The W3PIE Newsletter - February 2022

Summarizing just a few of the things that are going on at the Uniontown Amateur Radio Club:







PRESIDENT'S MESSAGE – Bunny Horvath, WA3NGA

Hello W3PIE Members & Friends. The current events that are happening at the club the soonest are:

First - On Wednesday, January 26th at 7:00pm, there will be a Q&A session where you will have an opportunity to have your questions, relating to ham radio, answered and discussed by a group of volunteers, who are very knowledgeable about the hobby. Please note that this would be an excellent time to bring forth any suggestions that you might have for the Wednesday evening class or discussion group that might be of interest to you. Given adequate time for preparation, your topics could turn into a very informative and enjoyable evening for everyone.

Second - On January 29th and 30th Winter Field Day will be held at the club. The hope is to operate three stations and this would be a great opportunity for new and old members alike to come up and get acquainted with the new equipment at the club as well as to see all the improvements that have been made in the last few months. A lot of very worthwhile changes have taken place.

As general information - Echolink is back up and running after a few weeks of being down. It can be found on the Echolink page by searching for KA3VOR-R. A big thank you goes out to Tony for making this happen.

This brings me to the next topic. The company Mark Pierson, K3PPP, works for has very graciously offered to pay for having the Internet installed at the club and to pay for a full year of service, as well. We are truly very appreciative to Mark and his organization for helping us out with this situation that has had us in a quandary for quite some time. After the Internet is installed at the club (which should be happening in the very near future) the Echolink node will be moved there and the club's call letters will then be associated with it.

There's a lot going on at W3PIE ladies and gentlemen and the participation and help of all the members would be greatly appreciated. Your involvement will be a very rewarding experience, as I'm sure you will come to agree.

73 to all and thanks for taking the time to keep current by reading our newsletter, produced by Cory, who does an excellent job with it.

WINTER FIELD DAY

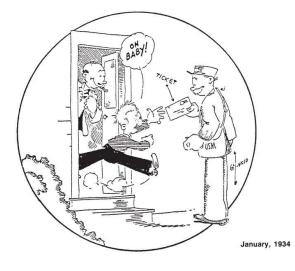
The weekend of January 29th and 30th is Winter Field Day. Details can be found at www.winterfieldday.com and your POC (Point Of Contact) is Jim Kenney, KC3BHN. Jim can be reached at kc3bhn@gmail.com.



Although not an ARRL event, Winter Field Day is patterned after the more traditional Field Day that we enjoy in June. With the warmth of the Clubhouse and Annex, plus a new HF+ transceiver, we have an excellent venue for contests and special events such as this – unless you prefer sitting outside and freezing your appendages...

NOVICE RIG ROUNDUP

In years gone by, when the Novice license was still the most common entry way into amateur radio, the ARRL used to sponsor a Novice Roundup contest, every February. While there are presently just under 7,000 Novice licenses still in effect, there are many current hams with fun memories of the era in which they were first able to get on the air. In this spirit, the Novice Rig Roundup was created as a means to celebrate the classic gear many of us used, along with a love of CW, throughout March.



The rules are simple and can be found at <u>NOVICE</u> <u>RIG ROUNDUP</u>. In essence, you use the same or similar equipment as was popular when you were a Novice. If you were allowed to use a VFO, then a rig with a VFO is in keeping with the spirit of your experience. If you were limited to crystal-controlled transmissions and 75 Watts of input power, then go with that.

The event is more about dusting off some older gear (tubes add a certain sense of nostalgia) and reliving the initial excitement you felt when first becoming a ham. As depicted in the Gil cartoon at the left, some of us may still remember

the thrill of opening your letter from the FCC, some six weeks after your test was mailed in.

TECH WEDNESDAY - HIGH ALTITUDE BEACON BALLOONS

Our continuing education program is back at 19:00 on Wednesday, February 23rd. Our program this month focuses on WSPR and APRS beacons, carried aloft with high altitude balloons. Presented by club member Michael Aesoph, KC3GMG – who has launched successful flights that have traversed the greater widths of the globe - this is an opportunity to learn more about this exciting aspect of amateur radio.



GENERAL MEMBERSHIP MEETING

On Wednesday, February 2^{nd} – Groundhog Day – we will gather at 19:30 to conduct the business of the club, as well as get together with friends.

We hope to see you all there!

WAYS AND MEANS

Our Ways and Means planning meeting will take place at 19:30 on Wednesday, February 16th. As we plan for upcoming projects and events in 2022, you can enjoy another excellent opportunity to catch up with your fellow club members. As always, guests are encouraged.

CALENDAR FOR 2022 ACTIVITIES

Day	January
1	New Years Day
5	W3PIE Reg Meeting
17	Martin L King
19	W3PIE W&M Meeting
26	W3PIE Workshop
29	Winter Field Day
30	Winter Field Day

Day	February
2	Groundhog Day
2	W3PIE Reg Meeting
6	VE Testing
14	Valentines Day
19	W3PIE W&M Meeting
21	Presidents Day
23	W3PIE Workshop

Day	March
2	W3PIE Reg Meeting
	Daylight Savings
14	Starts
16	W3PIE W&M Meetings
17	St. Patrick's Day
20	Spring Begins
23	W3PIE Workshop

Day	April
6	W3PIE Reg Meeting
15	Tax Day
20	W3PIE W&M Meeting
27	W3PIE Workshop
TBA	DX Road Trip

Day	Мау
4	W3PIE Reg Meeting
8	Mothers Day
15	VE Testing
18	W3PIE W&M Meeting
25	W3PIE Workshop
29	Memorial Day
TBA	DX Road Trip

Day	June
1	W3PIE Reg Meeting
14	Flag Day
15	W3PIE W&M Meeting
19	Father's Day
20	Summer Begins
22	W3PIE Workshop
25	Summer Field Day
26	Summer Field Day
	_

Day	July
1-7	13 Colonies Contest
4	Independence Day
6	W3PIE Reg Meeting
20	W3PIE W&M Meeting
27	W3PIE Workshop

Day	August
3	W3PIE Reg Meeting
7	DX Eng. Hamfest
13	Gabfest
13	Extra VE Testing
13 17	Extra VE Testing W3PIE W&M Meeting

Day	September
7	W3PIE Reg Meeting
4	VE Testing
5	Labor Day
21	W3PIE W&M Meeting
22	Fall Begins
28	W3PIE Workshop

Day	October
5	W3PIE Reg Meeting
8-9	PA QSO Party
10	Columbus Day
19	W3PIE W&M Meeting
15-	
16	BSA JOTA
19	W3PIE W&M Meeting
26	W3PIE Workshop
31	Halloween

Day	November
2	W3PIE Reg Meeting
	Daylight Savings Ends
11	Veterans Day
16	W3PIE W&M Meeting
24	Thanksgiving

Day	December
3	W3PIE Xmas Party
7	W3PIE Reg Meeting
4	VE Testing
21	W3PIE W&M Meeting
21	Winter Begins
24	Christmas Eve
25	Christmas
31	New Years Eve

NETS

The Uniontown ARC holds the Information and Traffic Net on the 147.045 MHz repeater every Thursday evening at 21:00. Should the 147.045 MHz repeater be inoperative or become inoperative, wait two (2) minutes then tune to the backup repeater, which is 145.170 MHz.

Detailed repeater information such as mode capabilities and offset / PL tone can be found HERE

In addition, the Keystone-Wide net occurs at 20:00 on Sunday nights, accessible through WIRES-X room 60328. Any System Fusion radio that can reach the Club's 443.750 MHz repeater is your ticket to participate. Repeaters and nodes from the western and eastern sections of Pennsylvania are connected to Keystone-Wide. In addition, we have had check-ins from as far away as Australia.

The network is up at all times, so give a call and see who you might be able to chat with - local and not so local.

If it snows, spin your VFO to 28.600 MHz at 19:00 and check in to the Snowbird Net. Herb Shaffer, KA3WSO, will be your net control operator.

NEW TECHNICIAN LICENSE QUESTION POOL ANNOUNCED

The NCVEC (National Conference of Volunteer Examiner Coordinators) has released the upcoming $2022 \sim 2026$ question pool for Technician Class amateur radio license exams. This gives those who produce training materials and conduct classes some lead time. Note that the $2018 \sim 2022$ pool is still in effect and will be until the middle of this year. If you know someone who is studying for their Tech, then let them know that sooner is better.

VE SESSION COMING SOON

As fortune would have it, our next VE session will be held on Sunday, February 6th. The Pregame Show starts at noon. For more information, please contact Dave Watson, N3QAS.

NEW MEMBERS AND PENDING APPLICATIONS

We welcome returning member Barry Humbert, WC3BH. It's good to have you back!

BRING A FRIEND

Do you know someone at work or a fellow member of some other organization you are associated with that may be interested in becoming an active member of the amateur radio community, as well as an important member of our growing Club?

How about a friend who is already a ham but doesn't regularly attend meetings? A gentle reminder or offer to give them a ride may encourage interest and possibly help them (once again) become active on the air.

INTERESTING ITEM FROM AROUND THE INFOBAHN - AE5X:

Another use for your nanoVNA

₹ 2.44	_		×	
Permittivity		58.6		
Conductivity		27.9 mS/m		
Skin depth		5.1 ft		
Frequency		10.00	MHz	
VNA R		41.7	Ω	
VNA X		-35.7	Ω	
Rod leng	th	12.750	"	
expo	sed	0.750	"	
diam	eter	0.375	"	
spac	ing	3.000		
Wire gau	ge	14	AWG	

Brian Beezely, K6STI, has written a small (215 KB) Windows program that, when used with a nanoVNA and a set of probes, allows measurement of ground conductivity and permittivity.

Brian notes that, while conductivity charts exist, they are much too general in nature to allow an accurate assessment of a specific local area.

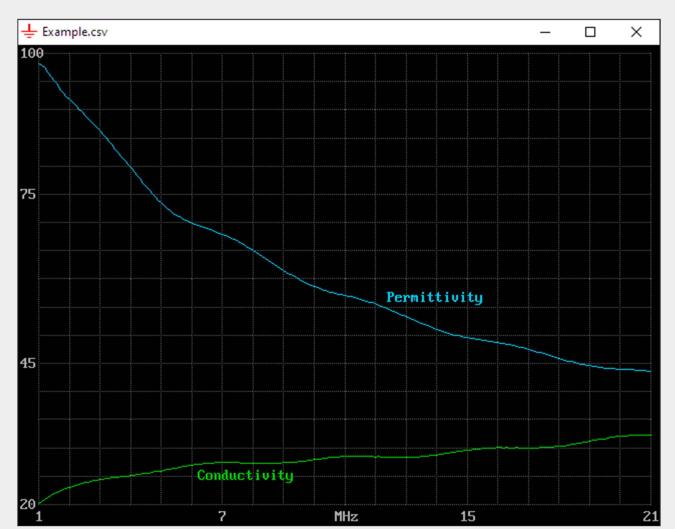
Rudy Severns, N6LF, is currently developing a design for a set of probes that will help standardize measurements made in this manner.

Interested users will be able to build the probes from common hardware store parts and with no special tools required.

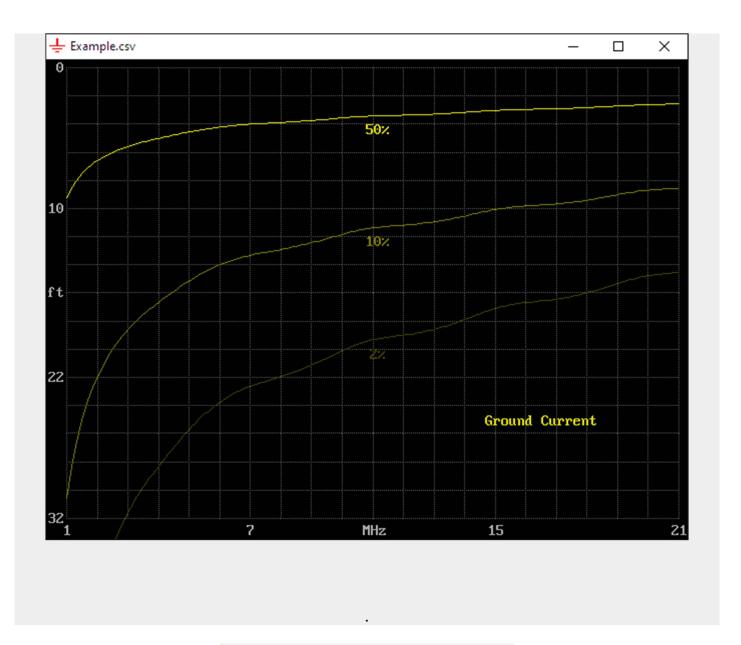
The Soil Probe Calculator program can be downloaded <u>here</u> (Windows may give a warning about downloading this file).

Make sure to have a look at the README file for more info.

.



.





SUPPORT W3PIE THROUGH AMAZON SMILE

An additional way to support our club is to designate UARC as your charity of choice, when shopping though the www.smile.amazon.com portal. A small percentage (which adds up) of your purchase goes to support us, as we are a registered non-profit 501(c)(3) organization. Best of all, there's no cost to you.

TRADING POST

This section is open to members who are wishing to sell, trade, or acquire ham radio related items. Please contact the listing member directly through the information provided.

FS: Kenwood TS-520 HF Transceiver \$290

In good condition. Covers 80, 40, 20, 15, and 10 meters. SSB / CW output up to 120 Watts PEP. Includes optional 500 Hz narrow CW filter. Nice choice for a first or backup HF rig. Wired for 117 VAC but can operate from 243 VAC or 13.8 VDC. Please contact Cory Sickles, WA3UVV via email at wa3uvv@gmail.com.

WB: ARC-5 Transmitters and Power Supply

Looking for transmitters in good condition to match my ARC-5 receivers for 3.5 and 7 MHz. Please contact Cory Sickles, WA3UVV at wa3uvv@gmail.com.

UPCOMING HAMFESTS, CONVENTIONS, CONFERENCES, AND OTHER EVENTS IN OUR AREA



WASHfest 2022

The South Hills Hamfest — Now in our TWENTY SIXTH big year!

Sponsored by the Wireless Association of South Hills Amateur Radio Club, Inc.

Sunday, February 27th, 2022 8:00 AM until 3:00 PM Rain or Shine (or Snow!) Home Economics Building, South Park

3735 Buffalo Drive, South Park Township, PA 15129
Behind the Allegheny County Police Station on Brownsville Road
Talk-In on 146 955(-) and 443 650(+) 131 8 PI

Talk-In on 146.955(-) and 443.650(+) 131.8 PL Donation \$5



Breakfast & Lunch will be available!



FREE Coffee for the entire Hamfest courtesy of HAM RADIO INSURANCE ASSOCIATES of Canonsburg, PA

MAIN PRIZES — You've Got to Play to WIN!

First Prize: To Be Announced
Second Prize: To Be Announced
Third Prize: To Be Announced

Additional Hourly Door Prizes! 2 Special Black Box Prizes (Separate Drawing)! Main Prize tickets are \$2.00 each, 3 for \$5.00, 7 for \$10, 15 for \$20, 40 for \$50, 90 for \$100 All Prizes Subject to last-minute changes

For Table Reservations, or More Information, Please Contact:

Carol Danko KB3GMN at (412) 884-1466 n3sbf@comcast.net

E-mail us directly at washarc@yahoo.com Check out our website too! www.n3sh.org

Please Note: Early
Table Reservations must
be paid in full on or before
January 31", 2022.
Reservations received
after February 1", 2022
must include payment in
full.
Reserve now... we have
sold out in advance eleven
years running!

Name:		Email:				
Address:			Phone: ()		
City:	_ State:	Zip:			-01 1/00100, 20 01 55	
Call Sign:				WIRELESS	ake all checks payable to: ASSOCIATION OF SOUTH HILLS	
Tables WITH Electricity:	X \$15	.00 =		PLEASE MAIL RESERVATION TO: WASHFEST 2022		
Tables WITHOUT Electricity:	X \$12	.00 = _		c/o CAROL DANKO KB3GMN 4246 Seton Drive		
5 Or More Tables w/o:	X \$10	.00 =		Pittsl	ourgh, PA 15227-1244	

We reserve the right to resell any tables not occupied by 8 AM, unless prior arrangements have been made!

+++

Charleston WV Hamfest and ARRL WV Section Convention Saturday, March 19, 2022 9 AM to 2 PM

Charleston Coliseum & Convention Center

200 Civic Center Drive Charleston, WV 25301 Admission \$8 – Tables \$12 – Electricity \$10 Forms to be Announced

Main Prizes:

1st \$500 Cash

2nd Alinco DR135 2M Mobile

3rd Jetstream 25A Power Supply

Info: w8kg.org or n8tmw@arrl.net

Table Reservations: Russ Dean ke8dmb@gmail.com 304-362-5888





TWO RIVERS AMATEUR RADIO CLUB 50th ANNUAL AMATEUR RADIO / COMPUTER SHOW SUNDAY APRIL 3rd, 2022 - 8am to 2pm

The McKeesport Palisades – 100 Fifth Ave – McKeesport, PA 15132 https://www.themckeesportpalisades.com/

Directions: 146.73 Repeater (No PL Tone)
Mobile Check-In: 146.52 MHz Simplex
(Mobile Check-In prize will be awarded. Must be present to win)

Main Prizes: ICOM-7300

Alinco DJ-MD5XT Dual Band DMR Handheld

HP 14-inch laptop computer

NANOVNA Vector Network Analyzer w/Book

Advanced ticket sales are available to the public and club members at significant savings. Advanced ticket sales form is available the TRARC website http://www.trarc.net.

Admission \$5.00

Tables:

\$15 each for the first two tables \$12 each for the 3rd table and above

Table Reservations: Please fill out the Exhibitors Application form on the TRARC website at http://www.trarc.net
Information: Contact Bill Powers at 412-260-5699 or email: atsfbill2@gmail.com

Overnight parking is available

Amateur Radio Exam Testing is Available Exam Registration: 412-751-9657 email: veteam@trarc.net

> Breakfast and Lunch Available This is an ARRL sanctioned hamfest

> > +++

MONONGALIA WIRELESS ASSOCIATION HAS A NEW MEETING PLACE

After nearly two years of virtual meetings and trying to find a more static location for in-person meetings than restaurant backrooms, food courts, and alcoves – W8MWA has found a welcoming home at the Wesley United Methodist Church at 503 North High Street (near Panera), in downtown Morgantown. Meetings are being held in a second floor conference room at 19:00 on the third Tuesday of each month. Entry is through the gym entrance on High Street, across from the parking lot. Visitors are always welcome.

Also, the club plans to begin VE testing sessions in March, starting at 18:00, prior to each meeting. Geographically, this is the closest club to ours. They support two System Fusion repeaters (145.370 / 442.700 MHz) plus a number of community events throughout the year. More information on the club can be found at www.w8mwa.org and more information on the Wesley United Methodist Church can be found at www.w8mwa.org and more information on the Wesley United Methodist Church (wesleymorgantown.org)

IMPORTANT MESSAGE FROM PEMA

Transition to 5G Cellular Service Will Cause Older 3G Phones to Stop Operating in 2022

01/13/2022

Harrisburg, PA – The Pennsylvania Emergency Management Agency (PEMA) and Pennsylvania State Police (PSP) are urging residents with older cell phones to prepare for the phase out of 3G cellular networks and service in 2022.

"The best plan of action is to contact your service provider to determine if your devices are compliant," said PEMA Deputy for 911 Jeff Boyle. "It's important to plan now so you don't lose connectivity."

The nation's three major wireless carriers (AT&T, Verizon and T-Mobile) <u>have announced plansOpens In A New Window</u> to shut down their 3G networks to accommodate more advanced services, including 5G, as early as February 2022. As a result, many older phones will be unable to make or receive calls and text messages or use data services. This may also affect other devices that rely on 3G connectivity, such as medical alert devices, tablets, smart watches, home security systems, and in-vehicle safety, security, and roadside assistance systems.

"If your mobile phone is more than a few years old, you may need to upgrade your device before your provider shuts down its 3G network and you lose service – including the ability to call 911," said Lt. Adam Reed, PSP Communications Office Director. "During an emergency, every minute counts whether you need police, fire or medical assistance."

Most users of these services will be notified directly by the carriers if this discontinuation affects them. However, users of older phones that are used only for 911 connectivity may not receive the notification if they do not have active service with a carrier.

Organizations that serve individuals experiencing homelessness or survivors of domestic violence sometimes provide clients with older phones without a service plan for making emergency calls. Users of these types of 911 only phones should check with the organization that provided the phone about their options.

Low-income individuals concerned that their 911 only phones will no longer be supported should consider applying for service through the Federal Communications Commission's Lifeline program. Information about eligibility, participating providers, and the application process can be found at https://www.lifelinesupport.org/Opens In A New Window.

About 911 in Pennsylvania:

Approximately 70 percent of 911 calls in Pennsylvania are made from a mobile phone each year, either by a voice call or a text message. Text-to-911 is not yet available in all counties. You can find the status of text-to-911 service in the county where you live or work online.

While voice calls to 911 are always preferred, there are situations where texting may be necessary:

- Making noise may endanger the caller;
- Someone is suffering a medical emergency that makes them unable to speak; or
- Individuals have speech or hearing impairments.

In Pennsylvania, each county is responsible for providing 911 service within their jurisdiction through a centralized Public Safety Answering Point (PSAP) where all incoming 911 calls are received and dispatched to the appropriate local police, fire, or emergency medical service responders.

Pennsylvania has 61 PSAPs serving 67 counties. A county may provide 911 service through participation in a regional 911 system.

Pennsylvania's PSAPs process approximately 14.5 million requests for emergency services every year.

YOUR IDEAS

Are there some things that you would like to get involved with at the Club? Are there topics you would like to suggest for Tech Wednesdays? Would you like to know more about the stations we have, that are available for member use? Do you have some questions on antennas, digital modes, some new (to you) aspect of ham radio, upgrading your license, helping to mentor others, etcetera? Then come on out and let us know. Or, just send an email to: officers@w3pie.org with the details.

OF INTEREST – RETRO SINGLE BOARD COMPUTING

The first computer system marketed as a "Personal Computer" was offered in September 1971, before the first 8-bit microprocessors were developed. It was initially designed in the late 1940's, but the technology of the day (tubes) made it impractical. With shift registers for memory (256 bytes), miniature light bulbs for the display, and push buttons for input, the KENBAK-1 sold – wired and tested - for \$750. Although it wasn't as functional as a PDP-8 – otherwise the most affordable small computer on the market – it did offer engineers, computer scientists, and general electronics hobbyists an opportunity to learn more about the inner workings of computers and logic circuits at a price that was tens of thousands of dollars less.



It also gave folks a
way to learn
about machine
programming.
While 256 bytes
may not seem
like a lot of
memory
(because it isn't)
that's more than
enough to
experiment and get

a feel for how a computer "thinks".

The first computer I built used an Intel 8008 microprocessor that ran at a blazing clock speed of 100 kHz. It too, initially had only 256 bytes of memory as limited by my piggy bank and ability to earn money while still in high school. I used toggle switches to program it and red LEDs for the display.

Later, I bought a kit from Motorola that was based on their 6800 microprocessor - running at roughly 900 kHz - with the same compliment of memory. Eventually, I expanded these systems and was able to run more sophisticated software, including the BASIC programming language. As an inspired project to celebrate the 50th anniversary of the original KENBAK-1, a Nano Kenbak has been produced using state of the art technology. This single board computer is the size of a small ruler and is available for \$30.



It includes lots of links to the original design, sample programs, and enough documentation for you to be well edutained. You can find more information on all of this at nanoKenbak-1 | Adwater & Stir (adwaterandstir.com) as well as a half-size (of the original system) kit and a retro version of the Altair 8800 from the seventies, as well. Think of it as an adventure with a QRPp version of the personal computer of today.

HOW CURRENT IS YOUR MOST RECENT BACKUP?

There was a time when backing up your personal computer programs and data might involve paper tape, audio cassettes, 8" floppies, 5¼ " mini-floppies, 3½" micro-floppies, digital tape, or a removable media (CD / DVD). Today, the most practical ways involve a USB disk drive or some form of solid state storage. The costs of storage and the convenience involved has never been more attractive. Even so, when someone's hard disk fails and I ask "Where's your most current backup?", I most often see an expression of The Thousand Yard Stare on their face.

Depending on how often the information on your system is changed, a simple A, B, C rotation of 32 or 64 GB USB sticks might be enough to preserve your work, for the day when your hard disk fails. A little Googling can reward you with ways to accomplish a full backup, then incremental backups (saving only the files that have been created or updated) – until you get to the point where it makes sense to run the full backup again.

Alternately, you can continue without any backups and see what happens. Ask I often heard in my youth, "You play in the street, you're going to get hit."

THIS NEWSLETTER

Hoping that this will once again become a regular means of communicating with the W3PIE membership, this modest newsletter is being sent to <u>you</u>. Your input - concerning news, activities and other items of interest as well as for the good of the Uniontown ARC and our amateur radio community at large - is most welcome.

Keep in mind that this is <u>your</u> newsletter and it is another form of <u>two-way</u> communications, so please "transmit" once in a while. Until we find a "real" newsletter editor, send your submissions to <u>wa3uvv@gmail.com</u>. The cutoff date for the next issue's publication will be the 19th of February.

HOUSEKEEPING

Any opinions expressed are those of the individual contributors, writers or editors alone and are not necessarily those of the Uniontown ARC. Times used in this publication are local, unless otherwise specified. All donations mentioned will be treated as anonymous, unless otherwise specified. All articles and contributions to the contents of this publication will be credited to the respective source, unless otherwise specified. Trading Post items are to be of a personal, non-commercial and amateur radio related nature. Hope is the first step on the road to disappointment.