



July 2017

RADIO SOCIETY of GREAT BRITAIN
CITY of BRISTOL GROUP
NEWSLETTER

Monthly meetings at the BAWA, 589 Southmead Road, BS34 7RF

NEXT MEETING MONDAY 31 FEBRUARY 7.30pm
ANNUAL DINNER
WINDMILL INN, PORTISHEAD



There is no lecture meeting at the BAWA this month. Instead, we will be having our Bristol RSGB Group annual (Christmas!) dinner at the Windmill Inn, 58, Nore Road, Portishead BS20 6JZ, arrive 7.00pm for 7.30pm. We will book a table so that everyone can sit together, but there is no fixed menu; you can choose what you want and then everyone pays individually for what they have. Keith G4EJH is co-ordinating this event, so please let him know by Thursday 27th July if you are coming. Of course, you are welcome to bring your partner aswell! Contact Keith on 01275 843 897 or keithg4ejh@talktalk.net . Lecture meetings at the BAWA will resume on August 21st with a talk about Magnetic Loop aerials by Dave G3ZXX.

JUNE MEETING REPORT

A few days before our June meeting, Professor Cathryn Mitchell M0IBG told us that she was unwell and asked if she could postpone her talk. I am hoping that she will be able to give us her talk in November and we all wish her a speedy and full recovery.

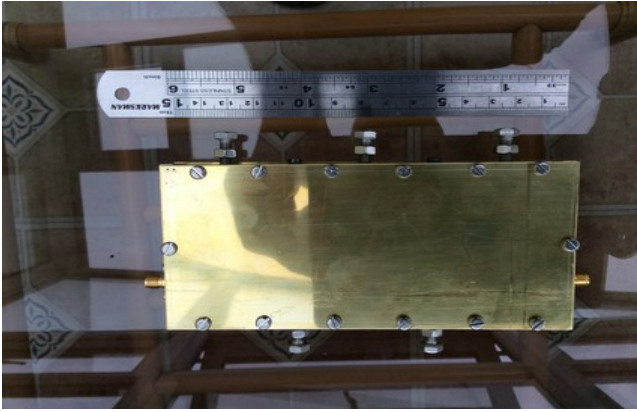
It was decided to try something new, a "Show & Tell" evening. The idea was that members brought along something that they could show everyone and say a few words about. I am pleased to say that members rose to the challenge magnificently and we all had a varied and interesting evening. I know a few people didn't get the opportunity to show their items, so perhaps we can arrange another one of these events next year?



First off the blocks, Colin G3YHV showed us his WSPR transmitter. WSPR stands for Weak Signal Propagation Reporter and is one of the modes in Professor Joe Taylors JT software package. It uses a series of audio tones with a spread of just 6.5Hz to send a limited set of data comprising callsign, locator and power output. Very little power is needed for worldwide communication, with

most stations using under 1W and many just a few tens of milliwatts. The programme is usually run on a computer, with accurately timed transmit and receive sequences. Signals received are reported by the internet to a master website, where it is possible to see where your signals have been received. Colins transmitter is completely self contained and does not need a computer to run. It comprises a number of cheap modules available from Ebay; a clock for timing, an oscillator module to generate the signal (bands 160-20m are available) and a GPS module to provide accurate calibration. A backlit LCD display shows what is happening and the box also included a mains psu. The clever bit is Colins software stored on a PIC chip. The power output is 20mW and best dx so far is Newfoundland! Colin has now made a pcb for a Mk.II version as a club project for the Shirehampton club. I think there are quite a few people in Bristol who would be interested in this project.

Next yours truly showed a 5 pole interdigital filter for the 23cm band. This was made in brass and is the first project from my new mechanical workshop. Forty years ago, as a young trainee mechanical engineer, I did a basic workshop training course at Hackney College, London. We were taught the basics of milling, turning and various other metal bashing techniques.



The idea was not to make into us into skilled machinists, which would take many years, but to give an appreciation of practical work for people who were mostly destined to be designers and “meeting engineers”. I really enjoyed it and ever since harboured an ambition to set up a small workshop at home.

Last year, I finally decided to make a start and acquired a small, model makers milling machine and lathe from Ebay. These are inexpensive Chinese made machines, but are ideal for honing machining skills and making small items such a filters. The design for this filter was published in the UHF Compendium and was intended to have a bandwidth of about 40MHz in the 1296MHz region. It worked out a little wider than this, but provides really useful performance with an insertion loss of about 1dB. Next on my list is a similar filter for the 1250MHz end of the band, another for 70cm and then 2m.

Finally, Pete G4HQX showed us his transverter for the 24GHz band. This is completely self-contained and included a parabolic dish aerial about 300mm in diameter. It is designed for portable use and would sit on a tripod. It is



driven by a rig with a 70cm output, such as an FT790 or 817. It is mostly used in SSB or CW mode, although any mode could be used because it is a linear device. The raw power output is 600mW, but because of the gain of the dish at this frequency, 36dBi, this translates into 2.5kW erp – don’t stand in front of it! It is based around some French made modules by Alcatel, which were designed for 23GHz and tweaked onto the amateur band. Pete was at pains to point out that much of the work making this item was undertaken by Keith GW3TKH, who was also at the meeting. The device uses an external 10MHz GPS reference source to

ensure that it is accurately on frequency. Best DX so far is about 70km, the limit being line of sight plus a bit, unless modes such as rainscatter are used. If anyone tells you that amateur radio and home construction is dead, then they should have come to our June meeting! The home brewer and experimenter is very much alive and thriving, still exploiting the old art of re-engineering commercial products for amateur duty and then adding a little bit of their own magic.

MEMORIES OF LONGLEAT

Whilst sorting out the garage recently, I came across an envelope containing some pictures of our Groups activities during the 1980's. Some of them were pictures taken at a Christmas party, which I will save for later. The remainder were taken at the Longleat rally. I think these were taken in the late 1980's. You may wonder why they are in black & white? The reason was that we took these as publicity pictures for magazines etc. and in those far off days, colour photography was far less common and usually reserved for a couple of feature pages per issue.



This picture shows part of the huge bring & buy that we used to run. This filled the whole of one side of a 140ft marquee and must be the largest amateur radio bring & buy ever staged. Managing it was a major task engaging many people for entire day. Typically, we would handle about 400 booked in items, sell about £14,000 worth of equipment, making a commission of 10%.

The second picture shows a general view of the rally.





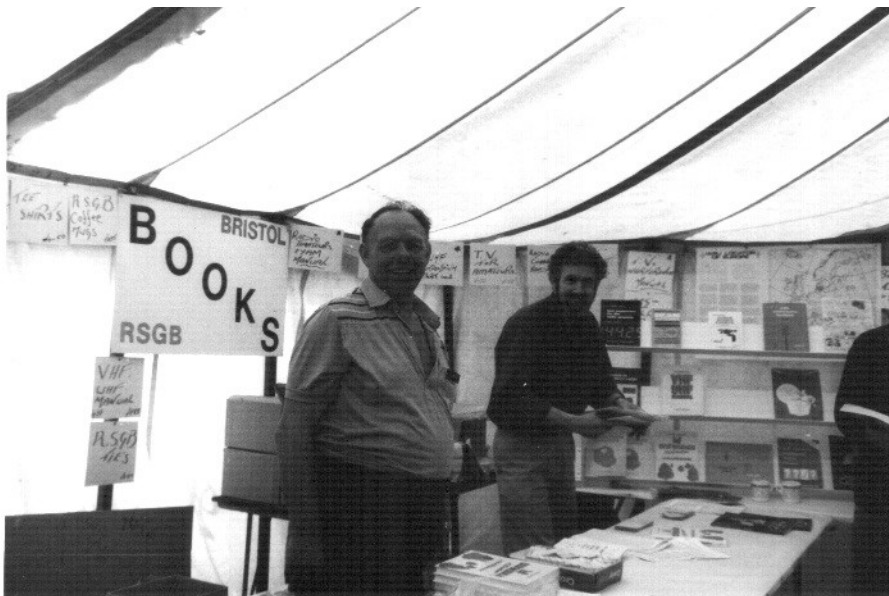
This is the talk-in station that was operated from “Heavens Gate”, the high spot of the Longleat Estate. I await correction here, but think the Land Rover belonged to either Dave Stone G8FNR or Malcolm Cooper G8KGH. Stations would call in from all over southern England, with one station in Southampton asking for directions as he reversed off his drive!

The second picture shows the raffle stand, which this year must have operated by the Shirehampton club. Shown is our membership secretary and another character whose face is familiar, but whose name I cannot recall.





This is the RSGB membership services stand which was manned by members of HQ staff. The fetching YL was, I believe, Sylvia Manco.



This is the bookstall, which the Group used to run. Featured are the late Des Iles G3COP and present committee member Keith G4EJH. Running this was another major task. We had to hire a van to collect all the stock from RSGB HQ and then return the unsold items.



This is a general view from the opposite side of the lake, showing part of the vast number of cars that had to be parked on the site. Below is another view from Heavens Gate.







This is the under £25 section of the bring & buy, which this year was operated by the North Bristol ARC. Shown are the late Ken Ottrey G3ECS & Tom Farmer G4UGO.

This final view shows the hot air balloon that we hired to ascend from the site one year. We tried to have one major family type attraction each year, and I can recall people parachuting onto the site, the Bristol Unicorns marching band and a visit from GWR Radio.



RALLIES & EVENTS

A selection of radio rallies & events within reasonable travelling distance of Bristol.

16 July	McMichael Rally Reading
30 July	Chippenham & DARC Rally Kington Langley
13 August	Flight Refuelling ARC Rally Wimborne
18-20 August	Bristol Model Engineering Exhibition Thornbury Leisure Centre
20 August	Rugby ATS Rally Princethorpe
2-3 September	Telford Hamfest & QRP Convention
10 September	Blackwood ARC Rally Newport
10 September	Wildhern Radio & Computer Boot Sale Andover
10 September	Torbay Rally Newton Abbot Racecourse
17 September	Weston-super-Mare RS Radio & Electronics Rally Worle
29-30 September	National Hamfest Newark
13-15 October	RSGB Convention Milton Keynes
15 October	Holsworthy ARC Rally
5 November	West London Radio & Electronics Show Kempton Park Racecourse
19 November	Plymouth Rally Plympton

AROUND THE LOCAL CLUBS

Bath & DARC <http://badarc.webs.com>

Chepstow & DARC www.gw4lwz.co.uk

Chippenham & DARC www.g3vre.org.uk

Mid-Somerset ARC www.midsarc.org.uk

North Bristol ARC www.nbarc.org.uk

Shirehampton ARC www.shirehampton-arc.org.uk

South Bristol ARC www.sbarc.co.uk

Thornbury & South Glos.ARC www.tsgarc.uk

Trowbridge & DARC www.tdarc.uk

Weston-super-Mare RS www.g4wsm.club

If your club has a major event or talk by a “star” speaker, send details to the secretary – g8vpg@aol.com – and I will be pleased to include it here. Also, please send reports & photographs of your recent activities and any news.

I am beginning to think about the lecture programme for 2018, so if you have any ideas about what you would like to hear and even better, know someone who can give a talk or could give one yourself, please let me know.

73 de Shaun G8VPG, Honorary Secretary.

Chippenham

& district

AMATEUR RADIO CLUB



RADIO RALLY & CAR BOOT SALE

Sunday 30th July 2017

Kington Langley Village Hall & Fields

Church Road, Kington Langley, Chippenham, SN15 5NJ

- Close to M4 (J17). Follow signs from A350
- Rally Talk in on S22 (145.550 Mhz)
- Hot Food & Drinks are available on-site
- Disabled facilities & on-site parking

Buyers 10am - 1pm

Entrance is only £2 each. Under 16s are free.

Sellers & Car Boot Sale Pitches

Car Boot pitches are only £6 for cars/vans payable on entry. Access available from 7am for set up. To book INDOOR HALL SPACE (£8 per table), advance booking is recommended. Contact Brian - g6huim3hui@gmail.com

www.g3vre.org.uk