



**RAGCHEW**

**JUNE 2018**

**SPECIAL EVENT STATION**

**GB4LMG**

**Saturday 16<sup>th</sup> June**

**Gloucester Life Museum, Westgate Street**

## FROM THE EDITOR - G4CIB

Many thanks to those members who responded to the article by **Kirk NT0Z** on the impact of digital modes on our hobby. I will in due course collate all the comments and forward to Kirk. In a similar vein **Chris W3CMP** has written an interesting critique in **Six News** (the **UK Six Metre Group** newsletter) on 6m band openings in the USA this Spring. He comments that very often the only signals he is hearing on the band are FT8 mode and calling CQ on SSB and CW results in no contacts. He is not decrying FT8 but states that when signals reach +10db he urges stations to change from FT8, which is after all a weak signal mode, to SSB and CW. Regardless of your mode preferences, please remember two things - it's only a hobby, and be active as much as your free time permits on whatever bands and modes you enjoy using!

In this month's Ragchew **Tony G4HBV** describes the 160m/80m end fed antenna we used occasionally at club.

Members have taken advantage of the Spring weather and with two Bank Holidays falling in May have been able to enjoy /P outings to Crickley Hill - many thanks to those who have submitted photos for publication. **Andy M0RON** has recently spent some time on the Exe estuary and managed to do some some /P operating on the lovely beaches in the area - read all about his exploits in this issue.

On the contest front, at the time of writing we are in 18<sup>th</sup> place in the **UKAC Local Clubs** table - many thanks to those members who enter and submit logs to the RSGB - more details in this issue.

You have all no doubt been inundated with emails regarding the new GDPR Regulations. I have aligned the email circulation list of "Ragchew" with the current membership list of GARES and only those who have responded to **Rita M6RYL** with their agreement to receive information will continue to receive "Ragchew" by email.

I'm writing this piece on the run-up to National Field Day and the weather forecast looks good so hopefully the bands will be in good shape too.

Articles from members on any aspect of amateur radio are more than welcome! Email your article to me at [g4cib@outlook.com](mailto:g4cib@outlook.com)

**73 and good DX!**

**Brian G4CIB**

## G4CIB and G4RHK - Lundy 2018

We are already making plans for our annual stay on Lundy in the Bristol Channel and this year we will be there from 1<sup>st</sup> - 15<sup>th</sup> September.

Our accommodation this year is Castle Cottage where we last stayed in 2002. The property is situated on the cliff top on the extreme south-east part of the island with commanding views and good VHF take-off towards the North Devon and Somerset coast. The only downside compared to Stoneycroft (our property for the past four years) is that there is limited room for HF antennas, although my notes for 2002 show that I did use my 80m dipole. For VHF I'm planning to use a 3 element beam for 2m, an HB9CV for 70cm and an extended double Zepp for 6m. If luggage space space permits I'm planning to take my IC703 and FT817ND

The two weeks we are on the island gives us plenty of opportunity for contest activation as follows:-

Sept 1<sup>st</sup> / 2<sup>nd</sup> 144MHz trophy & HF SSB Field Day

Sept 2<sup>nd</sup> 144MHz Backpackers

Sept 4<sup>th</sup> 144MHz UKAC

Sept 11<sup>th</sup> 432MHz UKAC

Sept 13<sup>th</sup> 50MHz UKAC



**View from the shack window Castle Cottage**

Routine operating will take place in the mornings from approximately 0700-0900 and late afternoons 1600-1800 daily and skeds with GARES members can be arranged to suit. Hopefully too we will be able to join Club on the Air on 80m.



## RSGB AGM - BIRMINGHAM - 21<sup>st</sup> APRIL 2018



**Brian G4CIB and Anne 2E1GKY at the RSGB AGM held in Birmingham**



**Joe Taylor N1JT addressing the AGM attendees on the latest update to the FT8 and JT65 software**

### Intermediate Training Outdoors

The recent spell of warm weather coinciding with Club evenings enabled a small group who are studying for the Intermediate Licence to take to the outdoors at Churchdown to test the oscillators they had constructed and other associated tasks. Here below we see **Andy M0RON** explaining the effects of tuning a circuit.



## **Portable on the Exe estuary by Andy M0RON**

I recently took my Clansman PRC320 with me to Exmouth for a short break intending to work /P from the estuary bed when the tide had ebbed. I also took a Yaesu VX8 DE for VHF / UHF.

### **Tuesday 15<sup>th</sup> May between 12 and 1:30.**

The HF forecast was fair on 20m. I set up a SOTAbears 2 band linked dipole on a 7m pole, with the links set for the 20m band. At first only a few calls were heard but as time went on more stations at higher strength were heard. Signal strength on a Clansman is subjective as there are no meters for indication unless an internal modification is performed. The Clansman uses a 24V battery and so low power of 3w was selected instead of 30W to conserve battery life.

Stations worked were The Algarve, Portugal, Spain, Italy (several), a Danish mobile station and Ukraine. Received signal reports ranged from 55 to 59. Most stations were using 100W and towers with beams or dipoles except for the Danish mobile. He was parked next to a body of water using 50W into a HF whip on a magmount. We were both pleased with that and had a lengthy qso while he waited for his wife to finish shopping.



**Low tide on the Exe estuary - M0RON/P**

**A good view showing the dipole antenna support pole**

### **Thursday 17<sup>th</sup> May. Between 1 and 2:30.**

The HF forecast for today was poor and I didn't expect much from my lowly 3W. The dipole was set for 20m as before but orientated differently.

Stations worked were Spain, Italy, Sweden, Cyprus, South Coast of France. Some US stations were heard but weak. Received reports ranged from 53 to 59+. Most stations were using 100W and towers with beams. The Swedish station being the exception. He was a German on holiday in Sweden, using a dipole at 65 feet and 400w from a valve amp. He was very amused with the difference in our stations, he was 59+ with my signal report of a very stable 5 and 5.





**A close-up view of Andy's Clansman set**

The Clansman PRC 320 makes a very good, though heavy choice of radio when operating from a wet environment such as an estuary bed because it is waterproof to 1m for 1.5 hours, sand proof, rugged, has punchy audio, is battery powered and has a built in tuner capable of tuning over a wide range of impedances or can be bypassed for use with resonant dipoles. As standard it is AM, CW (Wide), CW (Narrow) or USB. It can be easily be modified to cover LSB, and operates from 160m (Top Band) to 10m with no gaps in TX or RX. A working radio ready to go can be picked up from less than £200. I have the thick finned version. The SOTAbears dipole performed well, using only 3w with the wire elements being very thin stranded wire. It received well and radiated a good signal for an inverted vee with the centre at about 6m high, the salt water probably helped. I have found that orientation of this dipole doesn't seem to make any difference and could almost be omnidirectional.

As for the Yaesu VX8DE? Not a single station heard all week!

**Andy M0RON**

Many thanks Andy for submitting this article - there is just nothing to beat operating /P in locations such as this - it brought back happy memories of some beach operating I did a few years ago on the west coast of Ireland.

### **Contest Round-Up**

As mentioned earlier, GARES is in 18<sup>th</sup> position overall in the UKAC Local Clubs table, with band entries on 50MHz (19<sup>th</sup>), 70MHz (21<sup>st</sup>), 144MHz (12<sup>th</sup>) and 432MHz (17<sup>th</sup>). Sadly we have no members entering the 1296MHz and SHF bands.

In the VHF Championship, GARES is in 33<sup>rd</sup> position.

The following stations have contributed to these results:-

**M0XAC Gary, G0ULH Les, G4CIB Brian, G8CQZ Cliff, G4BCA Dave, G4IZZ Mike, 2E0MFH Matt, M0HFI Barry**

In the HF Club Championship we are well up the table in 14<sup>th</sup> place out of 44 entries in the Local Clubs section, the contributing stations being **Bob M0NQN, Gary M0XAC, G4IZZ Mike, G4CIB Brian and G4CMY Tony.**

## RF NOTES BY TONY, G4HBV

Following on from my last “Notes” on end-fed antennas, there is a rather useful two-band Marconi (end-fed) antenna that we used to use at club.

One of the advantages of the end-fed, having no feeder, is that loading/matching the antenna is simplified in comparison to antennas where a feeder is involved. This two-band Marconi uses a “magic length” - that is on the lowest band it is  $3/8$  wavelength long and on the next band it is  $3/4$  wavelength long.

To enable resonance and matching to be achieved an additional ATU is recommended because the  $3/8$  wavelength is reactive and this reactance needs to be cancelled out.

At the club we used a 200ft end-fed for 160m ( $3/8$  wavelength) and 80m ( $3/4$  wavelength). The ATU(this one really does “tune the antenna”) is shown in the photos. Since its components are in series with the antenna, construction has to be “all insulated” - so a plastic case and insulated coupling shaft for the capacitor are necessary. Without this ATU in circuit, we found that the Heathkit ATU would not match the TX sufficiently well on its own.



The controls are:

- at the top is the switch for selecting series inductance of 1, 1.4, 2, 2.5 and 3 microhenries.
- at the bottom is the variable capacitor from 45-180 picofarads, with additional sockets to plug in two separate fixed 100 picofarad capacitors in parallel with the variable.





Terminals on the rear panel allow selection of either series inductance and series capacitance or a combination of both.

Because of creating a trip hazard we could not put any counterpoise wiring actually under the antenna itself, so we ran a counterpoise wire along the outside wall of our meeting room. This was spaced off the ground by a dozen or so one foot wooden pillars. This enabled the counterpoise to be the quarter wavelength without it being de-tuned by ground proximity too much.

The “magic lengths” for other bands (only those harmonically related) are:

100 ft  $\frac{3}{8}$  wave for 80m  $\frac{3}{4}$  wave for 40m  
 49 ft  $\frac{3}{8}$  wave for 40m  $\frac{3}{4}$  wave for 20m  
 24 ft  $\frac{3}{8}$  wave for 20m  $\frac{3}{4}$  wave for 10m

These end-feds can be made inconspicuous if you have problems with neighbours. For an almost invisible antenna you could attach the wire to the plastic guttering around your house.

## Portable operating on Crickley Hill

The two Bank Holidays in May were kind weather-wise and GARES members took advantage of these conditions to operate from our usual site at Crickley Hill. **Anne 2E1GKY** has submitted the following

“A few years ago I had an Icom IC.202S 2M SSB Transceiver which was quite different to tune from anything else I had, so I traded it in for the much simpler Yaesu FT.290 Mk 1 which I found much easier to operate. I also bought the FL.2010 10w linear amplifier which was not at all easy to find and I had to wait a very long time before one became available. I still have this set up located in the the kitchen and use it with an MFJ 1754 antenna.

For the May Day Bank Holiday meeting at Crickley **Brian G4CIB** very kindly loaned me his spare IC202S so that we could do a test from Crickley to his home QTH at Corse Lawn where he was using his IC202S. For the test I used a vertical antenna - the Watson W770HB with a magmount on the roof of the car. Time and time again this antenna has proved highly successful. This is the QSL card I received for this contact”

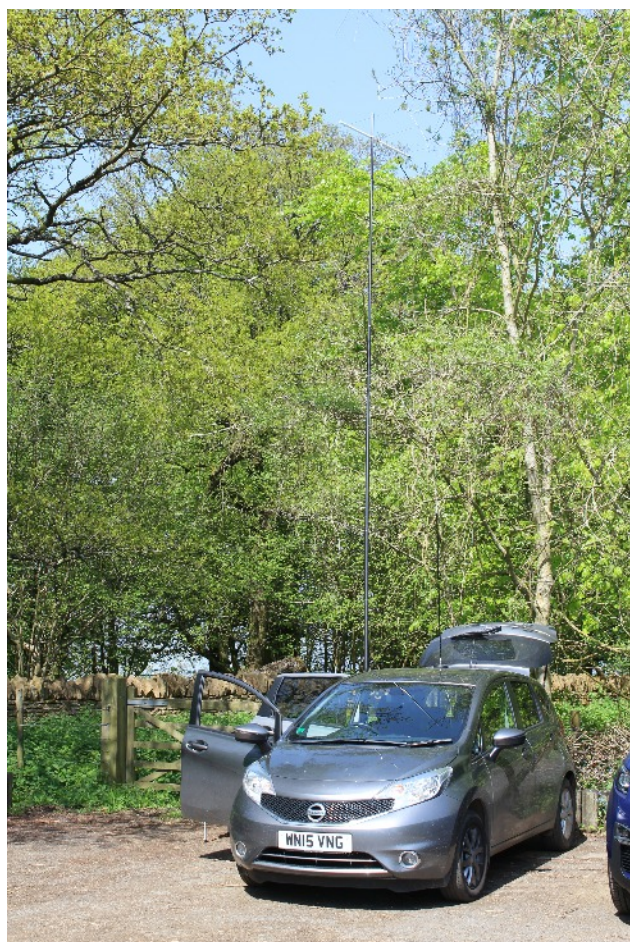


**Anne 2E1GKY and Vernon G0HTO enjoying some VHF operating with the IC202S on Crickley Hill**





**Graeme G0EEA enjoying a joke and Dave G4BCA enjoying the May Day Bank Holiday sunshine on Crickley Hill**



**Dave G4BCA's set up - 2m antenna just visible in the trees**



**Gary M0XAC doing some serious operating**





**Anne 2E1GKY operating on 2m ssb with Vernon G0HTO looking on while Graeme G0EEA examines what appears to be a mini iPad**



**Mike G6OTP giving his FT817 a close examination**