DELAWARE LEHIGH AMATEUR RADIO CLUB Inc. FEBRUARY 2016



Club Meeting February 4th, 7:30PM At the Bethlehem Township Community Center



JANUARY MEETING PROGRAM

"Maple Syrup"

Pete / KC3EVL

FEBRUARY MEETING PROGRAM

"Northampton County District Attorney"

John Morganelli





A general membership meeting of the Delaware-Lehigh Amateur Radio Club Inc. (the Club) was held on January 7, 2016, at the Bethlehem Township Community Center located in Bethlehem Township, Pennsylvania.

Call to Order: Bill / W3MJ President, called the meeting to order at 1930 hrs.

Pledge of Allegiance: Led by Bill/ W3MJ. A moment of silence was held for Ray / W3TDF who had passed away early morning the same day.

Member Happenings: Bill / W3MJ gave a brief eulogy for Ray / W3TDFF. Jon / NJ3I said that he and Dave / NB3R were less than 6000 points from a record in the RRTY Roundup held the previous weekend for the Atlantic Division single/multi-operator. Bob / NE2C said that he made 5 contacts in the Straight Key Night. Pete / K2PM related that the QCWA night on 3.961 now has a patching device to Echolink and our local repeater. Bill / W3MJ announced he had for loan "Universe in a Nutshell" by Stephen Hawking to any member wishing to read it.

Approval of the Minutes: Larry / AB3TY asked if there were any additions or corrections to the minutes as they appeared in the last newsletter. Bill / W3MJ asked for a motion to approve the minutes of the last meeting.

Motion: It was moved by Mark / W2MB, second by Jay / N3OW. Motion carried.

Treasurer's Report: Mike / KB3LOD presented the Treasurer's Report for November. Bill / W3MJ asked for a motion to accept the report as read.

Motion: It was moved by Jay / N3OW, second by Pete / NL7XM. Motion carried.

Club Station: No issues were reported.

Club Repeater: No issues were reported. It was verified that the Club Station license had been renewed.

Website: No issues were reported.

Membership Report: Frank / W3WOW announced the following new member Robert Heisler / KC3FXG. Bill / W3MJ asked for a motion to accept the new member

Motion: It was moved by George / N3SQD, second by Dave / N3EYT. The vote was unanimous for approval. Motion carried.

Education Classes: Bob / KE3AW said the Spring classes will begin on Tuesday March 8 for a total of 9 classes. A V.E. session will be held on May 10. Bob has books available for the Tech and General classes.

Club Badges: Dave / N3EYT handed out badges and announced he had a signup sheet for members needing a badge.
Club Shirts and Jackets: Mark / W2MB said he had order forms for Club shirts and jackets. The cutoff date will be the January general meeting.

Kudos: Bill / W3MJ thanked Jay / N3OW and Dave / N3EYT for their service to the Club and apologized for not doing so when he became president.

Field Day and Club Picnic: George / N3SQD said that he had put in the application to reserve Pavilion 5 at Louise Moore Park for Field Day on June 25 and 26 and the Club picnic for the last Sunday in August. He had not received official confirmation for the dates but expected have them soon.

Club Christmas Party: Bill / W3MJ said the Christmas party was a success with great food and a great time was had by all who attended.

Pete's Corner: Pete announced that Skip / W1PV had won the month's brainteaser. He also said that beginning with the January General Meeting, he would present a book of interest. This month's pick is "200 Meters and Down": The Story of Amateur Radio by Clinton Desoto. Pete also presented an original 50 anniversary edition printed in 1936 by the ARRL purchased from the very first Radio Shack store that was located in Boston, Massachusetts.

Tribute to Ray / W3TDF: Bill / K3ANS gave a thorough background for Ray, including his accomplishments with CW, electronics, contesting, and his love for Moonbounce. Bob / NE2C and Bill / W3MJ added touching anecdotes about Ray. Pete / NL7XM said that it was 14 years ago the he first came to a Club Meeting where Ray had done a demonstration and was the reason for him joining.

Adjournment: There being no further business before the Club, the meeting adjourned the meeting at 2007 hrs.

Respectfully submitted by Larry / AB3TY, Secretary

VE TEST SESSION

There will not be a test session this month. The next test session will be March 4th 6^{th} at 7 PM at the Northampton County 911 center. Pretest registration is required. Contact George / N3SQD at george@bioserv.com or Al / W3CE at w3ce@arrl.net

FEBRUARY CONTESTING AT THE OK CORRAL



February 6 & 7 — YLRL YL-OM Contest

-- Black Sea Cup International

February 13 & 14 - CQ WW RTTY WPX Contest

- Dutch PACC Contest

February 20 & 21 - Russian PSK WW Contest

- ARRL International DX Contest - CW

February 27 & 28 - CQ 160 Meter Contest - SSB

- UBA DX Contest - CW



FEBRUARY QUICK CHECK CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2 Happy Groundhog Day	3 DLARC Net (W3CE)	4 DL ARC MEETING 7:30 PM	5 NO VE SESSION	6
7	8	9	10 DLARC Net (KC3II)	11	12	13
14	15	16	17 DLARC Net (N3SQD)	18 DLARC BOARD MEETING	19	20
21	22	23	24 DLARC Net (KB3CTX)	25	26	27
28	29		DLARC Net (K3PDL)			

NEW MEMBER

The DLARC is continuing to grow, so be sure to greet our new member, shake their hands, and give them a warm welcome to our club. The newest member is Robert Heisler / KC3FXG.

AMATEUR RADIO CLASSES - SPRING 2016

DLARC will offer free classes to anyone (ages 8 to 80+) who may be interested in becoming an Amateur Radio Operator. The classes are designed to help potential amateur radio operators learn about amateur radio, and prepare them for the FCC Amateur Radio multiple-choice examination leading to the Amateur Radio license.

The classes will begin on Tuesday, March 8, 2016, and will be held for a total of 9 Tuesdays, 7 PM – 9 PM in the Nazareth area.

If you are interested in learning about ham radio and earning your license to transmit on the amateur radio bands, please contact me for details.

If you know someone who may be interested, please have them contact me for details. I'll be happy to answer questions about getting into ham radio, and provide interested persons with directions to the class location from wherever they will be

coming. Bob Green / KE3AW at ke3aw@arrl.net 610 432-8286

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**

0.8 (g/2 = 0.4t g = 0.4t x 2 = 0.8)

Winner - Skip / W1PV

?

FEBRUARY BRAINTEASER

Using only four fours, and any math symbols/ operations you choose, can you obtain 55?

HARD COPY SUBSCRIPTION

You must sign up if you want a hard copy newsletter subscription. The rate is \$12, this is exclusively for the newsletter only, to cover printing and mailing. The price of maintaining a Bulk Mailing Permit is too expensive to justify with the size of our membership, thus the first class postage requirement. This will squarely cover the cost of paper and printing supplies for 12 issues. To subscribe contact Pete / NL7XM at nl7xm@arrl.net

.

MEMBERSHIP DUES ARE DUE!

It's that time, already! DUES are payable for the calendar year 2016. Here's how easy it is to remit your club DUES and keep your valuable D.L.A.R.C. Membership current. Whether in person or by mail, CHECKS made payable to the D.L.A.R.C. are the preferred method of payment to more accurately record your timely renewal. Please ensure that your callsign appears somewhere on the instrument, such as in the memo field. Paying with cash is discouraged, but if you really, really have to, kindly make certain you are prepared with the correct sum according to the rate table shown below. Remember, if your DUES are not paid by February 1st, your membership will expire.

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 Include your phone number if you prefer a live reply.

de Mike / KB3LOD, DLARC Treasurer

Silent Key

The D.L.A.R.C. Wishes to express its sadness at the passing of the wife of club member, Van / K3CP

Mildred Van Horn

THE LATEST NEWS ON TERRORRISM

At New York's Kennedy Airport today an individual, later discovered to be a NYC public school teacher, was arrested trying to board a flight while in possession of a ruler, protractor, set square, slide rule and calculator. At a morning press conference a White House spokesman said authorities believe the man is a member of the notorious Al-Gebra movement. The man is being charged by the FBI with carrying weapons of maths instruction.

"Al-Gebra is a fearsome cult," the spokesman said. "They desire average solutions by means and extremes and sometimes go off on tangents in search of absolute value. They use secret code names like `x' and `y' and refer to themselves as 'unknowns', but we have determined they belong to a common denominator of the axis of mediaeval, with coordinates in every country. As the Greek philanderer Isosceles used to say, "There are three sides to every triangle".

When asked to comment on the arrest President Obama said: "If God had wanted us to have better weapons of maths instruction he would have given us more fingers and toes".

Silent Key

The D.L.A.R.C. Wishes to honor and to express its sadness at the passing of a club member, Past President and Board member. A long time DLARC member and the holder of eleven county PA QSL Party Records and a honoree of many other Amateur Radio Awards. Past President of the QCWA Chapter 17, and present Vice-President.



RAY "THE GRUMP" Bilger W3TDF

REPEATER ETIQUETTE

Atlantic County ARES Web Page Via Bob Green / KE3AW

Every couple of years it seemed we used to "remind" operators using our repeaters of the proper etiquette to be used on W3OK. With numerous new hams over the past couple years, or hams new to this area, it may be worth considering using/altering to suit us some such guide to operators in our club. I know, from recent questions to me about a number of points covered in this article, below...

Here is the Delaware-Lehigh Amateur radio Club Repeater Etiquette.

Use of the W3OK Repeater

- 1-Usage will be in accordance with FCC Rules Part 97.
- 2-Users will comply with directives of the control operator.
- 3-Transmissions will be courteous and professional. (See Basic Repeater Etiquette Below)
- 4-The time out timer is set for 90 Seconds. Keep transmissions under that time. Leave breaks between transmissions so the repeater can drop and the time out timer resets.

Basic Repeater Etiquette

- 1-Starting a QSO via a directed call. There are two main ways by which a QSO can begin, one is via a directed call and one is via monitoring. A directed call is where one amateur calls another amateur individually, such as "N3XYZ from K3ABC". In such a case, K3ABC is looking for one particular individual, N3XYZ. It generally is not an invitation for anyone other than N3XYZ to return the call. If N3XYZ doesn't answer the call, K3ABC may just clear off by saying "K3ABC clear", or may clear and listen for other calls by saying "K3ABC clear and listening". The "and listening" or "and monitoring" implies they are interested in hanging around to QSO with anyone else who might be listening at that time. "Listening" and "monitoring" don't mean you are listening to somebody else's conversation, they mean you are listening for other people who may want to call you to start a new QSO. Likewise, just saying your call by itself with nothing following it is meaningless. If you were to say "N3XYZ", people listening wouldn't know if that means you were monitoring for calls, whether you were testing, or whether they missed the callsign of a party you were calling. Be concise, but be complete.
- 2-Starting a QSO via a monitoring call. If the repeater is not in use, simply stating your callsign followed by "listening" or "monitoring" implies that you are listening to the repeater and are interested in having a QSO with anyone else. Calling CQ on a repeater is generally not common, a simple "N3XYZ listening" will suffice. There is no need to repeat the "listening" message over and over again as you might do when calling CQ on HF. Once every few minutes should be more than sufficient, and if someone hasn't answered after a few tries, it probably means there is nobody around. If someone is listening and wants to QSO, they will answer back. Avoid things like "is anybody out there" or "is there anybody around on frequency"; it sounds like a bad sci-fi movie.
- 3-Joining a QSO in progress. If there is a conversation taking place which you would like to join, simply state your callsign when one user unkeys. This is the reason for having a courtesy tone: to allow other users to break into the conversation. One of the stations in QSO, usually the station that was about to begin his transmission, will invite you to join, either before making his own transmission or afterward. Don't interrupt a QSO unless you have something to add to the topic at hand. Interrupting a conversion is no more polite on a repeater than it is in person.
- 4-Interrupting a QSO to make a call. If you need to make a directed call to another amateur but there is already another QSO going on, break into the conversation during the courtesy tone interval by saying "Call please, N3XYZ". One of the stations will allow you to make your call. If the station you are calling returns your call, you should quickly pass traffic to them and relinquish the frequency to the stations who were already in QSO; don't get into a full QSO in the middle of someone else's conversation. If you need to speak with the party you call for a significant length of time (say, more than 15 seconds), ask them to either wait until the current QSO has cleared, or ask them to move to another repeater or simplex channel to continue the conversation.
- 5-Round tables and "Turning it Over". When more than two amateurs are in a QSO, it is often referred to as a "round table" discussion. Such a QSO's usually go in order from amateur A to amateur B to amateur C ... and eventually back to amateur A again to complete the round table. To keep everyone on the same page, when any one amateur is done making a transmission, they "turn it over" to the next station in sequence (or out of sequence, if so desired). Without turning it over to a particular station when there are multiple stations in the QSO, nobody knows who is supposed to go next, and there ends up either being dead silence or several stations talking at once. At the end of a transmission, turn it over to the next station by naming them or giving their callsign, such as "...and that's that. Go ahead Joe." or "....and that's that. Go ahead XYZ." If it's been close to 10 minutes, it's a good time to identify at the same time as well, such as "...and that's that. N3XYZ, go ahead Joe."
- 6-IDing and Who's Who? By FCC regulations, you must always identify at 10 minute intervals and at the end of a transmission. If you are making a test transmission or calling another party, this is a one-way transmission. Since it has no "length" as there is no QSO taking place, you should identify each time you make a call or a test transmission. When identifying yourself and another party (or parties), or when making a directed call, your callsign goes LAST. "N3XYZ, K3ABC" means that K3ABC is calling N3XYZ, not the other way around. There is no need to identify each time you make a transmission, only once every 10 minutes. You do not need to identify the station with whom you are speaking, only your own callsign, but it is generally polite to remember the call of the other station. Avoid phonetics on FM unless there is a reason for using them, such as the other station misunderstanding your callsign. When phonetics are needed, stick to the standard phonetic alphabet.
- 7-Demonstrations. From time to time, an amateur may want to demonstrate the capabilities of amateur radio to another non-amateur. The typical way to do this is to ask for a "demo" such as "N3XYZ for a demonstration." Anyone who is listening to the repeater can answer them back. Usually telling the calling party your name, callsign, and location is what they are looking for, not a lengthy conversation. Someone doing a demo may ask for stations in a particular area to show the range of amateur radio communications, such as if the calling station is in the Poconos they may ask for any stations in south Jersey or Harrisburg areas, which is more interesting than demonstrating that they can talk to someone in the same town as they are in.
- 8-Signal Reports. If you are unsure how well you are making it into the repeater, **DO NOT** kerchunk the repeater. Any time you key up the repeater, you should identify, even if you are just testing to see if you are making the machine. "N3XYZ test"is sufficient. Do not use the repeater as a "target" for tuning or aiming antennas, checking your transmitter power, etc. Use a dummy load where appropriate, or test on a simplex frequency. If you need someone to verify that you are making the repeater OK, ask for a signal report such as "N3XYZ, can someone give me a signal report?" "Radio check" is a term most often used on CB, "signal report" is what most amateurs ask for.
- 9-Language. Aside from some of the techno-syncracies inherent in amateur vernacular, use plain conversational English. The kind of English that would be suitable for prime-time television, not R rated movies. Avoid starting or encouraging conflicts on the air. If a topic of conversation starts to draw strong debate, change the subject. Avoid "radio-ese" lingo whenever possible. CB has its own language style and so does amateur radio, but the two are not the same. Amateurs have "names",

not "personals". Although many new hams have graduated from the CB ranks, let's try to keep CB lingo off the amateur bands. When visiting a new repeater, take some time to monitor before jumping in to get a feel for the type of traffic and operating mannerisms of that particular system. Some repeaters are very free-wheeling in that there are people jumping in and out of conversations constantly. Others primarily have directed calls on them and discourage ragchewing. Others are member-exclusive repeaters. Listen before you talk, when in Rome do as the Romans do.

- 10-Emergencies. If there is a QSO going on, break into a conversation with the word "Break" or "Break for priority traffic."

 DO NOT USE THE WORD BREAK TO JOIN IN A QSO UNLESS THERE IS AN EMERGENCY! All stations should give immediate priority any station with emergency traffic.
- 11-Malicious Interference. If there is malicious interference, such as kerchunking, touch-tones, rude comments, etc. **DO NOT ACKNOWLEDGE IT!** Continue the QSO in a normal fashion. If the interference gets to the level where it is impossible to carry on the QSO, simply end the QSO as you normally would.
- 12-Power. Use the minimum power necessary to complete a QSO. However, the minimum power necessary doesn't just mean you are barely tickling the repeater receiver squelch. If someone says that you are noisy, increase power or relocate or take whatever measures you can to improve your signal. Continuing to make transmissions after being told your signal is noisy is inconsiderate to those listening. The amateur radio manufacturers continue to come up with newer, smaller handheld radios, many with power levels well under a watt. Many new amateurs start out with a handheld radio as their "first rig". Although convenient, they aren't the most effective radios in terms of performance. Without a good external antenna, operating a handheld radio indoors or inside a car is going to result in a lot of bad signal reports.

W1AW 2015 / 2016 WINTER OPERATING SCHEDULE

```
Morning Schedule:
Time
           Mode
                            Days -
1400 UTC (9 AM EST) CW 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) CW
                             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 "
                     " CW Tue, Thu
0100 " (8 PM EST CWf 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) CWs
                            Daily
Frequencies (MHz)
CW: 1.8025, 3.5815, 7.0475, 14.0475, 18.0975, 21.0675, 28.0675, 147.555
DIGITAL: 3.597, 7.095, 14.095, 18.1025, 21.095, 28.09, 147.555
VOICE: 1.855, 3.990, 7.290, 14.290, 18.160, 21.390, 28.590, 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.

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.

SOME "REFLECTION" ON SWR

Jim Botts III / K4FJQ

First, let me say that I am NOT going to dispute the theories of Maxwell, Krause, DeMaw, or any other recognized "Guru" of modern day transmission line and/or antenna theory. This incident occurred many years ago, probably 1973 or thereabouts, at a mountain top transmitter site, where I was employed by a local TV broadcast station. I was the technician "on duty" that Sunday afternoon in September. At the site with me was the caretaker of the site who lived up there most of the time. On this particular day he was outside at our picnic table whittling. I was inside, sitting at the transmitter control console probably reading and keeping a cursory watch on the program flow, etc.

The caretaker, an elderly fellow, had been a cook during WW2 and later, after the war followed the logging camps as a cook and general laborer. He knew the outdoors well, but had no interest or training in electronics. At this point in time our TV station, like most others, would stay on the air all night to cover the US space programs. He didn't much care for that all night noise as it disturbed his sleep. I didn't care for it much myself, as I did not have any time to do maintenance on the equipment; we normally would sign off about 1 AM so it was quiet for a few hours at our site. I had several hours "free" to do maintenance. The caretaker was skeptical of the entire US space program. He often said what was seen by the public as man landing on the moon, etc. It had been carried out in Hollywood on a sound stage. He debunked the whole "space thing".

About mid- afternoon that transmitter I was "babysitting" suddenly and without warning went off the air. No indication of any trouble on the fault panel, no smoke, noise or anything indicating a problem. I jumped up and went around the console and tried to return the transmitter to operation. It would not return to the air and no fault was indicated. Broadcast transmitters are designed, for the most part, as being capable of diagnosing what has failed so the technician can trouble -- shot it and return it to service with a minimum amount of lost airtime. I must have recycled that rig a half dozen times and with each application of a transmit command the unit would come up momentarily and then drop out. Of course the telephone was ringing off the wall with studio people telling me WE are off—the—air as if I didn't already know!

After, what seemed like an eternity, the transmitter came back up on its' own and stayed on! I had the back-up transmitter warming up and ready to feed the back-up antenna system should I fail at getting the primary system going again. When things got back to "normal" I sat down for a "breather" and to contemplate what had just happened. Fifteen minutes or so later the whole scenario began again. I was reluctant to go to the back-up system, as this would have reduced our service area a good bit. I began going through the restart procedure on the main system this time getting a positive result after only a few tries.

While I pondered the situation the caretaker strolled through the building and mentioned that he'd seen a satellite come by and it attached itself to our antenna for a few minutes before sailing off to the east. In a few minutes it came back and attached itself briefly to the antenna before taking off to the west. Needless to say I had lots of questions for him but I ran outside to see if I could get a glimpse of this "satellite." No sign of anything out of the ordinary, but did note that the prevailing wind was out of the west and was a good breeze. No balloon, this!!! Going back inside I began to question my co-worker as to what he'd seen and heard when the "satellite" came by. He said it made no noise and the only thing that got him to look up was because it cast a large shadow.

The caretaker seemed a bit reluctant to talk about what he had seen and I know that I had many questions. That night after we had signed off the station at its' regular time I began a search of the main transmitters control and overload indicator system. I manually tripped each fault circuit and each time it took the transmitter off the air and lit up a warning light indicating the area of the simulated "fault"-all except one. The last circuit to test was the SWR protection circuits. When manually tripped it took the transmitter off the air but NO pilot light came on. It was burned out! To this day I still wonder what I missed seeing that day. Had that simple No.47 pilot lamp only come on I would have gone outside to at least taken a look at our tower and antenna to see if I could have spotted any readily apparent problem. Maybe I would have gotten to see the "satellite" too. The gent who did get to see it, TWICE, didn't believe in such. He never brought up the story again. If there is a moral to this story...the next time you experience an SWR problem, go outside and look up at your antenna!

WORLD RADIOCOMMUNICATION CONFERENCE APPROVES GLOBAL 60 METER ALLOCATION

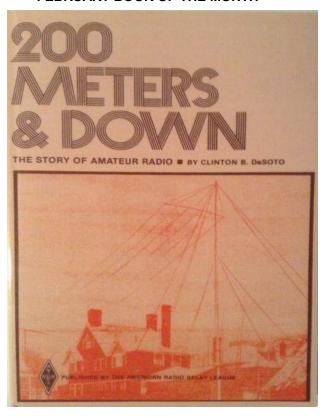
The Plenary Meeting of the 2015 World Radiocommunication Conference (WRC-15) in Geneva has approved an allocation of 5351.5-5366.5 kHz to the Amateur Service on a secondary basis with a power limit of 15 W effective isotropic radiated power (EIRP). The November 18 decision on Agenda Item 1.4 was adopted on two back-to-back readings. Some Region 2 countries, but not the US, will be permitted up to 25 W EIRP. With this action, and despite conditions that are more restrictive than had been hoped at the start of the Conference, the Amateur Service has obtained its first new global HF allocation since 1979. The new band will not become available until and unless the FCC adopts the Acts of the Conference and establishes operating rules. Until then, the five discrete channels will remain in place.

The International Amateur Radio Union (IARU) team in Geneva is now focusing its efforts on tweaking the agenda for WRC-19. It is likely, but not certain, that the agenda will include an effort to harmonize the Amateur Radio allocation at 50 MHz. A proposed agenda item to align the 160 meter allocation in Region 1 with the rest of the world is no longer under active consideration.

The WRC-19 agenda will also likely pose spectrum defense challenges, including the possible consideration of the 144 MHz and 430 MHz Amateur Radio allocations for sharing with the space operations service, and the possible consideration of one or more bands above 10 GHz for 5G smartphone use. The bounds of these potential defensive items, however, are still under discussion.

The IARU team continues to monitor several other WRC-15 items that appear to be headed toward acceptable conclusions. WRC-15 continues through the signing of the Final Acts on November 27.

FEBRUARY BOOK OF THE MONTH



ARRL AGAIN COMPLAINS TO FCC ABOUT ILLEGAL MARKETING OF ELECTRONIC LIGHTING BALLASTS

The ARRL has again complained to the FCC to allege illegal marketing of electronic RF lighting ballasts, operating under Part 18 of the Commission's rules, on the part of two major retailers. Letters went out this week to the FCC Enforcement Bureau and its Office of Engineering and Technology claiming Part 18 marketing regulations violations by Lowe's and by Walmart stores. At issue is the sale of non-consumer RF lighting ballasts to consumers who, in several instances, were told by store personnel that it was okay to install these in a residential setting. In addition, non-consumer and residential-class ballasts are intermixed in store displays with inadequate signage to direct consumers to the correct choice. Both letters asked the FCC to investigate and commence enforcement proceedings with respect to the two stores' marketing and retail sale of RF lighting devices in the US.

"ARRL purports to show that the retailer is...marketing and selling to consumers (by retail sale) non-consumer Part 18 RF lighting devices which are not intended for residential deployment, to consumers who have specifically noted their intention to deploy the devices in residential applications," ARRL Chief Counsel Chris Imlay, W3KD, said in similar complaint letters to the Commission on December 28 and December 29. Part 18 emissions limits for consumer devices are far lower than those allowed for non-consumer devices.

"ARRL has received numerous complaints from Amateur Radio operators of significant noise in the medium (MF) and high frequency (HF) bands between 1.8 MHz and 30 MHz from 'grow lights' and other Part 15 and part 18 RF lighting devices," Imlay continued. "These devices are easily capable of emitting RF noise sufficient to preclude Amateur Radio MF and HF communications (and, as well, AM broadcast station reception) throughout entire communities."

Supporting both complaints are extensive and detailed reports by ARRL Laboratory EMC Specialist Mike Gruber, W1MG. The reports recount incidents of actual purchases of Part 18 RF lighting devices intended for commercial use to consumers who made clear to store personnel that they intended to use the devices at home. Gruber's report includes multiple photographs that depict in-store displays of the products in question and showing signage that does not adequately explain which devices may be sold to whom.

The ARRL has asked that all non-consumer devices be removed from retail sale and marketing at the stores and to track and recall non-consumer devices already sold to consumers. In his report, Gruber concluded that retailers should require purchasers of non-consumer Part 18 RF lighting devices to provide a valid contractor's number. He also advised that the stores improve display signage to make it clear that non-consumer Part 18 devices may not be used in residential settings.

Earlier this year, the ARRL sent similar complaint letters to the FCC regarding the marketing of Part 18 RF lighting devices by The Home Depot. The League also has complained about specific RF lighting "grow light" devices that it has aleged exceed Part 18 emission limits.

FOR SALE

"Equip your ham station: Office desks, file cabinets, supply cabinets, counters, tables, staplers, tape dispensers, organizers, chairs, beautiful antique oak conference table, Pendaflex hanging folders, red rope file folders, manila folders, clothes racks, old computers, monitors, partition, etc. Merged my CPA firm two years ago, so I do not need this building or its contents. All in good condition. Great for equipping ham station at fraction of new prices. Take tour and make offers. 2560 Nazareth Road, Easton, PA 18045-2793. Call Bill Goodman, K3ANS; office 610-770-9236, cell 484-241-6176, home 610-258-5063."

Bill / k3ans E-mail: WGoodman@GoodmanCPA.com

AN ANALYSIS OF LIGHTNING DEATHS IN THE UNITED STATES FROM 2006 THROUGH 2013

John S. Jensenius, Jr. Lightning Safety Specialist National Weather Service, NOAA

From 2006 through 2013, 261 people were struck and killed by lightning in the United States. Almost two thirds of the deaths occurred to people who had been enjoying outdoor leisure activities. The common belief that golfers are responsible for the greatest number of lightning deaths was shown to be a myth. During this 8-year period fishermen accounted for more than three times as many fatalities as golfers, while camping and boating each accounted for almost twice as many deaths as golf. From 2006 to 2013, there were a total of 30 fishing deaths, 16 camping deaths, and 14 boating deaths, and 13 beach deaths. Of the sports activities, soccer saw the greatest number of deaths with 12, as compared to golf with 8. Around the home, yard work (including mowing the lawn) accounted for 12 fatalities. For work-related activities, ranching/farming topped the list with 14 deaths.

Males accounted for 81% of all fatalities, and more than 90 % of the deaths in the fishing and sports categories. Females had comparatively fewer deaths than men in every category, with their highest percentages in the boating-related activities (35%) and routine daily/weekly activities (36%).

June, July, and August are the peak months for lightning activity across the United States and the peak months for outdoor summer activities. As a result, more than 70% of the lightning deaths occurred in the months of June, July, and August, with Saturdays and Sundays having slightly more deaths than other days of the week.

Ages of the victims varied from young children to older adults with the greatest number of fatalities between the ages of 10 and 60. Within that age range, there were fewer deaths for people in their 30s, possibly due to parents of young children being less involved in vulnerable activities.

Based on the media reports of the fatal incidents, many victims were either headed to safety at the time of the fatal strike or were just steps away from safety. Continued efforts are needed to convince people to get inside a safe place before the lightning threat becomes significant. For many activities, situational awareness and proper planning are essential to safety.

JANUARY PROGRAM "MAPLE SYRUP"

While not having anything to do with ham radio, Pete / KC3EVL, presented a fine program on Maple Syrup. Pete's f amily.has been making maple syrup for many years in Wayne County, Pennsylvania.

Starting with slides,. Pete, showed us how to identify a sugar maple tree by its bark, seeds and flowers. Also that most of the maple trees in our area are sugar maples.

Beginning with the drilling of three-quarter inch hose to mount and continuing right through to the finished product. The trees productive, begins **in** the middle of February and continues into March. The sap runs from the trees by gravity to the stainless steel tanks that hold the sap until processing. The tanks are taken to the building where the syrup making process begins

This process is where the sap is heated to remove water and other impriorities **a**nd reduce it **to** pure syrup. It is during this process that different temperatures create the various other products made with this syrup. Maple syrup is the product that is produced by the lowest temperatures, the other products are determined by the processing temperatures.

It takes 40 gallons of sap to result in 1 gallon of syrup. Pete's family has about 2500 taps in the trees on the property. This number OF taps and result in possibly 500 gallons of syrup in a Good year They presented to the Obama White House, 5 gallons of Pennsylvania maple syrup.

Pete concluded with sample of ice cream and maple syrup, and limitd sales of the syrup.

REDNERS' SUPERMARKETS SAVE-A-TAPE PROGRAM

Here's how it works:

Redner's has a terrific program to support the Club **AT NO COST TO THEM**, if our members simply sign up for a Gas Card that records their shopping points, and give their cash register receipts to, **Pete / NL7XM**, He'll do the rest.

Note: This does not affect your gas points in any way.

HELP THE ENVIRONMENT

Donate your old, empty printer ink cartridges to the Club for recycling. Any brand, model, size or shape; color or black. Please bring them to the meeting in a leak proof ziplock type baggie and give them to Pete / NL7XM. This simple act can help your Club by reducing recurring expenses, and make you feel a lot better about our environment.

The March Program will be "Emergency Communications" - "WT" / WN3LIF

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.

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 147.370 (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.

The Clubhouse telephone number is 484-895-7038.

EXECUTIVE COMMITTEE 2015 – 2016 OFFICERS

President - Bill Connelly / W3MJ	president@dlarc.org
Vice President - Steve Harper / KB3WYJ	vicepresident@dlarc.org
Secretary - Larry Kaplan / AB3TY	secretary@dlarc.org
Treasurer - Mike Gower / KB3LOD	treasurer@dlarc.org
	BOARD of DIRECTORS
Gabe Lantos / KZ2A	gpl3639@gmail.com
Skip Leslie / KD2BDA	mleslie105@yahoo.com
Bob Oppen / NE2C	oppen.robert@yahoo.com
Evelyn Uhler / W3DOY	evelynuhler@hotmail.com
Dave Mellman / KA3IWC	dbm073@gmail.com
Jay Mason / N3OW	n3ow@rcn.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 - Brad Snyder / W3JXQ	w3jxq@dlarc.org
Circulation - Paul Morrison / N3YNT	n3ynt@aol.com