



FEEDBACK



Web Site k3dn.org

Warminster Amateur Radio Club

July 2021

Next Meeting July 1st via ZOOM - The Battleship New Jersey

Announcements from ARRL



In an effort to keep member records up to date, ARRL emailed Life Members on June 16, asking them to verify their mailing address. Several recipients of the email have called asking if the email was legitimate and from ARRL. Be assured that it is legitimate and was sent from ARRL. Thank you to all those who responded. If you need to update your address information, call (860) 594-0200, email membership@arrrl.org, or respond to the email you received. You may need to cut and paste the web address into your browser.



The UK Six Meter Group's (UKSMG) widely accepted [FT8 Code of Practice](#) recommends that European stations transmit during even periods, 00 and 30 seconds past each minute, and that Asian and North American stations transmit during odd periods, 15 and 45 seconds past each minute.



Six operators will depart for Prins Karls Forland Island in July, landing by dinghy, to operate as [JW0W](#) (Svalbard). Prospective 3Y0J (Bouvet Island) team members will conduct some practice landings. All operators will concentrate on [RSGB IOTA Contest](#) weekend, July 24 - 25, but otherwise will focus on North America and Asia using CW, SSB, and FT8/4. The [Prins Karls Forland DXpedition](#) Facebook group page has more information.

HAM Radio Classes in the Fall of 2021

Starting September 13th

Morse Code is no longer required for HAM Radio licenses

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 13th for 8 Mondays in a row from 7 to 9 pm. These instructor lead classes will get you started in HAM radio. Most students are ready to take the entry level license test by the end of the classes.

Elmer guided classes will be hosted by experienced WARC members starting September 13th for 8 Mondays in a row from 7 to 9 pm. Having trouble putting up an antenna or setting up a digital mode? This is the class for you.

All classes are held at the Ben Wilson Senior Center just off Street road and Delmont avenue in Warminster, PA. For further information contact George Brechmann, N3HBT at 215-443-5656

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Warminster ARC General Meeting Minutes

June 3, 2021

Attendance:

Call to Order

Minutes from last Board Meeting

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

Committee Reports

Treasurer's Report: Herb KB3VMN

As reported at the meeting

Programs: Tony N3YNH

July – Battleship New Jersey NJ2BB

August – System Fusion w/Bruce WA3ZPC

September – Intro to Contesting w/Irwin KD3TB

October – Contest University w/Tim K3LR

Membership: Kathy KC3FBY

124 paid & active members

New members:

John Sullivan, WA1TEJ

Tom Roe, K3KWW

Zoheir Al-Radiedeh, KC3RVX

Public Service: George N3HBT

Golf outing will take place on Thursday, June 10 – We have all Hams signed up that we need to work the event.

Classes: George KA3WXV

Next classes: September 13, Monday after Labor Day in person Tech from 7pm to 9pm. and possibly General/Extra class will begin at that time.

VEC Testing: Larry WA3ELQ

Successful VE session on Monday May 24. 6 of the 10 applicants showed up. All 6 were successful 3 new tech, 1 new who passed tech and general and 2 upgrades to general.

June 28 is the next session. We will allow 12 people to schedule, have a few more openings left.

Repeater: Brian N3EXA – not in attendance – Charles Schmell reported that everything seems to be working fine except Echo-Link.

Good and Welfare: Ken K9KJL – sent out one sympathy card.

Other Committees

Radiosport: Irwin KD3TB – This past weekend was the CQ WPX CW contest with lots of activity and opportunity to work stations from all over the world.

Kentucky QSO Party - June 5th to 6th

West Virginia QSO Party - June 19th to 20th

ARRL Field Day - June 26th - 27th

UHF/VHF - ARRL VHF/UHF Contest begins 2pm June 12 to Sunday June 13 at 11 pm.

Hamfest: Tony W3FLH – tabled – postponed to 2022

Field Day: *Doc W3GAD* - we will go in depth on Field Day during our presentation.

Old Business

Elmer Program – Online: Introduction to N1MM+ (Irwin KD3TB) – Class was scheduled for Thursday May 13 from 7:30 – 9:00. We had about 5 to 6 participants via Zoom. Class went well and we will be having another Q&A session in the next few weeks.

Club Station: Interest/Activity (Marty NR3Z & Andy KD3RF) – Tabled

Director (Appointed) for 2021 – Mike Malone W3MJM, stepped up to the appointed director position and the board approved him. Thank you for stepping up.

Election results: A review of the 2021-2022 Board election results are as follows. The new board will begin on July 1, 2021.

President – Tony Cuttone W3FLH

Vice President – Ray Oechslein KA3TRU

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FOR SALE

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

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

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

K3SRO

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Secretary – Dan Myers K3NXX

Treasurer – Herb Hickmott KB3VMN

Directors – Larry Abbott WA3ELQ & George Brechmann N3HBT

Tony W3FLH thanked Tony N3YNH and Kathy KC3FBY for the past years of service.

Annual Club Auction/Online (Board/Andy KD3RF) – August/September time frame. Stay tuned for more details. We have received some estate pieces that will be included and there may be some options for consignment.

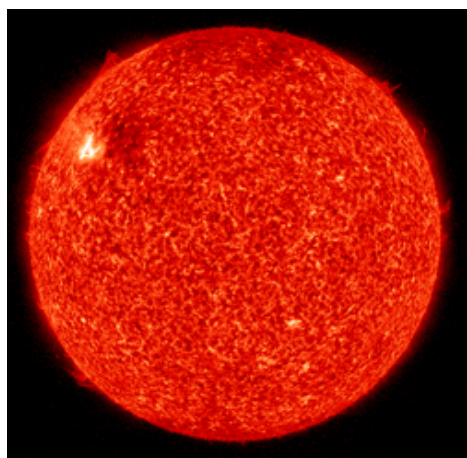
CC Survey: Reconvening in-person activities. Thank you for your participation. The board is reviewing the results and comments. Statistically, everyone wants to get back to in person meetings. The incoming board will be making the decision when to return and what the parameters will be.

New Business

2nd installment of BWSC contract – due in June. The board drafted a letter that we will be sending to BWSC board. The letter is requesting that we can postpone the second installment until we meet again at the center and then pay a retroactive amount when we return to using the SC on a more regular basis.

Public service announcement – MS150 City to Shore bike race will be happening this year. They will be looking for Hams to provide help. Watch for announcements. Tony N3YNH and Jim WA4YWM will keep everyone informed.

Motion made and accepted to adjourn meeting at 8:24 pm

Presentation: Field Day Strategy w/Doc W3GAD**The K7RA Solar Update**

Tad Cook, K7RA, Seattle, reports: The average daily sunspot number was 14 this reporting week (June 17 - 23), essentially unchanged from last week's 13.9. Average daily solar flux increased from 75.2 to 79.3.

Geomagnetic indicators were quieter. Average planetary A index declined from 9.6 to 5.3, and average middle latitude A index dropped from 9.7 to 6.1.

Predicted solar flux is 82 on June 24; 85 on June 25 - 30; 80, 78, and 78 on July 1 - 3; 75 on July 4 - 7; 78 on July 8 - 11; 75 on July 12 - 16; 78 on July 17 - 22; 75 on July 23 - 25, and 78 on July 26 - 30.

Predicted planetary A index is 8 on June 24; 5 on June 25 - July 3; 12 on July 4; 5 on July 5 - 8; 8 on July 9 - 10; 5, 15, and 12 on July 11 - 13; 5 on July 14 - 20; 8 on July 21, and 5 on July 22 - 30.

Sunspot Group 2833 is about to rotate over the sun's western horizon, but I see promising activity around and beyond the eastern horizon when viewing the [STEREO mission images](#) and [this site](#) to see the emerging activity.

Check the 2300 UTC June 22 [solar flux reading](#) from the Dominion Astrophysical Observatory in Canada and note that the value

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jumped way up to 104.5. The official solar flux for that day was the noon reading, 80.8 at 2000 UTC.

Sunspot numbers for June 17 - 23 were 12, 24, 15, 13, 11, 12, and 11, with a mean of 14. The 10.7-centimeter flux was 85, 77, 77.1, 76.4, 79.1, 80.8, and 79.7, with a mean of 79.3. Estimated planetary A indices were 7, 7, 4, 4, 4, 7, and 4, with a mean of 5.3. Middle latitude A index was 9, 8, 5, 4, 3, 8, and 6, with a mean of 6.1.

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. For customizable propagation charts, visit the [VOACAP Online for Ham Radio](#) website.

[Share](#) your reports and observations.

Courtesy of the ARRL Newsletter

13 Colonies Special Event Set for July 1 - 7

The 13th running of the popular [13 Colonies Special Event](#) will take place July 1 - 7. A series of 1 × 1 call signs (K2A - K2M) will represent each of the original colonies in North America. The event begins at 1300 UTC on July 1 and concludes at 0400 UTC on July 7.

This year, some French stations will be joining, in recognition of the French Navy's importance in the 1700s as part of the France-Britain global competition. TM13COL will be a bonus station, as will GB13COL and WM3PEN in Philadelphia, Pennsylvania, named after land-grant grantee William Penn, the colony's founder. Of course, Philadelphia is where the US founding fathers met.

Last year, the Special Event's 13 stations made 202,000 contacts. Each QSL card will be different, including the three bonus stations, each bearing a representative image of a ship.



Courtesy of the ARRL Newsletter

3Y0J DXpedition to Bouvet Island Cancelled

The Intrepid-DX Group announced over the weekend that it has cancelled its long-anticipated [3Y0J](#) DXpedition to Bouvet Island. The DXpedition team had planned to travel to Bouvet via the *RV Braveheart*, owned by Nigel Jolly, K6NRJ. Jolly has told the DXpedition that *Braveheart* is being sold and he's cancelled its contract for the 3Y0J voyage.



"The global pandemic has impacted the expedition charter vessel business very hard; this includes the venerable *RV Braveheart*, which has provided outstanding safety and service to many DXpeditions," DXpedition co-leaders Paul Ewing, N6PSE, and Kenneth Opskar LA7GIA, said in announcing the news on June 13. "Today, we were informed that *Braveheart* will be sold. As a result, Nigel Jolly will no longer be associated with the ship, our contract with the ship has been cancelled, and our deposit will be refunded. This is a very disappointing development to all involved."

The DXpedition said that it has stopped accepting donations and will refund 100% of the donations using the same method they were received. "This process will take several weeks to sort out, so please be patient," the announcement said. "We wish to thank our team for putting their trust in us. We wish to thank all of the donors and sponsors that gave generously to this project. We will continue to research other ships and possibly find another suitable vessel for a future project."

ARRL announced in April that it had awarded a \$5,000 Colvin Grant to the Intrepid-DX Group to help in funding the DXpedition to Bouvet Island, scheduled for January to February 2023. A dependency of Norway, Bouvet is a sub-Antarctic island in the South At-

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lantic. It is the second-most-wanted DXCC entity, behind North Korea.

Courtesy of the ARRL Newsletter

3Y0J Bouvet Island DXpedition Team Hasn't Given Up

[The Daily DX](#) has reported that the [3Y0J](#) DXpedition team is still hoping to have a go at the island in 2023. The DXpedition team had planned to travel to Bouvet via the RV *Braveheart*, owned by Nigel Jolly, K6NRJ.

"Since the cancellation of 3Y0J, we have been working closely with Nigel Jolly to form a new plan, with a new owner of *Braveheart* and a revised payment plan that enables Nigel Jolly to continue managing *Braveheart* and will keep it available for DXpeditions for years to come," said the announcement from DXpedition co-leader Paul Ewing, N6PSE.

"We are working out the details of this plan and hope to have some very positive news very soon. We have not given up!" The Intrepid-DX Group [announced](#) earlier this month that it has canceled its long-anticipated DXpedition to Bouvet. Jolly told the DXpedition that the *Braveheart* was being sold and he was canceling its contract for the 3Y0J voyage.

Courtesy of the ARRL Newsletter

IARU Attends ITU Wireless Power Transmission Sessions

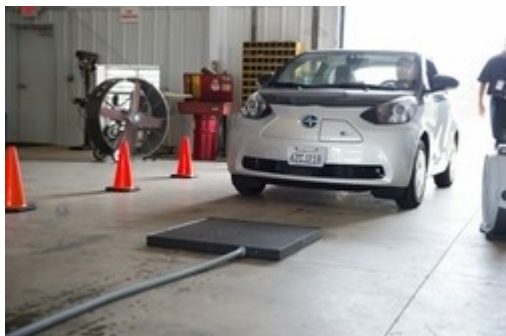
The International Amateur Radio Union (IARU) represented the Amateur Service at a recent International Telecommunication Union (ITU) virtual meeting on the topic of wireless power transmission (WPT), attended by some 350 delegates. ITU Working Party 1A Working Group WG1A2 was of most relevance to IARU, covering the topic of WPT. The focus is on WPT's impact on the radio spectrum.

IARU contribution centered on proposing amendments to material submitted by other delegations and a new annex that documents measurements of typical amateur signal levels, comparing these to test data from the US on non-beam WPT emission levels and to suggested limits.

"Most of the discussions on the detail were resolved with a degree of compromise, and the latest drafts will be attached to the chairman's report for the meeting," IARU Region 1 reported. Remaining technical issues include:

- Whether E-field antennas are as susceptible to WPT-EV (WPT Electric Vehicle) emissions as H-field antennas.

The true noise levels in residential areas, with WPT developers claiming that WPT emissions will not be significantly above the (now-elevated) noise level.



In terms of the E-field sensitivity to WPT emissions, the proposed work plan submitted by IARU to the European Commission, for WPT-EV tests in the Joint Research Centre, included proper E- and H-field measurements.

"IARU member-society DARC [Germany] has made good progress with the rollout of its ENAMS automated noise measurement system, and IARU is now able to draw heavily on that data," IARU Region 1 said. "The WPT Emissions document has been under discussion for some time. Here, there is no agreement yet on whether this should be a Report or a Recommendation, and the work has been carried forward to the next meeting in November 2021."

Discussion on so-called "beam" WPT covered a range of issues, including amendments to the proposed frequencies (none are below 800 MHz). "Sadly, many proposed frequencies fall in spectrum which the Amateur Service shares with other services," IARU said. "However, given the nature of the technology and the directivity of amateur antennas in these frequency ranges, the prospect of coexistence seems quite good."

IARU has provided extensive input on the potential impact on radio communications resulting from spurious emissions from WPT devices. Given the planned density of WPT systems for electric vehicles operating in the 79 - 90 kHz range, widespread interference could occur to Amateur Service stations in the vicinity of WPT systems.

Courtesy of the ARRL Newsletter

Vision-Impaired ARRL Member Takes Advantage of New Technology

ARRL member Ben Murray, KD8JBS, of Bryan, Ohio -- the vision-impaired subject of a recent [TV news piece](#) -- says new technology he's now using has permitted him to enjoy ham radio more fully. The [eSight](#) device resembles virtual reality goggles. Murray has nothing but enthusiastic praise for the technology.



"It has helped immensely with reading my radio displays and logs and being able to socialize in public with hamfests and other social events," he told ARRL. "And I'm able to see my computer screen too."

Murray works as a board operator for WBNO/Q.96.5. In his spare time, he's an ARRL VEC Volunteer Examiner (VE).

"Ben is one of our most dedicated VEs," says Assistant ARRL VEC Manager Amanda O'Brien, N1NHL.

As Murray explains, "The technology uses a camera to process an image in real time. The image is then re-processed through some algorithms in the glasses and then presented back to the user on two OLED screens in front of my eyes, and I can zoom up to 24x and adjust contrast."

Murray, 32, who was born legally blind with optic nerve atrophy, wears a pair of conventional eyeglasses behind his eSight device. For the first 26 years of his life, Murray says, he "was passed from doctor to doctor, ophthalmologist to ophthalmologist." In 2015, he learned about eSight's "smart" eyeglasses that fit over the user's head.

At first he was skeptical, but once he experienced it for himself, he was sold. A community fundraiser helped Ben raise the \$15,000 needed for his first pair of eSight glasses; he now wears the latest update. The adaptive technology is not widely covered by health insurance, and he's on a campaign to change that.

The smart glasses have provided him with essentially 20/20 vision.

As for ham radio, Murray's favorite activities incorporate a public service bent. "I enjoy hamfests and VE testing sessions. I'm the VE liaison for Williams County, Ohio, and I'm the Emergency Coordinator," he told ARRL. "I also enjoy public service activities such as festivals and parades where they include amateur radio [for] communications."

Murray has been a ham since 2008. He upgraded to Amateur Extra class in 2012. -- *With thanks to WNWO NBC24News, Toledo, Ohio*

Courtesy of the ARRL Newsletter

WSJT-X version 2.4.0 Now Generally Available, Version 2.5.0 on the Horizon

WSJT-X version 2.4.0 now is available in general release. According to co-developer Joe Taylor, K1JT, WSJT-X version 2.4.0 includes a new digital mode, Q65. This protocol is designed for two-way contacts over especially difficult propagation paths, including ionospheric scatter, troposcatter, rain scatter, TEP, EME, and other types of fast-fading signals.

"On paths with Doppler spread more than a few Hertz, the weak-signal performance of Q65 is the best among all WSJT-X modes," the [Quick Start Guide](#) asserts.

WSJT-X version 2.5.0-rc1 (beta) version has been released. According to the [Release Notes](#), in version 2.5.0 "the Q65 decoder has been enhanced to measure and compensate for linear frequency drift in Q65 signals."

Q65 uses 65-tone frequency-shift keying and builds on the demonstrated weak-signal strengths of QRA64, a mode introduced to WSJT-X in 2016. Q65 offers user message and sequencing identical to that in FST4, FT4, FT8, and MSK144. It includes a unique

tone for time and frequency synchronization. As with JT65, this “sync tone” is readily visible on the waterfall spectral display. In addition, Q65 provides a sensitive “sync curve” near the bottom of the waterfall window.

Testing showed that Q65 will enable stations with a modest Yagi and 100 W or more and to work one another on 6 meters at distances up to ~2000 kilometers on most days of the year, in dead band conditions.

“An excellent example of targeted uses of Q65 is ionospheric scatter on the 6-meter band,” the documentation states. “Extensive tests on the 1,150-kilometer path between K1JT and K9AN have shown that with 300 W power output, nearly every Q65-30A transmission is copied correctly by the other station.” The 30A refers to the transmit-receive period and spacing width.

For the complete announcement and to download the latest version, visit the [WSJT-X website](#).

Courtesy of the ARRL Newsletter



Interactive LightCube Satellite Set to Launch in Late 2022



NASA has selected [LightCube](#), along with 13 other small research satellites, to fly as auxiliary payloads aboard rockets launching between 2022 and 2025. The launch opportunity is provided through NASA's CubeSat Launch Initiative. Being designed, built, and tested by an interdisciplinary team of students, advisors, and engineers across multiple organizations, LightCube is a microsatellite educational mission that aims to produce a light visible to the naked eye of observers on Earth. The spacecraft's two xenon flashtubes will be triggered via amateur radio.

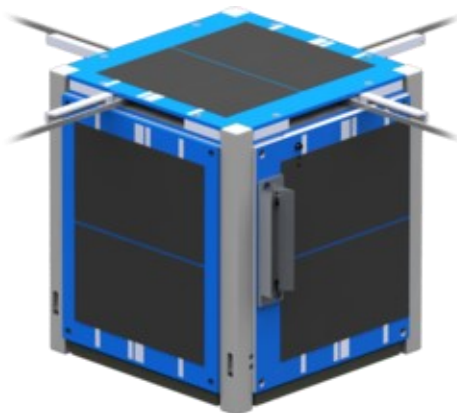
When the light beacon is activated, the 1U CubeSat will be visible momentarily -- each flash will take 8 microseconds -- from the ground, with a brightness similar to the International Space Station (ISS). Following ISS deployment, LightCube will orbit Earth for approximately 2 years before safely deorbiting.

The LightCube mission is a collaborative project between Arizona State University's (ASU) Interplanetary Initiative, the ASU Ira A. Fulton Schools of Engineering, Vega Space Systems, and CETYS (Centro de Enseñanza Técnica y Superior) Universidad. ASU designed and built the satellite.

A radio amateur with a handheld transceiver will wait until the satellite is roughly overhead, as determined by a smartphone or computer app. The user will transmit a predefined number code, and if LightCube is charged, it will flash. The satellite then requires 30 seconds to recharge the capacitor that fires the xenon light tubes. At this point, no frequencies have been coordinated for LightCube.

The idea itself is not novel. As the LightCube sponsors note, FITSat in 2013 used high-power LEDs to transmit Morse code. EQUisat in 2016 could produce a beacon visible to the naked eye.

Courtesy of the ARRL Newsletter



2021 Contest Calendar

July

10-11 [IARU HF World Championship](#)

1200 UTC Saturday and ending 1159 UTC Sunday

August

7-8 [222 MHz and Up Distance Contest](#)

1800 UTC Saturday and ending at 1759 UTC Sunday

22 [Rookie Roundup – RTTY](#)

1800 to 2359 UTC

September

11-13 [September VHF](#)

1800 UTC Saturday, ends 0259 UTC Monday

October

18-22 [School Club Roundup](#)

Monday through Friday from 1300 UTC Monday through 2359 UTC Friday

QSO Parties

Missouri 1400Z, Jul 31 to 0400Z, Aug 1 and
1400Z-2000Z, Aug 1

V.E. TEST LOCATIONS

Confirm all information, in advance, with the contact person. Licensed applicants must bring the original, and one photocopy of their license. All applicants, including children, must bring two forms of positive ID. Also bring the original, and a copy, of any Certificate of Successful Completion needed to prove current status. The ARRL VEC'S 2021 test fee is **\$15.00**.

Warminster Amateur Radio Club,
Monthly, Last Mon. 7:00 pm at the Wilson Senior Community Center 580 Delmont Avenue Warminster, PA 18974
George Brechmann (215) 443-5656.

Atco, NJ, The fourth (4th) Tuesday of each month, at 7 p.m. Winslow Township Senior Center, 33 Cooper Folly Road, 08004-2603.
Mark (K2AX) jtra@comcast.net

Levittown, PA, Monthly, 3rd Monday at 6:30. Falls Township Building - Ben Johns, K3JQH, 215-657-5994

Telford, PA, RF Hill ARC. Indian Valley Library. Held the third Monday of odd months (January, March, May, July, September, November)
Contact: Jim Soete 215-723-7294
wa3ylq@arrl.net.

Philadelphia, PA, Testing is done on the 4th, non holiday Thursday of the month at the, Community Ambulance Association of Ambler, 1414 E Butler Pike, Ambler PA 19002 at 7:00 PM We also are testing on Saturdays at least once per quarter at 9:00 AM. For further information contact James McCloskey at jmccloskey@msn.com and by phone 215-275-2979.

Lansdale, PA Testing on the fourth non-holiday Thursday of the month starting at 7:00 PM. The Lansdale Library Community Room Vine St. and Susquehanna Ave. Lansdale, Pa. Registration is required 48 hrs. or more before the scheduled exam date. If there are no registrations the scheduled exam date will be canceled. NO WALK-INS. You can register by contacting:
Olaf N. Markert - Phone (610) 517-5074, E-mail w3pa@arrl.net
Alt Contact: Jim, 610-287-5630

➤ ATLANTIC DIV. HAMFESTS ➤ 2021

July 3

[Firecracker Hamfest, ARRL Pennsylvania State Convention](#)

Harrisburg Postal Picnic Grounds 1500 Roberts Valley Road
Harrisburg, PA 17101
<http://www.W3uu.org>

July 17

[Valley Forge Hamfest](#)

Kimberton Fire Company Fairgrounds
762 Pike Springs Rd. Phoenixville, PA 19460
<http://marc-radio.org/hamfest2.htm>

July 31

[CVARC 2021 Hamfest](#)

CVAEMA Show grounds
1501 Criders Church Road Chambersburg, PA 17201
<http://w3ach.org>

August 7

[Reading Radio Club Hamfest](#)

Heritage Park
992 Clematis St. Sinking Spring, PA
<http://www.qsl.net/w3bn/>

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

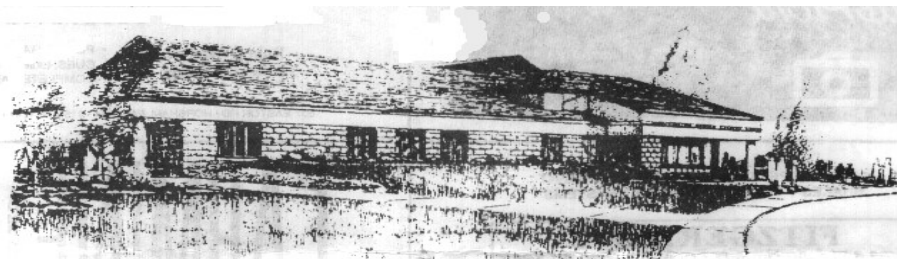
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even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

July - The Battleship New Jersey
August – System Fusion w/Bruce WA3ZPC
September – Intro to Contesting w/Irwin KD3TB
October – Contest University w/Tim K3LR

The Club Station - K3DN - is located at the Benjamin Wilson Senior Center, Delmont Avenue, Warminster, PA. The station is open for club members and the interested general public on the first Thursday of the month (meeting night) between the hours of 6:30 and 7:30 pm. with the exception of the December dinner meeting. The station is fully operational on HF (80 meters through 10 meters) both phone and CW. There is an assortment of amateur radio shareware which may be copied under the shareware licensing agreement.



For additional information on the Club Station please call the Station Manager N3HBT - George at 215-443-5656.

➤ WARC Meetings are held the first Thursday of each month at 7:30 pm at the Benjamin Wilson Senior Center, Delmont Avenue, Warminster, PA. Talk in is available on the 147.09 & 443.950 repeaters.

SKYWARN INFORMATION**Bucks County SKYWARN Weather Spotter PRIMARY FREQUENCY: 147.300MHZ (+ 131.8)**

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

Mount Holly NWSFO SKYWARN Homepage:

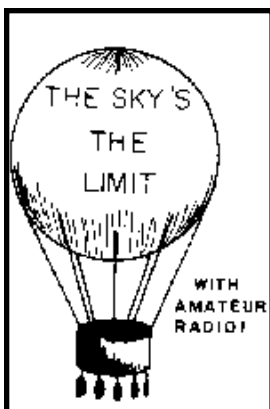
<https://www.weather.gov/phi/Info>

SKYWARN Basic Weather Spotter Educational Programs URL:

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

➤ CLUB EQUIPMENT

WARC has 2 Baofeng UV-5R dual band HT's and a Yaesu FT-2900 2M mobile that are available for use by members of the club. The radios are available on a month-by-month basis and have been purchased primarily to help new hams get on the air. However, they may also be used by any club member who is in need of a temporary 2-meter radio. They are also available for use by participants in WARC's public service activities.
DE, Tony Simek N3YNH



*The Warminster Amateur Radio Club
Announces Free Ham Radio Instructional Classes*

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

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

Area Repeaters**VHF**

145.310 R.F. Hill
145.350 Doylestown R.C.
146.790 Penn Wireless
145.330 Hilltown
146.670 DVRA
146.685 Holmesburg
146.925 Willingboro
147.000 Ham Buergers
147.030 Phil-Mont
147.090 Warminster
147.270 Frankford
147.300 BEARS
147.390 CBRA

220

224.580 PackRats
223.76 K3NAL

UHF

442.650 DVRA
443.250 TAG
443.050 Metro-Comm
443.950 Warminster
444.200 BEARS
447.475 WR3B
448.225 Penn Wireless
444.759 RF Hill Analog/
Fusion

D-STAR

146.61000 K3PDR DV
445.18125 K3PDR DV
445.01875 AA3E Montco
RACES

6 Mtr

53.030 WA3BXW
53.230 N3DQZ
53.320 K3MFI

Bucks County Amateur Radio Emergency Service (BCARES)

www.bucksares.org

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

Winlink Gateway Stations:

Lower Bucks NY3J-10

145.530 Bensalem

Net Schedules

Sunday	2000	10 Meter Net	28.445 MHz
Wednesday	2000	2 Meter Net	147.09 Rptr.
Wednesday	2000	Linked w/ 2 Meter Net	443.95
Rptr.Wednesday	2000	Linked w/ 2 Meter Net	53.230 Rptr.
Sunday	2030	Informal Net	223.5 Simplex
Thursday	1900	Mont. Cnty RACES Net	146.835 Rptr.

Are you submitting an article for the Feedback ?

Contributions of articles to be published are always accepted for consideration. Please follow these guidelines:

- E-Mail to:
wa4ywm@comcast.net
Or via snail mail to:
FEEDBACK EDITOR
Warminster Amateur Radio Club
Box 113
Warminster, Pa 18974
- Use both upper and lower case letters.
- Use your program's spell check.
- If you don't have a computer, then typewritten sheets are o.k. but please use both upper and lower case.
- Put your name and call at the beginning or end of the article, and show credits if you are using material from another source.
- Deadline for articles is the Saturday before the regular meeting.

For general club correspondence:
k3dn@k3dn.org

Visit our Home Page at:
<http://www.k3dn.org>

The annual dues rate structure is as follows:

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

- Are your dues current ?

2021 Officers

Executive Officers

President	Tony Cuttone	W3FLH	267-679-9297
Vice-President	Ray Oechslin	KA3TRU	
Secretary	Dan Myers	K3NXX	
Treasurer	Herb Hickmott	KB3VMN	267-718-3601
Director (A)	Doug Becker	KC3MNQ	
Director (E)	Larry Abbott	WA3ELQ	215-704-3282
Director (A)	Mike Malone	W3MJM	215-639-2175
Director (E)	George Brechmann	N3HBT	215-443-5656
Past President	Marty Squicciarini	NR3Z	215-872-9644

Committee Chairpersons

ARES/RACES Liason	Karl Harris	K3KH	215-264-1855
ARRL Liason	Irwin Darack	KD3TB	215-343-8170
Awards Manager	Vince Pironti	KD3TC	215-674-0446
Classes	George Altemus	KA3WXV	215-855-3856
Digital and APRS	Ron Wenig	NY3J	215-638-9257
Feedback Editor	Jim Elmore	WA4YWM	215-538-1889
Field Day 21	Doc Whitticar	W3GAD	215-968-6397
Hamfest 21	Michael Shanblatt	W3MAS	267-491-5773
Hamfest 21	Tony Cuttone	W3FLH	267-679-9297
Hamwear	Kathy Acker	KC3FBY	215-815-7978
Holiday Dinner	George Brechmann	N3HBT	215-443-5656
Membership	Kathy Acker	KC3FBY	215-815-7978
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