Web Site k3dn.org

Warminster Amateur Radio Club

October 2019

Next Meeting October 3rd - Home Brew Night

President's Message

Well the cooler weather of fall is starting to welcome us each morning as we start our day. I am always reminded this time of year of a saying that my father would repeat as soon as he would feel that morning chill, "A little frost on the pumpkin this morning". It comes from a poem by James Whitcomb Riley and it is said that "the frost on the pumpkin" was a signal for farmers that the harvest is over and the time for a little "downtime" of winter was coming. For me as a ham fall is a time of being able to work outside without the heat and humidity of the summer. I look forward to setting the radio up on the back patio and making contacts in the cool weather.

For WARC, this time of year means that nominations are being accepted for the Dave Simpson, WI3Y Outstanding Ham of the Year Award. This award was created in honor of WI3Y, a long-time club member who became SK in 2016, and is designed to recognize WARC members for their service and dedication to the club and ham radio in general. If you would like to nominate a club member just email me at KC3ESH@arrl.net.

Tickets for the Club's Holiday Dinner are also now on sale. You can order them online at the club's website K3DN.org and use the PayPal link (you do not have to have a PayPal account to do this, just use your regular credit/debit card) or get them at the club meeting. Tickets must be purchased in advance. The dinner this year will be held at Giuseppe's Pizza and Family Restaurant (right in front of the Ben Wilson Senior Center) starting at 6:30pm on December 5th. Tickets are \$24.00 each.

Be sure to save the date for our November meeting which is November 7th. This will be the night of our annual ARRL Night. Plans are being finalized for an impressive lineup of ARRL personnel to attend. The list of attendees will be announced at the October Meeting. A big thank you goes out to Tony, W3FLH and Marty, NR3Z for putting this together.

73, George, KC3ESH KC3ESH@arrl.net

> WARC Meeting Minutes September 5, 2019

Attendance:

• Call to Order 7:37pm

o Introductions - pass mic

Minutes from last Meeting

• Additions/Corrections – Motion to approve/approve as amended? Approved

Committee Reports

• Treasurer's Report: Herb KB3VMN

As reported at meeting

• **Programs:** *Marty NR3Z*

October – Outstanding Club of the Year November – ARRL Night December – Holiday Dinner Starting at 6:30PM

• Membership: Mary KC3KJZ

121 active members

2 pending

• Public Service: George N3HBT October 14, 5 ponds Golf Outing

(Continued on page 2)

Page 2 FEEDBACK

(Continued from page 1)

8:30 start with hot meal at 2:30

Possibly 5k at Warminster Community Park for Craven Hall. Details to follow.

Central County Bikes covered bridge ride, 10/13

1500 riders, free tshirt and food, after event party for volunteers.

Contact Kc3JXT, or Drex WI3C?

• Classes: George KA3WXV/Ron WB2OOB

Classes start this coming Monday, September 9, 7-9pm

3 Class types

Tech

Instructor led

General / Extra

Instructor led, but topics based on student's interest and need

Elmering

Topics based on student's interest and need, facilitated by

Elmers.

• **VEC Testing:** Larry WA3ELQ

No session in August

Next session September 30

• Repeater: Brian N3EXA

Everything is working well

• Good and Welfare: Ken K9KJL

No cards this past month

Advertising – Sent out to 6 or so newspapers regarding up coming classes.

· Other Committees

o Radio Sport: Irwin KD3TB

VHF Contest 9/14-15

Category for expanded coverage radios

Category for HT/FM only contest

Keep eye for Special Event Stations

Look at OST for sources

o Union League Special Event

Joe - AA3JH

Veterans' day weekend

Using K3DN

ARRL has been notified and we will be in Nov QST

7 people already signed up, more volunteers can be accepted

Running 1130am - 5pm, 2 bands

Old Business

• Constitution Review

Tabled

· Holiday Dinner

Holiday dinner will be at Guisseppes on December 5, 2019 starting at 6:30pm. Tickets will be available for purchase online or at a meeting for \$24 each. Tickets must be purchased in advance, by November 25, there will be no tickets available at the door.

OHOTY-Dave Simpson Award

Nominations due before October board meeting (10/24)

New Business

• Loaner Equipment

The club is trying to put together rig setups to be loaned out to help new hams

get on the air. If you have old gear that is just gathering dust, consider helping us with this project.

- Board Meeting Dates Changed
 - o October changed from 10/31/19 to 10/24/19
 - o November changed to 11/27/19 phone conference
 - o December canceled

Motion to Adjourn 8:08pm

Program: Amelia Earhart

(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

Radio Sport in October by Irwin KD3TB

To me October begins the contest season, although the CQWW RTTY DX contest was the last weekend of September (Sept 28th to 29th). As I write the article on September 24th around 5 pm we find 20 meters open to Europe. Hopefully this is a sign that the band gods will bless us with good Dx'ing in the month of October.

There are a number of **State QSO Parties** on the air including California on October 5th & 6th, **Pennsylvania**, Nevada, South Dakota & Arizona are on October 12th & 13th, New York on October 19th & 20th & Illinois is on October 20th & 21st. The State QSO Parties are a great way to help earn your ARRL Worked All States Award.

Pennsylvania QSO Party is one contest hopefully you will participate in. The object is to work as many of the Pennsylvania counties. Mode include CW and Phone, bands are: 160, 80, 40, 20, 15, 10 & VHF/UHF. The exchange for PA Stations is Serial Number + County, while send Serial non-PA Stations send Serial Number + ARRL/RAC Section. There are 67 counties in Pennsylvania. Rules can be found at http://paqso.org/pa-qso-party-rules.html and Logs are submitted to logs@paqso.org.

There are plenty of **DX Contests** in the Month with the big one being **CQWW DX SSB** contest on October 26th to 27th. Both the Oceania DX SSB contest and Russian World Wide Digital contest are on October 5th & 6th. For those who are experimenting with the new Digital mode FT4, there is a RSGB FT4 Contest on 80 Meters on October 8th. Rules for this contest can be for

Pennsylvania... Regions and Counties

Erie

Warren McKean Potter Tioga Bradford

Surguehanne
Wayne

Crawford

Forest Elk Comeren Clinton Lycoming Lecks

Mercer Clarion JefferFrence Butler

Law Potter Tioga Bradford

Surguehanne
Wayne

Clinton Lycoming Lecks

Pilke
Law Hondroe

Law Potter

Column Monroe

Clearfield

Centre Union Harth

Sunder Washington

Pitty Franklin Adams

Comberland

Washington

Chester Payette Somerset Bedford Full Franklin Adams

York

Control Surguehanne

Wayne

Pilke
Labanan

Berks

Bucks

Bucks

Bucks

Family

Carbon

Harth

Carbon

Labanan

Chester

Labanan

Chester

Labanan

Chester

Labanan

Chester

Lancaster

Ch

ing with the new Digital mode FT4, there is a RSGB FT4 Contest on 80 Meters on October 8th. Rules for this contest can be found at https://www.rsgbcc.org/hf/rules/2019/r80m_ft4.shtml. You will find the ARRL School Club Roundup on October 21st and 22nd. Modes for this contest include CW, Phone, RTTY/Digital. Rules can be found at https://www.arrl.org/school-club-roundup.

CQWW DX SSB Contest. This begins the Big 4 HF Contests; CQWW DX SSB & CW along with the ARRL DX SSB & CW in 2020. This is a World Wide Contest covering Bands: 160, 80, 40, 20, 15 & 10m. Participation in this contest is a great way to earn your ARRL DXCC award. You only need 100 confirmed stations to start. The exchange is simple, RST & your CQ Zone. Those in our area are in Zone 5. Rules can be found at: http://www.cqww.com/rules.htm. Logs must be submitted within 5 days after the contest ends using the Cabrillo format and are uploaded to http://www.cqww.com/logcheck. Once again members of WARC will be traveling to Turks & Caicos to put VP5W on the air for CQWW DX SSB.

As always a good source of contests can be found on WA7BNM's website at https://www.contestcalendar.com.

Good luck and Good Contesting. You worked hard for your license....

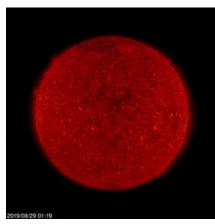
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Page 4 FEEDBACK

(Continued from page 3)

The K7RA Solar Update

Tad Cook, K7RA, Seattle, reports: Sorry, still no sunspots. <u>Spaceweather.com</u> reported on September 25 that the sun has been spotless for more than 3 weeks -- 23 consecutive days -- and with 89% spotless days this summer. So far in 2019, 72% of the days have been spotless, equal to what it was in the last solar minimum in 2008 and 2009.



We transitioned through the fall equinox this week. This is a good time for HF propagation, even with low solar activity, whether you are in Northern Hemisphere's fall or Southern Hemisphere's spring.

Over the September 19 - 25 reporting week, the average daily solar flux shifted marginally from 68.1 to 67.3, while average daily planetary A index reflected quiet geomagnetic conditions, dipping from 8.3 to 5.4. The mid-latitude index went from 8 to 4.6.

Predicted solar flux is 67 on September 26 - October 3, and 68 on October 4 - November 9.

Predicted planetary A index is 8, 28, 45, 24, and 12 on September 26 - 30; 12 and 8 on October 1 - 2; 5 on October 3 - 5; 12 on October 6; 5 on October 7 - 9; 8, 5, 8, 10, 8, and 8 on October 10 - 15; 5 on October 16 - 19; 12 and 8 on October 20 - 21; 5 on October 22 - 24; 25, 18, 10, 5, and 8 on October 25 - 29; 5 on October 30 - November 1; 10 on November 2; 5 on November 3 - 5, and 8, 5, 8, and 10 on November 6 - 9.

The planetary A index forecast of 28, 45, and 24 for September 27 - 29 is due to solar wind spewing from a large coronal hole, the same one that gave us planetary A indices of 38 and 45 on August 31 and September 1 -- now after making a trip around the sun. Look for it again on October 25 - 26.

Sunspot numbers for September 19 - 25 were 0, 0, 0, 0, 0, 0, and 0, with a mean of 0. The 10.7-centimeter flux was 67.1, 67.2, 67.7, 68.3, 66.1, 67.1, and 67.5, with a mean of 67.3. Estimated planetary A indices were 4, 3, 7, 4, 3, 13, and 4, with a mean of 5.4. Middle latitude A index was 4, 3, 7, 2, 2, 11, and 3, with a mean of 4.6.

A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, visit the ARRL Technical Information Service, read "What the Numbers Mean...," and check out K9LA's Propagation Page.

A propagation bulletin archive is available. Monthly charts offer propagation projections between the US and a dozen DX locations.

Share your reports and observations.

Courtesy of the ARRL Newsletter

1921 Solar Event May Have Been Bigger than Carrington Event

(See the article on the Carrington Event in the September Feedback)

Scientific American reports that, according to new data, the "New York Railroad Storm" of 1921 may have surpassed the intensity of the famous Carrington Event of 1859. In his paper published in the journal *Space Weather*, Jeffrey Love of the US Geological Survey and his colleagues reexamined the intensity of the 1921 event in greater detail than previously.

Although different measures of intensity exist, geomagnetic storms are often rated on an index called disturbance storm time (D_{st}) -- a way of gauging global magnetic activity by averaging out values for the strength of Earth's magnetic field measured at multiple locations. Earth's baseline D_{st} level is about -20 nanoteslas (nT), with a "superstorm" condition occurring when levels fall below -250 nT. Studies of the very limited magnetic data from the Carrington Event peg its intensity at anywhere from -850 to -1,050 nT. According to Love's study, the 1921 storm came in at about -907 nT.

(Continued on page 5)



Peter Ward in his 2017 *New York History Blog* article "Strange Phenomena: The New York Railroad Storm" <u>recounted</u> that theatre-goers in New York City "marveled at the spectacle" of an iridescent cloud that was brighter than the moon. "On the roof of the *Times* Building, reporters, having discovered the telegraph lines to be curiously blocked, gathered to watch the aerial kaleidoscope," he wrote.

As with the earlier Carrington Event, telegraph operators experienced wild fluctuations in the current on their circuits, while wireless propagation was enhanced. "The next day, papers reported that the Central New England railroad station (also home to the telegraph switchboard) had burned to the ground." Railroad officials later blamed the fire on the aurora.

According to Ward's article, the lights were visible in New York, California, and Nevada. Especially in rural areas, "the lights were said to be brighter, appear closer to the ground, and even move with a swishing sound."

Railroad and telegraph service were restored the following week, although one Western Union transatlantic cable showed signs of damage. "Delays and damage lead to some referring to it as the New York Railroad Storm," Ward wrote.

A dramatic <u>description</u> of the event on the SolarStorms.org website said, "At 7:04 AM on May 15, the entire signal and switching system of the New York Central Railroad below 125th Street was put out of operation, followed by a fire in the control tower at 57th Street and Park Avenue."

The short article said a telegraph operator reported being driven away from his station by flames that enveloped his switchboard and set the building on fire. "In Sweden a telephone station was reported to have been 'burned out,' and the storm interfered with telephone, telegraph, and cable traffic over most of Europe," the article said.

Courtesy of the ARRL Newsletter

"Storm Area 51" Event Attracts Modest Crowd, Following ARES/RACES Deployment



A "Storm Area 51" publicity poster. [Photo courtesy of Alien Research Center] The much-heralded "Storm Area 51" event that started out as a joke on social media, prompted states of emergency in two Nevada counties and spurred an Amateur Radio Emergency Service (ARES®)/Radio Amateur Civil Emergency Service (RACES) deployment. As do many storms, this one failed to live up to its hype. No one stormed anything, and no extraterrestrials were sighted, beyond variously costumed earthlings embracing the vibe. The Storm Area 51 weekend of September 20 - 22 instead morphed into a music festival and other events along a 50-mile stretch of highway running through the Nevada desert known as Extraterrestrial Highway (Nevada Highway 375).

At the core of the whole concept was a call urging people to storm the mysterious US Air Force Facility known as Area 51 in the Nevada Test and Training Range to see if

extraterrestrial life forms said to have been recovered by the US military following UFO sightings in the 1950s were being held there. The military issued stern warnings to stay away, and the FAA was reported to have closed the airspace above the area.

Some 2 million initially indicated they were game for the event, but attendance predictions subsequently were tempered considerably. Ultimately, an estimated 3,000 to 4,000 visitors heeded the call, and only a hundred or so even made it to the main gate. A couple of people were arrested.

A major concern was that a horde of visitors to the small towns of Rachel and Hiko would come ill prepared for the desert environment and overwhelm the few available facilities available. With virtually no local infrastructure and faced with the pos-



The so-called Extraterrestrial Highway in Nevada, during quieter times. [Photo courtesy of TravelNevada.com]

sibility of being overrun by visitors, officials in Lincoln and Nye counties declared states of emergency. The town of Rachel, in

Page 6 FEEDBACK

Lincoln County, has just 50 inhabitants, and virtually all of the land is owned by the federal government. The county has just 20 law enforcement officers. No serious problems were reported. ARES teams planned to staff and support six incident-specific locations along Extraterrestrial Highway.

Multiple Facebook sites opened to promote the "Alienstock" music festival in Rachel, and an Area 51 Basecamp in Hiko. Other UFO -inspired events popped up along desolate Extraterrestrial Highway. Law enforcement and medical personnel were posted, along with the Nevada National Guard. Visitors came from as far away as Australia.

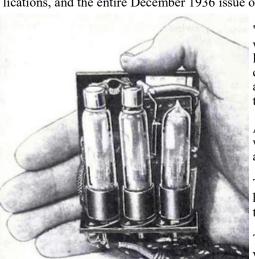
Courtesy of the ARRL Newsletter

A Radio on Your Belt -- 1930s Style

Since the advent of wireless technology, efforts have aimed at condensing the size of the necessary equipment to permit ease of transport, mobile installation, and radios that could be hand carried, slipped into a pocket or -- in this case -- carried on the belt. Hu-

go Gernsback's <u>Radio-Craft for December 1936</u> included the article, "How to Make the World's Smallest 3-Tube Radio Set" by Arthur Miller (likely not the playwright). It details how a clever radio crafter could construct a set worn on a belt around the waist and -- in this case -- with the antenna worn on the head in the manner of an old-time banker's eyeshade. The individual wearing such equipment today likely would not only have to endure considerable pointing and laughing but would raise the alert level at any airport TSA checkpoint.

Vacuum tubes of the day were not too sensitive, required separate voltage sources for filament and plate, and were pretty hard on batteries. The filaments for the three tubes came from "a liquid unspillable storage cell" (i.e., rechargeable) to supply the necessary 2 V. The article says this battery should last from 7 to 10 hours and came "with an oiled silk bag and fits in the hip pocket." This was the sort of futuristic innovation that Gernsback typically featured in his publications, and the entire December 1936 issue of *Radio-Craft* is worth perusing.



"When using this 'Belt-Radio' the wearer is quite unmindful that the latest news or dance music is

coming from an ultra-midget receiver which is actually being worn on the belt!" the article exults. "And it takes only a minute to put the whole equipment on -- and less to take it off!"

WORLD'S SMALLEST 3-TUBE RADIO SET

According to Miller's article, building the three-tube set was easy. "The loop aerial is wound on a cardboard disc 13 ins. in dia," it explains. "Litz wire is used and 22 turns are interlaced around the 9 ribs." No mention of gauging hat size.

The article concedes just to "one disadvantage" in having to wear the antenna on one's head. "The 4-ft. cable connecting it with the receiver acts as a capacity and restricts the tuning range of the set," it explains.

The set tuned the AM broadcast band, and with the antenna on the head, directionality was less of an issue. While it might look silly to us now, project ideas such as this helped advance the radio art toward the technology we use and enjoy today.

Courtesy of the ARRL Newsletter

144 – 146 MHz Removed from French Proposal for Additional Aeronautical Applications

The 144 – 146 MHz Amateur Radio segment has been removed from a French proposal to study spectrum additional for Aeronautical Mobile Service (AMS) applications. France had included the band, which comprises the entire 2 meter band in ITU Region 1, for consideration as a European Conference of Telecommunications and Postal Administrations (CEPT) position for World Radiocommunication Conference 2019 (WRC-19). Heading into a just-ended CEPT Conference Preparatory Group (CPG) meeting in Turkey this past week, France was holding firm on the proposal to have AMS share 144 – 146 MHz with Amateur Radio. The CPG meeting considered CEPT ECC positions on this and other issues for WRC-19.

The International Amateur Radio Union (IARU) had called the French proposal for 144 – 146 MHz "unsound" and contended that sharing of the current amateur allocation with AMS radio systems would not be possible "without a significant likelihood of mutual interference."

The French spectrum study proposal would have had to gain approval from at least 10 CEPT countries at the CPG meeting — with not more than 6 opposing — to appear on the agendas of WRC-19 and WRC-23, where a final decision would be made.

Also at the CEPT meeting, at the insistence of the European Commission, a WRC-23 agenda item was considered necessary to address world-wide protection of Regional Navigational Satellite Systems (RNSS) from amateur emissions in the 23 centimeter band, 1240 – 1300 MHz. Delegates agreed to a draft WRC Resolution that stresses the importance of the band to the Amateur Service and explicitly excludes the removal of existing allocations as part of the proposed agenda item. The issue stems from reported incidents of interference to the Galileo GPS E6 signal on 1278.750 MHz.

Other Amateur Radio-related issues addressed at the CEPT CPG included:

- Agreement to a European Common Proposal (ECP) on allocating 50 52 MHz to the Amateur Service in Region 1 (Europe, Africa, and the Middle East) on a secondary basis, with a footnote listing those countries where the Amateur Service will have a primary allocation in the band 50 50.5 MHz (WRC-19 Agenda Item 1.1).
- Agreement to an ECP on spectrum to be considered for International Mobile Telecommunications (IMT), which does not now include the primary Amateur Radio band at 47 47.2 GHz (WRC Agenda Item 1.13).
- Agreement to an ECP that retains the current regulatory position in the 5725 5850 MHz band that includes secondary Amateur Radio and Amateur Satellite allocations (WRC Agenda Item 1.16). No change to an already agreed upon CEPT position on wireless power transmission (WRC Agenda item 9.1.6). This calls for no change in the *Radio Regulations* to address the question of operating frequency for wireless power transmission for electric vehicle charging (WPT-EV), but leaves open the question of spurious emissions from WPT-EV.

IARU Region 1 President Don Beattie, G3BJ, said that the IARU team at Ankara — the only representatives of the Amateur Service at the meeting — had presented clear and convincing arguments for Amateur Radio positions and that he was pleased that regulators had recognized the strength of the amateur case. He expressed his thanks to everyone who contributed to the outcome at CPG.

CEPT is one of the six regional telecommunications organizations but viewed as the most influential. The issues now move to WRC -19 in Egypt this fall for final resolution. IARU will be represented at the international gathering, which gets under way in late October. — *Thanks to IARU*

Courtesy of the ARRL Newsletter



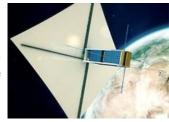
North Korea is said to be testing digital broadcasting on 80 meters.

Radio World reports that the People's Democratic Republic of Korea (North Korea) has resumed testing digital radio broadcasting on the 80-meter amateur band after a 2-year absence. North Korea is transmitting with the Digital Radio Mondiale (DRM) protocol. The latest transmissions on 3.560 MHz began in mid-August. "It appears unclear at this time, however, whether the current series of transmissions will soon end or be the start of a regular service," Radio World said. "According to radio enthusiasts in the region, the signal has been clear and very audible." Radio World says Voice of Korea, the North Korean international broadcasting service, has conducted DRM trials off and on since 2012

Courtesy of the ARRL Newsletter

A CubeSat with an FM-to-Codec-2 transponder has been launched.

The Taurus-1 (Jinniuzuo-1) CubeSat carrying an Amateur Radio FM-to-Codec-2 transponder was launched on September 12 from China's Taiyuan Satellite Launch Center. The CubeSat was developed by Aerospace System Engineering Research Institute of Shanghai for youth education and Amateur Radio. The transponder is similar to that used on the LilacSat-1 (LO-90) CubeSat and can use the same software, once frequencies are changed, receiving FM with 67 Hz CTCSS on 145.820 MHz and retransmitting it as Codec-2 9,600 bps BPSK digital voice on 436.760 MHz. The telemetry downlink is 435.840 MHz. In addition to the transponder, the satellite also carries a drag sail. For more infor-



mation on the transponder type, see "<u>Digital Voice on Amateur Satellites: Experiences with LilacSat-OSCAR 90</u>," which appeared in the January/February edition of *The AMSAT Journal*. -- *Thanks to* AMSAT News Service

Courtesy of the ARRL Newsletter

Page 8 FEEDBACK

CLUB INFO

PUBLIC SERVICE

October 13 - Covered Bridge Ride, Contact Drex W3ICC

October 14 - Five Ponds Golf course, 8:30 am, Golf outing.

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

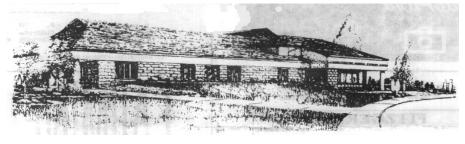
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even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

October-Home Brew Night November – ARRL Night December – Holiday Dinner

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 Contest Calendar

October

21-25 School Club Roundup

1300 UTC Monday through 2359 UTC Friday

19-20 EME - 50 to 1296 MHz

0000 UTC on Saturday through 2359 UTC Sunday

November

2-4 Nov. Sweepstakes - CW

2100 UTC Saturday and runs through 0259 UTC Monday.

16-18 Nov. Sweepstakes - Phone

2100 UTC Saturday and runs through 0259 UTC Monday.

16-17 EME - 50 to 1296 MHz

0000 UTC on Saturday through 2359 UTC Sunday

OSO Parties

California 1600Z, Oct 5 to 2200Z, Oct 6 Nevada 0300Z, Oct 12 to 2100Z, Oct 13

Arizona 1600Z, Oct 12 to 0600Z, Oct 13 and 1400Z to 2400Z, Oct 13

Pennsylvania 1600Z, Oct 12 to 0500Z, Oct 13 and 1300Z to 2200Z, Oct 13

South Dakota 1800Z, Oct 12 to 1800Z, Oct 13 New York 1400Z, Oct 19 to 0200Z, Oct 20 Illinois 1700Z, Oct 20 to 0100Z, Oct 21

> ATLANTIC DIV. HAMFESTS > 2019

October 5 - 7th Annual TailgateFest

Hollywood Volunteer Fire Dept. Bingo Hall 24801 Three Notch Road (MD Route 235)

Hollywood, MD 20636

http://www.k3hki.org

October 6 - CARAFest 2019

Howard County Fairgrounds 2210 Fairgrounds Road West Friendship, MD 21794

http://www.carafest.org

October 20 - RF Hill Amateur Radio Club Hamfest

Sellersville Fire House 50 North Main Street

Sellersville, PA 18960

http://www.rfhillarc.club

October 27 - Mason Dixon Hamfest

Sportsman's Hall Roller Skating Center 15500 Hanover Pike Upperco, MD 21155

https://k3pzn.net/hamfest/

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 Del-

son 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
wa3ylg@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

Page 10 **FEEDBACK**

SKYWARN INFORMATION

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

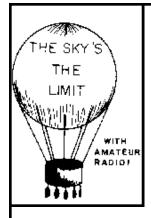
Fairless Hills, PA (many remote access locations throughout Bucks County)

Mount Holly NWSFO SKYWARN Homepage:

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

SKYWARN Basic Weather Spotter Educational Programs URL:

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



The Warminster Amateur Radio Club Announces Free Ham Radio Instructional Classes

If you're interested in Ham Radio, or think you might be, this is your opportunity. Perhaps you'd like to learn about digital communications, VHF, UHF, satellite, or perhaps you'd rather sit down and chat with someone in South Africa, Russia, Great Britain or in the space station.

Technician classes will be taught starting September 9th for 8 Mondays in a row from 7 to 9 pm.

General and Extra classes will be taught starting September 9th for 8 Mondays in a row from 7 to 9 pm.

Elmer guided classes will be hosted by experienced WARC members starting September 9th for 8 Mondays in a row from 7 to 9 pm.

For further information contact George Brechmann, N3HBT at 215-443-5656.

Bucks County Amateur Radio Emergency Service (BCARES)

www.bucksares.org

Bucks County ARES will be on the air Wednesdays, at 9:00 PM. We will be using Warminster Amateur Radio Club's repeater on 147.090, pl 131.8. This net is linked as shown in the Net Schedule box for the Wednesday night net. It may also be linked to 147.300.

Winlink Gateway Stations:

Lower Bucks NY3J-10 145.530 Bensalem

		Net Schedules	
Sunday	2000	10 Meter Net	28.445 MHz
Wednesday	2000	2 Meter Net	147.09 Rptr.
Wednesday	2000	Linked w/ 2 Meter Net	443.95
Rptr.Wednesday	2000	Linked w/ 2 Meter Net	53.230 Rptr.
Sunday	2030	Informal Net	223.5 Simplex
Thursday	1900	Mont. Cnty RACES Net	

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 N3DOZ 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