

Web Site k3dn.org

Warminster Amateur Radio Club

February 2023

Next Meeting February 2nd - Eric from Craven Hall, "Bucks County History"

President's Message

Good February Everyone,

We are already into the second month of the new year. Bands have been open and many contacts are waiting to be made. The past few months has seen all of the bands open throughout the world. Of course this brings many of us who want to turn our attention to our antenna systems. Yes, Spring is approaching thus antenna season. Many of us are making our lists of what needs to be done to make our antennas better and what needs to be done to repair our aging systems. Some of us are thinking of putting up new antennas. Time to make plans and order the parts or antennas we want so we will be ready to go when the good weather gets here. Remember we still have some supply chain issues which are affecting stores and manufacturers. Plan and order early to ensure that you'll have what you need when you need it.

February has some good contests coming up. There are RTTY, CW as well as SSB. There is also the School Club Roundup in the middle of the month. Check the ARRL website and the internet for the specifics of the upcoming contests.

Hope to see all of you at the meeting. Remember we have coffee and donuts and good company for some rag chewing.

Ray - KA3TRU

Warminster ARC General Meeting January 5th, 2023

Meeting Called to Order: 7:30pm

Attendance: Introductions (Hybrid Meeting; 18 Zoom / 26 In-person attendees)

Minutes from last Meeting: Motion made to approve and seconded as submitted

Committee Reports:

Treasurer's Report: Tom (K3PLA) As Submitted

Programs: Dave (KC3RAT) Tentative Upcoming Presentations: February- Eric from Craven Hall, "Bucks County History" March- Mike Newman (K3MJN) "Other Radio Services" Membership: Tony (W3FLH) 141 members / 118 in good-standing

Public Service: George (N3HBT) Nothing

Classes: Dan (K3GMQ) & Dave (KC3RAT) Pending: Online classes running 4 to 8 weeks

VEC Testing: Larry (WA3ELQ) December 26, 2022 no candidates tested.

Next session: Last Monday in January 2023

Repeater: Brian (N3EXA) All working

Good and Welfare: Regina (KC3LRF) Nothing to report

Other Committees:

Radiosport: Irwin (KD3TB)

January 7-8: ARRL RTTY Round-Up. The exchange for US/Canada stations is RSt + State/Province. While the exchange for Non-US/Canada stations is RST + Serial Number.

January 14-15: NAQP (North America QSO Party) - CW. Exchange is your Name + State and power is limied to 100 watts.

January 21- 22: ARRL VHF Contest. Exchange is your 4-character Maidenhead grid-square

January 21-22: NAQP SSB Contest. Same rules as the NAQP CW Contest

Hamfest: Tony (W3FLH) Met with new campus contact. Application submitted to the BCCC Bristol Campus.

Field Day: New Field Day Chair, Herb (KB3VMN)

Page 2 FEEDBACK

(Continued from page 1)

Old Business:

Club Station: Interest/Activity Things should go back to normal after construction.

Elmer Program: Ongoing- *Tabled* Website: *Volunteers will help Al (WI3Z)*

New Business:

(Karl K3KH) Bucks County EEOC making a new station for BCARES.at Bucks County site in Warminster. BCARES is developing a new web site. Look for change.

* Club Auction: Scott (KB3ALX) needs to meet with the board before moving ahead with the auction.

* Must be a member in good standing to be on the io.groups WARC Talk.

* A moderator is needed for the WARC Talk. To be discussed at the next board meeting.

* New members photos for laminated club ID badges. New members photos need to be added to the web site.

* The Zoom link for club meetings will not be made available to the public. It was suggested that the link be sent to members-only just prior to a club meeting.

Meeting Adjourned: 8:05pm

Presentation: Fusion, by Bruce (WA3ZPC)



Tad Cook, K7RA, of Seattle, Washington, reports for this week's ARRL Propagation Bulletin, ARLP004:

From the first week of 2023, we saw a dramatic and welcome increase in solar activity, but it softened in this reporting week, January 19 - 25.

Average daily sunspot numbers for the weeks starting with the final reporting week for 2022 were 96.1, 97, 135.9, 173.4, and 162.

Over the same period, average daily solar flux was 143.8, 157.8, 181.2, 221.8, and 198.9.

The northern hemisphere winter solstice was more than a month ago, and through the next two months we will see a gradual transition toward spring conditions.

Predicted solar flux over the next month shows values peaking near 205 on February 14 - 15. Predicted numbers are 170 and 165 on January 26 - 27; 160 on January 28 -

31; 165, 170, 180, and 185 on February 1 - 4; 190 on February 5 - 6; 195 on February 7 - 12; 200 on February 13; 205 on February 14 - 15; 200 on February 16 - 18; 195, 200, and 190 on February 19 - 21; 185 on February 22 - 23; 180 on February 24 - 25, and 175 on February 26 - 28. Flux values may peak above 200 again after March 10.

Predicted planetary A index, an indicator of geomagnetic instability, is 10 on January 26; 8 on January 27 - 29; 5 on January 30 through February 1; 8 on February 2; 5 on February 3 - 6; 12 on February 7 - 8; 15, 12, and 5 on February 9 - 11; 8 on February 12 - 13; 5 on February 14 - 17; 8, 10, 10, 12, and 10 on February 18 - 22; 8 on February 23 - 25, and 5 on February 26 - 27.

More dramatic solar warnings.

https://bit.ly/3XGqNm

Sunspot numbers for January 19 - 25, 2023, were 166, 197, 194, 166, 144, 127, and 140, with a mean of 162. The 10.7-centimeter flux was 226.1, 217.5, 208.7, 198.6, 189.1, 180.2, and 171.8, with a mean of 198.9. Estimated planetary A indices were 7, 6, 17, 9, 7, 4, and 7, with a mean of 8.1. Middle latitude A index was 6, 4, 11, 7, 5, 3, and 5, with a mean of 5.9.

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

(Continued on page 3)

FEEDBACK Page 3

(Continued from page 2)

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

A propagation bulletin <u>archive</u> is available. For customizable propagation charts, visit the <u>VOACAP Online for Ham Radio</u> website.

Share your reports and observations.

A weekly, full report is posted on <u>ARRL News</u>.

Courtesy of the ARRL Newsletter

Volunteers On The Air

Year-long -- <u>ARRL Volunteers On the Air</u> (VOTA). See also the State Activations Schedule for weekly <u>W1AW Portable Operations</u> including these:

- January 25 31 -- Oklahoma, W1AW/5
- January 25 31 -- New York, W1AW/2
- February 1 7 -- South Carolina, W1AW/4
- February 1 7 -- South Dakota, W1AW/0

Courtesy of the ARRL Newsletter



Winlink for Rookies

The Saturday Morning Digital Training Net and the EPA Section of ARRL will be sponsoring a Zoom class on the topic of

This class will meet on four successive Saturday mornings at 9 am - 10 am during March 4,11,18,25 We will concentrate on the Winlink modes **VARA** on HF SSB and the mode **VARA** FM on VHF/UHF.

The Zoom class is open to all operators in the EPA region.

You do not need to be an ARRL member to register for the class, but class is limited to the first 20 who register.

We will be practicing **VARA HF** SSB on an 80m frequency (3583 - 3585 kHz) and we will use a 2m FM repeater (147.270 PL 77) in the Phila region.

Topics for this class will include

Wk 1 General observations about Winlink and VARA HF and VARA FM

Wk 2 Getting Winlink and VARA licenses, configure your HF SSB radio for CAT and PTT. Configure VARA FM with your 2m rig.

Wk 3 How to send an email to both a Gateway and P2P

Wk 4 How to send an attachment: American Red Cross, Wx, ICS

Wk 5 - trouble shoot and summary

I am looking for a few experienced Winlink operators to help organize and teach this class.

If you feel you can contribute please contact k3eui directly: k3euibarry@gmail.com.

To register for this class, please write to Barry at the address: k3euibarry@gmail.com

(Continued on page 4)

Page 4 FEEDBACK

(Continued from page 3)

Winlink Invitation From W8ZY

Winlink is one of the many tools that amateurs can use for fun, as well as for emergency communications situations. I live in Connecticut and have been involved with Winlink for several years now. I will not presume to know all the answers, but I would like to invite Winlink-capable operators to send me a message and tell me two things: where you're sending the message from, and whether you're using HF, VHF, VARA, or Telnet. This is not a formal survey, just my curiosity, but I will try and report on what I get in my inbox. Send your Winlink message to W8ZY, and let's see what happens.

I am happy to suggest that if you wish to participate in regular Winlink exercises, drop by the EmComm Training Group, www.emcomm-training.org, and check out their events.

From the ARRL Club News for Jan 17

THE QSO TODAY VIRTUAL HAM EXPO RETURNS MARCH 25-26, 2023 WITH THE THEME "NEW AMATEUR RADIO LICENSE - NOW WHAT?"

Quote: "Amateur Radio is now like the traditional circus of old, with the traditional communications activities in the bigtop's three rings, but now with a midway of a thousand tents, each containing a unique and interesting ham radio activity', said Eric Guth, 4Z1UG, QSO Today podcaster and creator of the Expo.

LOS ANGELES, Ca - The amateur radio hobby is alive and well and coming to the QSO Today Virtual Ham Expo on March 25-26th, 2023 with the theme: "New amateur radio license - now what?". While the general public may not be aware that the hobby of amateur radio is not only alive and well, it is bigger and better than it ever was. Many new amateur radio licensees may not know what opportunities for fun and growth exist in the hobby, once they leave their exam with their new license in hand. The goal of the Expo is to get more ham radio licensees on the air and involved in the hobby.

This 6th QSO Today Virtual Ham Expo will showcase, through a weekend of presentations with live video questions and answers, the wide range of ham radio activities, technology, and communities that exist, not only in North America, but around the world. "Amateur Radio is now like the traditional circus of old, with the traditional communications activities in the bigtop's three rings, but now with a midway of a thousand tents, each containing a unique and interesting ham radio activity', said Eric Guth, 4Z1UG, QSO Today podcaster and creator of the Expo.

The Expo is presented on the vFairs virtual convention platform that creates virtual spaces and lounges for attendee interaction, a presentation auditorium with multiple simultaneous speaker tracks, and opportunities to interact through video, audio, and text chat with sponsors and exhibitors. Every new edition of the Expo features new interactive features to enhance participation and educational benefit to amateur radio operators who want to try something new, or learn more about something in the hobby that interests them. This time the Expo will introduce match-making between attendees who need amateur radio mentoring and potential mentors who match skills, expertise, and the location of hams needing help.

The QSO Today Virtual Ham Expo will return on Friday Evening, March 24th at 6:00 PM PDT, that's Pacific Daylight Time, with the show's opening and includes live shows by distinguished ham radio podcasters and YouTubers. Interactive spaces and lounges are open for a continuous 48 hours over the weekend. Presentations begin at 8:00 AM PDT, Saturday morning, March 25th, 2023. After the weekend, all of the presentations are available for 30 days to ticket holders. Tickets are on sale now at a cost of \$15.00 each at qsotoday.vfairs.com/en/registration-form

For more information, go to the QSO Today Virtual Ham Expo website at: https://qsotodayhamexpo.com.

Contact: Eric Guth

email: eric@qsotoday.com

(Continued on page 5)

FEEDBACK Page 5

Amateur Satellite FalconSAT-3 Nears Reentry

Many amateur radio operators and satellite watchers have been predicting the date and time of reentry for <u>FalconSAT-3 (FS-3)</u>. While all reentry predictions are something of a guessing game due to the large number of variables affecting the upper atmosphere, it is certain that the end for FS-3 will be coming

very soon, possibly the week of January 16 - 21, 2023.

Radio Amateur Satellite Corporation (<u>AMSAT</u>) Board Member and FS-3 control operator, Mark Hammond, N8MH, said he will try to have the satellite operational for its final hours. The satellite has only been available for approximately 24 hours each weekend due to weak batteries.

FalconSAT-3 was built in 2005 and 2006 by cadets and faculty in the Space Systems Research Center at the US Air Force Academy (USAFA) in Colorado Springs, Colorado. It is the fourth in a series of small satellites designed, built, and operated there as part of a capstone course, which brings together about 30 cadets each year from several different academic departments.



The FalconSAT-3 satellite. [Photo courtesy of AMSAT]

Nearly 700 cadets at the USAFA obtained their amateur radio licenses as part of training to operate FalconSAT-3 and other USAFA satellites. They have taken that knowledge, understanding, and value of amateur radio into their Air Force service and industry. Since FalconSAT-3, the USAFA Astronautics Department has built and operated one additional satellite and has two more queued for launch. The space operations curriculum and the ground station are being rebuilt and configured for these new space assets.

Since its launch on an Atlas V rocket from Cape Canaveral in March 2007, the satellite has been through three mission phases. The first phase was operation of the science payloads. The second phase was used as a tool for training cadets in the space operations squadron, students in undergraduate space training in California, and graduate students at the Air Force Institute of Technology. The satellite's third phase was an on-orbit resource for amateur radio and amateur-satellite services operation managed by AMSAT.

For amateur radio service the downlink is at 435.103 MHz transmitting 1 W into a quarter-wave whip antenna. The uplink is at 145.840 MHz and the receiving antenna is a quarter-wave whip antenna on the opposite side of the satellite. All UHF and S-band equipment on National Telecommunications and Information Administration licensed frequencies has been disabled. The VHF receiver is very sensitive. Modulation is 9600 bps GMSK for the uplink and downlink. The broadcast call sign is PFS3-11, and the BBS callsign is PFS3-12, Unproto APRS via PFS3-1.



The core avionics were designed and built by Mark Kanawati, N4TPY, and Dino Lorenzini, KC4YMG at SpaceQuest, and have performed remarkably well for nearly 16 years in orbit. Jim White, WD0E, was the lead engineer for FalconSAT-3 at the USAFA and managed the design, construction, testing, and early operations of the satellite.

The success of FalconSAT-3 is an excellent example of how amateur radio can be integrated into the curriculum of an education institution for the benefit of the students and the amateur radio service.

-- Thanks to Sasha Timokhov, VE3SVF; Jean Marc Momple, 3B8DU; Mark Hammond, N8MH; AMSAT Operations, and AMSAT News for the information contained in this story.

Courtesy of the ARRL Newsletter

Page 6 FEEDBACK

2023 Contest Calendar

February

5 North American Sprint, CW

0000Z-0359Z

11-12 CQ WW RTTY WPX Contest

0000Z, Feb 11 to 2359Z, Feb 12

13-17 School Club Roundup

18-19 International DX - CW

0000 UTC Saturday and runs through 2359 UTC Sunday.

25-26 North American QSO Party, RTTY

1800Z, Feb 25 to 0559Z, Feb 26

March

4-5 International DX- Phone

0000 UTC Saturday and runs through 2359 UTC Sunday.

25-26 CQ WW WPX Contest, SSB

0000Z, Mar 25 to 2359Z, Mar 26

QSO Parties

Vermont 0000Z, Feb 4 to 2400Z, Feb 5

Minnesota 1400Z-2400Z, Feb 4

South Carolina 1500Z, Feb 25 to 0159Z, Feb 26 North Carolina 1500Z, Feb 26 to 0100Z, Feb 27

> ATLANTIC DIV. HAMFESTS > 2023

April

15 Sussex Amateur Radio and Electronics Expo

Cheer Community Center

20520 Sand Hill Rd.

Georgetown, DE 19947

http://www.radioelectronicsexpo.com/

29 York Hamfest

Elicker's Grove Park

511 Roth Church Road

Spring Grove, PA 17362

http://yorkhamfest.org

May

7 Warminster ARC Hamfest, ARRL Eastern Pennsylvania Section Convention

Bucks County Community College-Lower Bucks Campus

1304 Veteran Hwy (Rte.413)

Bristol, PA 19007

http://www.k3dn.org/hamfest/

28 Memorial Day Hamfest

Howard County Fair Grounds

2210 Fairgrounds Road

West Friendship, MD 21794

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) itra@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

FEEDBACK Page 7

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

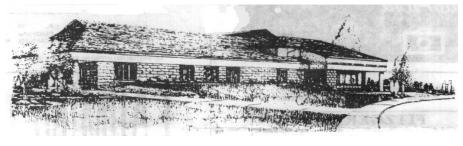
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even 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 2023

February- Eric from Craven Hall, "Bucks County History" March- Mike Newman (K3MJN) "Other Radio Services"

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. Page 8 FEEDBACK

SKYWARN INFORMATION

Bucks County SKYWARN Weather Spotter PRIMARY FRE-QUENCY: 147.300MHZ (+ 131.8)

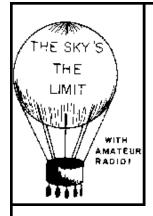
Fairless Hills, PA (many remote access locations throughout Bucks County)

Mount Holly NWSFO SKYWARN Homepage:

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

SKYWARN Basic Weather Spotter Educational Programs URL:

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



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.

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.

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 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 **FEEDBACK** Page 9

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:
 - wa4vwm@comcast.net Or via snail mail to: FEEDBACK EDITOR Warminster Amateur Radio Club

Box 113 Warminster, Pa 18974

- Use both upper and lower case
- 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 ma-terial from another source.
- Deadline for articles is the Saturday before the regular meeting.

For general club correspondence:

WARMrcinfo@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	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

Youth Programs

Committee Chairpersons						
ARES/RACES Liasor	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	WA4YWN	1215-538-1889			
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						
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	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	Al Konschak	WI3Z	215-491-9941			