

# RAGCHEW DECEMBER 2016



#### From the Editor

We are fortunate in GARES that we have an enthusiastic group who keep in regular contact over the air by way of the Club 2m net run by Tony G4HBV and Club on the Air by Tom G3XMM. One of the advantages of these regular contacts is that any changes in signals as a result of antenna or rig problems are quickly spotted by the group members. In this way we can be alert to any adjustments or repairs that need to made. Of course this time of the year does not lend itself to clambering around outside working on antennas so instead how about researching and planning some antenna improvements so that when Spring arrives you will be eager to get working? In the meantime this winter why not experiment with loft antennas? I have just spent an interesting couple of hours on the RSGB Affiliated Societies (AFS) 2 metre contest and using 50 watts to 5 element ZL special mounted on a rotator in the loft managed to work DF0MU on ssb at a distance of some 650km, as well as working a good number of G stations in the 150 – 200km range. I have also recently installed a 70cm Moxon loop in the loft so it will be interesting to see how this performs.

As I write this, the preparations for Christmas are in full swing and no doubt Santa will bring some much anticipated radio goodies! So it only remains to wish all GARES members and their families a Happy Christmas and a Peaceful, Prosperous New Year and may

2017 bring lots of DX!

### AN INITIATIVE WORTH SUPPORTING

I wrote a few months ago about an initiative by GW8JLY to promote SSB activity on 2 metres which seems to be going from strength to strength. Well I have just had a QSO with Malcolm G0TMP/M after answering his CQ call. I was tapping away on the keyboard working on this newsletter and aware that nobody was returning his call. After 3 CQs I stopped what I was doing and went back to him. Malcolm is determined to increase activity levels on 2m FM and before I knew it we had been joined by G0NVZ John, near Stratford-upon-Avon who has returned to the hobby after an absence of some 18 years. Brilliant! Malcolm is hoping to come along to the club in the New Year to introduce himself and hopefully join the club.

### **CONTEST GOSSIP**

The final 144MHz UKAC event of 2016 held on Tuesday 6<sup>th</sup> December was blessedplenty of activity and saw incredible scores being posted by the leading stations. G4CIB and M0HFY were both active, G4CIB's best dx being GM3SEK at 341km and M0HFY's best dx M1MHZ at 191km – not bad for 50W into a halo antenna.

GARES are currently in 45<sup>th</sup> place in the overall results table for the Tuesday evening UKAC events.

On the HF front, GARES using the call sign G2HX/P came 4<sup>th</sup> in the Low Power Field Day.

In the 80m series of Clubs Calls contests GARES finished a creditable 13<sup>th</sup> place.

Many thanks to all who have not only submitted logs during the past year but have also participated in the Low Power Field Day. Hopefully in 2017 more members will be able to support these events which provide useful operating experience.

The RSGB VHF Contests Committee have announced the following changes for the 2017 season which participating members will find of interest:-

The introduction of a series of awards for the leading stations aged 18 or under to encourage more young operators to try, and hopefully stay with contesting.

Increasing the power limits for the two sections of the Backpackers contests from 3W and 10W to 5W and 25W

Introducing new short low power FM contests aimed at newcomers on 4m, 2m and 70cm which will run in the hour prior to the UKAC events (1900 – 2000) on those bands

Re-introducing the 2m diameter limitation for dish and backfire antennas in the Restricted and Low Power section of the 23cm UKAC contests

Introducing separate Local and National club sections to the UKAC Club Competitions defined in a similar way to the successful 80m CC sections.

The 4m UKAC contests will move to occur every 3rd THURSDAY of the month to allow them to happen every month, and the 4m Cumulatives will be removed from the calendar

The 6m UKAC contests will move to occur every 2nd THURSDAY to separate them from the SHF events

In VHF NFD it will be possible for stations in both the Mix and Match and Restricted sections to operate on up to five bands, but have only their best 4 bands count

With the aim of increasing weekend activity, we are introducing a new Club section to the VHF Championship for weekend contests. In this section, the scores from every individual entry to a contest from a club's members will count towards an overall score for the club

## A Short History of my way into Amateur Radio by Les Harris G0ULH

As a young schoolboy I was infatuated with electrical items, to the extent that I was always buying batteries and modifying torches to get greater (but often short lived) brightness.

This enthusiasm when testing a 4.5v torch in the church on choir practice night armed with a 6v trailing lead produced a fantastic beam of light down the vast unlit church area. This event did not however go unnoticed and I was dismissed from the choir and asked to return my Royal School of Church Music badge immediately. This had financial implications as choir membership gave a small income and missing out on weddings/funerals were a serious loss! At about this time I acquired a copy of a second hand F.J.Camm radio book in a jumble sale and the enthusiasm to get knowledge rapidly overcame my general reluctance to read books. I built a crystal set and battery operated one valve sets. Having external aerials connected to our home radio, although not popular, soon resulted in many more stations. After 6 weeks in hospital I was given a Telefunken 4

valve portable radio which used 90v High Tension and 1.5v Low Tension batteries and despite my best endeavours to recharge them it proved expensive to listen for long so when my uncle said they were having a new FM set and I could have there old working AM all band set I was delighted. At this stage I had a copy of Fun with Short Waves by Gilbert Davey (D2AH) which introduced many projects, many of which I had already built.

The domestic set had octal valves, 465KHz IF and plenty of "spare HT & 6.3v ac" in its transformer PSU. As well as tuning 40m & 20m AM amateurs on the original set I purchased a BFO coil and built an add on to the domestic Rx. SSB was starting to appear as well as CW and with careful adjustment of the BFO all was revealed. Only funding limited my progress although doing family electrical work was a good earner.

Soon I had front end units for 160/80m and another for 20/15m both with RF amplifiers and an IF output to link to the domestic set. I also built a 160/80m converter for the car radio, output on the medium waveband about 1.5MHz which worked well but using valves with a vibrator power supply proved it could soon flatten a car battery if used for long without recharge. The next model used transistors!

Now at technical school I absorbed all the RSGB "How to become a Radio Amateur" book (was 3/6d) and constructed a dual conversion receiver with 1.6MHz first IF on 10/15 20m and 465KHz second IF. Single conversion applied to 40/80&160m bands. This was all constructed on a redundant CR100 chassis although some hardware still functioned and I fitted a crystal filter in the 2nd IF. It worked very well with the original band switch reused for amateur band selection and the mains transformer/LF choke in the power supply.

I decided to take the Radio Amateurs Examaination (RAE) while at school and was joined by another pupil and the 'A' level Physics master. The two of us passed, but the Physics master didn't. He didn't seem so friendly after!

This was in an era when people took an amateur TV transmitting licence to allow phone / TV transmissions on and above 420MHz which didn't need a Morse test. The GPO then started the class B licence with G8AAA etc and after a couple of years added the 2 metre band to class B authorisations. Armed with an RAE pass I was given G8CRL and built a 2m AM transmitter based on the 15W Tx in my 1962 RSGB Handbook and a homebrew valve convertor to 28-30MHz.

This rig lasted years with the 2m/70cm old band plan based on UK counties. It used 8MHz 10XJ or FT241 xtals to produce about 5-6W of RF. A 6W car sidelight lamp allowed PA tuning before antenna connection for checking. This chassis was scrapped in the various moves we made but fortunately most of the key components survived in junk / valve boxes.

In the mid 1990s Vernon promoted a well supported 6m AM initiative in the club and I decided to rebuild the AM Tx with a 17.1MHz crystal to operate on 51.3MHz. Activity was regularly held on an AM club net on this frequency.

The chassis of this rig survived although many parts were back in the boxes!. A picture is shown together with the RSGB handbook, a school prize for maths. The 2m version had one additional frequency multiplier stage which was an EF80 (cheap) TV pentode. The 6m version triples to output frequency in the ECL80 (also cheap) to drive the original QQV03-10 output stage, modulated by a pair of 6AM5 valves in push-pull. It is interesting to note that the old band plan based on UK areas had frequencies which were not permitted from

144MHz every 90KHz up to 145MHz and when you moved around the country, like we did, you needed different crystals to operate in that area and of course being called on your frequency was very rare so "tuning high to low or low to high" was regularly heard after a CQ call.



In Somerset I embarked on SSB with a big 2m beam, several mast failures led to a final management warning "if it comes down again it won't be going up again"!

In Gloucester antennas have been carefully considered and the management have joined the hobby, although Rita built a radio before we were married.

It was at this time that I decided CW was possible and passed my test with Jack Wooler (G3FPB) and Stuart Heywood testing, I moved on to HF with the current call sign. I should have concentrated and sorted CW earlier but that's history.

Operation / P is a real favourite as well as /MM as many of you know and equipment has been tidied up with capability and antennas for most bands up to 70cm.

### TIME TO CHECK THOSE BATTERIES!

So you have eaten too much over Christmas, you need some peace and quiet and the shack calls-out – but the bands are dead! Well now is the time to check all those gadgets and equipment containing batteries of any sort, particularly those items which are subjected to infrequent use. Not only check the voltage but look for any any signs of leakage. You will be amazed at how many items you will find yourself checking!

### **FROM THE ARCHIVES**

During a recent shack-cum office sort out, your editor re-discovered two large box files containing club Newsletters and "Ragchews" dating back to 1981. I plan to scan these documents and with our Webmasters agreement, archive them on the GARES website on the basis that when I'm pushing up the daisies the paper copies I have are likely to be chucked away by whoever has the task of sorting out my stuff and at least in digital format it will remain accessible to anyone who may be interested in years to come.

### **THE LUNDY "OLD LIGHT" AWARD**

Most GARES members are aware that Leta and I regularly visit Lundy Island in the Bristol Channel. For the past few years I have awarded a trophy, the "Lundy Old Light" award to the GARES member who has helped via Amateur Radio to make our visits a success. The 2016 award was recently presented to Anne 2E1GKY for her persistence and eventually making an 80m contact with G4CIB and G4RHK.



BRIAN G4CIB PRESENTING ANNE 2E1GKY WITH THE LUNDY "OLD LIGHT" AWARD

### GARES MEMBERS ENJOYING THE CHRISTMAS MEAL AT THE TOBY CARVERY BROCKWORTH – ORGANISED BY ANNE 2E1GKY





