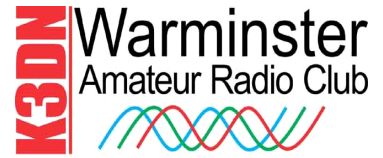




FEEDBACK



Web Site k3dn.org

Warminster Amateur Radio Club

September 2022

Next Meeting September 1st -

President's Message

Hello Everyone,

Well the summer is coming to a close and the time for some antenna work is upon us. As the cooler weather approaches, we look to installing new antennas or tuning up the ones we are using. It is time to tackle these amateur radio projects before the cold weather sets in. A little work now will be rewarded in the shack during the cold winter months and all of the contests that are scheduled. As always please use caution while climbing towers or working near power lines. If you have to think about climbing a tower then it might be wise to contact someone who is experienced in tower climbing.

The sun is playing havoc with HF radio these days. There were several sunspot activities that shut down the bands as well as interfering with GPS devices. For a good source of band activity and sunspot numbers a simple check on QRZ.COM will give you some good information.

There are three weekends in September that have different contests. CW, RTTY, VHF, and even a EME contest. If you are interested in contesting these are a good challenge, and if you are new to Amateur Radio these contests will give you some experience in the different modes of the hobby.

We are coming into the peak hurricane season, so be prepared. Have an emergency kit containing a battery operated weather radio as well as flashlights, water, and the other essentials. It is always better to be prepared than not. Remember that Amateur Radio Emergency Services are essential for emergencies and disasters. Those of us who are interested or curious about these services can find a wealth of information in the ARRL publication "The Amateur Radio Public Service Handbook"

In closing, I hope that everyone had a good summer season and with the coming months stay warm and healthy. I hope to see you at the September meeting.

Ray
KA3TRU

Warminster ARC General Meeting August 4, 2022

Meeting Called to Order: 7:30pm

Attendance:

Introductions: *Hybrid Meeting; 13 on Zoom, 16 In-person attendees.*

Minutes from last Meeting

Motion made and seconded to approve as submitted.

Committee Reports:

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

Programs: Dave (KC3RAT)
September - ?

Membership: Tony (W3FLH) *no report*

Public Service: George (N3HBT) *nothing until October Golf Outing*

Classes: Dan (K3GMQ) & Dave (KC3RAT)
Pending (Fall 2022)

VEC Testing: Larry (WA3ELQ) *July 25; four candidates. Two new Techs, two upgrades to General. No August testing.*

(Continued from page 1)

Testing takes place the last Monday of the month at the BWSC. Next testing session, Sept. 26.

Repeater: Brian (N3EXA) *all working*

Good and Welfare: Ken (K9KJL) *nothing*

Other Committees:

Radiosport: Irwin (KD3TB) *nothing*

Hamfest: Tony (W3FLH) *no report*

Field Day: **Looking for a New Chairperson.**

Old Business:

Club Station: Interest/Activity *Up and running*

Elmer Program: *Ongoing*

Clean-up crew of WARC storage at BWSAC (Mike WJ3O): *No status report*

New Club Laptop & TB Drive: *In use*

New Business: *None*

Meeting Adjourned: 7:45pm

Presentation: *Greg (KC3SMW) Winlink*

The K7RA Solar Update



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

A new sunspot group emerged on August 18 and August 21, and two more emerged on August 23. Overall, solar activity was down slightly, with the average daily sunspot number declining from 60.8 to 58.7, and average solar flux from 123.7 to 104.5.

Planetary A index changed from an average of 11.7 to 12.6, and middle latitude A index, measured at a single magnetometer in Virginia, was 11, after an average of 10 last week.

The Wednesday night forecast from the 557th Weather Wing at Offutt Air Force Base showed a probable solar flux peak at 130 on September 11 for the near term.

Predicted solar flux is 105 on August 25 - 26; 108 on August 27 - 28; 110 on August 29 through September 1; 114 on September 2; 116 on September 3 - 4; 112 on September 5; 108 on September 6 - 7; 115, 120, 124, and 130 on September 8 - 11; 128,

120, 118, 105, and 102 on September 12 - 16; 98 on September 17 - 18; 96 on September 19 - 21; 94 on September 22 - 24, and 92, 98, and 100 on September 25 - 27.

Predicted planetary A index has some surprises in store: 5 on August 25 - 26; 8 on August 27 - 28; 5 on August 29 through September 2; then jumping way up to 30, 38, and 20 on September 3 - 5; 15, 18, 10, 12, and 8 on September 6 - 10; 5 on September 11 - 12; 12, 15, and 10 on September 13 - 15; 8 on September 16 - 17; 25, 15, and 8 on September 18 - 20; 5 on September 21 - 22; 12 on September 23, and 8 on September 24 - 26.

My main power supply failed on August 21, so for a week or two I will be unable to make on-the-air observations as I await factory repair.

News about a large sunspot can be found at <https://inshorts.com/en/news/huge-sunspot-on-suns-surface-grows-10-times-in-size-in-48-hours-pic-surfaces-1661347322422>.

Sunspot numbers for August 18 through 24 were 83, 74, 56, 56, 44, 52, and 46, with a mean of 58.7. The 10.7-centimeter flux was 116.5, 105.4, 101.5, 97, 102.6, 100.9, and 107.8, with a mean of 104.5. Estimated planetary A indices were 26, 20, 14, 14, 7, 4, and

(Continued on page 3)

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3, with a mean of 12.6. Middle latitude A index was 19, 15, 16, 13, 7, 3, and 4, with a mean of 11.

Send your tips, questions, or comments to k7ra@arrrl.net.

A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, [visit](#) the ARRL Technical Information Service, [read](#) "What the Numbers Mean..." and [check out](#) the Propagation Page of Carl Luetzelschwab, K9LA.

A propagation bulletin [archive](#) is available. For customizable propagation charts, visit the [VOACAP Online for Ham Radio](#) website.

[Share](#) your reports and observations.

A weekly, full report is posted on [ARRL News](#).

Courtesy of the ARRL Newsletter

New ARRL Radio Lab Inspires Innovation in the Ham Shack

ARRL has unveiled its new Radio Laboratory, W1HQ, in a [video](#) released on August 4, 2022. In the video, Jherica Goodgame, KI5HTA, a summer intern at ARRL Headquarters, tours viewers through the station.

"The ARRL Radio Lab is an innovative test space designed to reshape the way we imagine and build a ham radio shack," said Goodgame. The station is intended to inspire members to build, organize, and equip their own stations in innovative ways. "From a decluttered workspace and a digital user interface, to being able to remote into the equipment from anywhere, W1HQ is a step towards the future of amateur radio stations," Goodgame added.



The station includes a new tower and antennas atop the main administrative building at ARRL Headquarters in Newington, Connecticut. Inside the station, three operating positions provide an interface to rack-mounted and computer-controlled transceivers, amplifiers, antenna switches, and rotators.

Goodgame explained that the Radio Lab will also support equipment testing and *QST* Product Review. "An extension of product reviews in the future will be to take that piece of gear that we're testing, put it on this test bench, and see how it integrates with a station that's already under full automation and control," she said.

The video is published on ARRL's YouTube channel at <https://youtu.be/68BJxGHg74Y>.

Courtesy of the ARRL Newsletter

Hams Radio Operators Support American Red Cross in Kentucky Flood Response

As the flood waters began to recede following devastating rainfall in Kentucky that began on July 26, the American Red Cross reported that over 400 of their disaster workers were on the ground, as well as dozens more in other locations. They provided shelter, meals, and other forms of support. Red Cross teams also worked alongside their state and municipal partners among others, including Kentucky Amateur Radio Emergency Service® ([ARES®](#)) volunteers.

[ARRL](#) Director of Emergency Management Josh Johnston, KE5MHV, was in touch with American Red Cross personnel in the affected area. He said ham radio volunteers were supporting Red Cross damage assessment teams with radio communications. "The rural and mountainous terrain of the affected area adds to the already difficult situation," said Johnston.

Much of the local response effort is being coordinated by Steve Morgan, W4NHO, of Owensboro, Kentucky. The response of radio amateurs throughout the region is under and in cooperation with an existing Memorandum of Understanding (MOU) with the Kentucky Chapter of the American Red Cross.

(Continued on page 4)

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ARES® groups from Ohio and Virginia have also been in touch with hams in the affected areas and have been on standby, ready to respond if needed.

Courtesy of the ARRL Newsletter

ARRL New England Division Helps FEMA Test Message Distribution

The ARRL New England Division recently helped the Massachusetts Task Force 1 (MA-TF1) FEMA Urban Search & Rescue (FEMA US&R) team test message distribution in the event of a total communications failure.

Using the National Traffic System (NTS), nearly 250 radiograms were routed through the system. Charles Rocheleau, W1CPR, a FEMA Communications Specialist for the MA-TF1, said the alerts were the real thing. "The alerts I sent out were real-world alerts as the task force, MA-TF1 FEMA US&R, was on standby for a deployment to Kentucky," he said. "Steve Hansen, KB1TCE, runs a digital hub in Owls Head, Maine, and was my go-to person for injecting these messages quickly into the [NTS]."

Marcia Forde, KW1U, an active traffic handler in the NTS since 1981, said she received an alert that 40 messages were being sent from W1CPR. "I alerted key Maine traffic handlers to be ready, and these folks did a fantastic job of getting them out," she stated. "All 40 messages were handled in one day."

Phil Temples, K9HI, Vice Director of the ARRL New England Division, said the NTS and all amateur radio operators involved did a great job passing the messages.



International Space Station Upgrades Amateur Radio Operations

ARISS, Amateur Radio on the International Space Station, announced that simultaneous operations of the ARISS voice repeater and digital APRS (Automatic Packet Reporting System) communications on the Space Station are now a reality.

Current ARISS operations include voice repeater transmissions with the JVC Kenwood TM-D710GA in the Columbus module and APRS operation from an identical radio in the Zvezda module. Packet operations are on 145.825 MHz.

The Columbus module radio uses the call sign NA1SS and the new radio in Zvezda uses RS0ISS. Aside from the call signs, the radios are identical, and packet operations are the same as before. You can use RS0ISS, ARISS, or APRSAT as the packet path. Both radios are expected to be running full time, except during educational contacts, extra vehicular activities (EVAs), and docking maneuvers. Final checkouts and equipment activation occurred on August 11.

ARISS International Chair Frank Bauer, KA3HDO, said, "Simultaneous operation of APRS and the voice repeater on ISS is transformative for ARISS. It represents a key element of our ARISS 2.0 initiative, providing interactive capabilities 24/7 that inspire, engage, and educate youth and lifelong learners -- especially lifelong learning in ham radio operations. Our heartfelt thanks to Sergey Samburov, RV3DR, for making this crucial ARISS 2.0 initiative become a reality."

Rosalie White, K1STO, one of two US delegates to ARISS, said the ham radio community will be very happy with the new radio operations from the ISS. "Hams really love doing ARISS packet, cross-band repeater, and Slow-Scan Television (SSTV) operations. Besides the thousands who download ARISS SSTV images downlinked from the ISS, we discovered that in a year's time, hams did 80,000 ARISS packet messages," she said. "We are not sure how many have been enjoying the ARISS cross band repeater, but we know it is a lot. This simultaneous operation capability is going to make many hams happy -- and we know that keeping hams on the air is good for ARRL and good for amateur radio," White added.

Operational status and expected downtimes of the ISS radios can be found at www.ariss.org/current-status-of-iss-stations.

ARISS is a cooperative venture of international amateur radio societies and space agencies that support the ISS. In the US, sponsors

(Continued on page 5)



NASA Astronaut Kjell Lindgren, KO5MOS, tweeted this photo of the ham radio station in the Columbus module, just before ARRL Field Day in June. <https://tinivurl.com/2p9cr53f>

are the Radio Amateur Satellite Corporation (AMSAT), [ARRL](http://www.arrrl.org) The National Association for Amateur Radio®, and NASA's Space Communications and Navigation (SCaN) program. The primary goal of ARISS is to promote exploration of science, technology, engineering, arts, and mathematics topics. ARISS does this by organizing scheduled contacts via amateur radio between crew members aboard the ISS and students. Before and during these radio contacts, students, educators, parents, and communities take part in hands-on learning activities tied to space, space technologies, and amateur radio. For more information, see www.ariss.org and www.arrrl.org/amateur-radio-on-the-international-space-station.



Courtesy of the ARRL Newsletter

HAARP to Host Open House at Alaska Facility

The High-frequency Active Auroral Research Program, ([HAARP](http://www.haarp.org)), will host an open house at the facility in Gakona, Alaska, on August 27, 2022.

The event will offer an opportunity to learn how scientists study the Earth's ionosphere and will provide a tour of the research facility. Amateur radio operators who attend can learn about how the ionosphere affects both long- and short-range communications.

The University of Alaska Fairbanks (UAF) acquired HAARP's research equipment from the United States Air Force in August 2015, and their Geophysical Institute operates HAARP under a cooperative research and development agreement.

In 2021, the National Science Foundation awarded the UAF Geophysical Institute a 5 - year \$9.3 million grant for a new research observatory at HAARP. The Subauroral Geophysical Observatory for Space Physics and Radio Science will explore Earth's upper atmosphere and geospace environment. The facility attracts scientists from universities, government, and the private sector.

UAF describes HAARP as "the world's most capable high-power, high-frequency transmitter for study of the ionosphere." Built in three phases, starting in the early 1990s and continuing through 2007, at a cost of some \$300 million, the 30-acre facility has 360 transmitters, 180 antennas, and five powerful generators.

The open house runs from 9 AM to 3 PM on Saturday, August 27, and, will feature a 90-minute self-guided, tour that will highlight the following:

- HAARP's control room
- Science and history displays
- Power plant, with the five generators used during research
- Transmitters and the 33-acre antenna array
- Aircraft surveillance radar
- Ionosonde, a radar that checks the status of the ionosphere
- Riometer, which measures cosmic radio noise
- Optical equipment domes

More information about the HAARP open house is available on their [Facebook](https://www.facebook.com/haarp) page.

Courtesy of the ARRL Newsletter



The High-frequency Active Auroral Research Program facility Gakona, Alaska. The 33-acre ionospheric research instrument helps researchers study the ionosphere. [JR Ancheta, photo]

2022 Contest Calendar

September

10-12 [September VHF](#)

1800 UTC Saturday, ends 0259 UTC Monday

24-25 **CQ Worldwide DX Contest, RTTY**

0000Z, Sep 24 to 2400Z, Sep 25

October

1-2 [Collegiate QSO Party](#)

October 1st 0000 UTC to October 2nd 2359 UTC

17-21 [School Club Roundup](#)

1300 UTC Monday through 2359 UTC Friday

QSO Parties

Colorado 1300Z, Sep 3 to 0400Z, Sep 4

Tennessee 1800Z, Sep 4 to 0300Z, Sep 5

Alabama 1500Z, Sep 10 to 0300Z, Sep 11

Iowa 1400Z, Sep 17 to 0200Z, Sep 18

Texas 1400Z, Sep 17 to 0200Z, Sep 18 and 1400Z-2000Z, Sep 18

New Jersey 1600Z, Sep 17 to 0359Z, Sep 18

New Hampshire 1600Z, Sep 17 to 0400Z, Sep 18 and 1600Z-2200Z, Sep 18

Maine 1200Z, Sep 24 to 1200Z, Sep 25

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 2022 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, 3rd Monday at 6:30. Falls Township Building - 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.

Philadelphia, PA, Testing is done on the 4th, non holiday Thursday of the month at the, Community Ambulance Association of Ambler, 1414 E Butler Pike, Ambler PA 19002 at 7:00 PM We also are testing on Saturdays at least once per quarter at 9:00 AM. For further information contact James McCloskey at 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
Alt Contact: Jim, 610-287-5630

➤ ATLANTIC DIV. HAMFESTS ➤ 2022

September 11

[ARRL Southern New Jersey Section Convention](#)

Gloucester County 4H Fairgrounds

235 Bridgeton Pike (Rt 77) Mullica Hill, NJ 08062

<http://www.w2mmd.org/>

September 17

[Hagerstown Tailgate Fest](#)

Maugansville Bible Brethren Church

17904 Binkley Ave. Maugansville, MD 21767

<https://w3cwc.org>

September 18

[EPARA Hamfest](#)

Moose Lodge 1336

705 Stokes Mill Rd.

East Stroudsburg, PA 18301

<http://qsl.net/n3is>

October 16 [RF Hill Hamfest 2.0](#)

Bucks County Community College, Upper County Campus

Fifth Street and Blooming Glen Rd.

Perkasie, PA 18944

<http://rfhillarc.club>

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."

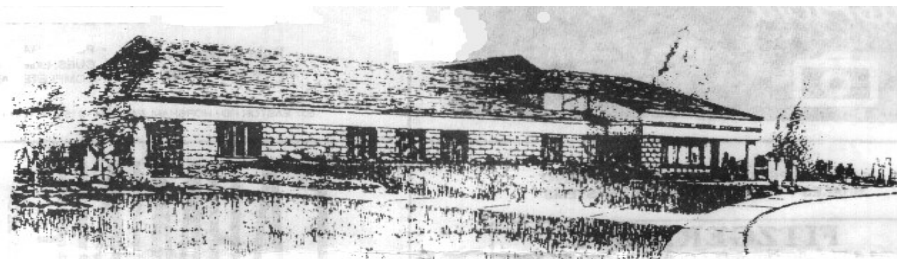
ATTENTION MEMBERS

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.

If you want to have your picture taken to be placed on the 'Members' Photos' section of the 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 2022

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:

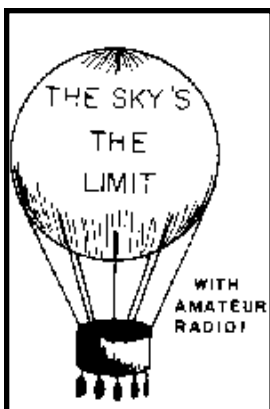
<https://www.weather.gov/phi/Info>

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, Tony Simek N3YNH



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.

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

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 Buergers
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

Bucks County Amateur Radio Emergency Service (BCARES)

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:
k3dn@k3dn.org

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 ?**

2022 Officers

Executive Officers

President	Ray Oechslin	KA3TRU	267-269-3198
Vice-President	Dave McGowan	KC3RAT	215-850-5846
Secretary	Dan Myers	K3NXX	215-957-2343
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			
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			
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
Sunshine Club	Ken Lichtenstein	K9KJL	847-697-1188
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	Al Kanschak	WI3Z	215-491-9941
Youth Programs			