



The Spirit of '76 and '88



Monthly Newsletter of the Lake Erie Amateur Radio Association
... Dedicated to Amateur Radio and to Public Service ...

Editor: Mike DiTurno, KC8OWL
Associate Editor: Bryan Torok, N8OOF

Publisher: Jeannie St. Marie, KC8MNV

April 2004 Edition

About LEARA

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, 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. For reservations, please call Marv Grossman, W8AZO at 440-248-0031 or submit your reservations on-line at www.leara.org.

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.



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April 2004 Meeting Program

Digital Signal Processing (DSP) Tuesday, April 27th

Presented by Dr. Marc Buchner, NB8T

Please join us on Tuesday, April 27th for the next meeting of the Lake Erie Amateur Radio Association where, the presentation will be all about the latest craze in cell phone—and ham radio—technology: digital signal processing (DSP). Ever wonder how it works, what's so great about it? For example, DSP can make it possible for DX'ers to hear a very attenuated signal with significant improvement in the signal-to-noise ratio. Join us as our guest speaker, Dr. Marc Buchner, a member of the faculty in Electrical Engineering and Computer Science at Case Western Reserve University and also a (currently non-practicing) ham, gives us the low-down on just how that happens. He'll explore how DSP works and how it benefits us as hams.

Membership Meetings are held the last Tuesday of each month except

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SKYWARN Affiliated Club

Cuyahoga County
SKYWARN Activity can be
Found on LEARA's
146.760 Repeater
(- offset) 110.9pl

An American Radio Relay League Affiliated Club
www.arrl.org

Mark your calendars now for

FIELD DAY 2004

June 26th and 27th



Meet the Board of Trustees

President	Bob Winston, W2THU 216-771-3314 w2thu@leara.org
Vice-President, Net Manager	Eric Jessen, N8AUC 440-734-3146 n8auc@leara.org
Vice-President, Trustee	Alex Manuk, WD8JMM 216-459-8523 wd8jmm@leara.org
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Additional Points of Contact

Sunshine	Don Raith, N8DJG 216-921-7546
Newsletter Staff	editor@leara.org
LEARA Web Site	www.leara.org

de W2THU . . .



This past Sunday I was doing something that I rarely do. I watched the last hour of the Masters Golf tournament while attending a dinner party at a friend's house. If you are not familiar with professional golf, this is one of the most prestigious events in the golfing world. One of the guests, who was an obvious fan of the game, proclaimed that watching the Masters was like being in heaven. He even stated that when he dies, he wants to be viewing this particular tournament.

I immediately identified with this passion for a hobby. I have stated many times to friends, family and in this very column that the Dayton Hamvention® is ham radio heaven. It's sort of like Mecca. Every ham needs to go at least once. (But I like to go every year.) Living here in Northeast Ohio we are fortunate to be only 3.5 hours away. Most hamfests last for a day, usually 6 hours or so. They have a few exhibitors, a small flea market and maybe a speaker or two. The big attraction is the camaraderie.

But Dayton endures for three full days, has hundreds of indoor exhibitors, thousands of outdoor flea market stands, dozens of seminars and many unofficial activities during all three evenings. The finale is the staggering ham radio give away when over \$100,000 worth of door

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IRLP Node 4282 is On The Air

de The Editor

Thanks to the hard work of Jeff Garvas, N8YNR and a few other members of the Board of Trustees, LEARA's Internet Radio Linking Project (IRLP) node, number 4282, is up and is on the air.

The east-side 70cm repeater, 444.400 + offset, 131.8Hz pl has been reconfigured to serve as the club's IRLP machine. When not connected to an IRLP node the repeater may continue to be used as a regular repeater.

All licensed amateurs with a Technician class license or higher are encouraged to give it a try. For more information on the IRLP and for best-practice operating procedures, please see www.irlp.net.

The *Spirit of '76 & '88* is published monthly except in December.

Editor:
Michael A. DiTurno, KC8OWL
editor@leara.org

LEARA News

February 2004 Door Prize Winners

de The Editor

Below is a summary of the door prize winners from the February 2004 club meeting.

Free Dinner at a LEARA Club Meeting

Jeff Brown, N3OYQ

12V 1.5A Switching Power Supply

Sara Cechner, KC8KSU

Digital Multi-Meter

Anthony Weaver, KC8RXD
Tanya Sottosanti

Vehicle Jumper Cables

Mike Siracusa, N8OQY

50/50 Raffle:

Bill Patrick, KC8WIB

Congratulations To All

Looking Forward

Please feel free to contact the 2004 Program Chairperson, Sara Cechner, KC8KSU with any tips or ideas for upcoming meeting programs.

May 25th: Ohio MARCS System — Darryl Anderson

June 26th and 27th: Field Day Weekend—Meeting will be at Field Day site on Saturday

July 27th Annual Picnic Meeting

Check It Out!

**To see this newsletter in color,
please go to
<http://www.leara.org/newsletter>**

New Vice-President Nominated

de The Editor

Please take a minute to congratulate Alex Manuk, WD8JMM on his new role as the 2nd Vice-President of the Lake Erie Amateur Radio Association. I'm confident Alex's up-beat attitude and love for amateur radio will help bring new life to the club.

Welcome to the Club

Please join us in welcoming LEARA's newest members. If you hear him on the air, be sure to pick up the mic and say hello!

Ed Rivers, W8IE

Phil Isard, WF3W

March Meeting Recap

By Sara Cechner, KC8KSU

***** Disaster Averted at Skywarn Meeting *****

Our forecast for the March Skywarn meeting was somewhat doubtful, at first; dinner was rushed for an early start, and then there was a delay due to technical difficulties with the equipment which required a trip to the local Radio Shack for a replacement video cable. Once that excitement was smoothed out, the 'weather' cleared, and speaker Gary Garnet once again gave a stellar presentation on the finer points of spotting weather in Ohio.

One of the key points was that if you spot tornadic activity, and it happens to be coming at you, turn around and go to safe shelter! Fortunately, we see lots more downbursts than tornados in Ohio. But they also can be dangerous, as can flooded roadways, lightning, and the other attendant hazards of bad weather that a spotter might encounter. The point is, as much as the National Weather Service values the services of spotters, it's best to remember: safety first!

The presentation was well-attended. There was one exciting announcement for southwesterly Skywarn

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LEARA News

April Meeting ... continued

(Continued from page 1)

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 (except March 2004, see above). Meetings are open to all interested persons. You may attend without eating, but reservations are required if you do wish to eat. Dinner is \$14.50 per person and includes your choice of Sirloin Steak, Chicken Parmesan, or broiled Boston Scrod. All entries include potato, vegetable of the day, coffee, iced tea, desert and gratuity. A vegetarian selection is also available upon request. For reservations, please call Marv Grossman, W8AZO at 440-248-0031 or submit your reservations on-line at www.leara.org.

March Meeting Recap ... Continued

(Continued from page 3)

spotters: there are plans to put up a new transmitter in Grafton to cover Lorain and the southwest portions of Cuyahoga County.

For those of you who were not able to attend the meeting, you are welcome to attend any of the other skywarn presentations being held in our 32-county region. Just visit the NWS Cleveland Office's website to look up where one might be convenient to you: <http://www.erh.noaa.gov/cle/>

If you're interested in becoming a ham radio affiliate of Cuyahoga County Skywarn and learning more about participating in severe weather nets, you can contact Matt, KC8NZJ at kc8nzj@adelphia.net, or visit their website for more information: www.ccs.w.us .

Cuyahoga County Skywarn

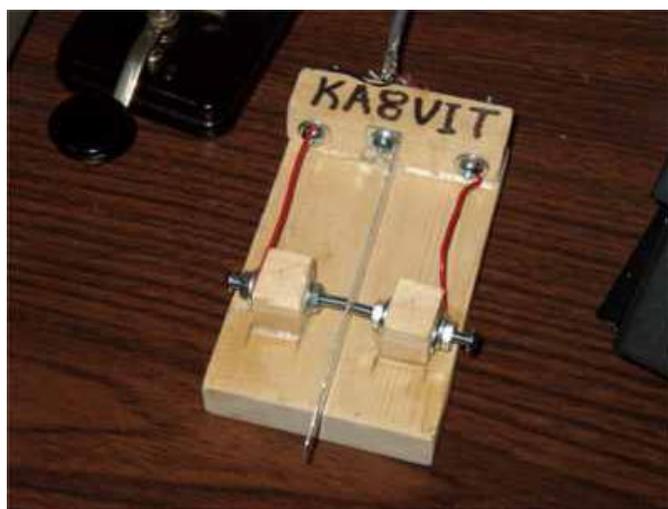
<u>TX MHz.</u>	<u>RX MHz.</u>	<u>PL Hz</u>	<u>Comments</u>
146.160	146.760	110.9	VHF Primary
146.280	146.880	110.9	VHF Alternate
447.125	442.125	82.5	UHF Alternate and coordination

The VIT Paddle

By Bill Chaikin, KA8VIT

Here is a homebrew single lever paddle that I put together this past weekend. I got the idea from an article on www.eham.net by Mark Oring, AG4RQ. His original article <http://www.eham.net/articles/7114> can be viewed by clicking on the link. I had seen Mark's article back in December 2003 but had not given it much thought.... that is... until a ham friend took back his paddles that I had been borrowing for quite a long time. It didn't take too many QSOs after that until I started getting a glass arm 15 minutes into a contact.

Having already spent my ham radio budget for the next 20 years on my Kenwood TS-870S, I can't afford to buy a set of Bencher Paddles. That's when I remembered Mark's article. After looking at Mark's article again I went out to the garage to see what kind of scrap I had that I might be able to use. I already knew I had a few of the computer card "L" brackets down in the basement. (The small "L" bracket that is removed from a computer when a new card is put into it is what is used as the paddle blade).



It doesn't take a lot to put the paddle together. I used a piece of 5" x 3" x 1/2" pine I had laying around in the garage along with a 6" piece of 3/4" x 3/4" stock, which I glued together to form the base. Also used were three 1-1/4" 8-32 machine screws and two 1-3/4" 8-32 machine screws. Each screw also had three small washers and associated hex nuts. A couple of short pieces of #18 solid copper hook up wire completed the unit. The biggest cost in this project was the shielded 1/4" stereo phone plug needed to plug the paddle into my TS-870S. That and 6 feet of shielded cable. Both together cost me about \$3.95 at Radio Shack.

Adjusting the paddle wasn't hard. I adjusted it so that the contact screws were touching the paddle blade on

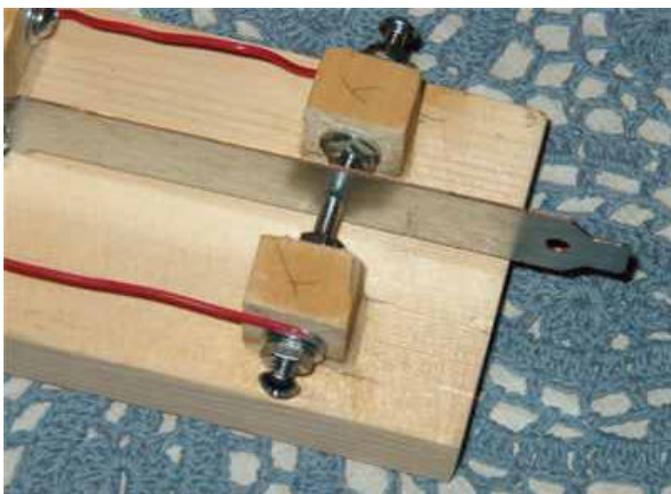
(Continued on page 5)

VIT Paddle ... continued

(Continued from page 4)

both sides and then backed off about 3/4 of a turn on each screw leaving a small gap. I hooked it up to one of my keyers to see if it really worked and to check the action and gap. All seemed ok. I then hooked it up to my rig for the big test.

The biggest surprise came when I tried out my new paddle. Not only did it work. It worked so well that I doubt I will ever buy those Bencher Paddles now! I practiced with my new paddle using the sidetone on my rig for about five minutes and then went on the air. I made 16 contacts with it this weekend and am just tickled pink. One last thing I want to do is to hot glue some medium sized buttons or such to the paddle blade to act as the paddles and insulators.



Many thanks to Mark Oring, AG4RQ for his original idea.

73,
Bill KA8VIT

What Really Happened to .76?

By Bill Chaikin, KA8VIT

Over the last few weeks I have been asked some interesting questions. "How bad was the fire at the 76 site?" And, "What else did the lightning take out when it hit 76?" Or, "Is it true someone sabotaged the 76 machine?" My first thought to these questions is, "Where does this stuff come from?!"

What really happened to 76? Time and Mother Nature. It's pretty much that simple. No fire, no lightning hit, no sabotage. The commercial, four-bay, folded dipole antenna that had been at the 76 site had been there for some ten years. Sitting up there on top of the world... ok, the hospital... up high and out in the open. Ten

long, hot summers and ten long, cold winters along with all the wind driven rain, sleet, snow and ice that the Cleveland Weather Gods could throw at it. As good as an antenna as it was, it was no match.

The antenna had probably been dying for a while. Its output and signals had degraded for a time and when the repeater became almost unusable due to low signal strength and garbled audio a trip was made to the site. During this visit it was determined that there was high SWR on the transmission line and antenna and that there was nothing that could be done about it at that time, so the repeater was shut down. (The four-bay folded dipole antenna is the vertical antenna on the right side of picture #1).



Picture 1 — Four-Bay Folded Dipole on Right

Not knowing what exactly was wrong with the antenna it was decided after some discussion that a return trip to the repeater site would be made so that the commercial four-bay could be taken down and temporarily replaced with a "amateur" grade vertical antenna until the four-bay could be fixed or replaced.

The trip to the repeater site to swap antennas was made and then aborted when high winds and heavy rain made working on top of the hospital too dangerous. Another try was made about a week later. The removal of the four-bay and the mounting of the replacement antenna was a success and the 76 machine has been back on the air ever since. Because of the power limits of the replacement antenna, the power amp that is normally engaged during nets, Skywarn and drive time has also been taken off-line.

Later inspection revealed that water had gotten into the antenna and froze, splitting some of the dipole mounting hardware and eventually causing some of the phasing lines to become detached from two of the dipoles. At this point it doesn't look like the antenna can be fix or salvaged, but we haven't given up yet. All

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Homebrew — And I'm Not Talking about Beer

By Steve Kinosh, KB8UTA

One of the things that I think first attracted me to amateur radio is the fact that a lot of the equipment is homebrew. Not as much as in the past, at least not the radio end of it, as its getting harder and harder to find sources for parts and the parts are getting WAY too small for my eyes and large hands.

One of the largest aspects of homebrew is antenna building. Who has NOT made a dipole out of twin lead or a 2 meter ground plane or j-pole. Nothing more rewarding than getting that aluminum or copper monster up in the air and then hearing and being heard with it. So far I have built the basics, as well as a 2 meter 3 element quad out of PVC and fiberglass arrow shafts as spreaders. With this home brew antenna at 25 feet, I have logged 2 meter SSB contacts as far away as South Carolina and Wisconsin.

I have a 6 meter rotateable dipole made from aluminum electrical conduit at 30 feet and have contacts into Southern Florida and New York. QST just published an article on a 6 meter Moxon antenna (really gaining popularity) and I have just ordered the aluminum tubing to start construction. I am going to replace the dipole as soon as it is finished and if you get the this years field day, you will see one in operation as well as the 2 meter quad (Eric, I'm gonna get as many VHF points on 2 and 6 as the rest of you guys on all the HF bands combined) - BTW, Steve N8TUA, HELP !!!!!!!!

If you haven't tried a homebrew antenna, get into it. I have seen quite a few examples of home brew antennas as well as a really cool portable PVC mast assembly at the last couple of field days. There are a lot of construction articles in QST, CQ, and on the web. Have fun building and look for me on 6!

RTTY is the Old Hat Digital Mode

By Joe Phillips, K8QOE
ARRL Ohio Section Manager

I keep this old pork pie cap, which was fashionable in the 50s, in a closet just in case such a hat will come back in fashion. Thank the Lord I wasn't into RTTY then or I'd probably keep one of those massive teletype machines around. Fortunately for RTTY devotees, the mode is now working with much smaller equipment. And never goes out of style.

At least not in the ham shack of Jim Kimmel, W8FEJ, of Mason, who has written about RTTY for years. His latest piece was a page one story in "HF

Chronicles" (newsletter of the West Chester ARA). This mode is a lifelong dream to Jim.

In amateur radio, radio teletype (RTTY) is a century old communications mode which has changed equipment but never really dropped from sight. It is the first true digital mode of amateur radio - moving text from typewriter to typewriter for almost a century now. Started early in the 1910s when electrical energy was moving text and graduated to where electrical energy moved into telegraph lines. Then on the air as a broadcast mode in the 30s and on to teletype into the 40s, RTTY was used extensively in that small war we fought then. After the war, the commercial interests, particularly journalism, made the teletype machine a part of our society. RTTY had through these years developed from a simple typewriter to one fixed up with relays, contacts and magnets.

From the mid-40s until the late 70s, those RTTY enthusiast would lug huge mechanical teletype machines (most popular was Teletype Corp. Model 28) from shack to hamfest and back again. These were the ultimate boat anchors. WHY? Because they resembled mail collection boxes you'd find on any neighborhood street corner. Often a RTTY ham would have three or four in his shack which made it looked like a small newspaper office.

Then the Burroughs Corp. started the VIC-20 computers (most popular of the earlier computers used for RTTY) and this digital specialty was practiced in smaller and easier to carry packages. The rest is current history.

RTTY, Jim writes, needs little computer memory. Up to date equipment is available from manufacturers such as MFJ and cheap. There are other more popular digital modes at the moment (PSK-31 comes to mind) but none have RTTY's extensive history. In Southwest Ohio, the Midwest RTTY net (nightly on 3607 MHz) has been on the air for a long time and continues.

You may wonder why I spend any time on this. There are more important ham radio issues to comment on - BPL, Spectrum Protection Act, antenna legislation, and the like. But I never forget, and I don't want anyone else to forget, that we, as ham radio operators, are first a technical society. Thank you Jim.

For a complete list of all northeast Ohio public service volunteer opportunities please see the Northeast Ohio Public Service Volunteer web site at:

www.neopsv.org

Public Service and Emergency Communications

2004 Rite Aid Cleveland Marathon

By Mike DiTurno, KC8OWL



One of the first big opportunities of 2004 to help make a difference through amateur radio is coming up on Sunday April 25th, 2004.

Amateur radio volunteers are needed to staff the 2004 Rite Aid Cleveland Marathon. Our role as amateur radio volunteers is critical in helping to ensure the safety and security of race participants and spectators by taking positions along the route and relaying information back the central communications tent where race officials and EMS dispatchers will be located.

Whether it's injury, severe weather threats, dangerous intersections, or any number of other possible threats, amateur radio volunteers are the only way to effectively monitor and report on events in real-time over the 26 mile route.

Please consider volunteering for this highly visible event. Any amount of time or service you can volunteer will be tremendously appreciated. **Please contact Mike DiTurno, KC8OWL by phone at 216-898-1891 or by e-mail at kc8owl@yahoo.com** for questions or to volunteer. For more information on the marathon, please see their web site at www.clevelandmarathon.com.

2004 March of Dimes WalkAmerica

By TJ Powell, N8UIR

The March of Dimes will be holding it's annual WalkAmerica this spring.

The March of Dimes is looking for Communications (Ham) and Medical Volunteers to staff the events. Additional information about the events follows:

WALKAMERICA Botanical Gardens (Wade Oval)

May 1, 2004 (Saturday) (07:00 AM to 01:00 PM)
2000 Participants (estimated). 6-8 Medical Volunteers (First Responder Level and Higher) and 6-8 Communications Volunteers are Required.

WALKAMERICA Geauga Lake (Six Flags)

May 2, 2004 (Sunday) (07:45 AM to 01:00 PM)
2000 Participants (estimated). 6-8 Communications Volunteers are Required.

If you are interested in volunteering please send an email to T.J. Powell at tjpowell@neopsv.org

ARES Support in Wildfires

Article taken from www.arrl.org

Amateurs assisting Red Cross in Colorado fire: At week's end, Amateur Radio Emergency Service (ARES) members were supporting American Red Cross shelter operations in northern Colorado, where a wildfire had prompted voluntary evacuations of residents in a threatened subdivision. ARRL Colorado Section Emergency Coordinator Rob Roller, N7LV, says the latest word he has is that between six and eight amateurs per shift are supporting the shelters. It's anticipated they'll continue that coverage through the weekend and possibly longer.

As of April 2, the 3500-acre-and-growing Fort Collins Picnic Rock Fire in the mountains some 15 miles northwest of Fort Collins was only 15 percent contained, according to the National Interagency Fire Center <<http://www.nifc.gov/>>. "The fire season is starting very early this year," said Roller. "March and April are normally our snowiest months, but instead we have conditions that haven't been this dry in over 90 years."

The Picnic Rock Fire got its start March 30 when a residential yard fire went out of control, and winds gusting to 35 MPH have helped spread the flames through the timber-pocked brush and grassland area. More than 200 firefighters, air tankers and helicopters were battling the flames, but no homes or structures had been lost.



Net Control Operators Needed

de The Editor

Net Control Operators are needed to help staff the weekly Lake Erie Amateur Radio Association's Thursday night club net at 2000 on the 146.760 repeater. Those interested should contact Eric Jessen, N8AUC for additional information.

.76 ... Continued

(Continued from page 5)

viable options are being investigated and look for the 76 machine to be back in full operation sometime in the near future.

Picture #2 is a view looking west from the 76 antenna site. Located between the I-271 and I-480 junction and the Cuyahoga County Community College Eastern Campus, you can now easily see why the 76 machine



Picture 2— Looking West from the .76 site

has such good coverage. Just look at that view!

A special thanks goes out to Radio Officers Bryan N8OOF and Raye N8NAP, License Trustee Eric N8AUC and Trustees Marv W8AZO, Jeff N8YNR, John KC8FOC and Tom W8TAB for helping to fix and keep the 76 machine on the air. Very good job, gentlemen!

For Sale

New Motorola Oncore GT+ GPS engine and custom interface card w/amplified mag-mount antenna (has 6 meter cord), windows software (Motorola software, APRS software and extra 'goodies' thrown in) on CDROM. Uses 12VDC and direct RS-232 connection to PC serial port. Board set approx 2" x 3.5" x 1.25". \$100.00. Contact John, N8OBJ at:

gibbonsj@att.net -or-
gibbons_john@keithley.com) -or-
(330) 468-2217 (7-9PM weeknights, 1-9PM weekends).

USPS Money Orders or cash only please.

de W2THU ... continued

(Continued from page 2)

prizes are won by attendees. Almost 30,000 hams from all over the world participate in this largest convention of amateur radio operators in the world. So, if you have never gone, or if you haven't been there in quite some time, then I urge you to drive to Dayton the weekend of 14-16 May 2004. You won't be disappointed. Point your browser to www.hamvention.org to learn more about it.

I'd like to remind you that there are two comment periods open right now at the Federal Communications Commission. One involves BPL, while the other deals with the new amateur radio licensing structure. If you have any feelings at all concerning these topics, then I urge you to submit your comments to the FCC. To review the ARRL proposal on license restructuring go to <http://www.arrl.org/news/stories/2004/01/19/1/>, and then visit http://svartifoss2.fcc.gov/prod/ecfs/upload_v2.cgi to enter your comments directly on the FCC website. To update yourself on the ARRL's position on BPL go to <http://www.arrl.org/bpl/>.

The Cleveland Marathon takes place shortly, on 25 April 2004. LEARA has been providing radio communications to this event as far back as I can remember. We usually get along with about 30 volunteers, but this year, due to a major route change, we will need at least twice that many hams. This is the first time that the course will remain entirely within the city of Cleveland and it will not double back on itself. It is a much more interesting race that wends its way through all of the Cleveland neighborhoods and both sides of the Cuyahoga. Please volunteer for this major public service event by contacting Mike, KC8OWL.

Finally, this is the time of year when members are dropped from our roster if they have not paid their current dues by the end of March. So, some of your fellow LEARA members will not be reading this Newsletter, at least not by snailmail. If you know someone who inadvertently let their membership expire, please remind them to mail a check for \$18.00 to the club post office box listed on the mailing page.

I look forward to seeing you at Dimitri's on 27 April, when I will bring the latest supply of badges.

73, Bob Winston W2THU

Upcoming Exam Sessions

April 2004

Date: 18-Apr-2004

Sponsor: LORAIN COUNTY ARA RED CROSS

Time: 1:00 PM (walk-in's allowed)

Contact: CHARLES S HALL
(216)433-3036
VE@W8HF.COM

Location: AMERICAN RED CROSS
2929 W RIVER RD N
ELYRIA, OH 44035
WWW.W8HF.COM (HOME PAGE)

Date: 24-Apr-2004

Sponsor: WRECS

Time: 9:00 AM (Walk-ins allowed)

Contact: RAYMOND C DABKOWSKI
(440)729-0110
W8RD@W8RD.NET

Location: BENTLEYVILLE TOWN HALL
6253 CHAGRIN RIVER RD
CORNER SOLON RD & RIVER RD
BENTLEYVILLE, OH 44022

May 2004

Date: 02-May-2004

Sponsor: CUYAHOGA ARS

Time: 9:00 AM (Walk-ins allowed)

Contact: GARY S DEWEY
(216)642-8705
GDEWEY@EN.COM

Location: TOWN HALL
6652 BRECKSVILLE RD
STATE ROUTE 21
INDEPENDENCE, OH 44131

Date: 16-May-2004

Sponsor: LORAIN COUNTY ARA RED CROSS

Time: 1:00 PM (Walk-ins allowed)

Contact: CHARLES S HALL
(216)433-3036
VE@W8HF.COM

Location: AMERICAN RED CROSS
2929 W RIVER RD N
ELYRIA, OH 44035
WWW.W8HF.COM (HOME PAGE)

June 2004

Date: 20-Jun-2004

Sponsor: LORAIN COUNTY ARA RED CROSS

Time: 1:00PM (Walk-ins allowed)

Contact: CHARLES S HALL
(216)433-3036
VE@W8HF.COM

Location: AMERICAN RED CROSS
2929 W RIVER RD N
ELYRIA, OH 44035
WWW.W8HF.COM (HOME PAGE)

Upcoming Hamfests

April 2004

Date: 18-Apr-2004

Sponsor: Cuyahoga Falls ARC

Internet: <http://www.cfarc.org>

Contact: Ted Sarah, W8TTS
239 Bermont Avenue
Munroe Falls, OH 44262

Phone: 330-688-2013

Email: w8tts@arrl.net

Date: 25-Apr-2004

Sponsor: Twenty Over Nine Radio Club

Contact: Don Stoddard, K18SS
55 Whitney Avenue South
Youngstown, OH 44509

Phone: 330-793-7072

Email: N8LNE2@JUNO.COM

May 2004

Date: 14-16 May-2004

Sponsor: Dayton Hamvention Dayton ARA

Internet: <http://www.hamvention.org/>

Contact: Gary Des Combes, N8EMO
PO Box 964
Dayton, OH 45401-0964

Phone: 937-276-6930 or 937-276-6934

Email: info@hamvention.org

Date: 30-May-2004

Sponsor: Franklin County Hamfest Committee

Contact: Chris Lind, KC8BUO
PO Box 14281
Columbus, OH 43214

Phone: 614-267-7779

Fax: 614-263-7934

Email: clind2@juno.com

June 2004

Date: 19-June-2004

Sponsor: Milford ARC

Internet: <http://www.hamvention.org/>

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July 2004

Date: 11-July-2004

Sponsor: Wood County ARC

Contact: Bill Wilkins, WD8JWJ

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LEARA

*PO Box 22823
Beachwood OH 44122-0823*

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 (110.9 Hz tone)
224.90/R-	Lakewood (141.3 Hz tone)
444.40/R+	Highland Hills (131.8 Hz tone) - IRLP Node 4282
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 ó 223.70 MHz Gateway
LEARA 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.