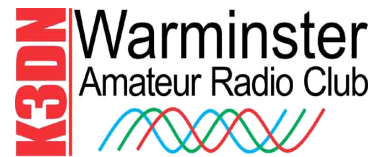




# FEEDBACK



Web Site [k3dn.org](http://k3dn.org)

Warminster Amateur Radio Club

April 2020

## Next Meeting **APRIL MEETING CANCELED**

### President's Message

I hope everyone is staying healthy and following the rules about staying home and social distancing. The only way to beat Covid-19 is to stop the spread. Just to give you an idea of how fast this virus can spread, let's say 1 person can infect 3 people a day and then each infected person infects 3 others in 10 days almost 20,000 people are infected. This is why it is important to stop the spread.

As you are aware all hamfests have been cancelled, even Hamvention. The monthly club meetings are also cancelled until further notice. I would like to try and have a Virtual meeting in May and as we work out the details I'll keep you posted.

Since we are confined to our homes, ham radio is the perfect hobby for this time. I have been on the air almost every day and monitor the repeaters. Give me a call and get on the air and talk to someone.

20 Meters - Daytime to Europe and beyond  
30-40-80-160 Meters - Sunset to sunrise stations from all over  
Contests - There are contests every weekend and sprints several days a week.  
FT-8 - Make contacts all over the world  
Fusion, DMR & Allstar - Give one of these modes a try.  
Homebrewing - Build something  
Satellite - Dual band HT and simple antenna

Speaking of getting on the air the club does have an HF station to loan to a ham currently without a rig. Reach out to a club officer for details.

It is my hope that we will be able to meet again by June and start to get ready for Field Day. However we still need to hold elections and if you would like to run or nominate someone for office please reach out to Bill Ballantine, K3FMQ our nomination chairman.

Hope to see you all soon, please stay healthy.

73,  
Marty NR3Z

### **FIELD DAY**

Wow! What a way to end the winter. I sincerely hope that this finds all of you in good health. With quarantines, social distancing and curfews everyone is paranoid and perhaps, rightfully, frightened about the immediate future. We all know that club meetings have been canceled and will, quite possibly, be canceled for the foreseeable future along with major events like our HAMFEST and The Eastern Area ARRL Convention.

While all this is disappointing to many of us, there are lights at the end of this tunnel. We are pretty sure it's not a big train coming the other way. We believe one of those lights is the annual ARRL FIELD DAY.

After being physically isolated (social distancing), it is time to get out, stretch your legs, get some sun AND get on with ham radio. FIELD DAY is one of the premiere operating activities on the amateur calendar. Appropriately it is an emergency preparedness exercise and operating with a hint of a contest all rolled into one, all too short, weekend. The contest element is between our stations to see who can put together the best operating station using whatever you choose. It is a great time to put your ingenuity to the test, try out new antenna ideas or learn more about some of the tried and true designs

Perhaps I am being optimistic but, without some activities to look forward to, the future could look very bleak. I prefer to look for the sunny spots and bask in the feeling of accomplishment. Toward that end I am hoping Warminster Amateur Radio Club and you, the membership, share this optimism and can lend a hand making the weekend of June 27<sup>th</sup> and 28<sup>th</sup>, one of the biggest and best

*(Continued on page 2)*

*(Continued from page 1)*

Field Days in the club's recent history. I know the days of the 13 ALPHA size efforts are a thing of the past but there is no reason why, with 3 different operating modes available on all bands we cannot support five or six stations on the air and also have a major public relations event to boot.

There are plenty of opportunities for everyone from organizing a station, lending a hand during setup, operating some really terrific radios during the 24 hours of operation, sharing some really delicious food, and helping to clean up after the weekend.

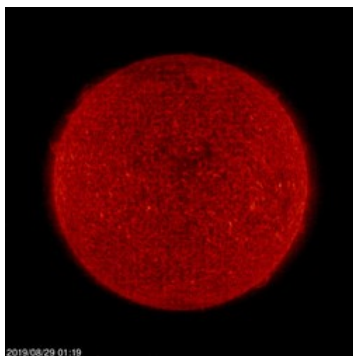
As chairperson I will look forward to hearing from many of you stepping forward to fill the many empty shoes lined up to show the best side of HAM RADIO and the comradery that is the nature of our hobby to the other participants and visitors too. Some tasks will be managed by experienced teams that are very willing to mentor anyone willing to take on any of the many tasks needed to make this coming out weekend special.

I am looking forward to hearing, via email at: [docw3gad@outlook.com](mailto:docw3gad@outlook.com), phone at: 215-990-4683 (please make your message brief), or on the air via the repeater or the nets.



Meanwhile please stay healthy and get on the air.  
73 de Doc W3GAD

### The K7RA Solar Update



Tad Cook, K7RA, Seattle, reports: We saw another week with no sunspots, which were last seen just briefly more than 2 weeks ago on March 8 - 9. [Spaceweather.com](https://spaceweather.com) reports that, so far in 2020, the percentage of days without sunspots (76%) is about the same as all of 2019, when it was 77%.

Average daily solar flux inched up from 70.1 to 71.1. Geomagnetic indicators remain quiet, with average planetary A index at 7.7, a little higher than the previous week's 5.9 average. Average mid-latitude A index was also 5.9, up from 4.1 last week.

Predicted solar flux for the next 45 days is 71 on March 26 - April 2; 70 on April 3 - 4; 72 on April 5 - 18; 70 on April 19 - May 1, and 72 on May 2 - 9.

Predicted planetary A index is 5 on March 26 - 29; 12 on March 30 - 31; 8 on April 1; 5 on April 2 - 5; 10 and 8 on April 6 - 7; 5 on April 8 - 13; 8, 12, and 8 on April 14 - 16; 5 on April 17 - 22; 12 and 8 on April 23 - 24; 5 on April 25 - May 2; 10 and 8 on May 3 - 4, and 5 on May 5 - 9.

Sunspot numbers for March 19 - 25 were 0, 0, 0, 0, 0, and 0, with a mean of 0. The 10.7-centimeter flux was 72.1, 71.7, 70.8, 70.2, 70.4, 71.2, and 71.2, with a mean of 71.1. Estimated planetary A indices were 12, 7, 8, 7, 12, 4, and 4, with a mean of 7.7. Middle latitude A index was 7, 5, 5, 7, 10, 4, and 3, with a mean of 5.9.

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*

*(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

Kenwood TS-570D HF Transceiver. 10-160 meters. Automatic Antenna Tuner. SSB and CW (500hz) filters. Includes hand mic, power cord, and original box.  
PS-40 Power supply for the radio.

Asking \$550.00 for both.

Marty NR3Z  
Skitch@SkitchFamily.net  
NR3Z@ARRL.net

### Coronavirus Ham Radio Guidelines

#### GUIDELINES

Amateur Radio operators are requested to adapt to the Coronavirus mitigation guidelines as they apply to amateur radio operating.

All ham radio operators are encouraged to stay at least 6 feet from the microphone in order to maintain proper separation from others. The distance may be reduced if a mask is put on the microphone.

CW operators should wear appropriate gloves when handling keys. Keyboard CW operators should disinfect their keyboards.

There should be no more than 10 stations on the same frequency at the same time.

Disinfect all knobs, switches, etc before operating ... especially touch screens and PTT. Shoe covers should be worn when using foot switches. Use of hands-free VOX is strongly encouraged although from 6 feet away, it may be necessary to shout.

Disinfect all antenna cables coming into the station.

Only mobile stations and walkie-talkie contacts are permitted where sit-down service has been banned. The 6 ft microphone separation guideline is suspended for these types of operation, but the use of a mask on the microphone is strongly recommended.

Mobile operators are encouraged to remain in their vehicles except to get necessities.

Operators should leave their operating positions only for necessities.

Outdoor antenna work is allowed as long as there is social distancing among all who are present.

Hoarding of batteries, spare tubes, etc. is discouraged and is unfair to others. We are in this together.

New equipment and parts should be ordered "to-go" online for front porch delivery.

(Continued on page 4)

*(Continued from page 3)*

Do not test (tune) your equipment unnecessarily. Testing should be reserved for those who actually need it.

Your understanding and cooperation in this matter will be appreciated.

*Sent by a good friend of mine from Tennessee, W4TZB Wayne*

### **IARU Region 2 Seeks Young Hams to Help Reshape Amateur Radio**

International Amateur Radio Union (IARU) Region 2 (R2, the Americas) is looking for a few young hams interested in helping to remake amateur radio for the 21st century.

"Frustrated that there are so few of your friends and age group that are interested in ham radio? Frustrated that amateur radio is in a rut, not doing more or different things with technology? Concerned that an aging demographic means ham radio is dying? And that our frequencies will be sold out to the highest bidder because there aren't enough hams to show that we use them?" IARU Region 2 said in a March 3 [solicitation](#). "So are we. And we want to do more than talk. We want to do something about it."

According to the announcement, IARU R2 is looking for volunteers who would brainstorm ideas and possible actions to make amateur radio more attractive to a younger generation.

"We're not looking for a single magic approach. After all, amateur radio means many things to many people. Rather, we're looking for possible ways to target specific interests that are either part of ham radio today or could be part of ham radio in the future to recruit and retain new amateurs," the solicitation said. IARU R2 said it's looking for radio amateurs between the ages of 18 and 35 who have been licensed for more than 1 year. Applicants must be self-starters willing to take initiative, exercise creativity, and volunteer their time.

If interested, [contact](#) IARU Region 2 Secretary George Gorsline, VE3YV, telling why you are willing to volunteer, your current interests, and your thoughts on solutions. "Ideally, we would like to have as many parts of the Americas represented as possible," IARU R2 said in its announcement.

"This is more than a think tank. We're prepared to provide funding to try out some of the proposed ideas to see how well they work. We expect that some ideas will work, others won't, and different things will work in different parts of the Americas -- one size will not fit all. As part of the work, IARU R2 would propose to send one person to the IARU R1 YOTA youth camp to experience the camp, meet with the R1 youth coordinators to learn about what they are doing in Europe and Africa, to exchange ideas, and to explore what joint activities might be done." -- *Thanks to Joaquin Solana, XE1R, IARU Region 2*

*Courtesy of the ARRL Newsletter*



### **Motorola Wins Multimillion Dollar Theft of Trade Secrets Case Against Hytera**



A jury for the US District Court of the Northern District of Illinois has awarded [Motorola Solutions](#) damages of \$764.6 million in its theft of trade secrets and copyright infringement lawsuit against [Hytera Communications](#) of Shenzhen, China. In 2017, Motorola filed [complaints](#) in federal court alleging that Hytera's digital mobile radio (DMR) products employed techniques and systems that infringed on Motorola Solutions' patents and trade secrets. Already known for its Land Mobile Radio Service products, Hytera entered the amateur radio DMR market in 2016. Its ham products include the Hytera AR482Gi digital mobile radio.

Motorola alleged that proprietary and patented information was taken illegally by three former company engineers who went to work for Hytera, as "part of a deliberate scheme to steal and copy" its technology. The company said it would seek a global injunction to prevent Hytera from trade secret misappropriation and copyright infringement, a Motorola spokesperson said following the verdict.

Motorola said technology features it developed started showing up in Hytera products soon after Hytera began hiring former Motorola engineers in 2008, according to the lawsuit.

In a [statement](#), Hytera expressed disappointment and disagreement with the verdict and said it would appeal. But, the company went on to say that it has "enhanced its corporate governance and added new policies and procedures related to intellectual property and the onboarding of new employees." Hytera also said it's "engaged in an ongoing process of removing the affected source code from the products at issue and has been rolling out updated software to the marketplace."

*(Continued on page 5)*



*Courtesy of the ARRL Newsletter*

## ARISS Celebrates Successful Launch Carrying Interoperable Radio System to ISS



Amateur Radio on the International Space Station ([ARISS](#)) is celebrating the successful launch and docking of the SpaceX-20 commercial resupply mission to the International Space Station (ISS). One payload on the flight is the ARISS Interoperable Radio System (IORS), which ARISS calls "the foundational element of the ARISS next-generation radio system" on the space station. Amateur radio has been an integral component of ISS missions since 2000. The *Dragon* cargo capsule docked successfully with the space station on March 9. ARISS-US Delegate for ARRL Rosalie White, K1STO, said hundreds of ARRL members contributed to make the IORS project happen, and ARISS is celebrating the 4-year-long project.

"ARISS is truly grateful to ARRL and AMSAT for their co-sponsorship and support of ARISS since day one," White said. "ARISS greatly appreciates the hundreds of ham radio operators who have stood by ARISS, sending financial support and encouragement. A robust ham station is on its way to replace the broken radio on the ISS, and tens of thousands of hams will enjoy strong ARISS packet and ARISS SSTV signals as a result. In addition, thousands of students will discover and use ham radio to talk with a ham-astronaut. We hope to see the trend continue where more ARISS teachers and local clubs set up school ham clubs." The new system includes a higher-power radio, an enhanced voice repeater, updated digital packet

radio (APRS), and slow-scan television (SSTV) capabilities for both the US and Russian space station segments.

White called the March 7 launch, "beautiful, flawless." ARRL President Rick Roderick, K5UR, told ARISS that he had his fingers crossed for a successful launch.

According to NASA Mission Control, it will take the three ISS crew members up to a month to unload and stow the 4,300 pounds of cargo on board the *Dragon* capsule, and the IORS is not a priority. The actual ham equipment will be installed in the ISS *Columbus* module. Another IORS unit is in line to be launched and installed in the Russian segment of the ISS later this year.



The IORS consists of a custom-modified JVCKenwood TM-D710GA transceiver, a multi-voltage power supply, and interconnecting cables. The ARISS hardware team will assemble four flight units -- and 10 IORS units in all -- to support onboard flight operations, training, operations planning, and hardware testing. Future upgrades and enhancements to the next-generation system are in various stages of design and development. These include a repaired Ham Video system -- currently planned for launch in mid-to-late 2020, an L-band (uplink) repeater, a microwave "Ham Communicator," and Lunar Gateway prototype experiment.

*Courtesy of the ARRL Newsletter*

## Dayton Hamvention Cancels 2020 Show

For the first time in its 68-year history, Dayton Hamvention® will not take place this year, due to concerns about the coronavirus outbreak. The glum news was not entirely unexpected, given widespread cancellations of public gatherings and a national state of emergency.

"The Hamvention Executive Committee has been monitoring the COVID-19 pandemic. We have worked very closely with our local and state health departments. It is with a very heavy heart the Hamvention Executive Committee has decided to cancel Hamvention for this year," Hamvention General Chair Jack Gerbs, WB8SCT, said in announcing the cancellation on March 15. "This decision is extremely difficult for us, but with around 2 months until the Great Gathering we felt this action necessary. More specific details regarding the closure will soon be posted. Thank you for your understanding in this time of international crisis."



The Dayton Hamvention cancellation comes less than a week after the International

DX Convention in Visalia, California, called off this year's show. The Dayton Amateur Radio Association (DARA) sponsors Hamvention.

Since 2017, Hamvention has been held each May at the Greene County Fairgrounds and Expo Center in Xenia, Ohio. The international gathering attracted more than 32,000 visitors in 2019.

Hamvention's announcement has caused the cancellation of other associated events. These include Contest University, the Contest Dinner, and the Top Band Dinner. The QRP Amateur Radio Club International's "Four Days in May" event has also been cancelled. Presumably, the DX Dinner, sponsored by the SouthWest Ohio DX Association ([SWODXA](#)) and AMSAT Academy have also been called off, although no formal announcements have been made.

*Courtesy of the ARRL Newsletter*

### Radio Amateurs Team Up to Help University Design Low-Cost Ventilator



Amateur radio volunteers from around the world have volunteered to assist University of Florida Professor Sam Lampotang and his engineering team in their quest to rapidly develop an open-source, low-cost patient ventilator that can be built anywhere from such commonly available components as PVC pipe and lawn-sprinkler valves.

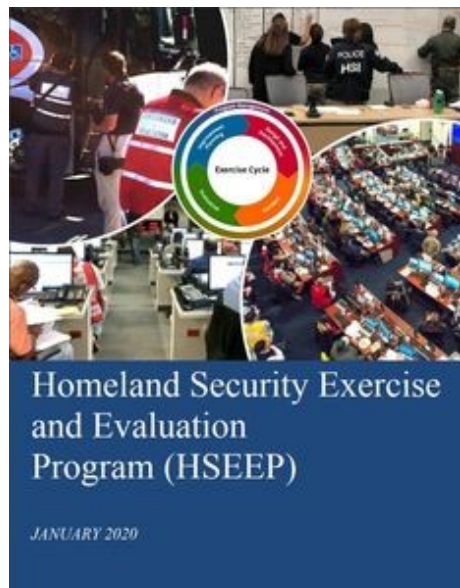
The amateur radio volunteers are developing Arduino-based control software that will set the respiratory rate and other key parameters in treating critically ill coronavirus victims.

Multiple volunteers responding to a call for help from Gordon Gibby, MD, KX4Z, include noted software developer Jack Purdum, W8TEE, and uBITX transceiver maker Ashhar Farhan, VU2ESE. University of Florida physicians are working to address the critical legal aspects as the design moves closer to fruition. The ventilator's valves would precisely time compressed oxygen flow into patient breathing circuits under Arduino control, allowing exhausted patients with "stiff" lungs impacted by viral pneumonia to survive until their body can clear the infection.

The software design team is also adding simple features such as an LCD display, encoders to choose parameters, and watchdog safety features.

*Courtesy of the ARRL Newsletter*

### Major Florida Emergency Communication Conference and Exercise are a Major Success



Radio amateurs and communications professionals from several states convened over the February 29 - March 1 weekend in Gainesville, Florida, for a training conference and exercise to test new skills learned along with basic radio communication skills and protocols. The Alachua County Emergency Manager and staff served as exercise evaluators. Former FEMA Administrator Craig Fugate, KK4INZ, also attended and served as an exercise player on Sunday. The weekend's programs and exercise were developed by Gordon Gibby, KX4Z, who also conducted the optional ARRL EC-001 *Introduction to Emergency Communications* course on Friday.

"Overall, the exercise was positively reviewed by both the participants and the professional evaluators," reported Rick Palm, K1CE, who edits the *ARES E-Letter* and took part in the activity. "For the participants, a few of the more-challenging objectives were documentation on the ICS forms, and establishing HF voice/Winlink connections, which were ultimately achieved successfully," he recounted. "Some participants were unclear on some procedures and instructions. Set-up and getting HF antennas erected resulted in delay, leaving some message traffic backed up." These stumbling blocks were discussed in an after-exercise debriefing, Palm said.

"More easily accomplished was setting up radio equipment, using VHF packet, and addressing the issues presented [by the exercise moderators]. Group relationships were dy-

namic and positive. Units were able to check into the command net with little difficulty," Palm added.

The conference featured a basic track for individuals needing basic or advanced skill improvement, and a leadership track for ARES® leaders who need to design and execute exercises while growing local groups. The day kicked off with a review of amateur radio disaster response, with discussion focused on service to main stakeholders, including government agencies, NGOs, and disaster survivors. Topics covered the importance of communications when "lives are really at stake" and the value of exercises.

Good weather prevailed for the Sunday exercise with a large and enthusiastic group of radio amateurs on hand to put lessons learned the previous day into practice by playing out the Homeland Security Exercise and Evaluation Program (HSEEP)-compliant exercise dubbed

*2020 Hot & Cold.* The scenario was a malfunction of high-pressure natural gas pipelines with telecommunications failures. Resources required included VHF/UHF/HF voice and digital equipment and capabilities; the Winlink system, and the NTS/RRI networks.

The Incident Command post and shelters for area residents were staffed and set up with both long-haul, regional, and local radio communication capabilities. The overall exercise mission was "response."

Players worked to meet several objectives, which included joining the command net, using alternative antennas (such as a long wire to replace a Yagi), employing emergency power sources and alternatives in the event of failures, checking into an HF voice net for message handling, using Winlink to access gateways and make connections, practicing voice net control procedures, drafting ICS-213 message forms and transmitting, receiving, and relaying messages, composing and transmitting situation reports to the Incident Command Post via the command net, and completing required documentation.

Participant surveys indicated that those taking part felt that the best features of the exercise were testing equipment, learning how to complete the ICS forms, having the ICS-205 frequency plan ahead of the exercise, antennas, and power source testing.

Surveys and comments indicated that some participants wished they had studied the exercise plan missions and objectives more in advance; understood the forms they had access to better in Winlink; were more familiar with Winlink, local frequencies, and digital modes in general; tested their equipment before leaving home, and had advance practice with the packet mode.

"[These are] all good learning opportunities that will result in greater efficiency in next year's exercise, and, of course, the real thing, should that occur," Palm said.

*Courtesy of the ARRL Newsletter*



**Former FEMA Administrator Craig Fugate, KK4INZ, also attended and served as a *Hot & Cold* exercise player.**

## Georgia Institute of Technology CubeSat to Feature Amateur Radio Robot Operation

The Glenn Lightsey Research Group's Space Systems Design Lab at the Georgia Institute of Technology is sponsoring a 1U CubeSat mission that will include a digital robot. The primary function of the GT-1 satellite is to serve as an educational proof of concept and satellite bus demonstrator.

Georgia Tech will use this mission as an opportunity for undergraduates to get involved in all facets of a space mission, from design to implementation and support. GT-1 will test a prototype deployable antenna and solar panels, which can be used for future missions derived from the same baseline design, and with inclusion of additional experimental equipment. It will operate with AX.25 protocol telemetry. In partnership with the W4AQL Georgia Tech Amateur Radio Club, the satellite will also host a digital contact robot payload, inspired by the earlier Russian RS-12 and RS-13 satellites of the early 1990s. GT-1 will collect contact information from stations that contact the robot as it orbits.



The satellite will also function as a standard digipeater. Plans call for a deployment from the International Space Station in October.  
-- Thanks to AMSAT News Service



## 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

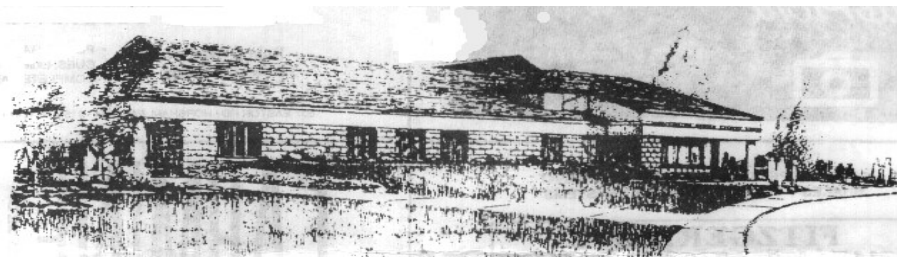
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for \$8 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership. Pictures for the club badge will be taken before club meetings on even 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](mailto:membership@k3dn.org).

If you want to have your picture taken to be placed on the 'Members' Photos' section of the [www.k3dn.org](http://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 2020

June 4 - Pizza Night

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.



## 2020 Contest Calendar

## April

**19 Rookie Roundup – Phone**

1800 to 2359 UTC

## June

**13-15 June VHF**

1800 UTC Saturday, runs through 0259 UTC Monday

**20 Kids Day**

1800 UTC through 2359 UTC

**27-28 Field Day**

800 UTC Saturday and running through 2059 UTC Sunday

**QSO Parties**

Nebraska	1300Z, Apr 4 to 0100Z, Apr 5 and 1300Z-2200Z, Apr 5
Missouri	1400Z, Apr 4 to 0400Z, Apr 5 and 1400Z-2000Z, Apr 5
Mississippi	1400Z, Apr 4 to 0200Z, Apr 5
Louisiana	1400Z, Apr 4 to 0200Z, Apr 5
New Mexico	1400Z, Apr 11 to 0200Z, Apr 12
Georgia	1800Z, Apr 11 to 0359Z, Apr 12 and 1400Z-2359Z, Apr 12
North Dakota	1800Z, Apr 11 to 1800Z, Apr 12
Michigan	1600Z, Apr 18 to 0400Z, Apr 19
Florida	1600Z, Apr 25 to 0159Z, Apr 26 and 1200Z-2159Z, Apr 26

## 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 2020 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](mailto: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](mailto: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](mailto:w3pa@arrl.net)  
Alt Contact: Jim, 610-287-5630

➤ ATLANTIC DIV. HAMFESTS  
➤ 2020

## April 25

York Hamfest

ELICKER'S GROVE PARK 511 Roth Church Road Spring Grove, PA 17362

<http://www.yorkhamfest.org/>

## May 24

Memorial Weekend Hamfest

Howard County Fair Grounds 2210 Fairgrounds Road West Friendship, MD 21794

<http://www.marylandfm.org>

## June 13

Bloomsburg Hamfest

Lime Ridge Community Center 6405 4th Street Lime Ridge, PA

<https://www.qsl.net/cm-arc/hamfest.htm>

## June 21

Father's Day Hamfest at Arcadia

Arcadia Fairgrounds 16920 Carnival Avenue Upperco, MD 21155

<http://W3FT.com> & [Facebook](#)

**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:**

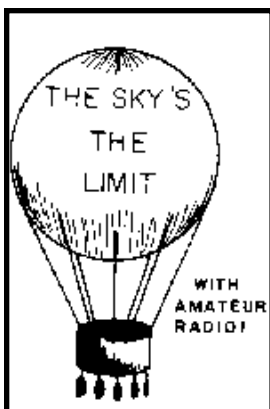
<https://www.weather.gov/phi/Info>

**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](http://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 Family Member: \$ 10.00**  
**Student:           \$ 10.00**  
**Alumni:             \$ 10.00**

- Are your dues current ?

## 2020 Officers

### Executive Officers

President	Marty Squicciarini	NR3Z	215-872-9644
Vice-President	Tony Simek	N3YNH	
Secretary	Norm Miles	AB3ZZ	267-625-9117
Treasurer	Herb Hickmott	KB3VMN	267-718-3601
Director (A)	Doug Becker	KC3MNQ	
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 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