



FEEDBACK



Web Site k3dn.org

Warminster Amateur Radio Club

May 2019

Next Meeting May 2nd - Keith Putnam Elections & Hamfest Final Prep

President's Message

There is a lot going on this May in Amateur Radio and our Club. We have the WARC Hamfest and EPA Convention on the 5th and the Special Event at the Shrine of Czestochowa on the 26th. There is a public service event, The Warminster Parade on the 27th. Myself, my better half, Kathy KC3FBY, and some other of our club members will be traveling to Ohio and Hamvention the week-end of the 17th, 18th and 19th.

If you have never been to Xenia or Dayton for Hamvention, I highly recommend it. One of the things I love about our hobby is the camaraderie. That is one of the best benefits of belonging to a club, a bunch of people getting together and enjoying a common interest. Nowhere is this more evident than Hamvention. Thousands of people getting together with a shared interest. And it doesn't hurt to have all the major manufacturers there showing off the latest "toys". Last year while walking in the entrance I got talking to a fellow ham who traveled from England to be there. We walked and talked about our experiences for about five minutes. After we parted I got to thinking, here were two strangers from different countries and backgrounds but on a chance meeting in a group of people we were able to immediately strike up a friendship over amateur radio.

Be sure your dues are up to date so you can vote in the Club Elections at this month's meeting. Electronic ballots went out the end of last month, but paper ballots will be available at the meeting. You can email our membership Chairman, Norm-AB3ZZ and check your status at norm982@gmail.com. Thank you to the nominating committee, Irwin-KD3TB and Jacek-KC3HXF, for their hard work putting following slate together: President, George Acker-KC3ESH, Vice President, Marty Squicciarini-NR3Z or Tony Simek-N3YNH, Secretary, Norm Miles-AB3ZZ, Treasurer, Herb Hickmott-KB3VMN and Directors, George Brechmann, N3HBT and Larry Abbott, WA3ELQ.

See you at Hamfest and EPA Convention!

73, George, KC3ESH
KC3ESH@outlook.com

The Warminster ARC is pleased to announce the speaker list for our Hamfest/EPA Section Convention:

9 am to 10 am -Bud Trench, AA3BU, Using Propagation Tools for contesting and Dx'ing
10 am to 11 am - Bob Allison, WB1GCM, ARRL Laboratory Product Engineer
11 am to 12 Noon - Eastern PA Section Convention Meeting & Open Forum

Date: May 5, 2019

The K7RA Solar Update

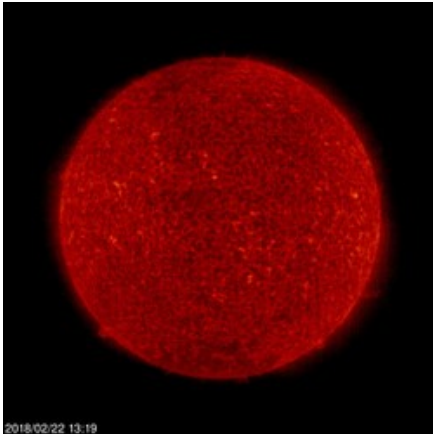
Tad Cook, K7RA, Seattle, reports: Following a good 2-week run, sunspots disappeared after April 20. The average daily sunspot number for the recent reporting week was 8.1, down from 14 last week, and average daily solar flux was 70.6, down from 76.4. Daily planetary and midlatitude A index were nearly the same this week, with the average planetary A index at 4.7 and middle latitude A index at 4.6.

Predicted solar flux for the next 45 days is 69 on April 25 - May 2; 72, 76, 76, and 77 on May 3 - 6; 78 on May 7 - 16; 76 and 72 on May 17 - 18; 69 on May 19 - 29; 72, 76, 76, and 77 on May 30 - June 2, and 78 on June 3 - 8.

Predicted planetary A index is 15, 10, 5, and 10 on April 25 - 28; 5 on April 29 - May 1; 12, 8, 5, 10, 12, and 14 on May 2 - 7; 8 on May 8 - 10; 5 on May 11 - 19; 8 on May 20 - 22; 5, 12, 8, and 5 on May 23 - 26; 10, 14, 12, 8, and 5 on May 27 - 31; 10, 12, and 14 on June 1 - 3; 8 on June 4 - 6, and 5 on June 7 - 8.

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Sunspot numbers for April 18 - 24 were 23, 23, 11, 0, 0, 0, and 0, with a mean of 8.1. The 10.7-centimeter flux was 74.6, 72.7, 69.9, 69.3, 69.4, 68.8, and 69.3, with a mean of 70.6. Estimated planetary A indices were 2, 4, 4, 4, 4, 8, and 7, with a mean of 4.7. The middle latitude A index was 2, 4, 4, 4, 8, and 6, with a mean of 4.6.

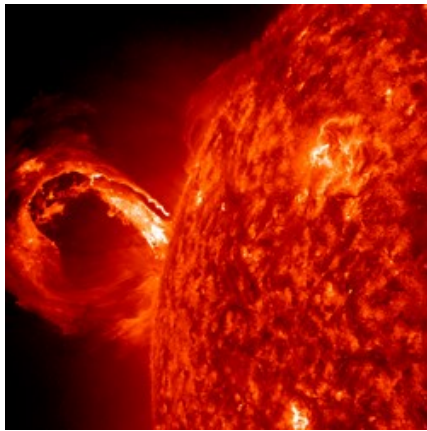
A comprehensive K7RA Solar Update is posted Fridays on the ARRL website. For more information concerning radio propagation, [visit](#) the ARRL Technical Information Service, [read](#) "What the Numbers Mean...", and [check out](#) K9LA's Propagation Page. A propagation bulletin [archive](#) is available. [Monthly charts](#) offer propagation projections between the US and a dozen DX locations.

[Share](#) your reports and observations.

Courtesy of the ARRL Newsletter

Solar Cycle 25 Predicted to be Similar to Cycle 24

Scientists predicting the sun's activity for Solar Cycle 25 say it's likely to be much like that of current Cycle 24, which is declining and predicted to bottom out in 2019 or 2020. Solar Cycle 25 Prediction Panel experts said Solar Cycle 25 may get off to a slow start, but is anticipated to peak between 2023 and 2026 with a sunspot range of 95 to 130. This is well below the typical average of 140 to 220 sunspots per solar cycle. The panel expressed high confidence that the coming cycle should break the trend of weakening solar activity seen over the past four cycles. The Solar Cycle Prediction Panel forecasts the number of sunspots expected for solar maximum, along with the timing of the peak and minimum solar activity levels for the cycle. The outlook was presented on April 5 at the [2019 NOAA Space Weather Workshop](#) in Boulder, Colorado.



A 2013 coronal mass ejection.
[Photo courtesy of NOAA]

complete one solar cycle, this is only the fourth time that US scientists have issued a solar cycle prediction. The first panel convened in 1989 for cycle 22.

For Solar Cycle 25, the panel hopes for the first time to predict the presence, amplitude, and timing of any differences between the northern and southern hemispheres on the sun, known as hemispheric asymmetry. Later this year, the panel will release an official sunspot number curve showing the predicted number of sunspots during any given year and any expected asymmetry. The panel will also look into the possibility of providing a solar flare probability forecast.

"While we are not predicting a particularly active Solar Cycle 25, violent eruptions from the sun can occur at any time," said Doug Biesecker, panel co-chair and a solar physicist at NOAA's Space Weather Prediction Center ([SWPC](#)).

[Visit](#) the SWPC to obtain the latest space weather forecast. Read [more](#). -- *Thanks to NOAA*

"We expect Solar Cycle 25 will be very similar to cycle 24: Another fairly weak cycle, preceded by a long, deep minimum," said panel co-chair Lisa Upton, a solar physicist with Space Systems Research Corp. "The expectation that Cycle 25 will be comparable in size to Cycle 24 means that the steady decline in solar cycle amplitude, seen from cycles 21 - 24, has come to an end and that there is no indication that we are currently approaching a Maunder-type minimum in solar activity."

The solar cycle prediction gives a rough idea of the frequency of space weather storms of all types, from radio blackouts to geomagnetic storms and solar radiation storms. In addition to its effects on Amateur Radio signal propagation, space weather can affect power grids; critical military, airline, and shipping communications; satellites and GPS signals, and can even threaten astronauts through exposure to harmful radiation.

Solar Cycle 24 reached its maximum in April 2014, with a peak average of 82 sunspots. The sun's northern hemisphere led the sunspot cycle, peaking more than 2 years ahead of the southern hemisphere sunspot peak. Given that the sun takes 11 years to complete



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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

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WELZ TP05 Power Meter WELZ TP05 Power Meter

Yaesu FT 60

FNB-83 Battery Packs (2) FNB-83 Battery Packs (2)

G3 Globe Traveler Radio G3 Globe Traveler Radio

YAE VX-170 Transceiver YAE VX-170 Transceiver

3 ft Cable with Connectors 3 ft Cable with Connectors

SO-239 Connectors

Travel Alarm Clock

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Don (Byron) Rector W3UBF

Apt 2102

84 Dernstine Rd

Hatfield, PA 19440

215-723-1421

_donaldrector1932@yahoo.com

Kenwood TS-520S in good working order priced at 250.00.

Kenwood R-2000 Receiver with optional YG-455C included 250.00.

Both Items sell on EBAY for well over 300.00.

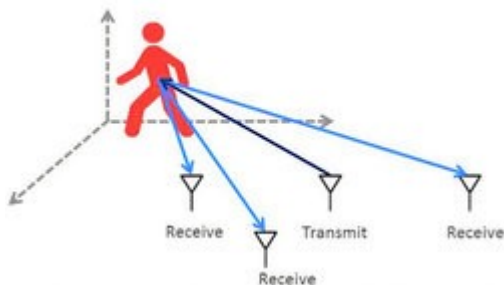
Elliott Ressler W3YEP

erressler27@gmail.com

Tel: 215-635-4893

MIT Requests FCC Rules Waiver for Medical Monitoring Device

The Massachusetts Institute of Technology (MIT) is seeking a waiver of some Part 15 rules in order to obtain FCC certification of its WiTrack System, a swept-frequency ultra-wide band (UWB) indoor medical monitoring device. According to MIT, the WiTrack System uses an indoor swept signal of up to 2.5 GHz in the 6 - 8.5 GHz band to passively monitor mobility, breathing, and other physiological signals in patients and senior adults. Because the system would transmit an RF signal and receive its reflection from the environment, it would not require the use of body-worn sensors. MIT has indicated that different versions of the devices would sweep slightly different frequencies within the 6 - 8.5 GHz range.

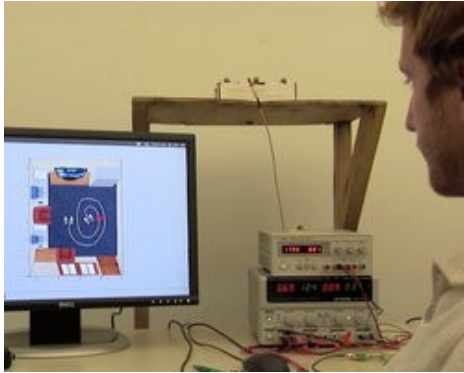


According to MIT [publicity material](#), WiTrack tracks the 3D motion of a user from the radio signals reflected off a person's body. It works even if the person is occluded from the WiTrack device or in a different room. WiTrack does not require the user to carry any wireless device.

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"WiTrack localizes the center of a human body to within 10 to 13 centimeters in the x and y dimensions (about the size of an adult hand), and 21 centimeters in the z dimension. It also provides coarse tracking of body parts, identifying the direction of a pointing hand with a median of 11.2 degrees. It can also detect falls with 96.9% accuracy. WiTrack can be incorporated into consumer electronics and has a wide set of applications," MIT says.



Section 15.503(d) of the FCC's rules defines a UWB transmitter as an intentional radiator that, at any point in time, has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth. The WiTrack System would not satisfy this definition, because each frequency step is less than 500 MHz in bandwidth "at any point in time," MIT says, even though the total bandwidth needed for optimal performance exceeds 500 MHz. MIT states that the waiver it seeks is similar to those previously granted by the Commission, and that grant of a waiver for the WiTrack System would be in the public interest.

The waiver request has been folded into ET Docket 19-89, and interested parties have until April 18 to comment and until May 3 to file reply comments.

Courtesy of the ARRL Newsletter

Petition for Rule Making Calls for "Amateur Digital Mode Transparency"

The FCC is accepting comments on a *Petition for Rule Making* ([RM-11831](#)) seeking to amend FCC Part 97 rules that require all ham radio digital transmissions to use techniques "whose technical characteristics have been documented publicly." The *Petition*, filed by Ron Kolarik, KO1DT, of Lincoln, Nebraska, expresses concerns that some currently used digital modes are not readily and freely able to be decoded, and it asks the FCC to require all digital codes to use protocols that "can be monitored in [their] entirety by third parties with freely available, open-source software," per §97.113(a)(4).

Kolarik said his petition also aims to reduce levels of amateur-to-amateur interference from Automated Controlled Digital Stations (ACDS) on HF operating under §97.221(c)(2). Kolarik wants the FCC to delete §97.221(c), which permits automatic control of digital emissions provided the station "is responding to interrogation by a station under local or remote control, and [n]o transmission from the automatically controlled station occupies a bandwidth of more than 500 Hz." The petition does not call for eliminating ACDS, however. Under current rules, ACDS are allowed in specific sub-bands.

In his *Petition*, Kolarik maintains that interference from ACDS continues to be "a major problem on the amateur bands." He suggested that an absence of formal complaints may be due to the fact that such stations are "difficult to identify."

The *Petition* also proposes to amend §97.309(a)(4) to ease monitoring of certain digital transmissions. "Without open, over-the-air interception capability for all transmissions in the Amateur Radio spectrum, there is no way to determine if there is commercial or other prohibited, inappropriate content in ongoing communications..." Kolarik's *Petition* asserts. He said problems arise when "protocols and devices used in commercial, government, and marine services are used in the Amateur Service with no adequate means to fully decode transmissions," thwarting any efforts at self-policing of such transmissions. He said simplifying the language "would remove ambiguity about what constitutes 'publicly documented technical characteristics' by requiring any protocol to be freely decodable," and lead to "amateur digital mode transparency, present and future."

Kolarik contended in his petition that FCC action stemming from ARRL's 2013 "symbol rate" *Petition for Rule Making* could increase congestion (i.e., interference) problems. In July 2016, the FCC in WT Docket 16-239 [proposed](#) to revise the Part 97 rules to eliminate current baud rate limitations for data emissions, consistent with ARRL's *Petition*, but declined to propose a bandwidth limitation for MF and HF digital to replace current baud rate limitations. ARRL had asked the FCC to delete the symbol rate limits in §97.307(f) and replace them with a maximum bandwidth for data emissions of 2.8 kHz on amateur frequencies below 29.7 MHz.

Courtesy of the ARRL Newsletter

Faster, More Contest-Friendly FT4 Digital Protocol Beta Version to Debut on April 29

A new, speedier, more contest-friendly digital mode is just days away, initially in beta form. [WSJT-X](#) developers say serious work on the new FT4 protocol began shortly after the FT8 Roundup held last December 1 – 2. The goal was a mode that could compete with RTTY contesting in terms of contact rates, while preserving many of the benefits of FT8.

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“Over the past month a small group of volunteers have been conducting on-the-air tests of FT4,” the *WSJT-X* Development Group — Joe Taylor, K1JT; Steve Franke, K9AN; and Bill Somerville, G4WJ — announced this week. “The early tests were very successful and helped us to make a number of important design decisions. We believe FT4 has considerable promise for its intended purpose.”

The developers say FT-4 soon will be ready for testing by a larger group and they’re seeking interested participants who can offer their “considered feedback.” They suggest reading [The FT4 Protocol for Digital Contesting](#) first. A general release of the *WSJT-X* suite that includes FT4 is anticipated in July.

According to the document FT4 is an experimental digital mode designed specifically for radio contesting that — like FT8 — uses fixed-length transmissions, structured messages with formats optimized for minimal contacts, and strong forward-error correction. Transmit-receive sequences are 6 seconds, making it 2.5 times faster than FT8 and about the same speed as conventional RTTY for

radio contesting. FT4 can work with signals 10 dB weaker what would be required to decode RTTY while using much less bandwidth.

Transmissions last for 4.48 seconds, compared to 12.64 seconds for FT8. Modulation uses four-tone frequency-shift keying at approximately 23.4 baud, with tones separated by the baud rate. The occupied bandwidth is 90 Hz.

“We plan to post downloadable installation packages for *WSJT-X* version 2.1.0-rc5 on Monday, April 29,” the Development Group said. *The FT4 Protocol for Digital Contesting* document includes:

- Instructions for installing *WSJT-X* 2.1.0-rc5 and configuring FT4.
- FT4 operating instructions.
- A basic description of the FT4 protocol, modulation, and waveform.
- Detailed sensitivity measurements for FT4 under a wide variety of simulated propagation conditions.
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“A few parameters and operating behaviors of FT4 are still being tested and optimized,” the initial FT4 guide says. “It will be very useful to hold several more mock contest practice sessions, with a larger group of active participants.”

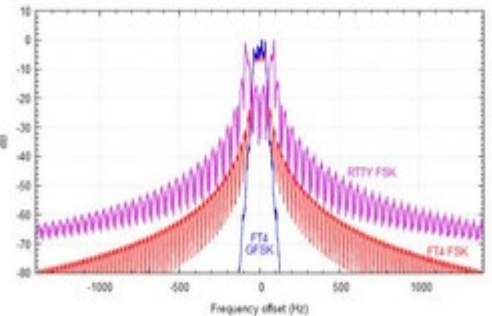
Even if these practice sessions reveal no serious bugs or inadequacies, the *WSJT-X* Development Group believes FT4 is still too new to be used in the ARRL VHF Contest (June 8 – 10) and ARRL Field Day (June 22 – 23). For that reason, release candidate *WSJT-X* 2.1.0-rc5 will “time out” on June 7.

Here is the proposed schedule related to the FT4 beta version rollout.

- April 29: Second announcement, with links to downloadable installation packages for *WSJT-X* 2.1.0-rc5
- May 9, 0000 – 0100 UTC: FT4 practice session, 7.090 MHz
- May 14, 0000 – 0100 UTC: FT4 practice session, 7.090 MHz
- June 5, 0000 – 0100 UTC: FT4 practice session, 7.090 MHz (if needed)

July 15: General Availability (GA) release of *WSJT-X* 2.1.0.

Courtesy of the ARRL Newsletter



Spectra of an FT4 signal transmitted with GFSK (blue), FT4 with FSK (red), and RTTY with continuous-phase FSK (purple).

**WARC General Membership Meeting Minutes
April 4, 2019**

Attendance:

Call to Order

Introductions - pass mic

Minutes from last Meeting

Additions/Corrections – Motion made and everyone approved minutes as published at in the newsletter

Committee Reports

Treasurer's Report: *Herb KB3VMN*

As reported at the meeting

Programs: *Jacek KC3HXF*

May – Keith Putnam Elections & Hamfest Final Prep.

June - Laura Floyd, KC3GWL Project Recap

July - Radio Astronomy, Robert Welsh, N3RW

Sunday, May 26 Special event at the Shrine of Czestochowa. 11am – 6pm. We will use the same special call sign as last year, W3P. We will have a sign-up sheet at next month's meeting.

Membership: *Norm AB3ZZ*

103 active members. 1 new application. We had a lot of good response to the email blast regarding the number of members that were past due. A second reminder email will be sent out prior to the election ballot email.

Public Service: *George N3HBT*

March for Babies on Sunday, April 28. Sign-up sheet is here at the meeting to sign up for this event.

Memorial Day parade is on and they will need our help. Monday, May 27. Will need 10 operators for this event. Sign-up sheet will be available soon.

Five Ponds golf outing in June 6. Will need about 8-10 people for this event again.

Michael announced the Tour de Cure bike race is Saturday, June 15. Cards were handed out tonight for anyone interested in signing up.

Classes: *George KA3WXXV/Ron WB2OOB*

No classes are currently running. Classes in the fall will be tech classes starting the second Monday in September.

VEC Testing: *Larry WA3ELQ*

Successful VE session this past Monday night. 3 successful candidates. Next session will be the final Monday in April. The May session will be 1 week earlier due to Memorial Day.

Repeater: *Brian N3EXA*

Nothing to report. Everything functioning. Need more people using it.

Good and Welfare: *Ken, K9KJL*

Nothing to report. Please contact him if you know of someone who needs a card sent to them for any reason.

Other Committees

Hamfest: Michael W3MAS

Sunday, May 5 coming up

Sign-up sheets are available tonight. Please sign up tonight. You can also sign up on our website if you are undecided tonight. All volunteers will enter the Hamfest for Free and will receive a hot/cold tumbler.

Set up on Saturday, May 4 beginning at about 3pm

Transport team – 2 functions, bring equipment from the senior center beginning at 2pm at the Senior center. Bring equipment back to the center after the Hamfest

Front Gate – Early in the morning, beginning at 6am about a total of 10 to 12 people.

Parking – again beginning early in the morning at about 6am, need about 10 to 12 people.

Tear down and cleanup – starting at about noon for about an hour or so.

Signage crew – will not need anyone for this

VE Testing crew – only need about 6 people for this area. No other people are needed.

Thanks to Irwin for setting up some great speakers, Bob Allison is the keynote speaker, AA3B, EPA Section meeting, George Miller and Bob Famiglio

Slacks Hoagies will be open again. Will have people running out to the flea market area taking orders.

Vendors can start setting up at about 4:30pm and can set up until about 7pm.

Outdoor vendors will be set up starting in the middle of the parking lot and go to the back.

Radio Sport: Irwin KD3TB

Nothing to report at this time. No contests coming up this weekend.

Field Day: Doc W3GAD

Coming up on June 22 and 23. Please let us know if you are interested in captaining a band and if you want to run a station, please let Doc know.

Old Business**July Meeting Date Changed****Constitution Review****Elmer Program**

6 club members who have stepped up to become elmers. If anyone else is interested. See Bill Ballantine.

New Business**W3GOD Donation**

Radio donation with power supply. International space station, Field Day are 2 events that will be using this equipment.

KC3JET Donation

Gerald donated his equipment to the club. We will be reviewing the items and some things may be in the club table at Hamfest other items we will hold onto.

After Meeting Clean-up

We need to make sure we leave the BWSC hall the way we found it. Please be mindful before you leave to return your chair where you found it and throw your trash out.

Nominations – Irwin KD3TB and Jacek KC3HXF are the nominating committee. Voting will begin the end of April. It will be going out via Constant Contact. The ballot is as follows:

President: George Acker, KC3ESH

Vice president: Marty Squicciarini, NR3Z and Tony Simek, N3YNH

Secretary: Norm Miles, AB3ZZ

Treasurer: Herb Hickmott, KB3VMN

Elected Directors (2): Larry Abbott, WA3ELQ and George Brechmann, N3HBT

Motion made and approved to close nominations.

In 2 weeks, PackRats is having there awards night with ARRL speakers.

Motion to Adjourn at 8:21pm***Program: MESH Networks with Tom Nolan W3EX*****An Iowa ARES team helped a water utility to resolve an RFI issue.**

Des Moines (Iowa) Water Works (DMWW) uses secure radiotelemetry to monitor various remote-site parameters to alert staff to problems. Earlier this year, DMWW experienced periodic and sometimes total failure of the radio system. After no solution could be found, staff reached out to various resources, including the FCC. [Polk County ARES](#) was also brought in, and eight operators assembled to track down the interference, working the late shift. After a process of elimination, the ARES volunteers pinpointed the interfering signal to defunct equipment atop a downtown Des Moines building. The team contacted the owner of the license associated with the equipment and got permission to disable it, and DMWW confirmed that the signal interference was gone. Collectively, the Polk County ARES volunteer team spent approximately 70 hours assisting DMWW. Following the experience, DMWW installed a more robust radio system with encryption and established stronger relationships with several entities that can

Courtesy of the ARRL Newsletter

American Honda has announced a voluntary recall of some 200,000 portable generators sold in the US, due to a potential fire and burn hazard.

The recall includes the EU2200i, EU2200i Companion, and EB2200i generators. The US Consumer Product Safety Commission (CPSC) says the affected portable generators can leak gasoline from the fuel valve. Users should stop operating the recalled generator and contact an authorized Honda dealer for a free repair. Honda is also contacting users directly. For more information, [visit the CPSC website](#). A similar recall has been issued in Canada.

Courtesy of the ARRL Newsletter

CLUB INFO

PUBLIC SERVICE

Memorial Day parade for Warminster. Sign up sheet will be at the May meeting.
June is the Hole in One golf outing on the first Thursday in June. Sign up sheet at the May meeting. We will need about 10 operators

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.

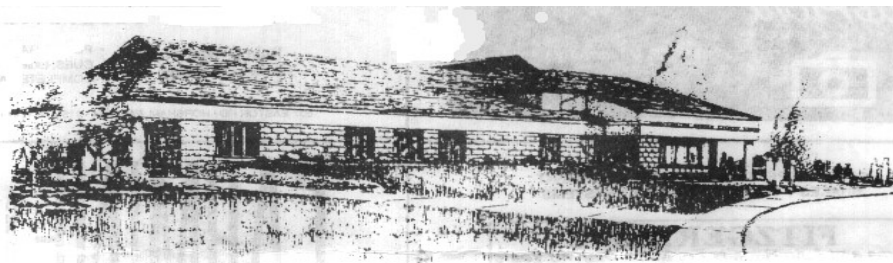
PROGRAMS 2019

May – Keith Putnam Elections & Hamfest Final Prep.

June - Laura Floyd, KC3GWL Project Recap

July - Radio Astronomy, Robert Welsh, N3RW

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

June

8-10 [June VHF](#)

1800 UTC Saturday, runs through 0259 UTC Monday

22-23 [Field Day](#)

1800 UTC Saturday and running through 2059 UTC Sunday

July

13-14 [IARU HF World Championship](#)

200 UTC Saturday and ending 1159 UTC Sunday

August

3-4 [222 MHz and Up Distance Contest](#)

1800 UTC Saturday and ending at 1759 UTC Sunday

18 [Rookie Roundup – RTTY](#)

1800 to 2359 UTC

QSO Parties

7th Call Area	1300Z, May 4 to 0700Z, May 5
Indiana	1500Z, May 4 to 0300Z, May 5
Delaware	1700Z, May 4 to 2359Z, May 5
New England	2000Z, May 4 to 0500Z, May 5 and 1300Z-2400Z, May 5
Arkansas	1400Z, May 11 to 0200Z, May 12

V.E. TEST LOCATIONS

Confirm all information, in advance, with the contact person. Licensed applicants must bring the original, and one photocopy of their license. All applicants, including children, must bring two forms of positive ID. Also bring the original, and a copy, of any Certificate of Successful Completion needed to prove current status. The ARRL VEC'S 2019 test fee is **\$15.00**.

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

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

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

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

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

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

➤ ATLANTIC DIV. HAMFESTS ➤ 2019

May 5 - [Eastern Pennsylvania Section Convention \(Warminster ARC Hamfest\)](#)

Bucks County Community College - Lower Bucks Campus 1304 Veteran Highway
Bristol, PA 19007
<http://www.k3dn.org/hamfest/>

May 26 - [Memorial Day Hamfest](#)

Howard County Fair Grounds 2210 Fairgrounds Road West Friendship, MD 21794
<http://www.marylandfm.org>

June 8 - [Bloomsburg Hamfest](#)

Lime Ridge Community Center 6405 4th Street Lime Ridge, PA
<https://www.qsl.net/cm-arc/hamfest.htm>

June 16 - [Father's Day Hamfest at Arcadia](#)

Arcadia Fairgrounds 16920 Carnival Avenue Upperco, MD 21155
<http://w3ft.com>

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, Jacek Ostrowski KC3HXF

Area Repeaters

VHF

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

220

- 224.580 PackRats
- 223.76 K3NAL

UHF

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

D-STAR

- 146.61000 K3PDR DV
- 445.18125 K3PDR DV
- 445.01875 AA3E Montco RACES

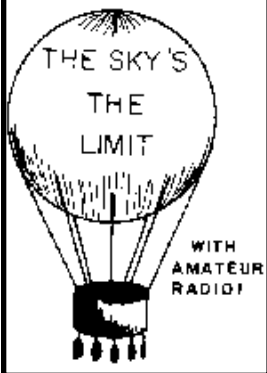
6 Mtr

- 53.030 WA3BXW
- 53.230 N3DQZ
- 53.320 K3MFI

*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.



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 ?**

2019 Officers

Executive Officers

President	George Acker	KC3ESH	215-815-7783
Vice-President	Jacek Ostrowski	KC3HXF	215-343-1899
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	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	WA4YWM	215-538-1889
Field Day 19	Doc Whitticar	W3GAD	215-968-6397
Hamfest 19	Michael Shanblatt	W3MAS	267-491-5773
Hamfest 19	Tony Cuttone	W3FLH	267-679-9297
Hamwear	Kathy Acker	KC3FBY	215-815-7978
Holiday Dinner	George Brechmann	N3HBT	215-443-5656
Membership	Norm Miles	AB3ZZ	
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