helps (UKAC's in particular, where there is no limit on numbers) So several chaps with just a few contact each, all add up & boost the total. Lets hope that 2021 becomes non Covid & folks can go to a local hill, even with modest equipment, & have some fun, if they do not have a good VHF base-station?

I am happy to have a chat, or answer questions from anyone thinking of dipping their toe in the (contest) waters. Home Tel: 01296-715290 or email: g8fmc@dkm3adk.plus.com

73, Dave K (G8FMC)

P.S. A separate 'contesting' Google group email has been set up by Malcolm. Anyone can sign up to that, even if not actively participating, but interested in our chat.

However we are determined NOT to create a 'club-within-a-club', so general comments, progress, dates etc about contesting will still be posted from time-to-time on the general club group.

The idea is to not block the in-box of everyone with minute details about contesting equipment etc, if that is not your thing?

Thanks Dave (G8FMC) for a very interesting article, below is an email from the Northampton Radio Club, an offer that's seems a great idea in supporting each other.

Dear Members and Friends,

We hope you are keeping well during this second national lockdown. What a year it's been so far! Although we've not been able to meet physically - and it looks unlikely that we will be able to do so until at least Easter 2021 - it's not all bad. We've had a number of new members over the last months, including some who've trained with us.

A reminder that we continue to meet 'virtually' in all of the ways previously outlined (check the website if you're not sure).

With the thought that we are not likely to be able to meet physically for some time to come (and therefore we are not having to pay for room hire) the Committee has agreed a number of things as below:

*-*Those who are currently paid-up members of the Club will remain members until 1st January 2022 with no extra charge. If you do not wish to remain a member, please let Richard 2E0RKJ as soon as possible.**

*-*Those who wish to join the Club between now and 1st January 2022 will not be charged a membership fee.* If you wish to join, please go to: <https://northamptonradioclub.co.uk/index.php/membership/> and fill out the membership form. You will not be required to pay a fee.*

-There will be no Annual General Meeting (AGM) for 2020 and the current Officers and Committee, being in agreement, will serve until the AGM in 2021.

73 for now

Richard 2E0RKJ and Chris 2E0ORE

Richard Kellow 2E0RKJ
Secretary
Northampton Radio Club

Any other business

Congratulations



Guy has gone through all 3 exams to get his full licence in record time, now he's M0GUY, well done!