Newsletter

Chesham & District Amateur Radio Society

www.g3mdg.org.uk

February 2021

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

Welcome

The newsletter has been running since February 2020, happy 1st birthday! My thanks to those who have contributed during that period, without whose input the pages would be blank.

This month my thanks go to the following (in alphabetical callsign order):

Jeremy (G3XZG) for 'CW in contests'.

Malcolm (G3ZNU) for 'Are you running out of wallpaper?', at least I can see the point in what you've done/achieved, it all makes sense, and also for submitting 'VHF Contest News'.

Guy (M0GUY) for 'SSTV', especially on his home brew Yagi, proving you don't need to spend a fortune on expensive antenna's to receive signals, that and the fact it's home brew makes it even more interesting.

As I type I'm presented with a 'winter scene' in the back garden, the first snow of the year, albeit a little late for Christmas!! Unfortunately it didn't last long.

Bryan M0IHY

In this issue

- 2 Chairman's Ramble
- 2 Editor's Muse
- 3 SSTV
- 10 Are you running out of wallpaper?
- 14 Morse code abbreviations
- 17 CW in conmtests
- 17 eBayer buyer beware
- 18 Contest Corner everything contesting
- 19 VHF Contest News
- 25 'Air Miles', how far have we gone?
- 27 Any other business

Contact details

Chairman - Jeremy Browne (G3XZG) Secretary - Malcolm Appleby (G3ZNU)

Treasurer - Matt Whitchurch (M1DTG) Editor - Bryan Page (M0IHY)

Angie Page (M6WTL)

Chairman's Ramble

Well, after the AGM, you have got me as chair again for another year. This means amongst other things that you will have more of these rambles to put up with, though of course you can skip them and go to the interesting bits of the newsletter.

Many thanks to everyone who was able to attend the AGM on 27th January, and thanks to Malcolm for stepping up as secretary and for Angie for continuing to do that job until lockdown restrictions lift sufficiently to make it possible to transfer the records. Thanks too to Bryan, Matt and Angie for remaining on the committee and for all the other offers of help.

I hope to have a committee meeting shortly and start to sketch out a programme, though it now seems clear that the earliest we can meet together as opposed to online will be the 4th Wednesday in March.

A priority will be setting up storage at Ashley Green and moving the equipment from the Whitehill centre, including taking down the antenna's there. This is not possible of course at the moment. Despite the recent problems, we have been quite lucky over the years at the centre, in being able to set up a station and erect permanent antenna's, something which many clubs would envy. The installation of LED lighting, plus the local radio station, which now I gather will have a broadcast licence, has made it very difficult to continue to operate, and we are now, I'm happy to say, too many to meet in the Mezzanine room, unless you enjoy a game of sardines.

We can then look forward to start using Ashley Green to its full potential as the evenings get longer and, hopefully, the weather gets warmer.

One thing that we will need to reflect on is that Zoom meetings have made it possible for people to attend who would not be keen to drive at night. We need to think about how to continue this next winter, and whether it would be possible to meet in person, say for a talk, but also include people joining remotely. This is beyond my technical knowledge, but something we need to consider.

Sitting here after a week of snow and heavy rain, with little lakes forming at the bottom of the hill where the drains have failed to cope, it seems hard to believe that spring and summer will happen, but I'm assured that they will. It will be good to make the most of them.

In the meantime we have the final limb of the affiliated societies contests on 7th February on 70 cms. CDARS is in 5th place at the moment and can certainly aim for 4th. The first two, Cam-Hams and Grimsby are well ahead. Plenty of space out east.

73, Jeremy.

Editor's Muse

I tend to suffer with excessive QRM on 80m at my QTH and as such have ordered a QRM-Eliminator off eBay and expect delivery hopefully before the end of February. The unit requires 2 antenna's, one as a 'listening' antenna, the other your TX/RX antenna, both connect to the back of the box, the output of which is fed to your rig. The receiving antenna signal is phase reversed and added to the signal from your TX/RX antenna, thereby cancelling out the interference and improving reception, the unit is bypassed when transmitting, the internal relays are good for 100W.

There are kits on eBay, I chose to purchase a ready built one as I can't purchase the individual components for less than the cost of the built unit.

When I get the unit (you also need a decent receiving antenna, which has been ordered off eBay and arrived 27th January), I'll report back on my findings.

Bryan M0IHY

SSTV Guy M0GUY

SSTV

Slow Scan TV is a method of sending/receiving pictures over radio. I've been playing at receiving a few pictures on 20 meters. However over this Christmas (2020) period the ISS are broadcasting SSTV to celebrate 20 years of amateur radio onboard the ISS.

https://amsat-uk.org/2020/12/21/iss-slow-scan-tv-event-145-800-mhz-fm/

After looking at the <u>ISS tracking</u> I saw that it was going to pass over my QTH on Christmas morning at 0705, so I thought I'd have a go at receiving the signal. I have a Diamond-V200 on the side of the house, however I doubted it would pick up the transmission from space so I decided I needed to build a Yagi antenna which I can point at the space station as it passes by. This being Christmas eve and in lockdown I was not going to be able to buy one at this short notice or indeed buy any parts to make one, so I was reliant on whatever I could find in my garage.

Parts

2 meter long wooden batten(3x3x200cm)
Solid core mains cable, usually used inside walls 3 meters
PL259 connector
RG58 cables 5 meters
Balun Toriod(TORD-100)

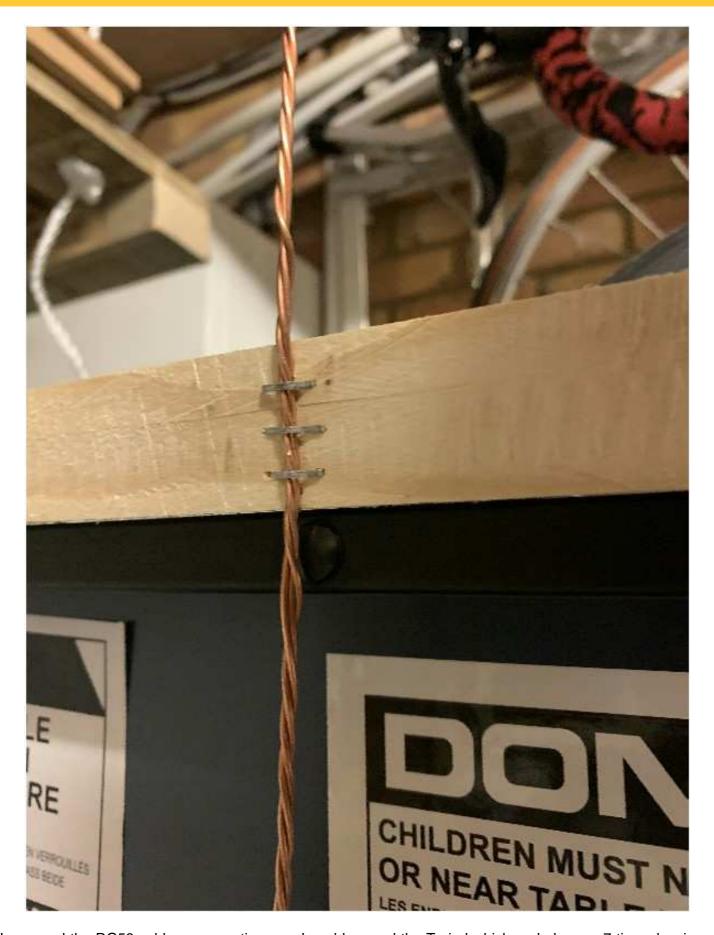
Building

I cut the mains cable into just over 1meter lengths, and stripped the outer insulation to get bare cores. I didn't feel that the wire would stay straight so the plan was to strip the inner cores as well and then twist two together to give extra strength, it also has the advantage that it would be able to handle higher powers.

To wind the pairs together I clamped both wires together in a vice and the other end in the chuck of my hand drill and slowly ran the drill giving a nice even wrapping. For the reflector I used all the earth cores(3), making it even stronger and may be improving the reflection(?) I then cut the new wires to these specifications.

I used a staple gun to attach the wires to the wooden batten. But really anything would do at this point.

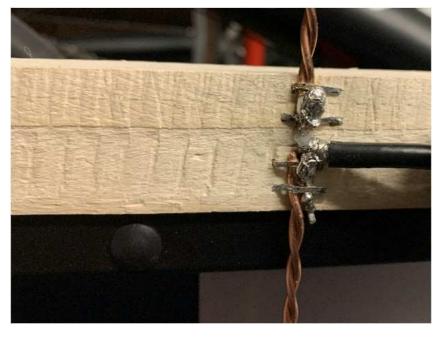
Element	Length (mm)	Spacing (mm)
Reflector	1014	0
Driven	986	414
D1	947	155
D2	940	372



I wrapped the RG58 cable as many times as I could around the Toriod which ended up as 7 times leaving a very short length to strip and attach to the driven elements.



The driven element was a little trickier as the two wires needed to be close together but not touching. Again I used the staple gun and hammer to hold them tight. I cut the RG58 cable and using lots (too much) solder attached to the elements,keeping the stripped RG58 cable as short as possible as I didn't want it to effect the SWR.



The final result came out well.



Testing

I connected it to my ICOM-705 and tuned around at 145Mhz, however as I'm surrounded by houses I'm not really going to pick up much. I did however reach a repeater about 30 miles away and was seeing a SWR of 1:1.3 so very happy with that. Ready for tomorrow morning.

Receiving the ISS signal

Well it was 0705 in the morning with a very heavy frost. So first order was to put some warm clothes on. I put my ICOM-705 radio on the back seat of my car and set the radio to the following.

Tuned it to 145.800Mhz, and locked the dial FM-Data Squelch fully open Filter 1 Amp off Notch filter off

I made no allowance for doppler shift. The pass was only lasting 5 minutes. I decided that I wasn't going to drag a computer outside to decode in real time, but rather record the transmission and then decode later in the warm. I used an SSD in the ICOM to record and save as a WAV. At just after 0700 I started recording and then stood on my drive with my rather large Yagi pointing towards where I determined the ISS would appear. At 0705 on the dot it appeared. I had a very clear sky and could see the bright light of the space station rising between the houses. The signal on the ICOM appeared at +9. I then kept the yagi pointing at the station as it passed by. The passing started with the tail end of one picture which helped me line myself up and check things were all working. At the end of each picture transmission there's a 2 minute cool down break on the transmitter. I kept tracking the station with my yagi and was able to follow it as the signal started up again and kept track all the way to completion.

Decoding

I used QSSTV on my Raspberry Pi4 to decode. QSSTV is looking to take an audio stream. While in my shack I have the ICOM connected to the Pi via a USB cable which is used for rig control and audio. While outside I had recorded the audio to an SDcard in the ICOM. I took the SDcard and put it in my Mac and used "Quicktime" to trim the audio to start just before the transmission and end just after. To play this audio back to the QSSTV I used "pulse", and configured the audio to direct the audio over to QSSTV.

```
pavucontrol &
paplay -d virtual-cable iss.wav
```

With the audio playing back QSSTV started to render the picture and save it. As you can see I had a very strong signal and ended up capturing a very good picture on my first attempt.



I also submitted to my picture back to ARISS SSTV for an award.



I repeated the capture today (Sunday 27th December 2020). This time more practised and grabbed another picture. Today however we had heavy cloud cover and the pass was directly over my house so only started picking up after it was higher in the sky hence the loss of the first part of the picture. Since then I've been using my Diamond V-2000 and letting my rig capture throughout the night as the ISS passed over. I've been quite impressed as I've still managed to capture pictures not as good quality which is to be expected with the orientation of the antenna.



You can see Guy's other images at: https://www.spaceflightsoftware.com/ARISS_SSTV/, simply type in Guy's callsign (M0GUY) for his images.

A recent email was forwarded by the Secretary of the Northampton Radio Club about awards that are available for FT8 operating. In the email, Karl G7AAY gave a website link to the FT8 Digital Radio Club (ft8drc.eu), which not only offers a range of awards but is also a gateway to awards programs run by other enthusiasts of digital operating modes.

The FT8 DMC was started by two Austrian amateurs as "a worldwide meeting point and platform for users of FT8", and its website explains the awards application process in many languages (fortunately, including English).

I downloaded the required Windows application UltimateAAC (from the associate European PSK Club website) and installed it, and registered as a member of the FT8 DMC. I found that UltimateAAC quite happily read the database of my logbook, which is held in Log4OM, and uploaded all my QSO's to the awards database to check for which awards I had already qualified. As Karl's email explained, it was then a process of noticing which award levels had been achieved – the buttons go green – and clicking to apply for each award.

I was a little surprised just how many awards I had already "earned", so I started merrily clicking away and applying. After a little while – in some cases just a few minutes and in other cases a day or two – the award certificates can be downloaded from a download website. The process for this was not immediately obvious from the instructions, but eventually the penny dropped and I started downloading.

This is where I have to admit to getting a bit carried away. I mentioned that the FT8 DMC is a gateway to other enthusiast groups' awards programs, so in the end I realised I had applied for awards from many, many countries. So far I have downloaded 65 certificates from the FT8 DMC itself, including awards from The African Arab Countries, Belgium, Bosnia, Croatia, Cyprus, Czech, Finnish, French, Greek, Hungarian, Kazakhstan, Kenya, Oman, Poland, Portugal, Scandinavian, Serbia, Slovak, Spain, and the USA, as well as squares and prefix awards.

As if that wasn't enough to cover the walls of most modest living rooms, I then realised I had three other awards from the Croatian Digital Group, one from the European PSK Group, and 94 (yes, 94!) from the Activity Group of Belarus. I tell a lie – there are another 17 locator awards waiting on the Belarus website that I haven't quite got the energy to download. I've only had 11 QSOs with Belarusian stations, but it appears this activity group freely gives out awards for all manner of QSOs including worldwide, with any European stations, and even with African stations.

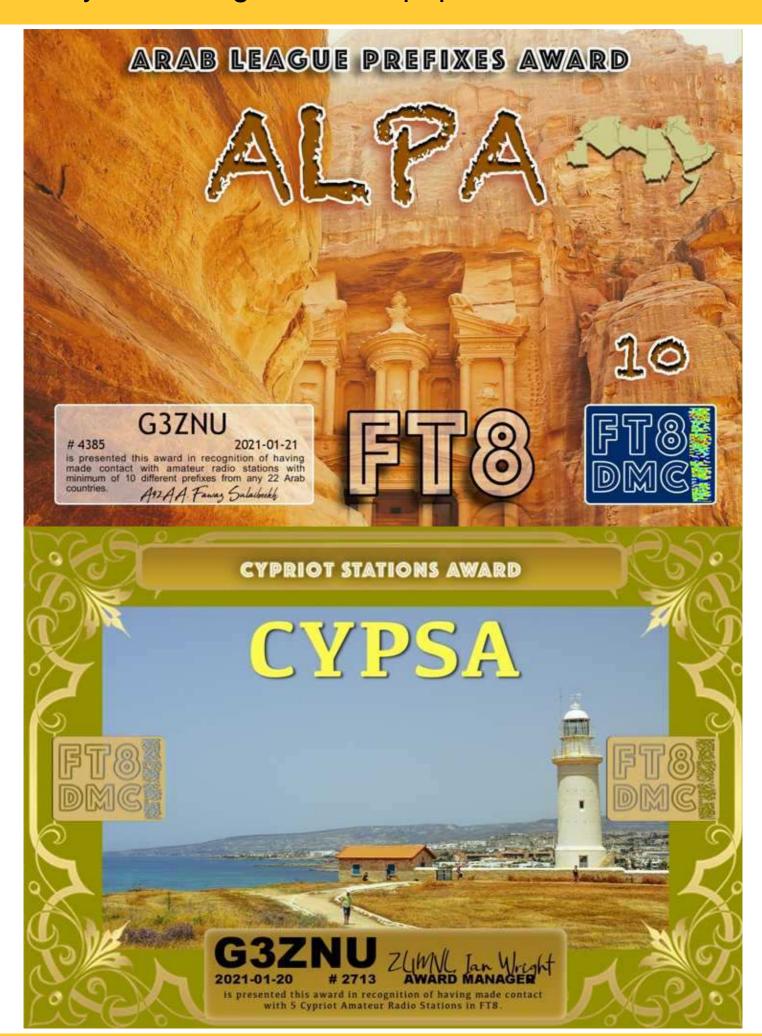
You will not be surprised to hear that I haven't printed out all the awards, but some of the more colourful ones are worth the ink and the paper. Just to whet your appetite, I've included some of the more interesting ones here.

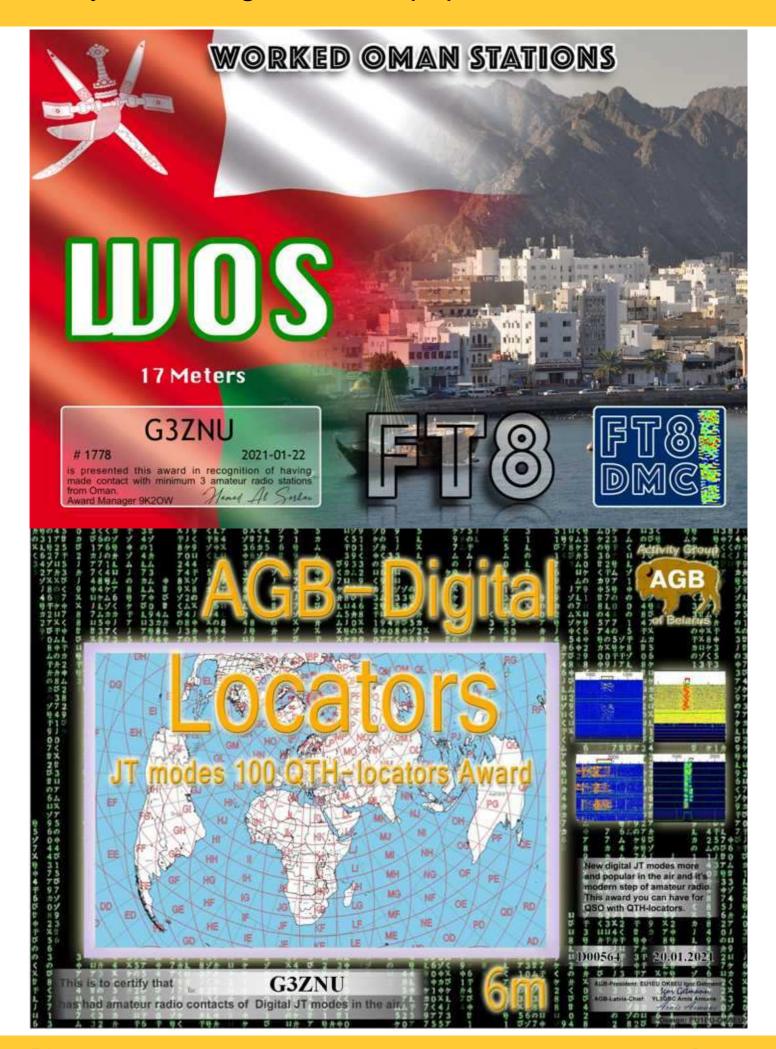
So what next? Well I haven't yet qualified for awards from the Natal Digital Group (Brazil), the European ROS Club (Spain), or the Belgium Club SSTV (not sure how they are included in an FT8 group). But I think I'll concentrate on getting my DXCC count above the current 83 (84 if that Liechtenstein station confirms) and maybe look at the RSGB awards program, now that an Awards Manager has picked up the reins again. Happy hunting!

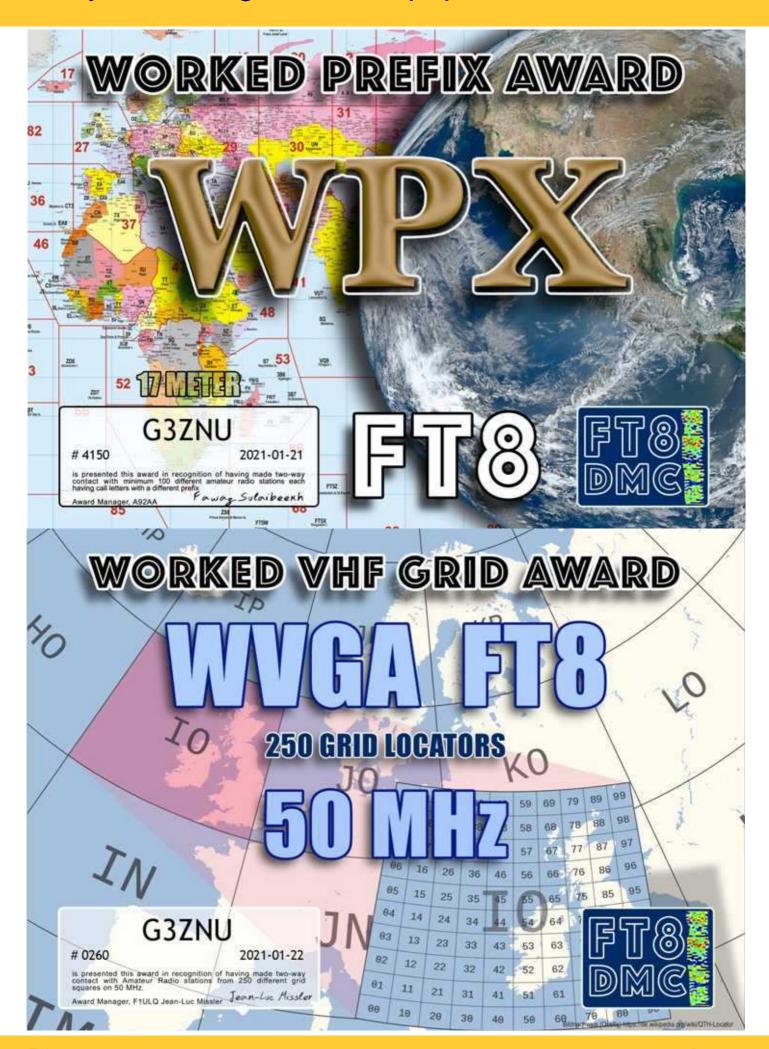
Congratulations Malcolm, now that's what I call making QSO's with redeemable rewards! Maybe a 'Wall of Fame' section on the club website?

May I suggest printing the certificates off in a smaller format, you'll be able to get more on the wall!!!

MOIHY







Morse code abbreviations

```
All after
AA
AΒ
           All before
ABT
           About
ADEE
           Addressee
           Address
ADR
AGN
           Again
           Amplitude Modulation
AM
ANT
           Antenna
           Broadcast Interference
BCI
           Broadcast Listener
BCL
           Be seeing you
BCNU
           Break, Break in
BK
BN
           All between; Been
BT
           Separation (break) between addr & text; between txt & signature
BTR
           Better
BUG
           Semi-Automatic key
В4
           Before
C
           Yes, Correct
           Confirm; I confirm
CFM
CK
           Check
           Circuit
CKT
CL
           I am closing my station; Call
CLBK
           Callbook
CLD
           Called
CLG
           Calling
           Can't
CNT
           Conditions
CONDX
CQ
           Calling any station
CU
           See You
           See You later
CUL
CUM
           Come
           Continuous wave
CW
DA
           From, This Is
DE
           Difference
DIFF
DLD
           Delivered
           Delivered
DLVD
DN
           Down
DR
           Dear
EL
           Element
           And DX - Distance
ES
           And FB - Fine Business, excellent
ES
FER
           For
           Frequency Modulation: From
FM
           Go ahead; Good Afternoon
GΑ
           Good bye, God Bless
GB
           Good
GD
GE
           Good Evening
GESS
           Guess
GG
           Going
           Good morning
GM
           Good night
GN
```

February 2021 Page 14

GND

Ground

Morse code abbreviations

GUD	Good
GV	Give
GVG	Giving
HH	Error in sending
HI	The telegraph laugh; High
HPE	Норе
HQ	Headquarters
HR	Here; Hear
HV	Have
HW	How, How Copy?
IMI	Repeat, Say Again
INFO	Info
LID	A poor operator
LNG	Long
LTR	Later; letter
LV	Leave
LVG	Leaving
MA	Millamperes
MILL	Typewriter
MILS	Millamperes
MSG	Message; Prefix to radiogram
N	No, Negative, Incorrect, No More
NCS	Net Control Station
ND	Nothing Doing NIL - Nothing; I have nothing for you
NM	No more
NR	Number
NW	Now; I resume transmission
OB	Old boy
OC	Old chap
OM	Old man
OP	Operator
OPR	Operator
OT	Old timer; Old top
PBL	Preamble
PKG	Package
PSE	Please
PT	Point
PWR	Power
PX	Press
R	Received as transmitted; Are; Decimal Point
RC	Ragchew
RCD	Received
RCVR	Receiver
RE	Concerning; Regarding
REF	Refer to; Referring to; Reference
RFI	Radio frequency interference
RIG	Station equipment
RPT	Repeat, Report
RTTY	Radio teletype
RST	Readability, strength, tone
RX	Receive, Receiver
SASE	Self-addressed, stamped envelope
SED	Said
SEZ	Says
SGD	Signed
SIG	Signature; Signal

Morse code abbreviations

```
Operator's personal initials or nickname
SINE
SKED
           Schedule
SRI
           Sorry
SS
           Sweepstakes
           Single Side Band
SSB
STN
           Station
SUM
           Service; Prefix to service message
SVC
Т
           Zero
TFC
           Traffic
           Tomorrow
TMW
           Thanks
TKS
           Thanks
TNX
TR
           Transmit
T/R
           Transmit/Receive
           Tricks
TRIX
TT
           That
TTS
           That is
TU
           Thank you
TVI
           Television interference
           Transmitter; Transmit
TX
TXT
           Text
U
           You
UR
           Your; You're
URS
           Yours
VFB
           Very fine business
VFO
           Variable Frequency Oscillator
VY
           Very
           Watts
W
           Word after
WA
           Word before
WB
           Word
WD
WDS
           Words
WID
           With
WKD
           Worked
WKG
           Working
WL
           Well; Will
           Words Per Minute
WPM
           Word
WRD
           Would
WUD
WX
           Weather
XCVR
           Transceiver
XMTR
           Transmitter
XTAL
           Crystal
XYL
           Wife
YL
           Young lady
YR
           Year
30
           I have no more to send
73
           Best Regards
88
           Love and kisses
161
           73+88=161
```

The first problem with saying anything about CW abbreviations which you will hear in contests as opposed to anywhere else, is that nothing is standard.

Abbreviations that you will generally hear are as follows:

for contest, "TEST";

for the number 9, the letter N;

for the number zero, the letter T; for the words thank you, the letters TU;

Thus a contact in which you are receiving a report and serial number, will often be just your callsign, followed by TU, 5NN T2T for the number 20.

Other stations may use the letter O instead of T for zero.

Others again will send the whole thing, 599 020.

If you are calling a station, responding to a CQ or QRZ, it is usual only to give your call, not theirs, and they will respond just with your call.

An example is: CQ TEST DE G3XZG G3XZG TEST M0IHY M0IHY TU 5NN TT1 BK TU 5NN TT1 BK TU 73S

A station may add GM or GA, at the beginning for good morning, good afternoon etc, and GL for good luck at the end.

As I say, these are not standard but generally accepted.

eBay buyer beware

I have twice now had faulty goods from eBay sellers. In each case I have contacted the seller, who has in return requested pictures to substantiate my claim, these I provided with the sellers agreeing these items were indeed faulty, so far, so good.

In both cases the seller has suggested I keep the item and has offered me approximately 25% of the original cost as a refund, this I obviously refused. Next the offer was increased, again I was to keep the faulty item and would be offered approximately 75% of the original cost, this I also refused.

My last email to the first seller repeated my request for a full refund but this time I included "if I have not received a full refund within 72 hours I shall take the matter up with eBay and PayPal", this I found did the trick. For the second seller I simply went through the 'returns' process, which is remarkably good, getting my refund within 48-hours of them receiving the item, and at no postal cost to myself (eBay provide a printable return label).

I think I've learned my lesson here and will go through the eBay returns process without contacting the seller, far less hassle methinks!

Although Chinese products are certainly far cheaper, I've found getting refunded for faulty goods is a task in itself, and have found they 'try it on' when trying to get a refund, I wonder how many people have kept the item and accepted a refund of less than their original expense?

MOIHY

Contest Corner

February						
HF						
Day	Date (2021)	Time UTC	Contest Name			
Mon	01 Feb	2000-2130	80m CC SSB			
Wed	10 Feb	2000-2130	80m CC DATA			
Sat	13 Feb	1900-2300	1st 1.8MHz Contest (HF Championship)			
Mon	15 Feb	2000-2130	RSGB FT4 Contest			
Thu	25 Feb	2000-2130	80m CC CW			
	VHF					
Day	Date (2021)	Time UTC	Contest Name			
Tue	02 Feb	1900-1955	144MHz FMAC			
Tue	02 Feb	2000-2230	144MHz UKAC			
Wed	03 Feb	1900-2100	144MHz FT8 AC			
Sun	07 Feb	0900-1300	432MHz AFS (AFS Super League)			
Tue	09 Feb	1900-1955	432MHz FMAC			
Tue	09 Feb	2000-2230	432MHz UKAC			
Thu	11 Feb	2000-2230	50MHz UKAC			
Tue	16 Feb	2000-2230	1.3GHz UKAC			
Thu	18 Feb	2000-2230	70MHz UKAC			
Tue	23 Feb	1930-2230	SHF UKAC			
Sun	28 Feb	1000-1200	70MHz Cumulatives # 1			

March					
HF					
Day	Date (2021)	Time UTC	Contest Name		
Mon	01 Mar	2000-2130	80m CC DATA		
Wed	10 Mar	2000-2130	80m CC CW		
Sat-Sun	13-14 Mar	1000-1000	Commonwealth Contest (HF Championship)		
VHF					
Day	Date (2021)	Time UTC	Contest Name		
Tue	02 Mar	2000-2230	144MHz FMAC		
Tue	02 Mar	2000-2230	144MHz UKAC		
Wed	03 Mar	1900-2100	144MHz FT8 AC		
Sat-Sun	06-07 Mar	1400-1400	March 144 432MHz (VHF Championship)		
Tue	09 Mar	1900-1955	432MHz FMAC		
Tue	09 Mar	2000-2230	432MHz UKAC		
Thu	11 Mar	2000-2230	50MHz UKAC		
Tue	16 Mar	2000-2230	1.3GHz UKAC		
Thu	18 Mar	2000-2230	70MHz UKAC		
Tue	23 Mar	1930-2230	SHF UKAC		

VHF Contest News

At the start of last year, Dave G8FMC suggested that members of CDARS join in with Northampton Radio Club in their endeavours in the VHF / UHF contest season, and in particular the Activity Contests that take place on weekday evenings throughout they year. In return, NRC members would contribute to CDARS' efforts in the Affiliated Societies' (AFS) Contests.

The AFS season is nearly over with just one more session on 432MHz in February, but the AC Contests are now over and the results are in. And NRC with CDARS members came an overall third place, a really good result as the only two teams above us, Hereford ARS and Parallel Line CG are real contest heavyweights. In the individual legs, NRC / CDARS came 3rd in the 50MHz, 144MHz and 432MHz legs, and 2nd in the 70MHz.



VHF Contest News

Northampton Radio Club (with CDARS) took 3rd place in the Local Club section of the overall UK Activity Contest 2020, not far behind the Parallel Line Contest Group.

If we could get more members to put an entry to the 1296MHz leg, and get active on the SHF Bands we could improve on this and take the Runner-up position. Except - remember this was an exceptional year, with portable operation not permitted for a significant proportion of the year. Next year it's likely that the portables will be back, and the competition will be on again!

Looking at just how far ahead the Hereford ARS were last year in the tables, despite the limitation on portables, winning the trophy looks to be out of our reach for the time being!

Overall UKAC 2020

Click <u>here</u> for General Club Scores Click <u>here</u> for Individual Scores

	Local Club Scores								
Pos	Club	50 MHz	70 MHz	144 MHz	THE RESERVE OF THE PERSON NAMED IN	THE RESIDENCE OF THE PARTY OF T	SHF	Total	Pos Cert
21	Hereford ARS	1000	1000	1000	1000	1000	649	5649	
2	Parallel Lines CG	233	348	199	256	435	1000	2471	
@ 3	Northampton RC	415	562	482	524	342	49	2374	
4	Worksop ARS	404	538	450	462	126	60	2040	
5	Tall Trees CG	458	426	433	393	270	7	1987	
6	Milton Keynes ARS	356	335	339	364	542	22	1958	(E)
7	Bolton Wireless Club	198	202	233	290	690	309	1922	
8	RAF Waddington ARC	373	319	344	427	368		1831	
9	Trowbridge & DARC	212	131	290	285	288	566	1772	
10	Rugby ATS	164	320	223	212	290		1209	=
11	Cray Valley RS	2		525	547	114		1188	





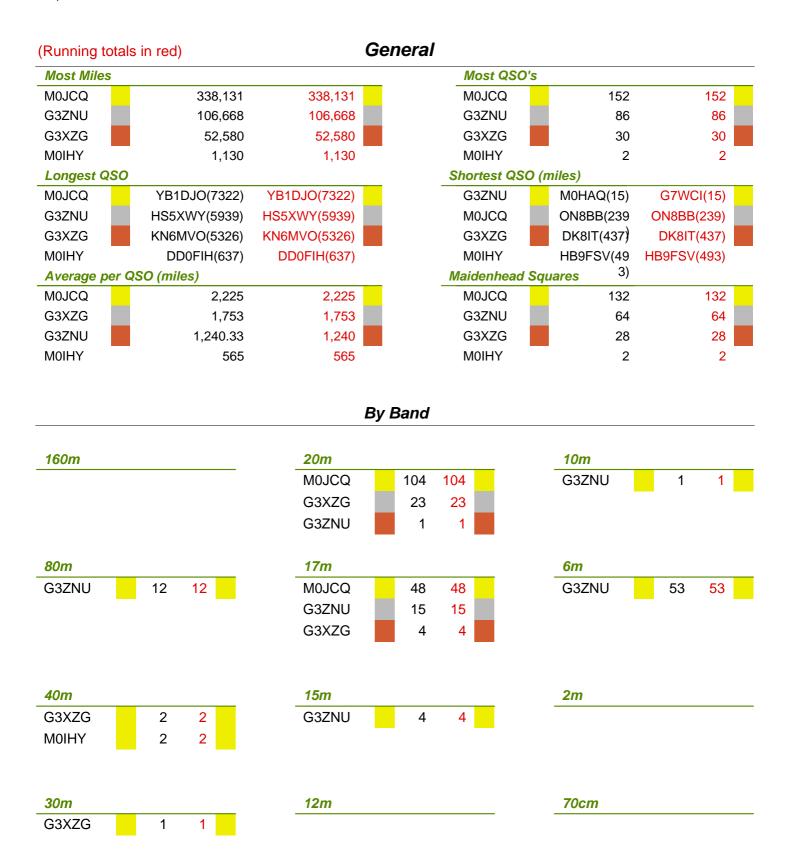




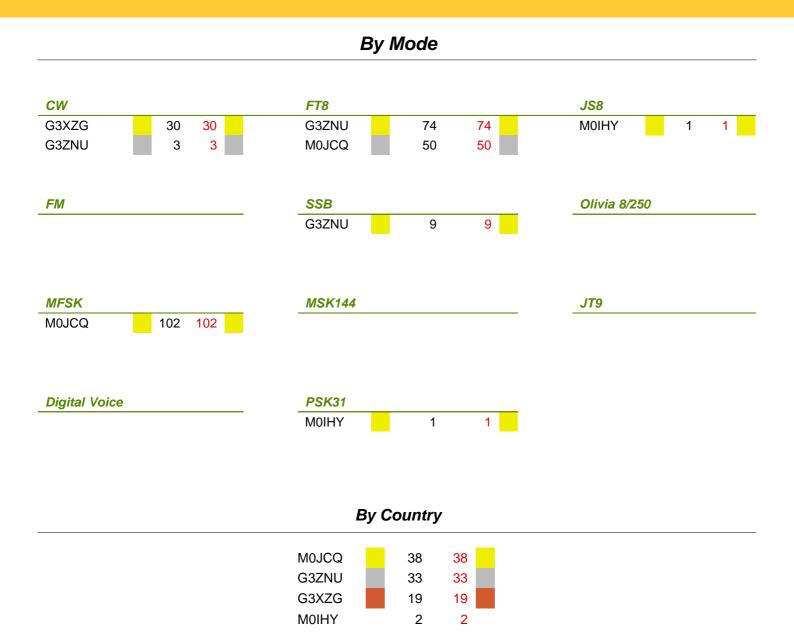
'Air Miles', how far have we gone? / results

This month we start the whole cycle again (it runs from January-December), thanks to those who took part last year. I shall not be putting in such a large effort as in December (the perils of lock-down and lots of spare time), I think I FT8'd myself out, James (M0JCQ) On the other hand seems to have dominated the rankings this month.

So, how have we done this month?



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



Any other business

AGM

On the 27th of January we held our AGM, hopefully I will be able to include the document in next months newsletter.

COVID-19 Vaccinations

Dave (G8FMC) had his jab on Friday 29th January, Angie (M6WTL) and I (M0IHY) on Sunday 31st January, and Graham (G0MKI) following on Tuesday 2nd February. I believe Guy (M0GUY) has his booked for 10 years time! Hopefully we may be able to venture out by the end of February (fingers crossed)