



FEEDBACK



Web Site k3dn.org

Warminster Amateur Radio Club

December 2020

Next Meeting December 3rd via ZOOM - Holiday Meeting - History of Interest

MINUTES FOR THE NOVEMBER 5TH GENERAL MEETING

Attendance:

Call to Order at 7:30pm

Minutes from last Meeting

Additions/Corrections - Motion made and minutes approved as printed in Feedback

Committee Reports

Treasurer's Report: *Herb KB3VMN*

As reported at the meeting

Programs: *Tony N3YNH*

December – no club business that evening. We will be discussing the history of the club

January – Stump the Chumps, online version

February – DX Engineering – Tim Duffy presentation on Grounding and Bonding your Radio Station

Membership: *Kathy KC3FBY*

We have 114 active members

Welcome new members:

Alexander Errico, KC3QFQ

Will be sending an email regarding paying dues for 2021. If you pay by December 31, 2020 you will pay \$20. Beginning January 1, 2021, dues will be \$25.

Public Service: *George N3HBT*

Golf outing on Columbus Day October 12 with 9 holes. It was cold and wet. We had 9 hams come to help. Thank you for your help with this event. We received a letter and a certificate from Warminster Township thanking us for our participation and help at the golf outing. They hope that we will continue to help in community events.

No other events in the foreseeable future.

Classes: *George KA3WXV*

Next classes: TBD

VEC Testing: *Larry WA3ELQ*

Successful testing session on Monday October 26. 9 candidates all passed, 8 new hams 1 upgrade from tech to general.

Next session: November 30. Standby for information regarding this session depending on COVID regulations just in case it needs to be cancelled.

Repeater: *Brian N3EXA*

Everything is working properly. Brian tracking down the interference on 440. Has not been able to install the solid-state amplifier.

Good and Welfare: *Ken K9KJL*

Nothing requested or sent out this past month. Please send any requests to either Ken or Tony W3FLH

Other Committees

Radiosport: *Irwin KD3TB – we are in contesting season.*

The ARRL Sweepstakes CW contest is this weekend, November 7-9 from 2100 UTC on Saturday to 0259 UTC on Monday. The SSB contest is the weekend of November 21st. You can only work 24 of the 30 hours in the contest and logs must be submitted in 7 days. Contest information is posted on Facebook. There are several other contests coming up. Check WARCtalk for more information.

Hamfest: *Tony W3FLH*

Nothing new to report. In a holding pattern until we see if the college will allow us to have the event there. May need to relinquish the ARRL EPA Section convention depending on the venue.

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Field Day: *Doc W3GAD*

4th weekend in June. Would like to see if we can find a Co-leader on the event. Doc is willing to work with this person for at least a year or two. Need someone for publicity to really work on getting the word out about the event. We are concerned for safety of the event.

Old Business

Elmer Program – Online/Zoom? – Nothing new to report

Club Station: Interest/Activity? (Marty NR3Z & Andy KD3RF) – nothing to report yet

FCC Proposed fee increases for Amateur Radio – Robert N3RMC, Scott KB3ALX and Tony W3FLH drew up a proposed response from the club. It will be posted on WARCtalk groups.io for the club members to review before submitting it to the FCC. Robert N3RMC suggested that club members respond individually as well.

Contract renewal w/BWSAC (Kathy KC3FBY) – We received our new 2-year contract with 2-year renewal option at the current rental rate from the BWSC. We requested that we split our rental payment in 2 installments instead of paying our rent all in January.

New Business

Director/Appointed for 2021 – We have an opening for an appointed director position. Brandon N3UO has asked to step down at the end of the year. Please let anyone on the board know if you are interested in joining the board.

December Event – Online social gathering; OHOTY Award presentation -Purely social event, no business will be conducted.

We will announce the Outstanding Ham of the Year Award winner and talk about the club history. We will also be holding an Online Raffle ticket sale for a \$500 DX Engineering gift card. Tickets are \$20 each and we are only selling 50 tickets.

The sale will be open to WARC members only, but if we do not sell out, we will open the ticket sale to outside Hams.

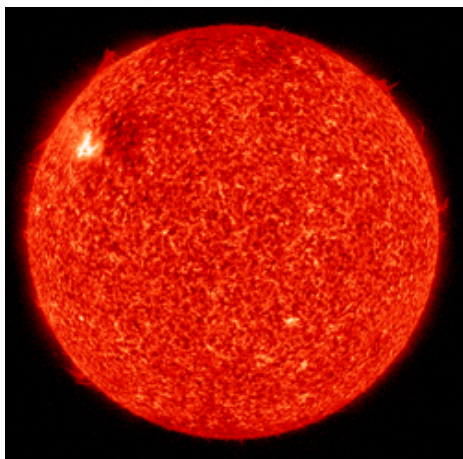
Watch your email for a link to the sale.

- Motion made and approved to Adjourn @ 8:15pm

Presentation: ARRL Night w/Atlantic Div. VD Bob Famiglio K3RF & EPA SM George Miller W3GWM, Tom Abernathy, W3TOM.

The K7RA Solar Update

Tad Cook, K7RA, Seattle, reports: Over the past week our sun has been quite active, with rising sunspot numbers and solar flux showing strong evidence that Solar Cycle 25 is progressing.



Average daily sunspot number rose from 12 last week to 27.9 in the current week, while solar flux rose to a high of 103.7, bringing average daily solar flux up from 79.8 to 90.1.

Average daily planetary A index rose from 3.1 to 9.9, and average daily middle latitude A index went from 2.1 to 7.7.

Predicted solar flux is 106, 108, and 105 on November 27 – 29, 102 on November 30 – December 4; 92, 88, and 85 on December 5 – 7; 82, 80, and 78 on December 8 – 10; 75 on December 11 – 17; 77, 80, 90, and 92 on December 18 – 21; 94 on December 22 – 25; 92 on December 26 – January 1, 88, 85, 82, 80, and 78 on January 2 – 6, and 75 on January 7 – 10.

The Planetary A Index forecast shows values of 8 on November 27; 5 on November 28 – December 17; 12, 24, and 18 on December 18 – 20; 10, 12, and 10 on December 21 – 23; 5 on December 24 – 29; 8 on December 30 – 31, and 5 on January 1 – 10.

Solar flux is [measured three times a day](#) in Penticton, British Columbia, Canada, and values have risen steadily in the past few days. Starting at 2200 UTC on November 24, they were 99.6, 102.8, 103.7, 104, 105.7, 105.8 and 110.2. The official daily flux value is taken at 2000 UTC (noon local time in Penticton). See the [article](#), “The Solar Flux Radio Telescope at Penticton BC” by John White, VA7JW.

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Here' the geomagnetic activity forecast for November 27 – December 22 from J. K. Janda, OK1HH. The geomagnetic field will be:

- quiet on December 7, 12-14, (15-16)
 - quiet to unsettled on November 29-30, December 1-2, 6, 8, 11
 - quiet to active on November 27-28, December 3-5, 9-10, 17, 22
 - unsettled to active December 18, 21
 - active to disturbed December 19-20
- solar wind will intensify on November (30,) December (2,) 3-5, (9,) 17-19

Note: Parentheses mean lower probability of activity enhancement. The predictability of change remains lower because of some ambiguous indications, and the situation is rapidly changing — an indicator of further growth in activity.

Courtesy of the ARRL Newsletter

FOR SALE

Drake TR-4C, RV-4C, AC-4 with Harbach modes by WB4HFN, Drake desk mic 7075, original Drake manual for TR-4C, a few spare Drake parts. All in excellent electrical and physical condition. New matched finals replaced a few years ago. No issues. Great back up set-up or set up for new ham.

ASKING: \$495 with local pick-up at my home or nearby local to be discussed.

Contact Bob Wilderman a WARC member at dlrwild1@verizon.net or 267-535-9189 cell

K3SRO

Arizona Congresswoman Introduces National Amateur Radio Operators Day Resolution



US Representative Debbie Lesko of Arizona has introduced a [resolution](#) to designate April 18, 2021, as National Amateur Radio Operators Day, to recognize the important contributions of amateur radio operators.

"Amateur radio operators are critical in times of crisis and our communities are safer thanks to their dedication to sharing important information with the public," Lesko said. She was approached to introduce the resolution by 12-year-old Raymond, N7KCB, from Peoria, Arizona.

"I started [Long Distance Responders](#) so I can help prepare the community for emergencies with amateur radio," said Raymond. "There might be a price for a radio, but the ability and knowledge to help someone is truly priceless."

As Lesko's resolution notes, World Amateur Radio Day (WARD) is celebrated annually on April 18 to commemorate the founding of the International Amateur Radio Union ([IARU](#)) in 1925, and she said her resolution recognizes the amateur radio community with a national day in the United States in 2021. The resolution cites the Amateur Radio Emergency Service (ARES®) for providing "invaluable emergency communications services following recent natu-

ral disasters, including but not limited to helping coordinate disaster relief efforts following Hurricanes Katrina, Wilma, and Maria and other extreme weather disasters."

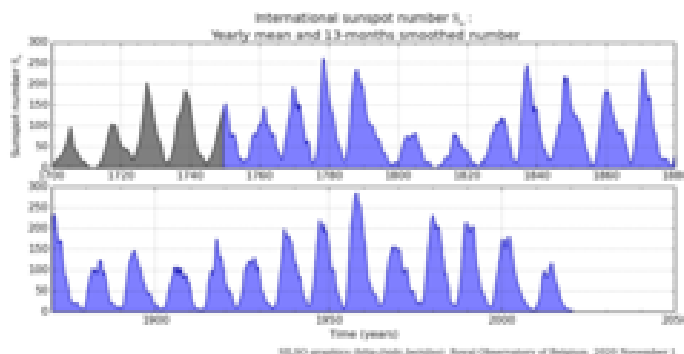
Courtesy of the ARRL Newsletter

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Academic Paper Predicts Sunspot Cycle 25 Could be Among the Strongest Ever

A [research paper](#), "Overlapping Magnetic Activity Cycles and the Sunspot Number: Forecasting Sunspot Cycle 25 Amplitude," by Scott W. McIntosh, Deputy Director of the National Center for Atmospheric Research in Boulder, et al., has concluded that Solar Cycle 25 could be among the strongest sunspot cycles ever observed, and will almost certainly be stronger than the just-ended Solar Cycle 24 (sunspot number of 116). The scientists say it will also most likely be stronger than Solar Cycle 23 (sunspot number of 180). As the abstract explains:



Sunspot cycle graph dating to 1700. [SILSO Graphic]

more than 270 years of (monthly) sunspot numbers, we robustly identify the so-called 'termination' events that mark the end of the previous 11-year sunspot cycle, the enhancement/acceleration of the present cycle, and the end of 22-year magnetic activity cycles. Using these, we extract a relationship between the temporal spacing of terminators and the magnitude of sunspot cycles.

"The sun exhibits a well-observed modulation in the number of spots on its disk over a period of about 11 years. From the dawn of modern observational astronomy, sunspots have presented a challenge to understanding -- their quasi-periodic variation in number, first noted 175 years ago, stimulates community-wide interest to this day. A large number of techniques are able to explain the temporal landmarks, (geometric) shape, and amplitude of sunspot 'cycles;' however, forecasting these features accurately in advance remains elusive.

"Recent observationally motivated studies have illustrated a relationship between the sun's 22-year magnetic cycle and the production of the sunspot cycle landmarks and patterns, but not the amplitude of the sunspot cycle. Using (discrete) Hilbert transforms on

"Given this relationship and our prediction of a terminator event in 2020, we deduce that Sunspot Cycle 25 could have a magnitude that rivals the top few since records began. This outcome would be in stark contrast to the community consensus estimate of Sunspot Cycle 25 magnitude."

McIntosh's [recorded presentation](#) of the paper is available. Use passcode **z7qCn@3G**.

Courtesy of the ARRL Newsletter

SpaceX Dragon Capsule Resilience Ferries Four Radio Amateurs to the ISS

A SpaceX Dragon capsule carrying four radio amateurs autonomously docked on November 17 at 0401 UTC with the International Space Station (ISS). A SpaceX Falcon 9 launcher carrying the precious payload went into space on Sunday, November 15, from NASA's Kennedy Space Center. They comprise the ISS Expedition 64/65 crew.

"Well, the ISS is loaded with hams now," Amateur Radio on the International Space Station (ARISS) US Delegate for ARRL Rosalie White, K1STO, said on Tuesday. "These four arrived very early this

morning Eastern Time: NASA astronauts Victor Glover, KI5BKC; Mike Hopkins, KF5LJG, and Shannon Walker, KD5DXB, as well as Japan Aerospace Exploration Agency (JAXA) astronaut Soichi Noguchi, KD5TVP." This marks Glover's first time in space. The others all are ISS veterans.

Earlier this year, NASA ISS Ham Project Coordinator Kenneth Ransom, N5VHO, held amateur radio licensing study sessions for Glover, who passed the Technician-class exam on August 20.

The four will remain on station until next spring. They joined Expedition 64 Commander Sergey Ryzhikov and Flight Engineer Sergey Kud-Sverchkov of the Russian space agency Roscosmos, on the ISS.



From left to right: Shannon Walker, KD5DXB; Victor Glover, KI5BKC; Mike Hopkins, KF5LJG, and Soichi Noguchi, KD5TVP.

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White said all but Noguchi likely will take part in ARISS contacts with schools. White said the first school contact is tentatively scheduled for



Three members of the Expedition 64/65 crew on board *Resilience*.

December 4 with Tecumseh High School in Oklahoma, home of the Tecumseh High School Amateur Radio Club, K5THS. She said the students have earned their ham licenses, and the club has built an antenna and is learning about satellites and circuits. Members of the South Canadian Amateur Radio Society of Norman, Oklahoma, are providing support and mentoring assistance.

The Sunday launch from Kennedy Space Center marked only the second crewed-flight for the SpaceX Crew Dragon, which became the first commercial vehicle to put humans into orbit when astronauts Doug Hurley and Bob Behnken, KE5GGX, launched in May, and NASA gave SpaceX the go for future such launches.

"The return of human spaceflight to the United States with one of the safest, most advanced systems ever built is a turning point for America's future space exploration," SpaceX claimed, "and it lays the groundwork for missions to the moon, Mars, and beyond."

Courtesy of the ARRL Newsletter

"Black Swan" Exercise Offers Opportunity to Demonstrate IPAWS via HF

The [SHARES](#) HF program recently brought the FEMA Integrated Public Alert & Warning System ([IPAWS](#)) and the [Winlink HF email](#) development team together to demonstrate that an IPAWS message could be delivered by HF in the event of an internet outage. IPAWS is FEMA's nationwide local alert system that provides authenticated emergency and life-saving information to the public through mobile phones using Wireless Emergency Alerts, to radio and television via the Emergency Alert System, and on NOAA Weather Radio. The recent Ohio Military Reserve "Black Swan" exercise provided the opportunity to demonstrate the ability to deliver an IPAWS message via HF.



Ideally, a SHARES Winlink station would be at the location where the IPAWS message originated. Because this wasn't possible within the time and budget constraints, the internet was used to get IPAWS messages from the point of origination to the SHARES HQ program office in Arlington, Virginia, where custom software written by Winlink Development Team Chief Programmer Phil Sherrod, W4PHS, detected the IPAWS message, and forwarded it by Winlink HF email to exercise participants in Ohio.

station building. Messages were then retrieved by SHARES operators over SHARES Winlink, and the messages handed off to radio amateurs, who manually relayed them to county and city emergency management agencies. Involved were the ARRL Amateur Radio Emergency Service (ARES®), the ARRL National Traffic System (NTS), and amateurs involved through the government's AUXCOMM program.

Exercise messages were sent each day at various times to demonstrate that the Winlink system gets the message through under varying radio conditions. The project was coordinated by Scott Johnson of Sawdey Solutions, a FEMA contractor, and Ross Merlin, WA2WDT, the SHARES HF Radio Program Manager, of the Cybersecurity and Information Security Agency (CISA) of DHS.

The SHARES Hybrid Winlink Radio Email Network is provided to the federal government at no cost by the Amateur Radio Safety Foundation, Inc. -- *Thanks to Ross Merlin, WA2WDT, SHARES HF Radio Program Manager*

Courtesy of the ARRL Newsletter



2020 –2021 Contest Calendar

December

4-6 [160 Meter](#)

Starts 2200 UTC Friday, ends 1559 UTC Sunday

12-13 [10 Meter](#)

Starts 0000 UTC Saturday; runs through 2359 UTC Sunday

20 [Rookie Roundup–CW](#)

1800 to 2359 UTC

January

2 **ARRL Kids Day**

Saturday 1800 UTC - 2359UTC

2-3 **ARRL RTTY Roundup**

Starts 1800UTC Saturday through 2400UTC Sunday

16-18 **ARRL January VHF Contest**

Starts 1900UTC Saturday through 0359UTC Monday

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 2020 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 ➤ 2021

April 17

[DELMARVA Hamfest, ARRL Delaware State Convention](#)

Cheer Community Center

20520 Sand Hill Road

Georgetown, DE 19947

www.radioelectronicsexpo.com

June 20

[Father's Day Hamfest at Arcadia](#)

Arcadia Fairgrounds

16920 Carnival Ave.

Upperco, MD 21155

<http://W3FT.com> Facebook Baltimore Amateur Radio 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

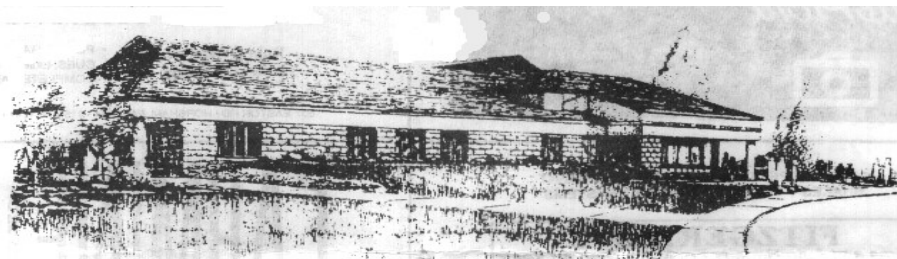
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even 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 2020 - 2021

December 3 Holiday Meeting - History of Interest
January 7 Stump the Chumps Zoom style
February 4 Bonding and Grounding (K3LR tentative)
March 4 Home Brew

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:

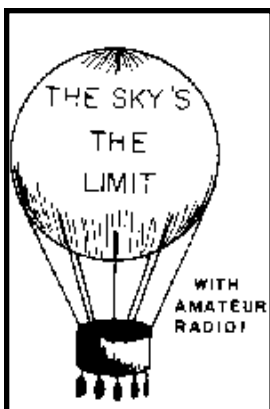
<https://www.weather.gov/phi/Info>

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: \$ 20.00
2nd FamilyMember: \$ 10.00
Student: \$ 10.00
Alumni: \$ 10.00

- **Are your dues current ?**

2020 Officers

Executive Officers

President	Tony Cuttone	W3FLH	267-679-9297
Vice-President	Tony Simek	N3YNH	
Secretary	Kathy Acker	KC3FBY	215-815-7978
Treasurer	Herb Hickmott	KB3VMN	267-718-3601
Director (A)	Doug Becker	KC3MNQ	
Director (E)	Larry Abbott	WA3ELQ	215-704-3282
Director (A)	Brandon Penglase	N3UO	215-259-7255
Director (E)	George Brechmann	N3HBT	215-443-5656
Past President	Marty Squicciarini	NR3Z	215-872-9644

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	George Altemus	KA3WXV	215-855-3856
Digital and APRS	Ron Wenig	NY3J	215-638-9257
Feedback Editor	Jim Elmore	WA4YWM	215-538-1889
Field Day 21	Doc Whitticar	W3GAD	215-968-6397
Hamfest 21	Michael Shanblatt	W3MAS	267-491-5773
Hamfest 21	Tony Cuttone	W3FLH	267-679-9297
Hamwear	Kathy Acker	KC3FBY	215-815-7978
Holiday Dinner	George Brechmann	N3HBT	215-443-5656
Membership	Mary Miles	KC3KJZ	267-625-8538
Net Manager	George Brechmann	N3HBT	215-443-5656
Publicity	Bernice Kraut	KB3PCX	215-884-8195
Refreshments	Brandon Penglase	N3UO	215-259-7255
RF Interference	Andy Vavra	KD3RF	610-287-3295
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 Konschak	WI3Z	215-491-9941
Youth Programs	Steve Larson	WW3Y	215-822-1511