The PATCH
Published by the Lake County Amateur Radio Association
P.O. Box 868
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10 METER ROUNDTABLE
WEDNESDAY NIGHT @ 2030 HRS
28.450 MHz

February’s meeting is at Tri-Point Medical Center
Physicians Pavilion (Lower Level)
7590 Auburn Rd., Concord, OH 44077
http://lakehistorycenter.org/
Meeting @ 7:30 pm on February 6th
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Minutes from January 2, 2019 Meeting

Board Members Present:

- KB8BKE – Ed – President
- K8LPC – Larry - Vice President (and acting Secretary)
- N8JKO - Director at Large

Meeting Minutes:

- The meeting was called to order at 7:30 PM by Ed – KB8BKE. The meeting began with the Pledge of Allegiance.
- A very detailed presentation was given by Larry Leasko-WB8PHI about baluns. The membership enjoyed the presentation and had a lengthy Q & A session at the end. The presentation ended at 8:38 PM and was followed by a short break.
- The monthly meeting began at 8:46 PM beginning with a round of introductions.
- There were no additions or corrections to the Patch.
- There was no correspondence.
- Treasurer report: Ed-KB8BKE stated that the Treasury is in good shape.
- No board meeting report
- No ARRL report
- No new members at this meeting.
- Jim – AA8OY gave a very detailed DX report.
- No education to report.
- Public Service Report: Mike – WB8ZGH Mike noted that there were no planned Public Service events until the spring of 2019 which may start with the 10 & 20 Mile Drop Run in April.
- Bob-K8QXO stated that he had no updates from the Lake County Historical Society.
- Communication Team: Bill-N8IJG stated that all of the repeaters and remote sites were in service and fully operational.
- 2 meter Net: Bill N8IJG stated that the LCARA Thursday net continues at 7:00 PM on the 147.21 repeater.
- 2 meter ARES Net: THE ARES net continues each Monday at 7:30 PM on the 147.21 repeater.
- 10 meter Net: Mike-WB8ZGH stated that 10 meter roundtable continues each Wednesday at 8:30 PM on 28.450.
- Sunshine Report: Bob-K8BL circulated a get-well card for Reno-WT8C who is ill at home.
- Swap and Sell: None
- Old Business: None.
- New Business: ED-KB8BKE made a motion to re-elect the current Board members noting that no one else has petitioned for a position. The motion was seconded; the current Board members agreed to serve another term and were retained.
- Ed-KB8BKE noted that a CPR / AED class was being given at Tri-Point on Tuesday January 29th. The cost is $19.50 for those wishing to receive a certificate.
- Ed-KB8BKE noted that he is sending out a letter to previous members who have not rejoined along with a short survey. The information will be discussed at a later date.
- Ed-KB8BKE stated that he is looking for volunteers to form a “Ham-Fest” committee for a “Tailgate” style event possibly located at the Lakeland Community College this fall.
Meeting minutes cont’d.

- Joe-N8JKO stated that he has not been contacted by the “Boy Scouts” in regard to our offer for a Merit Badge class. Joe stated that he will attempt to make contact again.
- Joe-N8JKO stated that he has “Booked” the “Lakeview Shelter” located at 4799 Lockwood Road, North Perry Village for our picnic on July 28th. We will have the facility from 10 AM to 6 PM.
- There were 19 members present who included: Ed-KB8BKE, Larry-K8LPC, Cal-W8BZP, Joe-N8JKO, Bob-K8QXO, Bill-W8BBL, Phil-KC8JPU, Melody KB8QIB, Larry WB8PHI, Tom-N8UAZ, Bill-N8IJG, Mike-WB8ZGH, Neal-NF1X, Jeff-KC8LAR, Sally-N1BCF, Jim-AA8OY, Tom-KD8SJG, Andy Fortier and Bob-K8BL.
- Announcements: Joe-N8JKO was awarded the 2018 “Ham of the Year” Award.
- Larry-K8LPC updated our database with new contact information.
- Larry-K8LPC noted that we have 29 paid members to date.
- Larry-K8LPC won the 50-50 raffle.

Meeting adjourned at 9:15 PM

Larry – K8LPC

January Attendance

Ed, KB8BKE; Larry, K8LPC; Cal, W8BZP; Joe, N8JKO; Bob, K8QXO; Bill, W8BBL; Phil, KC8JPU; Melody, KB8QIB; Larry, WB8PHI; Tom, N8UAZ; Bill, N8IJG; Mike, WB8ZGH; Neal, NF1X; Jeff, KC8LAR; Sally, N1BCF; Jim, AA8OY; Tom, KD8SJG; Andy Fortier and Bob, K8BL.
Greetings Everyone 😊

February has arrived, bringing us closer to springtime.

There were no Public Service events in January. The CPR / AED training class at Tri-Point was canceled and will be rescheduled at a later date.

Our February meeting will be held at the Tri-Point Medical Center in one of the three meeting rooms on February 6th. We will continue to meet there through March. This month, we have Mr. Aaron Hargiss from the Information Technologies Department from Cuyahoga Community College. He will give us a presentation on “Internet Security”.

Our weekly nets continue, every Monday, we have the Lake County ARES Net time at 7:30PM, we have the LCARA Weekly Net on Thursdays at 7PM. These Nets are on our 147.21 repeater which requires a PL tone of 110.9. On Wednesdays we have our 10 meter roundtable on 28.450 at 8:30 PM. Please take some time to visit us on any or all of our Nets, we will be glad to have you.

Our next VE session will be on February 2nd at the Kirtland Public Library beginning at noon. Please arrive a few minutes to get your paperwork in order before the testing session begins.

The next LCARA Board meeting will be at the Tri-Point Facility on Wednesday February 13th in the Board room at 7PM.

Our next breakfast gathering will be on Tuesday February 19th at the Perkins in Painesville. Come join us about 8 AM for good food and fellowship.

I’m looking forward to seeing everyone at the Tri-Point Medical Center on Wednesday February 6th at 7:30 PM, bring a friend 😊

73 de Larry Caskey K8LPC

LCARA Vice President

K8LPC@ARRL.NET
BACKSCATTER

973 Years Ago: Global cooling. The weather turns especially cold throughout Europe. Monks note in the Anglo-Saxon Chronicle that "no man alive...could remember so severe a winter." This is the first known record of the beginning of the 200 year period of exceptional cold, known as the "Little Ice Age."

140 Years Ago: Edison who? The first practical incandescent light bulb was demonstrated by Joseph W. Swan in Newcastle upon Tyne, England. Swan soon established the world's first electric light bulb factory in the western suburbs of Newcastle, and later Swan's bulbs were used to light up Mosley Street in the Newcastle city centre, the first street in the world to be lit by electric light.

122 Years Ago: Politicians at work. The Indiana State legislature passed Bill No.246 defining pi as 3.2 exactly. It was introduced by Representative Taylor I. Record, a farmer and lumber merchant, on behalf of a mathematical hobbyist, Dr. Edwin J. Goodwin, M.D. Its inaccuracy was soon recognized by Clarence A. Waldo, mathematics professor at Purdue University, who advised the law makers, who indefinitely postponed the bill.

47 Years Ago: The first scientific hand-held calculator, named the HP-35 since it had 35 keys, is introduced by Hewlett-Packard. Priced at $395, it was the first hand-held calculator able to perform logarithmic and trigonometric functions with one keystroke.

40 Years Ago: LCARA tours the recently completed Ohio Bell Electronic Switching System office, on South Street in Painesville.

The FAA approves the club’s antenna request, and the new Phelps Dodge 340 four dipole array sits majestically atop its tower on Lake East Hospital.

30 Years Ago: Ken, N8EIH, reports the McDonald’s Painesville drive-up window frequency is 154.57MHz. With solar cycle 22 nearing it’s peak, flux levels over 250 are reported, assisting several members with the new single band DXCC awards, which include 10 and 75 meters.

25 Years Ago: Bob, K8BL, reports on rumors the FCC may let us choose our calls. Last available for a short period in the late '70's, folks are talking about simplifying their call by dropping the last letter. Bob ponders becoming K8B, and I could become KO8 !!

A new country is created. Eritrea brings the DXCC countries list to 319. A special award is suggested for anyone who knows how to pronounce it correctly.

Ken, WT8F, demonstrates a new program, DX Base, which allows not only packet cluster operation and logging, but also tracks DXCC progress, checks packet spots for worked/confirmed status, shows beam headings, prints labels, connects with HF radios, and sends Morse from the keyboard. Ah, the wonders of modern technology.

20 Years Ago: Riley Hollingsworth, K4ZDH, head of amateur radio enforcement for the FCC since last Fall, shows up unexpectedly on 3.894 MHz, a frequency considered to be one of the hot spots the FCC wants cooled down. Hollingsworth said he broke in on an argument that was growing increasingly nasty in an effort to settle things down. He then remained on frequency to discuss FCC enforcement with those hams who were interested. But not everyone wanted to hear what he had to say, and there was a serious effort made by some to silence K4ZDH, with jamming and a number of rude and lewd comments while Hollingsworth was on the air. None-the-less, Hollingsworth told those involved to keep in touch if they have enforcement problems, and gave out his e-mail: rholling@fcc.gov
Backscatter cont’d.

15 Years Ago: The ARRL asks the FCC to create a new entry level no-code amateur license to include limited HF phone privileges plus VHF and UHF. Also proposed is consolidation of all current licenses into three classes, retaining code at 5WPM for only the highest class. ARRL First VP Joel Harrison says “Change in the Amateur … license requirements … when Morse is involved, has always been emotional.

Bill Chaikin, KA8VIT describes ACARS (Aircraft Communications Addressing and Reporting System), a 2400 baud AM packet network for aircraft, operating principally on 130.450 MHz.

10 Years Ago: The February program is Bill Chaikin, KA8VIT describing the USS Cod and its communications systems.

Desecheo, KP5, is scheduled to be on the air mid-February with eight HF stations plus 6 meters. It is a .6 square mile island 13 miles west of Puerto Rico, administered by the US Fish & Wildlife Service. Until 1952 the island was used as a bombing range, and although diving is permitted around the island, the refuge is closed to the public due to the presence of unexploded military ordnance. Trespassers are subject to arrest, and the Fish & Wildlife Service has not approved a DXpedition there in fifteen years.

5 Years Ago: New LCARA President Ron, KC8BTN states the club repeater N8BC’s country count has increased by one with the addition of an Echolink QSO with Indonesia, YB.

Matt W8DEC, is teaching a Technician class, held at Lakeland.

LCARA Historian
Scott, KO8O
The PATCH, Published by the Lake County Amateur Radio Association

DX Alert, February 2019

**9X – Rwanda** - Harald, DF2WO is QRV as 9X2AW from Kigali until February 14. Activity is on 160 to 10 meters using CW, SSB, RTTY and FT8.

**EA8 – Canary Islands** - Erich, HB9FIH is QRV as EA8/home call from El Hierro, IOTA AF-004, until the end of March. Activity is on the HF bands using CW, SSB, and various digital modes.

**HC – Ecuador** - Rick, NE8Z is QRV as HC1MD until February 7. Activity is on 40 to 6 meters using CW, SSB and FT8.

**XZ – Myanmar** - Akio, JE2QIZ is QRV as XZ2B from Nay Pyi Taw. His license is valid for 150 days. He is permitted to operate from 15 to 1.25 meters within 20 kHz of each band edge, and using only CW.

**9U - Burundi** - 9U4RI, Shabu, is a new licensee as of November 30. He will be traveling there and operating February 15-25, and will apparently be on SSB, CW and digital modes PSK31 and RTTY. He says particularly look for him on or around 14222 SSB and the "very low end" of 40 and 20 on CW. He says he will be more active on CW than on voice.

**XZ - Myanmar** - JE2QIZ/AC7XZ, Akio Taguchi, will operate as XZ2B. The license limits him to 25 watts and only the lower 20 kHz of any band, so he will be CW only.

**T31 - Central Kiribati** - The T31EU team plans to be on the air February 16- March 5,

**6W – Senegal** - ON4AVT, Willy, on his upcoming 6W7/ON4AVT operation February 20 to March 30.

**PJ6 - Saba Island** - PJ6A will be in the ARRL CW Contest February 16-17, a multi-single low power he has received the news that the 60 meter band is okay to use from Senegal.

**V2 - Antigua and Barbuda** - N3AD, Alan, is planning to operate both the ARRL DX CW, February 16-17, and the ARRL DX SSB (March 2-3) Contests as V26M that he will give FT8 a try from there.

**V3 – Belize** - WB0TEV/V31VP, Victor, and K5PS/V31CQ, Scott, plan a visit to the former British Honduras February 26-March 5.

**BV – Taiwan** - From Taipei will be BW/JJ1DQR, Yosuke Sato, February 16-19, on HF SSB.

Happy hunting!

Jim, AA8OY
Thanks to ARRL DX and Weekly DX
Baluns

After the January talk on baluns, a question came up that we feel needs clarification. It was assumed that the number of turns determine the ratio of the balun. That is **not** true. You try to achieve 10 turns through the core for optimal performance of the balun (more is not necessarily better—it adds resistance). The turns ratio of the balun is determined by the number of wires used and the different termination used at each end. Hence there may be two wire; three wire, four wire, etc. baluns. The wires are terminated differently.

If any questions regarding baluns—call Larry, WB8PHI @ 440.259.2553

The below balun diagram was drawn by Tom, N8UAZ and tweaked by Larry, WB8PHI.
The Five-Volt Plan

The personal computer has revolutionized many aspects of our lives over the last forty-eight years. And if the question was posed as to what could be one of the most significant developments as a direct result of this technology, you might hear a variety of answers ranging from the evolution of items such as touch screen technology, or the advancement of CPU design, or the standardization of the USB port. And through all of these are true, one thing may be overlooked... the standardization of power.

The often underappreciated fact that with USB peripherals, power has been standardized as well.

Over the last decade, there has been a growing list of items that, while not computer peripherals, use the USB design and power requirements as the basis to standardize connectivity. A simple case in point may be the portable battery packs for use with cell phones. A greater case in point is the charging design of the smart phone itself. For this, and a number of solutions between the mentioned examples is that there is common power supply and charging for a broad range of items.

For example, some FRS Radios use rechargeable battery packs. These packs charge through a mini USB or micro USB connector. But if you are out at an event or gathering, how would you charge or supplement the battery in the radio? One possible answer is using a portable phone battery pack. Since the battery package outputs 5-Volts, and the radios require a feed from a 5-voly supply, connectivity is easy. All that is necessary is being sure the battery pack can supply the appropriate milliamperage.

Now consider the recent marketing of larger battery packs. Some now come with built-in solar cells to recharge the packs when a conventional power supply is not available. And although the solar cell charging does take longer, it is in fact, a built-in charging source that could extend the operating time of the radio. Another use of these battery packs can be applied to running and charging small AM/FM radios. This author has also seen DC based AA Battery chargers that use the Micro USB connector. And with a little imagination, means that you can charge AA and AAA batteries for devices that use solar powered 5-volt battery packs.

Such possibilities can allow for the reduction or elimination of dissimilar batteries and chargers, while optimizing the flexibility by standardizing one type of battery system, and building your technology around the power supply system.

And while this article is by no means the definitive guide to planning your portable power, it can stimulate the possibilities of planning for a universal, broad-ranged battery backup for low-power devices.

In conclusion, the purpose of this article is to consider the planning of your power needs, especially those of your devices that you may not normally consider for rechargeable power. And, as a result, become part of an overall battery strategy that is easy to plan, easy to maintain, and most of all, easy to use.

Joe, N8JKO
LCARA Christmas Dinner Pictures

Here's the link to the BOX account that has the pictures from yesterday evening.

Regards,
Joe
https://app.box.com/s/qb1cw6cehpnxigb8rt9cje6s6oydyrec

Public Service Events - 2018 Review

Below is a summary of the efforts made in service to our community and others during this past year by our ARES team members. This only captures the hours reported to ARES for the year.

It does not reflect those hours volunteered at the Lake Historical Center, or those members who help prepare for the monthly meetings, LHC radio room operation and displays, trailer improvements and maintenance, or volunteering for Lake History Center events.

4-15-18 20/10 Mile Drop Run
7:30 am start in Chardon
13 Ops. 65 Man Hrs.
Steady rain for the entire event – Net secured
At 11:50 am in Fairport Harbor
Approximately 352 total runners – 230 for 10 mile
Chardon Team - N8ONI, KD8QEI (bik), KB8BKE, KD8TWG, KD8BBL, KC8LJO
Lake Co. Team – AA8OY (bik), K8QXO, KB8BKE, WB8ZGH, NF1X, K8LPC, W8QL, N8JKO
ZGH and Fran at Bike Path at Gridle Road
OY and QEI on bike and rain suits riding in rain 35 degrees following the runners.

6-10-18 Sunday In June in Burton
77.5 Man Hrs. – Estimate 345 Riders
Start 7 am - Net Closed at 2:52
Some Route Markers washed away
Tom, KD8SJG, was ill and did not work event
Volunteers WB8ZGH, KB8BKE, K8LPC, NF1X, AA8OY, K8QXO, W8QL, N8IJG, KD8SJG, W8QL – SAG/Bike Morning
Man Hours 77.5
Public Service Events cont’d.

6-22 to 6-24 Field Day
375 + 9 = 384 Total Man Hours
KB8QIB, WB8PHI, WT8C, K8LPC, NF1X. AC8RV, KB8KKE, AA8OY, AB8GV, WA8TWM, K8BL, NI8CF, K8IU, WB8ZGH, K8QXO, K8SJG, KE8PP
Weather good – thunder storm threat

7-4-18 Mardi-Gras
27 Man Hrs.
This year the Parade was on the Holiday with an afternoon step off time at 4pm.
Five operators adjusted their Holiday events to work the Parade. It was smaller with only 4 sections. We were headed home by 6pm. Net Control did not use the Communication Trailer operating from his mobile unit. Exiting Fairport was easier due to the small crowd. It was fun as always.

7-21 & 7-22 Garfield Civil War Camp
22 Hrs.
Civil War operation was set up in the Communication Trailer stationed in our usual parking lot location. It was manned by K8BL and AA8OY. The telegraph office was demonstrated by WB8PHI and KB8BKE. They had a Civil War telegraph line set up between the office and remote field location. Civil War era equipment was in operation sending MORSE Code.

9-8-18 OSPOTA
22 Hrs.
LCARA activated Headlands Beach State Park (HEA) for the annual Ohio State Parks on the Air Event. Approximately 60 of the 74 Ohio State Parks were on the air. Two stations were in operation, one on 40m and on 80m. Operators on the air were WB8PHI, KB8BKE, K8QXO, WB8ZGM and WB8ZGH. The LCARA trailer had the 80m station and WB8ZGH RV was set up for the 40m station. N8BC (club call) was used for this event. NVIS antenna systems were used. The 80m arrangements yielded the best results recording 31 State of Ohio Parks. The team recorded 80 QSO’s during this event. The Chilly pot was on for lunch.

9-15-18 Touch A Truck
16 Hrs.
Willoughby Hills F.D.
LCARA Communication Trailer was on display at the Willoughby Hills F.D. Touch-A-Truck event. The Trailer was manned by Ed KB8BKE and Larry WB8PHI. This is a fun event for the Community with Police, Fire and County responders with their equipment on display. Life Flight Copper landed during the event. Kids, young and old, got to play as firemen during the live fire hose demo.
Public Service Events cont’d.

9-18-18  PNPP Drill
36 Hrs.
At approximately 9:30am, the Lake County Amateur Station came on the air. Net Control for Lake County was N8BC. Fritz (K8WLF) established contact with State E.O.C. station W8SGT and maintained this path through the Drill. Lake E.O.C. established contact with Ashtabula and Geauga E.O.C.’s. Lake Amateur staff at the E.O.C. were K8WLF Fritz, KB8BKE Ed and WB8ZGH Mike. Back up and second shift E.O.C. operators on stand by were Don WA8TWM, Bob K8QXO, and Jim AA8OY. Larry K8LPC served as official relay station helping to maintain State E.O.C. link with W8SGT and adjacent counties. Station checking in and volunteering for assignments were Vance KA8YHZ, Joe N8JKO and Bob K8BL.
The Drill was very successful with no findings by F.E.M.A. evaluators. Lake County has an experienced and well trained E.O.C. Team.

10-7-18  Northern Ohio Marathon
86.5 Hrs.
Twelve Amateur Radio Operators monitored the progress of 548 full and half Marathon runners. The course started at Headlands Beach State Park through a village of Grand River, Mentor, Willoughby and returning to Headlands along the Lakeshore. The half Marathons ran through Veterans Park to Mentor Lagoons Lakeshore Road (trail). This is the last section of the course for all runners back to Headlands Beach.
The LCARA Communication Trailer was located on a paved drive just off Headlands exit road. Operators can see the outgoing and incoming runners from this location.
Radio operators were placed at Grand River, Veterans Park split, Mentor water stop at Lake Catholic school, Lost Nation Airport, Willoughby Lakeshore, Mentor Beach Park, Mentor Lagoons, Forest Road and Lakeshore Elementary School. Amateurs were on duty from 7:00 AM until 2:00 PM. There were no major issues along the two courses and all runner arrived back at the Park in good condition. Hams working the event were K8QXO Bob, AA8OY Jim, K8LPC Larry, N1FX Neal, KB8BKE Ed, W3RJR Bob, WA8OAJ Jim, KE8PP Paul, WB8PHI Larry, K8BL Bob, KD8SJG Tom and WB8ZGH Mike for a total of 86.5 operating Hours.

Thanks to all who gave of their time and we hope to add more call signs to this group.

Mike, WB8ZGH
EC Lake County
OHDEN Has Some Changes To Tell You About
(from Gary, NJ8BB & Eldon, W5UHQ)

Due to the continued long skip being experienced on 80 meters during the Ohio Digital Emergency Net (OHDEN) training sessions @2145 local time each Tuesday; OHDEN will temporarily go to Sunday afternoons at 3:00 - 4:00PM.

Training will remain on the prime frequency of 3584.5KHz USB +1500 Hz.

Tests show that this time has much better propagation throughout the state and should allow the best propagation currently possible on 80 meter band. We are currently having to use a North Carolina station for NCS relays later in the evening.

Anything beyond local ground wave and this long skip point have not been reliable during this time of year, time of day, and sunspot cycle for the past three years.

At the same time, W5UHQ is going to start an experimental Olivia / FT8 net on 1805.000 USB +1500 Hz during the normal time slot of 21:45 – 22:45 on Tuesdays.

The objective of the 160 meter net will be to perform signal reports and check for traffic quality circuits on 160 meters from county to county and county to SEOC. Hopefully we can get more stations active on this frequency and as many county control stations as possible to try out their capability. Tests thus far have been great from border to border. I currently have six different stations that have checked into that test frequency. There will be no change to our standard mission call up frequencies at this time. Using alternate times and frequencies is already in our SOP. The Ohio Technical Specialist team will be available to assist ECs in putting up at least a compromise antenna for that band.

These changes be in effect from Jan 15 until March 12 (start of daylight savings time). These changes should allow all members interested in improving the 160 meter readiness of this critical statewide connection under all conditions of solar impacted propagation.
Winter Field Day
Axel, K8AXX hosted the winter field day event. Larry, WB8PHI was given permission from Ed, KB8BKE to use the club call sign N8BC. The event was attended by Peter, N1BKZ; Sally, N1BCF; Bill, W8BBL; John, KE8USA; Eric, WD8MHR; Larry, WB8PHI; and Melody, KB8QIB.

This event was very informal and used as question and answer time for amateur radio theories, techniques, and equipment. Discussion was prompted by a new amateur radio operator to the seasoned operators. Discussion were very enlightening and sometimes intense. This is why we have events like this to promote learning. Later contesting did begin as you see by the below scores.

Summary:
Total contacts : 257
80 cw: 102
80 ph: 18
40 cw: 96
40 ph: 28
20 ph: 13
Multipliers:  x5, ( 1 each for  80 ph&cw, 40 ph&cw, 20 ph)
Bonus:  1500 for non-commercial power
Total points claimed: 3042

Disclaimer: Permission was given for all the pictures shown here.
VE Testing in Lake County

Exams are held every other month.

The Lake County Amateur Radio Association will be holding its 2019 Amateur Radio license exams at the Kirtland Library, 9267 Chillicothe Road, on the following dates:

- Saturday, February 2
- Saturday, April 6
- Saturday, June 1
- Saturday, August 3
- Saturday, October 5
- Saturday, December 7

This bi-monthly schedule is the first Saturday of every even-numbered month (e.g., February being the second month, etc.), and will be held at the Kirtland Library, 1.7 miles south of I-90 on Route 306 (Chillicothe Rd). The library is on the left, just beyond the Marathon gas station. The tests will start at 12 noon. Please arrive a few minutes earlier.

To register, you will need the NCVEC 605 Form, which will be available at the test. If you would like to complete one ahead of time, be sure it is the Sept 2017 version or later. You can find it by Googling “NCVEC quick-form 605” and clicking on the url for a pdf of the form.

Be sure to bring the original and a copy of both your license and any CSCEs you may have to the exam. The cost is $15.00, and if you wish to pay by check, it should be made out to the ARRL/VEC. Identification with your picture is also necessary, such as a driver’s license. If you have any questions, please contact Scott Farnham, KO8O, at (440)256-0320, or scottfarnham@roadrunner.com
Breakfast Date for February 2019

Mark your calendar the next meeting of the Tuesday Morning Breakfast Group is at the Painesville Perkins on **Tuesday, February 19**th at 8:00 a.m. Breakfast orders start being taken at 8:30 a.m. This group averages 15-20 people from all counties, and it provides a great opportunity to meet other Hams, sell and trade your spare equipment. This is not a club event. Please encourage any Hams or non-Hams to bring your significant other, or a friend, to breakfast. It is a fun gathering.

LCARA Board Meeting

The December Board meeting will be at the Tri-Point facility on **February 13**th @ 7:00 p.m., in the Tri-Point Board room.

To find the Board room, simply continue waling past the regular meeting rooms down the hallway. The Board room is located on the left from the main elevators.

All members are invited.

For Sale or Swap

**Equipment for Sale: by Bill, N8IJG (call 440.943.1703)**

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFJ 8268 Digital SWR/Wattmeter/Freq Readout</td>
<td>$140.00</td>
</tr>
<tr>
<td>Icom IC-756 Pro 3 Transceiver</td>
<td>$1300.00</td>
</tr>
<tr>
<td>Icom IC-275H 2 meter All Mode Transceiver</td>
<td>$600.00</td>
</tr>
<tr>
<td>Swan 350C w/117XC PS</td>
<td>$300.00</td>
</tr>
<tr>
<td>Icom IC-275H 2 meter All Mode Transceiver</td>
<td>$600.00</td>
</tr>
<tr>
<td>Swan 350C w/117XC PS</td>
<td>$300.00</td>
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</table>

Mike, KD8JDL is in the process of disposing of radio tubes from his father’s store. If members could e-mail him with requests and he has the tube, there will be no charge.

**Equipment for sale from the Estate of W8GZI: Contact Al Ballard @alanballard@gmail.com**

- Kenwood TS440 Transceiver
- Arbitron ASL 80B Amp
- Miscellaneous items
Events Contact Info.

<table>
<thead>
<tr>
<th>Event</th>
<th>Contact</th>
<th>Location</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARES</td>
<td>WB8ZGH <a href="mailto:mgoffos@ymail.com">mgoffos@ymail.com</a></td>
<td>147.210 MHz</td>
<td>Mondays 1930</td>
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<tr>
<td>Two Meter Net</td>
<td>Bill N8IJG <a href="mailto:n8ijg@arrl.net">n8ijg@arrl.net</a></td>
<td>147.210 MHz</td>
<td>Thursdays 1900</td>
</tr>
<tr>
<td>Ten Meter Roundtable</td>
<td>WB8ZGH <a href="mailto:mgoffos@ymail.com">mgoffos@ymail.com</a></td>
<td>28.450 MHz</td>
<td>Wednesdays 2030</td>
</tr>
<tr>
<td>LCARA Board Meeting</td>
<td>Tri-Point Board Room</td>
<td>Tri-Point Medical</td>
<td>Wed. 1/9 1900</td>
</tr>
<tr>
<td>VE Testing</td>
<td>Scott, KO8O, at 440-256-0320</td>
<td>Kirtland Library</td>
<td>Sat. 2/2 12:00</td>
</tr>
</tbody>
</table>

LCARA Net Information

Lake County ARES Net

The Net is Every Monday at 7:30 pm on the 147.210 repeater. This net is open to all licensed operators; you do not need to be a member. This net is provided for operators to verify the proper operation of their equipment and verify their stations capabilities in the event of an emergency. Here is your perfect chance to be Net Control or Alternate Net Control. Step forward, no experience is necessary, everyone will help you.

Lake County Two Meter Net

The 2 Meter Net runs weekly. Come join your fellow hams on Thursday’s at 7:00 pm on 147.210 MHz. This is an informal net where the group can discuss any subject for the good of the group, great time to ask those questions, especially from the new operators. List your items related to ham radio that you want to sell or swap and any sunshine announcements to pass on.

N8IJG brings us the ARRL News when available. Bill is always looking for Alternate Net Control Operators. Please check in.

Ten Meter Roundtable

The 10 meter Roundtable meets on Wednesday’s at 8:30 pm on 28.450 MHz. This is an informal roundtable where the group can chat about anything that comes to mind and even correct some of the world’s problems. You don’t need to be a LCARA member, just have at least a Tech ticket and some 10 meter gear. The Roundtable is a good chance to meet old and maybe some new friends this is a “Round Table” anyone can start it off on 10 meters. Any Questions contact WB8ZGH.
Ohio Emergency Preparedness Nets, Columbus EOC
Ohio Emergency Preparedness Net, W8SGT, is on every Tuesday at 7:15 pm. Try 3.902 MHz, tune up and down the band and check in! Follow on Twitter (hashtag W8SGT) for frequency information on the 80 meter band.

Ohio Digital Emergency Net

**Ohio Digital Emergency Net** is held on Tuesdays at 8:00 pm (0100 UTC).

OHDEN meets on 3585 KHz +/- USB [http://ohden.org/](http://ohden.org/)
This net is looking for all Ohio Counties to check-in. Learn as you go.
**Modes**: OLIVIA 8/500/PSK31 alternate, with MT63 1K for bulletins.
**Frequency**: 3585 KHz, 7072 KHz alternate.
MT63 2K on VHF/UHF with PSK as an alternate (Assigned locally)

The Amateurs Code

By Paul M. Segal, W9EEA (1928)

The Radio Amateur is:
CONSIDERATE..... never knowingly operating in such a way as to lessen the pleasure of others.
LOYAL..... offering loyalty, encouragement and support to other amateurs, local clubs and the American Radio Relay League, through which Amateur Radio in the United States is represented nationally and internationally.
PROGRESSIVE..... with knowledge abreast of science, a well built and efficient station, and operation beyond reproach.
FRIENDLY..... with slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit.
BALANCED..... Radio is an avocation, never interfering with duties owed to family, job, school or community.
Patriotic..... with station and skill always ready for service to country and community.

LCARA was organized for the purpose of furthering Amateur Radio by increasing the technical knowledge and operating proficiency of radio amateurs through continuing education, public service and acting as a vehicle of communication by, between and with the members of the association. LCARA is an incorporated association chartered under the laws of the State of Ohio and is an exempt organization under section 501 (C) (3) of the Internal Revenue Code. Contributions to LCARA are fully deductible from Federal Income Tax. Regular and Senior Dues are $20.00 per year, Students $10.00. Items may be reprinted by other non-profit publications without prior permission providing credit is given to the original source and The LCARA Patch. Articles from members are welcome.

Voice Repeaters N8BC

147.210 with a .600 MHz+ offset PL tone of 110.9 Hz.
224.500 with a 1.6MHz.-offset, PL tone of 141.3 Hz.
444.650 With a 5.0MHz. +offset, PL tone of 131.8 Hz.
(Repeater & N8BC trustee, Bob Liddy, K8BL)

**Web site**: [www.lcara.org](http://www.lcara.org)

To receive the Patch via email in PDF format Send an e-mail to lcara_patch-subscribe@yahoogroups.com

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The Lake County Amateur RADIO ASSOCIATION
## LCARA Calendar of Events

### February 2019

<table>
<thead>
<tr>
<th>Sunday</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
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<td>6</td>
<td>10 Meter Round-Table 8:30p</td>
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<td>19</td>
<td>Breakfast (Perkins) 8:00a</td>
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**VE Session 12:00**
Kirtland Library