Web Site k3dn.org

Warminster Amateur Radio Club

December 2019

Next Meeting December 5th - Holiday Dinner

President's Message

It was a pretty impressive sight. At our last meeting, which was our ARRL Night, I turned the program section over to Tony, W3FLH. Thanks to Tony, the main speaker for the evening was Howard Michael, CEO for the ARRL. Also, in attendance was Tom Abernathy Atlantic Division Director, Bob Famiglio Atlantic Division Vice Director, George Miller Eastern Pennsylvania Section Manager and Tom Mills, Eastern Pennsylvania Assistant Section Manager. I sat in the back of the room and watched a very interesting presentation by Mr. Michael on where he sees the ARRL now and where it is going. This was followed up by a question and answer period with each of the ARRL Representatives giving some input. It was great to see everyone in the audience listening to what was being said and asking questions of the ARRL staff. To say it was a success is an understatement. Thanks again to the ARRL Staff, Tony and our club members that made this possible.

One of the things that was discussed, and I have been thinking about since the talk is how to get new licensees on the air and to keep them interested in the hobby. How can we help them grow in the experience of ham radio? This is something we have discussed with the members involved with the club's Elmering Program. This is something that the board will be discussing in the New Year, but I would like your input. If you have any ideas or suggestions, please email me at the email address below.

By the time that this newsletter comes out we will be in the beginning of the Holiday Season. From my family to yours I hope this special time of the year brings you and your family all the happiness of the season. May you have many happy times with friends, family and time in your shack!

And just in case someone asks, the capital of New Zealand is Wellington.

See you all at the Holiday Dinner!

73 George, KC3ESH

WARC Meeting Minutes November 7th, 2019

Attendance:

• Call to Order PM 7:35

oNo Pass the Mike to facilitate meeting more quickly.

Minutes from last Meeting

• Additions/Corrections – Approved as published in Feedback

Committee Reports

• Treasurer's Report: Herb KB3VMN

o As Reported at meeting

• Programs: Marty NR3Z

- o December-Holiday Party
- o January-TBD
- o February-Homebrew
- o March-Auction
- Membership: *Kathy KC3FBY*
 - o 122 Members
- Public Service: George N3HBT
 - o No Report
- Classes: George KA3WXV/Ron WB2OOB
 - o No Classes active
 - o Will start again in March
- VEC Testing: Larry WA3ELQ

Page 2 FEEDBACK

(Continued from page 1)

- o 5 successful
- o Next session last Monday of November
- Repeater: Brian N3EXA
 - o 147.09 machine has intermittent problem, we have the parts, it will be repaired shortly
- Good and Welfare: Ken K9KJL
 - o 1 card sent out
- Other Committees
- o Radio Sport: Irwin KD3TB
 - ARRL Sweepstakes SSB contest (11/16/19)
 - CQWW Contest (11/23/19)

o ISS and Council Rock Contact: Andy KD3RF

- Potential Date 12/4 or 12/5
- Open to public
- Online streaming if you can't attend

o Union League Special Event: Joe AA3JH

- Saturday 11/9 Veteran's Day
- 11:30 5 using club call
- 40 and 20 Meetings

Old Business

Constitution Review

- o Tabled, will be starting
- Holiday Dinner
 - o Starts at 6:30pm

New Business

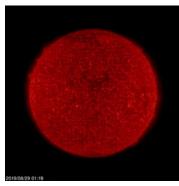
• BCARES meeting at EOC at 11/14/19 7pm

o Doing Simplex test in Bucks County after the BCARES net 11/13/19 9pm

Motion to Adjourn 7:49pm

Program: ARRL Night

The K7RA Solar Update



Another week went by with no sunspots. Average daily sunspot number this week rose from 69.9 to 70.4. Average planetary A index rose from 3.6 to 8.3.

Predicted solar flux is 70 on November 29 through December 6, 69 on December 7-8, 70 on December 9-22, 69 on December 23 through January 4, and 70 on January 5-12.

Planetary A index is predicted at 5 on November 29 through December 2, 8 on December 3-4, 5 on December 5-7, 8 on December 8, 5 on December 9-12, 6 on December 13, 5 on December 14-17, then 12 and 10 on December 18-19, 8 on December 20-25, 5 on December 26 through January 8, 6 on January 9, and 5 on January 10-12.

OK1HH sent this:

Geomagnetic activity forecast for the period November 29-December 24, 2019

Geomagnetic field will be

quiet on November 29-30, December 1, 10-16 quiet to unsettled on: December 2, 7-9, 17, 20-14

quiet to active on: December 3-6 unsettled to active on: December 18-19

active to disturbed:- none

Solar wind will intensify on December (3-9, 13-14,) 16-17, (18-24). Parenthesis means lower probability of activity enhancement.

Courtesy of the ARRL Newsletter

(Continued on page 3)

(Continued from page 2)

FOR SALE

Nine (9) aluminum military mast sections sold by the MAST COMPANY, high quality aluminum, each section about 3.75 feet once overlapped on each other for a total height of approximately 34 feet. Brand new in shipping carton. I can bring them to one of the meetings if you are interested. Contact, Bob, K3SRO at dlrwild1@verizon.net

267-535-9189 cell ASKING: \$110 cash or check

Union League Special Event station - K3DN



Picture shows Brian operating and Joe logging.

Operators were Joe, AA3TH, his YL, Marianne (Can't remember her call?), Brian, N3EXA, and myself, Charles, KS3Z.

We operated from 11:00-4:30 PM, made over 100 QSOs, mostly on 40 meters. There were 1 or two on 20 meters as well.

The Union League again proved a great host for this event.



This picture is a view of the roof of the Union League. While it is a six story building, you can see it sits well down in the "Concrete Canyon", that is Center City Phila. Joe is seen atop the cooling unit above the roof.

Sorry more members couldn't have taken advantage of this opportunity to operate, we had some good pileups.

We will be designing QSL cards to send out.

Charles, KS3Z

Page 4 FEEDBACK

(Continued from page 3)

Radio Amateur's "Tribute to a Century of Broadcasting" Video Debuts on YouTube



Art Donahue, W1AWX, of Franklin, Massachusetts, has posted his "Tribute to a Century of Broadcasting" video in recognition of the centennial of formal radio broadcasts. The video features a complete scan of the AM broadcast band (530 - 1700 kHz), with station IDs for all 118 AM radio channels.

Donahue told ARRL he recorded these off the air using two long-wire antennas in the trees. Each slide highlights one station on each frequency with call sign, location, power, day/night/gray-line reception, distance, and year of first broadcast, accompanied by audio of an actual station identification.

"If you ever spent evenings when you were a kid trying to hear long-distance radio stations on your AM radio, this video has what they all sound like today," Donahue

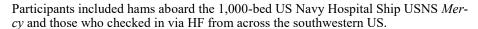
said. "I wanted to do something in honor of the KDKA broadcasting centennial next year and thought I'd try to get every single channel recorded. It took a lot of time, patience, and good luck. You'll hear a lot of surprises on the video."

Donhaue added, "It was a fun project to work on."

California Hams Support Major Terrorist Attacks Response Drill

Seventy southern California amateur radio volunteers deployed to 30 local hospitals, clinics, and city emergency operations centers on November 6 to support public safety and emergency medical functions during a mock terrorist response drill that tested law enforcement and medical treatment facilities in San Diego County.

The scenario was a coordinated attack at two locations 50 miles apart that resulted in mass casualties and inundated local emergency departments with 1,000 volunteer actors suffering from simulated injuries and frantic families (also actors) trying to locate loved ones. One simulated attack occurred at California's LEGOLAND theme park, which closed for a half day to support the exercise. The other simulated attack occurred at a 20,000-seat amphitheater. During the 5-hour exercise, hams relayed hundreds of formal ICS 213 messages via Winlink and voice nets from hospital to hospital and from hospitals to the County Medical Operations Center.





Hospitals used this full-scale exercise to fulfill their annual accreditation training requirement. Recent changes in California hospital regulations require smaller medical clinics to conduct annual certification drills, and that expansion of clinic participation has led to a flood of requests for trained radio operators at hundreds of day surgery clinics and group homes not covered previously by ARES. Because demand far exceeds the availability of ARES operators for mid-week daytime drills, ARRL San Diego Section Manager Dave Kaltenborn, N8KBC, has encouraged smaller clinics and medical networks to consider developing their own internal amateur radio capabilities. Several people involved at the smaller clinics have taken classes and training provided by ARES.

The exercise included cross-border participation by members of Club de Radio Experimentadores de Baja California (CREBC) at Tijuana General Hospital in Tijuana, Mexico. CREBC hams maintain an extensive Winlink and repeater network used by amateurs on both sides of the border. -- Thanks to ARRL San Diego Section Manager Dave Kaltenborn, N8KBC

Courtesy of the ARRL Newsletter

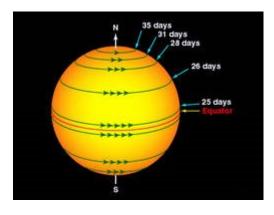
Why Propagation Repeats About Every 27 Days

The sun rotates in about 27 days, but different solar latitudes rotate with different periods. This is why propagation repeats roughly every 27 days, as NASA <u>explains</u>.

The sun's rotation was first detected by observing the motion of sunspots. The sun's rotation axis is tilted by about 7.25° from the axis of Earth's orbit, so we see more of the sun's north pole in September and more of its south pole in March. Because the sun is a ball of gas/plasma, it does not have to rotate rigidly, as solid planets and moons do. In fact, the sun's equatorial regions rotate faster -- taking only about 24 days -- than the polar regions, which rotate once every 30+ days.

The source of this "differential rotation" is an area of current research in solar astronomy. -- *Thanks to* The ARRL Contest Update *and NASA*

Courtesy of the ARRL Newsletter



Happy 45th Birthday, AMSAT-OSCAR 7!

The world's longest-lived satellite, AO-7, turned 45 years old this month. It was <u>launched</u> on November 15, 1974, from Vandenberg Air Force Base in California. After nearly 7 years of service, AO-7 was thought to have reached the end of its life in June 1981 due to battery failure, and a <u>premature obituary</u> appeared in the *AMSAT Satellite Report*. In an interesting footnote, although AO-7 was thought to be nonfunctional after 1981, <u>it's been reported</u> that the Polish Solidarity movement used AO-7 to pass messages in 1982, while Poland was under martial law. Twenty years later, on June 21, 2002, G3IOR reported hearing "an old-style CW beacon" from an unknown OSCAR near 145.970 MHz. It didn't take long to identify the satellite as AO-7, which remains operational and well-used while it's in sunlight. To celebrate AO-7's 45th birthday, AMSAT plans to auction a set of gold-plated AO-7 cufflinks and a 50th An-



niversary AMSAT lab coat (size 42R). The auctions are now live on eBay and will conclude shortly after 0200 UTC on November 26, 2019. AMSAT reports that 100% of the proceeds will go toward Keeping Amateur Radio in Space. -- *Thanks to* AMSAT News Service

Courtesy of the ARRL Newsletter

WSJT-X Development Group Announces Second Bug-Fix Release, WSJT-X Version 2.1.2

The WSJT Development Group, which just this week announced the release of WSJT-X version 2.1.1, has now issued a second bug-fix release, version 2.1.2. WSJT-X is the free software suite that includes the FT4 and FT8 protocols. According to the developers, an error in the code broke the WSJT-X rig control features for certain Icom radios. The Release Notes detail program changes made since WSJT-X 2.1.0. The WSJT-X 2.1 User Guide has also been updated. Upgrading from earlier versions of WSJT-X should be seamless, with no need to uninstall previous versions or move any files.

to installation packages for Windows, Linux, and Macintosh are available. WSJT-X is licensed under the terms of Version 3 of the GNU General Public License (GPL). Development of this software is a cooperative project to which many amateur radio operators have contributed. The WSJT Development Group asks those using the code to let the developers know, as well as to report bugs or suggest improvements to the code.

Courtesy of the ARRL Newsletter

RF-Seismograph Gets Traction in *Hackaday*

Alex Schwarz, VE7DXW, has theorized for some time now that his RF-Seismograph, initially aimed at indicating band openings, seemed to also act as a real seismograph of sorts, with effects of earthquakes affecting HF noise levels and -- going out on a limb -- actually briefly *enhancing* HF propagation (click on image). Schwarz has some support from Professor Kosuke Heki of Hokkaido University in Japan, who has been researching whether changes occur in the ionosphere as a result of an earthquake.

The work of both citizen scientist Schwarz and space geodesy expert Heki caught the attention of *Hackaday*, the online publication with a stated goal of promoting "the free and open exchange of ideas and information." A November 12 *Hackaday* article, "HF Propagation and Earthquakes," outlines the observations of both men. According to the article, Heki "knew that changes in the ionosphere can affect GPS and GNSS receivers on the ground, and with Japan's vast network of receivers to keep track of the smallest of movements of the Earth's crust, he was able to spot an anomalous buildup of electrons directly above the devastating 2011 Tohoku-Oki earthquake that preceded the earthquake by 40 minutes."

Page 6 FEEDBACK



Heki's theory is along these lines: Chemical bonds in the rock --specifically peroxy bonds between two oxygen atoms -- are broken by microfractures, leaving one side of the peroxy bond with excess electrons and the other with a positive hole. "These holes tend to migrate from high stress to unstressed areas of the rock, which leads them to eventually reach the surface, leaving it with a net positive charge," the *Hackaday* piece says. "As stress in the rock

below increases, the number of positive holes reaching the surface rapidly multiplies, drawing electrons from the atmosphere to balance the charge. The moving charges generate an enormous electromag-

netic field that can reach all the way up to the ionosphere, creating just the kind of anomalies that Professor Heki observed."

This week, Schwarz reported that the US Geological Survey recorded nine "significant earthquakes" on November 11, eight of which also were recorded by his RF-Seismograph. According to Schwarz, several small quakes early in the morning "opened the 40-meter band slightly, but the precursor of the quake [in Neiafu, Tonga] created a disturbance starting 4 hours prior to the quake and a total radio blackout between 0330 UTC and 0550 UTC. The quakes in late morning did not have a great effect on the local propagation. The one from Vanuatu created 80-meter propagation for 10 minutes only. At 2340 UTC, another quake from Indonesia opened the 30-meter band again," Schwarz said.

The *Hackaday* article concludes, "Clearly, the RF-Seismograph is not yet ready to claim to have a solid predictive ability for earthquakes. For that matter, Dr. Heki's space-based observations aren't ready to stake that claim either. But it certainly looks like ionospheric changes can be correlated to earthquakes, both in time and space..."



Alex Schwarz, VE7DXW, spoke at the 2015 ARRL-TAPR Digital Communications Conference. [Photo courtesy of HamRadioNow]

Courtesy of the ARRL Newsletter

MARSRADIO is Keeping the Phone Patch Alive

A military plane over the North Atlantic suddenly experiences rapid decompression. A call goes out to MARSRADIO, explaining the emergency and requesting a phone patch to the aircraft's command post. Over the next few hours, a MARSRADIO volunteer handles many phone patches to help resolve the situation. An adjunct within the Air Force Military Auxiliary Radio System (MARS), MARSRADIO is reminiscent of an era when MARS facilitated hundreds of troop morale phone patches each night between soldiers deployed in Vietnam and their families and loved ones back home.



Today, MARS is more oriented to official Department of Defense (DoD) communication, but the venerable phone patch remains viable within MARSRADIO, a special MARS operations group that provides primary service and a backup system that handles requests for official and morale phone patches, weather forecasts, informal messages, selective calling tests, and radio checks. Membership in MARSRADIO is open to both Army and Air Force MARS members, and it is seeking additional volunteers.

MARSRADIO members have advanced station capabilities, put in many hours of participation, and operate under more stringent requirements than the standard MARS program does. These include the ability to monitor two frequencies simultaneously; an amplifier; a directional antenna (i.e., Yagi) for operation above 13 MHz; dipoles for use below 13 MHz; internet access; at least 36 hours of participation per quarter, and no digital requirement, if MARSRADIO is the station's primary assignment.

"MARSRADIO" is the net call sign for the 11th Air Force MARS MARSRADIO Squadron (11AFMS) under the 1st AFMARS Special Operations Group (1AFMSOG). MARSRADIO net members guard frequencies as much as possible, and the net is authorized 24/7/365. MARSRADIO serves as a backup to US Defense Department communication, including the US Air Force Global System,

handling an average of 2,500 requests each year for assistance -- from providing estimated times of arrival to communications involving medical or mechanical emergencies.

MARSRADIO has evolved into a DoD asset that's noteworthy for its volunteer support, and interest is rising as HF regains importance. Volunteers handle communication for all branches of the military and for other US government users. All types of DoD aircraft and ground units may request support to complete their missions, and the net is open to US allies.

MARSRADIO is not for every ham or every MARS member, but those interested in service would be working with real-time traffic on a daily basis. A fast-track program is in place to bring well-qualified operators directly into MARSRADIO. While to-day's MARS is highly digital and encrypted, the phone patch is a totally different animal. Members of MARSRADIO do not need digital capability. They don't even need a landline. A Voice over Internet Protocol (VoIP) connection via the internet will provide the phone line needed to run a patch.



More information on MARSRADIO is available.

Courtesy of the ARRL Newsletter

France Gives its Highest Honor to The Secret Wireless War Author Geoffrey Pidgeon

The author of <u>The Secret Wireless War</u>, Geoffrey Pidgeon, recently became the 6,000th veteran to receive the French Legion of Honor (Legion d'Honneur). Through his undercover work in British intelligence, Pidgeon, now 93, played a pivotal role in the D-Day landings. His book, which recounts the important role of the



Communications Division of Britain's Secret Intelligence Service (SIS) during World War II, has long been a favorite among hams.

"There never was, in the whole history of wireless, a bigger role for the amateur wireless enthusiast," says Pidgeon. "This is an extraordinary story that includes hams among those patriots that undoubtedly helped the Allied war effort."

Pidgeon said he was "somewhat overwhelmed" by the turnout for the award presentation by French Ambassador to the UK Catherine Colonna. UK Defence Secretary Ben Wallace also attended. The event attracted news media as well. Reports included one from Forces TV. Pidgeon also was interviewed by London's *The Sunday Times*.

Geoffrey Pidgeon. [Forces TV]

"They made a fuss of me today," Pidgeon told Forces TV.

The Secret Wireless War offers a history of the SIS, its growing use of wireless in the 1930s, its involvement in the dissemination by wireless of Enigma (Ultra) intelligence, and a whole range of secret uses of wireless as part of the successful prosecution of the war.

The book documents the personal tales of those who were part of this most secret of units, and events that helped to win the war: Secret agents abroad, wireless operators handling Ultra and agents' traffic, wireless engineers, interceptors, and administrators; the story of Churchill's personal wireless operator; a fleet of 70+ Packard motor cars and converted Dodge ambulances used as mobile wireless stations; and hams listening to the German secret service and the Gestapo.

Pidgeon's memoir of his days in MI6 Communications during World War II is distributed in the US by ARRL.

Courtesy of the ARRL Newsletter

[Editor's Note: The Secret Wireless War is available in the WARC library in the upstairs room at the Senior Center]

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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

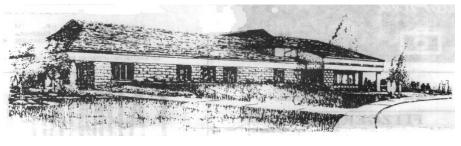
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even 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 2019-2020

December – Holiday Dinner January-TBD February-Homebrew March-Auction

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.

2019 - 2020 Contest Calendar

December

6-8 160 Meter

2200 UTC Friday, ends 1600 UTC Sunday

14-15 10 Meter

0000 UTC Saturday; runs through 2359 UTC Sunday

22 Rookie Roundup-CW

1800 to 2359 UTC

January

1 Straight Key Night

0000 UTC - 2359 UTC January 1

4 Kid's Day

4-5 RTTY Roundup

1800 UTC Saturday through 2359 UTC Sunday

18-20 VHF Contest

1900 UTC Saturday through 0359 UTC Monday

February

15-16 International DX Contest - CW

0000 UTC Saturday through 2359 UTC Sunday.

> ATLANTIC DIV. HAMFESTS > 2019-2020

December 7

SantaFest

American Legion Youth Camp

9201 Surratts Road

Cheltenham, MD 20623

http://www.pgares.org/

January 11

WinterFest

Vietnam Veterans of America 8000 Derry Street Harrisburg, PA 17101 http://www.w3uu.org

January 26

Post Holiday Hamfest

Odenton Volunteer Fire Company 1425 Annapolis Road Odenton, MD 21113 https://sites.google.com/site/marylandmobileers/hamfests-1/hamfest-2

April 18

DELMARVA Amateur Radio and Electronics EXPO, ARRL Delaware State Convention

CHEER Community Center 20520 Sand Hill Road Georgetown, DE 19947 http://www.radioelectronicsexpo.com

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 2019 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

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SKYWARN INFORMATION

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

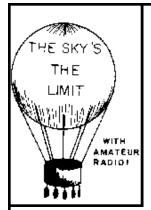
Fairless Hills, PA (many remote access locations throughout Bucks County)

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

	ı	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, Jacek Ostrowski KC3HXF

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

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.

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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?

2019 Officers

Executive Officers

President	George Acker	KC3ESH	215-815-7783
Vice-President	Marty Squicciarini	NR3Z	215-872-9644
Secretary	Norm Miles	AB3ZZ	267-625-9117
Treasurer	Herb Hickmott	KB3VMN	267-718-3601
Director (A)	Michael Shanblatt	W3MAS	267-491-5773
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	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	George Altemus	KA3WXV	215-855-3856
Digital and APRS	Ron Wenig	NY3J	215-638-9257
Feedback Editor	Jim Elmore	WA4YWN	1215-538-1889
Field Day 20	Doc Whitticar	W3GAD	215-968-6397
Hamfest 20	Michael Shanblatt	W3MAS	267-491-5773
Hamfest 20	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