

DELAWARE LEHIGH AMATEUR RADIO CLUB Inc.  
*FEBRUARY 2014*

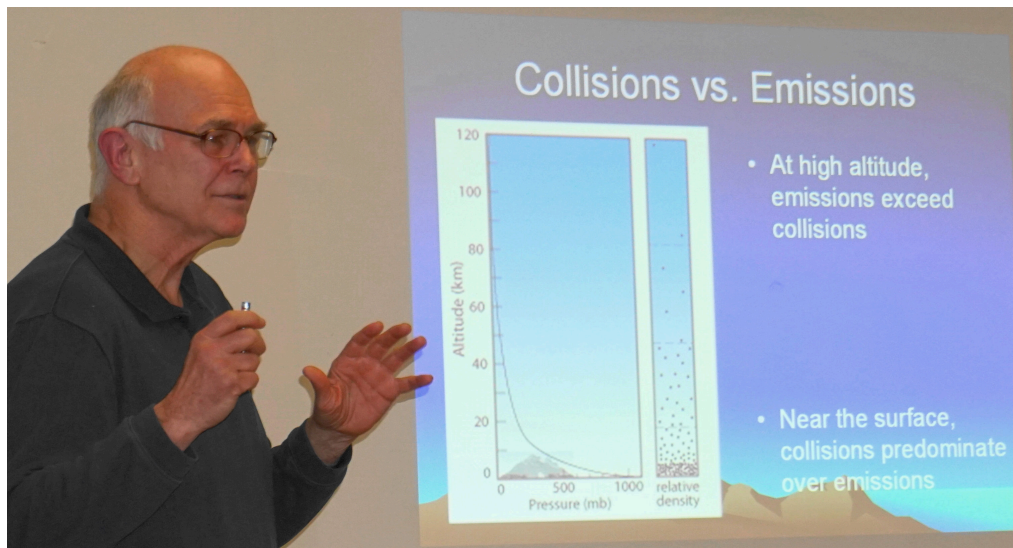


# *W3OK*

# *CORRAL*

**Club Meeting February 1st, 7:30PM At the  
Bethlehem Township Community Center**

**FEBRUARY PROGRAM**  
**“Introduction to Logger 32”**  
**Jay Mason / N3OW**



**“Why The Climate Debate?”**  
**Jim / KC3JHV**



## MINUTES FROM THE DLARC JANUARY GENERAL MEETING

A General Meeting of the Delaware-Lehigh Amateur Radio Club was held on January 4, 2018 at the Bethlehem Township Community Center, Bethlehem, PA.

A quorum being present, President Steve Harper, W3NAM called the meeting to order at 7:37 p.m.

**President's Report:** Steve announced that Les Morrow, W3LES, has taken over as administrator of the Club's two QRZ.com pages.

Regarding the replacement of the Club Station's 80-meter fan dipole antenna, Steve asked George Wieland, N3SQD, to contact Charlie Adams, K3HKZ, and request his assistance.

Concerning the phone at the Club Station, in order to have the capability of contacting Club members en masse, there are a number of ways to go. Ben Ramig, KB3CTX, who heads the Club's Interference Committee, will look into the matter and report to the membership at the February meeting. It was mentioned that we should find a way to (1) verify members' preferred phone contact number, and (2) allow them to opt out of being on the contact list.

Mike Gower, KB3LOD, has secured a DLARC debit card for those authorized purchases that may only be paid by credit card, or which would be burdensome for members to pay out of pocket. Procedures are being developed for its use.

**Secretary's Report:** JoAnn Schaffer, ND3JJ, announced that the Minutes for the December 2017 General Meeting were emailed to the membership on December 22, 2017. A motion to accept the Minutes as written was made and seconded, and so moved.

**Treasurer's Report:** Mike Gower, KB3LOD, have his report. A motion to accept the Treasurer's Report was made and seconded, and so moved.

**Membership Committee Report:** JoAnn Schaffer, Membership Chair, reported that the Club had received seven applications for membership. After the announcement of each applicant, a motion was made and seconded, and membership for all was so moved:

Lawrence Butler, KC3JTK  
Charles Hamilton, Jr., KC3KGH  
Mark Hilliard, W3BQD  
Steven Hunt, N2IYR  
William Snyder, K3ABE  
Thomas Strohl, KC3KGI  
John Weaver, N3PFA

**Education Committee:** Bob Green, KE3AW, announced that the next round of Tech and General classes will begin on March 6, 2018.

**Old/Unfinished Business:** Dave Blankenship, N3EYT, Chair of the 2017 Christmas Cities Event, report that nearly 800 contacts were made.

Ben Ramig, KB3CTX, asked if anyone would be interested in purchasing the Club's old projector.

**New Business:** George Wieland, N3SQD, announced that he has secured Louise Moore Park for Field Day on June 23-24 2018.

There being no further business, the Meeting was adjourned at 8:06 p.m

Respectfully Submitted by JoAnn Schaffer, ND3JJ

## NOTICE NOTICE NOTICE

**Each winter the DLARC supplies transportation for nurses and support staff to local hospitals in cases of bad weather driving conditions.**

**George / N3SQD is compiling a list of volunteers with four-wheel drive vehicles to supply this service. If you are interested contact George at [george@bioserv.com](mailto:george@bioserv.com)**

## FEBRUARY CONTESTING AT THE OK CORRAL



February 3 & 4 – 10-10 International Winter Contest \_\_ SSB  
– Mexico RTTY International Contest  
February 10 & 11 – Dutch PACC Contest  
– KCJ Topband Contest  
February 17 & 18 – ARRL International DX Contest – CW  
– Russian PSK WW Contest  
February 24 & 25 – CQ 160-meter Contest – SSB  
– UBA DX Contest - CW



## FEBRUARY QUICK CHECK CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3 DLARC Net (W3CE)	1 DLARC Meeting 7:30 PM	2 NO VE SESSION	3
4 SUPER BOWL SUNDAY	5	6	7 DLARC Net (KC3II)	8	9	10
11	12	13	14 DLARC Net (N3SQD)	15	16 LUNAR NEW YEAR	27
18	19 President's Day	20	21 DLARC Net (KB3CTX)	22 DLARC BOARD MEETING	23	24
25	26	27	28 DLARC Net (K3PDL)			

### Silent Key

*The D.L.A.R.C. Wishes to honor and to express its sadness at the passing of a club member or former club member.  
Earl Heacock Jr. / K3MGP*

### FEBRUARY VE SESSION

There will not be a test session this month. The next session will be on March 2<sup>nd</sup> at 7 PM at the Northampton County 911 center. Pretest registration is required. Contact John / NT3P at nt3p@arrl.net

### NEW MEMBERS

The DLARC is continuing to grow, so be sure to greet our new members, shake their hands, and give them a warm welcome to our club. The newest members are Lawrence Butler / KC3JTK, Charles Hamilton Jr. / KC3KGH, Mark Hilliard / W3BDQ, Steven Hunt / N2IYR, William Snyder / K3ABE, Thomas Strohl / KC3KGI and John Weaver / N3PFA.

### MONTHLY BRAIN TEASER

"A special prize awaits the first Club Member to submit the correct answer to this month's Brainteaser to the Pete / NL7XM, only, at nl7xm@arrl.net The winner must be present at the next Meeting to receive it, or it goes unrewarded. Officers, Board members, Newsletter staff, and Brain Teaser Authors are not eligible to win."

de Pete / NL7XM

### JANUARY BRAINTEASER ANSWER

E is the most commonly used letter in the English Language, and there are no "e"s in the statement.

The winner is Dave / N3EYT

### FEBRUARY BRAINTEASER

A chemist discovered that a certain chemical reaction took 80 minutes when he wore a wool jacket and thick soled shoes. But when he wasn't wearing the jacket and was barefoot, the exact same reaction always took an hour and 20 minutes. Can you explain?

## **JANUARY MEETING PROGRAM REPORT**

### **Why the Climate Debate?**

Climate encompasses all the meteorological conditions, including temperature, precipitation and wind, that characteristically prevail in a region. Change is defined as, 'To cause to be different, alter'.

Jim Siverly, KC3JHV, addressed the topic of climate change at our club meeting on January 4th. You may have heard of a 97% consensus among scientists claiming humans cause climate change mainly from fossil fuel emissions that produce global warming. However, many of the 97% are climate change skeptics who agree that there may be some human influence on climate change. "We just don't know the extent of that influence."

The past century's 1 deg C increase in global temperatures is not historically unusual. In the past few thousand years, average global temperature fluctuated several degrees C. During glacial and interglacial periods, temperatures were up and down ten degrees C or more. These swings occurred without any human influence, underscoring the influence of natural factors on climate. The last ice age ended about 11,700 years ago and we are overdue for another glacial period.

Climate models, the main argument favoring human caused global warming, predict temperature as increasing, but since about the year 2000, satellite and ground temperature measurements have been flat. This indicates a problem with the models being used, probably because they rely too much on the increase in carbon dioxide in the atmosphere. Jim said that there is no definitive evidence that an incremental increase in carbon dioxide above current day levels will have any effect on the average global temperature.

Jim concluded that our earth remains temperate, due to the greenhouse gases (mostly water vapor and carbon dioxide) that cool during the day and warm during the night, buffering extreme temperature swings that would occur without them.

### **2018 DUES Rates / No Changes**

Regular Membership 18-64 years of age:

Jan. - Dec. ....\$17.-

65 and over, or retired from all forms of employment (no age limit)

Jan. - Dec. ....\$12.-

Additional Family member  
each \$3.-

Associate Individual Membership  
\$10.-

**You are strongly encouraged to MAIL your DUES** so that I may conduct the bulk of the record-keeping duties apart from where I believe you deserve the most of my attention. In person at Club Meetings, I'd prefer to answer your questions, address your concerns, and welcome your thoughtful revenue raising and savings ideas. Therefore, it is firmly advocated that DUES correspondence be mailed to:

**Michael J. Gower**

**1511 Shelbourne Drive**

**Bethlehem, Pa. 18018**

Enclosing a S.A.S.E will bring your new membership card back to you immediately if you can't attend the next Meeting where they are routinely distributed. You may write to me anytime with questions regarding DUES, or to discuss issues that you believe are my responsibility at: [Treasurer@dlarc.org](mailto:Treasurer@dlarc.org) Include your phone number if you prefer a live reply.

de Mike / KB3LOD, DLARC Treasurer

### **IMPORTANT NOTICE**

Please check the web page roster listing. It is important that your telephone number and email address are correct. This is the only way we can contact members. If you do not receive the newsletter in your email and are registered for the phone tree and do receive the notices by phone, your email address is incorrect on the roster, and the same for your telephone number.

## REFLECT(IONS FROM THE PAST



Field Day 1983, Hacketts Park

### “QUANTUM RADIO” MAY OFFER NEW TWIST ON COMMUNICATION IN PROBLEMATIC ENVIRONMENTS

Researchers at the National Institute of Standards and Technology ([NIST](#)) have demonstrated that quantum physics might enable communication and mapping in locations where GPS, cell phones, and radio are not reliable or don't work at all, such as indoors, in urban canyons, underwater, and underground. NIST [announced](#) the technology advance on January 2. The technology may have marine, military, and surveying applications. The NIST team is experimenting with very-low-frequency (VLF) digitally modulated magnetic signals, which propagate farther through buildings, water, and soil than conventional electromagnetic signals at higher frequencies.

"The big issues with very-low-frequency communications, including magnetic radio, are poor receiver sensitivity and extremely limited bandwidth of existing transmitters and receivers. This means the data rate is zilch," said NIST project leader Dave Howe, AD0MR.

"The best magnetic field sensitivity is obtained using quantum sensors. The increased sensitivity leads in principle to better range. The quantum approach also offers the possibility to get high-bandwidth communications like a cellphone has. We need bandwidth to communicate with audio underwater and in other forbidding environments," he said.

NIST researchers have demonstrated detection of digitally modulated magnetic signals by a magnetic-field sensor that relies on the quantum properties of rubidium atoms. The NIST technique varies magnetic fields to modulate or control the frequency -- specifically, the horizontal and vertical positions of the signal's waveform -- produced by the atoms.

NIST developed a direct current magnetometer that uses polarized light as a detector to measure the "spin" of rubidium atoms in a tiny glass cell induced by magnetic fields. Changes in the atoms' spin rate correspond to an oscillation in the dc magnetic fields, creating alternating current voltages at the light detector that are more useful for communications.

"Atoms offer very fast response plus very high sensitivity," Howe said. "Classical communications involves a tradeoff between bandwidth and sensitivity. We can now get both with quantum sensors," Howe speculated on an Amateur Radio application.

"The quantum radio is great fun, far better sensitivity than any other receiver, at room temperature, anyway," Howe told ARRL. "The atoms in the gas cell replace the 'antenna' and detection in the classical sense. It would be nice to try modulation in the 2200-meter band using the quantum receiver for detection." In the future, the NIST team plans to develop improved transmitters.

The researchers hope to extend the range of low-frequency magnetic field signals by boosting the sensor sensitivity, suppressing noise more effectively, and increasing and efficiently using the sensor's bandwidth.

The NIST strategy requires inventing an entirely new field, which combines quantum physics and low-frequency magnetic radio, said Howe, who told ARRL that ham radio enhanced his interest in communications when he was in ninth grade in New Mexico. "So, it's what guided my interest into applied quantum physics in college. Ham radio was the bigger influence in all ways." Howe retired from NIST last September. He now is a research advisor for NIST and Colorado University.



## W1AW 2018 Winter Operating Schedule

### Morning Schedule:

Time	Mode	Days
1400 UTC (9 AM EST)	CWs	Wed, Fri
1400 UTC (9 AM EST)	CWf	Tue, Thu

### Daily Visitor Operating Hours:

1500 UTC to 1700 UTC - (10 AM to 12 PM EST)  
1800 UTC to 2045 UTC - (1 PM to 3:45 PM EST)

(Station closed 1700 to 1800 UTC (12 PM to 1 PM EST))

### Afternoon/Evening Schedule:

2100 UTC (4 PM EST)	CWf	Mon, Wed, Fri
2100 "	CWs	Tue, Thu
2200 " (5 PM EST)	CWb	Daily
2300 " (6 PM EST)	DIGITAL	Daily
0000 " (7 PM EST)	CWs	Mon, Wed, Fri
0000 " "	CWf	Tue, Thu
0100 " (8 PM EST)	CWb	Daily
0200 " (9 PM EST)	DIGITAL	Daily
0245 " (9:45 PM EST)	VOICE	Daily
0300 " (10 PM EST)	CWf	Mon, Wed, Fri
0300 " "	CWs	Tue, Thu
0400 " (11 PM EST)	CWb	Daily

### Frequencies (MHz)

**CW: 1.8025 3.5815 7.0475 14.0475 18.0975 21.0675 28.0675 50.350 147.555**

**DIGITAL: - 3.5975 7.095 14.095 18.1025 21.095 28.095 50.350 147.555**

**VOICE: 1.855 3.990 7.290 14.290 18.160 21.390 28.590 50.350 147.555**

### Notes:

CWs = Morse Code practice (slow) = [5](#), [7.5](#), [10](#), [13](#) and 15 WPM

CWf = Morse Code practice (fast) = [35](#), [30](#), [25](#), [20](#), [15](#), [13](#) and 10 WPM

CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2330 UTC (6:30 PM EST), Keplerian Elements for active amateur satellites are sent on the regular digital frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0100 UTC (8 PM EST) Thursdays and 0100 UTC (8 PM EST) Fridays.

Audio from W1AW's CW code practices, CW/digital bulletins and phone bulletin is available using EchoLink via the W1AW Conference Server named "W1AWBDCT." The monthly W1AW Qualifying Runs are presented here as well. The audio is sent in real-time and runs concurrently with W1AW's regular transmission schedule.

All users who connect to the conference server are muted. Please note that any questions or comments about this server should not be sent via the "Text" window in EchoLink. Please direct any questions or comments to [w1aw@arri.org](mailto:w1aw@arri.org).

In a communications emergency, monitor W1AW for special bulletins as follows: Voice on the hour, Digital at 15 minutes past the hour, and CW on the half hour.

All licensed amateurs may operate the station from 1500 UTC to 1700 UTC (10 AM to 12 PM EST), and then from 1800 UTC to 2045 UTC (1 PM to 3:45 PM EST) Monday through Friday. Be sure to bring your current FCC amateur radio license or a photocopy.

The W1AW Operating Schedule may also be found on page 90 in the January 2018 issue of QST or on the web at, <http://www.arri.org/w1aw-operating-schedule>.

Please note W1AW is now active on 50.350 MHz for all its CW practice, and CW, digital, and phone bulletins.

## THOUSANDS GETTING THEIR GRIDS ON!

*And they're off!* New Year's Day January 1 (UTC) marked the opening day for the ARRL International Grid Chase 2018 (IGC). Among those hitting their grids running was newly minted General-class operator Katie Thompson, KI7HCX, of Mt. Vernon, Washington, who used the occasion to embark on the Chase *and* to get on HF for the first time using her own call sign. The 11-year-old comes from a ham radio family. Her dad, Todd, is W7TAO, while her older brothers are Mason, K7MWT, 15 -- who upgraded to Amateur Extra at the examination session where his sister upgraded to General -- and Tanner, K7TMT, 13. "She called CQ Grid Square Chase on 20 meters and very quickly made 44 contacts," her dad told ARRL. "She was very excited to work her first pileup and even had two Japanese stations QSO with her. She's anxious to continue participating in the grid square chase." Todd Thompson said all three young radio amateurs are looking forward to participating in [Rookie Roundup](#) in April. The IGC is off to a rousing start, with some 6,400 participants from around the globe already showing up on the [Leader Board](#) as of the morning of January 4. Point totals for the International Grid Chase are shown for confirmed contacts only, and, while the leader boards are not based on real-time data, they are updated several times a day. All contacts on all bands except 60 meters are valid for Grid Chase credit, provided both stations upload their logs to Logbook of The World ([LoTW](#)) and get a match. The objective of the year-long event is to work stations in as many different Maidenhead grid squares as possible, and then upload your logs to [LoTW](#). Each new grid square contact confirmed through LoTW will count toward your [monthly total](#). Stations do *not* have to exchange grid squares for a valid contact, although it's anticipated that many operators will do so. Some rare grid squares will be in demand. How about yours? Get on the air, and get behind *your* grid! If you can, get out there, and activate the scarce ones. Members of the Marconi Cape Cod Radio Club [KM1CC](#) at the Cape Cod National Seashore will activate rare grid square FN51 January 18-19 for the International Grid Chase. Complete details of the ARRL International Grid Chase 2018 appeared in the December 2017 issue of *QST*. For more information, [contact](#) the ARRL Contest Branch.

## HOW TO REGISTER ON THE DLARC WEB PAGE

**Only club members can register to the site.**

Only club members can post to the site or gain access to the club rosters which includes addresses, phone#s, e-mail etc. I believe there will be more added later that members only have access. Scroll down on the front page. You will see on the left a place to log in. Under the log in spaces you will see:

- forgot your password?
- Forgot your user name?
- Create an account.
- Click on "create an account"

Now you will see the registration form. All fields must be filled in.

We are a private forum/web page on the site so feel free to use your real name in the first space.

**!!!The user name MUST BE YOUR CALL SIGN!!!!**

- Next a working e-mail address for your confirmation e-mail
- Next pick a password
- Next space re-type your password
- Click the register button to the lower left.

You will then be brought back to the DLARC home page - at the top of the page will be this message:

"Your account has been created and an activation link has been sent to the e-mail address you entered. Note that you must activate the account by clicking on the activation link when you get the e-mail before you can log in."

Wait for the e-mail and follow the directions from there. The web master will check your call sign against the up to date / dues paid roster for 2009. If you are not on it you will be rejected. If you do not use your call sign you will be rejected.

The DLARC web page forum has a for sale section, a rag chew section etc.

Hope to see you on the site.

Any other questions - post them on the e-mail forum or contact the web master.

## DLARC CLUB STATION OPERATING GUIDELINES

1. A control operator must be present at all times the club station (W3OK) is transmitting
2. The control operator will be responsible for following all FCC rules and regulations, with special attention to third party rules:
  - a. A third party is defined as any non licensed individual who takes part in communications.
  - b. Included are non-amateurs, Technicians operation HF, and General or Advanced hams operating in band segments reserved for higher class licenses.
  - c. When those mentioned in b. are operating communications should be limited to those countries that the United States has third party agreements with.
3. Log of all contacts and transmissions on the high frequency bands should be kept. 2 meter Local communications need not be logged.
4. Club member's personal call signs may be used and privileges must be restricted to the license class of that member.

## A BRIEF HISTORY OF THE WOUFF-HONG AND THE RETTYSNITCH

Bill Connelly / W3MJ



In 1930, the radio amateur's handbook, page 11, had pictures of both instruments of enforcement. By 1936, only the Wouff-Hong was included, and by 1947, the handbook had deleted both photos. "The Wouff-Hong is amateur radio's sacred symbol for the enforcement of law and order in the amateur operation. The Rettysnitch... Is used to enforce the principles of decency in operating work. "The Radio Amateurs Handbook, 1930, page 11"

Perhaps the last time the story of the Wouff-Hong was told was in the May 1934 issue of QST in which Rufus P. Turner recounted "Hamdom Traditions: A Bedtime Story for Young Squirts". However, even by Turner's time the Rettysnitch was relegated to a paragraph on the story's continuation page in the back the magazine, with no picture. Somehow, it seems, folks have forgotten that you could never have law and order without first having decency.

The origin of both instruments of terrible power and might can be attributed to the "Old Man" in his first article in QST, 1917. I'm not sure of the month. In it he blasted concocted words of "Rotten QRM" just coming into use. Among the almost unintelligible gibberish in his headphones with words like "Wouff-Hong" and "Rettysnitch", surely instruments of terrifying punishment. By mid 1917, the ARRL was besieged by orders for these contraptions, orders could not be filled because the League staff had not never seen either device.

In 1919, after world war one, the league once more took up its work in earnest. At this critical time in history, the directors received from the "Old Man" a package containing an authoritative and well preserved specimen of a Wouff-Hong. Turner describes the contents of the package as "the gruesome instrument of torture". By order of the directors, that was hung in the office of the Secretary-Editor, within easy reach. It's this portrait appeared in July of that year. At each board meeting, the Wouff-Hong stood on display, to the blanched looks of the humbled directors.

In 1921, the world was treated to the first glimpse of the Rettysnitch. The monstrous machine was presented to the league traffic manager by the Washington DC Radio Club, ostensibly receiving it from the "Old Man." Even at its first public appearance, two of its teeth were missing, suggesting a long history of necessary and effective use. However to this day, the Rettysnitch has lost no other teeth. It was ordered to hang by its mate.

The loyal order of the Wouff-Hong still exist today and as a member of the esteemed organization I can attest to the veracity of its effect to keep law and order on the airways and in the minds of all good amateur operators. To become a member you must attend a regional manifest sponsored by the ARRL. At midnight a secret ceremony is conducted in as a witness and participant you will be inducted into the Royal order of the Wouff-Hong. As a member you will know the secrets of fraternal camaraderie and deepen your understanding of the high ideals of amateur radio.

Hams care about amateur radio in their hearts. We strive for a decent law-abiding service to inspire young and old alike to become hams or, lacking the inclination to electronics to become admirers of Hams.

Today, we amateurs might think about the Wouff-Hong and the Rettysnitch as reminders that decency and law and order are not archaic principles of the past, but alive and well on our airwaves. You will find those icons of the "Old Man" deep in your own conscience. If they seem to hold no power, then you know it's time once more to evaluate your standards a notch higher, and strive to achieve them perfectly. Each of us has a secret and private office where no one else may go. Above the door, facing our individual operating tables, hang two instruments, one of law and order and one of decency. We never deserve their sting.

Thanks to L.B. Cebick/ W4NRL, Dave Watrous / WD2K, The Radio Amateur's Handbook and QST.

### WEDNESDAY NIGHT NETS

Additional Net Controls are needed for the Wednesday Night ARES, RACES & DLARC net. If we have enough interested operators, it will only be necessary for each operator to have only one net session in each three month period. Actually 13 weeks in a period, so 13 net controls would be ideal, and maybe some extras to fill in if needed. This would give us a pool of experienced controls, for any emergency which would arise. Interested operators should contact Don / KC3II at [kc3ii@arrl.net](mailto:kc3ii@arrl.net). The NIMS IS-700 and ICS-100 courses are not required to be a net control, but should the need arise and we do supply controls and operators for real emergencies, then the courses requirement will be in effect and EMA issued IDs will be needed to be on the scene of an emergency.



## F.Y.I.

The March Program will be "Common Mode Noise Problem & Solutions" – Mark / KC3BNV

The D.L.A.R.C. meets the "FIRST" Thursday of each month. Membership, friends and interested persons meet at the Bethlehem Township Community Center, 2900 Farmersville Road, Bethlehem, Pa. 18020 ) at 7:30 PM. Committee reports and announcements of all present and future activities will be presented at that time. Followed by that month's program.

## NORTHAMPTON COUNTY ARES, RACES AND DLARC NET

All Radio Amateurs are welcome to participate in the ARES, RACES and DLARC net. This net meets Wednesday at 1900 hours local time, on the W3OK Repeater 51.76, 146.70 and 444.90 ( pl 151.4 ). With an alternate frequency of 147.350 ( DCS 315 ) W3OI Repeater.

QCWA Chapter 17 holds a net Monday evenings at 8:30 PM on 3960 +/- depending on conditions. Other inputs are the 146.85 repeater, (151.4 PL) and Echolink at K2PM-R.

Mid-Atlantic D-Star Net meets each Tuesday at 7:30 PM. The following repeaters Dstar repeaters are available in the Lehigh Valley. W3OK -145.11000MHz -0.600 Port C – W3OI -147.16500MHz +0.600 Port C, – W3OI - 445.02500MHz -5.000 Port B All repeaters on the net are linked through **Reflector 020 port A**, so all stations checking into the net should make sure that they have *their local repeater call sign followed by the letter "G" in the eight position of the RPT2 field*. Otherwise, you will only be heard locally and not over the Reflector. Dongle users wishing to check into the net should Log On by connecting directly to Reflector 20, port A, rather than through your local repeater in order to conserve local bandwidth.

The OK Corral is an organization publication for the purpose of informing members of the D.L.A.R.C. of educational and training opportunities, club events, relevant news articles and a monthly calendar of daily activities, meetings and dates.

## EXECUTIVE COMMITTEE 2017 – 2018 OFFICERS

President – Bill Connelly - W3MJ	-----	president@dlarc.org
Vice President – Stephanie Koles / WX3K	-----	vicepresident@dlarc.org
Secretary – JoAnn Schaffer / ND3JJ	-----	secretary@dlarc.org
Treasurer – Mike Gower / KB3LOD	-----	treasurer@dlarc.org

## BOARD of DIRECTORS

Gabe Lantos / KZ2A	-----	gpl-3639@gmail.com
Dean Guth / AB3BD	-----	babydean1@hotmail.com
Malcolm Leslie / KD2BDA	-----	mleslie105@yahoo.com
Les Morrow / W3LES	-----	lesterf52@gmail.com
Skip Paulsen / W1PV	-----	flathead@rcn.com
Bill Connelly / W3MJ	-----	cqw3mj@gmail.com

## PHONE NUMBERS FOR THE EXECUTIVE COMMITTEE OF THE DLARC CAN BE FOUND ON THE WEBSITE / MEMBERSHIP LISTING CLUB MEETINGS

All regular meetings of the D.L.A.R.C. Are held on the first Thursday of each month at 7:30 PM at the Bethlehem Township Community Center

TALK IN ON 146.700 (PL 151.4 )

## THE W3OK TRUSTEE --- Barry Vogt / N3NVA

## The W3OK Corral is published monthly and is the Official Publication of the DELAWARE LEHIGH AMATEUR RADIO CLUB INC.

14 Gracedale Avenue  
Nazareth, Pa. 18064-9211

## THE NEWSLETTER STAFF

Editor – Don Holmes / KC3II	-----	editor@dlarc.org
Web Master – Rich Hurd / WC3T	-----	rich@wc3t.us
Circulation – Paul Morrison / N3YNT	-----	n3ynt@aol.com