



'Tis the time of year when heavy clicking of keyboards can be heard from the “offices” of the Bristol 70cms Repeater Group as we busily produce this, our special 10 year on site and 40+ years of operation special edition of the Repeater Group newsletter.



It's hard to believe that 10 years have past since GB3BS was shutdown at the Cossham Hospital site and moved to Lansdown. It feels like it was only last week. Yet on Saturday the 19th of December 2009 Mark and I were on site at Cossham before 9am to shutdown the Repeater for the last time. It was carefully recovered. Then it and a donated PMR Repeater from Avon Ambulance, located in the unit next to the one that had contained GB3BS. With agreement of the Hospital the antennas were abandoned. This was due to access restrictions placed on us by the hospital, and the antennas were over 30 years old (also we had a brand new antenna as a spare ready for Lansdown).

At the time there were strong grumblings by some users of the Repeater about us abandoning the antennas, but these people were not armed with the reality of the restrictions placed on us by the site owner, or had not followed previous newsletters stating we had gone to single antenna working due to the lower antenna failing. Recovery just did not make sense. We were aware of at least one person who had stated on air that they were going to recover the antenna for themselves!



Thankfully this was just bluster and we guess they decided that trying to recover the antenna would have been trespass and theft (The Hospital technically owned it once we left site) and there was too much risk of personal injury.

The Repeaters were carefully loaded into my ex-company van and taken to the new site at Avon Fire and Rescue Lansdown (Located to the East side of Bristol who don't know).

Unfortunately for us the Lansdown site at this point was not really ready to receive GB3BS, and had only recently had the roof and the internal electrical system replaced making it water tight and electrically safe. Yes we had been given around 7 Months notice by the Hospital to leave site, this had been extended from its original 4 Months. We spent a fair bit of this time locating a site for the Repeater, Negotiating terms and then as stated above, repairing the roof, allowing the site to dry out and at the same time, re-wire the site to bring it up to standard.



Yet here we were moving the Repeater to the site! As some will remember when we move to site, we did not even have an antenna on the tower. Instead we had to set up a temporary antenna installation at around 10ft AGL. This we knew was going to give poor coverage, but we needed to get some kind of service on air to keep the licence "warm".

And yes you guessed it; we were soon bombarded with complaints about the poor signal into Bristol. A lot of those complaining knew of the reasons behind the problem, yet moan they did.

We were also aware that some users of the repeater were carrying out independent testing of our antenna coverage, using their own antenna equipment and portable masts. We assume to try and prove the coverage predictions were incorrect and moving to Lansdown was a mistake.

Thankfully once we got the antenna up on the tower things started to settle down.

So, here we are a whole 10 years later and with the gracious support of our members we are still on air.



Yes we have grown with the introduction in 2014 of GB7BS (Yes that too is time that has flown by). GB3BS Still remains our primary box.

So, "Happy Birthday GB3BS – Lansdown"



What about the 43rd year calibration?

Those who can remember our 2016 Newsletter will know we celebrated our 40th Anniversary. So this year is 43 years GB3BS has been on air. In this time GB3BS has almost been on air every day, with only we think 10 days off air, spread over this time. Again a lot of this is due to the fantastic support the Repeater Group has received from you, yes YOU the Members!

Without users and members of the repeater group, GB3BS (and GB7BS) would not be on air. It would be fantastic to perhaps hear more members on air using GB3BS & GB7BS in the future.

But we know that people are busy and do not have quite so much time for the Hobby as they used to.

73' de G7FBD/KG7FBD
Mat

IN THIS EDITION:-



- Up the Pole (from the 1987 Newsletter) – By *Mark G4KUQ*
- Technical Report GB3BS by *Mark G4SDR*.
- Technical Report GB7BS By *Mark G4SDR*.
- The Southwest Cluster – By *Mark G4SDR*.
- Site Maintenance report – By *Mark G4SDR*.
- Rally Report – By *Mark G4SDR / Mat G7FBD*.
- Membership – By *Mark G4SDR*.
- Technical report MB7VV & MB7UVV – By *Mat G7FBD*.
- Membership form.

DID YOU KNOW?

The Bristol 70cms Repeater Group can be found in the diverse world of “Social Media”. We can be found on **FACEBOOK** Just search for GB3BS, or The Bristol 70cms Repeater Group.

You can follow us on Twitter @gb3bs or #gb3bs. This feed reports on emergency outages/faults or other “Stuff” we think you might like to know about The Bristol 70cms Repeater Group.

Or, if you have time to kill, why not pop over to YouTube and check out our Channel, again search for GB3BS. Ok, our videos are sometimes crazy & sometimes, we hope, interesting. This is what happens to you when you run a repeater system!

A brief look back at one of our more memorable moments at Cossham Hospital.
(Article first published in the 1987 edition of our Newsletter).

UP the POLE by Mark, G4KUQ

As will have been reported elsewhere by my friend and fellow committee member Mark, G4SDR we have had one fault with GB3BS this year which manifested itself in a falling



off in RX performance. Dire thoughts about RX antenna problems and other expensive faults were raised when Mark 'SDR went on site to test RX sensitivity and found this OK. Even more head scratching when it was reported that the RX ant was showing a VSWR of over 3:1!

With all of this in mind I decided that the only way to find out was to have a look at feeder and the connector and if serious work was needed then the array would have to come down and be sorted out. Sunday morning was decided on and G4XCB and the GBC van were pressganged into helping.

Sunday morning dawned bright and clear (& v.cold) and we set out to sort this one out either way. Lashing a ladder to the pole soon was accomplished and G4KUQ was climbing the ladder so that he was level with the connectors on the antenna. Not the time to find you are a little afraid of heights! In the very cold wind I started to unclip the cable ties and get the connector free.

There was the problem - a neat hole in the amalgamating tape. So far so good. Getting at the connector and undoing the whole thing revealed a mini lake in the top of the connector and water coming out of the 'N' plug. "I have found it", I shouted. At this point I dropped the pliers. "Catch 'em", I yelled and Mark who never could have played for Somerset First VII dropped 'em.



The horror of those pliers slipping off the roof can never be forgotten and goes to prove that when your working at heights tie your kit on!!!

We checked the cable - 1.01:1 no problem and put the lot back together after drying out the connectors. It was at first OK but after about 5 min the VSWR started to rise again. "What scale on this thro'line am I spose' to look at", said Ken, G4XCB, "It says here 120 watts up and 3 back!". As you can guess all of this technical shouting

was just long enough for me to re-wrap the connector with tape.

"Its no B**** good Mark", said G4SDR when he had completed his meter reading lesson with G4XCB "you'll have to take it to pieces again". I was undecided about liking heights when I started the job but now I was becoming certain - I didn't like 'em one little bit. What had put me off was seeing a Cessna 142 flying past and it seemed VERY, VERY close. Up the pole I went feeling less than 100% about the whole project. Sure enough full up again. I cut the coax PVC and out came water - great I thought my old mate capillary action again! What was I to do? I flicked the cable and great drops came out of the connector. I struck upon a plan. Being an ardent fan of John Wayne I remembered how he always cured the rattle snake bite by cutting the leg or whatever and sucking out the poison and spitting it out on the floor.

That was for me! "Now listen coax, this is for your own good" I said and cut the PVC and proceeded to suck it dry. I managed to get a great deal of water out and put the connector back together and test again. "Tis a far better thing I do this day" I thought and I now know why John Wayne spat out the snake poison - if it tastes anything like Coax water !

Result one dry coax - no more RX problems - I live to fight another day and BS has John Wayne to thank for its RX coax. Two morals to this story. One don't drop your kit over the roof and if your in a jam think about it - this is what dedication is all about.

Mark, G4KUQ



GB3BS Technical Report by Mark – G4SDR.

Welcome to the 2019 report on GB3BS. 2019 has been very quiet, the repeater continues to function without any faults or troubles and now that the problem with the GPS Clock has been sorted, we have not had any repercussions of the infamous crash when the repeater controller repeatedly broadcast the message "Time out, Time out Cancelled".

The year ticked on by with very little attendance or work needed at the site. Our remote monitoring and control systems were working well as most things could be done from the comfort of the shack, or the mobile phone.

In June we decided to swap out the repeater controller with our spare. As was mentioned in our newsletter last year, the processor used in the controller has become obsolete and a new processor needed to be swapped out on the working unit. Everything was swapped across and a new processor has been successfully installed and tested on the bench. It was hoped that the new updated controller would be put into service on GB3BS this year, but with a few last minute changes and configuration updates we have decided to delay this until the early part of 2020.



Interference Issue.

Thinking that 2019 was going to be a fairly uneventful year came to an abrupt halt when I noticed that GB3BS was getting some odd interference which on the face of it sounded like adjacent channel break through. This all started on October the 18th and would, at times, prevent the repeater from closing down and cause real problems for some stations working the

repeater, especially weak or mobile stations.

I was able to quickly identify the problem within about an hour and initially thought that someone had made an awful blunder, so I took that extra bit of time to really be sure of my findings before raising the alarm.

So now for the tech bit, calculators at the ready ☺. I found out that the repeater in Swindon, GB3TD, had moved frequency from their usual RB3 channel to a wide split channel, RU67 (430.8375), just 12.5 KHz down from BS. However, and what is even worse is that their frequency pairs had been reversed, so that their repeaters output was high at 438.4375 MHz.

This placed their repeaters output frequency 12.5 KHz below our input frequency at 438.450 MHz and with it, their input was now only 12.5 KHz away from our output frequency, 430.850 MHz !

Also bear in mind that the repeater GB3ZB located on Dundry is operating on RU66. As you can see, with BS on RU68 the repeater GB3TD had been placed right slap-bang between the two repeaters (BS & ZB) and that the new frequency pairs of GB3TD were reversed. This is what was causing the splatter to BS and potentially to ZB. It was also subsequently shown that BS was causing splatter to TD,....the whole thing was one big cock-up by someone, and I had my suspicions who it was!



To make things worse, GB3TD & GB3BS both share the same CTCSS Tone slot of 118.8 Hz. This was not helping things as the tone from TD's output was being detected on BS's input and at times preventing the repeater to properly close down.

As soon as I had all the facts, I immediately emailed the chairman of the ETCC, (who is also the regional representative for the South West) and the repeater keeper responsible for GB3TD, the Ridgeway Repeater Group and explained the situation and my findings.

I quickly had responses from both parties. The keeper of GB3TD did acknowledge that he was surprised at the frequencies that were issued at the time and that there may be problems.

The response from the ETCC was, in my view, non professional and lacked very basic RF Channel Management skills. I was told that the Computer Model they used says it would be ok,...a case of "Computer says yes". Bearing in mind that BS & TD are 30 miles apart and have a completely unobstructed view of each other, no natural cover or obstruction for any sort of RF isolation.

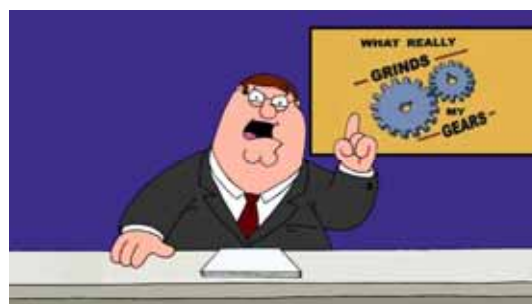
I was also contacted by a repeater group up north, around Coventry I think it was, who also reported problems to their repeater as a result of the frequency move by TD.

The good news was that everyone agreed that there was a problem and things could not continue as they were. Fortunately, after about a week I was informed by the ETCC and by the keeper of TD that TD would revert back to their original channel of RB3 until a new channel could be worked out.

The interference to BS continued on and off for about another 10 days while plans were put in place for TD to arrange access to their site and move frequency again. My thanks to them for keeping me informed of what was going on.

Unfortunately I am not at all surprised that something like this had happened. Sadly Ofcom has, what amounts to, outsourced frequency management to the RSGB's spin-off arm called the ETCC. They are both supposed to be in place to ensure that these sorts of problems are kept in check and avoided. Clearly one or both failed in this instance and I question the professional standing of one of them, and have done so for some time! As a result, the 70cms Band has become a mess, made up of several different Duplex channel splits, reversal of some TX output and RX input frequencies & scattered Mode allocations. My view is that the 70cms band especially has become a Free for All "Wild West" and is not being properly managed. It is probably impossible now to rectify the problems, the genie is out of the bottle,...

As Peter Griffin said,
"it's what Grinds my Gears".



GB3BS Maintenance.

Maintenance to GB3BS was carried out during June/July. It was found that nothing really needed adjusting, but it is always good to carry out basic checks and not get complacent. It is satisfying to know that all the equipment is performing well and gives us such good reliability.

Probably in 2020 we will carry out a major health check to everything to make sure everything is in tip top condition and that there is nothing that needs adjusting or replacing. Part of this would be to swap over to our spare Tx & Rx units to give them a bit of exercise and to swap the controller over so as to make use of the new CPU based unit. Testing it on the bench only goes so far!

The antenna branching system will also be rigorously checked over. As GB3BS & GB7BS both share the same antenna it is important that all the Duplexers and Cavities are kept in tune. As the inside site temperature can swing between 5°C in the winter to around 32°C or more in the summer. The mechanical stresses due to temperature changes on these units need to be kept in check so that performance is maximised.



Pips and the Timeout Timer.

This is always a newsletter favourite, but its worth mentioning as people do still fall foul of it.

The repeater has two Pip's. It is customary for a station to wait for the 2nd Pip to pass before taking the opportunity to transmit. If this is not honoured then the station will potentially Time Out after what ever time is left out of 4 minutes.

Please remember, the Timeout Timer **only** resets itself after the 2nd Pip has been sent.

It is, of course, permissible for stations to call-in if they wish to join the QSO before the 2nd Pip.

But to be sure of resetting the timer, always wait for two Pip's, especially after someone has called in.

The Time out Timer is set for 4 minutes. If this time is exceeded the repeater will announce Timeout and shut down. As soon as the input is clear the repeater will come out of Time out and QSO's can continue.

The Timeout Timer is now working correctly. There were issues with it before the GPS Clock problem was sorted early last year. See last years Newsletter for a detailed explanation as to the problems and the fix to the timer issue.

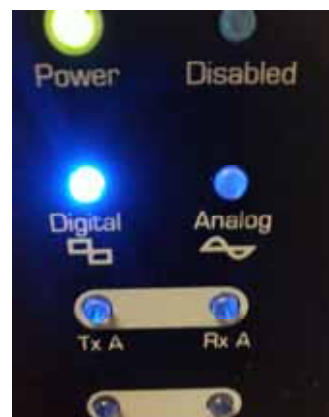
**Old Newsletters can be viewed in the Newsletter Archive section of our website.
Or by clicking the link below.**

<http://www.gb7bs.com/news/archived%20newsletter.html>

GB7BS Technical Report.

Very little to report this year. The repeater performed without any trouble or down time throughout the whole year. As we have mentioned in past newsletters the repeater is a single self contained Motorola commercial DR3000 unit and just gets on with the job.

It is connected to the South West Cluster and is the primary unit for maintaining and controlling the network. We have set up a off-site server which monitors all of the repeaters that are attached to the South West Cluster. From there each repeater can be controlled if necessary and any alarms on the system can be logged and details sent out to the individual repeater keeper.



GB7BS Maintenance.

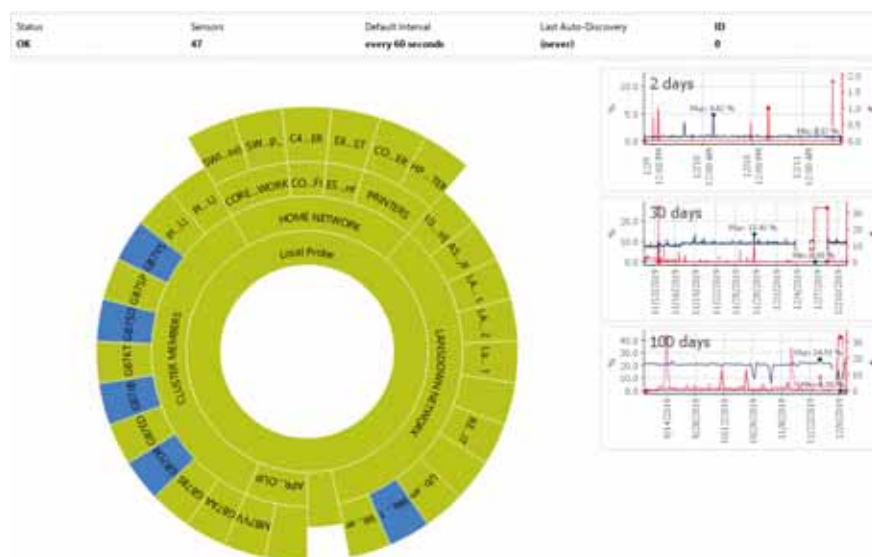
Like GB3BS maintenance was carried out during June/July. Fortunately being a DMR Repeater there is very little maintenance to be done. No audio levels to check etc. So it amounts to Rx Performance, Frequency & Power checks.

As mentioned above, in 2020 along with GB3BS we plan to carry out detailed checks on the antenna branching system to ensure it is fully tuned and in tip top condition and is working along side GB3BS.

At the same time we will take the opportunity to update the repeaters Firmware. This latest version appears to be the last release of firmware for the DR3000 as Motorola have announced that the equipment is "End of life", but we will keep an eye on this.

The Southwest Cluster.

The South West Cluster still remains fairly under used, especially at this time of year. With the SWC now covering a good part of the South West even with areas of a large populous activity on TG950 is disappointingly low.



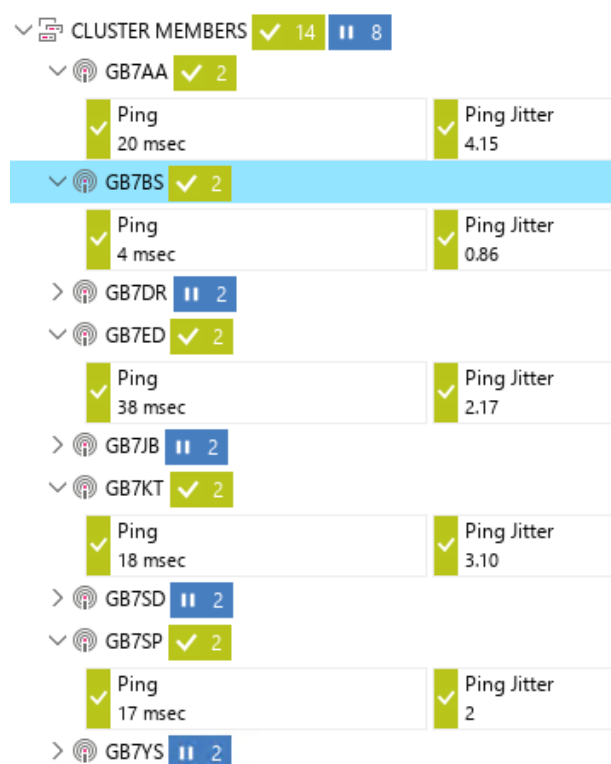
For example, GB7ED located in Exeter joined the SWC just over a year ago, yet despite assistance in getting sample Codeplugs written to get stations up and running, there has not been any identifiable activity from that area.

It seems to be that people are more interested in running their own Hot Spot and or using the Internet directly to communicate using digital modes. Digital modes using traditional repeaters have changed the way we use repeaters. Most activity on them is by way of fixed station users, using them as a Gateway. Mobile stations are found less often on digital repeaters, sadly.

People often ask why the SWC is not connected to the Phoenix or BrandMeister DMR networks so that I can talk all over the UK & beyond. As the DMR boom has subsided it has become clear that these big networks have become too big, complicated to use, difficult to program new radios for and limits in talk time. The DMR system was never designed to cope with so many Talk Groups spread across only 2 time slots.

We believe that the SWC offers the functionality of a mobile DMR network with true Roaming, which it was designed for. It is simple to use and simpler to include in DMR Radio's. No limits on Talk Time (other than the standard 4 minute waffle time out timer) and only having two Talk Groups.

We have received quite a few emails now supporting this concept more and more as people tire of the overcomplicated networks and the frustration it brings them. Ok, if you want to talk to the world then they may work for you. There is already much duplication to do this, so why add to it.



CLUSTER MEMBERS	✓ 14	⏸ 8
GB7AA	✓ 2	
Ping	20 msec	Ping Jitter 4.15
GB7BS	✓ 2	
Ping	4 msec	Ping Jitter 0.86
GB7DR	⏸ 2	
GB7ED	✓ 2	
Ping	38 msec	Ping Jitter 2.17
GB7JB	⏸ 2	
GB7KT	✓ 2	
Ping	18 msec	Ping Jitter 3.10
GB7SD	⏸ 2	
GB7SP	✓ 2	
Ping	17 msec	Ping Jitter 2
GB7YS	⏸ 2	

Currently, as this newsletter is being written, the SWC is made up of the repeaters GB7AA, GB7BS, GB7DR, GB7ED, GB7KT, GB7SD and GB7SP.

Unfortunately there are a few missing from the operational list. GB7JB is currently off the air and is awaiting a new network connection. I have been informed that it's return to service is imminent. In fact by the time you all read this it may well be back on air.

GB7MJ is, as far as I am aware, on air but is not connected to the SWC. As GB7MJ is not a Motorola unit it cannot connect to the SWC. There has been a long standing wish to change out the repeater to a Motorola unit so that it can then connect to the SWC network.

Sadly money creeps into this plan. The Group responsible need to raise funds in order for this change of equipment to happen. I am not privy to the current status of this or if it will ever succeed. We will just have to wait and see.

GB7YS is currently off air and the site has been lost. If you remember, originally it was located on the roof of Yeovil College but had to move due to structural problems with the roof.

It was moved to a local amateur's home QTH within a stones throw of the Yeovil College site and initially worked very well. However, due to some broad band problems and some issues with the site, Dave G3ZXX decided to close it down and remove the equipment.

Dave is currently tracking down a new site for this repeater. Let's hope we see it back soon.

It should be remembered that the Bristol 70cms Repeater Group is not responsible for any of the South West Cluster group of repeaters apart from GB7BS. Each repeater is maintained and managed by individual Groups. So if you have a issue or a question about any of the SWC Repeaters then please contact the repeater keeper directly.

We do try to keep people informed as to what is going on and this is usually done through our groups Facebook page, www.facebook.com/groups/gb3bs. It also has an update on the operational status of each repeater. Members are welcome to post topics of interest, ask questions, make suggestions and of course report any problems that we might not be aware of.



A bit of a reprint from last years newsletter to remind everyone that there is a DMR Net on most Saturday evenings on TG950 (Slot 2) between 19:00 and 20:00 local. This net has no formal format, and is a good chance to natter and dare I say it, ask technical questions (Not always DMR related!). The regularity of the net does give newbie's, or people wanting to check their radios or even code plugs a chance to "join in and have a go". You will not be chastised for having or doing something wrong. Although problems are pointed out! So please do not be offended by the help or advice offered.

The Andover club also hold a net on TG950 starting at 20:00. This net is open to all, and is held on the second Tuesday of the Month (and Tuesdays when there is no club meeting). For more information check www.arac.org.uk

Site Maintenance.

During 2019 we carried out the usual checks on the standby generator, usually every 2 months. This was to check that it started when needed to and that everything like oil, fuel and starter batteries were all topped up.

Generator run time so far this year from genuine outages was around 8 hours. If you remember back in the early part of 2019 there were bouts of wind and rain which caused some outages to our mains supply that are brought in via overhead power lines. If I remember correctly the longest single generator run was about 4-5 hours.

As reported last year, we had planned to repaint the roof so that it stayed sealed from any water and which would also provide a reflective surface that helps to keep temperatures down within the building. Unfortunately this work was not completed and is now planned for the spring/summer of 2020. It became clear that the roof needed more preparation before the new paint could be properly applied, and some good weather.

Some tree pruning will also be required as there is quite a bit of overhang from trees which causes the roof to become clogged with leaves and debris over the year, leaving a horrible thick green sediment that needs a lot of time to really dry out, only then is it easier to be removed.



Also in our 2018 Newsletter we mentioned the fact that our Front wooden doors to the site were rotting badly, very badly. We had reported that we had found a source of a new set of doors and were looking for someone to install them.

Unfortunately we could not find anyone who was able to help and it was a job that both Mat & myself felt was outside of our skill set. If you're paying good money, then you can't afford to make a mistake. We are not carpenters. Know your limits!

During one visit to site by Mat earlier this year he was unable to gain access, the doors had become so warped and swollen that they just could not be opened. So after gathering some extra tools, like a sledge hammer and some chisels I headed for site.

With a bit of careful hammering and prising of the doors we managed to open them,... phew!

It was clear that these doors have had it and although we made a few basic repairs it was time to expedite their replacement ASAP.

We can now report that we have secured replacement doors for the site. We had to seek professional help & advice as it became clear that the doors were of an odd dimension and thickness, so much so that they were not available "off the shelf".

So,..we had to have the new doors custom made. Initially this made both Mat & I cringe as we were expecting a big quote for a double emergency entrance/exit fire door. This was potentially going to be our biggest single purchase in a long time and potentially cripple the Repeater Groups bank account. But what else were we to do; bodging it was no longer an option.

I am glad to report that early this month the new doors were expertly fitted. We had also taken the opportunity to replace all the old and semi rusty door mechanicals. Watching a professional door fitter get the doors hung so quickly and to fit so well is an art !

We managed to get a little discount off the price as we were happy to fully paint them ourselves with a good top coat of gloss paint. So it's nice to finally have a rain, snow and wind tight pair of doors.

Another job that has been delayed, which was reported in last years newsletter, was the installation of a cooling fan in the equipment room wall, as during the summer months the room which does not have any natural ventilation, gets very warm.



The good news is that we have kindly been donated a suitable extractor fan which should push the warm air out of the room while allowing cooler air in and will be thermostatically controlled for summer temperatures.

We now just need to run some electrics up the wall to where the fan will be located and cut a 100mm hole in the wall. Fortunately Mat – G7FBD has a suitable drill and 100mm core cutter. Plans are to get this installed before the summer of 2020 hits us.

Rally Report.

Following a two year break from attending Radio Rallies we decided to attend our usual haunt, the Frome Rally.

We decided to “slim down” our table as all the effort of putting up a back stage and fill it with posters etc did not really pay off for us and just added time to everything. However, the free sweets were still available on the table.

Someone correct us if we are wrong, but I think we were the only repeater group there this year with a formal table position. As usual there was lots of inquires about the repeaters, especially GB7BS & the South West Cluster network. It was nice to see people who came up to us and gave their support and enquire of some technical issues.

It was also good to meet the repeater keeper for the Exeter repeater GB7ED, which is connected to the SWC. As at rallies before, we were getting a lot of questions about the dreaded CodePlug. Fortunately Mat – G7FBD with the aid of his Laptop was able to quickly answer most questions and even write a basic CodePlug for a few people in order to get them started.

As usual, we only gained about two new members and four or five membership renewals despite having quite a good throughput of people. So, it remains to be seen if we attend the 2020 Rally. It is something we will have to think about as apart from meeting people, which is always good to do, it sadly does not boost our membership!

Membership.

Our membership seems much like a wave. This time last year we reported that our membership was at around 44. Over the most part of the year it had slowly grown, peaking at around 55 members in July/August.

Unfortunately, and for whatever reason, the numbers started to fall again to almost back where we were at 46.



Announcing the Sixteenth **WEST of ENGLAND RADIO RALLY**



Sunday 16th June 2019

**A popular & successful
event for Amateur Radio
Electronics
& Computer Enthusiasts**

www.westrally.org.uk

The numbers not renewing are from across the board, from new first time members to the long established member/supporter. We have seen these peaks and troughs before, they are nothing new.

People come and people go. Sadly there are still those who like to come and regularly use the repeaters, and that's always good to hear, but very few of those actually stop and think twice about finding out who runs the repeaters and maybe contribute to supporting it.

Some repeaters don't run a "membership" scheme as such, like we do. They just wait for donations to hopefully come in. We feel that a membership scheme is just a better way to encourage users to support us. But we must not forget those who do send us donations without asking to become a member. It all adds to keeping the repeaters on the air and maintained.

The current membership is shown below. This is a snapshot of membership and the colours indicate their status. If your callsign does **NOT** appear below then your membership has already expired and this maybe the last newsletter you receive from us. If you think this is an error then please go to our web site www.gb3bs.co.uk and check there or contact us, again, via the website.

We do send out reminders via email one month before your membership is due to expire. There is no further reminder. To abide by GDPR rules we do send a final notice after three months. This will inform you that as your membership has expired under GDPR rules we will be deleting, permanently, your membership record.

However, that all said, our sincere thanks to everyone who has supported us over the last year. As we say every year, without your support we would find it impossible to maintain the repeaters we currently run. We like to think we provide repeaters that people enjoy using, are easy to use, give a reliable and friendly service.

Membership status as of 18th December 2019

2E0EOL DEC 19	2E0GRB FEB 20	2E0JWJ DEC 19	2E0PGS JAN 20	2WOCGM FEB 20	G0GZW JUL 20	G0IUE FEB 20
G0IWT AUG 20	G0XAY JUN 20	GW1LOR FEB 20	G1ZKJ JAN 20	G3LZN LIFE MEMBER	G3XED JAN 20	G3XOB DEC 20
G4EJH JAN 20	G4FUA NOV 20	G4GUG NOV 20	G4KUQ SEP 20	G4MCQ JUN 20	G4OJI MAY 20	G4OPQ OCT 20
G4OTJ DEC 19	G4SDR OCT 20	G4TAH NOV 20	G4WOD APR 20	G4XCB DEC 20	G6MRJ MAY 20	G6YNL FEB 20
G7BYN NOV 20	G7FBD JUN 20	G7KNA DEC 19	G7NSY JUL 20	G8CKK JUN 20	G8NQQ APR 20	G8YMM JAN 20
M0HDI JUN 20	M0KEE MAY 20	M0LHS OCT 20	M0LJT NOV 20	M0MGT JAN 20	M0XMM JUN 20	M0ZLI FEB 20
M1CEL JUN 20	M1NED JUN 20	M6GFM DEC 19	M6NQJ OCT 20	M6OJI MAY 20		

MEMBERS ACTIVE 47	MEMBERS With less than 1 month remaining	MEMBERS with less than 2 months remaining	MEMBERS with over 2 months remaining
-------------------------	---	--	---

REMEMBER: If you have received this newsletter via email but do not see your callsign listed in the table above then this means your membership has now expired (you would have received an invitation to renew on the 1st day of the month you expire via email. Check your SPAM box). The Repeater Group would welcome you to re-join, but if that is not to be, then we would like to take this opportunity to thank-you for your past support and inform you that no further Newsletters will be sent to you.

However, it's never too late to renew or rejoin the Repeater Group. It's fast and easy via the PayPal Me method. Just follow this link <https://www.paypal.me/GB3BS> and just follow a few steps and your done.

Of course our Membership page on our web site is still able to take any new membership and renewals.

Technical Report – MB7VV and MB7UVV

There is not much really to report on this “The Evil Twins”. Both have proven to be very reliable this year, with only one reboot to MB7VV at the Lansdown site. This was a precaution to prevent a possible bug in the firmware that caused a lock up a couple of years ago. This was a counter value exceeding its maximum value and causing an Integer overflow (Tech talk for a counter that counted higher than it is allowed thus causing it to roll over back to 0). Other than that, as the kit is all commercial, there is very little to adjust.

Internet availability has been very reliable post vermin attack adding to the stability of the node.

MB7UVV is a direct copy of MB7VV with only minor changes to the configuration allowing MB7UVV to have full TX/RX dataflow to the internet and the antenna is a homebrew 1/4λ. Remember MB7UVV is licensed to transmit data received from the internet. MB7VV receives these data transmissions and re-broadcasts them (Digipeat)

MB7UVV has unfortunately been rebooted several times this year, as it appears my Power Brownouts have returned. But this does mean that MB7UVV won't be hit by this counter overflow problem.

Data usage has fallen off in this area (as appears the general Amateur activity), yet there are some hardened APRS users out there! Once I can workout a solution that allows me to provide an ignition controlled power source to my APRS unit, I will be back on APRS from my car.

Talking about getting back onto APRS, although not a technical matter, I was VERY surprised talking to my motor insurance provider, they accept APRS as a valid tracker unit that can be fitted to a car, as you can display car location information on a public map. This in turn gives a discount on the policy. This is a bit of a win, win situation. I can implement APRS and save money at the same time. It might be worth checking with your insurer if you also use APRS.

Yes, my insurer has been informed about my situation and will add the discount one implemented.

And Finally,

Well, that ends our 2019 edition of the Bristol Repeater Group's newsletter. We hope very much that you found it interesting and informative. These last 10 years at the Lansdown site has flown by and with it, so much work & effort has gone into it. Your support has only made this possible, so once again, a big thank you. Your comments, good or bad, along with any suggestions are always welcome.



Merry Christmas And a Happy New Year

Dear Member.

The Bristol 70cms Repeater Group wish you, your family and loved ones, a safe, enjoyable and comfortable festive period.

We also would like to wish you good DX and look forward to hearing you on one of our repeaters in 2020.

73' from
Mark- G4SDR.
&
Mat – G7FBD.

THE BRISTOL 70cms REPEATER GROUP.

GB3BS / GB7BS

Website: www.gb3bs.co.uk Email: info@gb3bs.co.uk

If you use the Repeaters, GB3BS or GB7BS and would like to support the group then all you need to do is fill out this form and part with £8.00p. Your details and membership fee will then be passed to our treasurer. You can also subscribe using Paypal™ (also supports Credit/Debit card payment). See “Membership” on our website for detail. 100% of your membership goes towards looking after both repeaters and the site in which they are located.

PLEASE REMEMBER

Repeaters do cost money to run.

Without members the repeaters GB3BS and GB7BS would cease to exist.

Please help support what you use.

Please make cheques payable to “Bristol 70cms Repeater Group”



Please tick appropriate boxes and print clearly – Thank you.

☐ £8.00 Membership ☐ Donation Amount £ _____

I am paying by **CHEQUE / CASH** Please delete appropriately.

Callsign: _____ Email: _____

Name: _____

Address: _____

Postcode _____

Please contact us for our postal address if sending Cheques by post. Thank you.

PLEASE NOTE: Membership is based on a yearly subscription (from the date processed). Although we can process advance yearly membership we would discourage this method. At present we DO NOT have a “Family” membership, or any other concessions. Please also note ALL membership fees and donations are NON refundable. We recommend you do not send cash through the postal system. The Bristol 70cms Repeater Group cannot be held responsible for lost or missing payments. Being listed on our website is conformation of membership. No receipts are issued unless a stamped address envelope has been provided. Membership is used for the upkeep of BOTH Repeaters.

Any information/data provided will ONLY be used to mail or email you our newsletter and send membership reminders. Data will be deleted 6 Months after the laps of any membership. Reminders of pending membership laps will be sent via email where possible one month before the expiration date. The membership section of our website also reflects this information.