



# FEEDBACK



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

Warminster Amateur Radio Club

September 2019

**Next Meeting September 5th - Amelia Earhart shoulda took along a Radio Amateur**

## President's Message

September brings the Back to School Season and for WARC that means our license classes start. September 9<sup>th</sup> is the start date for our classes this year which will include the entry-level Technician class and an upgrade class, which will cover the topics needed to upgrade to either General or Amateur Extra Class. We will also be offering a third class which we are calling an Elmer Class. This class will give any class license holder the opportunity to ask about any ham radio topics and have an experienced WARC member answer your questions for you. The subject matter for this class will be picked by the participants. During the first class we will discuss any topic that the members want to cover, and a schedule will be set up. Want to know how to solder a PL-259 connector, do you have questions about how to program a radio, interested about digital modes? If you are interested these could be on the class schedule. Bring your ideas and we will see you at the Ben Wilson Senior Center on the 9<sup>th</sup> starting at 7:00pm. For more information check the club's website at <http://www.k3dn.org/classesexams>

Also, this time of year brings us to nominations for the 2019 Outstanding Ham of the Year. If you know somebody who is worthy of this award, please email me at [KC3ESH@arrl.net](mailto:KC3ESH@arrl.net). As written in the selection guidelines, "*Nominees must be a current member in good standing of WARC and should be recognized for their contribution (current or lifetime) to benefit the club or its members, and their dedication to the Amateur Radio community as a whole*". Previous winners are Dave W13Y/SK, George N3HBT, Brian N3EXA, and Irwin K3TB. Nominations need to be received by the October 24, 2019 board meeting and the award will be presented at our Holiday Dinner on December 5, 2019, which starts at 6:30pm.

73, George, KC3ESH  
[KC3ESH@arrl.net](mailto:KC3ESH@arrl.net)

## **WARC General Membership Meeting Minutes August 1, 2019**

### **Attendance:**

- **Call to Order - 7:35pm**
  - Introductions - pass mic

### **Minutes from last Meeting**

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

### **Committee Reports**

- **Treasurer's Report:** *Herb KB3VMN*  
As Reported at Meeting

- **Programs:** *Marty NR3Z*

September - Amelia Earhart Story - Bill Strunk, K3ZMA

October - Club of the Year

November - ARRL Night

December - Holiday Dinner

- **Membership:** *Mary KC3KJZ (Not in attendance)*  
*121 Current Members*
- **Public Service:** *George N3HBT*  
*October 14, 5 Ponds Golf course, 9a, Golf outing*  
*Signup at September meeting*
- **Classes:** *George KA3WXV/Ron WB2OOB*

*(Continued on page 2)*

(Continued from page 1)

*2nd monday sept classes will start 7-9pm*

*3 types of classes*

*Conventional lecture tech class 8-9 Weeks*

*General / Extra Class Duration dependant on students and needs*

*Elmering Class Duration dependant on students and needs*

*Come with your classes and we will find the expert for you*

- **VEC Testing:** *Larry WA3ELQ*

*Last session was Monday July 29. 2 Applicants passed Tech Test.*

*No testing in August*

- **Repeater:** *Brian N3EXA*

*Amp adjusted, but all is working well*

- **Good and Welfare:** *Ken K9KJL*

*2 cards sent out over the last month, 1 for car accident, 1 for concussion*

*Ken will also be publicizing events, classes, etc.*

- **Other Committees**

**Radio Sport:** *Irwin KD3TB (not in attendance)*

*Nothing in the near future*

**Hospitality**

*Laura Floyd just graduated high school. She is headed to Indiana for school, cake provided by Mark for a farewell.*

**Old Business**

- **Constitution Review**

*Review will be started this month*

- **Groups Migration to Groups IO**

*Groups io*

*Migration has happened*

*Initial transfer was slower than expected, but it worked.*

*Only 73 people automatically transferred, the rest were manually put in.*

*If you are not receiving messages, contact Brandon.*

**New Business**

- **Holiday Dinner**

*Board has been discussing the Holiday Dinner. The price must be raised due to losing money each year. New estimated price will be \$20. At this price point we have the option of off-site catering. General poll was conducted with unanimous interest to move the Holiday Party to an off-site facility, such as Guiseppe's. More details to follow.*

- **Outstanding Ham of the Year (OHOTY)**

*Nominations due in October*

- **After meeting clean-up**

*We have received feedback from the center that we are not cleaning up after our meetings. While we dispute this, please be mindful and make sure your area is clean and restored to its pre-meeting condition.*

- **Board Meeting Dates Changed**

*o October changed from 10/31/19 to 10/24/19*

*o November changed to phone conference*

*o December canceled*

**Motion to Adjourn 8:04**

(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](mailto:dlrwild1@verizon.net)

267-535-9189 cell      ASKING: \$110 cash or check

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### REDUCED PRICE!!

Kenwood TS-520S in good working order priced at 150.00.

Kenwood R-2000 Receiver with optional YG-455C included 150.00.

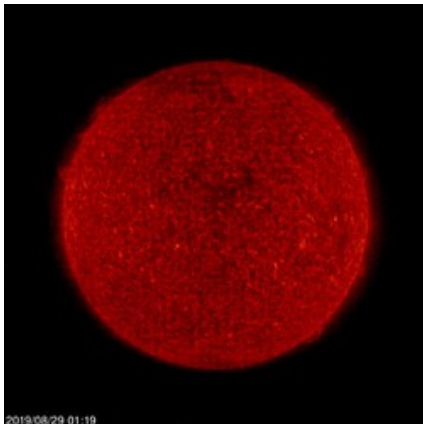
Both Items sell on EBAY for well over 300.00.

Elliott Ressler W3YEP

[erressler27@gmail.com](mailto:erressler27@gmail.com)

Tel: 215-635-4893

### The K7RA Solar Update



Tad Cook, K7RA, Seattle, reports: The current stretch of spotless days has continued for more than 3 weeks, according to [Spaceweather.com](http://Spaceweather.com). The continuing quiet seems eerie. For the past reporting week, Thursday through Wednesday, the average daily solar flux -- 10.7 GHz radiation that roughly tracks with sunspot activity -- was only 66. I had to go back to the fall of 2007 to find average solar flux in that range.

Predicted solar flux for the next 45 days is 66 on August 29 - September 4; 67 on September 5 - 11; 68 on September 12 - 15; 67 on September 16 - October 8, and 68 on October 9 - 12.

Predicted planetary A index is 5, 8, 20, 34, 16, and 8 on August 29 - September 3; 5 on September 4 - 5; 8 on September 6 - 7; 5 on September 8 - 21; 10, 15, and 8 on September 22 - 24; 5 on September 25 - 27; 35, 18, and 10 on September 28 - 30; 5 on October 1 - 2; 10 and 8 on October 3 - 4, and 5 on October 5 - 12.

Spaceweather.com reported that a large recurring coronal hole is facing Earth, and the effects are expected to be felt on September 1, when the predicted planetary A index is 34.

Sunspot numbers for August 22 - 28 were 0, 0, 0, 0, 0, 0, and 0, with a mean of 0. The 10.7-centimeter flux was 65.7, 66.5, 66.3, 66, 65.8, 66.1, and 65.9, with a mean of 66. Estimated planetary A indices were 6, 4, 5, 4, 6, 10, and 5, with a mean of 5.7. Middle latitude A index was 7, 4, 5, 5, 6, 10, and 5, with a mean of 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*

### Here are some links to stuff K3ZMA will talk about at WARC meeting:

Amelia Earhart and the Nikumaroro Bones: A 1941 Analysis versus Modern Quantitative Techniques Richard L. Jantz PDF :

<http://journals.upress.ufl.edu/fa/article/view/525/518>

A Tighar member's analysis of 57 credible Post Loss HF Signals from Amelia Earhart and Fred Noonan:

<https://tighar.org/Projects/Earhart/Archives/Research/ResearchPapers/Brandenburg/PostLossSignals/PostLossRadioAnalysis/PostLostRadioAnalysis.pdf>

All about Ham Brian Lloyd's Solo Flight Followed Historic Amelia Earhart Route at the equator in June-July 2017:

<http://projectameliaearhart.org/>

The Two books from members of Tighar that I referenced:

Finding Amelia, by Ric Gillespie; Naval Institute Press 2007

Amelia Earhart's Shoes, by T. F. King, Karen Burns, Randall Jacobson and Kenton Spading; AltaMira Press 2004

### Ending the Great Radio Silence after "The Great War"

Practical wireless was still in its infancy at the turn of the 20th century and unregulated experimentation rampant. Chaos reigned on the airwaves. Given the technology of the day -- spark gap transmitters that emitted very, very broad signals -- interference was a problem. As Al Brogdon, W1AB, explains in "The World War I Shutdown," in the September 2019 issue of *QST* (p. 70), hams, passenger ships, and the US Navy were the main users of wireless, and the Navy went to Congress in an unsuccessful effort to wrest control over radio and, effectively, abolish ham radio in the US. Radio amateurs opposing the bill had an ally in the Marconi Company.

When the US in 1917 joined the European conflict that became World War I, the federal government ordered hams to disassemble their stations, lower their antennas, and not use transmitters *or* receivers. Many hams who joined the military took their own radio gear along, because, as Brogdon explains, "the military didn't have enough radio equipment."

The end of the war did not mean the resumption of Amateur Radio. Hams were allowed to use their receivers again but not transmit. The Navy was still in charge of all US radio communications, and another bill introduced in Congress proposed handing over ongoing control of all radio to the Navy.



**ARRL First President Hiram Percy Maxim, W1AW.**

Publication of *QST* also ceased during the war, and many hams had let their ARRL memberships lapse for the duration. ARRL officers and key members dug into their own wallets to thwart the bill, mailing a "Little Blue Card" to members urging them to ask their congressional representatives to oppose the Navy proposal. ARRL President Hiram Percy Maxim went to Washington to speak against the bill, which died in committee.

It was not until 1919 -- amid another Navy effort to gain control over radio that was stalled by opposition from hams and others -- that the transmitting ban was lifted by an act of Congress. As Brogdon explains, "Maxim went to Washington again and found a sympathetic ear in Massachusetts Congressman William Greene, who ultimately introduced the successful House Joint Resolution 217,

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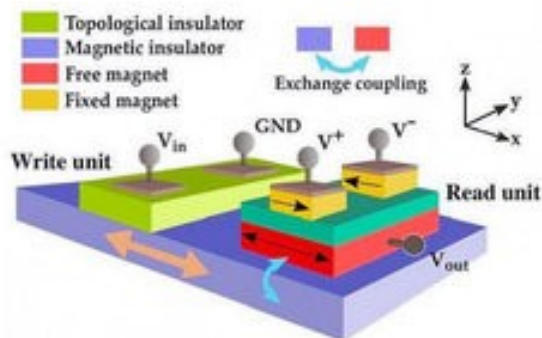
which asked the Navy 'to remove the restrictions on the use and operation of Amateur Radio stations throughout the United States.'"

Hams were back on the air by the fall of 2019 -- 100 years ago!

*Courtesy of the ARRL Newsletter*

### Logic Switch Uses No Electric Current

The *Smart2.0 Newsletter* for May 13 [reported](#) on a logic switch that uses no electric current. According to the article, researchers at New York University say the new method of controlling magnetic circuits is energy efficient, promising lower heat and energy costs in applications such as large server farms or in the artificial intelligence arena, which requires massive amounts of memory.



"The method uses a voltage-controlled topological spin switch (VTOPSS) that requires only electric fields, rather than currents, to switch between two Boolean logic states, greatly reducing the heat generated and energy used," the article explains. "Spin can be transported without a charge with the use of a topological insulator -- a material whose interior is insulating but that can support the flow of electrons on its surface."

Compared with existing spin-based devices, researchers claim the VTOPSS offers 10 to 70 times lower energy dissipation and 70 to 1,700 times lower energy-delay product. The VTOPSS technology, the researchers add, "offers competitive metrics compared with existing CMOS technology, and interconnect issues that dominate the performance in CMOS

logic are relatively less significant for the VTOPSS, enabling it to switch between two states more effectively."

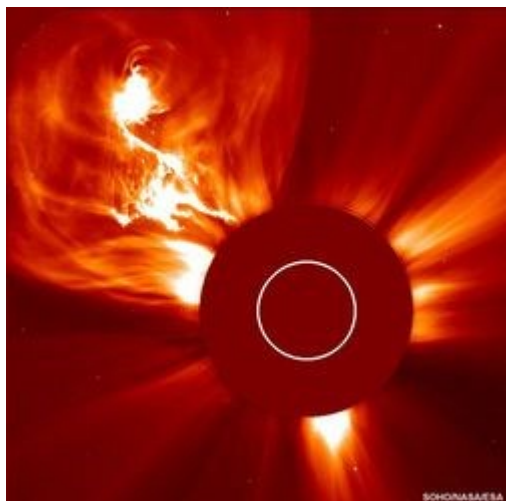
"Imagine if you were preparing a recipe and had to go into a different room anytime you needed an ingredient before returning to the kitchen to add it," says NYU Tandon School of Engineering Assistant Professor Shaloo Rakheja, the principal author of an [academic paper](#) on VTOPSS. "It's just as inefficient when the portions of computing hardware needed to do a calculation and the portions needed to store it are not well integrated."

The article noted that VTOPSS can reduce reliance on cloud memory, potentially making computing safer, because it would be harder for to gain access to a system's hardware.

*Courtesy of the ARRL Newsletter*

### 160 Years Since The Carrington Event

September 1 marks the 160th anniversary of the Carrington Event, the strongest geomagnetic storm known to have hit Earth since at least the 14th century. The event was named for British astronomer Richard Carrington, who first viewed and sketched the huge sunspot complex on the sun from which a gigantic solar flare -- a coronal mass ejection -- erupted, as he watched. Within hours, Earth was virtually enveloped by an aurora borealis that was visible even at lower latitudes and into the tropics. It was a truly spectacular light show that in some places, turned night into day. When the flare interacted with Earth's magnetosphere, however, it was another story.



This was the Victorian age, when practical wireless was still a few decades off, but the "auroral phenomena," as it was called then, had "a remarkable manifestation of magnetic influence" on telegraph wires -- the internet of the day, as it were. So considerable was the effect that *The New York Times* [reported](#) telegraph operators were able to disconnect the batteries that normally operated the system and were "working by the atmospheric current entirely!" Although the operators subsequently were able to reconnect their batteries, the storm continued to affect the lines. A telegraph manager in Pittsburgh reported "streams of fire" emitted from the circuits. In Washington, DC, telegraph operator Frederick W. Royce was severely shocked as his forehead grazed a ground wire. A witness said an arc of fire jumped from Royce's head to the telegraphic equipment.

The *Times* account quoted an operator in Worcester, Massachusetts, who said, "During ten years' experience in telegraphing, I have frequently observed the effect of the Aurora Borealis on the wires, but never before have I seen it so grand and appalling."



Operators said that at times the polarity of the battery power supply would become reversed. "One moment the batteries would begin to boil over, and we would have so strong a circuit that the armature would not come away from the magnet; the next moment, there would be no current at all," a report from Quebec recounted.

Based on examinations of ice samples, scientists believe that geomagnetic storms two and three times stronger occurred prior to the 14th century.

After the Carrington Event, scientists began paying a lot more attention to solar phenomena and sunspots. -- *Thanks to Frank Donovan, W3LPL*

*Courtesy of the ARRL Newsletter*

### **France Stands its Ground on 144 – 146 MHz Aeronautical Mobile Sharing Proposal**

A French “annex” to its proposal to have the Aeronautical Mobile Service (AMS) share 144 – 146 with Amateur Radio doubles down on that country’s determination to secure AMS access to that spectrum, although no longer on a primary basis. The annex was submitted ahead of a European Conference of Telecommunications and Postal Administrations (CEPT) Electronic Communications Committee (ECC) Conference Preparatory Group (CPG) meeting that gets under way on August 26 in Turkey. The meeting will consider CEPT ECC positions for World Radiocommunication Conference 2019 this fall. In the annex, France counters contrary International Amateur Radio Union (IARU) assertions and insists that spectrum sharing is possible.

“France recognizes the wide range of amateur applications hosted by the 144 – 146 MHz band,” the French annex document said. “The band will remain available for all these applications after WRC-23. However a clear vision of the band segmentation per application and associated occupancy rates will be necessary for the sharing and compatibility studies carried on during the WRC-23 preparation cycle. Such studies are essential for assessing the possibilities of frequency sharing and establishing, where appropriate, the conditions that will ensure the continuity of operation and the protection of existing services.”

Since France submitted its initial proposal in June, the IARU and its Region 1 (Europe, Africa, and the Middle East) member-societies have made the matter a top priority. If the French proposal gets a thumbs up by at least 10 CEPT countries at the CPG meeting — with not more than 6 opposing — the proposal could appear on the agendas of WRC-19 and WRC-23, where a final decision will be made.

According to IARU President Tim Ellam, VE6SH/G4HUA, the French proposal provides no rationale for including the amateur band in the proposed spectrum study, and that IARU believes sharing with airborne systems would be extremely challenging and lead to constraints on the development of the Amateur and Amateur Satellite services.

“If accepted as a WRC-23 Agenda Item, this proposal would require *4 years* of studies by administrations,” Ellam has stressed. “Considering the challenges of sharing spectrum with aeronautical systems, it seems inevitable that the conclusion of such studies would be that sharing with a widely used part of the amateur spectrum presents too many problems to be viable.”

In its own submission for the August CPG meeting, IARU contends that basic technical studies “show that sharing of the current Amateur Service allocation with non-safety-related [AMS] radio systems is not possible without a significant likelihood of mutual interference occurring.” IARU calls the proposal “unsound.”

“There is no need for a lengthy WRC study cycle to determine this,” IARU said, asking that 144 – 146 be withdrawn from the French WRC-23 non-safety AMS proposal.

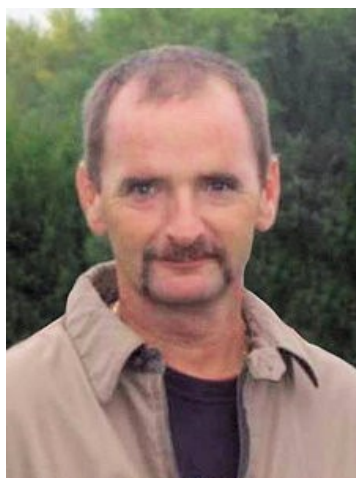
IARU asserts that suitable alternative spectrum exists in the VHF range, but France said this view “disregards the fact that the effectiveness of studied sharing opportunities will depend upon the characteristics of the incumbent services.” France went on to say, “Use of techniques like dynamic frequency assignment, antenna treatment, power control, duty cycle control, [and] spread spectrum may be considered.”

*Courtesy of the ARRL Newsletter*

### **One Dead, One Injured in New Hampshire Ham Radio Tower Mishap**

A tower dismantling turned tragic on Saturday, July 27, in Deerfield, New Hampshire, when two radio amateurs working some 40 feet up on the tower were carried to the ground when the structure collapsed. Joseph Areyzaga, K1JGA, 52, of Goffstown, New Hampshire, did not survive injuries sustained in the fall, while the tower's owner, Michael Rancourt, K1EEE, 65, was seriously injured and remains

hospitalized. Rancourt was taking down the tower in preparation for selling his house, and the pair had nearly completed their work. They were tied into the tower and went down with it as it collapsed.



Joseph Areyzaga, K1JGA.

The tower, a tilt-over model said to be 40 to 50 feet, had been bolted to prevent it from tilting as it was being dismantled.

A law enforcement source said a number of people were at the site for a social gathering as the tower was being taken down, and they witnessed the tragedy.

No official determination has been made regarding the cause of the structural failure, but a radio amateur who visited the scene afterward observed that two of the tower's three legs were clearly compromised and split cleanly and the third leg bent, just above the fully intact tilt base.

The New Hampshire Amateur Radio tower-related fatality is the second such deadly incident in a little more than 6 weeks. In mid-June, a Pennsylvania radio amateur died when the tower he was installing collapsed as he was attempting to attach a guy line to the structure's bottom section.

*Courtesy of the ARRL Newsletter*

## Arizona ARES Volunteers Support Communication during Arizona Wildland Fire



**Smoke from the Museum Fire is in the distance as CARC members complete a temporary radio setup for more effective communication. [Ken Held, KF7DUR, photo]**

public service, private, and Amateur Radio repeaters.

"The loss of one or both of these complexes would have been catastrophic," Shearer said. CARC members were prepared for the risk and quickly assembled spare equipment, including extra radios and repeaters.

Air tankers dropped many loads of fire retardant around the repeater sites, and the exceptional work of the fire crews prevented the fire from running up the slopes to the complex-

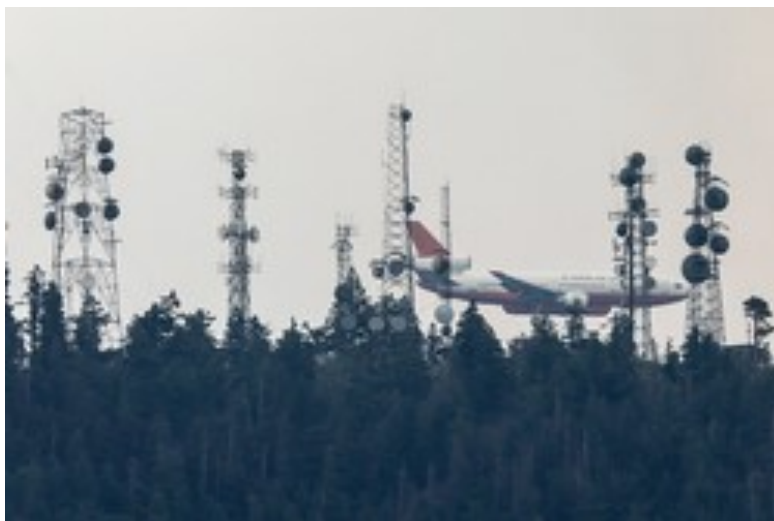
Members of the Coconino County Amateur Radio Club ([CARC](#)) in Arizona activated on July 21 as winds accelerated the Museum Fire beyond 50 acres, triggering the activation of the county's Emergency Operations Center (EOC). Members of the club, many of them ARES volunteers, staffed the EOC.

"The club has a great working relationship with Coconino County," said CARC's Public Information Officer Dan Shearer, N7YIQ. "CARC's ARES component has a dedicated position in the EOC structure and has assisted on many incidents over the last few years, providing communications to field personnel when cell and radio coverage is limited or nonexistent."

Shearer said Amateur Radio equipment and antennas are stored at the EOC, and CARC members have been trained to set it up and have everything operational within an hour of activation.

The fire, of undetermined origin, soon grew larger than 500 acres and became a top fire-fighting priority. A Type 1 incident management team took over management of the fire-fighting effort late on July 22, and more than 12 Hotshot crews (teams highly trained in all aspects of fire management), fire engines, water tenders, and aircraft were engaged in suppressing the blaze.

Residents in some neighborhoods were ordered to evacuate, although no homes and structures were lost. There were fears that the fire might overrun communications sites on Mount Elden, which include



**A very large air tanker completing its run dropping retardant on the radio complexes atop Mount Elden. [CB Johnson, NQ9C, photo]**

es, Shearer said.

A midweek change in the weather with substantial rain gave firefighters a chance to keep the blaze from crossing a fire line they constructed. ARES resources were released on July 26 and placed on standby as the fire risk was substantially reduced.

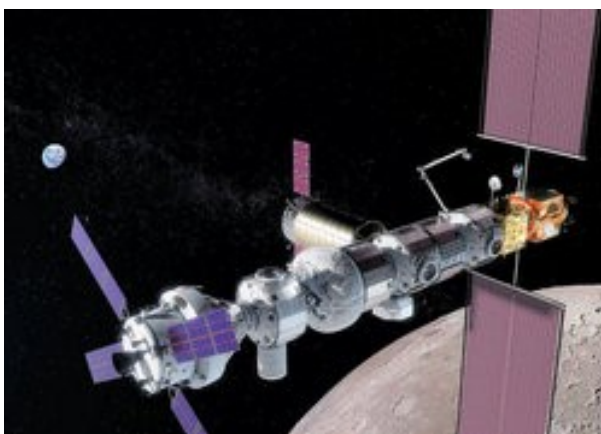
Shearer said there is now a risk of flash flooding across the burned-over areas from the region's summer rainy period, and the City of Flagstaff and Coconino County are providing sandbags.

"CARC personnel provided well over 250 hours in support of the Museum Fire in direct support of the joint EOC," Shearer said, adding that the EOC team and Arizona Governor Doug Ducey expressed their appreciation when the governor visited the fire operations.

The Museum Fire grew to nearly 2,000 acres before it was brought under control.

*Courtesy of the ARRL Newsletter*

### AMSAT and ARISS Designing Amateur Radio System for Lunar Gateway



Details are still being fleshed out, but [AMSAT](#) and [ARISS](#) are working on the design of an Amateur Radio system for NASA's Lunar Gateway. As NASA explains, the Gateway "will be a small spaceship in orbit around the moon that will provide access to more of the lunar surface than ever before with living quarters for astronauts, a lab for science and research, ports for visiting spacecraft, and more." For NASA, the Lunar Gateway is "a spaceport for human and robotic exploration to the moon and beyond." For radio amateurs, the Lunar Gateway will represent the next step in moving ham radio away from low-Earth orbit and into deep space. Under the current [timeline](#), initial sections of the Gateway are scheduled to launch in 2022, with the Gateway in lunar orbit by 2026.

"To make this happen, we are leveraging the work and expertise of the worldwide AMSAT organizations and the international ARISS community," ARISS-International Chair and AMSAT Vice President for Human Spaceflight Programs Frank Bau-

er, KA3HDO, said. "We have an international team working on this and are meeting twice a month to mature the concept." The ARISS concept was presented to NASA in May and got positive feedback, and was favorably received a few weeks later at the ARISS-International meeting in Montreal from the Canadian Space Agency's Gateway Program Manager.

"The Amateur Radio Exploration (AREx) team has done some really good work," Bauer continued. "The challenge for amateurs will be on the order of a 30 dB signal path loss as compared to LEO."

The Lunar Gateway will serve as a solar-powered communication hub, science lab, short-term habitation module, and a holding area for rovers and other robots that may be bound for the moon or for other planets. NASA is leading the project in collaboration with commercial and international partners, including all of the International Space Station partners.



"We need to develop a block diagram of a system and subsystems and find team members who want to work on each," Bauer said when the ARISS-International team met in Montreal. "We must set up requirements and interface documentation. We need to solidify the frequencies to use, working with the International Space Frequency Coordination Group."

ARISS ARRL Representative Rosalie White, K1STO, said that ARISS is working to spread the word about the new initiative. She also hopes the new project may inspire the [generosity](#) of the Amateur Radio community.

*Courtesy of the ARRL Newsletter*



**CLUB INFO****PUBLIC SERVICE**

October 14, 5 Ponds Golf course, 9am, Golf outing.

Signup at September meeting

**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 2019**

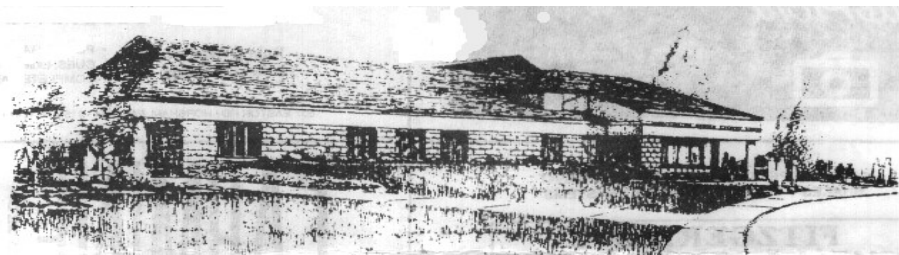
**September**-Amelia Earhart shoulda took along a Radio Amateur- Bill Strunk, K3ZMA

**October**-Home Brew Night

**November** – ARRL Night

**December** – Holiday Dinner

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



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

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

### 2019 Contest Calendar

#### September

##### 14-16 [September VHF](#)

1800 UTC Saturday and ends 0259 UTC Monday

##### 21-22 [10 GHz & Up - Round 2](#)

6:00 AM local Saturday through 12:00 midnight local Sunday

##### 16-17 [EME - 50 to 1296 MHz](#)

0000 UTC on Saturday through 2359 UTC Sunday

#### October

##### 21-25 [School Club Roundup](#)

1300 UTC Monday through 2359 UTC Friday

##### 19-20 [EME - 50 to 1296 MHz](#)

0000 UTC on Saturday through 2359 UTC Sunday

#### QSO Parties

Tennessee	1800Z, Sep 1 to 0300Z, Sep 2
Nebraska	1300Z, Sep 7 to 0100Z, Sep 8
Texas	1400Z, Sep 14 to 0200Z, Sep 15 and 1400Z-2000Z, Sep 15
Alabama	1500Z, Sep 14 to 0300Z, Sep 15
Iowa	1400Z, Sep 21 to 0200Z, Sep 22
New Hampshire	1600Z, Sep 21 to 0400Z, Sep 22 and 1600Z-2200Z, Sep 22
New Jersey	1600Z, Sep 21 to 0359Z, Sep 22
Maine	1200Z, Sep 28 to 1200Z, Sep 29

### 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](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 ➤ 2019

#### September 15 - [Gloucester County ARC Hamfest](#)

Gloucester County 4-H Fairgrounds 235 Bridgeton Pike (rt 77)  
Mullica Hill, NJ 08062

#### October 5 - [7th Annual TailgateFest](#)

Hollywood Volunteer Fire Dept. Bingo Hall 24801 Three Notch Road (MD Route 235)  
Hollywood, MD 20636  
<http://www.k3hki.org>

#### October 6 - [CARAFest 2019](#)

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

#### October 20 - [RF Hill Amateur Radio Club Hamfest](#)

Sellersville Fire House 50 North Main Street  
Sellersville, PA 18960  
<http://www.rfhillarc.club>

#### October 27 - [Mason Dixon Hamfest](#)

Sportsman's Hall Roller Skating Center 15500 Hanover Pike  
Upperco, MD 21155  
<https://k3pzn.net/hamfest/>

**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:**

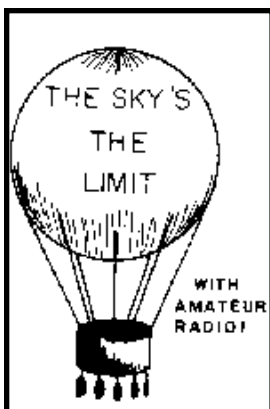
<https://www.weather.gov/phi/Info>

**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



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

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

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

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

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

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

**Bucks County Amateur Radio Emergency Service (BCARES)**

[www.bucksares.org](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.

**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

### 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	Marty Squicciarini	NR3Z	215-872-9644
Secretary	Norm Miles	AB3ZZ	267-625-9117
Treasurer	Herb Hickmott	KB3VMN	267-718-3601
Director (A)	Michael Shanblatt	W3MAS	267-491-5773
Director (E)	Larry Abbott	WA3ELQ	215-704-3282
Director (A)	Brandon Penglase	N3UO	215-259-7255
Director (E)	George Brechmann	N3HBT	215-443-5656
Past President	Tony Cuttone	W3FLH	267-679-9297

### Committee Chairpersons

ARES/RACES Liason	Karl Harris	K3KH	215-264-1855
ARRL Liason	Irwin Darack	KD3TB	215-343-8170
Awards Manager	Vince Pironti	KD3TC	215-674-0446
Classes	George Altemus	KA3WXV	215-855-3856
Digital and APRS	Ron Wenig	NY3J	215-638-9257
Feedback Editor	Jim Elmore	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