

**DELAWARE LEHIGH AMATEUR RADIO CLUB Inc.**

**MARCH 2020**



***W3OK***

***CORRAL***

**Club Meeting March 5th, 7:30PM At the  
Bethlehem Township Community Center**

**MARCH MEETING PROGRAM**

**"Arduino: What's all about"  
Larry / KC3JTK**

**FEBRUARY MEETING PROGRAM**



**"CBD And You"  
Larry / AB3TY**



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### FEBRUARY MEETING MINUTES

A General Meeting of the Delaware-Lehigh Amateur Radio Club was held on November 7, 2019 at the Bethlehem Township Community Center, Bethlehem, PA.

President, Stephanie Koles, WX3K, called the meeting to order at 7:30 p.m.

#### **President's Report:**

Stephanie opened the meeting by relating her time at W1AW and operating on the AM Rally. Stephanie said that she gave a talk at Northampton Community College in a class taught by Donna Acerra who we are familiar with from the National Museum of Industrial History. Stephanie's talk ranged from the history of amateur radio to the challenges of getting the youth involved in the hobby. Stephanie said Jim / KC3MKP has stepped up to be the point person for the prospective Hamfest. Stephanie said the Club is still in need for a chairperson for the Youth Committee. Stephanie related the Steve / NS3L has checked out a Yaesu FT-757, left at the Milkhouse years ago, is in working order. The identity of the owner is not known. It is possible the owner was with the County Sheriff Department. Any information would be appreciated.

#### **Announcements:**

1. Bob / KE3AW said new classes would begin on March 3 at the 911 Center. Bob announced that he is moving to a new QTH where he will be able to have an antenna but not a tower. Bob also said there will be a Science Fun Night at East Hills Middle School in March, details to follow.
2. Ken / KB3MOT said JS8Call has a QSO Party on February 8-9.
3. Ben / KB3CTX has a new call—N3WR.

#### **Guests:** Ike

Chris / KC3OTC

**Secretary's Report:** Larry / AB3TY, announced the Minutes for the January 2020 General Meeting. Steve / N3NAM motioned to accept. It was seconded by JoAnn / ND3JJ and so moved.

**Treasurer's Report:** Mike Gower / KB3LOD, reported on the Club's financial status for December 2019. JoAnn / ND3JJ motioned to accept; it was seconded by Dave / N3EYT and so moved.

#### **Committee Reports:**

**Membership:** Membership Chair Terry Swinney / KC3JHT reported that 138 members are current on their dues, 9 associates and 9 Life for a total of 154. There were no new members announced

**Adjournment:** There being no further business, the meeting was adjourned at 7:55p.m.

### MARCH CONTESTING AT THE OK CORRAL

March 7 & 8 – ARRL International DX Contest - SSB  
– Novice Rig Round-up  
March 14 & 15 – South America 10 mtr Contest  
– Tesla Memorial CW Contest  
March 21 & 22 – BARTG HF RTTY Contest  
– Russian DX Contest  
March 28 & 29 – CQ WW WPX Contest – SSB

### VE TEST SESSION

There will be a test session this month on March 6<sup>th</sup> at 7 PM at the Northampton County 911 center. Pretest registration is required. Contact John / NT3P at nt3p@arrl.net

## MARCH QUICK CHECK CALENDAR

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SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3	4 DLARCC Net (W3CE)	5 DLARC MEETING	6 VE SESSION	7
8 Daylight Savings Begins	9	10	11 DLARCC Net (KC3II)	12	13	14
15	16	17 St. Pat Day	18 DLARC Net (N3SQD)	19 First day of Spring	20	21
22	23	24 DLARC BOARD MEETING	25 DLARCC Net (N3WR)	26	27	28
29	30	31				

## DLARC AMATEUR RADIO LICENSE CLASSES

de Bob / KE3AW

The Spring Series of Amateur Radio Classes for prospective hams and licensed hams wishing to upgrade to the General license, will begin on Tuesday, March 3 at the 911 Communication Center. It is not too early to register for the 9 Tuesday evening classes, 7 pm. – 9 pm.

Please pass the word to family and friends. Anyone interested in registering, or with questions, should contact me at [KE3AW@arrl.net](mailto:KE3AW@arrl.net) or phone 610.432.8286.BDA

We will register people onto the roster on a first-come, first-served basis. If we go over 25 again for the Technician Class we will offer priority placement on the Fall, 2020 list.



### DAYLIGHT SAVINGS TIME

**Daylight saving time (DST)**—also **summer time** in several countries including in British English and European official terminology is the practice of temporarily advancing clocks during the summertime so that evenings have more daylight and mornings have less. Typically clocks are adjusted forward one hour near the start of spring and are adjusted backward in autumn. Modern DST was first proposed in 1895 by George Vernon Hudson and it was first implemented during the First World War. Many countries have used it at various times since then; Details vary by locations.

The practice has been both praised and criticized. Adding daylight to evenings benefits retailing, sports, and other activities that exploit sunlight after working hours, but can cause problems for evening entertainment and other occupations tied to the sun. Start of spring and are adjusted backward in autumn.

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The practice has been both praised and criticized. Adding daylight to evenings benefits retailing, sports, and other activities that exploit sunlight after working hours, but can cause problems for evening entertainment and other occupations tied to the sun. Its effect on health and crime is less clear. Although an early goal of DST was to reduce evening usage of incandescent lighting formerly a primary use of electricity, Modern heating and cooling usage patterns differ greatly, and research about how DST currently affects energy use is limited or contradictory

DST clock shifts present other challenges. They complicate timekeeping, and can disrupt meetings, travel, billing, recordkeeping, medical devices, heavy equipment, and sleep patterns. Software can often adjust computer clocks automatically, but this can be limited and error-prone, particularly when DST protocols are changed.

**So now having read this brief history, do not forget to turn your clocks ahead one hour on March 8.**

### W3OK CLUB STATION

Better known as the "Milkhouse" the W3OK Station 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 Steve / NS3L

### 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

### FEBRUARY BRAINTEASER ANSWER

The winner is **NO WINNER**

### MARCH BRAINTEASER

If  $4 + 2 = 26$

$8 + 1 = 76$

$6 + 5 = 111$

What does  $7 + 3 =$

### REFLECTIONS FROM THE PAST



**GLOBAL WARMING 2010**  
Charlie / W3OPA

### 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!

### \*\*\*\*\* NOTICE \*\*\*\*\*

The Executive Committee wishes to support the growth of our hobby. And feel that a youth program would be the ideal way to do this. To do this we need a member to step forward and chair and form a committee to get this idea rolling. Any interested member or members should contact any member of the Executive Committee to get details. The Executive Committee member information can be found on the web site or on the back page of the newsletter.

## FEBRUARY PROGRAM REPORT

### CBD and You

CBD was the topic of this month's meeting program, presented by Larry /AB3TY. Cannabidiol (CBD) has been recently covered in the media, and you may have even seen it as an add-in booster to your post-workout smoothie or morning coffee. What exactly is CBD? Why is it suddenly so popular? How is cannabidiol different from marijuana?

CBD stands for cannabidiol. It is the second most prevalent of the active ingredients of cannabis (marijuana). While CBD is an essential component of medical marijuana, it is derived directly from the hemp plant, which is a cousin of the marijuana plant. While CBD is a component of marijuana (one of hundreds), by itself it does not cause a "high." According to a report from the World Health Organization, "In humans, CBD exhibits no effects indicative of any abuse or dependence potential.... To date, there is no evidence of public health related problems associated with the use of pure CBD."

Is cannabidiol legal?

CBD is readily obtainable in most parts of the United States, though its exact legal status is in flux. All 50 states have laws legalizing CBD with varying degrees of restriction, and while the federal government still considers CBD in the same class as marijuana, it doesn't habitually enforce against it. In December 2015, the FDA eased the regulatory requirements to allow researchers to conduct CBD trials. Currently, many people obtain CBD online without a medical cannabis license. The government's position on CBD is confusing, and depends in part on whether the CBD comes from hemp or marijuana. The legality of CBD is expected to change, as there is currently bipartisan consensus in Congress to make the hemp crop legal which would, for all intents and purposes, make CBD difficult to prohibit.

Larry explained the various health uses where CBD has been used throughout the world. Also he covered his personal experiences in its usage. And how his use came after extensive research on his own part. Using only 1 ml. a day placed under the tongue was all that was necessary for internal use and this same liquid compound rubbed on sore areas would have helpful qualities.

Finally Larry covered what to look for in purchasing CBD, so as to avoid possible rip off. To look for the "QR" code on the label and also the scanning code, which will tell you the details of that batch.

The program ended with the usual Q & A session. While not associated with Ham Radio it was an interesting and informative program.

## HAPPY ST. PATRICK'S DAY



### Irish Stew

#### Ingredients:

2 lbs boneless lamb shoulder, cut  
into 1" cubes  
4 medium potatoes, sliced 1/2" thick  
2 medium onions, sliced 1/4" thick  
2 stalks celery, sliced 1/4" thick  
4 medium carrots, peeled and sliced 1/4" thick  
1 tsp salt  
1/4 tsp black pepper  
1/2 tsp thyme  
1 cup water  
2 tbsp chopped fresh parsley



#### Directions:

Preheat the oven to 325 degs. F. In a large Dutch oven or covered casserole, layer the ingredients in the following order: Lamb cubes, sliced potatoes, sliced onions, sliced celery, sliced carrots, sprinkling each layer with salt, pepper and thyme. Add the water to the pot, cover and slowly bring to a boil over medium-low heat. Let simmer for 5 minutes, then transfer the pot to the oven and bake, without lifting the lid or stirring, for 2 to 2 1/2 hours or until the lamb is tender. Sprinkle with chopped parsley, stir very gently to mix ( the potatoes will be very soft ) and serve.

## **AMATEUR RADIO OPERATORS**

We have an issue which needs immediate attention. See the link attached which has a markup of the cell phone law proposed. It is NOT good and would make it illegal to operate handheld radios and possibly may be argued to include use with handheld mics attached to a radio except in certain commercial vehicles and police and fire vehicles.

**DELETING EXEMPTION: (4) a hand-held radio being used by a person with an amateur radio station license issued by the Federal Communications Commission.**

**Now proposing INSTEAD: (4) A TWO-WAY OR CITIZENS BAND RADIO AFFIXED TO A COMMERCIAL MOTOR VEHICLE OR MOTOR CARRIER VEHICLE.**

This does not include amateur radio or other 2-way radio like part 90 public safety or busine

ss for that matter unless operated from a defined commercial. This is likely because politicians involved really have no grasp of the different activities and how ham stuff differs in operation at the driver level. I have not spend a good deal of time yet analyzing this, but it appears a big gap for us now exists.

We need a join sections response to this. Do we have one or more Government liaison yet? Can both of you send a section wide email for help? Maybe send the link out for all to see? Out of the thousands of members we have, some may be able to step up.

This is a critical event in my view. It may also elevate an accidental death while operating an amateur radio to vehicular homicide. See the penalties and related laws from the link. I do not know how much time we have on this

**Bob Famiglio, K3RF**

**Vice Director - ARRL Atlantic Division**

**610-359-7300**

## **HB 37 STATUS**

The ARRL Eastern Pennsylvania Section team has learned that the PA Senate Transportation Committee Chair, Senator Kim Ward, (R – Westmoreland) is now aware of the unintended consequence of the House action to eliminate the Amateur Radio exemption from HB37 – the bill prohibiting the use of hand held devices while driving. She has agreed to work with Senator Larry Farnese (D-Philadelphia) who will propose an amendment exempting ham radio operators from the restrictions in the House bill. More updates as they are available once the Senate Transportation Committee's next session begins after March 16th.

## **US AIR FORCE SPACE FENCE NEARING OPERATIONAL ACCEPTANCE**

According to NASA's most recent *Orbital Debris Quarterly News*, the space agency calculates about 17.6 million pounds of objects are in earth orbit, a number that will grow as launches proliferate -- including thousands of small satellites -- presenting a huge problem. The US Air Force Space Fence -- a second-generation space surveillance system now nearing completion -- is expected to play a crucial role.

Using advanced solid-state S-band radar technology, Space Fence is located on Kwajalein Atoll in the Marshall Islands. Such critical space-based technologies as weather forecasting, banking, global communications, and GPS navigation are under threat from space junk orbiting Earth. Collisions already are frequent, and defunct satellites and rocket boosters have increased the amount of space debris.

The Air Force Space Surveillance Network tracks about 25,000 objects. When Space Fence comes online, the catalog will expand considerably, and when fully operational, it will be the world's largest and most advanced radar system, offering unprecedented space situational awareness. Beyond cataloging objects, Space Fence will detect closely spaced objects, breakups, maneuvers, launches, and more.

Contractor Lockheed Martin reported last spring that Space Fence was able to detect debris from a microsatellite destroyed by India as part of an anti-satellite test. It then was able to determine the orbit of the remnants and predict when the space junk would pass through the fence again.

Space Fence is expected to become fully operational this year.-- *Thanks to AMSAT News Service via Milsat Magazine; Lockheed Martin*



## HUSKYSAT-1 WITH UHF/VHF LINEAR TRANSPONDER SET TO DEPLOY SOON

The University of Washington's **HuskySat-1** 3U CubeSat, launched November 2, 2019, is set to deploy on January 31 after the vehicle that carried it to the International Space Station undocks. HuskySat-1 has remained stowed aboard a Northrop Grumman Cygnus supply vehicle. Within 24 hours after Cygnus' departure from the ISS, HuskySat-1 and **SwampSat 2** will be deployed into orbit.

After deployment, HuskySat-1's 1,200 bps BPSK beacon on 435.800 MHz should be active and decodable with the latest release of AMSAT's **FoxTelem** software. HuskySat-1 is expected to carry out its primary mission before being turned over to AMSAT for amateur radio operation.

HuskySat-1 features a 30 kHz wide V/U linear transponder for SSB and CW. The uplink passband will be **145.910 – 145.940** MHz LSB/CW. The downlink passband will be **435.840 – 435.810** MHz USB/CW (inverting). Telemetry will be transmitted on 435.800 MHz, 1k2 bps BPSK with an experimental downlink at 24.049 GHz. The "Fox-in-a-Box" **FoxTelem** software has been updated for HuskySat-1 operation at its download website. The new release now contains the SD card image, FIAB-dist8-V1.08w.zip. This file, when unzipped and written to a 16 GB SD card, will provide the latest software for **FoxTelem** and will run on a Raspberry Pi 4. The 1.08 versions can switch bands between listening on VHF and UHF, based on which Fox and Husky satellites are overhead at the time.

The linear transponder and telemetry system carried aboard AMSAT's Fox-1E was designed for use in different CubeSats merely by adding an interface adapter for connection to the host bus. Noting the prevalence of CubeSats built and launched by universities and other organizations, AMSAT adopted a goal of "amateur radio in every CubeSat."

Additional information is posted on the University of Washington Husky Satellite Lab site. – *Thanks to AMSAT News Service via the HuskySat-1 Team, AMSAT Engineering, AMSAT Operations, the Fox Telemetry Team, and NASA*

## YUKON'S VY1JA PLANS TO BE BACK FOR 2020 ARRL NOVEMBER SWEEPSTAKES CW

ARRL November Sweepstakes stalwart J. Allen, VY1JA, in Canada's Yukon Territory, may not be off the air quite yet. Allen announced his retirement from ham radio last November, but now says he plans to keep a small station on the air "for as long as possible," leaving one antenna tower in place. Allen told ARRL earlier this month that there's a "strong likelihood" he'll return for the 2020 ARRL November Sweepstakes CW in the Low Power category, using his own call sign.

For the past few years, the remotely operated VY1AAA, using equipment and antennas located at VY1JA, has been among the precious few stations handing out the Northern Territories multiplier in Sweepstakes. Gerry Hull, W1VE/VE1RM, told ARRL that the remote equipment and high-power amplifier have now been removed, along with the radio gear and antennas from Allen's larger station, which will be sold. Allen, who has been diagnosed with Alzheimer's disease, says his current medication has stabilized his condition, but he's been looking ahead to the day when his wife, Ann, would face the task of dismantling and disposing of his station equipment and antennas.

"Because I am concerned about what I will be like in a few years or so, I wanted to sell out the station completely so that Ann would not have a big problem on her hands removing poles, towers, cables, gear, and so on," he explained.

Allen thanked Hull; Cary Rubinfeld, VE4EA; Chuck Cullian, K0RF, and Tyson Schulz, VY1SLZ, for their assistance. Rubinfeld is handling the sale of Allen's gear, while Schulz has pledged to assist in dismantling and disposing of Allen's scaled-down station when the time comes. Cullian has provided a transceiver for Allen, who no longer had an operational radio on site.

"It means that, for as long as I remain functional, I intend to keep VY1JA on the air, and especially to be there for as many ARRL Sweepstakes as possible," Allen said.

Hull said he and others involved with the VY1AAA remote operations have been looking for a new home for the VY1AAA remote gear and radio.

## NEW AMATEUR EXTRA QUESTION POOL RELEASED

The new Amateur Extra-class license examination question pool, effective from July 1, 2020, through June 30, 2024, has been released and is available at the National Conference of Volunteer Coordinators (NCVEC) website at, <http://www.ncvec.org/>.

The 2020-2024 Extra-class pool incorporates significant changes compared to the current 2016-2020 question pool, which expires on June 30. The number of questions in the pool was reduced from 712 to 622. The result was 239 modified questions, 49 new questions, and 139 questions removed due to changes in what was felt to be an abundance of outdated questions, while areas of new technology and subjects were added.

In addition, an effort was made to balance the difficulty level, removing or replacing some questions deemed too easy or too difficult compared to the rest of the pool. The 2020 pool has 10 diagrams, which have been renumbered because the new question pool has two fewer than the 2016 question pool.

## WEDNESDAY NIGHT NETS

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

## F.Y.I.

The April Program will be **"Homebrew Night: Hands on experience" - Stephanie / KX3K**

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

President – Stephanie Koles / WX3K -----	president@dlarc.org
Vice President – Steve Harper / W3NAM -----	vicepresident@dlarc.org
Secretary – Larry Kaplan / AB3TY -----	secretary@dlarc.org
Treasurer – Mike Gower / KB3LOD -----	treasurer@dlarc.org

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Steve Nordahl / NS3L -----	ns3l@yahoo.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 )

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

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

**The W3OK Corral is published monthly and is the Official Publication of the  
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