

NARS - November 2020 Roundup !

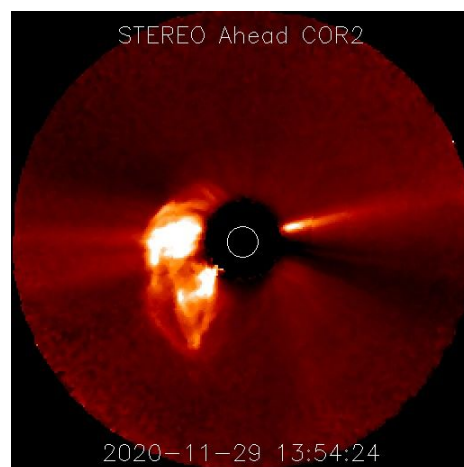
Hi all, just a quick recap of November. The start of the month ended with Wales coming out of a two week lockdown. Guy Fawkes night was surrounded by the lockdown so I assume many had sparklers in the garden ! The month ended with some great talks on zoom from guest speaker Oscar M7OJA on Flora and Fauna, and from club member Mike MW1EHW on VDSL interference.

Although over a month ago now, the AGM went well on zoom, with old and new officers taking up their posts. Talking of Zoom, what a great platform this has turned out to be, enabling all of us to see and talk to each other. I think we will somehow work this into our schedule next year when we manage to get back to the club house. Great to see new members joining the club and guests arriving from far and wide on the zoom meeting. Brilliant.

Space....

The Sun : A moderately strong solar flare measuring M4.4 at its peak erupted at 13:11 UTC on November 29, 2020, from a region about to rotate into Earth view. The event started at 12:34 and ended at 13:41 UTC. This is the strongest solar flare in more than 3 years.

A Type II Radio Emission with an estimated velocity of 765 km/s was associated with the event, indicating a coronal mass ejection (CME) was associated with the flare event. Additionally, a 10cm Radio Burst with a peak flux of 240 sfu lasting 34 minutes was also associated with the event.



A 10cm radio burst indicates that the electromagnetic burst associated with a solar flare at the 10cm wavelength was double or greater than the initial 10cm radio background. This can be indicative of significant radio noise in association with a solar flare. This noise is generally short-lived but can cause interference for sensitive receivers including radar, GPS, and satellite communications. [quoted from The Watchers]

SpaceX : A SpaceX Falcon 9 rocket carrying the company's Crew Dragon spacecraft launched NASA's SpaceX Crew-1 mission to the International Space Station with NASA astronauts Mike Hopkins, Victor Glover, Shannon Walker, and Japan Aerospace Exploration Agency astronaut Soichi Noguchi onboard. A six month mission launched at 7:27pm EST from Complex 39A at Kennedy.

SpaceX launched another 60 satellites into its Starlink system mid month, part of an estimated 30,000 cluster of satellites overhead. Check them out here : <https://satellitemap.space/>

All of this launching and reuse of rockets is becoming second nature now to SpaceX, much like reusable aircraft. In years to come I wonder if distant space travel for humans will also become second nature. A ticket to the bar at the end of the universe with a stay over on Mars please? Perhaps the answer is indeed 42 !

If you need an invite to the whatsapp group, drop me an email with your phone number and I can add you. Please keep submitting anything you feel can be included in the monthly round up. Honestly it can be garden work, fixing a boiler, building a time machine, or even radio related! It is all very welcome.

Thanks to all that have submitted articles this month.

73 for now, Richie. MW0LGE

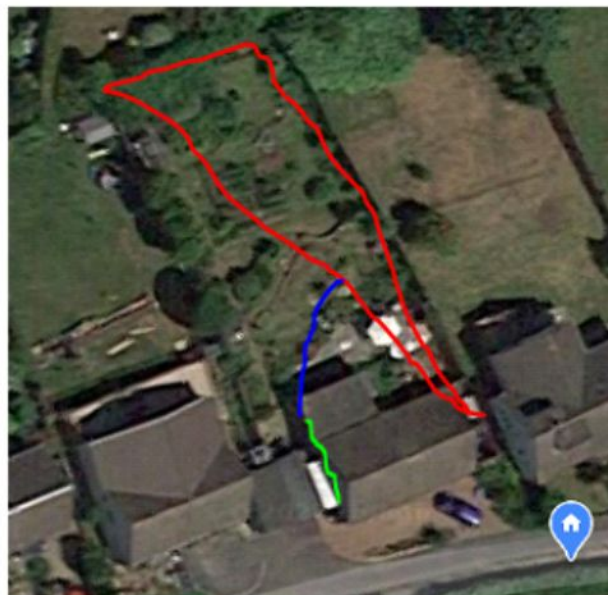
Hello from MW1EHW (Mike)

My name is Mike and I have been a member of the club for about 3 years now. I have not been the most active club member including being on the air. Most of my activity is in the Autumn, Winter months when it is cold outside, and the nights are long.

Having been away from the hobby for about 15 years I have a lot to learn again and it is good to get something back out. I recently replaced my FT-847 HF side with a new Icom 7300 from Dan the man plus a Microset PT135. It made an amazing difference and it allows full working on 60m, 40m. The FT-847 is now left for 2m/70cm work the Diamond V-2000 which was recently attached to the bungalow extension to get me on the air for Tuesday nets.

Turning my attention to the HF antenna which was put up about three years ago. The antenna was a doublet about 24 metres in length fed with 450 Ohm balanced feeder (approx. 10m) to a 4:1 balun (originally thought it was a current but turns out to be voltage). I have now replaced it with an 80m HF loop still using the original 450hm balanced feeder and 7 metres coax. Thank-you to Ross GW3NWS for the cable.

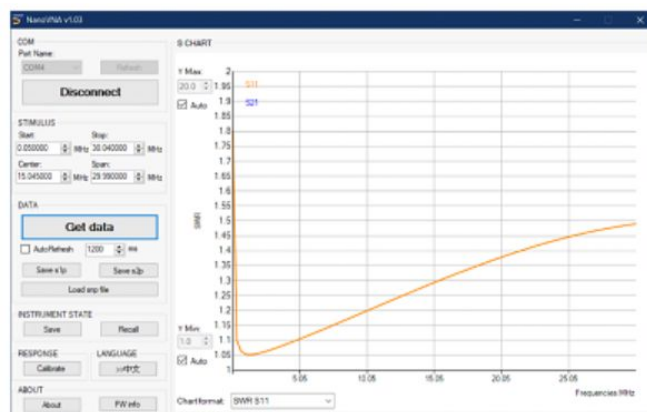
The bungalow pole gives me about 7-8 metres of height, but the garden falls away by a good 2.5 – 3 metres. Using two 6 metres scaffold poles allowing a triangle configuration. The aerial picture shows the antenna in Red, ladder feeder in blue and the coax in green.



There are several upcoming projects.

- Build a new 4:1 Current balun
Under construction is a M0PZT 4:1 Guanella current balun using two FT-240-31 ferrite core and 15A DC automotive cable (temporary) with the final version using 1.25mm enamelled wire. The nanovna is giving me some interesting results with the 200 Ohm load due to the resistor not being a non-inductive load.
- SDR for Icom 7300
Purchased an SDRPlay RSP1a which now allows investigations into the local noise floor for electrical and VDSL interference.

I have opened a complaint with Ofcom for VDSL interference.



VDSL Presentation

If anyone missed my VDSL interference presentation on the club zoom night, happy to run it again on request.

For further reading.

- <http://rsgb.org/main/files/2019/10/How-to-identify-VDSL-interference-v1.0.pdf>
- <https://rsgb.org/main/technical/emc/vdsl-interference-reporting/>
- EMC Leaflet 15 - <http://rsgb.org/main/files/2020/03/EMC-Leaflet-15-VSDL-v3-February-2020.pdf>
- Radcom November 2018
https://rsgb.services/public/publications/vdsl/november_2018_radcom_vdsl_article.pdf
- Radcom May 2020
https://rsgb.services/public/publications/vdsl/200408_vdsl_call_to_action_article_in_radcom_may_2020_edition.pdf
- Clean up your shack
[RSGB Convention lecture 2015 - Clean up your shack - Bing video](#)
[Clean Up Your Shack – 2019 | GM3SEK's Technical Blog](#)
- Email addresses
Vdsl@rsgb.org.uk – Use when submitting complaint to Ofcom and providing updates
Vdsl.help@rsgb.org.uk – Use for general queries
Interference.Report@ofcom.org.uk – Engineers work 24x7 – May get a call evenings / weekends

Open offer to club members to help record VDSL interference and engage with Ofcom.

EMC filtering of computer noise to rigs

The Thursday 26th November 2020 club night zoom meeting raised the subject of computer noise being transferred to my rig at the end of my VDSL interference presentation. Joe M0JVG/DH4JG pointed out the Wurth Elektronik 829993STICK USB 3.0 EMC Filter. I am offering to make a bulk purchase for the club as I am looking for two of them. The cheapest place I can find at the minute is Mouser for £13.72 if we can get a quantity of 5 or more and the postage is free.

Battery Support

Thanks to a kind neighbour I now have a 12V 65Ah AGM battery. Plan to reconfigure the rigs for battery power using Anderson Pole connectors. Will help with interference tests and operate during power cuts along with supporting options for portable work in the future.

73 Mike MW1EHW

GW4JBQ Activity Report - October/November 2020

Autumn Series RSGB CC Contest

Well the Autumn Series RSGB CC Short Contests have now been and gone you can find the results here [HF Contests-news.results.rules \(rsgbcc.org\)](https://www.rsgbcc.org/Contests-news.results.rules). My activities in the Summer Series were documented in a previous newsletter and the Autumn Series is much the same.

The contest is 80m only and runs from September through to November and there is a section for CW/ SSB/ DATA each month, it's duration is 1 ½ hours starting at 8pm and ending at 9:30pm clock time. I could only do the DATA section and chose RTTY as my preferred mode, you could have chosen PSK or FT4 or any other fancy mode if that's what takes your fancy.

Running at the same time as this is the RSGB FT4 Contest which runs for the same time duration each month, you must be very aware though that in this contest you don't use the usual report that is pre-set in WSJT-X or JTDX. There is no signal report so you can't use JTDX because there is no contest mode and in WSJT-X you have to put a tick in the contest box. This is File/Settings/Advanced then tick "Special Operating Activity" at the bottom of the window and select "NA VHF Contest" this will setup the report as Grid Square only, I say this as the winter series from December onwards is the same. It never ceases to amaze me the number of times that I get caught out doing something wrong and end up about 5 minutes from the start of activity cobbling something together and sorting out the Cabrilo file at the end of the contest.

As this is the club calls contest you must put Newport ARS as the club so that we get some points but as I was the only entry it doesn't really matter.

In the General Club Section Newport ARS was 25th from 47 entries, not bad seeing that I only did 2 of the Data slots. Results are here [RSGB Contest Results Autumn Series DATA 2020 \(rsgbcc.org\)](https://www.rsgbcc.org/RSGB-Contest-Results-Autumn-Series-DATA-2020)

In the individual sections you have 10w and 100w assisted and unassisted, I was only in the 100w unassisted section because I was using more than 10 watts. So there were 154 entries in this section and I achieved 54th place, I am quite happy with that as I missed the first slot and couldn't be bothered to fix my aerial (that's another chapter).

CHRISTMAS HQP

Keep your eye open for the Christmas Hope QSO Party that runs from 21st to 31st December, there are sections for FT4, CW, SSB and RTTY again it's only 1 ½ hours but at different times during the day. I may or may not see you there, it depends on how the days pan out.

SHACK PROBLEMS

Now my shack is pretty basic, I have a Yaesu FT920 as the main rig with a TH3 Tri-Band Aerial on the tower and a G5RV for the other bands. The FT920 is good for this as it has two aerial sockets and I use one for the beam and the other for the G5RV, I have another radio for 6m and 4m but that's not used very much at the moment. My G5RV is tuneable on all bands except for 80m, this is a problem as the activity contests are all on 80m. On 80m I have to tune the aerial with a FC-102 Tuner which will give me about 2.5:1 SWR and then use the radios internal atu to tune out the 2.5:1 and it runs all night on 80m.

One dry and sunny morning last week I decided the time was right to take the aerial down and see what had happened to it, my G5RV is home made. The ladder line is 450ohm Commercial ribbon type cable the same as we use at the club and the wire elements are 2.5mm twin&earth wire that I had spare. This aerial has been in the air working quite well for well over ten years and I suspect the change to a non 80m aerial has been

progressive over a period of time. The twin&earth is normal wire and not hard drawn so when it's 40ft in the air with a wind blowing it will naturally become drawn and consequently a lot longer, when I measured it last week each leg was 54feet long instead of the required 52 so I cut off 2feet on each leg and put it back up but it was still a little low on 80m so cut off another foot and it now tunes nicely on 80m and all other bands as well up to and including 4m (70MHz) and that's using the internal ATU so quite pleased with it. I just need to use it now and see if it radiates any RF.

That's my ramblings for the month,

73 and 44
GW4JBQ

All tied up with ribbons - Steve GW4OGO

I don't use my HF amplifier much but when I do, it can make all the difference. There are two reasons behind this. One is that, unless absolutely necessary, I will try to work a station with the minimum of power I can get away with. The other reason is that the less I use it, the longer it will last and I will evade the inevitable rollicking in the event of my breaking it!

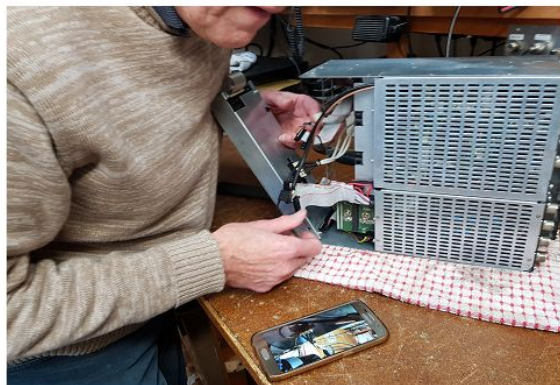
However, despite my best efforts, one day last month, I tried to turn it off and the button marked off did nothing. I had in the past noticed that several of the other, less used buttons had been "playing up" so it should have come as no surprise! Luckily for me, I happen to have a very good friend and amplifier expert extraordinaire living up the road called Ross GW3NWS.

So after doing a bit of sleuthing – talking to Ross - it seemed that the "ribbon" touch screen had developed a fault which is not that uncommon and more importantly – not my fault! After a call to ML&S and speaking with Steve Venner, it was established that they could order one for me or maybe it would be better to contact SPE in Italy.

Finding an email address on their site, I did this and got a reply from Guido at SPE and we eventually agreed on which part that was required which he said he would supply – free of charge! Now that's what I call service especially as the amp (SPE Expert 1K-FA) is well out of warranty.

A week later, true to his word, I received the part via post and as I had been told that replacing this part which has to be stuck on to the front panel and you only get one go at it, I decided it may be better to let the expert fix my expert!

They say pictures tell a story, so here they are.





There was a heart stopping moment when, after re-assembling after fitting the new panel and switching on..... it didn't work! While I was considering the best way to explain to the xyl why I may need to find north of £3K for a replacement amp, Ross re-seated the ribbon cable and tried again.

And it worked!!!! Thanks Ross!!!!

73 GW4OGO

Nets and Keeping In Contact

We have two nets running at the moment, and Zoom on Thursday.

- Tuesday VHF net, 8pm local. 144.700MHz
- Thursday Club Night on Zoom <https://www.gw4ezw.org.uk/zoomdetails/>
- Sunday HF net, 10am local. 3.705MHz +- qrm

Other Nets

- Cwmbran DARS - GB3RT net, Monday 7.30pm
- Cwmbran DARS DSTAR net - DCS 005P, Tuesday 7:30pm
- Cwmbran DARS HF net, 3.722, Thursday 7:30pm
- Carmarthen ARS - 80m ssb, Sunday, 2.30pm, contact GW0JLX on 0776 828 2880
- Bristol ARC - Nets on GB3AC Sun 8pm, Wed 8pm. Fri 7pm