



FEEDBACK



Web Site k3dn.org

Warminster Amateur Radio Club

August 2024

Next Meeting August 1st - Fat Dipole Jack W2INF

President's Message

Greetings Everyone,

I hope everyone is enjoying their summer, our next general meeting is in Thursday August 1st.

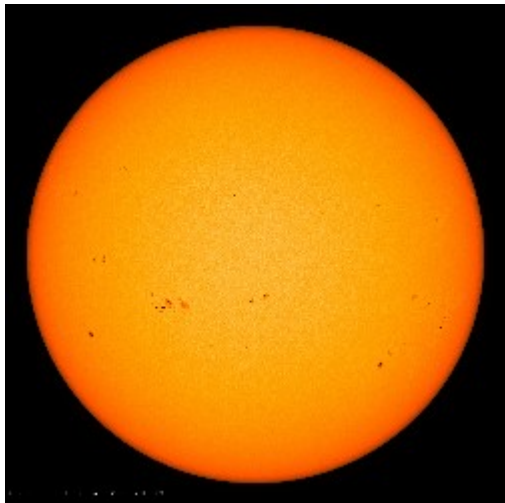
We have two good presentations coming in August & September. August will be FAT Dipole by Jack Sullivan W2INF and September "An Introduction to Antenna Modeling" by Dan Clementi K3GMQ. If you have any ideas for a club presentations or would like to share your knowledge please contact our vice-president Rich Parker KC3WNX.

We are looking for volunteers for a work night to clean up the upstairs and inventory the equipment.

The success of our club depends on your participation, if you have any ideas to make our club better, please let one of the board members know.

Thanks Dave – K3FTD

The K7RA Solar Update



This image was taken on July 25, 2024. [Photo courtesy of NASA SDO/HMI]

Solar activity was a bit lower this week. Seven new sunspot groups appeared. The only day with no new sunspot groups was Sunday, July 21. The next day two new sunspot groups arose, and all other days each had one new group.

Average daily sunspot number was 208.1, down from 215.9, while average daily solar flux declined from 226 to 193.

Geomagnetic numbers remained quiet, with average planetary A index unchanged at 6, and middle latitude numbers changing from 8 to 7.3. Future geomagnetic indicators look very quiet, for many weeks.

The outlook for the next few weeks has solar flux reaching a short term maximum of 230 on August 12-14.

Spaceweather.com sent out this alert on July 25.

"MAJOR FARSIDE SOLAR FLARE: Europe's Solar Orbiter (SolO) spacecraft just detected the most intense solar flare of the current solar cycle. The X14-category explosion sprayed energetic particles throughout the solar system, causing high dose rates on Mars and even hitting Earth on the opposite side of the sun. The source of the flare could turn to face our planet late next week."

Predicted solar flux is 170 on July 26-27, 165 on July 28-29, 170 on July 30 through August 1, 165 on August 2, then 170, 180 and 190 on August 3-5, 200 on August 6-11, 230 on August 12-14, 210 on August 15, then 200 on August 16-18, 195 and 185 on August 19-20, 180 on August 21-23, 175 on August 24, 170 on August 25-27, 165 on August 28-29, and 170 on August 30-31. Flux values may climb to 230 again on September 8-9.

Predicted planetary A index is 10, 18 and 8 on July 26-28, 5 on July 29 through August 14, 8 on August 15-16, and 5 on August 17 through possibly mid September, a long stretch of very quiet conditions.

Weekly Commentary on the Sun, the Magnetosphere, and the Earth's Ionosphere for July 25, 2024.

(Continued from page 1)

So here we are on Thursday, July 25th. Initially it appeared there would be a continued period of high solar activity, including flares. A logical continuing chain of predictions of increased geomagnetic activity, especially after major flares. Then finally at 1351 UTC a message came from NOAA containing the words: "WARNING: Geomagnetic Sudden Impulse expected. IP Shock Passage Observed: 2024 Jul 25 1315 UTC." The development continued and we could read the message from Boulder, Co.: "SUMMARY: Geomagnetic Sudden Impulse Observed: 2024 Jul 25 1422 UTC. Deviation: 8 nT. Station: BOU."

After all, after a series of solar flares, this was no longer a major surprise while the week-old forecast by Tom Bayer (RWC Prague, Department of Geomagnetism, Budkov Observatory) was fulfilled.

But it was not a big surprise, the previous major disturbance occurred on 28 June, or 26 days ago. If the mentioned geomagnetic disturbance develops and lasts longer, it will adversely affect shortwave conditions in the following days, possibly until Sunday. However, the recovery could be even faster due to the high solar activity. F. K. Janda, A.R.S. OK1HH"

The latest from Dr. Tamitha Skov, Space Weather Woman, WX6SWW:

<https://youtu.be/BgT8Y2cJjVw>

Eruptions: <https://bit.ly/4c2BNBb>

Havoc: <https://bit.ly/4dgMRf3>

Reconstructed sunspot series:

<https://www.eurekaalert.org/multimedia/1035992>

Storm forecast:

<https://bit.ly/46mWBSL> <https://bit.ly/4fjVPd5>

Cycle 26: <https://bit.ly/3ydtq7Y>

Send your tips, reports, observations, questions and comments to k7ra@arrl.net. When reporting observations, don't forget to tell us which mode you were operating.

For more information concerning shortwave radio propagation, see <http://www.arrl.org/propagation> and the ARRL Technical Information Service web page at:

<http://arrl.org/propagation-of-rf-signals>.

For an explanation of numbers used in this bulletin, see <http://arrl.org/the-sun-the-earth-the-ionosphere>.

An archive of past propagation bulletins is at

<http://arrl.org/wlaw-bulletins-archive-propagation>

More good information and tutorials on propagation are at

<http://k9la.us/>

Also, check this: <https://bit.ly/3Rc8Njt>

Instructions for starting or ending email distribution of ARRL bulletins are at <http://arrl.org/bulletins>

Sunspot numbers for July 18 through 24 2024 were 276, 269, 212, 200, 173, 167, and 160, with a mean of 208.1. 10.7 cm flux was 208.7, 201.6, 207.4, 197.9, 185, 175.5, and 174.8, with a mean of 193. Estimated planetary A indices were 5, 5, 7, 5, 9, 5, and 6, with a mean of 6. Middle latitude A Index was 4, 5, 8, 9, 9, 8, and 8, with a mean of 7.3.

Courtesy ARRL Newsletter

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Amateur Radio Participates in World's Largest Naval Exercise

“Partners: Integrated and Prepared” is the theme for [Rim of the Pacific \(RIMPAC\) 2024](#), the world’s largest international military maritime exercise, which began June 27, and will come to a close on August 1. Conducted from Joint Base Pearl Harbor-Hickam in Oahu, Hawaii, the exercise encompasses many islands in the Hawaiian chain.

The event included 29 nations, 40 surface ships, three submarines, 14 national land forces, more than 150 aircraft, and more than 25,000 personnel, including amateur radio operators working with health care facilities.

The amateur radio portion of the exercise has been completed. ARRL Assistant Section Manager and State Government Liaison Michael Miller, KH6ML, said 36 amateur radio operators from Hawaii volunteered to demonstrate the value of amateur radio in emergency preparedness and response.

“It turned out very good,” said Miller. “Some of hospitals, staff and administrators involved had their first experience with amateur radio. The operators were able to blend their skills using public service radios, satellite phones, as well as amateur radio.”

Miller pointed out that hospitals on the smaller islands don’t usually have a full-time communications officer, so working with amateur radio gives them experience for future emergencies. The amateurs worked with [Health Comm Hawaii](#) which provides amateur radio communications to health care associations in Hawaii during emergencies and disasters.

“Health Comm Hawaii really needs 100 more operators for backup and to build skill sets through monthly exercises,” Miller added.

Vice Adm. John Wade, commander, U.S. 3rd Fleet and RIMPAC 2024 Combined Task Force (CTF) commander, said the Rim of the Pacific exercise has grown over the years to be the world’s largest and premier joint maritime training opportunity. “The exercise’s purpose is to build relationships, to enhance interoperability and proficiency, and, ultimately, contribute to the peace and stability in the vitally important Indo-Pacific region.”

Many of the volunteers participating in RIMPAC 2024 are also members of other vital emergency communication groups, such as Amateur Radio Emergency Service®(ARES®), Radio Amateur Civil Emergency Service (RACES), and Community Emergency Response Team (CERT).

Courtesy ARRL Newsletter

Celebrating Software Defined Radio

At Ham Radio 2024, the International amateur radio exhibition, last week in Friedrichshafen, Germany, the Software Defined Radio Academy (SDRA) celebrated its 10-year anniversary. Founded in 2014, the SDRA has become a new platform for the exchange of knowledge surrounding software defined radio. In the early years, the academy’s lectures were recorded with primitive camera technology, but today a video team takes the recordings to a completely different level. The SDRA's YouTube channel now has 150 uploads, 4850 subscribers, and many more views of the videos.

The winners of the Ulrich L. Rohde Award, created in 2022 for innovative research in the field of software defined radio, were also announced:



Members of the Software Defined Radio Academy celebrate their awards at Ham Radio in Germany" [Photo courtesy of SRDA]

The GNU Radio project for its good software solutions for software defined radio (SDR) technology. GNU Radio is a free software development toolkit that provides signal processing blocks to implement software-defined radios and signal processing sys-

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tems.

The DARC-AJW team for the SDR questions in the new questionnaire and the standardization of education. According to group leader Matthias Jung, DL9MJ, posting on X, the team's work "focused on integrating SDR into the German amateur radio exam and educational materials."

Rob Robinett, AI6VN, with Paul Elliot, WB6CXC, for their fundamental work and influence on scientific research in other areas.

Christoph V. Wüllen, DL1YCF, with Laurence Barker, G8NJJ, for fundamental work on stations.

Dr. Rohde, N1UL, has been an avid amateur radio operator holding several licenses in the United States and Germany. He has been licensed since 1956 and involved in technology and systems and has received worldwide recognition. In 2015, he won first place in the ARRL DX Contest in the Northern New Jersey Section. He also operates N1UL/MM on his yacht, the Drag-fly, and is Trustee of the Marco Island Radio Club, K5MI.

Courtesy ARRL Newsletter

Get On the Air during VHF Contest Season

VHF contesting season is in full swing! Summer weather brings with it enhanced propagation. With good conditions, stations hundreds of miles away can be worked via tropospheric ducting, E-skip, and perhaps even meteor scatter. If you have an HF rig that includes 6 meters or VHF/UHF capability, you've got just the tools you need to take advantage of these enhancements! US amateurs of all license classes may participate in these events, so they are a great way for Technician-class hams to compete in contests.

There are several upcoming VHF+ contests coming up. The first of the VHF Fall Sprints, the 6-meter Sprint, will be held from 1800 – 2200 UTC on Saturday, August 10. The sprints continue in September with single-band events on 144, 222, and 432 MHz. The final sprint, held on Saturday, October 5, includes all bands 902 MHz and above.

For rules, see www.packratvhf.com/index.php/fall-sprints.

Closing out the VHF contest season is the ARRL September VHF Contest, which will be held from 1800 UTC on Saturday, September 14 through 0259 UTC on Monday, September 16. All amateur frequencies above 50 MHz may be used.

For activities on the higher VHF and UHF bands, there are two contest opportunities coming up. The ARRL 222 and Up Distance Contest begins at 1800 UTC on Saturday, August 3 and concludes at 1759 UTC on Sunday, August 4. Operation is allowed on all bands from 222 MHz through 241 GHz.

The ARRL 10 GHz and up Contest will be held the weekends of August 17 - 19 and September 21 - 23, from 0900 UTC Saturday through 0759 UTC Monday. Any amateur band from 10 GHz through light may be used.

If you need an antenna for the VHF contest season, ARRL has a space- and budget-conscious solution, with two antennas in one. The ARRL Dual-band Momobeam 6/10 Antenna features a 10-meter Moxon (28 MHz) and 6-meter Yagi (50 MHz). The antenna is made of aluminum tubes, galvanized steel hardware, UV-resistant POM-C driver insulators, and polypropylene clamps. Assembly is easy, and all tubes are labeled. It comes with two sets of hardware — one for permanent install and the other for portable use. The antenna retails for \$299.95 and is available in the ARRL Store. It is designed to get Techs active on 6 and 10 meters while Solar Cycle 25 is near its peak.

Courtesy ARRL Newsletter

2024 Contest Calendar

August**3-4 North American QSO Party, CW**

1800Z, Aug 3 to 0600Z, Aug 4

3-4 222 MHz and Up Distance Contest

1800 UTC Saturday and ending at 1759 UTC Sunday

17-18 North American QSO Party, SSB

1800Z, Aug 17 to 0559Z, Aug 18

17-18 10 GHz & Up – Round 1

0900 UTC Saturday and runs through 0759 UTC Monday

18 Rookie Roundup – RTTY

1800 UTC through 2359 UTC

24-25 EME - 2.3 GHz & Up

0000 UTC on Saturday through 2359 UTC Sunday

24-25 World Wide Digi DX Contest

1200Z, Aug 24 to 1200Z, Aug 25

QSO Parties

Maryland-DC	1400Z, Aug 10 to 0400Z, Aug 11
Hawaii	0400Z, Aug 24 to 0400Z, Aug 26
Kansas	1400Z, Aug 24 to 0200Z, Aug 25 & 1400Z-2000Z, Aug 25
Ohio	1600Z, Aug 24 to 0400Z, Aug 25
Colorado	1300Z, Aug 31 to 0400Z, Sep 1

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 2024 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.

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 jmcloskey@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

➤ 2024

**August 3 - Reading Radio Club Hamfest**

Heritage Park 992 Clematis St. Sinking Spring, PA

<http://www.qsl.net/w3bn/>**August 11 - Valley Forge Hamfest**

Kimberton Fire Company Fairgrounds 762 Pike Springs Rd.

Phoenixville, PA 19460

<http://marc-radio.org/hamfest2.htm>**September 8 - ARRL Southern New Jersey Section Convention and Hamfest**

Gloucester County 4H Fairgrounds 235 Bridgeton Pike (Rt 77)

Mullica Hill, NJ 08062

<http://w2mmd.org>**October 6 - CARA Fest 2024**

Howard County Fairgrounds 221 Fairgrounds Road

West Friendship, MD 21794

<http://www.carafest.org>**October 20 - RF Hill Amateur Radio Club Hamfest 2.0**

Upper County Campus of the Bucks County Community College

1 Hillendale Rd. (Use Blooming Glen Rd. entrance 40°22'57.2"N 75°16'26.3"W)

Perkasie, PA 18944

<http://www.rfhillarc.club>

CLUB INFO

PUBLIC SERVICE

October – Golf Outing Part 2. Anyone interested in helping contact George at N3HBT@ARRL.NET

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 \$12.50 annually and are approved by the Board. Please contact the Membership Committee for more information if interested."

ATTENTION MEMBERS

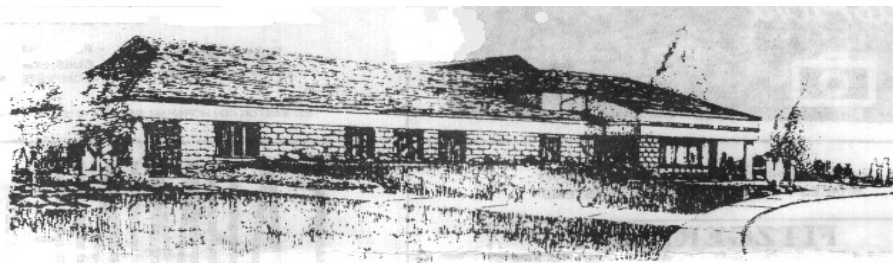
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even 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 2024

- **August - Fat Dipole**
- **September - Intro to Antenna Modeling**

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

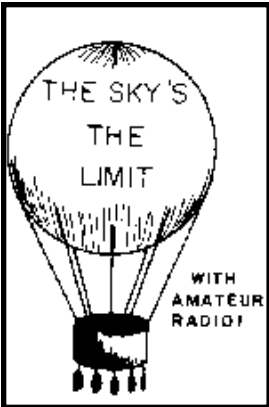
D-STAR

- 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

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

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 ?

2024 Officers

Executive Officers

President	Dave McGowan	K3FTD	215-850-5846
Vice-President	Rich Parker	KC3WNX	
Secretary	Tony Simek	N3YNH	215-796-0336
Treasurer	Tom Newman	K3PLA	215-630-5965
Director (A)	Doug Becker	KC3MNQ	215-932-1370
Director (E)	Herb Hickmott	KB3VMN	
Director (A)	Bruce Farrington	WA3ZPC	215-262-4215
Director (E)	George Brechmann	N3HBT	215-443-5656
Past President	Ray Oechslin	KA3TRU	267-269-3198

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	267-337-0392
Digital and APRS	Ron Wenig	NY3J	215-638-9257
Feedback Editor	Jim Elmore	WA4YWM	215-538-1889
Field Day 24	Herb Hickmott	KB3VMN	267-718-3601
Hamfest 24	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			