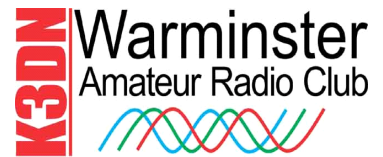




FEEDBACK



Web Site k3dn.org

Warminster Amateur Radio Club

January 2018

Next Meeting January 4th - Stump the Chumps

President's Message

The holidays are behind us, New Year's is upon us, and 2018 looms large ahead! WARC has a big year in front of us, and with everyone pulling together and contributing in our own unique way, we're poised to make this a better, more successful year than last – and that's some big shoes to fill!

One of the ways you can contribute is to be active; on the air, with club activities, or even by taking a leadership role within WARC. We are always looking for members who are willing to step up and take on responsibilities with the club, whether as a committee chair such as Refreshments or Field Day, or by seeking a position on our Executive Board and helping guide the club's direction going forward. We have open elections annually, with nominations in March & April, and voting for Board members every May. If you are interested in becoming a more active club participant, please contact any of our current Board members who will be more than happy to help you get involved.

Winter months tend to keep us huddled up inside, but that plays right into our sweet spot as hams! Gone are the days of boatanchor tube rigs heating our shacks on a cold winter night, but sitting in front of our radios and tuning the bands for that next contact – whether it's that elusive DX country or your regular sked with that buddy a few states away – remains a great source of enjoyment for all of us, and a relaxing way to spend a few hours while we're cooped up.

This month's meeting will once again be a version of our own "Stump the Chumps" gameshow, hosted by Irwin & Andy (KD3TB & KD3RF, respectively)! This was a big hit last year, and is shaping up to do the same this year. With teams competing head-to-head, and some audience participation, it's a great time for all, and there's even some prizes at the end! I, for one, am truly looking forward to it. See ya there!

de Tony, W3FLH

73

THE K7RA SOLAR UPDATE

Tad Cook, K7RA, Seattle, reports: There were no zero-sunspot days over the December 21-27 reporting week. Then, on Thursday, December 28, no sunspots were visible. So far in 2017, there have been 102 days with no sunspots, or 28%.

The average daily sunspot number was 17.4, up from 2.3 over the previous 7-day reporting period. The previous week had such a low average because only 1 day out of that week had any sunspots at all — December 20, with a sunspot number of 16.

The average daily solar flux was 74.6, up from 71.5 the previous week.

The average daily planetary A index declined from 9.4 to 7.1, while the average mid-latitude A index dipped from 6.1 to 5.7.

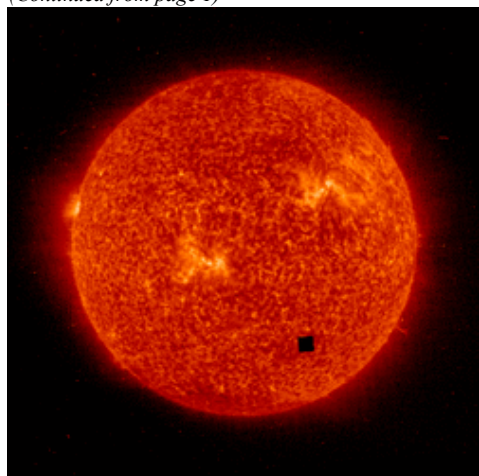
We probably will not observe a return of any sunspots at least until January 5, when the predicted solar flux is expected to increase slightly, from 68 to 72.

Predicted solar flux for the next 45 days is 70 on December 29-31; 68 on January 1-4; 72 on January 5-12; 74 on January 13; 75 on January 14-25; 74 on January 26; 72 on January 27-February 8; 74 on February 9, and 75 on February 10-11.

The predicted planetary A index is 5, 5, 10, 25, 15, and 8 on December 29-January 3; 5 on January 4-6; 10, 12, and 6 on January 7-9; 5 on January 10-12; then 22, 16, 20, 16, 10, 8, and 5 on January 13-19; 12 on January 20-21; 8 on January 22; 5 on January 23-26; 10, 25, 15, and 10 on January 27-30; 5 on January 31-February 2; 10, 12, and 6 on February 3-5; 5 on February 6-8, and 22, 16, and 6 on February 9-11.

(Continued on page 2)

(Continued from page 1)



The geomagnetic activity forecast for December 29-January 24 from F.K. Janda, OK1HH: Geomagnetic field will be:

- Quiet on December 30, January 5, 11, 17-18, 23-24
- Mostly quiet on December 29, January 4, 6, 19,
- Quiet to unsettled on January 7-8, 10, 16,
- Quiet to active on December 31, January 2-3, 12, 14-15, 22
- Active to disturbed on January 1, 9, (13, 20-21)

Amplifications of the solar wind from coronal holes are expected on December 31, January 1-3, (6-8,) 10-13, 19-20, (21-22).

Figures in parentheses indicate a lower probability of activity enhancement.

Jeff Hartley, N8II of Shepherdstown, West Virginia (FM19ck), reported on December 22:

“We had some excellent low-band conditions on the evenings of December 20-21 allowing QSOs with S01WS Western Sahara, Finland, Sweden, European Russia, Lithuania, Romania, and Ukraine on 160, with best signals mostly around 2400 and 0100. On 80, Russia, Latvia, Lithuania, Greece, Poland, Hungary, Slovenia, and Romania were worked. Many signals on 80 were at least S-9, as were several on 160.

“On December 22, 15 opened late to Europe, allowing a very solid S-9 QSO with EA7ATX at 1603 on 15 phone, followed by S-9 + 15 dB with MI5AFK in Northern Ireland. England and VO1CAL in Newfoundland were also worked on SSB and Hungary on CW. There could have been some sporadic E involved, not sure.”

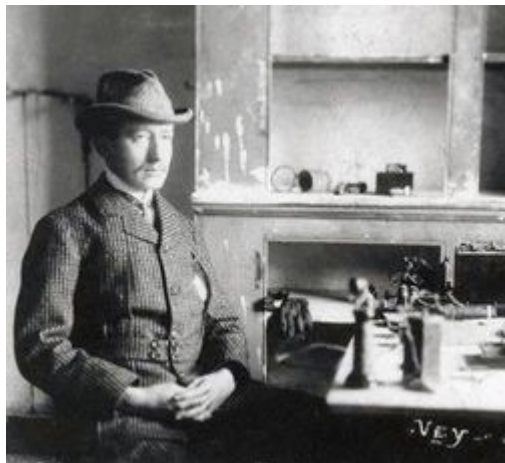
For [more information](#) concerning radio propagation, see the ARRL Technical Information Service at. Here is an [explanation](#) of the numbers used in this bulletin. An [archive](#) of past propagation bulletins is on the ARRL website. More [information and tutorials](#) on propagation are on the website of Carl, K9LA. The ARRL website also offers [monthly propagation charts](#) between four US regions and 12 overseas locations.

Sunspot numbers for December 21-27, 2017 were 18, 18, 22, 22, 17, 14, and 11, with a mean of 17.4. The 10.7-centimeter flux was 76, 75.3, 76.2, 76.1, 75.7, 71.8, and 71, with a mean of 74.6. Estimated planetary A indices were 3, 2, 5, 12, 10, 11, and 7, with a mean of 7.1. Estimated mid-latitude A indices were 2, 2, 4, 9, 9, 8, and 6, with a mean of 5.7.

Courtesy of the ARRL Newsletter

Radio Anniversaries Abound in December

December is the month in which three notable events in radio history occurred -- the first radio transmission heard across the Atlantic Ocean in 1901, the first broadcast of the human voice and music in 1906, and the first successful transatlantic Amateur Radio HF transmissions in 1921.



Marconi at Signal Hill in Newfoundland.

On December 12, 1901, Italian wireless pioneer Guglielmo Marconi succeeded in receiving the first transatlantic radio signal, transmitted from Poldhu, in Cornwall, England, to St. John's, Newfoundland, Canada. Marconi's team in Cornwall transmitted the letter "S" in Morse code, and this was heard by Marconi and his assistant George Kemp at a facility set up in Cabot Tower on Signal Hill in St. John's. On the Cornwall side, Marconi had erected a powerful spark-gap transmitter feeding a massive antenna. The receiving team used a kite antenna. The experiment proved that radio signals could be transmitted beyond the line of sight, opening the door to global wireless communication.

An article in the December 2007 issue of *QST* suggested that absorption may have been less in 1901 than in the 21st century, perhaps contributing to the success of the feat, which occurred during daylight on the Canadian end.

On Christmas Eve 1906, experimenter Reginald Fessenden made what may have been the first radio broadcast to include speech and music. The transmission originat-

(Continued on page 3)

(Continued from page 2)

ed at Brant Rock, Massachusetts, about 30 miles from Boston.

As he's done in year's past, Brian Justin, WA1ZMS, of Forest, Virginia, will commemorate that first audio broadcast by operating W12XLQ on 486 kHz this month, marking the 111th anniversary of the Fessenden's accomplishment. Historic accounts say Fessenden played the violin -- or a recording of violin music -- and read a brief Bible verse, astounding radio experimenters and shipboard operators who heard the broadcast.

"Since we now have a ham band on 630 meters, I will have a shorter transmission period this year that will only cover the Christmas holiday," Justin told ARRL. That's because he hopes to be active on the new band himself.

Justin will begin his transmission on December 24 at 1700 UTC and continue until December 26 at 1659 UTC. For his transmitter in 1906, Fessenden used an ac alternator modulated by placing carbon microphones in series with the antenna feed line. Justin's homebuilt station is slightly more modern, based on a 1921 vacuum tube master oscillator power amplifier (MOPA) design, using a UV-202 tube. The transmitter employs Heising AM modulation, developed by Raymond Heising during World War I.



Reginald Fessenden.

[Send](#) listener reports directly to Brian Justin, WA1ZMS.

In 1921, ARRL sponsored two series of transatlantic tests to see if signals from previously qualified Amateur Radio stations could be heard at a receiving station in Ardrossan, Scotland. The second series succeeded, with several ham stations heard on the receiving end, using equipment far superior to what had been available to Marconi just 20 years earlier. "[The Story of the Transatlantics](#)" chronicled the events in the February 1922 issue of *QST*, to great fanfare. As Mike Marinaro, WN1M, recounted in "[The Transatlantic Tests](#)," in the May 2014 issue of *QST*, the first signal "unofficially" heard in Scotland was actually that of a pirate, identifying as 1AW and not using the prearranged transmission format.



Paul Godley, 2ZE.

The "rough listening post" in Scotland, staffed by receiver designer Paul Godley, 2ZE, and D.E. Pearson of the Marconi Company, was equipped with a superheterodyne and regenerative receiver connected to a 1,300-foot Beverage antenna, 12 feet above ground.

On December 10, the CW signals of official entry 1BCG, owned by Minton Cronkhite, "were solidly heard on 230 to 235 meters," Marinaro wrote in 2014. "This signal derived from the specially designed and constructed station of the Radio Club of America at Greenwich, Connecticut -- the only station heard that morning."

Connecticut radio amateur and radio history buff Clark Burgard, N1BCG, will be among those celebrating the 96th anniversary of the first transatlantic shortwave transmission in Greenwich, Connecticut. Several other stations will take part by establishing contacts between the US and Europe, including GM7VSB in Ardrossan, Scotland.

No specific bands and frequencies were set in advance, in order to "permit flexibility due to propagation." Burgard has posted [additional information](#) on his QRZ.com profile page.

Chris Codella, W2PA, provides [additional radio history](#) on his "Ham Radio History" website.

Courtesy of the ARRL Newsletter

(Continued on page 4)

(Continued from page 3)

Amateur Radio Volunteers Support Evacuation Shelters in Fire that Refuses to Die

Since its start on December 4, the massive and only partially contained Thomas Fire in southern California by mid-week had consumed nearly 240,000 acres, destroyed more than 700 single-family residences and threatens thousands more, and caused residents in fire-threatened areas to evacuate. Amateur Radio volunteers have been supporting communication for American Red Cross shelter sites in Ventura and Santa Barbara counties, passing traffic between evacuation centers. One of several fires that have broken out across Southern California, the Thomas Fire is far and away the largest. The Ventura County Auxiliary Communication Service (ACS)/Amateur Radio Emergency Service (ARES) Net activated on December 5, "as smoke filled the air, and the fire grew to catastrophic proportions," said Ray Smith, KI6VED, who volunteered with his wife Jade, KI6VFQ. Their home was included in an evacuation order.



"The worst night for the crew at Nordhoff came Wednesday, December 6, when the fire surrounded the Town of Ojai on three sides," Smith explained. "The incident commander decided to shelter in place, instead of trying to move 250 refugees out on the only open exit, which was sometimes closed."

The Ojai Valley Amateur Radio Club begins operations: (L-R) Ken Williams, KI6VDT, is assisted by Alex Elliot, KI6ZPT, as they set up a 2-meter ground plane. An unnamed Red Cross volunteer discusses the situation with Wayne



Smith told ARRL that several fire vehicles dispatched to Nordhoff High School -- a shelter site -- taking up positions around the campus, and firefighters stood guard by classrooms, opened to accommodate evacuees sleeping in their cars, some with their pets. "They were warned that if the trucks sounded their air horns, they were to pick up the [pet] cages and run for shelter on campus immediately," Smith said. "The flames moved east to west along Nordhoff Ridge, with an army of firefighters retreating before them. For a time, the radio operators, like everyone else, did not know what would happen to us," Smith said the fire passed within 2 miles of the shelter location.

Radio amateurs also deployed to the Ventura County Emergency Operations Center (EOC). ARRL Ventura County District Emergency Coordinator Rob Hanson, W6RH, said the ACS/ARES volunteers staffed four evacuation centers, in addition to the EOC.

By Tuesday morning, Ventura County was under siege. The Smiths' next-door neighbor is preparing to evacuate. [Jade Smith, KI6VFQ, photo]

network live-streamed video from several sites. "Loss of primary power has required using the solar power backup capabilities, but, unfortunately, the heavy smoke has made that backup less than fully reliable," he said. In addition some sites are down because of power outages, and at least one hilltop site was overrun by fire. In addition to power loss to repeater sites, solar panels charging off-grid batteries have been affected by the huge plumes of smoke blocking the sun.

"The Santa Barbara District ARES organization works closely with Santa Barbara County OEM [and] is prepared to support any requests as the Thomas Fire continues to burn into Santa Barbara County," Fortney told ARRL.

Santa Barbara Section Manager Jim Fortney, K6IYK, told ARRL that an Amateur Radio digital network (ARDN) MESH video



The December 12 map of the Thomas Fire.

The Fallbrook Amateur Radio Group and other groups in the North County (San Diego) provided communication at some evacuation centers, and the Red Cross activated its own Amateur Radio team.

As of mid-week, FEMA reported, evacuation orders remained in effect for more than 93,000 residents, although shelter occupancy

(Continued on page 5)

was down to about 300. A boil water advisory has been issued for Ventura and Santa Barbara counties.

Smith said that as of mid-week, Amateur Radio volunteers remain on duty in Santa Barbara County, "as the Thomas Fire has refused to die."

Courtesy of the ARRL Newsletter

Radio Amateur's Invention to Treat Alzheimer's Patients Going to Clinical Trials

Inveterate inventor and radio amateur Eric Knight, KB1EHE, may be on the cusp of medical history as a device he developed in collaboration with a prominent Alzheimer's disease researcher enters clinical trials this month. Both are hoping that the device, which essentially saturates the brain with low levels of RF, may prove to be a viable treatment for the dreaded disease affecting millions.

"Sometimes breakthroughs happen in ways that are unexpected," Knight told ARRL.



Knight learned of experiments that world-renowned Alzheimer's researcher Dr. Gary Arendash was carrying out on mice specially bred to have the disease, exposing them to low levels of RF. Knight said the effects were dramatic, sometimes even reversing the disease's effects in the mice. Borrowing some concepts from his early experiments with small rockets and avionics, he set about developing, and later patented, a device that could provide the requisite RF exposure to the human head.

"In the early 2000s, we were trying to figure out then how to make antennas that would wrap around the airframes of the rockets we were designing," he said, noting that the diameter of his group's space vehicle was about the same as that of a human head. Knight learned that Arendash was attempting to extend his investigations in a similar vein, and eventually they collaborated.

"He came at it from mice and science, I came at it from an aerospace and hobby perspective," said Knight, who patented a device based on a bicycle-type helmet. At the same time, Arendash was developing a similar wearable -- a fabric cap resembling an old-time aviator's headgear.

Eric Knight, KB1EHE.

Both devices are embedded with small antennas to bathe the brain in electromagnetic radiation in the 900 MHz spectrum set aside for Industrial, Scientific, and Medical (ISM) applications -- some 100 MHz higher than a cell phone's frequency.

"Ironical for sure," Knight said. "Who would imagine that cell phone radio waves could be a potential treatment for Alzheimer's disease?"

Knight, who has no medical background, said the device to be used in the clinical trials consists of the cap plus a palm-sized transmitter and wiring harness worn on the arm. The resulting combination has been dubbed the NeuroEM 1000. Participants will get doses of RF twice a day.

From the Food and Drug Administration's (FDA) standpoint, the clinical trials aim primarily to show that the technology is safe, but Knight said he and Arendash are also looking for data that might demonstrate that the device could be beneficial in treating Alzheimer's. The protocol they've developed goes further than what the FDA requires and includes before-and-after baseline data, with cognitive testing, assays of spinal fluid and blood, and PET scans.

"The hope is that there is a tiny bit of efficacy. Then we can work to refine it," Knight said, adding, "No one is expecting a magic cure."

Courtesy of the ARRL Newsletter

More Room for Hamvention® at Greene County Fairgrounds and Expo Center

Hamvention® reports that the Greene County Commissioners and the Greene County Fair Board have approved the construction of a new building at the Greene County Fairgrounds and Expo Center, the new Hamvention venue in Xenia, Ohio.



"Greene County officials have decided to move forward with construction of a new building, as it will continue to expand their presence in the region as a world-class Exposition Center," Hamvention Spokesperson Michael Kalter, W8CI, said in a news release. "Hamvention certainly benefits from the decision to expand the Expo Center footprint. Construction is planned to be complete ahead of Hamvention 2018, and [the new building] will be used for the event."

In addition to the new structure, another building on the property, previously known as Fairgrounds Furniture, is being vacated and will be available for use by Hamvention in May 2018. Additional details are forthcoming.

Kalter said Hamvention has been told that the additional floor space will cover an area larger than the tents Hamvention used for some activities in 2017.

"Although this decision was made to expand opportunities at the Expo Center, Hamvention is grateful for the support Greene County, Xenia Township, and the city of Xenia," Kalter added.

Courtesy of the ARRL Newsletter

Bouvet DXpedition Nears its Moment of Truth

The group mounting the [3Y0Z Bouvet Island DXpedition](#) reports that it's sorting through the myriad of details necessary to make a DXpedition to the second most-wanted DXCC entity a reality. Plans call for 3Y0Z to be on the air in late January and early February.



A shipping container holding tons of gear is now in Punta Arenas, Chile, set to be moved out of "customs bond" soon. Last-minute supplies being collected to take as extra baggage include ice screws, "should we find ourselves camping on refrozen melt areas on the glacier."

Shelter and antenna layouts have been finalized, as has marine transportation. Team members will take a marine safety course before embarking. Still under negotiation is the cost of helicopter shuttles from the ship to and from the island.

Two years of detailed planning have gone into the Bouvet Island DXpedition. "We want to live up to all that is expected of us on this 'generational' DXpedition, which is likely the largest and most challenging DXpedition ever," the DXpedition team said earlier this fall. "Indeed, there may never be another like it."

The 3Y0Z [Propagation Page](#) has been updated and now includes a button visitors can click, enter a call sign and grid square, and get a propagation forecast specific for their location -- all bands over a 24-hour period.

A dependency of Norway, Bouvet is a sub-Antarctic island in the South Atlantic. The last Bouvet activation was 3Y0E, during the winter of 2007-2008. -- Thanks to [The Daily DX](#) for some information

Courtesy of the ARRL Newsletter

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.

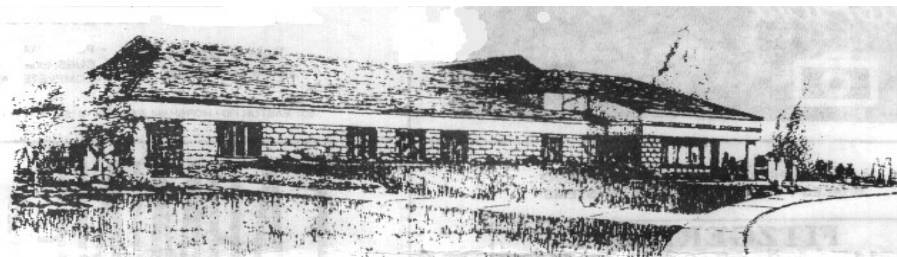
PROGRAMS 2018

January – Stump the Chumps

February - Club Auction

March – CAP Comms w/Chris Trotter KB3CET

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.

2018 Contest Calendar

January

6-7 ARRL RTTY Roundup

Starts 1800 UTC Saturday, ends 2359 UTC Sunday

20-22 ARRL January VHF Contest

Starts 1900 UTC Saturday, ends 0359 UTC Monday

February

12-16 [School Club Roundup](#)

1300 UTC Monday through 2359 UTC Friday.

17-18 [International DX – CW](#)

Starts 0000 UTC Saturday; ends 2359 UTC Sunday

March

4-5 [International DX– Phone](#)

QSO Parties

Jan 27 Montana 0000Z-2400Z,

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 2018 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@arrrl.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@arrrl.net
Alt Contact: Jim, 610-287-5630

➤ ATLANTIC DIV. HAMFESTS ➤ 2018

January 13 - Harrisburg Radio Amateurs Club Winterfest

Vietnam Veterans of America

8000 Derry Street

Harrisburg, PA 17101

<http://www.w3uu.org>

January 28 - Post Holiday Hamfest

Odenton Volunteer Fire Company

1425 Annapolis Road

Odenton, MD 21113

<https://sites.google.com/site/marylandmobileers/hamfests-1/hamfest-2>

April 21 - Delaware State Convention (Delmarva Amateur Radio & Electronics EX-PO)

Cheer Community Center

20520 Sand Hill Road

Georgetown, DE 19947

<http://www.radioelectronicsexpo.com>

May 6 - Eastern Pennsylvania Section Convention

Bucks County Community College - Lower Bucks Campus

1304 Veteran's Highway (Rte. 413)

Bristol, PA 19007

<http://www.k3dn.org>

SKYWARN INFORMATION

MOUNT HOLLY NWSFO SKYWARN Weekly Information Net: EVERY THURSDAY AT 21:00 HOURS

SKYWARN Net Repeater Listing/ Streaming Audio of scheduled SKYWARN

Net: <http://www.skywarnnet.net>

You do NOT have to be a certified SKYWARN Weather Spotter to check into the Net

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:

<http://www.erh.noaa.gov/phi/skywarn/index.html>

SKYWARN Basic Weather Spotter Educational Programs URL:

<http://www.erh.noaa.gov/phi/skywarn/training.html#sched>

➤ CLUB EQUIPMENT

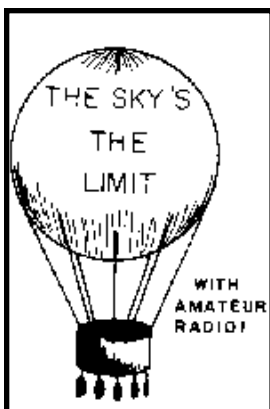
WARC has 2 Baofeng UV-5R dual band HT's and a Yaesu FT-2900 2M mobile that are available for use by members of the club.

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, George Acker KC3ESH



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, Morse code, 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 ?

2018 Officers

Executive Officers

President	Tony Cuttone	W3FLH	267-679-9297
Vice-President	George Acker	KC3ESH	215-815-7783
Secretary	Kathy Acker	KC3FBY	215-815-7978
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	Irwin Darack	KD3TB	215-343-8170

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 18	Doc Whitticar	W3GAD	215-968-6397
Hamfest 18	Michael Shanblatt	W3MAS	267-491-5773
Hamwear	Kathy Acker	KC3FBY	215-815-7978
Holiday Dinner	George Brechmann	N3HBT	215-443-5656
Membership	Jacek Ostrowski	KC3HXF	
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	
Station Trustee	George Brechmann	N3HBT	215-443-5656
Sunshine Club	Vince Pironti	KD3TC	215-674-0446
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