



RAGCHEW

APRIL 2023

From the Editor

Members will have been saddened to hear of the recent death of **Ron G3SZS** and we offer our condolences to his family.

Tony G4HBV continues his “**Brief History of Radio**” and in this issue he relates some early 20th century incidents where radio, or the lack of it, played a part.

Cliff G8CQZ has submitted details of a very simple but effective LED emergency light which has undergone a good soak-test. Details in this issue.

I wonder if any members have been watching the re-run of a popular 1980's series “**Howards' Way**” on the Drama channel? In one early episode, the story-line includes a clip of amateur radio in action, with a call-sign I had worked. Read more in this issue!

Leta and I spent 5 days on Lundy in early March and despite the weather managed to make 2m SSB contact with several club members. I was also able to get on for the **2m UKAC** event with interesting results. Sadly the weather played havoc with my attempt a few days later to take part in the 6m UKAC.

Nick M0NYY has been on the lookout for a trailer mast for quite a while and a bargain listing on eBay set him on a project for his /P operating. Part 1 in this issue describes how he managed to purchase a suitable item, transport it home and his plans to restore it to working order.

Anne 2E1GKY has been trawling through her QSL archive and uncovered a card she received when she was **RS87871** from Special Event Station **GB4BEW** organised by **Alan G4MGW (SK)**. The operator was **Pat G3MA (SK)** and the card is written in his unmistakable hand-writing! It was good to see **James G4KWW** at a recent club meeting. He has applied to re-join the club after an absence of many years when his work took him away from the area. Searching through the archives I found a photo of a DF hunt in the Forest of Dean. Both of these items are included in this month's “**From the Archive**” column.

73 Brian G4CIB

The next issue of Ragchew will be early July.

Submissions to g4cib@outlook.com by mid-June.

A Worrying Fault

An interesting item caught my eye in a recent edition of “**Engineering & Technology**” magazine, the monthly journal of the Institution of Engineering Technology. It reports that reported protective earth neutral (PEN) conductor faults have increased from 57 in 2003 to 474 in 2021. In such cases a neutral current diversion (NCD) to any nearby gas, water or oil pipes can take place. In 2014 an incident occurred in Scotland where a coat had fallen on to a gas meter and caught fire for no apparent reason. It transpired that the house, along with some seventy others had suffered an earth neutral conductor failure and the neutral current of all the houses, some 35 amps, was measured flowing through the metal pipes of the gas meter. There is nothing obvious to the consumer that such a fault exists. Safety notices have been issued to operators when replacing gas meters to check for this kind of fault and it is common practice to attach jump leads between pipes before replacing them to avoid sparks being generated. It has been recommended that clip-on transformers should be used by all operatives to check for currents flowing through gas pipes. Unfortunately when a gas explosion occurs, it is rarely possible to prove that the cause was a neutral current diversion as the ignition point is too badly damaged.

More information can be found at:-

<https://electrical.theiet.org/wiring-matters/years/2021/84-march-2021/broken-pen/>

Gordon Moore - Intel co-founder has died

The death of Gordon Moore has recently been announced. In 1965 he predicted that the number of transistors on an integrated circuit would double roughly every two years, which became known as “Moore's Law”. He based this on his observations of the rapid advances being made in IC technology in the 1960's. As a young student he studied chemistry and in 1956 joined a small group in a laboratory run by William Shockley who had recently shared the Nobel prize in physics for inventing the transistor. Shockley was a notoriously erratic manager and very soon, Moore along with seven others who became known as the “traitorous eight” left to form the Fairchild Semiconductor Company which can arguably be seen as the “foundation stone” of Silicon Valley. In 1968 Moore, along Robert Noyce left Fairchild and with Andy Grove set up Intel. Despite the success of Intel, he was not a fan of technology and he once joked that he was “the only Intel executive who travels without a laptop”

A Brief History of Radio **by Tony G4HBV**

After the First World War, long distance (not amateur) radio communications was carried out by low frequency radio stations with massive antennas and infrastructure. This all changed in the early 1920's when amateurs demonstrated that higher frequencies could provide intercontinental contacts, so governments were keen to take back these frequencies that previously had been considered of no use and donated to the amateurs.

Between the wars, high frequency radio became of use to various expeditions, a couple of which I'll describe later. But first let us look at the situation regarding maritime radio.

The British cargo steamer "Trevesa" sank in the Indian Ocean in 1923. 44 crewmen took to two open lifeboats and after 26 days and 1700 miles at sea, 35 survivors reached land. After this, extra provisions and emergency radios were fitted in some lifeboats. I think that probably the transmitters would have been spark sets for there were still ships lifeboats so equipped in the early days of World War Two.

Now I'll describe the episode of "The Red Tent". Pioneer aviator Umberto Nobile, an Italian, had already flown an airship across the Arctic when he attempted another journey. But this ended in disaster when it crashed, one part with several crewmen was never seen again. Nobile and some men survived along with their radio operator, Biagi. He managed to repair the radio and started sending emergency morse signals. These were finally received by a Russian amateur and when the Italian authorities were informed and got into contact, Biagi's "fist" was recognised and rescue operations started. The Italian rescue attempts were not efficient and most of the survivors were rescued by a Russian Icebreaker. In pre-war fascist Italy, Nobile's reputation was ruined.

The disappearance of Amelia Earhart in 1937 has never been solved. She had elected to do without a radio operator and had removed the long-range trailing aerial. A U.S. Navy ship had been sent to stand-by their destination, the small island of Howland where they were to refuel, but they never found the island. Their signals were heard, but apparently they were unable to receive any signals from the U.S. ship or other stations. There were reports of their signals being received in American and I wonder if these were harmonics in the transmitters of those days as these would have probably been significant. Despite widespread searches nothing of the plane or its crew was ever found. The decision to do without a trained radio operator was a fateful one.

From the Archive - Spring 1980



Coaley Peak 2m Contest 2nd March

L-R Jonathan G8VFO, James G8PNH, Tony G4HBV, SWL Alderwick, Steve G4HFT, Norman G8TDO

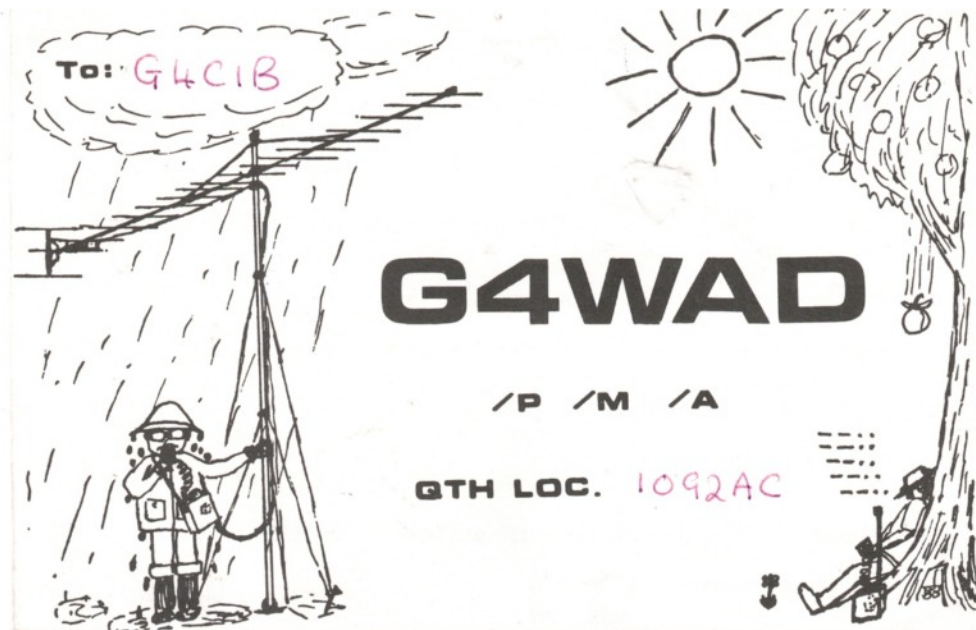


D.F. Contest 10th April Chequers Bridge Leisure Centre

Dave G4HJV and Jonathan G8VFO

Howards' Way - an Amateur Radio Connection
by Brian G4CIB

I wonder how many club members have spotted that the 1980s BBC series "Howards' Way" is being shown on the Drama channel? Filmed mainly on location in the Lymington, Beaulieu River and Southampton area, the story revolves around the fortunes of a traditional boat-building yard being saved from the brink of bankruptcy by the injection of capital from recently-made redundant aircraft designer Tom Howard. So what's this got to do with Amateur Radio? In the second series, the boatyard have built a modern "plastic" boat, the "Barracuda". Tom's daughter Lynne, flushed with her success of being in the winning Fasnet race-crew, takes it single-handed across the Atlantic. Towards the end of the voyage she encounters heavy seas and loses radio contact with the UK. The film shows her desperate calls on the Maritime Distress Frequencies 2182 kHz and 8.291 MHz then finally putting a CQ out on the 20m amateur band, which is picked up by **G4WAD** who tells her his name is Brian. That call-sign rang a bell and sure enough in my QSL card "shoe-box" collection filed in alpha-numeric order I quickly found the QSL card for a 6m CW QSO with **G4WAD** on **1st February 1986**, the day the band was opened to UK amateurs. But the name didn't tie up as the name on the card is **Dave Bushell**. However when the credits rolled at the end of the episode, the **Lighting** was credited to **Dave Bushell**. I've reproduced the QSL card below. It appears they must have "borrowed" his call-sign for the purposes of the episode!



D. J. C. Bushell

Operating QTH 24 ALMOND CLOSE, EVESHAM,
 WORCS.

ASL 120'

To G4CIB **confirming our** 50 MHz QSO

Date 1.2.1986 **GMT** 01.47

UR RST 579 **Mode** CW

Tx/Rx IC271E/MUTEK **Input** 10w
 TUVF 50c
 TV272

Antenna 3 el Yagi, homebrew

PSE TNX QSL Direct Via-RSGB

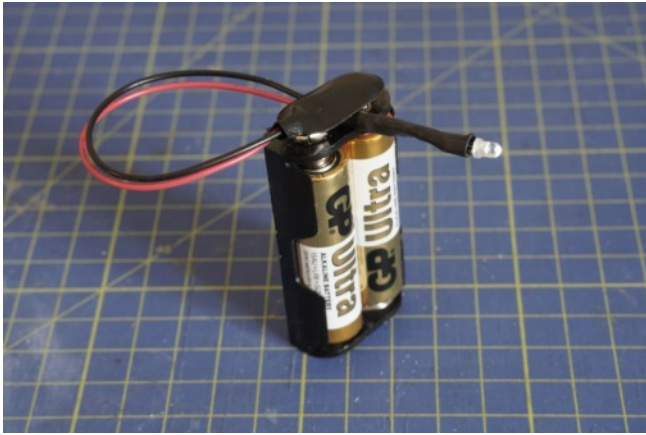
Mhic box for QSL & QSO, Brian. Very
 Pleased to have worked you on 1st day of 50MHz
 73s Dave

*the crown
 5m
 73 Dave*

A Simple but Effective Emergency Light

by Cliff G8CQZ

It was a dark and stormy night last winter when all of a sudden the power in the area went out. This is not uncommon in the countryside where I live but that night there were no car lights in the distance, no moonlight, no starlight, nothing. Just blackness! We waited and waited but our eyes didn't get accustomed to the dark and both our mobile phones were on charge elsewhere so I felt my way to find a torch.



The neat and compact assembly



After 10 weeks of continuous running

By next morning the power was back on but the radio was predicting power cuts that could last for days. Fortunately, these never happened. I needed an emergency light that didn't require me to remember to recharge it or even to switch it on. After a few experiments I came up with this: two ordinary alkaline AA batteries in a holder, a white LED and a 1N4001 diode in series with the LED, all held together with heat shrink tubing. The LED was a 3mm, 36°, Pure White LED from CPC (www.cpc.com), part number SC11539. It's been running continuously on the same batteries for over 4 months and, although it's quite dim now, the light is still bright enough to see by if there is no other light. The diode reduces the current to less than 250uA. I tried a resistor in series with the LED, to reduce the current to be the same as with the diode, but that died completely in less than a week. My emergency light is ready for the next winter storm. So far, fortunately, I haven't needed it.

From the Archive

*OUR Previous Special Event Station
at Walls Factory 12/1/1997.*

RS07871
To RADIO Smart Walls History Area WAB-S081
you 3<7
Confirming dir. 3<7 M Fx GSO
on Sat 12/1/97 13-19 GMT
Your CW/SSB/PW signal was 5.9+ RST
TX (F1.2) output 100 watts pep
Ant. W3D Z Z
Remarks Mini box for repair G4MGW
ALAN R. LODGE
92, Cheltenham Road,
Gloucester, GL2 0LX
UK
PSE TKS QSL Direct or via RSGB Post 3 MB
opl.

Left: GB4BEW (Birds Eye Walls) Special Event Station QSL card.

Below: DF Hunt, Beechenhurst May 1980. L-R Norman G8TDO, James G8PNH, Steve G4HFT, Jonathan G8VFO (hidden behind Steve)



Lundy – March 2023

by Brian G4CIB

Leta and I spent five days in early March on Lundy and at this time of the year, the supply ship M.S. “Oldenburg” being in dry-dock at Sharpness for its annual overhaul, it’s a 6 minute helicopter hop from Hartland. The luggage allowance is strict, just 10kg per passenger which now has to accompany you on the flight.

Luckily the best day of the week weather-wise was the Tuesday, the day I had arranged to come up on 2 metres SSB and attempt some contacts with club members. I was able to make good contact with **Andrew G4IVD** on Haresfield Beacon and **Jim 2E0GKN** on Churchdown Hill. I could detect other signals from members but these were not strong enough to exchange reports etc. For the record I was using my FT817ND and a small 15 watt amplifier kindly supplied by **Graham G8DLW** along with a 3-element SOTA beam. The winds were light so I kept the antenna up ready for the evening 2m UKAC event.

I managed to work 20 stations in 11 locator squares and the map (overleaf) shows their locations. The total cumulative distance worked was 4913km giving me 4913 distance points and 5500 points for the 11 locator squares worked giving a total of 10,413 points. When the results were published, I was pleased to see I had no logging errors, also no reverse errors.

Towards the end of the contest, the weather rapidly deteriorated and I ventured out of the castle, dropped the antenna to the ground and left it there to recover it the following morning in daylight.

For the 6m UKAC, I took a 3/2 wave wire dipole and dropped it down from the top of the Castle to use it as a “sloper”. Sadly after just one QSO, the fierce force 9 gale now in full spate managed to find a weak joint where the co-ax feeder was joined to the dipole wire.

We are on the island again in June and hopefully will enjoy some Sporadic E on 6 metres!

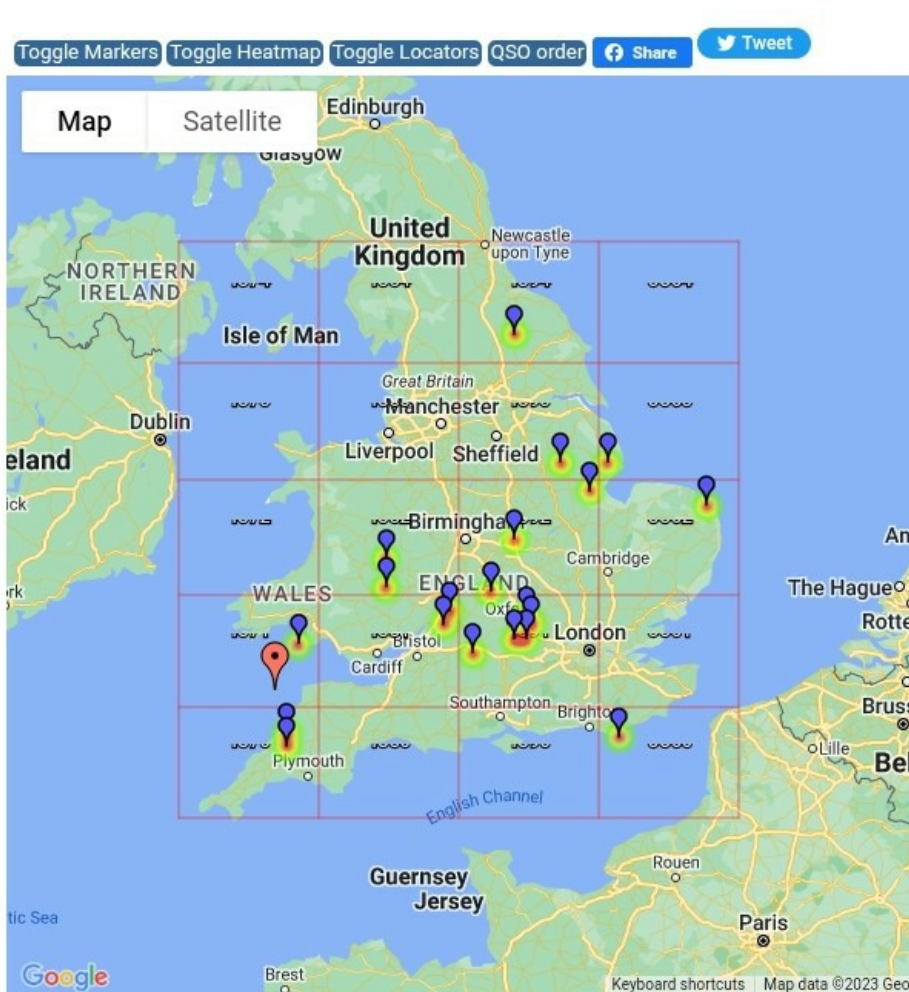


Above - G4CIB/P at
Marisco Castle

Left - 3 element
SOTA beam on
lightweight plastic
pole

Right - 2E0GKN/P on
Churchdown Hill

144MHz UKAC 7 Mar for G4CIB/P IO71QD



| Time | Call Sign | RS & SN (sent) | RS SN (rcvd) | Distance | Locator |
|------|-----------|----------------|--------------|----------|---------|
| 2005 | 2E0VCC/P | 59 001 | 57 008 | 57 | IO70SP |
| 2008 | G0ODQ | 57 002 | 57 006 | 263 | IO91MR |
| 2010 | G4ILI/P | 57 003 | 55 011 | 191 | IO81WU |
| 2019 | G4CLA | 57 004 | 57 047 | 278 | IO92JL |
| 2028 | GW0RHC | 59 005 | 59 018 | 52 | IO71UN |
| 2034 | MW0LKX | 52 006 | 52 033 | 170 | IO82LH |
| 2050 | M0ABT/P | 55 007 | 55 066 | 348 | JO00DR |
| 2058 | G1YBB/P | 55 008 | 54 071 | 150 | IO82LB |
| 2100 | M1MHZ | 57 009 | 57 052 | 365 | IO92WV |
| 2105 | G1DFL/P | 55 010 | 53 057 | 254 | IO91LO |
| 2113 | G4FZN/P | 56 011 | 54 072 | 413 | IO94JF |
| 2125 | G3YPQ | 59 012 | 59 003 | 44 | IO70SS |
| 2139 | G8CUL | 57 013 | 55 057 | 243 | IO91JO |
| 2143 | G8LNR/P | 57 014 | 55 041 | 180 | IO81VR |
| 2153 | M0NVS/P | 57 015 | 54 115 | 259 | IO91LT |
| 2157 | G0LBK | 55 016 | 55 100 | 393 | JO03BD |
| 2159 | G6UAJ/P | 58 017 | 55 091 | 201 | IO91CL |
| 2202 | G8DOH | 58 018 | 58 057 | 235 | IO92FA |
| 2208 | G4LPP | 56 019 | 52 067 | 460 | JO02SS |
| 2211 | G0FVI/P | 56 020 | 55 060 | 357 | IO93RD |

Trailer Mast Project – Part 1

by Nick MONYY

For quite a few years now I have been on the lookout for a trailer mast. Originally this was to mount fireworks to be launched at height to create a different 3D effect but, having joined Amateur Radio around 5 years ago, my requirements have expanded.

I had in the past couple of years looked at other methods of mast erection and had bumped into G8LNR who frequents the Minchinhampton Common car park on Contest evenings with his motor home and drive-on, hinged mast with rotator. Much as a drive-on plate would work for me, I wanted to have one mast to fit a larger range of radio projects without the requirement to drag huge lumps of metal out of my vehicle to bolt to a plate. With my planned increase in contesting, I wanted more height and a fast erection time so a trailer mast or vehicle with attached mast would be my preferred choices. Little did I know how expensive these things are. Like £5,000 expensive for 10 meters height to £20,000 for 30 meters and this was 2nd hand pricing.



The trip to Crickley Hill in September 2022 to partake in the GARES Club entry into the PW 70MHz Contest also showed that our method of erecting the Quad Antenna left you with the distinct possibility that this pole could snap. There is quite a bend as you walk it up to vertical. Scary! I mentioned to Gary (M0XAC) that I was actively looking for a trailer mast that we could use at future events. What I didn't expect was to find one so close to home.

In early January during one of my eBay sessions I took a quick look at trailer masts and found a listing for a tatty old 12m pump mast on a tatty old, converted boat trailer for £350. It had six days left to run on the auction so I marked it to look at later in the week.

It may be coincidence but the next day, the Facebook app on my phone decided to list trailer masts for sale in the news feed. One of the masts listed had the same picture as the eBay listing. The price however was significantly more. Like ten times more.

Well, this just got me real interested. Was the ebay listing a mistake? Was it all a con? After a bit of research, I find that both listings are from the same person so possibly not a con.

The mast is a Clark Military mast which we know is a quality brand, so I begin to think that the £3,500 price is the correct price.

Being a little bit cheeky I go to the ebay listing and put in an offer of £300 to buy it right there. To my complete surprise the offer is accepted. I hoped it wasn't a con as I paid straight away to take it off the market.



Mobile radio PA mast

£3,500

Message Seller

Of course, at this point in time I have no idea if anything works or how much repair is required but £300 for this has got to be a worthwhile project attempting to get it working. I arrange with the seller to collect from Banbury on the weekend after the January snow. To be honest I wanted to collect it fast before they realised that perhaps they had made a mistake on the price.

The seller whose name is Bob, owns a small company that rents out large screen TVs on the back of trailers to horse racing events. He used to use the trailer mast to mount floodlights and had left it in storage for the last few years so decided to sell it onwards. We had a good chat and Bob showed me around his business including his collection of scale model steam engines, so a good hour went by before it was time to hook up and leave with my new mobile erection.

The journey home was looking good. The trailer tows very well, all the electrics work and the spring-loaded number plate holder makes changing plates a simple task. Unfortunately, one of the trailer tyres has a puncture at Bibury so I park up only to find the spare wheel in the storage box is also flat and the tyre bead is off the rim. Not wanting to leave the trailer alone and with only a couple of miles to my storage unit, I decide to tow it along the back lanes and get it squirreled away. I can tell you now that towing on a flat tyre is a bad idea. Not only did I lose the tyre completely, but the wheel rim is worn away almost to the bolts.



It's not as bad as it sounds. All the tyres are old and needed replacing so it's easier to buy whole wheels anyway.

Two new wheels with tyres is £80.

Imagine my surprise when I open the 2nd storage box to find a Clark Mast Electric pump, remote control and a 12v car battery. Jackpot!!!

With it parked at my unit I had time to go through it in a little more detail:

- All mast sections move freely and lock off.
- The mast seals are good.
- The pump works.
- The trailer just needs a clean and coat of paint.
- Electrics all work and no broken light fittings.
- The friction winch works fine but needs a handle.
- Suitable guy ropes and stakes are required.



Clark Masts in the Isle of White have been brilliant. They have supplied me with operation and maintenance manuals and after giving them the serial number, they confirmed the mast was manufactured in 1990. Yes, it's an old mast but it's still sold now and all spares are available.

The mast identifies as a Clark Mast WT-12-8 which is an 8 section, 12 meters maximum extension with a maximum load weight of 40kg. That should be plenty strong enough for any rotator and antenna I am planning to mount in the future.

At the moment the trailer is locked up at my storage unit whilst it is stripped for cleaning and the mast dismantled to replace the old silicon grease with new. The erection requires a good old lube.