

THE BRISTOL 70cms REPEATER GROUP

GB3BS & GB7BS

NEWSLETTER 2025

RU68 - 430.850MHz - TONE J: 118.8Hz.

DVU13 - 439.6126MHz - Colour Code 3.

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W elcome to the Bristol 70cms Repeater Group Newsletter 2025.

As I have stated in previous newsletters, the older I'm getting, the quicker the year is going. It only seemed like yesterday I was composing the 2024 newsletter, but here we are with the newsletter for 2025. I hope this newsletter finds everyone in the best state possible and looking forward to the Christmas festivities this year. Personally, Christmas is not for me, but that's for personal reasons. which I will spare you from.

Generally, this year saw the repeater systems continue to perform as expected with the exception of GB7BS that decided it would prefer to be an indoor heater than a radio (full details of this crisp experience can be found further on in this newsletter), even non-repeater systems performed without fault, these include the lightning detector and the Flightradar24 equipment. As normal, full details of these items are further on in this newsletter. Dare I say it 2025 has been in general a pretty non-eventful year. I personally think a lot of this is down to the efforts of one person from the get go, Mark (G4SDR), Even before the big move to Lansdown, his insistence of spending time planning, checking, replanning certainly paid off. The result is an organised comms room, everything in its place and logically laid out.

The Southwest Cluster (SWC) continues to grow. With a whole host of new repeaters coming onboard during 2025, and being connected to what is now the largest Motorola DMR Repeater network in the UK, if not the world! Hard to believe.

Since its conception in 2014, when we consisted of a grand total of five repeaters interconnected, to today (at time of writing) having 29 repeaters connected and on air (There would be 31 but GB3JB is off air for a total refit, and GB7BT only gets switched on for testing). This is way past Motorola's IPsec system that we started with, and is the driving force for us moving to the FreeDMR Network based system. I think you would agree, all-in-all, not bad for a system that was too expensive and would never catch on, as we were once told by the RSGB.

Just like other repeater systems throughout the world the SWC does go through quiet patches however, these are few and far between as popularity continues to grow. Comments from users of the network heard on air, such as how easy dial on demand is to use or how simplistic the radio programming is to get a radio onto the Cluster does bring a smile at times.

Yes, the SWC does throw a curve ball sometimes, normally on a Friday evening at 23:00 (local) when something fails to do something just after an automated reboot of the server, resulting in a series of frantic phone calls between myself and Mark and LOTS of keyboard bashing as I demonstrate my (Lack of) Linux skills, trying to circumnavigate something that has happened further upstream of our server that is stopping the system re-starting. Thankfully these are few and far between....

...(cont) Anyway, onwards into this, our pen-ultimate newsletter before our 50th year of operation celebrations. Yes, The Bristol 70cms Repeater Group and GB3BS are almost 50! So, please enjoy the Newsletter, and you never know this year we may even get some questions or comments about its content.

73 and 44's -

mat

G7FBD/KG7FBD

GB3BS / GB7BS Report.

Welcome to this year's report into all things RF.

I am pleased to report that the 70cms FM Repeater GB3BS has been performing without issue for another year, so this report is going to be rather short.

During the year we have carried out the usual routine maintenance, which proved that everything was as it should be. For those that might not know, GB3BS is based on a Tait T800 system which is well known for its reliability and stability over time. These units are very popular with Repeater Groups as although out of production for many years, getting hold of spares is still fairly easy and not too pricy.



The repeaters control logic is an Arcom RC210, which since upgrading the main processor, has proved to make it very reliable, with only the occasional firmware update when released by Arcom. The RC210 has come a long way over the years and is popular with repeater groups all over the world. The nice thing about it is that it is very flexible and has a certain amount of fault/error sensing built in, or in other words, there is not much that makes it crash or lock up.

GB3BS is, at times, a very busy repeater. Although over the past few years has seen a marked drop off in

mobile stations for the fixed station. Bearing in mind it was originally designed and built to assist primarily mobile stations in and around the Bristol area.

With GB3BS now soon to enter its 50th Year of operation, yes that's, Fifty Years. It is hard to imagine Bristol without it, and makes one think, where will it be in the next 50 years? But that's for the next generation of repeaters keepers to worry about!



GB7BS

With the rapid expansion of the South West Cluster (SWC), which GB7BS is part of, it has certainly become more active and more people have taken to using it, which is great to see.

The repeater has itself been on air for some 12 years now and has seen activity grow and grow, especially with the expansion of the SWC, which now has some 28 active Repeaters as part of the SWC Network.

GB7BS is a Motorola DR3000, a professional bit of equipment which the Repeater Group purchased brand new from the very start, as not much DMR equipment was available...



...until it took off within Amateur Radio, despite various early voices saying there was no future in it!

Back in July this year we received a report that GB7BS was off-air. After doing some remote investigations it was found indeed to be “dead”, no sign of life!

A site visit was arranged and once we were on site it looked like the Repeater had “locked up” and was unresponsive. For Motorola equipment to do such a thing is un-heard of as it is just so reliable, being commercial equipment, it has to be. Such a lock up has only happened once before in its whole life.

GB7BS has been running continually for some 10 plus years without any real down time, apart from cleaning the fans and re-programming.

However, a standard reboot failed to bring it back into life. Opening the rack doors revealed that heart sinking smell of something had burnt. The unit was removed from site for investigation at the home QTH as it was going to require some careful dismantling.

The next day we returned to site to install our spare unit and get things operational again, following a few checks to make sure we had not missed anything that may have caused the unit to fail.

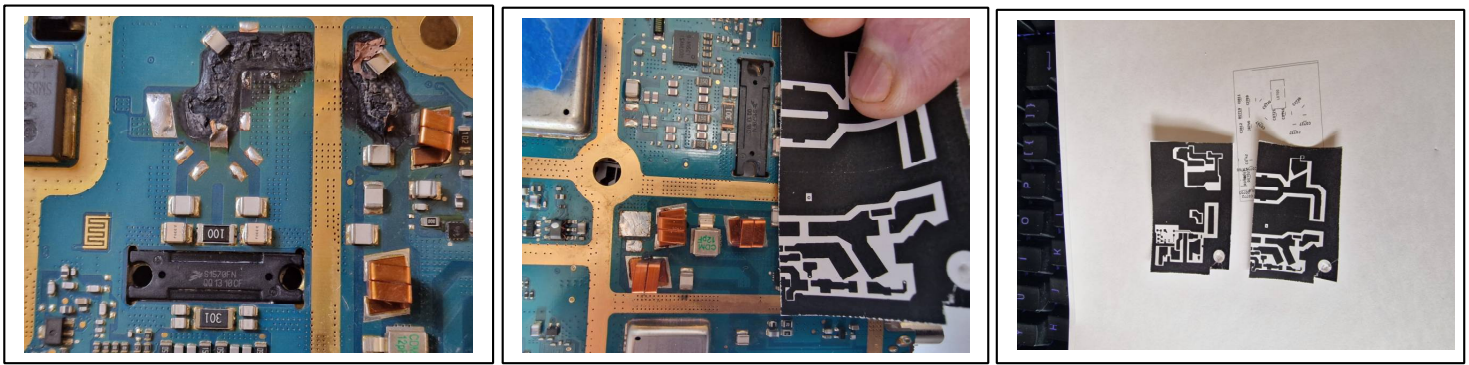


After some dismantling of the faulty DR3000 at the home QTH the problem revealed itself, as the lid was lifted on the Tx Unit and the burnt smell grew stronger.

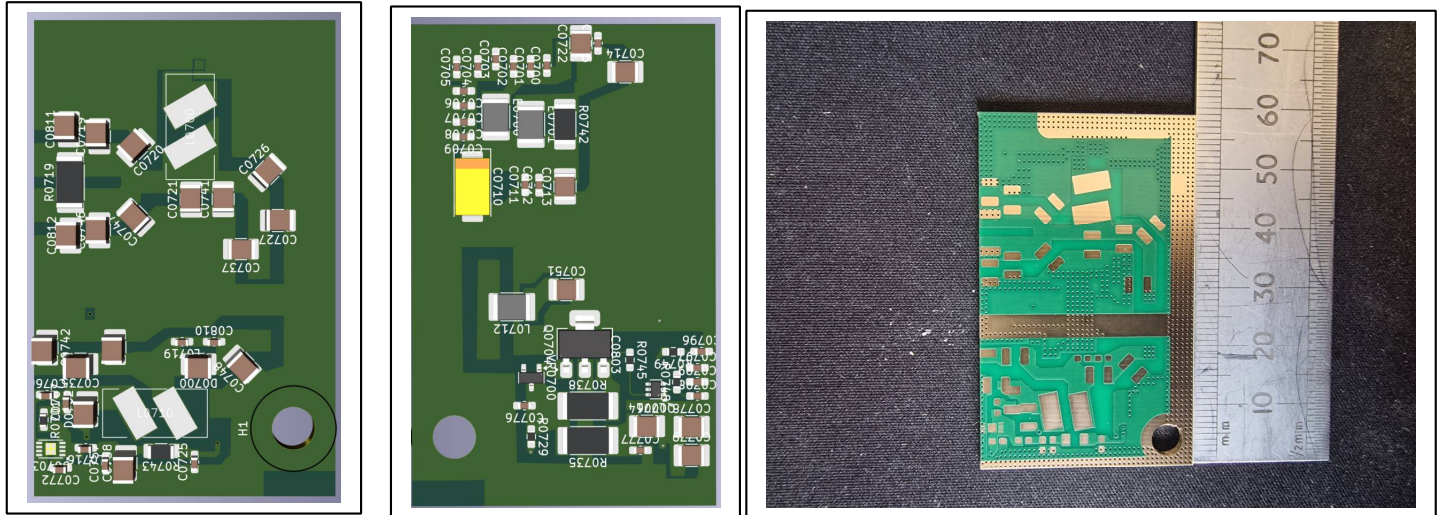
The inside of the lid revealed a very black burn mark within one of the small compartments. Initial thoughts turned to it being over the PA Module, but this soon proved not to be so. The PCB, which comprised almost all by surface mounted components, had a rather large burn on it, and was very localised within the PA output filter and SWR circuitry.

I removed the PCB and took it over to Mat – G7FBD to better investigate, as surface mounted components and multi-layered boards is not my cup of tea, and that he has the right tools.

After some checking, we believe the fault was down to a ceramic chip capacitor on the band-pass filter had gone short circuit and the PA just ramped up the power to try and compensate until the capacitor burnt the PCB and effectively “killed” itself.



The charred remains of the transmitter board. The hole appeared when testing the substrate (PCB) layer density



Mat has fabricated a new donor part of the main PCB which it is hoped can be grafted into position with all new band-pass filter and SWR components being fitted. This work is very much on-going and needing a lot of careful planning. The above three pictures show the part design that needs to be grafted. Left two pictures are from the CAD design package, showing both sides of the planned PCB, and on the right is the final product. This includes matching the gold flashing which mates to the conductive strips inside the cast aluminium chassis, which the board is ultimately fitted inside of. Care had to be taken to ensure the Microstrip line maintained the 50R calculated impedance.

We are ultimately hoping that the actual PA Module is still operational after delivering a destructive amount of R.F. Power. There is no real way to bench test the PA device, but time will tell, once the PCB is fully repaired, we can sew the patent back up and finally test. The PCB has two detection mechanisms to detect the chassis is open. One is purely physical the other is resistive. If the CPU detects the chassis is open, RF power is backed off to a minimum. Fingers crossed!

Currently, our spare unit is in place and will probably remain so until the original is repaired or is a total loss and broken for spares! Either way GB7BS remains on air.

All this work, down to a simple ceramic capacitor failing. This Placing a DC and RF dead short to ground which caused the output power detector to be starved of RF. This in turn told the CPU to increase RF power as there was none being detected, over and over till eventually there was smoke!

By the way, the PA is good for 45W operationally and 90W its destruction power (I think the data sheet said it could drive a 9:1 for 70 seconds. Before releasing the smoke. Let's hope the PCB failed before this time was up.



Site Maintenance.

During the year we have carried out a little site maintenance. This was mostly to bring the sites signage up-to-date; this was requested by our landlord and now gives clear warnings to people of some of the dangers, like generators starting without warning!

The roof was cleared of branch debris that usually falls from the adjacent trees during stormy weather. Lots of moss also forms and

usually blocks the roof drains, so a good scrape and checking the drains are clear is an annual event.

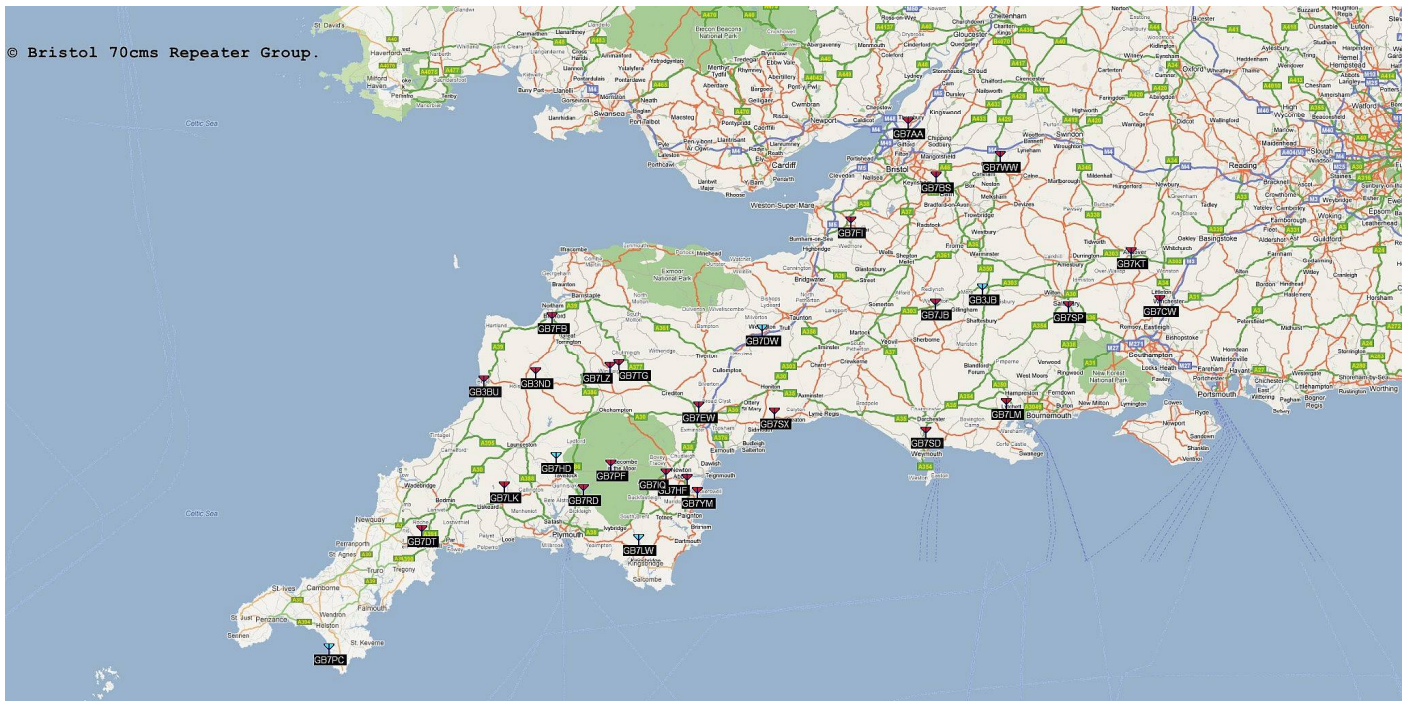
Generally, the building remains in good condition requiring very little up-keep. However, we have noticed that a small patch of the floor requires treating and re-sealing with floor paint. This will be a job for next summer. But as a general question to you dear readers, can you recommend a concrete treatment to stop the floor becoming dust, i.e. sealing it. There are commercial products, but it's always worth asking.

This year we have also started to remove some unwanted junk that has been slowly accumulating over the years we have been on site. This has been anything from wall fixings, screws, conduit, paint tins to old light fittings. It is always better to keep the site tidy and presentable... you never know when it might get inspected. Equally its painful escaping the home shed syndrome of "Well hold on to it, you never know when we might need it". In the end we adopted the principle of "We have not touched let alone used this in five years, time to move it on and recycle it".



The South West Cluster.

Since the South West Cluster switched over to running its own “Cloud Server”†, based on the FreeDMR system, things have been steadily growing, with a dramatic spurt of new repeaters joining us during 2025. To date, we have some 29 repeaters on the network, with a few more in the pipe line.



These repeaters are a mixture of UHF and VHF, the majority being UHF. These are all run by various individuals or by small Groups, and who are individually responsible for their repeater and licensing. All these repeaters are connected via the internet to the main Server, which is UK based.

The Server is the central brain of the network and is based on a Unix/Linux platform. Since running this system and its software has been an interesting time, as Mat & I, (more so myself), are new to Linux and has been a real and new learning curve. There is usually always something new that will show itself, requiring a remedy, which increases ones understanding.

Since the move over to Edition 2 of our server platform last year, there have been no outages or service interruptions. Our hosting company seem to have reliability as one of their top priorities and are always available to give support if we need it. They also provide system backup facilities, which we do not even have to manage apart from selecting what's required to be backed up.

During 2025 we have had two minor problems which have caused the system to be de-graded. Theses have, fortunately, been resolved fairly quickly and are usually overnight fixes. Sometimes these problems can take a little longer to resolve and is usually when we have to seek assistance and/or advice from the designers of the FreeDMR software, so please bear this in mind.

† A cloud-based server is nothing more than a real piece of computer hardware locked away in a data centre somewhere. The exact location, we do not care as it's not ours to power or maintain. This computer runs some special software that allows it to run hundreds of copies of an operating system. Be it Windows, or Linux all at the same time. These copies are individual versions of a servers. The company that owns the physical system then rent out these servers. In our case we rent a Linux server. We then remotely connect into "our" Linux Server (to us, this server looks and behaves just like if it were a real physical machine sat right next to us). We get to choose what version of Linux they (The company) install. We then can run our own programs such as a freeDMR™ server, which in itself is a virtual server. Take it from me, all we see is a Linux box that runs our programs, we are responsible for our programs and the running of them, however, the up keep of the operating system, and the hardware it runs on along with ensuring its accessible 24/7 365 days a year, along with the upkeep of the physical hardware and spares and even cooling is someone else's "Problem". We just pay to rent for this "IaaS" (Infrastructure as a Service) solution. Its far cheaper than running our own physical server (We used to!).

Virtual Server running costs have been frozen for two years 2025/2026 by our hosting company so we do not yet know what 2027 onward will be. If anyone would like to support the SWC Server by making a donation of any amount then this will go to supporting everyone, repeater keepers and users alike. Any donations made are completely independent of the Bristol 70cms Repeater Group.

Please send any donations via BACS to :-

Account name: THE SOUTH WEST CLUSTER
Sort Code: 23-05-80
Account Number: 56174326



CodePlugs

Users of the South West Cluster (SWC) should be aware that there are a few things that **MUST** be observed if you are writing your own CodePlug or using one that you have downloaded or adopted.

It is most important that your CodePlug has ANY periodic sending of APRS or GPS data turned **OFF** on any of the networks repeater channels. Further, some rigs now have a function/facility called **Talker Alias**. Talker Alias (TA) is a feature that transmits the user's information, such as their name and call sign, as an embedded text stream during a voice call.

These modes/facilities **MUST** be turned off on SWC Channels. If this is not done then your transmissions may appear broken and/or unreadable to others.



Slow It Down, It's not like FM.

As the SWC has grown and with it, its capture area, there are a lot more potential user out there. Some just listen, others participate in QSO's on the network and there are those that, well, just "blip" their local repeater to see if they come up on the Dashboard. (As a side note, every blip is logged, along with the ID number that blipped it!)

The SWC does not operate in the same way as a traditional FM repeater does.

The SWC Network needs just a little more time to process the data and work out where the data is coming from and where it needs to go. So, between overs it is always best just to pause for a second (Take a deep breath) before replying. It also gives any new stations time to join the QSO.

Remember, every SWC repeater is connected to the Internet via many different routes and ISP solutions (Inc 4G phone networks), so there may also be a Time of Arrival delay too. Your local repeater keys up instantly, but it can take up to a second for all the other 20++ Repeaters to all key up, it's just something to think about and be aware of.

SWC Dashboard.

The Dashboard has become a very popular facility and the server reports a good deal of activity, so it sort of shows its being used, which is good.

Users who use the Dashboard should note that this does not happen at the speed of light. It again takes time to gather various bits of network information, like user ID's, Names & Callsigns then order the responses before displaying them. So, all this is not instantaneous.

Simply "blipping" a signal into a repeater will not show up on the Dashboard. There needs to be a valid signal for a few seconds.

Sometimes the Dashboard at times may look out of sync; this is usually due to multiple stations all transmitting at the same time. Once the storm has passed the Dashboard will usually corrects itself. If this is observed, please be patient!

Callsign	Time	Slot	Repeater
GB7BS	14:00	152	GB7BS
GB7AA	14:00	152	GB7AA
GB7JB	14:00	152	GB7JB
GB7SD	14:00	152	GB7SD
GB7DR	14:00	152	GB7DR
GB7B	14:00	152	GB7B
GB7C	14:00	152	GB7C
GB7D	14:00	152	GB7D
GB7E	14:00	152	GB7E
GB7F	14:00	152	GB7F
GB7G	14:00	152	GB7G
GB7H	14:00	152	GB7H
GB7I	14:00	152	GB7I
GB7J	14:00	152	GB7J
GB7K	14:00	152	GB7K
GB7L	14:00	152	GB7L
GB7M	14:00	152	GB7M
GB7N	14:00	152	GB7N
GB7O	14:00	152	GB7O
GB7P	14:00	152	GB7P
GB7Q	14:00	152	GB7Q
GB7R	14:00	152	GB7R
GB7S	14:00	152	GB7S
GB7T	14:00	152	GB7T
GB7U	14:00	152	GB7U
GB7V	14:00	152	GB7V
GB7W	14:00	152	GB7W
GB7X	14:00	152	GB7X
GB7Y	14:00	152	GB7Y
GB7Z	14:00	152	GB7Z

SWC Problem Reporting.

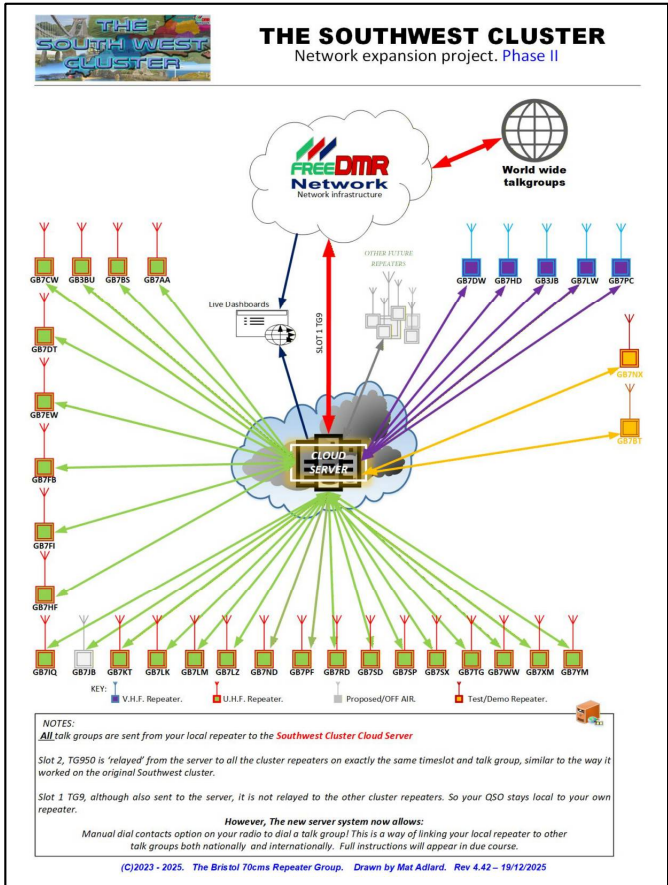
If you have a problem with the South West Cluster, you can of course raise this with us and we will try our best to help you.

However, if you have a question, or wish to raise an issue about a particular SWC Repeater, then we suggest that you first contact the relevant Repeater Keeper.

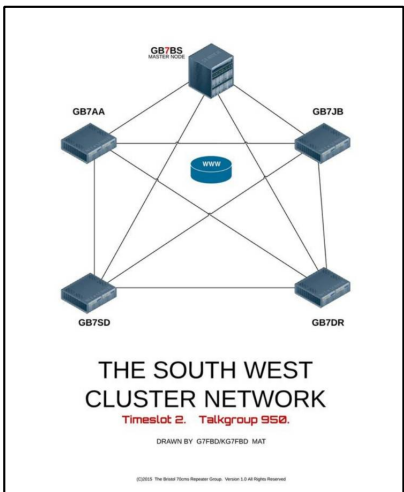
If you have a problem that you feel is more of a Network issue, or you can't get answers else where, then feel free to contact The South West Cluster using the online contact form. Please go to www.thesouthwestcluster.co.uk and select the Contact Us tab.

For **much** more on the South West Cluster please visit the dedicated web site at: - www.thesouthwestcluster.co.uk

Don't forget we also have a very active Facebook page for the Bristol 70cms Repeater Group, which includes The South West Cluster. So please come and join us at <https://www.facebook.com/groups/gb3bs>



From its humble beginnings in 2014 with only 5 repeaters (left pic). The South West Cluster has grown into the UK's largest inter-connected Motorola Repeaters network with now 29+ connected repeaters (Shown Right) of which 28 are currently live (at moment of writing).



GB3BS / GB7BS Membership.

Membership over 2025 is, once again, fairly stable. Membership has remained just short of 50 fully paid-up members.

As usual, we have had those that seem to just come and go for the year. However, we have had some new additions, which is always great to see and we hope that they will decide to stay and in doing so will really help support the Repeater Group. As I always say, without it, we will simply cease to exist.

Currently our bank account is not looking to bad, and is slowly recovering from the past few years when we had to replace our Antenna, Generator starter batteries and charger, this all made for a large dent in the bank account. So, a BIG thank you to everyone who gives money through membership and / or donations, it is very much appreciated.

Payment Methods.

Just as a reminder, when renewing your membership, could we ask that, if possible, you pay using Bank Credit Transfer (BACS). This way we get **100%** of your money rather than via PayPal who take their cut off our income.

Our BACS details are as follows:

“Bristol Seventy Centimetres Repeater Group”
Sort Code: 20-13-34,
Account Number: 20201316

Please Note: If paying via BACS, please send us an email (info@gb7bs.com) so that we can check that your payment has been received into our bank account and you're verified as the source.

Repeater group membership snap shot 15/12/2025

G0FAJ OCT 2026	G0IUE FEB 2026	G0IWT AUG 2026	G0XAY DEC 2026	G1ERM SEP 2026	G1IHL SEP 2026	G1RMT DEC 2026
G3XED SEP 2026	G3XOU NOV 2026	G4CPO JAN 2026	G4EJH JAN 2026	G4FUA FEB 2026	G4SDR OCT 2026	G4TAH NOV 2026
G4ULV DEC 2025	G4WOD APR 2026	G4XCB DEC 2026	G6DEN FEB 2026	G6FFB MAY 2026	G6MRJ AUG 2026	G6YCG NOV 2026
G6YNL FEB 2026	G7BYN DEC 2025	G7FBD JUN 2026	G7KNA MAY 2026	G7NBW FEB 2026	G7TFS MAY 2026	G8CKK MAR 2026
G8NQO JUL 2026	G8YMM JUN 2026	GW7HQL MAR 2026	M0HDJ JAN 2027	M0JVY AUG 2026	M0LHS OCT 2026	M0MGT DEC 2025
M0WYB DEC 2026	M0XMM JUN 2026	M1CEL JUN 2026	M1KPZ JUL 2026	M6GFM DEC 2026	M6IOK DEC 2026	M6MGE JUL 2026
M7EYY OCT 2026	M7KOG OCT 2026	M7LZG FEB 2026	M7NCK FEB 2026	M7YYJ NOV 2026	M9JWJ DEC 2026	MW0VCK DEC 2026

	Membership about to expire.
	Membership has 1 MONTH left
	Membership has 2 MONTHS left

MB7VV & MB7UVV

Both APRS Repeaters continue to function well, both were rebooted on December 1st, the first time for MB7VV at Lansdown for over 700 days, MB7UVV obviously was rebooted when National Grid carried out planned work on the substation mounted on a pole at the rear of my property. For this work they had to isolate the supply.

Back to APRS and the nodes (MB7VV/UVV), with the (Not so) recent licence changes, Both MB7VV and MB7UVV are now licenced for two-way traffic flow, IE, both can now transmit data from internet onto the RF medium, and vis-versa, from RF down onto the internet. Prior to this licence change, only MB7UVV was permitted to transmit data from the internet as it is about 18" away from my desk and can be turned off if required within a few seconds. This "uplink" was transmitted and MB7VV at Lansdown simply digipeated this data. When a beacon was received from a station (Other than MB7UVV), this data was processed, digipeated, but was also fed down onto the internet.

So, the Question going forward is, do I re-program MB7VV and promote it to become a full-flow node then close down MB7UVV, or just leave it working as is. There are pros and cons to both scenarios.

By the next newsletter I hope to inform you which way I lent.

Just to remind you APRS is available in the Bristol and surrounding area, and you can check for mobile, People, cars, bikes etc. on <https://aprs.fi> The system is fairly simple to set up. Dave G7BYN will be doing a talk on APRS and how to build a station at the North Bristol Amateur Radio Club next year. Please check their website for dates if you're interested.



The power outage: For the geeky amongst us.

We (The residential area) were notified that on the 12th of November National Grid would be carrying out some work on a substation transformer at the rear of my property. The work would require isolation of the transformer, resulting in the loss of power to the area.

Normally, it's a case of "Okay, we must remember not to open the fridge, or attempt to brew tea" at this time. But for me it's more, "Okay, we lose GB7BS from the Cluster, I better

let Mark and the rest of the cluster operators know '7BS' Will be stand-a-lone for a bit, oh we also lose APRS cover from MB7VV, Lightning detection from the Blizorgtung unit. And our ADS-B system will lose its connection to Flight Radar24". The first one could result in us being bombarded with emails "Did you know", or "I tried to use", you get the idea.

So, Facebook postings need adding to the repeater groups page, emails to the other keepers need to be sent to advise them GB7BS will be dropping from the cluster. It's all go. The APRS node, it can normally be a day before someone emails me, but there is no central point to notify and I am sure, no one would care.

We would get an email from Flight Radar24 if the outage was longer than 6hrs. but the work plan was nowhere this long the work, bit of an anticlimax. At 09:00 the power was turned off. My UPS (Uninterruptable Power Supply) kicked in. This provides power to my network and Broadband router equipment, as well as the "B" end of the Point-to-Point microwave link feeding internet connectivity from my QTH to Lansdown (for BS etc). The UPS should hold power for about 2hrs with the load it was seeing.

Other than the constant beeping from the UPS, there was a fantastic silence, okay Moe the cat was making his normal “Human, let me out”, or “Human, I need petting” noises, you get the idea.

The work was a bit of an anticlimax. At 09:00 the power was turned off. My UPS (Uninterruptable Power Supply) kicked in. This provides power to my network and Broadband router equipment, as well as the “B” end of the Point-to-Point microwave link feeding internet connectivity from my QTH to Lansdown (for BS etc). The UPS should hold power for about 2hrs with the load it was seeing.

Power, was off for about 90 minutes in total and, while my eldest daughter moaned a couple of times it was taking “Ages” and “I have a meeting at 12” (I did tell her this was happening and she should go to the office on the day, but you know what kids are like). When power was finally restored, life just carried on like nothing had happened.

However, the UPS changed from a Beeping to a electrical hum as it started to re-charge its internal batteries ready for the next time.

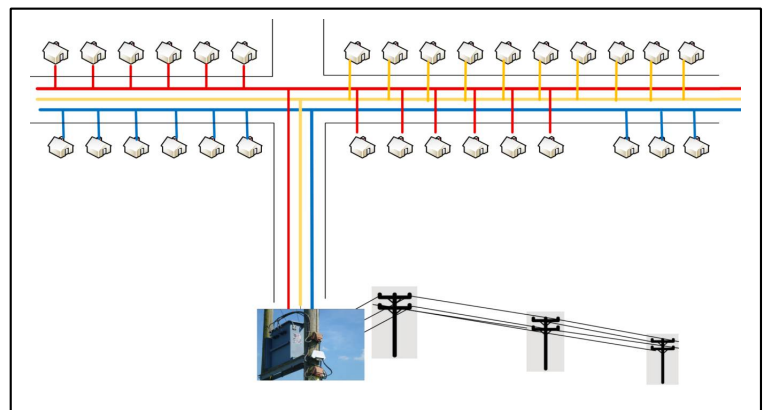
So, what were they doing?

In 2019 a new regulation came into effect throughout Europe and the UK banning PCB from transformer oil. PCB (*Polychlorinated Biphenyls*) were actual made illegal in the UK back in 1987. This is the same family of chemicals found in the old fridges! All existing commercial installations, of which power-transmission transformers of course, fall under, have to be clean of PCB based oils, with only traces of PCBs remain (Below 0.005%/0.05dm³) by the 31st of December 2025.

The work being undertaken was basically a dip stick measurement being taken to check the oil level in the transformer, and a sample being taken and checked on site for the presence of PCB's. The sample is also sent to the lab for verification. If PCBs are found, or the trace level is too high, Central electrical would have to return to site before the deadline and safely remove the oil and replace it with a compliant alternative. (This would need almost the same safety considerations needed for the safe removal of asbestos).

Needless to say, the transformer passed the inspection. Wonder how many more they need to inspect?

Fun fact: As you may be aware, the supply in the street is three phases. Commonly known as RED, BLUE and YELLOW phases. Each phase is 120° rotation from the next. Roughly speaking the 59 homes affected by the power outage, divided by the 3 phases gives ~19 homes per phase on a perfectly balanced system. For safety it is common for phases to be spread into blocks, this reduces the possibility of some unexpected event, such as two people cutting the grass,



both damaging the mains cable at the same time and both coming into contact. Yes, what's the chance, but it's still a chance. If they are on the same phase the volts to earth are 240V. If they were on two different phases then the volts to earth are 415V. Sadly, at this voltage you end up like a smear on the floor.

Blitzortung.

And for those who are not familiar with this, then it refers to our Lightning Detection receivers on site and along with a world-wide collection of other receivers, gives reports on lightning and its location and track. This is all done via a central server and uses the Time of Arrival principle.

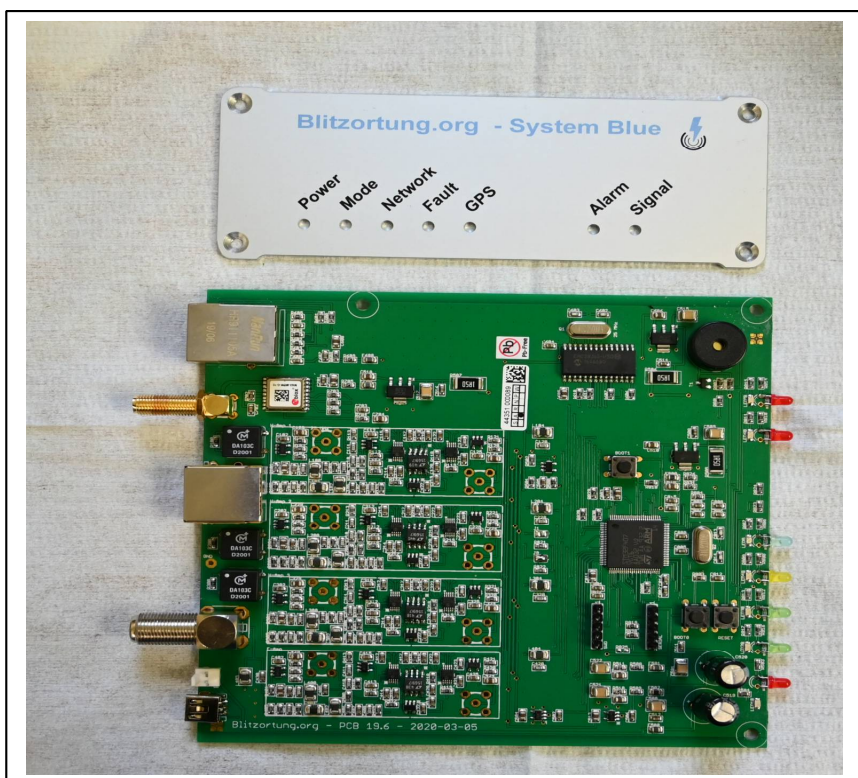
For anyone wishing to find out more about this network, I suggest first visiting the web sites below, or our web pages on the BS Web site at <http://www.gb3bs.co.uk>

<https://www.blitzortung.org>

<https://map.blitzortung.org/#5.64/52.686/-3.889>

Our onsite receiver can be viewed on the map, its ID number is 2834, and can be interrogated by using the interactive map.

The receiver (shown below) operates between 5 and 250 KHz and uses 3 antennas, 2 H-Plane, both at 90 degrees to each other, and 1 E-Plane.



The Antennas are pictured below.

The H-Field antennas are ferrite rod type construction feeding mast head pre-amps before being fed to the receiver. The E-Plane antenna is approximately a 40cm rod and feeds an active pre-amp which then is connected to the receiver.

Accurate timing is achieved by there being a GPS receiver, so that very accurate timing data can be encoded and passed to the central server in Germany. Our receiver has been operating continuously for around 3 years now but this past year has seen a few incidences of data either not being collected or viewed by the server, even though there was no fault with our receiver set up.

However, initially, unknown to us, there had been some changes within the server in Germany. There appeared to be an issue with their new server software and the software running in our receiver. It was then identified that some new Firmware for remote receivers, like ours, had been released.

So, we loaded the new software onto our receiver/detector and rebooted. This has now fixed the issue of the server not collecting data from remote receivers. At this time we looked at tweaking the receivers gain ranges and expanding the low-pass filter ranges. This can all be done remotely by connecting to the main receiver/processing box on site.

These adjustments can be rather laborious to set up and test, as results are not instantaneous and can take weeks before you can analyse if things are better or worse.

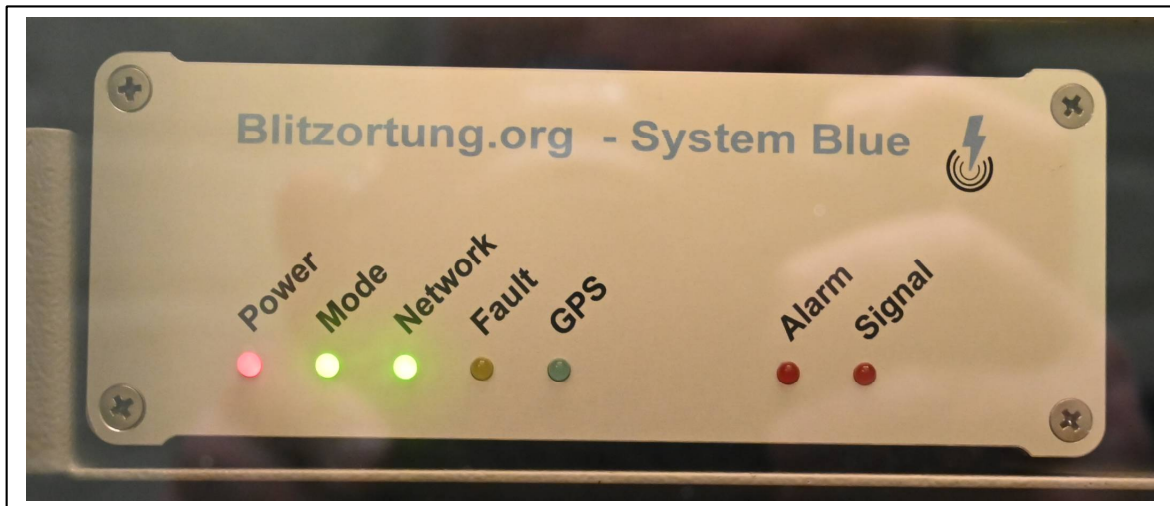
So far, our detection range has improved and response times quicker. The site gives very good 360-degree coverage out to around 2,000 km on average, but will detect further, depending on the type of lightning and storm height.



The H-Plain antenna (left)



The E-Plain antenna



Obituary



Back at the start of this year we heard the news that Philip (Mark) Goodfellow (G4KUQ) sadly, and unexpectedly, passed away on January 23rd.

I am sure many Bristol Amateurs will have heard of him. He was very active on many bands and was especially keen operating on the HF Bands.

Philip was a very good friend of mine over the early years, and I have some very fond memories, spending many a time with him. He became heavily involved with the Bristol 70cms Repeater Group (GB3BS) when it was located at Cossham Hospital as Chairman and was always keen to get his hands dirty when help was needed with the Repeater. Although taking a break from the hobby, he continued to support the Group throughout that time.

Philip was also instrumental in the formation of the South Bristol Amateur Radio Club (SBARC), when it was located at the Whitchurch Folk House. He was also a popular RSGB News Reader on VHF & HF, where he would broadcast to local Amateurs every Sunday morning with the news.

He will, I am sure, also be remembered by those who used to frequent the regular Wednesday Night get-togethers in a local pub, where the conversations were always wide and varied.

He, I am sure, will be missed by all those that knew him.



Sadly Steve Bailey (G4MCQ) passed away on the 14th November 2025.

Steve was first licensed as G8KGE and frequented most of the Bristol Clubs, BARC (Bristol Amateur Radio Club), SBARC (South Bristol Amateur Radio Club), NBARC (North Bristol Amateur Radio Club), along with the local RSGB Group.

Steve was the person who, along with a few other local Amateurs, formed the Bristol 70cms Repeater Group, circa 1974, and instigated the setting up and building of the Repeater GB3BS, which was originally located at Cossham Hospital.

Steve remained a standby Repeater keeper up until 2016 and although he was no longer an active committee member of the Group for some years, he was always keen to see it continue. Steve was often heard on the repeater and continued to stay in contact with the Group and the Repeater he was proud to be associated with.

He was also very keen in operating on the HF bands and on different modes. He would often be seen walking around the various Radio Rallies in the area. His other interests included Astronomy, Photography and a love of Flying.

Unfortunately, over the recent few years his health deteriorated, to which he sadly succumbed. I am sure there are a lot of people who knew Steve over many years, and who I know will miss him.



*Seasonal
Greetings*

From

Mark and Mat

Thank you all for your continuing support of the Repeaters and our on going work to provide Repeater coverage to the area.