

# NARS NEWS



| An occasional Newport Amateur Radio Society newsletter |

## Back in the Chair

Thanks to Richie for stepping in and producing a first class bumper September newsletter - this one won't be quite so large (!). We have a great article from Rich (that man again!) on renovating a BBC micro - I was more patriotic and have fond (!!) memories of a Dragon 32 and later Commodore 64. Heady days.

## Christmas Raffle

Tickets can be purchased every club evening up until the 16th December when the draw will be made. Prize donations for the raffle will be gratefully received. All proceeds to the club coffers.

## Upcoming Events

**28h Oct** - AGM

**18th Nov** - 3d Printing demo evening - Richie & Dale

**4th Dec** - JT65 Night

**16th Dec** - Christmas Fun Night and Raffle. Lots of grub and prizes to win !

## The Return Journey...

It's part two of Doug's 'Azores Challenge'. Read all about it here :

<https://goo.gl/zx1EFU>



## Christmas Gift idea ?

For the amateur with everything, how about this LED 'On Air' light currently on sale at John Lewis. Price? £75 !



## Margaret in RGH

At time of producing this edition of NARS NEWS, Margaret GW4SUE is in hospital at the Royal Gwent. We wish her well for a speedy recovery (Carol is posting regular updates on WhatsApp)



## UK/EI SSB Contest

Dependant on when this is read, there may still be time to spend an hour or two in the UK/EI DX SSB Contest. It's running until 1200 UTC Sunday October 23rd and rules can be found here:

<http://www.ukeicc.com/which-contest/uk-ei-dx-contest-rules>

Next weekend it's THE contest of the year - the CQWW PHONE contest. The world and his wife will be on then for sure!

<http://www.cqww.com/rules.htm>

# Annual General Meeting

The Annual General Meeting of the Newport Amateur Radio Society will be held on Friday 28th October 2016, at 7.30 pm, at St Julian's Community Learning and Library Centre, Beaufort Road, Newport, Gwent, NP19 7UB.

## Agenda

1. Apologies for absence
2. Minutes of last AGM
3. Chairman's report
4. Secretary's report
5. Contest manager's report
6. Treasurer's report
7. Equipment Manager's report
8. To discuss any amendments to the Constitution
9. Election of Officers
10. Debate of Motions notified

## Membership SUBS

A quick reminder to let you know that this years subs were due on the 1st September.

£35 should be made payable to NARS, although a proposal for changes concerning membership fees is on the agenda for the AGM.

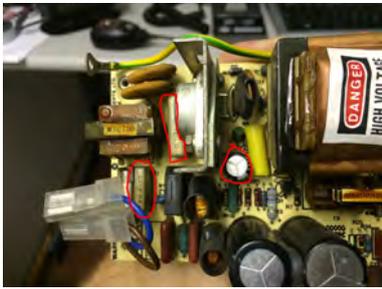
Subs to Steve GW4OGO

## BBC Micro Revival – Model B 32k



Well, over the years I have had loads of computers, some home brew, some commercial. They have come and gone, however, my Acorn BBC Micro – Model B 32k has always followed me around. It was purchased second hand some 30+ years ago, after selling our beloved Acorn Electron. I can remember my mum taking me into a computer shop in Newport to look at a Sinclair Spectrum 128k with cash in hand, and telling her it would be ok to park on those lines as we were only going to be a minute. How wrong I was – parking ticket and clip around the ear later. My brother and I decided to go for a BBC Model B instead, and due to the price, second hand was the way forward. Fast forward 31 years, and my BBC Micro – Model B was in a sorry state, and would not switch on.

After some diagnostics, I discovered the PSU was not working, a bunch of capacitors need changing, specifically C1, C2 and C9 in the PSU. I picked up a kit of parts just to get the PSU working again, and after 30 mins or so, the familiar double tone was heard. I will eventually change all the electrolytic caps in the PSU .



Everything had the looks of a 10-12 year olds bodge stamped all over it. Wires tacked in here, solder blobs there, a complete nightmare inside. I ripped out all the bodge wires, the dodgy keyboard cable, the 10k pot on cables for volume, chock blocks, it all got cleared away.

I had to replace all the power cables, however some of the spades had snapped from the mother board, so I replaced those with dil header pins. The CAPS lock key on the keyboard seemed to be faulty, and after investigation the pad had been pushed off from the board. A small jumper to a piece of track fixed this.

The composite video out connector needed fixing, the wires had been ‘ripped’ out of the motherboard. Things were getting better and taking shape. I gave the board a general clean up with some isopropanol and a q-tip.



After some testing I noticed that the audio seemed rather quiet and would often crackle and become inaudible. I replaced the 10k pot with a small through hole variable resistor and decided to replace all the electrolytic caps on the motherboard, so this was the next job, relatively easy. Audio still unstable, I decided to replace the LM386N audio amplifier 8 pin chip and swapped out with a modern replacement, which was not the best thing to do. The old chips were 1W, this new one 0.25W, so even quieter. I have noticed that the audio crackling has been reduced but not completely removed. I have now swapped this out with a NJM386BD which is the modern equivalent, and replaced the quad op amp LM324, just ‘up stream’ of the amp. All the sound is now perfect ! Everything is now socketed so much easier to change in the future.

Upcoming plans are to replace the remainder of the PSU caps, fix some ceramic disc caps that have been chipped by extracting roms and connect it to a VGA monitor via a graphics interface board using the TTL level RGB output.

Chuckie Egg, Revs, Elite and a bunch of other games were tested, and ran perfectly. Oh, I did enable colour on the composite out just to test things before the graphics board turns up. The final picture on the left shows her with her lid back on with the caps lock light glowing a nice shade of red. She lives again, after some 30+ years of ownership.

Richie - MWOLGE

