# DELAWARE LEHIGH AMATEUR RADIO CLUB Inc. JULY 2019







# Club Meeting July 11, 7:30PM At the Bethlehem Township Community Center

JULY PROGRAM "DMR and Packet Radio Roundtable" Mark / W3MB

# JUNE PROGRAM



"The Dangers of Lyme's Disease" Cathy Gumlock

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#### **GENERAL MEETING MINUTES JUNE 2019**

A General Meeting of the Delaware-Lehigh Amateur Radio Club was held on June 6, 2019 at the Bethlehem Township Community Center, Bethlehem, PA.

President, Stephanie Koles, WX3K, being absent, the meeting was conducted by Vice President, Bill Connelly, W3MJ, who called the meeting to order at 7:29 p.m.

#### President's Report:

- 1. At the request of Northampton County, Les Morrow, W3LES, will make an inventory of Club equipment stored in the barn. He will also find out how much space they will allow us to use.
- 2. The County changed the lock on the barn. However, the new key is at the Club Station.
- 3. The Board would like to have larger and more interesting signage for Field Day to attract youngsters to visit our site. The membership was asked for the name of a graphic designer who would assist us with this project. No names were suggested.
- 4. The "Don't Touch That Dial" exhibit at the National Museum of Industrial History requests that hams stop by and operate the museum's radio whenever the museum is open. The Club has committed to having someone there every third Sunday from now until October. We have a sign-up sheet for anyone interested in this activity.
- Secretary's Report: JoAnn Schaffer, ND3JJ, announced that the Minutes for May 2019 General Meeting were emailed to the membership on May 30, 2019. However, the Treasurer's report does not appear in the newsletter. It read: "Mike Gower, KB3LOD, gave his report for March 2019. Bill Connelly, W3MJ, moved to accept the Treasurer's report. It was seconded, and so moved." A motion to accept the Minutes with corrections was made by Dean Guth, AB3BD, seconded, and so moved
- **Treasurer's Report:** Mike Gower, KB3LOD, gave his report for April 2019. A motion to accept the Treasurer's Report was made by Dean, AB3BD, seconded, and so moved.

#### **Committee Reports:**

- **<u>Club Station</u>**: Les Morrow, W3LES, announced that he will be cleaning out Club equipment located in the barn on Wednesday, June 12 after 4 p.m., Saturday, June 15 from 9:30 am., and Sunday, June 16, if needed. The Parks Department will now be utilizing the ground floor of the barn for its equipment. He also stated that the Club will be given access to a conference room in the Greystone building when the county farm preservation office finishes remodeling.
- <u>Membership</u>: Chair Terry Swinney, KC3JHT, proposed Timothy J. Wilson, KC3NCS, for associate membership. Dean, AB3BD, moved that his application be accepted; it was seconded and so moved.
- **Field Day**: Jim Matlack, KC3MKP, reported that there will be three stations at this year's Field Day: two radios plus the goto station. Steve Nordahl, NS3L, will be giving demonstrations on satellite operations. He also noted that anyone under 18 who participates will earn us 20 extra points.
- Tech Committee: Al Wiemann, W3CE, is still working with ICOM to correct the problem we are having with D-Star operations.\_

#### New Business:

Bob Green, KE3AW, announced that the curator of the "Don't Touch that Dial" radio exhibit has invited Club members to participate in their "Museum Day Live" event on Sept. 21<sup>st</sup> at the National Museum of Industrial History.

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

#### Minutes submitted by

Secretary, JoAnn Schaffer, ND3JJ

#### **VE TEST SESSION**

There will be a test session this month on July 12<sup>th</sup> at 7 PM at the Northampton County 911 center. Pretest registration is required. Contact John / NT3P at nt3p

#### **NEW MEMBER**

The DLARC is continuing to grow, so be sure to greet our new member, shake their hand and give them a warm welcome to our club. The newest member is Timothy J. Wilson / KC3NCS.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	1	2	3 DLARC Net (KC3MKP)	4 Independence Day	5	6
7	8	9	10 DLARC Net (W3CE)	11 DLARC Meeting 7:30 PM	12 VE SESSION	13
14	15	16	17DLARC Net (KC3II)	18	19	20
21	22	23 DLARC BOARD MEETING	24 DLARCC Net (N3SQD)	25	26	27
28	29	30	31 DLARCC Net (KB3CTX)			

#### JULY CONTESTING AT THE OK CORRAL

July 6 & 7 – DL-DX RTTY Contest – Original QRP Contest July 13 & 14 – IARD HF World Championship – SKCC Weekend Sprintation July 20 & 21 – CQ World Wide VHF Contest – North American QSO Party July 27 & 28 – RSGB IOTA Contest – ARS Flight of the Bumblebees



## 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

#### JUNE BRAINTEASER ANSWER

"Leaves"

The winner is Doreen / K3PDL



JULY BRAINTEASER

I move incessant to and fro, obedient to Moon and Sun, but though I serve both high and low, all wait on me I wait on none, what am I?

#### HOW TO REGISTER TO THE DLARC WEB PAGE

I was recently asked how to register to the DLARC site.

First - for those that do not know, the page address is still the same: www.dlarc.org

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 username?

-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!!!!

LOOKING FOR DLARC AMATEUR RADIO OPERATORS TO WORK THE DEMO HAM STATION IN THE



#### NATIONAL MUSEUM OF INDUSTRIAL HISTORY.

On Exhibit through November 3, 2019

Sign up to operate the amateur radio station at the National Museum of Industrial History

The demonstration ham shack is in the National Museum of Industrial History, and is available to any licensed amateur radio operator to operate (within license limitations). In the corner of that room is a great collection of radios. They range from crystal sets through radios through the decades with cathedral wooden cabinets, console units, plastic table radios, small transistor pocket radios, and boom-boxes. There are over 75 units there to stir up memories, or learn about them.

The demonstration ham shack that we are operating is in the corner of the room, and is available to any skilled licensed amateur radio operators to operate (within license limitations).

Or you may want to match a skilled operator and one who wants some experience.

The rig there is the Kenwood 590. It is like the one in the DLARC Station. Antenna is a Cushcraft R-7 on the roof of a tall 3-story building.

I don't think it is really crowded at any given time, but when someone comes by we would like you to offer some information on amateur radio to whatever level their interest is, including making them aware of Monthly Meetings, Field Day, and DLARC license classes. They may make a transmission or more if you feel they can follow your directions, under your supervision, of course. All up to you.

If visitors come by, that's great. If there aren't any or many visitors during your shift, you still have control of the rig to make as many Qs as you wish.

Go to the sign-up sheet, fill in information and send it to the Museum. <u>http://signup.com/go/wNkozVD</u> It is fine to have a couple of hams there. I need not be one operator at a time.

The Museum is located near the Steel Stacks, at 602 E. 2nd Street, Bethlehem.

Open 10 am. until 5 p.m. Wednesdays through Sundays 610.694.6644 www.NMIH.org

#### JUNE MEETING PROGRAM REPORT THE DANGERS OF LYMES DISEASE Cathy Gumlock

In recent years ticks have become an increased problem in the Lehigh Valley. These ticks are the cause of bacterial diseases. Steps are needed to be taken to prevent the outbreak of these diseases. They include recognizing potential locations in which hold the danger of ticks. Then how to prevent bites by treating clothing and finally what to do after being bitten.

Ticks are found in most locations like thick brush, rock piles, wood piles and even around wooden park benches. Weather has no effect on them, they even have been found in snow. Once found you need to remove the breeding grounds or at least avoid them. But it is needed to remember that though they don't fly they still move by attaching themselves to anything passing through their habitat. People, animals, anything they could attach themselves to.

To protect yourself, don't expose yourself to them, keep covered as much as possible. The use of Permethgrin sprayed on clothing and other items prevent ticks from getting to you

If you find a tick on you, remove it promptly. Use a fine pointed tweezer pulling on the head area, pulling straight back. Then disinfect the area and don't forget to clean your hands as the bacteria can still have been on them.. Contact your doctor if you develop a rash or flu-like symptoms when it is not flu season. Additional information can be found on the Internet.

The Lehigh Valley has been the home of three types of ticks, the most found where the Blackleg (Deer) Tick, American Dog Tick and the Lone Star Tick. The deer tick is the source of lymes disease

Kathy ended with the usual question-and-answer session. And also prepared us for a safe summer.

#### THE DLARCforum

A few years ago the Executive Committee established an electronic mailing list for D.L.A.R.C. Members and friends to provide an easy way to disseminate information on a timely basis. This mailing list is called the "DLARCforum" and all club members with email capability are welcome to join.

Joining the list is easy, just go to this website :<u>http://mailman.qth/mailman/listinfo/dlarcforum</u> and fill in the appropriate boxes. Instructions for the subscription process are available on the page. If you don't have internet service, but do have email service you can still subscribe by sending a subscription request directly to the list administrator, ka3jwe@arrl.net.

The DLARCforum is a "closed" list which means only subscribers can post messages, so your mailbox won't be filled with junk mail from unknown sources. The list uses a "text only" format which means, that only messages in plain text are passed. Messages received in HTML are filtered and stripped of any formatting before being sent out to list subscribers. The list will not accept or pass attachments such as files and pictures. This is done to eliminate the possibility of spreading any type of computer virus or other harmful programs. The forum is an "un-moderated" list, which means that there is no moderator screening messages before they are passed on.

Since its beginning, the volume of messages on the DLARCforum has been relatively low compared to other similar mailing lists. So don't worry your your inbox won't be overflowing with messages if you subscribe. There is also the ability to configure your preferences for the list to your personal liking.

So, please consider joining the list if you're not already subscribed. You'll be better informed about current club activities and also have the knowledge and experience of over half the membership at you disposal. Anything you want to know, all you have to do is ask! de **Don / KA3JWE** List Administrator

#### HALF WAVE END\_FED ANTENNA By: Barry G. Kery, KU3X

The Half Wave End Fed (HWEF) is a very useful and efficient antenna. It was first developed to be used on the Zeppelin air ships. It was lowered from the air ship and used as kind of a trailing wire antenna.

A half wave dipole antenna is fed in the center, it has a low feed point impedance and is fed at the current portion of the antenna. This makes it good for feeding the antenna with coaxial cable. The only physical difference between the HWEF and a half wave dipole is its feed point. The HWEF is fed on the end. The radiation pattern on either antenna is the same. In other words, if you erect a 20 meter dipole 60 feet the air, you will get a figure eight radiation pattern. Erecting a HWEF20 at the same height, the radiation pattern will be exactly the same. On both antennas you are feeding them in phase which provides maximum power transfer from the feed line to the antenna.

The HWEF antenna has become very popular with hams operating portable. They are also well suited for stealth applications, like in an HOA environment. You can hide the feed line and feed transformer in a tree or on the side of one's house, use #20 enamel wire for the antenna and fishing line from the other end of the antenna to a tie point.

A 40 meter half wave length of wire is resonant on numerous bands. The problem with a center fed 40 meter dipole is, on 20 meters you are now feeding it at a voltage point and the feed point impedance is around 3200 ohms. This does not play well with 50 ohm coax. In order to use a center fed 40 meter dipole on 20 meters, you must feed this antenna with parallel feeders.

When you use a HWEF on its resonant frequencies, it is always fed at a voltage point. A HWEF 40 meter antenna is resonant on 40, 20, 15 and 10 meters, but great care must be taken when it comes to feeding this antenna.

One way to feed a HWEF antenna is with the use of a quarter wave length of 450 ohm parallel feeders. This feed method is mostly used when mono band operation is only needed. On 40 meters, the quarter wave parallel feeders transforms the 3200 ohms close to 50 ohms. Now place a 1 to 1current balun at that point and use coaxial cable from that point to the transmitter. But, by using this same antenna on 20 meters, the 40 meter quarter wave section of parallel feeders now becomes a half wave in length on 20 meters. What this means is on the generator end of the feeders it is now 3200 ohms. Now we have a problem !

So how do we make a HWEF40 usable on its harmonic frequencies? We use a matching transformer, also referred to as an UnUn. The UnUn is only one of the key components used for creating an efficient radiating system. A dipole consists of two parts and is considered a balanced antenna. A HWEF is a monopole and the RF is applied to the antenna via matching transformer. The RF is still looking for the other half of the antenna and the RF will find its way to the shield of the coax. Now we have a serious issue with common mode. This MUST be addressed, but first let's start with the design of the UnUn.

The UnUn is very easy to build. We will use ferrite, not powered iron, to build our UnUn. We want to build either a 49 to 1 or a 64 to 1 UnUn. The feed point impedance of a HWEF is a variable, the same as a center fed resonant dipole. The feed point impedance of a HWEF can be much higher than 3200 ohms as well as much lower. A center fed dipole can range from 40 ohms to as high as 100 ohms.

Let's start with a small compact UnUn that can handle 50 watts. Why 50 watts? When setting up portable and running 100 watts, you need a pretty big battery if you want to have a few hours of operating time. But, by turning the output power down to 50 watts, you will only be 3 db down in output power and that equates to a half of an S unit difference in signal strength on the other end of contact. Turning the output power down to 50 watts will greatly extend your operating time.

Shown below are two different 64 to 1 Unun's used on a HWEF40. The UnUn on the left uses three turns of wire on the primary and 24 turns of wire on the secondary, it's rated at 50 watts. The UnUn on the right has two turns on the primary and 16 turns on the secondary. It should easily handle up to 200 watts. The length of the antenna wire is 65 feet 6 inches. I use #22 teflon wire for the antenna only because I want something I can carry with me in my shirt pocket.





An UnUn is nothing more than a transformer, kind of like the transformer used in your Astron DC power supply. It has a primary winding as well as a secondary winding. But in this case we are using ferrite to build our transformer instead of an iron core. The ferrite used in the above pictured UnUn, on the left, is an FT 140-43. When using an UnUn on the high bands (10 and 15 meters) the primary winding has a slight inductive reactive component to it. We cancel out this inductive reactive component with a 100 pf @ 1 kv capacitor. Any mica capacitor with a value of 100 pf to 150 pf can be used. I found that the 100 pf works just fine. This capacitor is shunted across the primary winding of the UnUn. Ebay is a good place to find 100 pf @ 3kv mica capacitors. I used #20 enamel wire to make the UnUn. The primary winding uses three turns of wire and the secondary winding uses 24 turns of wire. For a 49 to 1 UnUn, the secondary winding uses 21 turns of wire.

If you want to use up to 200 watts with your antenna, you will need a bigger core. Now your core of choice will be an FT 240-43. Since there is more mass to the FT 240 cores, we have to modify the winding of the UnUn. We now use only two turns on the primary and 16 turns on the secondary. If you build an 49 to 1 UnUn, there are two turns on the primary and only 14 turns on the secondary.

To make the above left pictured UnUn, you will need to cut two lengths of wire. If you don't have enamel wire, thinly insulated wire will work just fine. Cut one wire 9 inches long and the other wire 48 inches long. To make winding the wires easier, pair up the primary wire with the secondary wire by twisting them together. If you watched any YouTube videos on how to make UnUns, they tell you that you have to twist these wires together for maximum coupling. This is pure bolder dash, it does nothing for RF coupling, the ferrite does all of the coupling. But it sure does make winding the transformer much easier. Both primary and secondary wires start at the same point. Both wires, at this point, will be attached to the shield part of your coax connector. I like to use a BNC but you can use an SO 239 for attaching coaxial cable. When winding a wire on a ferrite core, one pass through the core is considered a turn. Make three passes through the core with both wires. You will probably have to trim some excess wire off of the primary wire. At this point you have three primary and three secondary turns completed. Continue wrapping the secondary wire until you wind 12 turns around the core. Now cross over the wire and wind 12 more turns around the core. In other words, start winding your transformer at the 5 o'clock position, wind clockwise and continue winding until you hit the 11 o'clock position. Now cross over and start turn number 13 at the 4 o'clock position. Your cross over wire counts as a turn. This will place the end of the secondary wire at the top of the core. Don't forget to shunt the capacitor across the primary winding.

What I found out was, if you want to create a HWEF to cover 80 meters, or even 160 meters, the 49 to 1 UnUn is your best choice, but 10 meters now becomes an issue. You will need a tuner for that band. If you create a HWEF for 40 meters and above, the 64 to 1 is your best choice and a tuner probably will not be needed.

I wanted to see how efficient the UnUn was and here are the loss figures of my 50 watt 61 to 1 UnUn using an FT 140-43 core.

RF losses per band 3.5 MHz .59 db 7 MHz .61 db 14 MHz .65 db 21 MHz .83 db 28 MHz 1.55 db

Since the HWEF is a monopole, as mentioned earlier, we now have to address the common mode issue. We will need more ferrite to build an effective choke that will be placed on the coax. Since I use RG 174 coax when operating portable, a simple clip on ferrite does the trick. Choke placement is critical. You want to place the choke at a non resonant position on your coax. By placing it at a resonant position, you run into two problems. The first problem is, it directly effects the feed point impedance of the antenna and we need to keep the impedance constant for our UnUn to work properly. The second problem, as the impedance on the shield increases, the amount of choking reactance must also be increased and that equates to a massive amount of ferrite that must be used to create an effective choke. For my portable setup, I mounted the UnUn 26 feet in the air. I placed the choke 25 feet away from the UnUn. I then wrapped three turns of my RG 174 coax around the clip on ferrite core. At times I may place the choke 12 feet away from the UnUn instead of 25 feet. I do this because my UnUn may be mounted closer to the ground and less coax is needed to reach my radio. If you use a HWEF at you home, you want to make sure the choke is outside of the house. If you place it inside of your house, any RF that radiates off of the outside shield of the coax can create serious issues in your home and your primary station. Some hams use a counterpoise on their HWEF's. It can be a good idea to do so but not needed as long as you address the placement of a choke on your transmission line. If you do in fact use a counterpoise, the proper length is .05 wave lengths on the HWEF's

#### lowest frequency of operation.

Treat a HWEF the same as you would if you were erecting a simple dipole. Try to get both ends of the HWEF in the air. One thing that is a must for peak performance is to make sure the Unun is at least 5 feet above the ground. If the UnUn is placed close too close to the ground, the efficiency of the array will suffer.

Shown below is an UnUn rated for 500 watts. This uses two each stacked FT 240 cores. If you decide to make an UnUn with more than one core, never use three turns on the primary. Two core UnUns are needed to handle up to 600 watts.

Three cores are needed for more power. Once you get above 1000 watts of output power, you will have a heating problem with the Unun. You won't be able to run legal limit on all of the bands your HWEF is designed for. There are some UnUns on the market that are advertised to handle legal limit, "they don't !" If when transmitting your SWR seems to slowly increase,

that is a sign that your core material is getting hot. Never use #31 material to make your HWEF UnUn. If you want to design a HWEF to be used strictly on 6 meters, use #61 core material for your UnUn.



Shown below are two HWEF40 meter antennas. The one on the right shows an UnUn rated for 25 watts and the antenna wire is #22 teflon insulated wire, 65 feet 6 inches in length. The core used to make this UnUn is an FT 82-43. It is a 64 to 1 UnUn and #22 enamel wire was used on the core. I wanted a HWEF that would fit in my shirt pocket, hence the reason for the #22 teflon wire and the UnUn rated for only 25 watts.

The antenna shown of the left is rated for 50 watts and the core used for this UnUn is the FT 140-43, as shown in the beginning of this article. The wire is #18 plastic coated wire I had laying around and it is also 65 feet 6 inches in length. Stranded wire is used for both antennas but it's ok to use solid if that is what you have.

The coax on the right is 25 feet of RG 174 and also shown is the RF choke used to prevent feed line radiation past that point. The choke is made by wrapping three turns of coax around a #43 clip on ferrite. The coax on the left is 12 feet of RG 174 used to complete the run to the radio. RG 174 coax with a BNC on both ends can be purchased from, "Cables on **Demand**."



I mostly focused on a HWEF40 since the two most popular bands that I use when I set up portable are 20 and 40 meters. If all you need is 20 meters, make your's only 32 feet 6 inches long. If you would like to include 80 meters, the wire cut length will now be 131 feet long. A HWEF80 will cover 15, 17, 20, 40 and 80 meters. You can use it on 10 meters but the SWR will above 2 to 1. The HWEF80 is in fact resonant on 10 meters, but it does have an elevated SWR.

The following picture shows the SWR for each of the bands of my HWEF40. The UnUn was 26 feet in the air and the other end of the HWEF was tied off to a tree and it was about 15 feet in the air.

RigE	xpert	
MultiSWR > 28 000 kHz 28 650 kHz 21 290 kHz 14 000 kHz 7 000 kHz	SWR: 1.30 SWR: 1.31 SWR: 1.34	
AA-		

Another type of an end fed antenna is the "**non resonant**" random length wire antenna. This type of antenna uses a 9 to 1 UnUn instead of the 64 to 1 UnUn. They seem to be very popular but now you will have added losses in the transmission line and you will always need a tuner. Since this type antenna is fed out of phase, maximum RF coupling to the antenna is not achieved. In other words, "it is a less efficient system." If you are operating with low power, like I do when I set up portable, you want to maximize your signal and an inefficient array is not the way to go.

I did some basic field testing, comparing a 40 meter half wave coaxial fed antenna against a HWEF40. Both antennas were erected at the same height. I used reverse beacon to test the strength of my signal. Both antennas showed pretty much the same results.

Always remember one important thing, if you increase the efficiency of your antenna, the signal will be stronger in both receive and transmit. Increasing your power will make your signal stronger on transmit, but it does not do one thing for your receive signal !

#### W3OK CLUB STATION

Better known as the "Milkhouse" is open Wednesdays' 6 PM until ??, and Saturdays'9:30 AM until ??. Our repeater 146,700 is always on ... So just call W3OK and check.

#### de Les / W3LES

#### WEDNESDAY EVENING DINNER CLUB

Don't forget the Wednesday Evening Dinner Club. Club members get together for dinner prior to heading up to the "Milkhouse" for the weekly gathering. Listen to the Wednesday Net for the following weeks location. Each week is a different location. Also it is posted on the club FORUM. A fun get together!

#### Greetings To All Amateur Radio Operator Young and Old, Newbee or Veteran, Male or Female

Some folks start the summer on Memorial Day. Some start it on the first day of the Summer Season. A lot of our community start the summer this weekend - Field Day.

N3MSS starts the summer with this communication to announce our communities big event of: The 2019 Ride MS – City to Shore

Over the many many years in the past, we have always risen to the task of doing all that was asked by the National Multiple Sclerosis Society. Starting as just some guys on the side of the road looking for problems, we now are trusted with helping to bring off an event of up to 7,000 riders, over 1000 volunteers, and a countless number of supporters, family, and folks living with MS to raise over \$6 million dollars that mostly stays within our community to help the folks that are living with this debilitating disease, by having operations primarily in Communications, but add to that Route Support, Command Support, SAG, Situation Teams, Transportation Support, Rest Area Operations, and The Motorcycle HAMS picking up all the areas in between.

Once again we grew last year. With operators and our own support folks, our group brought 141 volunteers to the event. Once again I say...

## We Need 150 Volunteers To Support This Event Completely

And once again I say...
WE CAN DO THIS !!!!!!!!!

We can do this by having the tried and true return, and everyone spreading the word on how our community is a major force at this event and help with putting the word out as a recruitment tool for the event. Come as an individual, a club, a family – it doesn't matter how you come, only that you come. Well, enough of my begging this early in the process. Here are the particulars:

## The event is ---September 21<sup>st</sup> and 22nd, 2019

The on-line sign up link is: https://www.signupgenius.com/go/CTSCommunicators2019 Please check you calendars, and sign up early so that we can try to fill all requests for positions.

Remember, if you are bringing a significant other or family member to assist you, we need a sign-up form for them also.

As always, it is an HONOR to call myself a HAM and be a part of this elite group of people. Make our hobby proud and volunteer today.

With Much Appreciation Joe DiBartolo (KC2SFB) EvComm (609.316.8220)

## OUR TRIBUTE TO "RAY"

#### W3TDF

Ray Bilger, W3TDF was President of Chapter 17 of the Quarter Century Wireless Association for 10 years and was an amazing and unique person, friend and Amateur Radio Operator. He was a walking encyclopedia of Ham Radio information, facts and accomplishments. Ray's passing has been a loss to not only the Amateur fraternity but especially to QCWA Chapter 17. With the help of all of you we have been able to continue to grow our Chapter and maintain very healthy participation on our Monday night net. Two years ago we voted affirmatively to change our Chapter Call sign (from W3GS) but the topic stalled due to FCC Regulations regarding reissuing

of Amateur Call sign cancellation and grace period time frames. Through the constant alertness and research by Pete, NL7XM the perfect timing, process, and opportunity for applying to obtain Ray's call sign as a legacy for Chapter 17 was found. We then proceeded along those narrow guidelines. We did not disclose our recent efforts in case we were not successful because as you well know, with the government nothing is certain, hi!

On the day of eligibility, as Trustee I applied for a change of Chapter call sign from W3GS to **W3TDF**. After a few hopeful weeks of daily checking the FCC web site, permission was finally granted for the change on Tuesday, June 18.

So our On-Air presence will be now be easily recognized as the **W3TDF Station** of QCWA Chapter 17 as a Memorial to Ray who meant so much to so many. Our new Chapter call will be used for the first time, Saturday June 22, 2019 when Mel (W3SQ), Dick (WA3MDP) and myself, Joel (WB3IWC) operate Field Day from my home QTH. All are welcome to stop by and participate as we officially return **W3TDF** to the Amateur bands. Two years ago we voted affirmatively to change our Chapter Call sign (from W3GS) but the topic stalled due to FCC Regulations regarding reissuing of Amateur Call sign cancellation and grace period time frames. Through the constant alertness and research by Pete, NL7XM the perfect timing, process, and opportunity for applying to obtain Ray's call sign as a legacy for Chapter 17 was found. We then proceeded along those narrow guidelines. We did not disclose our recent efforts in case we were not successful because as you well know, with the government nothing is certain, hi!

Joel WB3IWC, President QCWA Chapter 17

#### F.Y.I.

The August Program will be "Info Age and The Marconi Belmar Wireless Site" -- Ray / KA2JOG 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 2018 – 2019 OFFICERS

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#### 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 )

Club Station Telephone Number – 484 291-1527 Email Address – w3ok146700@gmail.com

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

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