FEEDBACK

Warminster Amateur Radio Club

Web Site k3dn.org **Warminster Amateur Radio Club** **July 2014**

Next Meeting July 3rd , 2014

President's Message

First I want to thank you for the privilege you have given me in the election as club president for the upcoming year. In addition, we have a number of new board members to assist in the effort of running the organization. Having new board members means fresh new ideas, and different outlooks of making the Warminster ARC a dynamic organization. Please join me in expressing thanks to Irwin / KD3TB for his strong leadership for the last 2 years as your club president.

You have all seen the Warminster ARC's web site with the motto: **"The Club is it's Membership"**. That is really true. As the incoming president, I want to emphasize that each of YOU is a unique member of the club. I am constantly amazed about the backgrounds of each of the members. You are a unique group of folks who have come together because of your common enjoyment of amateur radio. For the new members, if you have a question or need help, please let any board member know, and there are a number of folks in the club who can help.

Let me bring you up to speed on a few new items in the club:

- **Club Station** – We have upgraded the club radio station to an all mode Kenwood TS-2000. This radio is equipped with all HF bands, 6-meters, vhf/uhf bands, DSP filtering, voice recorder, and some great other features.

- **Hamfest** – Thanks to Mother Nature, we again had a very successful hamfest. Here in SE Pennsylvania we are benefitting from fewer competing events which drives up our attendance. Next year we are looking for a new hamfest chairperson. Many thanks to Mark/WA3QVU our hamfest co-chair, and all of you who helped.

- **Field Day** – As I write this, the Field Day activity is in a few days at the National Shrine of Our Lady of Czestochowa, and all of our preparations are all in place. The forecast for Saturday is 77F and no precipitation. Hopefully this holds up. Let me thank in advance Mark / AA3K and Marianne / KA2VJO for again coordinating the event including the cooking by Marianne. We can't forget all the band captains, and volunteers. The club purchased some new screened tents, and hope they keep the bugs at bay. |

- **Club Clothing –** Herb Hickmott / KB3VMN is our club's clothing guru. He is working with a vendor in Doylestown who can supply shirts, hats, jackets, and all kinds of items. Our goal is to get the WARC logo scanned and digitized as a stitch pattern for our items, and then get prices on the items. We will get the ordering up on the website which would allow paying via PayPal. Or you can coordinate with Herb direct at trap5858@yahoo.com**.** Also a big thanks to Michael / KB1JEY who reached out to Herb and advised what Michael is doing with the Packrats clothing items.

- **Low Carb Alternative** – We know some of our members are cutting the carbs. So the board has decided to offer some fruit and non-carb snacks to go with the donuts. Speaking of that, Randy and Doc could use some help on meeting nights to carry some food items up and down the steps. Please give them a hand.

As we start the month of July, we can look forward to a number of operating events for the Summer as well as the start of the vacation season.
Don't forget that with our upgraded our new club station radio club station, we can now work all modes, and some of these HF events can be worked by our technicians who can fully participate in the event.
I'm looking forward to a great year.
'73s
Richard J Luce, Jr
President Warminster ARC
ag3l@arrl.net Ph: 215-852-3897

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CLUB OFFICERS FOR 2014 - 2015

President: Rich Luce AG3L
Vice President: Vinny Porcraro K3VJP
Treasurer: Bill Ballantine K3FMQ
Secretary: Tony Cottone W3FLH
Elected Directors: Joe Horanzy AA3JH and Andy Vavra KD3RF
Appointed Directors: Al Konschak WI3Z and George Brechmann N3HBT

Ham radio classes in September 2014

Warminster Amateur Radio Club sponsors Classes for all 3 levels of licensing in the hobby.

Looking to get your Ham Radio license? Morse code is no longer a requirement!
Or do you have a entry level license and are you looking to meet with other hams and expand your knowledge about Ham radio?

The free Ham radio classes given by the Warminster Amateur Radio Club are the place for you!

Entry level License classes are starting soon.

Classes will be offered starting on Monday, September 8th, 2014 at the Benjamin Wilson Community Center. The classes will start at 7:00 pm and last until 9:00 pm and run for 8 Mondays. The Classes are free, but the students will be responsible for any study guides.

All classes are at the Benjamin Wilson Senior Center
580 Delmont Ave.
Warminster, PA

For further information Contact:
George Brechmann, N3HBT at 215-443-5656

THE K7RA SOLAR UPDATE

The daily sunspot number rose dramatically during this reporting period, when it increased to 276 on June 13, but 2 days later it was back below 100. The resulting weekly average for June 12-18 (141) was actually down 2.3 points from the previous 7 days. The average daily solar flux was down 11.7 points to 134.7.

Predicted solar flux has been weakening lately, and near-term flux values are predicted at 110 on June 19, 105 for June 20-22, 100 for June 23-24, back to 105 for June 25-26, 120 for June 27 through July 6, 115 for July 7-12, and peaking at 130 for July 13-19.

ARRL Field Day <http://www.arrl.org/field-day> is June 28-29, when the predicted flux value is 120. This is the highest predicted flux value for those 2 days since May 25, when it was also 120.

Predicted planetary A index is 8 on June 19, 5 for June 20-21, 8 on June 22, 5 for June 23 through July 10, 8 on July 11, 5 on July 12, and 10, 8, 8, and 5 for July 13-16, respectively.

This weekly "Solar Update" in The ARRL Letter is a preview of the "Propagation Bulletin" issued each Friday. The latest bulletin and an archive <http://arrl.org/w1aw-bulletins-archive-propagation> of past propagation bulletins is on the ARRL website.

Courtesy of the ARRL Newsletter

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AMATEUR RADIO ROLE ON SPACE STATION FEATURED AT ISS RESEARCH AND DEVELOPMENT CONFERENCE

Amateur Radio on the International Space Station (ARISS <http://www.ariss.org>) got some visibility this week at the third annual ISS Research and Development Conference. The conference, organized by American Astronautical Society <http://www.astronautical.org/> (AAS) in cooperation with the Center for the Advancement of Science in Space and NASA, wrapped up June 19 in Chicago.

ARISS International Chairman and AMSAT Vice President for Human Spaceflight Frank Bauer, KA3HDO, was the lead presenter for a program compiled by members of the ARISS US team -- which included ARISS International Secretary and ARRL Delegate Rosalie White, K1STO, ARRL Education Services Manager Debra Johnson, K1DMJ, and E. Mike McCardel, KC8YLD, of AMSAT. The presentation, "ARISS -- Inspiring and Educating Youth through Direct Connections with the ISS Crew," focused on ARISS and its role in education.

ARISS is the first and longest continuously running educational outreach program involving the International Space Station. The first ARISS school contact took place in late 2000, and nearly 900 such Amateur Radio contacts have taken place since then.

Preparation for the ARISS experience motivates both students and teachers to further their educations. Educators involved in an ARISS event can learn about electronics and wireless technology through the hands-on training provided in an ARRL Teachers Institute on Wireless Technology <http://www.arrl.org/teachers-institute-on-wireless-technology> session -- several are held each year. In similar fashion, youngsters preparing for a contact with an ISS crew member may learn about radio waves, space technology, science experiments on board the ISS, geography, and the space environment. Some 15,000 students are touched directly by an ARISS contact each year, and many more become aware the program and its benefits either directly or via news media coverage resulting from an event.

The ARISS presentation at this week's AAS conference provided some historical background on the ARISS program, described the international volunteer team responsible for making program a success, and presented an overview of the process for schools to apply for an ARISS school contact. It also explained how the ARISS team partnered with NASA Education Office's Teaching from Space <http://www.nasa.gov/audience/foreducators/teachingfromspace/home/#.U58GDLGiWCQ> program to engage schools and students. It also described some of the educational outcomes from ARISS, including data and feedback from schools, students, and organizations.

In addition to inspiring an interest in science, technology, engineering, and math (STEM) curricula and careers, ARISS offers an opportunity for Amateur Radio experimentation and for evaluating new technologies. Read more <http://www.arrl.org/news/amateur-radio-role-on-space-station-featured-at-iss-research-and-development-conference>.
-- Thanks to The American Astronautical Society via AMSAT News Service

Courtesy of the ARRL Newsletter

COLORADO HAM TRACKS DOWN, RESOLVES INTERFERENCE FROM POT CULTIVATORS' "GROW LIGHTS"

The ARRL already has complained <http://www.arrl.org/news/arrl-to-fcc-grow-light-ballast-causes-hf-interference-violates-rules> to the FCC that so-called "grow light" ballasts can generate severe interference on the HF bands. According to a recent article in The Coloradoan, retired electrical engineer Tom Thompson, W0IVJ, first
noticed interference on 40 meters at his location in Boulder a couple of years ago. So, he coupled his own portable receiving loop <http://tomthompson.com/radio/ReceivingLoop/loop.html> with a direct-conversion receiver that he could use to walk around his neighborhood and pin down noise sources. In at least one instance, the problem emanated from a domestic marijuana-growing operation -- a "grow house."

"With the increase in legalized medical and recreational marijuana comes an increase in RFI due to electronic grow light ballasts," Thompson explained <http://tomthompson.com/radio/GrowLight/GrowLightBallastFilter.html> on
his website, where he describes how he constructed a filter that considerably reduced interference from the devices. "These ballasts are usually switching power supplies, capable of lighting 600 to 1000 W high-pressure sodium or metal halide lamps," Thompson said. "The switching frequency is usually 50 to 70 kHz and is rich in harmonics."

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Thompson said that because the light fixture is separated from the ballast by about 25 or 30 feet of wire -- approximately a quarter-wave on 40 meters -- the RFI may be strongest on that band. "I have heard radiations from these systems up to about one-half mile away," he said. "When the [marijuana] plants are young, the lights are on 24/7. After about 2 weeks, the lamps are on for 12 hours, and off for 12 hours." Thompson said that since most systems are on a timer, it's possible to predict when the RFI will start, once you have determined the initial
"on" time.

Thompson said one of the interfering growers was nice enough to loan him a lamp ballast for testing, and he was able to get a used lamp for free from a local grow shop. He gives away the common-mode choke filters to owners of offending lighting systems.

As the article in The Coloradoan pointed out, with 22 states and the District of Columbia now allowing medical marijuana, and Colorado and Washington permitting its recreational use, "there's been an explosion in the number of people growing their own pot, much of it indoors." The noise problems are reported to be worst in Colorado and California.

Thompson told The Coloradoan, "If I can track this down, anybody can track this down. If I listen long enough, I can tell when they turn the lights off...you can tell exactly when the harvest is."

Thompson has written an article on the topic of tracking down and resolving such interference. It is scheduled to appear this fall in QST.

Courtesy of the ARRL Newsletter

A CENTURY OF AMATEUR RADIO AND THE ARRL

A VHF-and-above ham license had been discussed and debated for years. When the FCC changed the Amateur Radio license structure on July 1, 1951, it established the Technician class license. It required passing a Morse code test of 5 WPM; the written exam was the same as the General class test.

The purpose of the Technician license was to allow electronics-minded people to get on the air easily to experiment on 220 MHz and higher frequencies, at a time when major advances were taking place on those amateur bands. As it turned out, the number of experimenters in the Technician ranks was fairly small; most Technician licensees wanted to be communicators. The FCC responded to this fact by progressively granting additional operating privileges to Techs.

In 1955, Technicians got privileges on 6 meters; in 1959, they obtained privileges on 145 to 147 MHz; in 1972, 145 to 148 MHz; in 1978, all privileges above 50 MHz, and in 1987, a small subband for 10 meter SSB. In 2000, Technicians who had passed a 5 WPM code test were allowed to operate CW on the Novice segments of 80, 40, and 15 meters, and to use all modes on 10 meters.

Experimentation and advances in the state of the Amateur Radio art on VHF-and-above remained, for the most part, the domain of higher-class licensees, although a fair percentage of Technicians contributed too.

As communicators, Technician licensees have proven to be a great asset to Amateur Radio during disasters and emergencies, for which the VHF/UHF bands have become primary. The proliferation of mobile stations on VHF and above also has played an important role in providing public service and emergency communication support.

As the FCC intended, both Technician and Novice licensees spurred the growth of Amateur Radio in the US. In 1950 there were about 90,000 hams; by 1956, there were more than 140,000; by 1963, more than 250,000, and today there are some 723,000 licensees.

Joe Speroni, AH0A, has compiled ham radio licensing statistics
<http://www.dxzone.com/cgi-in/dir/jump2.cgi?ID=13872 > from June 1997 to the present. -- Al Brogdon, W1AB

Courtesy of the ARRL Newsletter

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A CENTURY OF AMATEUR RADIO AND THE ARRL

Let's continue our stroll through ham radio in the early 1950s.

TVI was the major technical problem facing radio amateurs during the 1950s, and the ARRL led the fight. Articles appeared in QST, authored by George Grammer, W1DF; Phil Rand, W1DBM; and others. The League worked with TV manufacturers to reduce TVI problems in future TV designs. Hams started using low-pass filters at the output of their HF transmitters, and band-pass filters at the output of their VHF and UHF transmitters. Yet the TVI problem persisted for many years.

In addition to TVI, there was ITV -- interference from TV receivers, caused by strong radiation from the horizontal oscillators at 15.734 kHz and multiples thereof, well into the HF range. As you tuned across a lower HF band, there would be raspy "markers" every 15.7 kHz.

In the early 1950s, a few hams started working with amateur television (ATV), building complex equipment to generate NTSC video signals. They were successful, but usually there were only a few stations near enough to make contact -- sometimes only one other ATV-active ham. Although it was an excellent technical accomplishment, ATV never caught on in a big way in the 1950s.

Military surplus equipment and its conversion to amateur use continued to be of considerable interest, with articles in QST detailing how such conversions could be made. New vacuum tubes that had been developed for military use during the WW II years found great utility in ham equipment, particularly the tubes developed for high-power HF and VHF/UHF transmitters.

These surplus tubes were very inexpensive. One popular one was the 1625, the 12 V filament equivalent of the 807, a workhorse tube that was good for 75 W or so. They sold for 25¢ each, or four for $1. The 813 was another popular tube for higher power, A pair could run 500 W input.

The ARRL continued the push to get more hams on the VHF/UHF bands. Ed Tilton, W1HDQ, wrote many articles about the VHF/UHF equipment he designed and built, including a 2 meter station for Novices. QST began publishing a box listing of states worked on 50 MHz (with maximum path lengths noted), and the first 50 MHz Worked All States (WAS) awards (48 states back then) were earned.

A new idea -- voice-operated transmit (VOX) -- appeared in the early 1950s, so phone operators could chat back and forth quickly, rather than taking turns transmitting long monologues. A few AM operators used VOX, but the idea was quickly put into use by SSB enthusiasts. The earliest VOX switches required the operator to use headphones, so the VOX would not be triggered by the receiver audio, but anti-VOX circuits were soon published in QST that would allow use of the station speaker.

Courtesy of the ARRL Newsletter

A CENTURY OF AMATEUR RADIO AND THE ARRL

Continuing our look at ham radio in the early 1950s, we see that QST reported regularly on states that offered call sign license plates for motor vehicles. Just a handful of states offered call sign plates at first, but the idea gained momentum as more and more states joined in. Ham clubs -- or groups of ham clubs -- would lobby their state legislators to introduce bills requesting a new law. One notable example was Mississippi, where an eight-member Amateur Radio club lobbied successfully, leading to a new state law allowing Amateur Radio call sign tags!

With the help and advice of the ARRL, governments at the federal, state, and local levels started looking at ham radio's role in Civil Defense. The idea was to get a CD organization in place before an emergency, rather than waiting until afterward (as happened in World War II). By this time, the value of hams in providing emergency communication had been demonstrated to and appreciated by government agencies all over, so the ARRL's role was to get things operating smoothly while in the planning stages, rather than having to make a "hard sell."

The 1950s were, of course, the time of the "Cold War" and the threat of all-out nuclear war. Seattle, Washington, was the scene of a massive "A-Bomb Test," to test all aspects of emergency preparedness, should a nuclear device hit the city, and the Amateur Radio Emergency Corps -- as ARES was known in those days -- was a major asset during the test. On a related note, QST carried several articles on radiological monitoring during the early 1950s.

Following World War II, the number of private automobiles in the country increased by leaps and bounds, as vehicle production

shifted from military to civilian needs, and as the populace became more affluent and more mobile. In 1938, about 1.7 million American cars were built; in 1953, more than 6 million. As a result, QST published many articles on mobile receiving converters, mobile transmitters (single-band and bandswitching), and mobile antennas -- particularly multiband antennas.

Other areas that received attention in QST included VHF topics, the Military Affiliate (now "Auxiliary") Radio System (MARS), huge rotary arrays for 10 meters, antennas for VHF/UHF, RTTY, HF receivers and transmitters, and electronic keyers.

The ugly face of zoning restrictions first appeared in the 1950s. The ARRL got involved in helping hams wage legal battles against overly restrictive community limits on antenna and tower heights -- or, in some cases, complete prohibitions of antennas. These cases were reported in QST as they developed. Happily, the radio amateurs always won complete or partial victories in the court cases, thereby setting precedents for future battles of a similar nature. -- Al Brogdon, W1AB

Courtesy of the ARRL Newsletter

RADIO AMATEURS ARE PRINCIPAL PLAYERS IN EFFORT TO RESURRECT 36-YEAR-OLD NASA SPACECRAFT

Not even an earthquake kept the ISEE-3 Reboot Project <http://www.rockethub.com/42228> from contacting the 36-year-old International Sun-Earth Explorer 3 spacecraft -- later repurposed, redirected, and renamed the International Cometary Explorer (ICE) -- on May 29 from the Arecibo Observatory in Puerto Rico. The ISEE-3 Reboot Project is a private crowd-funded group of engineers, programmers, and scientists -- including several radio amateurs -- that is trying to fire the old spacecraft's engines to redirect its path. And that has to happen by June 17, according to Dennis Wingo, KD4ETA, one of the team members and the CEO of California-based Skycorp Incorporated <http://www.skycorpinc.com/Skycorp/Home.html>. Wingo has not ruled out the possibility that ICE could crash into the moon, but just commanding one of the spacecraft's transponders on 2.042 GHz by radio marked a major milestone.

"[W]e have successfully contacted the bird!" Wingo enthused in a June 1 project update. Wingo was at Arecibo Observatory on May 29 when a magnitude 5.8 earthquake rattled the region. Wingo said he and his colleagues were in a safe area when the earthquake occurred.

Surviving the earthquake experience aside, Wingo said, the "first miracle" was to command the spacecraft. The second task was to interpret data received back from the spacecraft. The group is hoping to place ISSE-3/ICE into a gravitationally stable spot some 930,000 miles from Earth -- essentially its original orbit -- where it could again study the effects of solar weather on Earth's magnetosphere (the project's slogan is "Make me do science again!"). But, it has a lot of work to do before that is possible. The group has obtained NASA's approval to communicate with the satellite.

"One of the major problems that we have...is to update the range to the spacecraft, so that its position, velocity, and trajectory into the Earth-Moon system can be properly plotted," Wingo said. If the team can fire the spacecraft's thrusters this month, ISSE-3/ICE will fly by the moon at an altitude of some 50 km on August 10.

Newer digital signal processing (DSP) techniques have made it possible to develop and apply software solutions to address problems that would have required extensive hardware a decade earlier. The project has purchased DSP peripherals from Ettus Research, founded by Matt Ettus, N2MJI, to implement modulator and demodulator programs.

More information and updates are available on the ISEE-3 Reboot Project <http://www.facebook.com/ISEE3Reboot> Facebook page and the ISEE3 Returns Community <https://www.facebook.com/ISEE3returns> Facebook page. The project also has a ISEE-3 Reboot Project
<https://plus.google.com/u/0/110871408384252629393/posts> Google+ page. Read more
<http://www.arrl.org/news/radio-amateurs-are-key-players-in-effort-to-maneuver-36-year-old-nasa-spacecraft

Courtesy of the ARRL Newsletter

CLUB INFO

PUBLIC SERVICE
Alex Lemonade Stand - July 20
Hatboro Car Show - July 26
See George , N3HBT

CLUB STATION
The WARC club station is open to anyone with an interest, on Tuesday evenings between the hours of 7:00 and 9:00 pm. 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. Please contact the Membership Committee for more information if interested."

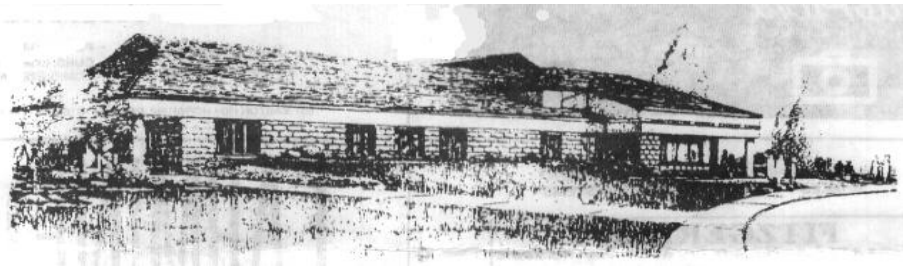
ATTENTION MEMBERS
The Membership Committee can provide Club badges. Two types are available: an engraved plastic callsign and name badge for $5 or a free, laminated plastic, photo ID badge/card. The photo id badge is included with your membership when a facial photo is provided by you. Please see members' photos on club website for proper facial composition. 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
2014

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 non-holiday Tuesday evenings from 7 to 9 pm . 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.**



2014 Contest Calendar

JULY
12-13 **IARU HF World Championship** 1200 UTC Saturday and ending 1200 UTC Sunday

AUGUST
2 - 3 **August UHF** 1800 UTC Saturday through 1800 UTC Sunday
16-17 **10 GHz and Up** 6:00 AM local Saturday through 12:00 midnight local Sunday
17 **Rookie Roundup - RTTY** 1800 UTC through 2359 UTC

SEPTEMBER
13-15 **September VHF** 1800 UTC Saturday and runs through 0259 UTC Monday
20-21 **10 GHz and Up** 6:00 AM local Saturday through 12:00 midnight local Sunday

➢ **ATLANTIC DIV. HAMFESTS - 2014**
➢

July 5 - Eastern Pennsylvania Section Convention (Firecracker Electronics Expo & Hamfest)
Harrisburg Area Community College3599 Industrial Road
Harrisburg, PA 17101
http://www.w3uu.org

July 12 - Valley Forge Hamfest
Kimberton Fire Co. Fairgrounds Route 113 and Firehouse Lane
Kimberton, PA 19442
http://www.marc-radio.org

July 20 - MARYLAND HAMFEST AND COMPUTER FEST
Howard County Fairgrounds 2210 Fairgrounds Road
West Friendship, MD 21794
http://bratsatv.org/hamfest

August 16 - READING RADIO CLUB HAMFEST
Heritage Park of the Sinking Spring Area Historical Society
992 Clematis Street Sinking Spring, PA
http://www.qsl.net/w3bn/

August 17 - Carroll County Tailgate Fest
Carroll County Agricultural Center 706 Agriculture Center Drive
Westminster, MD 21157
http://www.qis.net/~k3pzn

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 2014 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, Monthly, RF Hill ARC. 3rd Monday at the Indian Valley Library. Charles Schmell, KB3CEZ, 215-257-6368 days 215-538-7458 evenings.

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 first non-holiday Tuesday 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

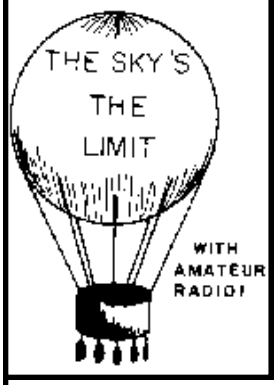
SKYWARN INFORMATION

MOUNT HOLLY NWSFO SKYWARN Weekly Information Net: EVERY THURSDAY AT 21:00 HOURS
SKYWARN Net Repeater Listing/ Streaming Audio of scheduled SKYWARN Net: http://www.skywarnnet.net
You do NOT have to be a certified SKYWARN Weather Spotter to check into the Net

Bucks County SKYWARN Weather Spotter PRIMARY FREQUENCY: 147.300MHZ (+ 131.8)
Fairless Hills, PA (many remote access locations throughout Bucks County)

Mount Holly NWSFO SKYWARN Homepage:
http://www.erh.noaa.gov/phi/skywarn/index.html

SKYWARN Basic Weather Spotter Educational Programs URL:
http://www.erh.noaa.gov/phi/skywarn/training.html#sched



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.

Entry level License classes are starting soon.

Classes will be offered starting on Monday, September 8th, 2014 at the Benjamin Wilson Community Center. The classes will start at 7:00 pm and last until 9:00 pm and run for 8 Mondays. The Classes are free, but the students will be responsible for any study guides.

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:

Upper Bucks	NJ3A-10	145.610 Riegelsville
Lower Bucks	NY3J-10	145.530 Bensalem
Montco	W3CF-10	145.950 Hatfield
Chester County	W3EOC-10	145.690

Net Schedules

Sunday	2100	10 Meter Net	28.445 MHz
Wednesday	2030	2 Meter Net	147.09 Rptr.
Wednesday	2030	Linked w/ 2 Meter Net	443.95
Rptr.Wednesday	2030	Linked w/ 2 Meter Net	53.230 Rptr.
Sunday	2030	Informal Net	223.5 Simplex
Thursday	1900	Mont. Cnty RACES Net	146.835 Rptr.

➢ **CLUB EQUIPMENT**
WARC has purchased four Vertex Standard 2-meter HT's that are available for use by members of the club. The HT's 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, Irwin Darack KD3TB 215 -343-8170

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

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

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**
Associate:	**$ 5.00**

- **Are your dues current ?**
- **Check the date on your Feedback mailing label.**

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Director (E)	Joe Horanzy	AA3JH	
Director (A)	Al Konschak	WI3Z	215-491-9941
Director (E)	Andy Vavra	KD3RF	
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Committee Chairpersons

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DXpedition	Doc Whitticar	W3GAD	215-968-6397
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Fundraising	Adam Huffnagle	KB3JCP	215-442-9526
Hamfest 14	Richard Luce	AG3L	215-441-8264
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Publicity	Bernice Kraut	KB3PCX	215-884-8195
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