



The Spirit of '76 and '88



Newsletter of the Lake Erie Amateur Radio Association

Editor: Bryan A. Torok, N8OOF
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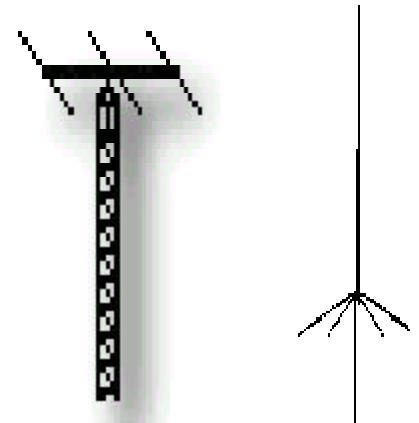
Publisher: Jeannie St. Marie, KC8MNW

This Month's Meeting

Antennas, Antennas, and more Antennas

Presented by Al Dolgosh, K8EUR

Tuesday, August 27, 2002



Please plan to join us on Tuesday, August 27th at Dinitiri's Restaurant for the August membership meeting of the Lake Erie Amateur Radio Association. This month's guest will be Al Dolgosh, K8EUR, of Amateur Electronics Supply in Wickliffe, Ohio. Before joining AES, Al worked as an Engineer with Antenna Specialists in Solon, Ohio.

Al will be on hand to share his tremendous knowledge with regard to antenna theory, design, and performance characteristics. Be prepared to ask Al all of your antenna related questions, be they mobile, base, or portable.

The meeting will be at Dimitri's Restaurant in the Mid-Town Shopping Center at Snow and Broadview Rds. and is open to all. Dinner will be served at 6:30 PM and the program will start at 7:30 PM. **If you plan to eat, reservations are required!**

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 \$14.50. 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** or leave a message on the LEARA information and voice mail line at **440-942-0154**.

August, 2002

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Bryan Torok Radio Officer	N8OOF 146.88/R
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de N8AUC . . .



July is in the books and it's on to August. Looking back on it, July was a busy month. We had the Triathlon on the 21st. Although we were a little short handed, the event went smoothly. Tom, KA8BZB organizes the troops for the triathlon every year. He does a fine job of it, and this year was no exception. Now if we can just find out who decided to tear up West 3rd Street and turn part of the run course into a construction site I'll be much happier. Although the construction barricades DID help reduce unwanted vehicle traffic on the course this year.....mmmmm....nah bad idea...never mind.



The club picnic was another smashing success on July 30. Jeff and Lori Garvas did a spectacular job setting us up for that annual event. But I would be horribly remiss if I did not mention senior assistant grill-meister Jim Ozello, N8XDO. He was serving up some fabulous burgers for us. The turnout seemed to be a little lower than normal this year - but part of that could have been the heat we've been experiencing lately. It was nice in the picnic grove though. Lots of prizes were given away with special emphasis on the little ones. That's as it should be though, since it is a family picnic.

Field Day results are in. We scored 1,486 points, which is a significant improvement over last year. We hit a lot more of the bonus categories than in 2001. Now for the bad news - when I sat down to prepare the submission for QST I noticed that they moved the deadline up a week this year. Last year the submission deadline was July 31. That's what I was working toward. This year though, they moved it up to July 23. Not much consolation in finding that on July 28. So please accept my apology for not getting the scores in for the publication deadline. I will say that we were in no danger of winning the Field Day "contest" by having the highest score, if last year's scoring is any indication. But based upon the comments I read in last month's newsletter we succeeded in our goals for Field Day. The goals were: 1) to do Field Day, 2) to get new people involved and a taste of what awaits after you upgrade, and 3) to improve our score over last year. We hit on all three. Thanks to all of you who helped on Field Day!

Pedal to the point is coming up fast. Jeff N8YNR is still looking for more hams to

(Continued on page 9)

LEARA is a not-for-profit organization dedicated to Amateur Radio and to Public Service. Club information packets and applications for membership are available from **Marv Grossman, W8AZO, 440-248-0031**, via voice mail at **440-942-0154**, 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.

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 PM. The regular meeting begins at 7:30 PM. 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** or leave a message on the LEARA voice mail line at **440-942-0154**.

Trustees' Meetings are held on the second Saturday of odd numbered months at 9:00 AM 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.

Association News

Welcome to the Club

Please join us in welcoming the following hams who recently joined LEARA and who have been formally approved by the LEARA Trustees. All will be fine additions to our Association. If you hear them on the air, say hello and make them welcome.

New Members

Todd MacMillin, KC8UNS

(Son of Jim, WA8ZHN and Gail, WD8EHL)

Alex Manuk, WD8JMM

Kelly Manuk, KC8UIX

As an additional service to our membership, LEARA would also like to recognize its members who have recently changed call signs either as the result of an upgrade or as part of the vanity call sign program.

Upgrades and Changes

Andrew Juchnowski **Old: KC8MZH**
 New: AB8MO
 Upgraded to Extra!

Tom Gimmartino **Old: KC8UFI**
 New: W8ZIP

Let Us Know

Have you recently upgraded? Did you finally get that last state for your WAS award or finally received your DXCC? Let us know. Please share your amateur radio related awards or special recognitions by sending a note to editor@leara.org

Looking Forward

August 27 - Antennas, Antennas, and more Antennas by Al Dolgosh, K8EUR

September 14 - Trustees' Meeting
 See page two for details.

September 24 - Amateur Radio Emergency Service (ARES) presented by Joe Molter, N8IDA .

October 29 - Short wave and Utility Monitoring by George Zeller and Annual Elections.

Anyone with program ideas or suggestions is urged to contact Bill Chaikin, KA8VIT, at 216-691-1038 or by e-mail at KA8VIT@ix.netcom.com

LEARA Wants YOU!

LEARA Wants Trustee Candidates

Marv Grossman, W8AZO

It's "that" time of the year again... Time to prepare for LEARA's annual election of one-third of its Board of Trustees.

To be eligible, a candidate must be a member-in-good-standing and must have joined LEARA before the August 28, 2001 deadline for nominations. Please make your intentions known as soon as possible to avoid the last-minute rush. If you are interested in running, here's what is needed:

1. A written statement from you indicating your willingness to run and serve if elected;
2. Someone to make the nomination (the Election Committee may do that, but it's better if you supply the nominator); and
3. Someone to second your nomination (same as above).

Incumbent trustees are automatically put on the ballot unless they formally withdraw.

This year's incumbents are:

Eric, N8AUC; Cliff, W8CJB; Steve, AA8MX; and John, KG8YZ. Patt, N8RKP has decided not to run for re-election.

All candidates are encouraged to submit a short bio and/or campaign statement(s) for inclusion with the election materials which will be mailed to all members-in-good-standing at least 2 weeks before the October election meeting. Submit nominations and bio/statements to one of the following Election Committee members:

Bill, KA8VIT,	ka8vit@ix.netcom.com
Bryan, N8OOF,	b.torok@en.com
Marv, W8AZO	marvg@apk.net

Get Well Soon

Get Well Cliff, W8CJB



Please join us in wishing Trustee Cliff Bade, W8CJB, a speedy and complete recovery. Cliff recently underwent bypass surgery and is now on the road to recovery. Good luck Cliff, when it's over you will be better than ever!

Association News

July Picnic Meeting

July Picnic Meeting Recap

de The Editor

If you happened to be among those who were unable to make it out to the Oak Grove Picnic Area of the Bresckville Reservation for the annual July picnic meeting, you missed some good food, good company, and lots of good door prizes.

As usual, Jeff and Lori Garvas, N8YNR and KC8MYE, did a great job pulling the details together for yet another outstanding LEARA picnic.

History repeated itself again as Jim, N8XDO, and Jeff, N8YNR, did a tremendous job slaving over the hot grill to make sure everyone had all the hot dogs and hamburgers they could eat. If anyone left this years picnic hungry, something was wrong!

A special thanks goes out to everyone who helped make this years picnic such a success. A lot of hard work went into making the event fun for everyone.



Grant, N0XIL with son Samuel



Todd Mac Millan,
KC8UNS



Becky Jessen

Check out the newsletter in color at

www.leara.org

Follow the Newsletters link on the side of the page

July Picnic Door Prize Winners

Door Prizes Everywhere

de The Editor

Food was not the only thing in abundance at the July picnic meeting, there were plenty of door prizes too! Listed below are the door prize winners from July's meeting. I did not attempt to list all of the young children who won door prizes simply because there were so many! Suffice it to say that the young kids made out like bandits. In some cases I missed the last name of non-ham winners, so I will apologize in advance for not listing everyone's first and last name.

Metropolitan Bank Triathlon T-Shirt

- ◆ Darren Turk, K8DMT
- ◆ Patt Mc Clain, N8RKP
- ◆ Grant Hedrick, N0XIL
- ◆ Robin Jessen, KC8AWO
- ◆ Ben Wawzyniak, K8IV
- ◆ Alex Manuk, WD8JMM
- ◆ Bryan Torok, N8OOF
- ◆ Jeannie St Marie, KC8MNW
- ◆ Kim Koehler (Fiancé of Mike DiTurno, KC8OWL)
- ◆ Katrina

Kitchen Pot Holder and Towel Set

- ◆ Kelly Manuk, KC8UIX
- ◆ Karen, Friend of Patt, N8RKP

Reusable Trash Bag

- ◆ Elizabeth Kimball, daughter of Tom Kimball, KA8BZB
- ◆ Mark Studer, KC8FQV
- ◆ Carol Ozello, wife of Jim Ozello, N8XDO
- ◆ Meredith

Hamfest Tickets

- ◆ Bill Marx, K8WJM (Columbus Hamfest)
- ◆ John Pearl, K8RWR (Medina Hamfest)

800 MHz Motorola Mobile Antenna

- ◆ Mike DiTurno, KC8OWL
- ◆ Bob Winston, W2THU

Flashlight Set

- ◆ Tom Long, N8QXA
- ◆ John Radney, KC8FOC

Camping Cooler

- ◆ Eric Jessen, N8AUC
- ◆ Cecilia Wawzyniak, W8FST

Tool Box

- ◆ Don Raith, N8DJG

Public Service

Ham Radio Public Service eGroup Started

By Tom Kimball, KA8BZB

I have started an e-Group on Yahoo so that event organizers can disseminate information to hams in the Cleveland area regarding various opportunities to participate in public service events.

The group is called "CLEVELAND-PUBLIC-SERVICE" and is open to anyone interested in receiving e-mails regarding ham radio participation in public service events. To prevent SPAM®, the group will be moderated. Only timely messages and periodic (monthly) reminders of upcoming events will be sent to subscriber's e-mail accounts.

The associated web site for the group has a calendar feature and we will archive messages for up to a year. You may put notices of upcoming events directly in the body of the message or you may use an attachment. The group is also set up to directly respond to a poster of a message so you can directly let the coordinator of the event know that you're interested.

This is sort of a "run it up the flagpole" endeavor. It is not affiliated with any particular club. Please pass this on to your club newsletter editor and any other folks who might be interested.

The basic addresses are as follows:

To Post a message: Cleveland-Public-Service@yahoogroups.com
To Subscribe: Cleveland-Public-Servicesubscribe@yahoogroups.com
To Unsubscribe: Cleveland-Public-Service-unsubscribe@yahoogroups.com
Email List owner: Cleveland-Public-Service-owner@yahoogroups.com

Suggestions and comments are appreciated. Let me know what you think. I can be reached at any of the following:

Voice – Home – 216-371-2832

Voice – Work – 216-828-9380

Email - ka8bzb@att.net

Fifty Cents and Fifteen Minutes

By Marc Flanagan, KC8SIE

What does Amateur Radio mean to the general public? What SHOULD it mean? We provide emergency, essential, and third-party communications for the public, and they should know that. It's our job to tell them.

John, KC8FOC, told me that he had written a letter to his local Police Chief explaining what amateur radio operators offer. His letter explained that we are NOT cop "wannabe's", just two-way radio operators that can be operational at a moment's notice without commercial power, for free. He told me this at Field Day, where we got no media attention.

I decided to write letters too; to my local Police Chief

and, as a County employee, to the County Commissioners.

Can you imagine what a great "ripple effect" we'd get if we ALL did this? By next year they'd be ASKING when Field Day is!

So here's my suggestion: Let's each write ONE letter to a local official, the media, and a public service organization telling them about the service we provide. Include LEARA's e-mail address and/or contact number. Let's let them know that we're here and we're ready.

What's your investment? About fifty cents and fifteen minutes. I figure that is the cost of a stamp, envelope, and the time it takes to write a letter. What's the return on your investment? Publicity and public appreciation! Sit down and do it!

Public Service

2002 July 4th Kiwanis Parade

By Fred Collins, W8ADW

The Kiwanis Club of Westpark would like to thank both the Lake Erie Amateur Radio Association and those amateur radio operators who were able to help with communications during the annual July 4th Kiwanis parade.

This years parade stretched out to approximately 1 mile in length which helped make keeping each of the three sections coordinated a bit challenging. As usual, Robin Jessen, KC8AWO, did a wonderful job keeping everything moving smoothly as parade net control. Robin was clearly a "Kilo-Cycle Orchid".

A special thanks goes out to the following amateur operators who helped make this event such a success:

Eric Jessen, N8AUC Robin Jessen, KC8AWO
 Pat Sweeney, KC8TBD Don Rupanovic, KC8BQR
 Marc Flanagan, KC8SIE John Radney, KC8FOC
 Dan Schlick, KB8LKH Steve Kinosh, KB8UTA
 Fred Collins, W8ADW

By the way, word has it that Fred, W8ADW, and a friend of his sprung for breakfast for everyone before the parade!

Cleveland Clinic Sports Health River Run

September 8th



The Half Marathon starts at 8:30 A.M. at Wallace Lake in Berea, elevation 774 feet above sea level, and finishes at the Memorial Fields in the Metroparks in

Rocky River, 604 feet above sea level. This downhill course promises to be a fast, competitive race. This is a point-to-point course. The course will remain open until 11:30 a.m. New for 2002 will be a 12 mile inline skating event and the ERC Corporate Division Half Marathon.

Volunteers are needed to provide amateur radio communication along the course. Please contact Eric, N8AUC, at 440-734-3146 or n8auc@hotmail.com to volunteer.

2002 Multiple Sclerosis Pedal to the Point

August 17th and 18th

Jeff Garvas, N8YNR



This year marks the 16th Anniversary of the North-east Ohio Chapter of the National Multiple Sclerosis Society's annual PEDAL TO THE POINT.

I have been an active volunteer for this incredible cause since I received my license in 1993 and I have looked forward to every year with great anticipation.

For the past few years I've taken on the role of coordinating this sincerely help I can Unlike service stretched miles of Berea and Ohio. Al-bicyclists to and back Point. Some four hundred volunteers are needed for this event, including a significant amount of dedicated hams with equipment!

**Amateur Operators
Still Needed for this
Awesome Event!**

**Please call Jeff with
Questions or to
Volunteer**

216-552-4368

event, and I need all the possibly find. most public events, P2P is over 100 road between Sandusky, most 2000 will ride both from Cedar

This two-day event offers meals, food along the event at rest stops, a volunteer t-shirt, and the opportunity to contribute to a great fundraising cause. You can volunteer for any amount of time for either day, but we really need quite a few of you all over the place. Don't let the scope of this event intimidate you; it's a great way to get into public service events! To volunteer please send an e-mail to jeff@mspedal.org or leave me voicemail at (216) 552-4368 with your phone number and availability. Please do me a favor and spread word of this event with every other amateur radio club you know of.

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Public Service

Amateur Radio to the Rescue

Ham Radio Instrumental in Mountain Rescue

The ARRL Letter Vol. 21, No. 31

Two stranded mountain climbers, one of them injured, have Amateur Radio to thank for helping to rescue them from Montana's highest peak August 1. For 32 hours, hams and scanner buffs across Montana witnessed first-hand the harrowing rescue operation, which was coordinated through Amateur Radio, the climbers' only means of communication.

Sixty-one-year-old Roger Kaul, K3TM, of Maryland and his 35-year-old nephew Clint Kaul of California, both seasoned climbers, were within 200 feet of the 12,799-foot summit of Granite Peak when a rock pulled loose, sending the younger man down an extremely steep-faced slope of jagged rock, injuring him. Stranded precariously on a ledge and without ropes some 35 feet above his nephew, Roger Kaul used his hand-held transceiver to call for help through a repeater in Billings.

Kaul's plea was heard across Montana via the Montana Repeater Link Association system. Kent Grabau, N0SQM, a member of the Livingston (MT) Fire Department, established the initial, and only, communication link with the stranded climbers from the mobile unit in his pick-up truck, parked next to the Livingston Sheriff's office. Later, Steve Longacre, AB7MV, of Longacre Communications Equipment Service, set up his company's communications trailer as a command center. Fortunately, K3TM was running his radio off an external battery pack of 8 D-cells.

High winds on the mountain prevented an immediate helicopter rescue attempt, so two search-and-rescue teams began the arduous trek up the mountain (a third eventually headed in from the other side of the mountain). In the meantime, Roger Kaul was able to maneuver himself and his nephew to a more favorable rescue location.

Stuck on the mountain overnight in freezing or near-freezing temperatures and with dwindling food and water, the climbers maintained an hourly contact schedule with the command center in Livingston. A second helicopter rescue attempt early on August 1 proved especially frustrating. Although the climbers could see the helicopter, and K3TM was able to make direct radio contact on 146.52 simplex, the steep terrain prevented the chopper pilot from deploying a long-line extraction cable.

After the second failed attempt, a crack team of rangers from Grand Teton National Park was called in from Jackson Hole, Wyoming, to take the pair off the peak. At around 6:30 PM on August 1, the rangers' helicopter was able to land a rescue team near the stranded pair, remove them from the mountainside and transport them to medical treatment.

Clint Kaul suffered a sprained ankle and knee and had broken three bones in his right hand. From his hospital bed, he said he was very glad his uncle had his ham radio along. "The alternative was to wait for someone to stumble across us," he said. Both climbers expressed their gratitude to the rescue workers and ham radio operators who had cooperated to get them off the mountain.

In all, 30 people from the Gallatin County Ham Radio Club, Park and Stillwater counties, and the National Forest Service helped in the rescue. The ARRL thanks Lyndel Thiesen, N7LT, for contributing information used to develop this account.

LEARA members can now receive the newsletter via e-mail, compressed in Adobe pdf format. The software required to view the newsletter, Adobe Acrobat Reader, is available for **free** on the internet by following the link on the club's web site.

By signing up for this **free** service, you will no longer have to worry about receiving a soggy newsletter in the mail nor will you have to continue imagining what all of the graphics and pictures look like in color.

To subscribe via e-mail, send an e-mail message to: spirit76-request@leara.org

In the subject area of the e-mail enter the word subscribe and in the body of the message enter your call sign and your name. Those who subscribe via e-mail will no longer receive a printed copy of the newsletter via U.S. Mail.

The International Space Station on 2 meters

Working the International Space Station

By Bill Chaikin, KA8VIT

The club picnic turned out to be very exciting for me. While Eric N8AUC was calling the door-prize ticket numbers, Dave WB8APD, Bob W2THU and a couple others beside myself were able to catch the International Space Station (ISS), on 2-meter FM voice working stations with just a HT and a rubber-duckie antenna.

For most of the ten-minute pass we were able to hear Valeri Korzun RZ3FK, ISS Expedition 5 Commander making one contact after another in rapid-fire succession. The signals, weak and scratchy at first quickly shot up to S9 and better as the spacecraft rose above the horizon. Signal strengths pretty much stayed this way until near the end of the pass when they quickly dropped and faded back into noise.

This was cool because up until now I had only been able to copy Earth-to-Earth packet going through the on-board digipeater with the exception of one time. I was able to catch the ISS making a scheduled ARISS/SAREX contact with a school in Pennsylvania while sitting in the car in my office parking lot.

Catching the ISS working stations came after months of trying. The reason for this I have come to learn is that the astronauts/cosmonauts crew's are only allowed to work the amateur radio equipment during their sleep time or other scheduled "free" time unless it is some officially sanctioned activity (like the ARISS/SAREX stuff). What this means is that besides requiring an orbit or pass that brings the space station into view of our station location, the pass has to fall within the crew's sleep or "free" time.

Before you can hear or work the ISS you have to know when it is going to be in view or when the space station is above the earth's horizon from the observer's location. This requires obtaining or generating orbital or pass predictions for the ISS orbits. These pass predictions will tell you when the ISS will be in view, at what azimuth it will cross the horizon when ascending into view, what direction the pass will take, (e.g. east to west, west to east, etc.), the max elevation in degrees, (i.e. 90 degrees would be a pass that traverses directly overhead), the azimuth at which it will cross the horizon when descending out of view, and the total time of the pass.

Obtaining pass predictions can be done a number of ways. Probably the easiest way is to logon to the Heavens Above web site at <http://www.heavens-above.com>. This web site has up to date information on a number space objects and can generate pass predictions for them. When you register on the web site (just a name and password) you can enter your location. The web site will use this location when you

ask it to generate your orbital or pass predications.

Another way to obtain pass predictions is to generate them yourself using a satellite-tracking program that runs on your computer. Beside the satellite-tracking program you will need a set of TLEs or Two-Line Elements, (also know as Keplerian data) for the ISS. TLE's are a set of reference numbers that define a space object's orbit and can thus be used to calculate future orbits. These TLE's are generated by US SpaceCom/NORAD and other entities and released for use. As long as you have a fairly recent set of TLE's the pass predictions generated by your satellite-tracking program will be accurate.

My favorite satellite tracking is SatScape version 1.8.7 available at <http://www.satscape.co.uk>. This is a wonderful program with lots of options. It also has a built in utility to download TLE's from the Internet. TLE's can also be downloaded from a number of other Internet sites including the AMSAT site. I usually download mine from <http://www.celestrak.com>.

Once we have our pass predications we can simply tune to the downlink frequency just before the beginning of the pass and listen. The worldwide downlink frequency for both packet and voice is 145.800 MHz. The voice uplink frequency for Region 2 is 144.49 MHz. The worldwide packet uplink frequency is 145.99 MHz. More information on ham operations aboard the ISS can be found at <http://ariss.gsfc.nasa.gov> or by doing a yahoo or google search.

Within a minute or two of the predicted time you should either hear packet bursts or one the crew talking. At certain times you may hear nothing at all. For various reasons such as crew EVAs, power budget problems or spacecraft docking operations the digipeater is shutdown. Because of Doppler shift, I typically start listening with the VFO of my HT set at 145.805 MHz. As the pass progresses about a third of the way through, I tune down 5 kHz, to 145.800 MHz. As the ISS passes by and starts heading away from my location, I tune down another 5 kHz to 145.795 MHz. I keep the uplink frequency of 144.490 MHz set in a memory channel because my HT doesn't have dual VFOs.

It doesn't take much power or antennas with az-el rotors to work the ISS. For packet, 5 watts of ERP and an omnidirectional antenna will do it. For voice, 5-35 watts ERP will do the trick.

This should be enough information to get you started. Happy hunting.

de KA8VIT

2002 Hamfest Listing

August

17 **Portsmouth Radio Club**
 Contact: Kim Lozier, KJ8WW
 Phone: 740-456-1616
 Email: kj8ww@zoomnet.net

18 **Warren ARA**
<http://hamgallery.com/warren>
 Contact: Renee McCaman, KB8SVF
 Phone: 330-847-8478
 Email: mccaman@cboss.com

September

8 **Findlay Radio Club**
<http://www.findlayradioclub.org>
 Contact: Bill Kelsey, N8ET
 Phone: 419-423-4604
 Email: kanga@bright.net

22 **Greater Cincinnati ARA**
<http://CincinnatiAmateurRadio.com>
 Contact: Jim Weaver, K8JE
 Phone: 513-459-0142
 Email: k8je@arrl.net

22 **Hamfest Association of Cleveland**
<http://www.hac.org>
 Phone: 1-800-CLE-FEST
 Email: info@hac.org

de N8AUC Continued

(Continued from page 2)

help out. So if you're interested in helping please contact Jeff and let him know.

September 8th is the second running of the Cleveland Clinic River Run. This half-marathon runs through the Rocky River Metroparks from Berea to the Memorial Ball Fields, north of Lorain Road. About 15 hams are needed for this event. If you're interested in helping please contact me. My phone number is listed just on the inside front page of this newsletter.

Finally, on a side note - I found out at the picnic that Todd MacMillan passed his technician license. Todd is the son of LEARA Trustee Jim MacMillan, WA8ZHN. Todd told me that he HAD to do it because both his parents possess "extinct" ham licenses. Jim has an Advanced and Jim's wife is a Novice. So...that's all for this month. See you at Dimitri's on August 27!!!

73 de N8AUC

Volunteer Exam Dates and Locations

<u>Date</u>	<u>Location</u>	<u>Contact</u>	<u>Phone</u>
8/18	Elyria	Charles S. Hall	(440) 327-3832
9/8	Independence	Gary Dewey	(216) 642-1399
9/15	Elyria	Charles S. Hall	(440) 327-3832
10/5	Wickliffe	Scott Farnham	(440) 256-0320
10/20	Elyria	Charles S. Hall	(440) 327-3832
11/10	Independence	Gary Dewey	(216) 642-1399
11/17	Elyria	Charles S. Hall	(440) 327-3832
12/7	Wickliffe	Scott Farnham	(440) 256-0320
12/15	Elyria	Charles S. Hall	(440) 327-3832

Elyria - Red Cross Building, 2929 West River Rd., Elyria, OH. Tests are given at 1:00 PM Park in the rear of the building and enter through the back door.

Independence - Independence Town Hall, 6652 Brecksville Rd. Doors open at 9:00 AM. Pre-registration is appreciated one week prior to test date, although walk-ins are welcome.

Bentleyville - Bentleyville Town Hall. Testing begins at 9:00AM.

Wickliffe - Amateur Electronic Supply (AES), 28940 Euclid Avenue. For reservations by mail, write to Scott Farnham, 10418 Briar Hill Drive, Kirtland OH 44094-9464. Include a 610 form, a copy of current license, and a check for \$10.00 written out to "ARRL/VEC". Walk-ins are welcome. All other exams begin at 1:00 PM. Do NOT call the store for information on VE testing.

****HAMFESTS** - Many hamfests provide VE testing.

INSTRUCTIONS FOR TEST CANDIDATES

To qualify for VE testing you must bring the original and copies of your current license and CSCE forms (if applicable), proof of identity, i.e., photo ID, or two other forms of identification, and the examination fee. ARRL VEC's exam fees have increased to \$10.00. Check with the contact person in advance for specific testing site requirements.

All VECs have agreed to adopt the policy requiring CSCE forms to be signed by any applicant receiving CSCE credit. Make sure you sign your CSCE before your copy is removed from the carbon copies that are used for processing your license or upgrade.

Those requiring special consideration, such as Braille exams or special hearing equipment for CW testing, should contact the testing organizers at least two weeks before the test session.

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LEARA—The Lake Erie Amateur Radio Association

VOICE REPEATERS:

- | | |
|------------------|--|
| 53.230/R- | • Highland Hills (136.5 Hz tone) |
| 146.76/R- | • Highland Hills (Use 110.9 Hz tone for remote inputs in Lakewood, Newbury & Willoughby) |
| 146.88/R- | • Lakewood (May require 110.9 Hz tone) |
| 224.90/R- | • Lakewood (141.3 Hz tone) |
| 444.40/R+ | • Highland Hills (131.8 Hz tone) |
| 444.70/R+ | • 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 | • 145.07 MHz & 223.70 MHz (KA-NODE) |
| NBRYX | • 145.07 MHz ⇔ 223.70 MHz Gateway |
| LEARA | • 145.07 MHz & 223.70 MHz PBBS |

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