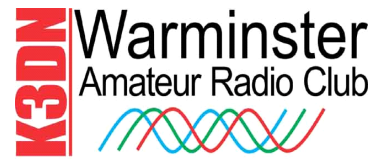




# FEEDBACK



Web Site [k3dn.org](http://k3dn.org)

Warminster Amateur Radio Club

November 2023

## Next Meeting November 2nd - POTA or Radio Astronomy

### President's Message

Hello All,

It appears that contest season is upon us. There are several contests coming up this month. Those of us who enjoy the hunt, it's time to get serious. Contests are also a great way to make contacts for your DXCC, and WAS awards. Don't forget the QRZ awards also. The bands have been mostly open and populated all week long. Take advantage and get on the air. I hope you were able to get on the air for the Scouts Jamboree on the Air. It was great talking to the scout troops throughout the country. Remember that these young persons are the future of our hobby. Always try to support the scouts as well as the school roundup.

Our club is going to try and get back to where we were prior to the COVID shutdowns. We are actively discussing different programs to get members involved. We are looking into some field trips and kit building nights. We need your input as to what you would like to see and do. Of course when we put together one of these events we will need help. That means volunteers will be needed to help out organizing and planning these events. Don't be shy. We can do many things as a club, but, the board can not do it all by themselves. Prior to the shutdowns our club was very active. Let's revive that spirit.

Our repeater is working well, but, there has been a serious decrease in usage. Let's get on the repeater as much as we can. Driving back and forth to work would be a great time. Check into the net and hear the interesting topics discussed. This is an easy way to talk to your fellow members and get to know them.

A future meeting will have a round table discussion. We will have the discussion after the business meeting and in place of a presentation. This will be posted on WARC talk and I encourage all members to attend this meeting. It will give everyone a voice to make their thoughts known. We need to know what you like or don't like, things you would like to see done, and, any changes you would like to see. As elected officials of the club, we work for you, but, we need to know what you expect and what you would like to see and expect from us.

One last item. This is for ARRL members. There has been an increase in dues and also changes to the QST magazine. Even though the dues are increasing, the ARRL is discontinuing the printed version of the magazine. Those members who still want a printed version of the magazine will have to pay an additional fee. A digital version will be included in the membership.

I am wishing everyone a Happy Thanksgiving. Please be careful in your travels during the holiday season.

73's  
Ray - KA3TRU

### Warminster ARC General Meeting Minutes October 5, 2023

Call to Order: 7:30 pm

Introductions and Attendance: 24

Minutes from last Meeting: Approved as submitted with no additions or corrections.

#### Committee Reports:

**Treasurer's Report:** Tom (K3PLA) As given

**Programs:** Dave (KC3RAT) October - Radio Astronomy

**Membership:** Tony (W3FLH) 126 Members on roll, 101 paid; 94 Regular, 2 Student, 5 Alumni

(Continued from page 1)

**Public Service:** George (N3HBT) Golf outing Part 2 on October 6<sup>th</sup> starting at 8:30 AM.  
Dean (KA3JXT) Bucks County Bicycle Club Covered Bridges Run could still use a few more hams.

**Classes:** Dave (KC3RAT) reported 1 Tech and 1 Extra.

**VEC Testing:** Next test session last Monday in October, 10/30.

**Repeater:** There was a problem with a sound board which was replaced. Anyone experiencing problems should let George know.

**Good and Welfare:** Regina (KC3LRF) – N3EXA's mother passed away recently. Regina will be asked to send a card.

**Contests:** PA QSO Party in two weeks. Members should check the Feedback for details.

#### Old Business:

**Club Station:** Everything working with no problems.

**Budget 2023-24:** The proposed budget was adopted as submitted. Vote was 37 in favor, 4 opposed.

**Constitution Changes:** Voting will be sent out next week via Constant Contact.

#### New Business:

**ARES:** SET (Simulated Emergency Test) is scheduled for 10/7/2024 at 11 AM on the WARC repeater.

**ARES Coordinator:** Mike (KB3GJT) reported there is a new set up going into the Bucks Count EOC to include an amateur radio operating position. Also, there is a new website KB3BUX.ORG

**Club Activities:** There was an extended discussion regarding activities previously sponsored by the club and things happen ing currently. May reasons for the change include the COVID fears, aging membership, lack of volunteers and other rea sons. Members were asked to present their thoughts on the Groups.IO and it was suggested that a future meeting be devot ed entirely to this topic.

Business Meeting Adjourned: 8:30 pm

Due to the lateness of adjournment, the group decided to postpone the presentation to next month.

### **The K7RA Solar Update**



Tad Cook, K7RA, of Seattle, Washington, reports for this week's ARRL Propagation Bulletin, ARLP043:

The recent decline in solar activity continues. The weekly average daily sunspot numbers, starting with ARLP039 on September 21, were 170.6, 128.6, 144.1, and 89.4. This week's average daily sunspot number was 41.9. The weekly average daily solar flux for the same period was 168.8, 155.6, 159.1, 145.1, and 123.5.

On October 25, [Spaceweather.com](https://spaceweather.com) noted, "Solar Cycle 25 roared to life in 2021 - [2023], dashing predictions of a weak solar cycle. Forecasters have since been expecting a robust Solar Max in 2024 or 2025. Suddenly, however, sunspot counts are dropping." They also noted that temporary lulls are common in strong sunspot cycles, and strong activity should resume soon, with a cycle peak occurring within the next 2 years. They provided a recent link to the NOAA Space Weather Scale at <https://bit.ly/3FyVWko>.

Three new sunspot groups appeared this week on October 20 - 22.

**Solar disk image taken October 26, 2023. [Photo courtesy of NASA SDO/HMI]**

Predicted solar flux is 125 on October 26 - 28; 120 on October 29 through November 1; 150 on November 2 - 5; 140 on November 6 - 9; 135 on November 10 - 11; 145, 140, 135, and 135 on November 12 - 15; 140 on November 16 - 18; 135 and 140 on November 19 - 20, and 145 on November 21 - 24.

(Continued on page 3)

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Predicted planetary A index is 5, 8, 5, 5, 18, and 10 on October 26 - 31; 5 on November 1 - 8; 12 and 8 on November 9 - 10; 5 on November 11 - 12; 12 on November 13 - 14; 10 and 8 on November 15 - 16; 5 on November 17 - 22, and 8 on November 23 - 26.

Jon Jones, N0JK, QST columnist for "The World Above 50 MHz QST" wrote:

"The weekend of October 20 - 22 had some outstanding propagation on 6 meters.

On the afternoon of Saturday, October 21, there was E-layer or sporadic-E propagation linking to trans-equatorial paths to the [South] Pacific from the Midwest. N0LL copied FK8CP and ZL1RS on just a ham stick vertical antenna while driving from Salina to his home in Smith Center, KS. He later worked E51WL from his home around 2130Z.

I was staying at the La Quinta Inn in Scottsdale for the weekend [and] had my MFJ-9406 [with me]. Using a dipole antenna in the hotel room, I copied N0LL EM09, N0KQY DM998, and N00T DM88 on 6-meter Es, calling DX stations around 1945Z. Es in October are rare, and Es links rarer still.

[On October 22], I managed to work W5JAY EM26 on [6-meter] FT8 via Es at 0136 [UTC.] Power was 7 watts to the indoor dipole. East coast stations were working the South Pacific on Es links to TEP.

That next afternoon, Arizona had Es link[s] to TEP to South America. I copied XE1H DL80 at the first Es hop. 231022\_233300 50.313 Rx FT8 -8 0.2 1612 CQ XE1H DL80.

October 24 at 2335 UTC copied PY5CC GG54 via Es link to TEP.

Spaceweather.com noted a coronal mass ejection (CME) impact [on] October 20. The active geomagnetic field boosted the TEP MUF and may have sparked some of the sporadic -E as well.

Note that this weekend is the SSB portion of the CQ World Wide DX Contest.

See <https://www.cqww.com/> for more information.

Sunspot numbers for October 19 - 25, 2023, were 39, 56, 65, 48, 25, 34, and 26, with a mean of 41.9. The 10.7-centimeter flux was 128.7, 125.7, 122.6, 118.8, 122.1, 121.1, and 125.8, with a mean of 123.5. Estimated planetary A indices were 10, 8, 22, 8, 3, 4, and 4, with a mean of 8.4. The middle latitude A index was 8, 8, 13, 7, 2, 2, and 3, with a mean of 6.1.

Send your tips, questions, or comments to [k7ra@arrl.net](mailto:k7ra@arrl.net).

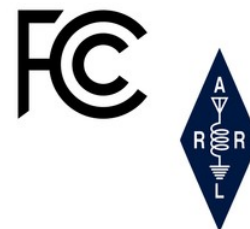
*Courtesy ARRL Newsletter*

### **FCC to Vote on Removing Symbol Rate Restrictions**

[ARRL](#) welcomes news of a scheduled vote by the Federal Communications Commission (FCC) to [consider removing symbol rate restrictions](#) that restrict digital modes, foster inefficient spectrum use, and dampen incentives for innovation. In the draft Commission decision, the FCC would replace the current HF restrictions with a 2.8 kHz bandwidth limit. The Commission also announced that it will consider a Further Notice in which it will propose eliminating similar restrictions where they apply in other bands and consider relying on signal bandwidth limits. If both actions are adopted by the Commission, there will be a period for public comment on the Further Notice issues.

In announcing the proposed Commission actions, FCC Chairwoman Jessica Rosenworcel said that "We're bolstering amateur radio. We will vote on a proposal to incentivize innovation and experimentation in the amateur radio bands by removing outdated restrictions and providing licensees with the flexibility to use modern digital emissions."

ARRL requested and strongly supports replacing the symbol rate limits on the HF bands with a 2.8 kHz bandwidth limit. ARRL also supports eliminating the symbol rate limits in favor of the already-existing bandwidth limits where they apply on the VHF and



*(Continued on page 4)*

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UHF bands and eliminating the similar limits 2200 and 630-meter bands.

ARRL Director of Emergency Management Josh Johnston, KE5MHV, said the changes will result in a tremendous time savings during disasters, when every second counts. "We will be very pleased to have the FCC remove the restrictions on symbol rate for the amateur bands. This will eliminate the need for temporary waivers during an event and provide the ability to train and exercise using the higher symbol rate, allowing increased data capability to our served agencies and partners."

[Congresswoman Debbie Lesko \(AZ-08\) introduced \*The Amateur Radio Communications Improvement Act \(H.R. 3241\)\* on May 11, 2023](#), to require that the FCC eliminate the obsolete HF digital symbol rate limit with a 2.8 kHz bandwidth limit.

The Congresswoman subsequently addressed the issue with Chairwoman Rosenworcel in a Congressional oversight hearing. The changes are supported by many state emergency management officials.

ARRL will continue to engage on this matter.

*Courtesy ARRL Newsletter*

### Using Amateur Radio to Play Chess

Playing chess using amateur radio? The concept may have begun in 1912 when a group of college students from Case Western Reserve University (CWRU) wanted to challenge chess players at The Ohio State University (OSU). Though the official origin is still debated, clippings from a 1912 issue of *The Case Tech*, one of CWRU's former student newspapers, reveal that the challenge was made when the CWRU Wireless Club procured a Morse code transceiver.

Faculty Advisor to the Case Amateur Radio Club, W8EDU, David Kazdan, AD8Y, said there are no official records of the match, so the challenge was re-proposed this year by the [Case Amateur Radio Club](#). With the help of [OSU's Amateur Radio and RF Club](#), W8LT, the game was on. It started on September 26 as a round-robin tournament with other schools and is now moving into an elimination phase. The setup is the same as any chess game except the players are in different locations.

Chess moves are relayed over the air either by voice or Morse code.

CWRU started the tournament strong with a win against Rensselaer Polytechnic Institute (RPI), but they lost the long-anticipated game against OSU.

W8LT President Arvcuken Noquisi, KE8MXF, said the tournament is a series of test games to determine the best way to incorporate amateur radio into what is now referred to as HAMCHESS.



**Case Amateur Radio Club, W8EDU members and Case Western Reserve University Chess Club members (left to right) Jonah Barnett, KO6BGI; Duncan Lu; Andrew Stappenbeck; Zach Baldwin, KE8ZDJ and Tobias Heller KE2BWU playing HAM CHESS. [Adam Goodman, W7OKE, photo.]**

"Now we are using EchoLink through a Cleveland, Ohio, repeater with algebraic chess notation relayed by voice," said Noquisi. "In the future, each chess team will determine what method works best for them based on skill level and participation."

Noquisi added that blending the school's chess and amateur radio clubs makes for a great campus experience and opportunity for community involvement.

W8EDU President Adam Goodman, W7OKE, said collegiate amateur clubs are still recovering from the COVID-19 pandemic, and HAMCHESS is a great way to reenergize amateur radio clubs and involve other college organizations.

In 1945, the United States and the USSR squared off in a radio chess tournament using CW. In the 1980s, Chess and Amateur Radio

(Continued on page 5)

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International, a club with more than 200 members, used 20-meter SSB in a match between five US players and five players in Oceania, a geographical region spanning the Eastern and Western hemispheres.

Today, more than a dozen college amateur radio and chess clubs are participating in HAMCHESS events. College and university radio clubs, including those participating in the chess tournament, regularly network with each other through the [ARRL Collegiate Amateur Radio Program](#).

Courtesy ARRL Newsletter

### WestFest STEM Event Offers Hands-On Experience

Amateur radio was represented at the seventh annual WestFest event at The Ohio State University in Columbus, Ohio, on Saturday, September 30, 2023. WestFest is a public engagement event that highlights science, technology, engineering and mathematics (STEM) research, sustainability initiatives, and outreach programs at The Ohio State University. The event featured three behind-the-scenes tours and 39 activity booths.

The Amateur Radio and RF Club at The Ohio State University, [W8LT](#),

and the [All Things Amateur Radio Association](#), W8ATR, provided information and hands-on STEM experiences for nearly 400 attendees. The W8ATR Mobile STEM Trailer, funded by a grant from the ARRL Foundation, included a CW oscillator, a display about the history of Morse code, and signage explaining the history of wireless technology and radios. Three Snap Circuits® stations were set up for visitors to build an FM radio, and there was a working replica of a spark-gap transmitter.



Griffin, Eve, and Celeste try out some hands-on STEM activities at the ATARA trailer. [ATARA photo.]

The trailer also featured a complete amateur station with a telescoping mast and a quarter-wave vertical ground-plane antenna.

"It's important to have amateur radio [be] a part of the STEM experience," said Lawrence L. Feth, PhD, Professor Emeritus and Faculty Advisor to W8LT.

ATARA Activities Director Diane Warner, KE8HLD, said throughout the day the STEM trailer hosted 52 adults and 80 children. "Watching the children's faces as they experience the sounds and sights of amateur radio technology is always rewarding," she said.

Additional information about WestFest is available at [The Ohio State University](#) website.

### Elmer's Corner

Welcome to Elmer's Corner. This will be a section where hams can request help with ham related issues. Our goal is to match someone with experience with the issue you are having in order to resolve your problem. This is intended to cover all aspects of ham radio:

Equipment  
Software  
Antennas  
Operations

Send the editor an email detailing the issue: [wa4ywm@comcast.net](mailto:wa4ywm@comcast.net).

### 2023 Contest Calendar

#### November

##### 4-6 [Nov Sweepstakes-CW](#)

2100 UTC Saturday and runs through 0259 UTC Monday.

##### 12 [North American SSB Sprint Contest](#)

0000Z-0400Z

<http://ssbsprint.com/rules/>

##### 18-20 [Nov Sweepstakes-Phone](#)

2100 UTC Saturday and runs through 0259 UTC Monday.

##### 25-26 [CQ Worldwide DX Contest, CW](#)

0000Z, Nov 25 to 2400Z, Nov 26

<http://www.cqww.com/rules.htm>

#### December

##### 1-3 [160 Meter](#)

2200 UTC Friday, ends 1559 UTC Sunday

##### 9-10 [10 Meter](#)

0000 UTC Saturday; runs through 2359 UTC Sunday

##### 17 [Rookie Roundup-CW](#)

1800 UTC through 2359 UTC

### V.E. TEST LOCATIONS

Confirm all information, in advance, with the contact person. Licensed applicants must bring the original, and one photocopy of their license. All applicants, including children, must bring two forms of positive ID. Also bring the original, and a copy, of any Certificate of Successful Completion needed to prove current status. The ARRL VEC'S 2023 test fee is **\$15.00**.

**Warminster Amateur Radio Club,** Monthly, Last Mon. 7:00 pm at the Wilson Senior Community Center 580 Delmont Avenue Warminster, PA 18974 George Brechmann (215) 443-5656.

**Atco, NJ**, The fourth (4th) Tuesday of each month, at 7 p.m. Winslow Township Senior Center, 33 Cooper Folly Road, 08004-2603.  
Mark (K2AX) jtra@comcast.net

**Levittown, PA,** Monthly, 1st Wednesday at 6:30. Levittown Library - Ben Johns, K3JQH, 215-657-5994

**Telford, PA,** RF Hill ARC. Indian Valley Library. Held the third Monday of odd months (January, March, May, July, September, November)  
Contact: Jim Soete 215-723-7294  
[wa3ylq@arrl.net](mailto:wa3ylq@arrl.net).

**Philadelphia, PA,** Testing is done on the 3rd, non holiday Monday of the month at the Giant Supermarket, 315 York Rd., Willow Grove, 19090 at 6:30 PM in the Community Room. For further information contact James McCloskey at [jmccloskey@msn.com](mailto:jmccloskey@msn.com) and by phone 215-275-2979.

**Lansdale, PA** Testing on the fourth non-holiday Thursday of the month starting at 7:00 PM. The Lansdale Library Community Room Vine St. and Susquehanna Ave. Lansdale, Pa. Registration is required 48 hrs. or more before the scheduled exam date. If there are no registrations the scheduled exam date will be canceled. NO WALK-INS. You can register by contacting:  
Olaf N. Markert - Phone (610) 517-5074, E-mail [w3pa@arrl.net](mailto:w3pa@arrl.net)  
Alt Contact: Jim, 610-287-5630

### ➤ ATLANTIC DIV. HAMFESTS

#### ➤ 2024



#### Jan 13 - [Winterfest](#)

Vietnam Veterans Association Building

8000 Derry Street

Harrisburg, PA 17101

<http://www.w3uu.org>

#### April 20 - [Delmarva Amateur Radio and Electronics Expo, ARRL Delaware State Convention](#)

Cheer Center

20520 Sand Hill Rd.

Georgetown, DE 19947

## CLUB INFO

### PUBLIC SERVICE

#### CLUB STATION

The WARC club station is open to anyone with an interest, on the first Thursday of the month (meeting night) between the hours of 6:30 and 7:30 pm. with the exception of the December dinner meeting For further information, call George Brechmann N3HBT at 215-443-5656.

#### WARC ALUMNI MEMBERSHIP

An Alumni membership category is available for WARC members who are unable to attend meetings and club activities on a regular basis because of health considerations, travel impediments, or other hardships. Dues for the Alumni membership are \$10.00 annually and are approved by the Board. Please contact the Membership Committee for more information if interested."

#### ATTENTION MEMBERS

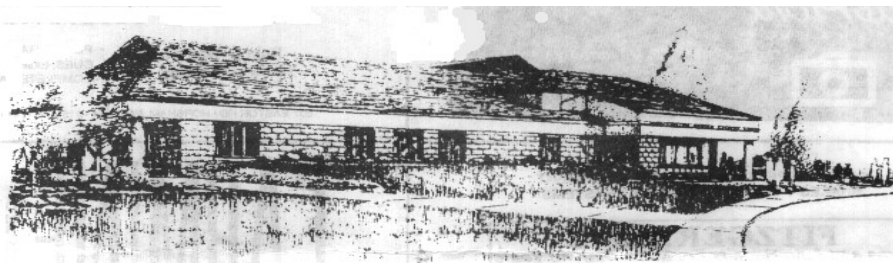
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even numbered months. If you do not have at least a Warminster Amateur Radio Club badge with your picture on it, please contact your Membership Chairs at the WARC monthly meetings. Otherwise, please contact Membership by email at: [membership@k3dn.org](mailto:membership@k3dn.org).

If you want to have your picture taken to be placed on the 'Members' Photos' section of the [www.k3dn.org](http://www.k3dn.org) website, please contact Membership with your interest. When we get enough people who are interested we will post a notice in Feedback and have a camera ready at the following club meeting.

## PROGRAMS 2023

**November** - POTA or Radio Astronomy

The Club Station - K3DN - is located at the Benjamin Wilson Senior Center, Delmont Avenue, Warminster, PA. The station is open for club members and the interested general public on the first Thursday of the month (meeting night) between the hours of 6:30 and 7:30 pm. with the exception of the December dinner meeting . The station is fully operational on HF (80 meters through 10 meters ) both phone and CW. There is an assortment of amateur radio shareware which may be copied under the shareware licensing agreement.



For additional information on the Club Station please call the Station Manager N3HBT - George at 215-443-5656.

➤ WARC Meetings are held the first Thursday of each month at 7:30 pm at the Benjamin Wilson Senior Center, Delmont Avenue, Warminster, PA. Talk in is available on the 147.09 & 443.950 repeaters.

**SKYWARN INFORMATION**

**Bucks County SKYWARN Weather Spotter PRIMARY FREQUENCY: 147.300MHZ (+ 131.8)**

Fairless Hills, PA (many remote access locations throughout Bucks County)

**Mount Holly NWSFO SKYWARN Homepage:**

<https://www.weather.gov/phi/Info>

**SKYWARN Basic Weather Spotter Educational Programs URL:**

<https://www.weather.gov/phi/classes>

➤ **CLUB EQUIPMENT**

WARC has 2 Baofeng UV-5R dual band HT's and a Yaesu FT-2900 2M mobile that are available for use by members of the club. The radios are available on a month-by-month basis and have been purchased primarily to help new hams get on the air. However, they may also be used by any club member who is in need of a temporary 2-meter radio. They are also available for use by participants in WARC's public service activities.  
DE, Dave McGowan KC3RAT

**Area Repeaters**

**VHF**

- 145.310 R.F. Hill
- 145.350 Doylestown R.C.
- 146.790 Penn Wireless
- 145.330 Hilltown
- 146.670 DVRA
- 146.685 Holmesburg
- 146.925 Willingboro
- 147.000 Ham Bueggers
- 147.030 Phil-Mont
- 147.090 Warminster
- 147.270 Frankford
- 147.300 BEARS
- 147.390 CBRA

**220**

- 224.580 PackRats
- 223.76 K3NAL

**UHF**

- 442.650 DVRA
- 443.250 TAG
- 443.050 Metro-Comm
- 443.950 Warminster
- 444.200 BEARS
- 447.475 WR3B
- 448.225 Penn Wireless
- 444.759 RF Hill Analog/Fusion

**D-STAR**

- 146.61000 K3PDR DV
- 445.18125 K3PDR DV
- 445.01875 AA3E Montco RACES

**6 Mtr**

- 53.030 WA3BXW
- 53.230 N3DQZ
- 53.320 K3MFI

*The Warminster Amateur Radio Club  
Announces Free Ham Radio Instructional Classes*



If you're interested in Ham Radio, or think you might be, this is your opportunity. Perhaps you'd like to learn about digital communications, VHF, UHF, satellite, or perhaps you'd rather sit down and chat with someone in South Africa, Russia, Great Britain or in the space station.

New Classes (Tech and General) to start Sept 13 from 7 pm to 9 pm.

For further information contact George Brechmann, N3HBT at 215-443-5656.

**Bucks County Amateur Radio Emergency Service (BCARES)**

[www.bucksares.org](http://www.bucksares.org)

Bucks County ARES will be on the air Wednesdays, at 9:00 PM . We will be using Warminster Amateur Radio Club's repeater on 147.090, pl 131.8. This net is linked as shown in the Net Schedule box for the Wednesday night net. It may also be linked to 147.300.

Winlink Gateway Stations:

Lower Bucks NY3J-10 145.530 Bensalem

**Net Schedules**

Sunday	2000	10 Meter Net	28.445 MHz
Wednesday	2000	2 Meter Net	147.09 Rptr.
Wednesday	2000	Linked w/ 2 Meter Net	443.95
Rptr.Wednesday	2000	Linked w/ 2 Meter Net	53.230 Rptr.
Sunday	2030	Informal Net	223.5 Simplex
Thursday	1900	Mont. Cnty RACES Net	146.835 Rptr.



**Are you submitting an article for the Feedback ?**

Contributions of articles to be published are always accepted for consideration. Please follow these guidelines:

- E-Mail to:  
**wa4ywm@comcast.net**  
Or via snail mail to:  
**FEEDBACK EDITOR**  
**Warminster Amateur Radio Club**  
**Box 113**  
**Warminster, Pa 18974**
- Use both upper and lower case letters.
- Use your program's spell check.
- If you don't have a computer, then typewritten sheets are o.k. but please use both upper and lower case.
- Put your name and call at the beginning or end of the article, and show credits if you are using material from another source.
- Deadline for articles is the Saturday before the regular meeting.

**For general club correspondence:**

[WARMrinfo@gmail.com](mailto:WARMrinfo@gmail.com)

**Visit our Home Page at:**

<http://www.k3dn.org>

**The annual dues rate structure is as follows:**

**Full Member:     \$25.00**  
**Student:           \$ 7.50**  
**Alumni:             \$12.50**

- Are your dues current ?

**2023 Officers**

**Executive Officers**

President	Ray Oechslin	KA3TRU	267-269-3198
Vice-President	Dave McGowan	KC3RAT	215-850-5846
Secretary	Tony Simek	N3YNH	
Treasurer	Tom Newman	K3PLA	215-630-5965
Director (A)	Doug Becker	KC3MNQ	215-932-1370
Director (E)	Larry Abbott	WA3ELQ	215-704-3282
Director (A)	Bruce Farrington	WA3ZPC	215-262-4215
Director (E)	George Brechmann	N3HBT	215-443-5656
Past President	Tony Cuttone	W3FLH	267-679-9297

**Committee Chairpersons**

ARES/RACES Liason	Karl Harris	K3KH	215-264-1855
ARRL Liason	Irwin Darack	KD3TB	215-343-8170
Awards Manager	Vince Pironti	KD3TC	215-674-0446
Classes	Dave McGowan	KC3RAT	215-850-5846
	Dan Clementi	K3GMQ	
Digital and APRS	Ron Wenig	NY3J	215-638-9257
Feedback Editor	Jim Elmore	WA4YWM	215-538-1889
Field Day 23	Herb Hickmott	KB3VMN	267-718-3601
Hamfest 23	Tony Cuttone	W3FLH	267-679-9297
Hamwear	Kathy Acker	KC3FBY	215-815-7978
Holiday Dinner	George Brechmann	N3HBT	215-443-5656
Membership	Tony Cuttone	W3FLH	267-679-9297
Net Manager	George Brechmann	N3HBT	215-443-5656
PA QSO Party	Mark Kempisty	AA3K	
Publicity	Herb Hickmott	KB3VMN	267-718-3601
Refreshments	Arlene Newman	KA3PLA	215-345-4539
RF Interference	Bill Ballantine	K3FMQ	215-766-0764
Repeater Coordinator	Brian Taylor	N3EXA	215-257-6303
Safety Officer	Mike Malone	W3MJM	215-639-2175
Station Trustee	George Brechmann	N3HBT	215-443-5656
Good and Welfare	Regina Litman	KC3LRF	
Township Liason	George Brechmann	N3HBT	215-443-5656
VE License Testing	Larry Abbott	WA3ELQ	215-704-3282
VHF/UHF/MW	George Altemus	KA3WXV	215-855-3856
Website Coordinator	Kathy Acker	KC3FBY	215-815-7978
Youth Programs			