



The Spirit of '76 and '88



Newsletter of the Lake Erie Amateur Radio Association

Editor: Ron Jakubowski, K2RJ

Publisher: Jeannie St. Marie, KC8MNW

This Month's Dinner Meeting — Oct. 30 2007, 6:30 p.m. Automatic Position Reporting System (APRS) Presented by Matt Welch, KB1LCS

Automatic Position Reporting System, also commonly known as APRS. What is it? How does it work? What equipment do I need? How do I...? These are just a few questions that hams often have when they hear about this great aspect of amateur radio. Matt Welch, KB1LCS, will be presenting as well as demonstrating just how this unique packet-based system works. APRS is one of many great tools to use during public service and emergency communications events. It is not designed to replace voice communications but to augment it with geographical position reporting. NCS knows the position of all equipped stations, even if they are lost!. If you can remember how your old VHF packet station worked, APRS isn't much different. Come to the meeting and learn just how it all ties together!

In addition to the "main event", we will be officially counting ballots for our annual election. Since the number of expiring Trustee positions equaled the number of available nominees this year, there will be no suspense. But, according to our present by-laws, we must still go through the motions! This is the subject of a bylaws revision that will be up for a vote at this meeting. It is more fully explained elsewhere in the newsletter.

The dinner and meeting are at our usual meeting place, Dimitri's Restaurant, at 1830 Snow Rd., Parma, Ohio (in the Mid-Town Shopping Center, just west of Broadview Road). Dinner will be served at 6:30 PM and the formal meeting will begin around 7:30. Meetings are open to all interested persons. You may attend without eating, but reservations are required if you do wish to eat.

Restaurant service is available only for those who purchase dinner. If you are attending the meeting only, kindly purchase beverages at the bar and bring them to your table. The dinner menu will consist of Steak, Broiled Boston Scrod, or Chicken Parmigiana

for \$16. Also available is a vegetable and pasta dish for those who prefer a meatless dinner. The dinner includes a salad, main course, dessert, ice tea or coffee, and gratuity (please note, bar service and soft drinks are not included).

RESERVATIONS ARE REQUIRED BY 11:00 AM OF THE MEETING DATE.

Please call in your reservation and your menu choice to Marv Grossman, W8AZO, at 440-248-0031. You can also visit www.leara.org and make your reservation through the club's website. -AR-

NOTICE!

LEARA Dues are now due and payable at the old \$18 rate until December 31, 2007. On January 1, 2008 the dues increase to \$25. They can be paid at the meeting.

OFFICERS

Eric Jessen President	N8AUC 440-734-3146
Jim Ozello Vice President	N8XDO 216-475-7218
Tom Bishop Vice President	W8TAB 440-331-9374
Joe Prokop Secretary	KC8RAN 440-884-5796
Dave Foran Treasurer	WB8APD 440-942-0618
Eric Jessen License Trustee	N8AUC 440-734-3146

TRUSTEES

Mike Cegelski	K8EHP
Raye Bayun	N8NAP 146.760/R
Gary Zimmet	WA8TJL
Marv Grossman	W8AZO 440-248-0031
Jacob Kinosh	KC8GHX 440-989-8170
Ron Jakubowski	K2RJ 440-498-1512
John Radney	KC8FOC 216-751-7067
Bryan Torok	N8OOF 440-871-5456
Bob Winston	W2THU 216-771-3314
Jeff Garvas	N8YNR 216-552-4368

TRUSTEES EMERITUS

Al Amster	W8TTY
Fred Collins	W8ADW(SK)
Pat Shreve	W8GRG (SK)
Al Severson	AB8P (SK)

POINTS OF CONTACT

Don Raith "Sunshine"	N8DJG 216-921-7546
Mike Cegelski Radio Officer	K8EHP
Bryan Torok Radio Officer	N8OOF 440-871-5456

The *Spirit of '76 & '88* is published monthly except in December. Contributions must be received by the 2nd Sunday of the month.

Editor: Ron Jakubowski, K2RJ

E-mail: editor@leara.org

The Prez Says

by Eric Jensen, N8AUC



What a busy month September was! If yours wasn't as filled as ours was, then you really need to get off the couch and get out more! Yes I know it's football season now, and yes the Indians are in the playoffs, but you still need to get out more. Pretty soon it'll be winter, and getting out won't be possible without first spending some quality time with a snow

blower.

First we had River Run! Thanks to all those who volunteered for that. Even though the day started off kinda soggy, and it slowed down the guys on roller blades a bit, by about 9:30AM the rain stopped, and the day ended up pretty well. There were also plenty of goodies to be had afterwards. And we were still home in time to see the Browns game!

Then there was the ARRL Great Lakes Division Convention. Missing that was a huge mistake. If you were one of those who attended, then you know EXACTLY what I mean. LEARA was pretty well represented, but there should have been more of us there. I especially enjoyed the foxhunting presentation, and the guy from AMSAT was excellent also. There were loads of door prizes! The prize I won was worth more than the price of the convention ticket! Tom W8TAB won a really slick RF power meter, and Bryan N8OOF won more than one prize! Their prizes were all worth more than the price of the convention ticket, too. Do you see a pattern here? The banquet was great, and it was kinda neat to get to chat one-on-one with ARRL President Joel Harrison.

Then there was the Royal Order of the Wouff Hong. That's all I can say about the Royal Order. You HAD to be there for that part. It's like trying to describe what a banana tastes like to someone who has never seen one in their whole life. If you missed this one, you'll have to wait 2 years for the next one, and you'll probably have to drive a ways to get there, too. But I have to tell you that the best part about the way

(Continued on page 3)

The Lake Erie Amateur Radio Assn., Inc., **LEARA**, is a not-for-profit [501(c)(3)] organization dedicated to Amateur Radio and Public Service. Club information packets and applications for membership are available from **Marv Grossman, W8AZO, 440-248-0031**, or may be downloaded from our web site at **www.leara.org**. Annual membership is \$18.00. **LEARA's address** is: LEARA, PO Box 22823, Beachwood, OH 44122-0823.

LEARA is an **ARRL**-affiliated club. When you join or renew the **ARRL**, **LEARA** benefits monetarily if you so through the club. Send **ARRL** Applications/renewals to Club Treasurer **Dave Foran WB8APD**, 5439 Nan Linn Dr. Willoughby, OH 44094-4365. Make the check payable to **LEARA**, not the **ARRL**.

Membership Meetings are held the last Tuesday of each month except December at Dimitri's Restaurant, 1830 Snow Rd., Parma, OH (in the Mid-Town Shopping Center, just west of Broadview Road). Dinner is served at 6:30 p.m. The meeting begins at 7:30 p.m. Meetings are open to all interested persons. You may attend without eating, but **reservations are required** if you do wish to eat. Call **Marv Grossman, W8AZO** at **440-248-0031** to leave a message.

Trustees' Meetings are on the second Saturday of odd numbered months at 9 a.m. at the Parma-Snow Branch of the Cuyahoga County Public Library, 2121 Snow Rd., Parma, OH (opposite the Mid-Town Shopping Center). Meetings are open to all current members of **LEARA**.

(Prez Says continued from page 2)

THIS convention worked, was that we worked together with the guys and gals from CARS and NODXA. When you work with someone for a while, you forge relationships that last far longer than the event itself. It was fun working with them, and getting to know some folks that I wouldn't normally had a chance to know, as well as renewing some old friendships as well. Those are the kind of things you miss out on when you stay on the couch and don't get involved.

The Cleveland Hamfest was next. You couldn't have asked for better weather for the hamfest. I've been there when it was 40 degrees and rainy, cold and windy, but I gotta tell you it's way better when it is warm and sunny. Oh and since I went to the Convention the day before, I got a discount on my hamfest ticket, too. Some people like to moan and groan about how hamfests are dying, and people are trying to get eBay prices on used junk at hamfests, blah, blah, blah. Well, let me tell you, hamfests are only going to die out if YOU let them die out. There is one thing you get at a hamfest that you will NEVER, EVER get over eBay. The camaraderie of hams getting together in person for the old fashioned "eyeball QSO". Besides, you can see, touch and feel that used gear before you decide it's even worth half of what the seller is asking. Sorry - can't do that on the Internet. I am glad to report that the Cleveland Hamfest seems to be holding its own these days. With any luck it will continue to do so.

Last but not least, was the September LEARA meeting. Tim Lanese did an excellent job with the presentation, dinner was great as usual, and it's always a pleasure to get to spend a couple of hours with our club members. And in case you haven't heard about it yet, there was a bylaws amendment that was proposed and presented at the September meeting. Look for details elsewhere in the newsletter, or better yet come to the October meeting and find out all about it.



I want to extend a special thanks to

Alex (WD8JMM) and Kelly (KC8UIX) Manuk for all their help with preparing the election materials this year. And what month in this newsletter would be complete without mentioning what a great job Tom Bishop W8TAB has done as our program chairman. Ron K2RJ keeps getting better and better at the newsletter editor job, too.

Upcoming LEARA Club Meetings:

Oct 30—APRS & Annual Election

Nov 27—Holiday Party

December—No Meeting Scheduled

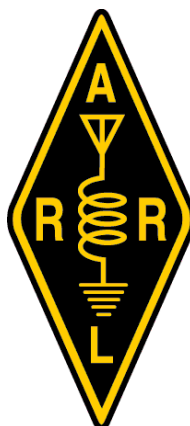
January 29—Tim Duffy K3LR - Multi-Multi Contest Station Presentation.

March 25—Gary Garnet - SkyWarn

October is even more important than September was. October is election month. You will soon be receiving your ballots (if you haven't already received them) and renewal forms in the mail for the annual election of trustees. Make sure to cast your ballot promptly, and send in your membership renewal for 2008. Promptly is the operative word, because that's how you can avoid the dues increase for one more year. After January 1, dues goes up to \$25/year. Renew before then, and you get 2008 at the 2007 price of \$18/year. Since you can easily tuck your renewal in the same envelope as your ballot, you can save time, and an extra stamp. This is one of those proverbial "win-win" situations you've heard about.

That's all for this month....see you all (I hope) at Dimitri's for dinner, and the October LEARA meeting! -AR-

LEARA is an Affiliated Club of the ARRL. If LEARA members join or renew their ARRL membership through the club, the LEARA treasury gets to "pocket" a portion of your dues. Another neat way to support your local club!



Hamfest Listing

28 Oct 2007

Massillon Hamfest and Auction
Massillon Amateur Radio Club
<http://www.marcradio.org>
Talk-In: 147.180+ (PL 110.9)
Contact:
Terry Russ, N8ATZ
3420 Briardale Circle NW
Massillon, OH 44646
Phone: 330-837-3091
Email: truss@sssnet.com

10 Nov 2007

Grant Amateur Radio Club
<http://www.garchohio.net>
Talk-In: 146.730 -
Contact:
Rodney Crawford, WD8CTX
PO Box 76
Buford, OH 45110
Phone: 937-446-2338
Email: wd8ctx@juno.com

12 Jan 2008

SouthWest Ohio Digital & Technical Symposium
Dial Radio Club & Center for Chemistry Education of Miami University
<http://www.swohdigi.org>
Talk-In: 146.01/61
Contact:
Jay Slough, K4ZLE
2554 Hamilton Road
Lebanon, OH 45036-8849
Phone: 513-934-0235
Email: k4zle@arrl.net

10 Feb 2008

Mansfield Mid-Winter Hamfest
Intercity Amateur Radio Club
<http://www.iarc.ws>
Talk-In: 146.94 (PL 171.9)
Contact:
Dean Wrasse, KB8MG
1094 Beal Road
Mansfield, OH 44904
Phone: 419-589-2415
Fax: 419-884-6177
Email: Metal07man@yahoo.com

20 Apr 2008

54th Annual Hamfest, Electronics, and Computer Show
Cuyahoga Falls Amateur Radio Club
<http://www.cfarc.org/>
Munroe Falls, OH 44262
Phone: 330-688-2013

Volunteer Exam Dates and Locations

(from the ARRL website)

27-Oct-2007

Sponsor: WRECS
Time: 9:00 AM (Walk-ins allowed)
Contact: ROBERT C GAUSS
(330)562-3328
Email: N8ZB@YAHOO.COM
VEC: ARRL/VEC
Location: BENTLEYVILLE VIL-
LAGE HALL/CHAGRIN FALLS
6253 CHAGRIN RIVER RD
CORNER SOLON RD & RIVER RD
BASEMENT
BENTLEYVILLE, OH 44022

28-Oct-2007

Sponsor: MASSILLON HAMFEST
Time: 9:00 AM (Walk-ins allowed)
Contact: GARY L KLINE
(330)837-2927
Email: WC8W@SSSNET.COM
VEC: ARRL/VEC
Location: MASSILLON BOYS &
GIRLS CLUB
730 DUNCAN ST SW
1 BLOCK S OF SR #21
ON WALNUT ST
MASSILLON, OH 44647

30-Oct-2007

Sponsor: PIONEER AR FELLOW-
SHIP
Time: 7:00 PM (Walk-ins allowed)
Contact: RONALD D LIEVING
(330)724-5981
VEC: ARRL/VEC
Location: AKRON BAPTIST TEM-
PLE
2324 MANCHESTER RD
PRE-REGISTRATION PREFERRED
CHECK-IN AT 6:30 PM
AKRON, OH 44314

11-Nov-2007

Sponsor: CUYAHOGA ARS
Time: 9:00 AM (Walk-ins allowed)
Contact: GARY S DEWEY
(216)642-8705
Email: GDEWEY@EN.COM
VEC: ARRL/VEC
Location: TOWN HALL
6652 BRECKSVILLE RD
STATE ROUTE 21
INDEPENDENCE, OH 44131

13-Nov-2007

Sponsor: PORTAGE COUNTY ARS
Time: 7:00PM (Walk-ins allowed)

Contact: JAMES J AYLWARD
(330)297-7979

Email: KC8PD@PORTCARS.ORG
VEC: ARRL/VEC
Location: MAPLEWOOD CAREER OP
CENTER
7075 STATE ROUTE 88
RAVENNA, OH 44266

15-Nov-2007

Sponsor: MAHONING VALLEY ARA
Time: 6:30 PM (Walk-ins allowed)
Contact: JAMES T VIELE
(330)534-1394
Email: W8JV@YAHOO.COM
VEC: ARRL/VEC
Location: YOUNGSTOWN STATE UNI-
VERSITY
WOOD ST - FACILITIES BUILDING
FOR DIRECTIONS CLICK ON:
WWW.MVARA.ORG
YOUNGSTOWN, OH 44501

18-Nov-2007

Sponsor: LORAIN COUNTY ARA RED
CROSS
Time: 1:00 PM (Walk-ins allowed)
Contact: CHARLES S HALL
(216)433-3036
Email: VE@W8HF.COM
VEC: ARRL/VEC
Location: AMERICAN RED CROSS
2929 W RIVER RD N
WWW.W8HF.COM (HOME PAGE)
ELYRIA, OH 44035

25-Nov-2007

Sponsor: WARREN ARA
Time: 6:30 PM (Walk-ins allowed)
Contact: WILLIAM H SHOWERS
(330)872-1929
VEC: ARRL/VEC
Location: NEWTON FALLS COMMU-
NITY CENTER
52 E QUARRY ST
REGISTRATION AT 6:30 PM!
NEWTON FALLS, OH 44444

01-Dec-2007

Sponsor: LAKE COUNTY ARA
Time: 12 NOON (Walk-ins allowed)
Contact: SCOTT FARNHAM
(440)256-0320
Email: SCOTTFARN-
HAM@ADELPHIA.NET
VEC: ARRL/VEC
Location: KIRTLAND LIBRARY

Bylaw Change Proposal

By Ron Jakubowski, K2RJ

At the September general meeting, the Trustees introduced a motion to change our Bylaws with respect to elections. The current bylaws require an election with mailed ballots even if the number of nominees is equal to the number of scheduled Trustee vacancies. Over the years it has become harder and harder to find members willing to commit to be nominated for the office of Trustee, the club's only office elected by the membership. This difficulty is being felt by the vast majority of similar organizations as life scheduling has become more complicated for our younger members with families as well as our older empty nesters. This year, the Nominating Committee was only able to find 5 nominees, 4 of them incumbents. With ever-increasing postage rates, the Club was forced to spend nearly \$200 printing and mailing ballots for an uncontested election. The change to our bylaws would not require a formal election if the number of nominees did not exceed the number of scheduled vacancies. In this case the nominees would be elected by acclamation at our October meeting. A majority of the Trustees approve of this change and recommend its approval.

Those opposing this change are concerned that it would not allow for a write-in campaign and it would not be democratic. Some feel that the Nominating Committee should do a better job finding Trustee nominees.

Whether you are for or against this bylaw change, please attend the October meeting so that your voice may be heard and so that you will have a vote in this matter. -AR-

Wanted: Club Photographer

By Ron Jakubowski, K2RJ

I would like to find somebody who could take pictures at club meetings, public service events and other club activities that could be included in *The Spirit of '76 and '88*. No formal application is required. Just e-mail low-resolution or down-sampled JPEG files (no larger than 250K per picture) to editor@leara.org. -AR-

LEARA Newsletter to be Primarily Electronic

By Ron Jakubowski, K2RJ

The LEARA Trustees voted last month to minimize the mailing costs of *The Spirit of '76 & '88* by no longer mailing copies to those members who have email accounts or web access. This is necessitated by the spiraling costs of postage and paper which, of late, has exhausted the club's treasury. We have also voted to make the LEARA membership roster available to members through a password system on the website. More details about this will be forthcoming as they are worked out.

Trustees at Work Between Meetings!

By Ron Jakubowski, K2RJ

Even though your Board of Trustees has official face-to-face meetings only six times per year doesn't mean that important club business must wallow for up to 2 months between these meetings. The Trustees have devised and codified into a Standard Operating Procedure (SOP) a mechanism by which they can make motions, have discussion and vote on these motions using the Trustees private e-mail reflector. Over the past 2 months, this SOP has been used to decide to make the newsletters and the membership roster primarily electronic and propose a bylaw change to the membership. Another proposed bylaw change to modify the number of Trustees failed. These e-mail discussions can get detailed and heated, just like in face-to-face meetings. But they seem to be effective and help the Trustees to run the club efficiently even when problems surface immediately after a scheduled meeting. -AR-

Remember that LEARA is not run as a pure democracy where the membership must vote on everything as a whole, but as a republic, where your elected representatives (Board of Trustees) do their very best to represent the membership that elect them every 3 years. That means that it is as important for you to communicate your thoughts to a Trustee as it is for us to communicate to you, the member. Every Trustee can be reached via e-mail at [callsign]@leara.org.

-AR-

LEARA "On The Air"

Club Net Information

by Joe Prokop, KC8RAN

SSTV Net: "88 at 8! Returns"

The SSTV net reconvened on October 6 and will continue every Saturday evening at 8:00 p.m. on the '88 machine. Please plan on checking in, as we welcome all whether they can send and receive or not. We also take the opportunity on the net to "Elmer" new SSTV stations.

Thursday Club Net

The Lake Erie Amateur Radio Association's weekly net is held every Thursday evening at 8:00 PM on the 146.760 (- offset, 110.9 PL) repeater. This is an open and informal net intended to provide the opportunity to test radio equipment, promote fellowship among local amateur radio operators, and develop radio traffic handling skills.

Thanks to all who check in and to the net controls who take the time to pass on the following information:

For the month of September, the following had checked into the net as reported by net controls:

AB8MO Andrew, K8AD Dale, K8ECL Gene, K8EHP Mike, K8PJM Phil, K8SAS Steve, KB8MHZ Lilly, KC8EHA Chuck, KC8FQV Mark, KC8RAN Joe, KD8ACO David, KD8AKA Dave, KD8CYL Nick, KD8DQX Drew, KD8FPQ Phil, KD8FTS Ron, KG8DN Ken, N8AUC Eric, N8CXA Howie, N8DJG Don, N8LZA Ron, N8NAP Raye, W2THU Bob, W8AJZ Ernie, W8EBB Matt, WA8TJL Gary, WD8JMM Alex.

Net Controls: KD8ACO, W2THU, KD8GN, N8AUC

Traffic and Items of note:

Congrats to Mike K8EHP was given on the 9/13 net.

Welcome back to the net, Andrew AB8MO and Alex WD8JMM. Also, welcome back to the hobby after a "long absence" to Ron, N8LZA. Hope we hear more from you in the coming months.

Net Control Operators Needed...Any member of the Lake Erie Amateur Radio Association interested in trying their hand at directing the weekly net or the SSTV net are encouraged to contact Joe KC8RAN (kc8ran@cox.net). -AR-

GLD Convention Highlights

(Tnx CARS)



BOB HEILS GROUP



N8IS - W8HBI - K8CMP

2007 ARRL Great Lakes Division Convention A Big Success

By Bob Winston, W2THU, Assistant SM

The 2007 ARRL Great Lakes Division Convention was held on 22 September 2007 at the Sheraton Hotel in Independence, on the Saturday before the Cleveland Hamfest. This was the first time that this biennial event was held in Cleveland. LEARA was a co-sponsor along with CARS and NODXA. Planning for the convention began one year earlier when the Division Vice-Director, Gary Johnston KI4LA, approached several larger clubs in our area to solicit a sponsor. CARS agreed to take financial responsibility, as the League does not pay for these conventions. LEARA came on board by appointing Eric Jessen N8AUC and Bob Winston W2THU to the planning committee.

Under the expert guidance of CARS president, Bob Check W8GC, every detail of planning a regional convention was carefully worked out. A key worker was Tina Check W8HBI, who tirelessly executed the plans as developed and approved by the planning committee. In addition to finding a suitable location, W8GC brilliantly secured many corporate sponsors, such as DX Engineering, Heil Sound, Solder-It, Elecraft and many others to help defray the costs. This resulted in a lower ticket price for all attendees.

About 150 amateurs attended the convention. This significantly surpassed the attendance at prior conventions held in other locations in our division. Many came from out of town and stayed in the Sheraton suites that were reserved by the committee. This included all of the ARRL leadership for our area plus our banquet speaker and League President, Joel Harrison W5ZN. In addition to Joel, we had Division Director Jim Weaver K8JE, Vice-Director KI4LA, Ohio Section Manager Joe Phillips K8QOE and the Michigan Section Manager Dale Williams WA8EFK all participating in some fashion.

One of the great draws was the outstanding seminars featuring really popular topics and speakers such as Bob Heil K9EID and Chip Margelli K7JA of Heil Sound, Bernie McLenny W3UR, editor of QST's How's DX? column and other DX bulletins and our own John Papay K8YSE who went on the DXpedition to Swains Island recently. By the way, the planning committee chose the seminar speakers after sur-

veying many area clubs, including LEARA, for their input. Other seminar speakers included AMSAT's Eagle Satellite project manager Jim Sanford WB4GCS and ARDF expert Bob Frey WA6EZV. Finally, for those hams who had no interest in the foregoing topics, the new ARRL Emergency Preparedness and Response Manager, Dennis Dura K2DCD, gave a very interesting talk on the League's role in this area post 911.

After the banquet, which everyone agreed had the most delicious food, ARRL President Joel N5ZN gave a very interesting talk regarding the League's position on

LEARA members who actively participated in the planning and execution of the convention included Ron Jakubowski K2RJ who took sole responsibility to set up the A/V equipment in Salon 3, including videotaping all of the seminars in his room. Also, Eric N8AUC participated in the Wouff Hong ceremony held after the banquet. Marvin W8AZO, Mike, K8EHP and Bob W2THU carried out various assignments during the convention.

The following day, at the Cleveland Hamfest, ARRL president Joel N5ZN was the featured speaker at the ARRL forum, which was very well attended. This was probably the first time that the Hamfest was honored by the top ARRL official's presence.

The most memorable convention attendee was Daryl N5VLZ who actually came from Little Rock, Arkansas via Amtrak. Daryl told me that he took the train from his QTH to Chicago, then another train to Cleveland! He purchase about 50 door prize tickets and it really paid off when he won 5 different prizes. Daryl said he would donate all of his prizes to the PCARS club in Portage County because that is how he heard about the convention. Apparently, he checks into their net via Echolink.

Special awards were presented before the banquet. These included the George S. Wilson III W4OYI Great Lakes Division Award to Fred Jones WA4SWF, the Amateur of the Year Award to Bob Check W8GC and the DX Achievement Award to Ted Pauck Jr. K8NA.

I thoroughly enjoyed the convention and I highly recommend that you attend the next one, which may also be in Cleveland in 2009! -AR-

WOUFF HONG CEREMONY AT ARRL GREAT LAKES CONVENTION



LEARA — The Lake Erie Amateur Radio Association -Serving Greater Cleveland Since 1969-

VOICE REPEATERS:

53.230/R-
146.76/R-
146.88/R-
224.90/R-
444.40/R+
444.70/R+

- Highland Hills (136.5 Hz tone)
 - Highland Hills (Use 110.9 Hz tone for remote inputs in Lakewood, Newbury & Willoughby)
 - Lakewood (Requires 110.9 Hz tone)
 - Lakewood (141.3 Hz tone)
 - Highland Hills (131.8 Hz tone)
 - Lakewood (131.8 Hz tone)
- (.76, .88, .90 and .70 offer emergency and member-only autopatch lines.)

PACKET NODES: CLE1 145.01 MHz: CLE5 145.05 MHz: CLEV220 223.70 MHz

These nodes are part of the Cleveland Net Cluster in K8EIW's backbone system.

GENERAL: NBRY
NBRYX
LEARA

- 145.07 MHz & 223.70 MHz (KA-NODE)
- 145.07 MHz ↔ 223.70 MHz Gateway
- 145.07 MHz & 223.70 MHz PBBS

INTERNET:

- www.leara.org
- To subscribe via e-mail, send a message to: spirit76-request@leara.org
Put *subscribe* in the subject area and your *name* and *callsign* in the body.

Affiliated



Club

Northern Ohio



Affiliate