# NEWSLETTER www.g3mdg.org.uk CCLDLALRASS

OCTOBER 2023

CHESHAM & DISTRICT AMATEUR RADIO SOCIETY MONTHLY NEWSLETTER

# With winter months getting closer, what projects, if any, do you have planned?

We meet the 2<sup>nd</sup> and 4<sup>th</sup> Wednesdays of the month at the Ashley Green Memorial Hall, Ashley Green, HP5 3PP



### The nightmare of handheld programming cables, they're all the same, right?



he encountered with this

seemingly simple task

#### **G-QRP Buildathon**



Angie (M6WTL) and I attend the Buildathon for the second year running.

#### SSB Field Day



This year from the QTH of G8FMC, including dabbling with VHF. Definitely more luxurious than in a tent in a field.

#### Morse Code

Bletchley Parks involvement with Morse code, and the Enigma and Bombe machines.



#### Spotlight

Schwenksville, Pennsylvania, its association with General George Washington, the Liberty Bell and London.



If you want something or have anything for sale, why not drop me an email and I'll put it in 'For sale and wanted'.

Want to write something for the newsletter? Then you can contact me on bryanpage1@btinternet.com

### **Morse links**

If you're interested in Morse code, here are a few useful links:



#### **FISTS CW Club**

Promoting Morse Code for 36 years 1987-2023

https://fists.co.uk

Wikihow	How to learn Morse Code		
	https://www.wikihow.com/Learn-Morse-Code		
The Ham Whisperer	Morse Code Course		
	http://www.hamwhisperer.com/p/morse-code-course.html		
LEARN MORSE CODE	LEARN MORSE CODE in one minute !		
	http://www.learnmorsecode.com/		
Welcome to LCWO.net	Learn Morse Code (CW) Online!		
	https://lcwo.net/		
WISCONSIN A 2014	Tools for learning Morse Code		
• Amateur Radio	https://www.aa9pw.com/morsecode/		



Celebrating the unique art form of Morse Code

https://cwops.org/



Morse Code by Ray Burlingame-Goff (SK - 29<sup>th</sup> July 2021)

http://www.g4fon.net/

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#### Other

#### **Morse Links**

Useful links if you want to learn Morse code. 2

Chairman - Dave Keston (G8FMC)

- Guy Plunkett (M0GUY)

-Roger Fellows (M7RMF) Secretary - Malcolm Appleby (G3ZNU) - James Stevens (M0JCQ)

Treasurer -Matt Whitchurch (M1DTG)

- Peter Holliday (2E0PTH)

All the above are members of the committee and can be contacted on cdars-committee@googlegroups.com

Editor - Bryan Page (M0IHY)

### Welcome

This month's CW Corner is a little different, showing the involvement of CW, and the Enigma and Bombe machines, hopefully interesting nonetheless.

Spotlight looks at a very small town, Schwenksville in Pennsylvania, an area given up by the Lenni-Lenape Indians to William Penn in 1684, it's also the home of the Liberty Bell, which was originally cast by the London firm of Lester and Pack (known subsequently as the Whitechapel Bell Foundry), General George Washington was also involved with the area after the Battle of Germantown in 1777.



Bryan M0IHY

Our trip to the G-QRP Convention went well with the Buildathon being the height of the

visit. We attended the hall sale and with tables also outside in the car park we had plenty to look at. Strangely we came away with nothing, prices varied tremendously from one of the ATU's manufactured by S.E.M. (Z match) on the Isle-of-Man going for £90 on a car park table and £35 for the same unit inside the hall, both of equal quality, most of the car park tables were selling stuff you could buy off eBay at about half the price, a sign of the times maybe?

My thanks go to Mark (M7EFR) for his article regarding handhelds and programming cables, I think most of us have probably 'been there, and done that', so for those of you venturing into the world of handhelds and programming cables for the first time, please note!!

As the front page says, "what are our plans for autumn and winter month's to come?". We're approaching that time of year when projects are starting. Do you have any, and if so, what are they?

**Bryan M0IHY** 

### **Chairmans Ramble**

With help from my daughter Mel, I managed to put up maps and award Certificates to 'decorate' the G8FMC shack with some 'wallpaper', ready for visiting operators on the W/E of 2-3 Sept, when we were to tackle both 144MHz Trophy and HF SSB FD (fixed station category) simultaneously! Team members were Roger M7RMF, Matt M1DTG and myself. (I hope they were impressed with the very significant effort that went into the prep, for a number of days prior?) In fact I got so wrapped-up in all this preparation that I forgot to get 'on-line' to host the 5th Wednesday Zoom meeting! Sorry folks; I think a couple of you logged-in, expecting me to be present?



So how did our multi-band, multi-op event go on the 2-3 Sept? With a professional 30MHz LPF (Low pass filter) in between HF rig and PA, plus a big cavity 2m BPF borrowed from Roger G3MEH (thanks Roger) we managed to have negligible

Dave (G8FMC)

breakthrough between 400W at HF and 250W at 2m on all bands except 28MHz, which is the IF for my Transverter. Even on that band it was possible to operate simultaneously if the frequencies were separated by more that about 50KHz.

Everyone had a great time and on Sat afternoon when Matt arrived, Roger was already working away on 2m. I vacated the HF 'hot-seat' and gave Matt a quick run-down on the station setup. After a brief tune-round Matt heard a strong /P contest station and tentatively called 'G3MDG'. An immediate response and exchange. This was repeated several times in quick succession, then Matt slightly bemused at how easy it seemed, asked what power we were running? '400W i.e. full legal'. It brought home just what a linear and full-size antenna can do. So I hovered whilst Matt got into the swing of things on several bands.

Looking across at Roger on 2m I was slightly taken aback to see that he was working well into Germany, into squares that I never normally hear! My 'student' was doing better than the 'Instructor' had done in the past 13 years! It seemed that there was a big VHF lift on, actually coinciding with a major EU wide contest? The RF Gods were smiling on us.

Early-ish on Sunday morning the 'Instructor' did redeem himself to bag the best DX of DK0NA/P on 2m in JO50 square at 823Km! Slight morning mist causing ducting?

More technical details on this and other contests, in the 'Contests/Operating' section at the back of this News Letter.

My efforts on the 'Indoor Workshop' (ex bedroom 1) have gone on hold, whilst the shack work took priority; not to mention the various contests. This means my Dining room and Lounge still have a lot of 'Stuff' that does not really belong there! It will get sorted eventually, I promise.

Till next time;

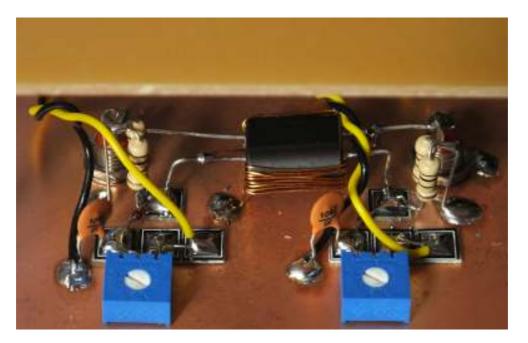
73 all, Dave K, G8FMC (Chairman and Contest Coordinator)

### **G-QRP Convention 2023**

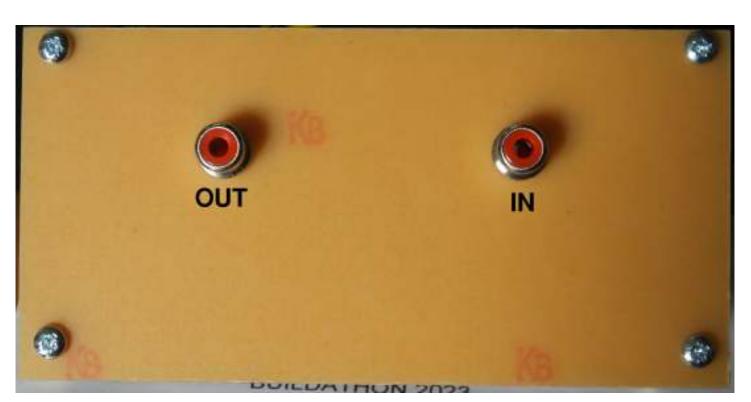
The Buildathon occurred on Saturday the 2<sup>nd</sup> of September, it was attended by about 20 people, with at least one volunteer from the NRC at Bletchley Park present, there were a couple of 'non-attendees' (that meant I could purchase another kit for Peter (2E0PTH)). The kit being built was a Stockton B-Directional Wattmeter / SWR indicator, a handy item to go with the ATU built last year.



The 12-page instruction booklet.



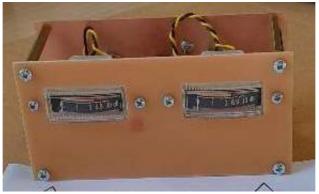
Construction is what I think you call "rat's nest".



The back panel with phono connections.

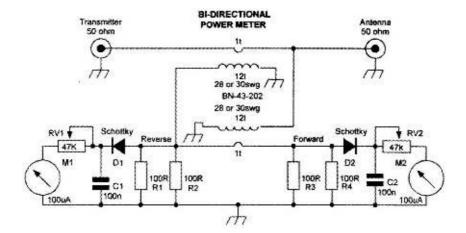
Whilst the kit is 'minimalist' suggestions for modifications are:

- Replace the phono sockets for your connector of choice; SO239, BNC, etc.
- Replace the edge-ways meters for 'proper' 100µA panel meters and calibrate them for power, or SWR.
- Enclose the meter in a metal box.
- Adding a 3-way 2-pole switch and additional pre-set resistors to have 1W, 5W and 10W settings.
- Replacing the two pre-set resistors with a dual potentiometer on the front panel to give constantly variable maximum power setting. You could calibrate the pot settings to indicate different power levels.
- Replacing meters with a microprocessor circuit and a TFT display to work out and display the forward and reflected powers, and the SWR.



The finished item

#### **Circuit Diagram**



Parts List		Notes
R1, R2, R3 & R4	4 of 100 Ohms	Marked Brown Black Brown
D1 & D2	2 of 1N5711 or BAT85	
C1 & C2	2 of 100nF ceramic	Marked as 104
Binocular core	1 of BN43-202	
RV1 & RV2	2 of 47k or 50k preset	
Soldering pads	8 of MeSquares	
Input/Output sockets	2 of RCA/phono sockets	
Coil wire	28 SWG magnet wire	40" (100cm)
Interconnect wire	Colured/Black stranded wire	2 * 8" of each
Bare wire	22 SWG BTC	10" (30cm)
Meters	2 of 100 micro-Amps edgewise meters	
M3 brass pillars	4 of 100mm long	
M3 pan head screws	4 of 12mm long	
M3 pan head screws	8 of 6mm long	
M3 nuts	4 of	
PCB material	2 of 150mm * 50mm	

Assembly time was around 3 hours with a final 'smoke test' (if you hadn't wired it correctly!) at the end with both meters calibrated against a QRP rig.

My thanks to Angie, who although her eyesight is not the best, guided me through the build and even pointed out where I'd wired something up wrong, thus avoiding the embarrassing puff of smoke when tested!

#### **Bryan M0IHY**

### **SSB Field Day**

This year at G8FMC's QTH, not Wiggington.



Roger M7RMF on 144MHz (250W to 8 ele beam at 13m AGL), Matt M1DTG on 40m (400W to inv. V Dipole at 10m AGL)



Looking back from the opposite corner, also showing some of my Certificates (Bragging Wall!)



Another view, both concentrating hard! WAB replica trophies on the Filing cabinet.

Zero breakthrough between stations, thanks to filters and good kit/station design. Centre of 40/80m Fan-Dipole supported on same mast as VHF beam and just 3m below.

For a description of the pictures above and on the previous page, see the Chairman's Ramble (page 5) and Contests/Operating (page 11).

### **Contests/Operating**

#### VHF Championship – AFS (Affiliated Societies) section;

Still we hang-on to 2nd place, but now there are 79 clubs in the mix!

We fielded a good number of members and friends for the 144MHz Trophy and eagerly await results for that. 5 full entries, plus just 3 hours worth from John GW4CZB/P, who was on a Welsh hill for the 5<sup>th</sup> Backpackers, but also put in a log for us to swell the total a bit, thanks John. It was worth his effort of climbing the hill, as John has bagged 2<sup>nd</sup> spot in the last Back-packers and 3<sup>rd</sup> place overall in the Backpackers Championship – great effort John.

The log for our combined effort at G8FMC on the 144MHz Trophy, shows that many others had the big lift in conditions that we experienced (see Chairman's Ramble) Our efforts, although the best from my QTH ever, are only mid-ranking compared to many others. This was expected since as a multi-op station we were in the '6O' category, along with many (more serious?) portable groups. Claimed score position is 16/27 which is quite good from this QTH, given the rules and the fact that it was largely a 'training exercise'. It will be interesting to see how the adjudicated scores pan-out?

There is now just the 1.3GHz/2.3GHz Trophy events on 7<sup>th</sup> October to end this series. Unfortunately very few of us have equipment for those bands, so we may well slip from our 2<sup>nd</sup> place when those results come through?

The evening UKAC's (under the Northampton banner): We are well established in 3<sup>rd</sup> place out of 42. Looking promising for the last 3 months? Keep up the good work all.

#### Dave's Delta-loop experiments continue, during SSB FD at G8FMC:

Picking up on last months experiments; I had another opportunity to compare the Delta-Loop with my Cobweb, during the SSB Field-day of 2-3 September. For this event we had Roger M7RMF and Matt M1DTG sharing my shack and getting some high power HF contest experience. (See Charman's Ramble near the front)

I set up a quality high-power antenna switch so that we could do instant comparisons (on 20m) between the Delta-Loop and the Cobweb. On this occasion I had the Cobweb setup on my front drive to provide some extra distance from my VHF 2m antenna, as we ran 2m at 250W and HF at 400W simultaneously! Negligible breakthrough, other than on 10m (2m IF!)

There was very little difference between the 2 antennas most of the time. Occasionally the Delta-Loop was slightly stronger, but mostly a little weaker? Generally the noise pickup was better on the Cobweb, but not by a big margin. I intend to try and arrange several loops with a common feed, as a low visual profile semi-permanent HF-band antenna.

It will be some time before the results for the SSB FD are published, as it is coordinated throughout the EU, with thousands of logs to cross-check.

Provisional logs submitted just show QSO numbers, without multipliers. Since we are 11<sup>th</sup> /46 that seems to suggest that we may have a very respectable final score, in spite of doing way less than the full hours? We wait with baited breath!

#### 73, Dave K, G8FMC

### Tales from the off-grid shed

I suppose it was the glowing review by MLS on the Ares radio that put the name Anytone in my head. So when I managed to blow up the little Kenwood dual-bander I started looking for a suitable replacement and found another glowing review of the Anytone AT779UV on YouTube. 'A little gem'.. 'easy to use'.. all that sort of stuff along with comments on various forums about how someone must have spent hours loading in every UK repeater and assorted non-TX frequencies as a free data file. I thought ...well, this will do nicely.



Anytone AT779UV (circled)

I bought it on ebay for £99 from a CB radio supplier that I'd used before and it duly arrived. However the programming cable wasn't in the box. Cutting a long story short this is an optional extra but the supplier didn't stock it. So I thought, 'no problem' I can program it manually direct using the radio. It's quite small as it's a mobile unit but the 'face' keys are repeated on the fist mic. Wired it up, and connected it to a new co-linear antenna on top of the old gas pole that also supports my 15ft vertical above the shed.



Co-linear (circled)

Turned it on and started fiddling about to find GB3TU. No joy. It seemed to be stuck on one VHF and one UHF frequency. The manual is very basic and there is no reference to the data file. Access to the memory requires holding down two buttons, then turning the radio off and then on while holding down the two... and holding the radio. As an aside, I sometimes wonder if the manufacturers recruit people with three or four hands. No joy. So I go back online to buy a programming cable. Plenty of AT779, or AT778UV but no 779UV's. Being the optimist I buy the 779 cable... it's only £12... it's only a cable right?

I look on the Anytone site for the software but they also don't have the 779UV cable or software... strange, everything else but that. I find it at Moonraker so I get the download and set it up on the laptop.



My collection of cables

The cable arrives, plug it in, run the software, and I get : 'Can't read the Radio' message. So I buy the 778UV cable £14... nope that won't work either. Back to the forums and reviews and I find that there are too many cables out there with an inferior chip in them. I need a specific chip. The Miklor site helpfully suggests I can make one. The components are all available, however my soldering skills are from the 1960's when I could buy old military surplus Cold War circuit boards that are about 18inches by 12inches for a shilling, with proper components I could pick up with my fingers. The chances that I could put together a PCB that would be about 2cm by 1cm are zero.

So back to the internet where up pops Amazon with an AT779UV programming cable, 'only one left' (why do they do that and why didn't this come up first time round)... £33..!! but ah well, so I buy it and lo and behold it works! However, when I read the data from the radio there's no huge list of stations as per the Moonraker video tutorial. Either I've bought a dud radio, or more likely, in my fiddling about with the memory I've managed to 'initialise' the settings and lost all the data...

I dig out my CDARs notes to get the GB3TU frequencies and ctcss tone and amazingly manage to correctly write these to the memory. Now all I need is some helpful Ham out there who has backed up the data file and I can re-write the whole thing to the radio. Meanwhile I can, at least, get on the Club Net again at last.

The moral of the tale I suppose is... well many or none in this complex world of ours, just keep plodding on until it works!

Thanks to Bryan I got onto 'HamRadioDeals' and put an advert in the wanted section to see if a Ham had backed up the Dat file that I mentioned earlier with all the Repeater frequencies already loaded. Within hours I had a message from Steve G4HTZ who had also wiped his memory and got a replacement from MLS which he forwarded to me...boom! it slotted straight into the software and so I now have over 200 frequencies preloaded as per the original, just got to write them to the radio...brilliant and made my day!!

#### Mark M7EFR

Ed: https://www.hamradiodeals.co.uk is run by hams for hams, everything from advice to gear for sale, the list is endless and well worth a visit.

When I get important software I always copy it onto a USB stick and put it somewhere safe, that way you know you have a 'get out of jail free card' should you accidently delete it from your computer. If you've never backed up your rigs data then now is the time to do so and save it somewhere safe!

'Yes', the cable that works is more expensive, unlike most Chinese cheap offerings, sometimes it pays to spend just that little more, an Internet search also helps, https://www.miklor.com is a good place to start.

### **CW corner**

Ultra, the Allied intelligence project that tapped the very highest level of encrypted communications of the German armed forces, as well as those of the Italian and Japanese armed forces, and thus contributed to the Allied victory in World War II. At Bletchley Park, a British government establishment located north of London, a small group of code developed techniques breakers for decrypting intercepted messages that had been coded by German operators using electrical cipher machines, the most important of which were the Enigma and, later in the war, the sophisticated Tunny machine. The flood of high-grade military intelligence produced by Bletchley Park was code-named Ultra (from "Top Secret Ultra"). According to some experts, Ultra may have hastened Germany's defeat by as much as two years.



The Manor house, Bletchley Park

Every day the German military transmitted thousands of coded messages, ranging from orders signed by Adolf Hitler and detailed situation reports prepared by generals at the front line down through weather reports and supply ship inventories. Much of this information ended up in Allied hands, often within hours of being transmitted. The actual texts of the deciphered messages—the "raw decrypts"—rarely left Bletchley Park. Instead, analysts there sifted the decrypts and prepared intelligence reports that carefully concealed the true source of the information. (Nevertheless, the entire Ultra operation was endangered by John Cairncross, a member of the British Foreign Office assigned to Bletchley Park who smuggled Tunny and Enigma decrypts out to Soviet agents in 1943.)

The Enigma machine, which combined electrical and mechanical components, was descended from a number of designs that were submitted for patent as early as 1918 in Germany and were produced commercially beginning in the early 1920s. Looking rather like a typewriter, it was battery-powered and highly portable. In addition to a keyboard, the device had a lamp board consisting of 26 stenciled letters, each with a small lightbulb behind it. As a cipher clerk typed a message on the keyboard in plain German, letters were illuminated one by one on the lamp board. An assistant recorded the letters by hand to form the enciphered message, which was then transmitted in Morse Code.

Each bulb in the lamp board was electrically connected to a letter on the keyboard, but the wiring passed via a number of rotating wheels, with the result that the connections were always changing as the wheels moved. Thus, typing the same letter at the keyboard, such as AAAA..., would produce a stream of changing letters at



Enigma

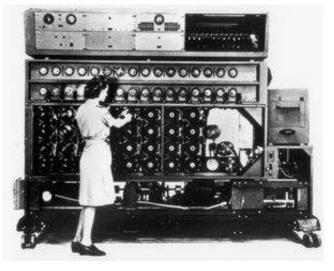
the lamp board, such as WMEV.... It was this ever-changing pattern of connections that made Enigma extremely hard to break.

The earliest success against the German military Enigma was by the Polish Cipher Bureau. In the winter of 1932–33, Polish mathematician Marian Rejewski deduced the pattern of wiring inside the three rotating wheels of the Enigma machine. (Rejewski was helped by photographs, received from the French secret service, showing pages of an Enigma operating manual for September and October 1932.) Before an Enigma operator began enciphering a message, he set Enigma's three wheels (four in models used by the German navy) to various starting positions that were also known to the intended recipient. In a major breakthrough, Rejewski invented a method for finding out, from each intercepted German transmission, the positions in which the wheels had started at the beginning of the message. In consequence, Poland was able to read encrypted German messages from 1933 to 1939. In the summer of 1939 Poland turned over everything—including information about Rejewski's bomba, a machine he devised in 1938 for breaking Enigma messages—to Britain and France. In May 1940, however, a radical change to the Enigma system eliminated the loophole that Rejewski had exploited to discover the starting positions of the wheels.

New methods developed at Bletchley Park during 1940 enabled code breakers there to continue to decipher German air force and army communications. However, German naval messages—including the all-important traffic to and from U-boats in the North Atlantic—remained cloaked. (The Poles too had had little success against naval Enigma.) U-boats were sinking such a large number of merchant ships taking food, munitions, and oil to Britain from North America that by 1941 some analysts were predicting that the sinkings would tip Britain into starvation within a few months. In June 1941 British mathematician Alan M. Turing and his group at Bletchley finally succeeded in breaking into the daily communications of the U-boats. Decoded messages revealed the positions of the submarines, enabling ships to avoid contact. Great care was always exercised to conceal the fact that Bletchley had deciphered these messages. For instance, British intelligence leaked false information hinting at revolutionary new developments in long-range radar



Bombe machine



An American Bombe machine

Turing was responsible for another major development in breaking Enigma. In March 1940, Turing's first Bombe, a code-breaking machine, was installed at Bletchley Park; improvements suggested by British mathematician Gordon Welchman were incorporated by August. This complex machine consisted of approximately 100 rotating drums, 10 miles of wire, and about 1 million soldered connections. The Bombe searched through different possible positions of Enigma's internal wheels, looking for a pattern of keyboard-to-lamp board connections that would turn coded letters into plain German. The method depended on

human instinct, though; to initiate the process, a code breaker had to guess a few words in the message (these guessed words were called a crib). The Polish bomba, a simpler 18-drum machine, was a forerunner of

#### Regulars

the Bombe, but it was based on Rejewski's method for finding the wheel positions at the start of the message. Unlike Rejewski's method, the more powerful crib-based method invented by Turing survived the May 1940 change. The war on Enigma was transformed by the high-speed Bombes, and the production of Ultra grew as more of them were installed in Britain and the United States.

#### Regulars

### Spotlight - Schwenksville, Pennsylvania

#### QSO with Joseph M Pawlicki, AA3DF

 Band:
 17m

 Mode:
 CW

 Date:
 20<sup>th</sup> February 2022

 Time:
 13:13z

QTH: Coordinates: Time Zone: Population:

Schwenksville, Pennsylvania 40°15'23"N 75°27'54"W UTC-4/5 1,296 (as of 2020)



#### Main Street

#### Source: Wikipedia

Schwenksville is a borough in Montgomery County, Pennsylvania, United States. The population was 1,431 at the 2020 census (there seems some contradiction as 1,296 is quoted in the side bar in Wikipedia). It is notable for being located near the site of the Philadelphia Folk Festival. The borough was founded in 1684, when the Lenni-Lenape Indians ceded to William Penn the land along the Perkiomen Creek; it was incorporated in 1903. The borough was named for George Schwenk, whose son, Jacob Schwenk, served in George Washington's army.

The town was the inspiration for the protagonist in Catherine Gilbert Murdock's novel Dairy Queen (2006).

The Hall & Oates song "Perkiomen" was written about the Perkiomen Creek, which constitutes Schwenksville's eastern border. "Perkiomen" is Lenape for "muddy waters" and "where the cranberries grow."

Schwenksville is also the gateway to the Perkiomen Trail, a nineteen-mile section of the former Reading Railroad's Perkiomen Valley corridor. It now serves as a multi-use rail trail and was completed in 2003.

General George Washington and the Continental Army camped in and around Schwenksville – September 26 to 29 and October 4 to 8, 1777 – prior to and immediately following the October 4 Battle of Germantown. Washington's headquarters probably was at the Henry Kelly House (demolished), just southwest of the town that he called "Pawling's Mill." The bulk of the Army camped on the opposite side of the Perkiomen Creek, at Pennypacker Mills. The borough was originally part of Perkiomen Township and home to the first copper mine



#### Pennypacker Mills

in Pennsylvania. Ice harvesting was a major industry in the area. Several large icehouses were located along the creek, and ice was regularly shipped to Philadelphia. Mills devoted to grain and textiles were also very

prominent which is evident by the existing historic structures. Its location along the Perkiomen Creek made the Borough a great summer resort community during its early existence, and Schwenksville was once home to The Perkiomen Inn, Spring Mountain House, and The Woodside Inn.

It was home to the Schwenksville Union School District until amalgamation with the Perkiomen Joint School District to form Perkiomen Valley School District in 1969.

Today the Borough is a residential community. Commercial and industrial businesses are located along the Main Street corridor. Schwenksville Elementary School; the Perkiomen Valley Branch of the Montgomery County-Norristown Public Library; the Schwenksville post office; two banks; three churches - Heidelberg United Church of Christ, Jerusalem Lutheran, and Eden Mennonite; and a 6.47-acre park along the Perkiomen Creek are located within the borough.

The Pennypacker Mansion and Sunrise Mill are listed on the National Register of Historic Places.

As of 2020 there were 4.04 miles (6.50 km) of public roads in Schwenksville, of which 1.24 miles (2.00 km) were maintained by the Pennsylvania Department of Transportation (PennDOT) and 2.80 miles (4.51 km) were maintained by the borough.

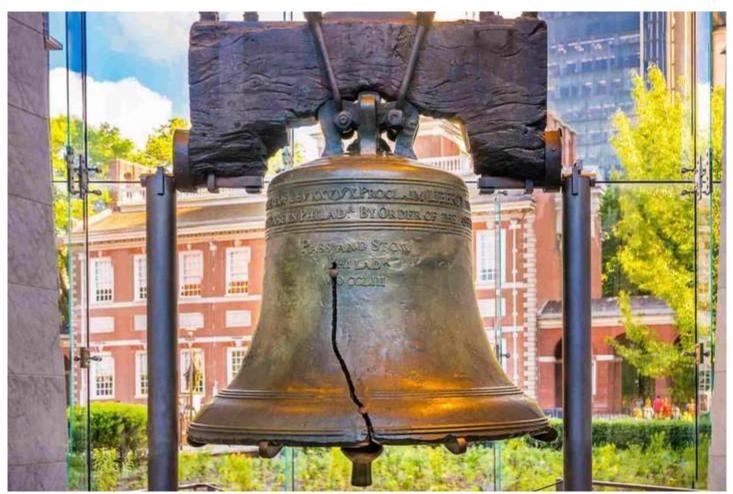


Pennsylvania Route 29 and Pennsylvania Route 73 traverse the borough concurrently. The two routes follow Main Street on a general north-south alignment through the borough.

The Liberty Bell, previously called the State House Bell or Old State House Bell, is an iconic symbol of American independence located in Philadelphia. Originally placed in the steeple of the Pennsylvania State House (now renamed Independence Hall), the bell today is located across the street in the Liberty Bell Center in Independence National Historical Park. The bell was commissioned in 1752 by the Pennsylvania

#### Regulars

Provincial Assembly from the London firm of Lester and Pack (known subsequently as the Whitechapel Bell Foundry), and was cast with the lettering "**Proclaim LIBERTY Throughout all the Land unto all the Inhabitants Thereof**", a Biblical reference from the Book of Leviticus (25:10). The bell first cracked when rung after its arrival in Philadelphia, and was twice recast by local workmen John Pass and John Stow, whose last names appear on the bell. In its early years, the bell was used to summon lawmakers to legislative sessions and to alert citizens about public meetings and proclamations.



The Liberty Bell outside Independence Hall in Philadelphia in April 2017

Although no immediate announcement was made of the Second Continental Congress's vote for independence and so the bell could not have rung on July 4, 1776, related to that vote bells were rung on July 8 to mark the reading of the United States Declaration of Independence. While there is no contemporary account of the Liberty Bell ringing, most historians believe it was one of the bells rung. After American independence was secured, the bell fell into relative obscurity until, in the 1830s, the bell was adopted as a symbol by abolitionist societies, who dubbed it the "Liberty Bell".

The bell acquired its distinctive large crack sometime in the early 19th century. A widespread story claims it cracked while ringing after the death of Chief Justice John Marshall in 1835. The bell became famous after an 1847 short story claimed that an aged bellringer rang it on July 4, 1776, upon hearing of the Second Continental Congress's vote for independence. Although the bell did not ring for independence on that July 4, the tale was widely accepted as fact, even by some historians. Beginning in 1885, the city of Philadelphia, which owns the bell, allowed it to be transported to various expositions and patriotic gatherings. The bell attracted huge crowds wherever it went, additional cracking occurred, and pieces were chipped away by souvenir hunters. The last such journey occurred in 1915, after which the city refused further requests.

#### Jeremy G3XZG

### **Contest Corner**

#### October HF

Day	Date (2023)	Time UTC	Contest Name
Mon	02 Oct	1900-2030	Autumn Series CW
Wed	11 Oct	1900-2030	Autumn Series DATA
Mon	16 Oct	1900-2030	RSGB FT4 Contest
Thu	26 Oct	1900-2030	Autumn Series SSB

#### VHF

Day	Date (2023)	Time UTC	Contest Name
Tue	03 Oct	1800-1855	144MHz FMAC
Tue	03 Oct	1900-2130	144MHz UKAC
Wed	04 Oct	1900-2100	144MHz FT8 AC (2 hours)
Wed	04 Oct	1700-2100	144MHz FT8 AC (4 hours)
Sat-Sun	07-08 Oct	1400-1400	Oct 432MHz-245GHz Contest
Sat	07 Oct	1400-2200	2.3GHz Trophy
Sat	07 Oct	1400-2200	1.2GHz Trophy
Tue	10 Oct	1900-2130	432MHz UKAC
Tue	10 Oct	1800-1855	432MHz FMAC
Wed	11 Oct	1900-2100	432MHz FT8 AC (2 hours)
Wed	11 Oct	1700-2100	432MHz FT8 AC (4 hours)
Thu	12 Oct	1900-2130	50MHz UKAC
Tue	17 Oct	1900-2130	1.3GHz UKAC
Thu	19 Oct	1900-2130	70MHz UKAC
Sun	22 Oct	0900-1300	50MHz AFS Contest
Tue	24 Oct	1830-2130	SHF UKAC

#### November HF

Day	Date (2023)	Time UTC	Contest Name
Mon	06 Nov	2000-2130	Autumn Series DATA
Sat	11 Nov	2000-2300	Club Calls (1.8MHz AFS)
Wed	15 Nov	2000-2130	Autumn Series SSB
Sat	18 Nov	1900-2300	2nd 1.8MHz Contest
Thu	23 Nov	2000-2130	Autumn Series CW
Mon	27 Nov	2000-2130	RSGB FT4 Contest

#### VHF

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Day	Date (2023)	Time UTC	Contest Name
Wed	01 Nov	1700-2100	144MHz FT8 AC (4 hours)
Wed	01 Nov	1900-2100	144MHz FT8 AC (2 hours)
Sat-Sun	04-05 Nov	1400-1400	144MHz CW Marconi
Tue	07 Nov	1900-1955	144MHz FMAC
Tue	07 Nov	2000-2230	144MHz UKAC
Wed	08 Nov	1900-2100	432MHz FT8 AC (2 hours)
Wed	08 Nov	1700-2100	432MHz FT8 AC (4 hours)
Thu	09 Nov	2000-2230	50MHz UKAC
Tue	14 Nov	1900-1955	432MHz FMAC
Tue	14 Nov	2000-2230	432MHz UKAC
Thu	16 Nov	2000-2230	70MHz UKAC
Tue	21 Nov	2000-2230	1.3GHz UKAC
Tue	28 Nov	1930-2230	SHF UKAC

### For sale and wanted

If anybody has anything for sale, or wants anything, then this is the place to ask, photo's and descriptions will help, email me at bryanpage1@btinternet.com.

Any other business