DELAWARE LEHIGH AMATEUR RADIO CLUB Inc. JUNE 2017







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

JUNE MEETING PROGRAM "1992 DLARC Field Day" (An Original Film) TOM / N3EBH



"DMR (Digital Mobile Radio)" Mark / W2MB

MINUTES FROM THE MARCH MEETING

A general membership meeting of the Delaware Lehigh Amateur Radio Club was held on May 4, 2017 at the Bethlehem Township Community Center, Bethlehem, Pennsylvania.

Called to Order: Steve / W3NAM, Vice President at 19:30 hrs.

Pledge of Allegiance: Led by Vice President Steve

The Vice President welcomed and thanked all for coming and asked if anyone had anything special ham happenings or events from and for the membership. Nothing was mentioned.

Secretary's Report: Lester / W3LES stated the minutes had been posted on line, the V. President ask if there were any corrections. Barry / KU3X said there was a mistake with on the Balun rating that the secretary had typed. IT SHOULD HAVE BEEN (5KW). A Motion to accept the minutes with the correction was made from Jay / N3OW and was seconded by Dean / AB3BD, the Motion was so moved by vote.

Treasure's Report: Mike / KB3LOD gave his report and on a Motion to accept by Pete / NL7XM and seconded by Mark / W2MB, the Motion was so moved by vote.

Club Station: Lester / W3LES reported that all was well and reminded all that it's your club station come out and use it. Hours for the Club Station are Wednesdays 5-9pm and Saturdays 9 till noon or so.

Club Repeater: No Report

Web Site: Rich / WC3T report on the increase in web page hits, and if anyone is still having trouble with the page to email him Rich also and read a letter of thanks to Brad Snyder / W3JXQ for his service to the Club.

Membership: Jo Ann / ND3JJ read 3 new Applications from: Stephen Schrack, N3MX, Danny Waldrop, AB3ZS and Darlene Waldrop, (Family membership, she is currently in our Tech class). On a motion to accept from Dave / N3LWY and seconded by Bob / KB3ULG was made, the Motion was so moved by vote.

Classes: Bob / KE3AW stated that the classes are going along well folks.

George / N3SQD stated that there will be FEMMAARES & RACES training classes upcoming and if any of the members would be interested in doing them to contact him and will repeat the info on the Net. And then reminded all of field day.

Mark / W2MB asked if there was any interest in doing a swap net Wednesdays after our regular net to also let him know. Adjournment 7:58PM

Respectively Submitted Lester Morrow / W3LES

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
				1 DL ARC MEETING 7:30 PM	2 NO VE SESSION	3
4	5	6	7 DLARC Net (ND3JJ)	8	9	10
11	12	13	14 DLARC Net (W3CE)	15	16	17
18 Father's Day	19	20	21DLARC Net (W0ROY)	22 DLARC BOARD MEETING	23	24 FIELD DAY
25 FIELD DAY	26	27	28 DLARC Net (KC3II)	29	30	

JUNE QUICK CHECK CALENDAR

JUNE CONTESTING AT THE OK CORRAL



June 3 & 4 – SEANET Contest – UKSMG Summer Contest June 10 & 11 – VK Shires Contest – ARRL June VHF Contest June 17 & 18 – All Asian DX contest – CW – Ukrainian DX Classic RTTY Contest June 24 & 25 – ARRL Field Day



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

MAYBRAINTEASER ANSWER

First, the waiter stuck the match into the lemon wedge, so that it would stand straight. Then he lit the match, and put it in the middle of the plate with the lemon. Then, he placed the glass upside-down over the match. As the flame used up the oxygen in the glass, it created a small vacuum, which sucked in the water through the space between the glass and the plate. Thus, the waiter got the water into the glass without touching or moving the plate.



The winner is Arden / WI5S

JUNE BRAINTEASER

If you use a certain formula on 13, you end up with 7. Under the same formula, 2352 becomes 16, 246 becomes 14, 700 turns into 16, and 1030 becomes 14.

What would 9304 become?

FIELD DAY 2017

ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. Each year over 35,000 amateurs gather with their clubs, friends or simply by themselves to operate.

ARRL Field Day is not a fully adjudicated contest, which explains much of its popularity. It is a time where many aspects of Amateur Radio come together to highlight our many roles. While some will treat it as a contest, most groups use the opportunity to practice their emergency response capabilities. It is an excellent opportunity to demonstrate Amateur Radio to local elected community leaders, key individuals with the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field Day is one of the highlights of their annual calendar.

The 2017 Field Day will be held on the week end of June 24th and 25th At BiCentennial Park East in East Allen Township. 5450 Liberto Lane, Bethlehem (for those with a GPS) .(Www.eatwp.org/rec_parks.html)

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.

VE TEST SESSION

There will not be a test session this month. The next session will be on September 5th at 7 PM at the Northampton County 911 center. Pretest registration is required. Contact Dean / N3HOG at dk28@ptd.net

MIDWAY AND KURE ISLANDS REINSTSTED AS DXCC ENTRIES

On March 31, 2017, the DXCC desk announced the deletion of Midway Island and Kure Island from the DXCC entities list. The stated reason for this action was because of changes in the administration resulting from changes in Papahanaumokuakea Marine National Monument, formerly known as the Northwestern Hawaiian Islands Marine National Monument, of which the Midway Atoll National Wildlife Refuge and the Battle of Midway National Memorial, the Hawaii State Seabird Sanctuary at Kure Atoll, and the Northwestern Hawaiian Islands State Marine Refuge, of which they are all included. After further review, it has been found that the deletion of these two entities is not supported by the changes that were made to the relevant administrations. Therefore, the deletions from the DXCC list should not have occurred, and the two entities, Midway Island KH4 and Kure Island KH7K, will return to the DXCC list as separate entities.

SIX GREAT CONFUSIONS STILL UNRESOLVED

At a movie theater, which 'arm rest' is yours?

 In the word scent, is "S" silent or "C"?
 If people evolve from monkeys, why are monkeys still around?
 Why is there a 'D' in fridge, but not in refrigerator?
 Who knew what time it was when the first clock was made?

If pro and con are opposites, wouldn't the opposite of progress be... congress?



REFLECTIONS FROM THE PAST



Lew Papp / W3MAC, in His Shack, he was blind and was able to use his equipment through the use of homebrew aids built by fellow DLARC members



MORE ON LEW PAPP / W3MAC de Bill / K3ANS

I knew Lew Papp very well in the 1950s. His home and shack were perched along Delaware Drive, PA 611 at the bottom of the rock cliffs, between College Hill, Easton and the Sandt's Eddy village near the PA Fish Commission boat landing, South of Martins' Creek, PA. At that time, I lived on College Hill. The railroad tracks and the Delaware River were about two feet in front of his home, with no yard space.

His yagi was mounted on a mast stuck through the hole in his roof. Looking east, he had a good take off angle over the Delaware River, for DXing into Europe. He was blocked to the west by the steep rock cliffs, about 200 feet higher than his home and shack. He had no room for a yard. He connected his ground wires to the lengthy railroad tracks that ran in front of his home along the River. His vacant home appears now to be falling apart.

He had a spoked wheel mounted on the bottom of the mast inside his shack. Lew was blind, so he could rotate and aim his yagi by feel of the spokes.

He had home built AM transmitters that he could maintain despite his blindness! I forget his transmitter, but it was home brew I believe it had an 813 tube, very common in the 1950s. Typical of that era, it was a rack mount in a heavy metal cabinet with a flip up top lid. I think it had plug in coils for each band.

Lew was a member of DLARC. He was very active and publicized when he provided emergency communication during Hurricane and Flood Diane in 1955.

Lew loved to drink beer. He lined up the empty bottles each hour along the shelf in his shack. I could tell the time by the number of empty bottles.

I often heard him on HF rag chewing, usually on 10 meters when skip was in. I met him in 1957, during one of the highest sunspot cycles. We all could work worldwide DX on 10 meters AM and CW with a few watts. My Heathkit DX-35 with a 6146 tube was common. It transmitted CW or AM with a screen grid modulator, which was about 60% of the audio level of a full blown plate modulator. (I later built a plate modulator with a pair of 6L6 tubes). Big stations had the Heathkit DX-100 or later the Apache with an AM plate modulator, WOW!

SSB was not developed or sold yet. We did have Double Side Band (DSB) with suppressed carrier. Few could afford the phasing or filters to eliminate one of the two sidebands. Hams take that for granted now.

I have Lew's QSL card.

Lew lost his vision from a dynamite cap explosion, while he worked at a local cement plant. It was either Alpha Portland Cement or Lehigh Portland Cement, both near his home just South of Martins Creek. I vaguely remember that he had been a mining engineer.

I do not remember if he had children. He was single when I knew him, but I think he was once married. He had a girlfriend. Lew died around 1965.

John Marrazi, W3BAL, was Lew's good friend and near neighbor along Delaware Drive / PA-611, in Sandt's Eddy. John died at least 10 years ago. He was a retired fireman and technician at C. K. Williams, paint factory in Easton, which later became Pfizer. His former home with a Cushcraft yagi on a windmill style tower is also along PA-611. The yagi and rugged tower were available free for many years, but were never claimed. W0RSJ/3 Bill Murphy, member of DLARC, handled John's ham estate sale.

Gary Gardner, KB3HLG, who owns Gardner Auto Service along Delaware Drive / PA-611 in Sandt's Eddy, Easton, was also Lew and John's neighbor. Gary is not active, and got his ham license after Lew and John died.

W3PYF and W3NF / W2ZVW, silent keys and past presidents of DLARC, knew John well. K3AFW (now the new W3PYF) and I used to visit Lew after school in the 1950s.

Call sign W3MAC has been reissued to a ham in Carnegie, PA, near Pittsburgh. Amazing that I could not find an obituary for him. I recalled a story about him getting married, and found that he was one of 3 husbands that his wife had buried when she died at 90 a few years back, I did some research and found the following from the Courier-News of Plainfield, NJ on January 31, 1939:

Blinded Worker Given Benefits On Old Accident Clinton

In a hearing before Deputy Commissioner Charles E. Coibin of the Workmen's Compensation Bureau last week in Flemington, Lewis Papp, 30, Martin's Creek, Pa., was awarded a verdict against the Alan Wood Mining Company, Oxford, whereby he will receive compensation of \$18.56 for the rest of his life. Figuring a 37-year expectancy, it is estimated this verdict will total \$36,000. Papp lost sight of both eyes Sept. '2, 1930, while at work in the concern's mines near Oxford. Accident occurred when a dynamite charge went off when struck by his drill in a large" rock previously blown by dynamite. Shortly after that time he received compensation for 22 27 weeks at the rate of \$18.55 per week for temporary disability and later he was paid the same amount for 400 weeks for permanent disability. W. Reading Gebhardt, representing Papp, showed the claimant could not be rehabilitated. Deputy Commissioner Corbin decided the claimant was entirely unemployable.I wonder if he ever had his pension inflation adjusted. Even sum of \$36,000 in 1930 would be just \$500,000 in 2017 - a paltry settlement

(Photos from the W3PYF Collection)

MAY PROGRAM REPORT

DMR

This month's topic presented by Mark / W2MB, was "Digital Mobile Radio". Which is believed to be the future of 2-way radio.

Developed in Europe by the European Telecommunications Standards Institute. It has become a published worldwide standard. With dozens of radio manufacturers having models available to users (Hytera, Vertex, Motorola, Tait, MYT and BFD for example). They present superior voice quality, longer battery life, automatic roaming, supports multiple talk groups on one frequency and supports applications.

DMR is divided into three tiers: Tier I is a single channel specification originally for the European unlicensed service. It is a single channel that supports peer-to-peer, repeater and linked repeater configurations. Tier II is two slot. peer to peer and repeater mode specification. Each slot can be either voice and/or data depending upon system needs. Tier III builds upon tier II, adding trunking operation involving multiple repeaters at a single site.

There are many sources of DMR radios, both new and used. As of very recently, you can walk into an amateur radio store and buy a DMR radio

Locally in Allentown, there is a DMR repeater, N3RPV. The use of the repeater was demonstrated by several member's activating their DMR radios. Indicating an present interest by some members.

Mark finished with a question and answer session. Another outstanding and informative presentation by Mark.

SWAP AND SHOP NET

There has been mentioned recently, there is an interest in establishing a swap and shop net. It would be held on Wednesday evenings following the regular net. Mark / W2MB is willing to organize it if there is enough interest and support. Any one interested in acting as a net control for such a net, should contact Mark directly via email.

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 Stephen Schrack / N3MX, Danny Waldrop / AB3ZS and Darlene Waldrop /NC

CANADA MAY BE BEST PLACE FOR HAMS TO EXPERIENCE THE SOLAR ECLIPSE

Alex Schwarz, VE7DXW, who developed the online <u>Scanning RF Seismograph</u> to determine which bands are open, is among the many looking forward to the solar eclipse on August 21, 2017. Although the path of totality will move over Oregon then southeastward toward South Carolina, he believes radio amateurs north of the border can take advantage of this "very exciting celestial event," as those in the US will be doing, and may have an edge of sorts. Members of the Ham Radio Science Citizen Investigation (<u>HamSCI</u>) in the US will sponsor a Solar Eclipse QSO Party (<u>SEQP</u>) to conduct their own research.

"This will be spectacular when viewed with our eyes," Schwarz said. "The effects of the solar radiation on the propagation of radio waves will be equally or more exciting." Schwarz said it may appear that Canada won't be a part of the solar eclipse, but British Columbia (BC) will have up to 95% coverage, he pointed out.

"As the solar eclipse is moving over the planet, it is leaving a canyon of de-ionized gas on the ionosphere in altitudes of about 100 to 300 kilometers," Schwarz said. "This puts Canada -- and especially Ontario -- in a very good position to get really long signal paths to the horizon toward the south. Southern Ontario will be in the best location to make contacts into the southern and western US and Central America. In southern BC, we can aim our antennas right down the length of the propagation anomaly and reach the Caribbean and southeastern US." Schwarz said timing is important, because the gas will ionize again after the solar shadow has passed. The entire passage across North America will be approximately 90 minutes.

Schwarz said that during the 1999 solar eclipse in Europe, radio amateurs recorded long-distance contacts on 160 and 80 meters. "We want to inform all amateurs about the opportunity of experiencing the solar eclipse on a totally different level by operating radios in their shacks," he said.

Schwarz encouraged all ham radio clubs to participate in the opportunity, not only to view the eclipse but to experience its effects on radio propagation.

NASA offers much more information about the 2017 solar eclipse.

FCC PROPOSES LEVYING HUGE FINE ON NEW YORK POLICE RADIO JAMMER

The FCC has proposed a fine of more than \$400,000 on a Queens, New York, man who has admitted making unauthorized transmissions on New York City Police Department (NYPD) radio frequencies, maliciously interfering with NYPD officers' communications. Jay Peralta, 20, is alleged to have transmitted false bomb threats, false claims of criminal activities involving firearms, false distress calls from purported NYPD officers, and threats against individual NYPD officers. The unauthorized transmissions began a year ago, according to the FCC.

"Through his actions, as he described them to the NYPD, Mr. Peralta has demonstrated not only a deliberate disregard of the Commission's authority and rules, but of the safety of NYPD officers and the public that they are called to serve and protect," the FCC said in a *Notice of Apparent Liability* (NAL), issued on April 14. "Commission action in this context is therefore essential to safeguard authorized operations on spectrum licensed for public safety uses, and, accordingly, a substantial penalty appears warranted."

The FCC said the *NAL* addresses nine unauthorized and interfering transmissions that Peralta has admitted to the NYPD that he made on its radio system. The FCC said Peralta's unauthorized transmissions included false bomb threats, false claims of criminal activities involving firearms, false distress calls from purported NYPD officers, and threats against individual NYPD officers.

FCC Chairman Ajit Pai, said that with the *NAL*, the FCC is making it "abundantly clear that it will not tolerate unauthorized and illegal use of the radio spectrum." The entire Commission now must sign off on such proposed fines, and Pai said he was grateful to his fellow FCC members for "agreeing to act swiftly and strongly" in the matter. "This may not be a typical pirate radio case in which an unauthorized operator inflicts damage on a radio broadcaster that is operating with a valid FCC license," Pai said, "but it does involve unauthorized interference to critical public safety communications systems." Peralta was arrested last fall along with two other men suspected of committing several robberies. According to news accounts, police found a cache of scanners and radios in one of the suspects' homes.

The FCC said it was alerted by a Twitter post about an unlawful intrusion on the NYPD radio system and dispatched an Enforcement Bureau agent to check it out. On September 30, the NYPD contacted the FCC's New York Office and advised that it had arrested Peralta and another individual in connection with unauthorized transmissions on NYPD's radio system. According to police reports, the other individual arrested — Ricardo Torres, 29, described as "a ham radio enthusiast" in some news accounts — allegedly provided the radios used.

Torres, is said to hold an FCC General Mobile Radio Service (GMRS) license but his name does not appear in the Amateur Radio licensee database. Police said they found 15 portable radios, 9 scanners, roof-top antennas, an amplifier, and assorted other electronics in Torres's apartment.

Peralta has 30 days to pay or contest the proposed \$404,166 FCC forfeiture.

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@arrI.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.

TRANSCEIVER "POLEVIK"

By: Vladimir Polaykov / RA3AAE

The schematic of the transceiver is just a project and required the practical test. Author will be really appreciated those who test the transceiver.

Schematic of the transceiver is shown on Figure 1. It is DC transceiver.

Transistors VT1 and VT2: They work like a mixer at RX mode and like a PA and doubler (key down) at TX mode.

It is necessary to use MOSFET with the "right" gate/drain characteristic. At such transistor drain current is absent when gate connected to source and voltage is across drain/source. To open the MOSFET you need connect the gate with

DC in positive polarity (relative to source). Cutting voltage for such transistors may be 0.5- 2.0- V.

If you have no MOSFET with the "right" gate/drain characteristic you may use usual MOSFET with the "left" gate/drain characteristic. However at the case the MOSFET should be closed by some negative polarity across gate- source. Transistors VT1 and VT2 should be matched pair (have the same parameters).

Transistor VT3: It is Quartz- RF Generator. It works at the same mode at RX and TX. Quartz has resonance frequency twice lower the working frequency. At RX/TX it should be some frequency shift that allows work at the transceiver mode.

Transistors VT4 and VT5: They work at audio amplifier. Transformer Tp1 is an ordinary output transformer from an old transistor radio.

Tuning and Adjustment: At first at transmitting mode (key down) tune the PA to maximum power. It does with help symmetrical L3 (find necessary numbers of turns) and tuning L4C7 to resonance (F/2). Maximum power into antenna (or dummy load) is depend on L1 and C1. PA tuned to the maximum power should provide maximum sensitivity at RX mode.

Attention: It should not be any current through VT1 and VT2 when the Quartz is removed.



25 YEARS AGO ----- JUNE 1992 NEWSLETTER

Announcement was made by Bob KU3K that Field Day would be held on the 27th and 28th at Hackett's Park in Easton. Clarence Snyder W3PYF was presented with the "Grand Ole Ham" award from the Rochester Amateur Radio Association of New York.

The DLARC (Golf) Open was held with K3OO posting the best score followed by K3NZ, KA3YXB, NU3L and W3TDF Van K3CP explains how diodes work in his column "Ima Lidd".

The DLARC supported the American Lung Association's Bikeathon with six members providing communication support. Ten of our members supported the March of Dimes Walk-A-Thon.

They were working on changes and additions to the Constitution and By Laws.

F.Y.I.

The July Program will be "Welcome ARRL Atlantic Division Director" -Tom / W3TOM 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.

EXECUTIVE COMMITTEE 2012 – 2013 OFFICERS

President – Bill Connelly - W3MJ	president@dlarc.org
Vice President - Steve Harpe / W3NAM	
Secretary – Les Morrow / W3LES	
Treasurer – Mike Gower / KB3LOD	

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Jo Ann Schaffer / ND3JJ	
Jav Mason / N3OW	

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

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