



**RAGCHEW**

**DECEMBER 2023**



## From the Editor

I've had a problem with Amateur Radio these last few months and for some reason the hobby has passed me by. I realise that we are fast approaching a solar cycle peak and I ought to make the most of it as in 11 years time, well, we won't go there!! Thankfully, however, the fortnightly club meetings have kept me in touch with members and with their encouragement, I have ventured back on to 80m CW.

Following on from my report in the last "Ragchew" about my failed antenna rotator, it turns out that **Mike G6OTP** has a similar (and aged) rotator which also refused to work. Read in this issue how he breathed new life into the control box.

We start our 2024 programme at Down Hatherley Village Hall on **Monday 8<sup>th</sup> January** when **Mike G6OTP** will be giving a talk on **Shack Safety**. In this issue, Mike gives us a preview and a few handy reminders.

Back in September, the **Bat Detector Project Group** headed up by **Richard M0HNK** were able to test their units, and **Graeme G0EEA** describes an evening expedition when they set out from Down Hatherley Village Hall to discover bats.

As I was putting this edition of "Ragchew" together, we heard the sad news that **Tom G3XMM** is now Silent Key. His funeral is on **Tuesday 19<sup>th</sup> December at 11.30am at Gloucester Crematorium**. In the New Year I will be compiling a tribute to Tom with a special edition of "Ragchew" so please send any reminiscences to me at [g4cib@outlook.com](mailto:g4cib@outlook.com).

**Anne 2E1GKY** has been sorting out some paperwork in her shack and came across two photographs taken at a club outdoor operating evening at Churchdown School in 2002. How many members can you identify? Also in this issue **Vernon G0HTO** tracks down a fault on his domestic iron, and **Richard M0HNK** has provided a link to an interesting Youtube video.

**Graeme G0EEA** has submitted a timely reminder:- "As I have just finished writing my first Christmas card of 2023, it occurs to me that I should write to say that I am collecting used postage stamps which will be donated, via St Peter's Roman Catholic church in Gloucester, to a canine assistance charity. Anyone who wishes to add to the collection is welcome and can simply give their used postage stamps to me at any GARES meeting."

**It only remains to wish all GARES members a very Happy Christmas and a Peaceful, Prosperous 2024.**

**73 Brian G4CIB**

## Rain Gauges and Sir Christopher Wren

An interesting item in the daily "Weather Eye" column in the "Times" caught my eye recently. 2023 marks the 300<sup>th</sup> anniversary of the death of Sir Christopher Wren and although chiefly known for his architectural masterpieces, he was also fascinated by meteorology and weather instruments. Rain gauges posed a particular problem as buckets filled to overflowing making accurate long-term measurements unreliable. In 1662 Wren designed a self-emptying rain collection system using a two tipping buckets in a see-saw mechanism. The capacity of each bucket was known and all that needed to be done was count the number of times the see-saw rocked back and forth, and that task too could be achieved mechanically. The same principle is used today in our outdoor weather stations that many of us use, and of course a clever bit of electronics counts the number of bucket tips. Wren also designed an automatic weather station using a pendulum clock which as well as keeping time, rotated a drum with a paper chart attached to it on which a pen trace could be recorded. Barometric pressure, temperature, humidity and rain were all recorded by this system. The invention was perfected by Wren's friend Robert Hooke (he of Hookes Law)

## The Earth's Magnetic Field

Another item which caught my attention in the "Times" Weather Eye column was about the sun. Not only are we heading for a sunspot peak, but that the sun's magnetic field is reversing as the north and south magnetic poles are rapidly weakening and expected to disappear before 2023 is out and re-emerge with opposite polarity. It seems that the sun's inner magnetic field usually reverses as we approach the peak of the 11 year solar cycle, so nothing to worry about! This reversal can set off intense geomagnetic storms in the upper atmosphere giving VHF enthusiasts the opportunity to work distant stations by reflecting signals off the resulting aurora.

I remember many years ago, my Science Master telling us that the earth's north and south magnetic poles can reverse, but thankfully this only occurs every several hundreds of thousands of years. It's interesting to imagine how it would affect our navigation systems and all the other things we take for granted in our technological age.

## Check Those Batteries

We all have things in the shack with internal batteries. Some items we use regularly, some occasionally and some very rarely. It's the latter two categories that we need to check. When was the last time you opened the battery container and check for physical condition, leakages etc? One of those rainy day, dark night, shack tasks that may prevent a nasty clean-up job at some time in the future!

## **Bat Detector Project**

A small team of enthusiastic Bat Detectorists went out from our regular once-a-fortnight GARES meeting at Down Hatherley Village Hall on Monday 18th September, at dusk, in search of bats. Armed with their bat detectors and led by **Richard MOHNK**, the originator who is at the heart of this club project, we had our own torches and opted to take the short cut through the field. Before we reached the gate to the field, a bat was briefly heard on Richard's detector. We continued on our way to the church, through the field and along footpaths. Along the way, and in the churchyard, crickets were heard on our detectors but no bats. Perhaps their favourite food was further away from the belfry, or were we already too late to hear the bat's breakfast hunt ? For the return route back to the village hall, the consensus was in favour of taking the road instead of the tall wet grass and bumps of the field. We were not very far from the church lych gate, when we heard a bat or bats on Richard's detector's loudspeaker, and a recording of this is provided here\* in Ragchew. A few of the team of enthusiasts posed for a photograph when we got back to the hall, left-to-right are Mike, Bob, Dave, Ciara, Richard, and Sally. The last word on The Bat Walk is given here to Ciara, who said, "I wasn't expecting it to be so fun but it was actually amazing and really fun ! "

**From our Bat Correspondents:**

**Graeme GOEEA and Carol.**

**\*Editor's Note:** It has not been possible to include the audio recording Graeme mentions, despite extensive efforts between us to get this fixed. Graeme has the recording available on his iPhone and will be more than pleased to play it for you at a club meeting. If in the meantime we can fix the glitch, the recording will be emailed to all members.



**The Bat Detectorists Team**

Christmas is coming, the goose is getting... but what about after. This is something to think about to distract you from writing cards, worrying over presents and over eating.

## **Monday January 8<sup>th</sup> "Safety in the Shack"**

**Organised by Mike Rainbow G6OTP (that's me.)**

Oh joy, back at the club again and what a treat awaits. Safety in the shack but read carefully. Yes it's organised by me, the easy part, but it's going to be delivered by you!

My part in the show will be limited to pouncing upon, sorry, cordially inviting five of you at least to stand up for just a few minutes, five at the most, to talk about safety in your own shack. What you found and what you did about it.

As a start, just go and look.

Here's a few clues.

The simplest and easiest, trips and slips. When was the last time you swept the floor and tidied up those snaking cables and boxes of junk? Not to mention all those tools all over the place.

When did you last look at those mains cables and check the braid clamps?

Who ever checks the fuse ratings and looks to see if L and N are reversed?

The earth connection?

Ventilation holes on rigs and power supplies clear?

Don't forget that pesky EMC check too.

Well, I'm not going to give it all away but remember, a safe and tidy shack is a happy shack and think of all those Brownie points from the XYL.

73 Mike G6OTP

### **Bringing an Old Rotator Control Box Back to Life**

**by Brian G4CIB**

Following on from my report in the last "Ragchew" about my failed antenna rotator, it turns out that **Mike G6OTP** has a similar (and aged) rotator which also refused to work. Investigations into both units revealed plastic gears which had degraded to such an extent that they disintegrated into dust! Mike has successfully stripped his unit down, retaining the 22v-0-22v output transformer, and the un-polarised electrolytic capacitor to drive the split phase induction motor. He managed to find a surplus garage door remote control transmitter and receiver on eBay and has incorporated this into the unit enabling him to rotate the antenna clockwise or anti-clockwise. He has some further ideas on how to monitor the position of the remote antenna. I now need to find some time to strip down my old control box and bring it back to life! Thanks Mike for the inspiration to utilise some kit I had almost consigned to the scrap bin!

**GARES Summer Picnic - 20<sup>th</sup> June 2002**

**Photographs submitted by Anne 2E1GKY**

Can you identify all the members?



# August Bank Holiday Monday - Crickley Hill

Photos by Dave G4HJV



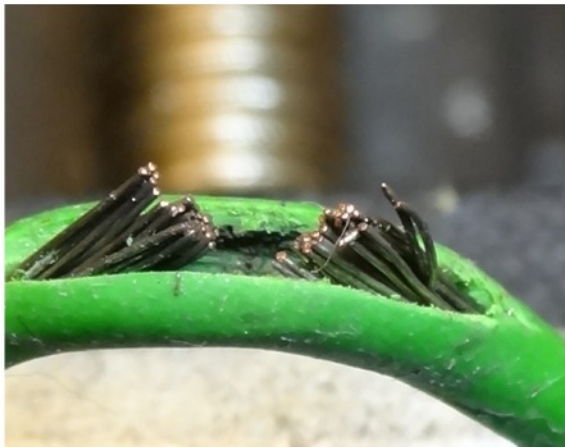
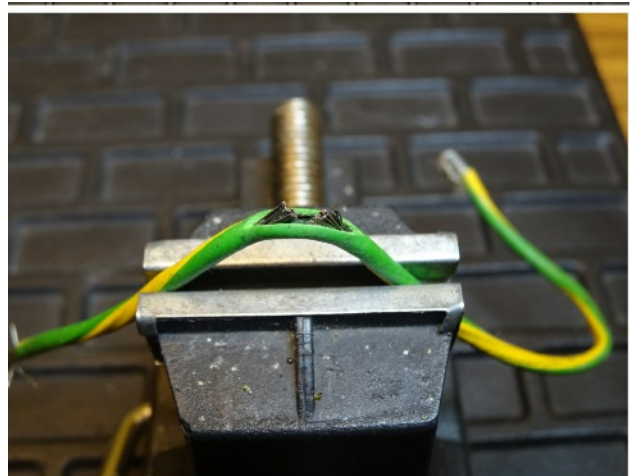
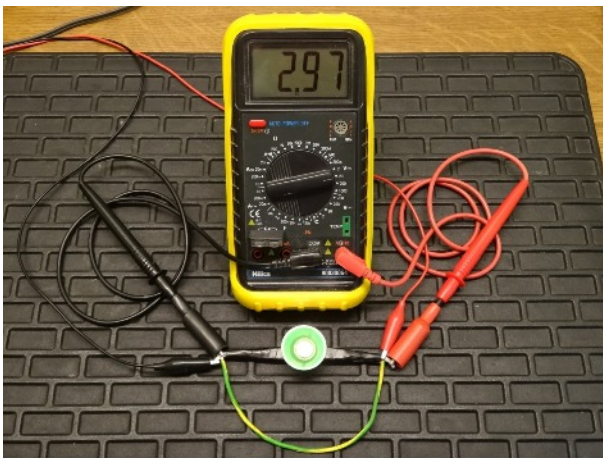
## A Cable Fault Mystery

By Vernon G0HTO

In essence the moral of the story is to never assume that just because something looks alright it is!

I have now encountered this phenomenon twice in my life so perhaps it's not as rare as one would imagine. It concerns faulty cables. The example here was a used cable but the first time I encountered it was on a brand new piece off a reel! Anyway.....

Today I discovered that I had no Earth continuity on my electric (clothes) iron. I thought something must have come loose but on testing between the plug and the cable as it entered the iron there was no continuity - so it had to be the cable (although it was undamaged).



As you will see from the photos I managed to find the broken section. The accompanying live & neutral were 100% fine - no broken strands at all. It's almost as if there was a manufacturing fault and that any previous continuity was purely fortuitous. When I came across this on the 'new' cable it was very similar but the strands on each piece were 'fused' together - almost like it was intended to be a join.

Perhaps someone in the club can shed some light on this?

Following on from **Tony G4HBV's** article on advances in radio made in World War 2, **Richard M0HNK** remembered that "**The Secret War**" is available on Youtube on the following link:

<https://www.youtube.com/watch?v=GJCF-Ufapu8&t=1994s>

The programme details many radio-related matters including **Knickebein** as mentioned by Tony. Richard missed it when it was first aired on TV but is belatedly enjoying it now.