

W8LAP

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# LCARA Waveguide



June

Published Monthly by The Lapeer County Amateur Radio Association

2004

## Upcoming Swap & Shops

**Saturday, June 5 — Independence, KY** HAM-O-RAMA Info: [www.k4c0.org](http://www.k4c0.org)

**Sunday, June 6 — Wabash, IN** 36th Annual Hamfest, Info: KB9NSO

**Saturday, June 19 — Milford OH** Hamfest Info: [www.w8mrc.com](http://www.w8mrc.com)

**Saturday, June 19—Midland** 30th Ann. Midland Hamfest, MI Army Nat'l Guard Armory; tables, trunk sales, Info: [ab8jf@arrl.net](mailto:ab8jf@arrl.net); [www.qsl.net/w8kea](http://www.qsl.net/w8kea)

**Sunday, June 20 —Monroe** Monroe Hamfest & Computer Show, County Fairgrounds, M-50 at Raisinville Rd. Tables, trunk sales. [Http://www.mcrc.org](http://www.mcrc.org) Info: 734.242.9487

*This month's Meeting is  
Tuesday, June 8th—7:30 p.m.  
At the Lapeer County Central  
Dispatch Center (911) at 2332 W.  
Genesee Street in the basement*

### The Treas Sez

Bill Miller, KD8VP

The LCARA treasury has had another uneventful month, nothing new just the usual electric and phone bills and one membership renewal.

Everyone should be aware that Memorial Weekend is coming up and if your traveling please careful and wear your seat belts. If your not going away for the weekend please try to help out with Operation Care. Therese KC8PEZ is doing a superb job of getting everything organized and will welcome your volunteering to serve what ever time that you can spare out at the rest area. If you will just go and serve a little time you will be rewarded by the experience, and have a good time doing it.

Finally, look forward into the month of June. Field Day 2004 is coming the forth weekend of June, the 26th and 27th and unless the City of Lapeer refuses at the last

*The Treas Sez (Continued on page 3)*

### The Prez Sez

Josh Long, N8CFS

## Field Day

June 26-27

Rotary Park, Lapeer

Did you ever wonder what "they" do when "they" go out to a thing called Field Day the fourth week-end in June? Down there in Lapeer on the east end of town in that park? In trailers. In tents. Under dining tarps. It's some emergency preparedness, contest thing. They use radios on all bands and talk all over. Am I missing something by not going to it? And they eat pretty good too!

### The VP Sez

Bill Hetchler, KC8SHI

A couple of things are on my mind this month. First the recent plague of storms that have hit our area. We have had one person who has been willing and able to run the Skywarn net from EOC. This isn't good as it takes at least two to run it with the greatest efficiency. One can do it but they are run ragged. We need more individuals to make themselves available during weather emergencies to work at the EOC. Also remember a weather emergency isn't just a watch but warnings having been

*The VP Sez (Continued on page 3)*

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**Lapeer County Amateur  
Radio Association**

P.O. Box 12  
Hadley, MI 48440-0012

**Officers**

President, Josh Long, N8CFS.....810-724-6790  
Vice-President, Bill Hetchler KC8SHI 810-667-1497  
Secretary, Therese Long, KC8PEZ..810-724-6790  
Treasurer, Bill Miller, KD8VP.....810-797-5329

**Committees & Appointees.**

Club Founder.....Hollis Hayes, W8ACD  
Club Call Trustee W8LAP.....Jim Boyer, KD8YX  
VE Coordinator.....Al Wilson, N8NPR  
Swap & Shop Chairperson.....Bill Miller, KD8VP  
Field Day Chairman.....Bill Miller, KD8VP  
Meeting Refreshments.....Bill Miller, KD8VP  
Two Meter Net Mgr.....Jim Boyer, KD8YX  
Newsletter Editor.....Hank Kohl, K8DD  
Club Historian.....Bill Hetchler, KC8SHI  
Public Information Officer...Bill Hetchler, KC8SHI

**ARES Repeater Nets**

Monday at 9:00 PM on 146.620-  
Thursday at 9:00 PM on 442.750+  
Mon—Sat at 9:30 PM on 147.300+

**Meetings**

LCARA meetings are held on the second  
Tuesday of each month in the  
Lapeer County Central Dispatch Center (911),  
2332 W. Genesee St, Lapeer MI  
at 7:30 p.m. local time

**Newsletter**

Items for the newsletter may be called to the  
Editor at 721-0708, sent by U.S. Mail (Box 88,  
Attica, MI 48412), or as an ASCII file, Word file  
or hand-written to k8dd@arrl.net

The deadline for submissions is the 20th of each  
month.

"Sometimes I think war is God's way of teaching us  
geography." - Paul Rodriguez  
The same could be said for Ham Radio.

**Show your club colors**

The following items, all with the LCARA logo, are available  
to members. Your name and callsign could be included at  
no extra charge.

Tee shirts.....\$12.00  
Sweat shirts, hooded.....\$30.00  
Sweat shirts, long sleeve without hood.....\$18.00  
Golf shirts, grey, yellow or white.....\$19.00  
Nylon jacket, windbreaker.....\$45.00  
Heavier poplin jacket, flannel lined, quilted.....\$83.00

For XXL add \$2.00 For XXXL add \$3.00

Add MI sales tax for all items.

Call Flo Haack, KC8CAB , or contact her at any club meeting  
to place your order.

**LCARA's Video Library**

The club has a number of video tapes available for  
use by members at no charge. If you would like to  
borrow one or more of the tapes, contact the  
president, at any club meeting.

Titles presently available:

- Getting Started in Ham Radio
- Getting Started in DXing
- Getting Started in Packet Radio
- Getting Started in Amateur Satellites
- Getting Started in Contesting

Tapes may be retained by the borrower for one  
month and must be returned at the following  
month's meeting.

**Board of Directors Meeting**

The Directors' monthly meetings are held on the  
first Tuesday of each month at the BK Lounge at  
7:30PM as needed (announced on the W8LAP  
repeaters). **All club members are urged to  
attend.**

**Contributors to this newsletter:**

Josh, N8CFS      Bill, KC8SHI      Therese, KC8PEZ  
Bill, KD8VP

**Your name and call should be here!**

**While in Imlay City, support your local Radio Shack store**



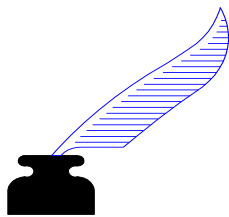
 **RadioShack**  
AUTHORIZED RADIOSHACK DEALER

**LCARA Site Sponcer:**  
Hillcraft Electronics  
1831 S. Cedar Street  
Imlay City, MI 48444  
Phone: 810-721-8030

## LCARA Monthly Meeting Minutes

### Lapeer County Central Dispatch Center (911).

The meeting was called to order at 7:31 PM by Josh N8CFS with the pledge of allegiance and introductions. There was one visitor, Tammy.



**Hospital/SK Reports:** Josh talked to Denny from Dentronics who continues to recover from a stroke. Bill KD8VP sent a get well card. Mark K8GAP is recovering from a heart attack and was hospitalized for a short time.

**Awards/Upgrades:** WD8JLW has a new vanity call sign, KN8Z. (that call, KN8Z, has a colorful history—it was previously issued in Southern Ohio!!! - ed.)

**President's Report:** given by Josh N8CFS. Josh discussed restructuring of licensing and new changes the FCC proposed to Amateur Service rules. The FCC is discussing reallocating Novice frequencies to other amateur license levels. Other changes are available on the ARRL website.

**VP/Historian/PIO's Report:** presented by Bill KC8SHI. Bill attended the MS Walk in Frankenmuth. Doug Donner Jr. also assisted at the walk. Bill is continuing to get quotes for a plaque for the family of Charlie Conley.

**Secretary's Report:** read by Therese KC8PEZ. Minutes accepted as read.

**Treasurer's Report:** given by Bill KD8VP. Accepted as presented. Bill is researching alternate phone plans for the auto patch. Various possibilities were discussed and Bill will make changes as needed. Long distance calls will still be available for members who live outside the 810 calling area.

**EC/Trustee's Report:** given by Jim KD8YX. Jim reported that the repeater went down briefly on May 10th due to a circuit breaker overload after power went out in the repeater area. During this repeater down time, stations from Capac, Marlette and other outlying areas were able to check into the Monday night ARES net which was held on 146.620 simplex. Tom KG0ZN ran this net on simplex as his first ARES net as net control. Tom was commended for his skills in running the net efficiently. Jim also reminded members that the equipment in the EOC is owned by Lapeer County Emergency Management. It is meant to be used for emergencies and other select situations (i.e. during tornado warnings). When used, this equipment needs to be left in the condition it was found. Also, Jim stated that in the near

*Minutes (Continued on page 4)*

This space is where you could have submitted something. Tell us about:

- What DX did you work?
- What interesting QSO did you have recently?
- Did you try a different antenna? Did it work?
- Did another ham you know do something to qualify for "here's your sign"? (the stupid sign—and we won't publish your call or name!)
- Rumors

Most any format is fine—Text file, Word file, hand written, typed or verbal over the phone. See page 2 for Newsletter contact information!

*(Continued from page 1) The Treas Sez*

minute to let us use Rotary park the event will be held there as usual. I will coordinate the event and am looking for participants. Those that have joined us in the past will testify to having a fun time, and it does give us an opportunity to put our club and amateur radio in the public eye. Please contact me soon about your wanting to participate.

Thanks Bill Miller KD8VP

*(Continued from page 1) The VP Sez*

issued for Lapeer County.

Also remember the upcoming Field Day on June 26 and 27. This is always a prime opportunity for the LCARA to show off our ability to be of public service to the community as well as show the public how much fun amateur radio is. I trust that we'll field a good crew with lots of opportunities to make contacts on many bands and in several modes. You don't have to have a General or Extra Class license to participate. One can seek to make contacts with only a Technician license as you are working under the license of the General and Extra license holders in attendance.

Let's make sure that Lapeer County knows we are alive and available and active.

### QUOTE OF A DAY -

"Anyone who stops learning is old, whether at 20 or 80." - *Henry Ford*

**If you have an e-mail address and would like the Waveguide via e-mail, let Bill KD8VP (kd8vp@juno.com) and Hank K8DD (k8dd@arrl.net) know and it will happen. This can help save postage and printing for the club....And the pictures will look better!**

(Continued from page 3) *Minutes*

future, more identification may be needed to enter the EOC at times other than scheduled club meetings.

Jim and Bill plan to put up the new antenna as soon as the ground is dry. A large manlift is going to be used. We hope to have the new antenna up prior to the June 5th SET.

The repeater is now working better due to minor changes made by Jim and Bill. Several minor changes were made to the repeater, including some new coax to a side mounted antenna.

Occasional kerchunking on the 440 machine was discussed. Jim said that he can adjust the squelch to eliminate some of this problem.

Jim also discussed the Simulated Emergency Test scheduled for June 5th. Listen to the repeater starting around 8AM for the beginning of the exercise. Many hams will be needed in the field and on the nets this day.

Ed W8NCJ announced that WWII veterans can attend a ceremony on May 29 at the American Legion.

#### Old Business:

Volunteers are still needed for the Memorial Day Operation C.A.R.E. Sign-up by emailing [kc8pez@yahoo.com](mailto:kc8pez@yahoo.com).

#### New Business:

Bill KD8VP received a letter from the ARRL approving our swap as an ARRL-affiliated hamfest.

Dayton Hamvention is this weekend.

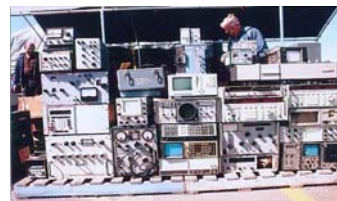
The President of the Saginaw Valley ARC sent his thanks via Doug Donner Jr. to the members of LCARA who helped at the MS Walk in Frankenmuth.

The 50/50 was won by Chris Azelton KC8TWL.

The meeting was adjourned at 9:12 PM by Josh N8CFS.

**Be RadioActive—  
Participate!**

## For Sale



This is a great place to sell what you don't need, give away what you don't need or look for what you can't live with out. Ads will be run for 2 months.

=====  
**Wanted: Articles, stories, pictures, facts, fables, witticisms or what-have -you for the Waveguide. If you have something that you think will be of interest to the LCARA membership, please get it to the Editor. See Page 3 for contact information.**

**For Sale:** all items are in good working condition. Talk to me on the -62 repeater, or see me at WMPC (no phone calls, please)

Set of ham-sticks: 75, 40, 20,15, 10.....\$90

MFJ DSP audio filter.....\$110

MFJ pocket CW reader.....\$30

LDG AT-11 automatic antenna tuner.....\$110

Radio Shack frequency counter.....\$35

Radio Shack DSP audio filter.....\$30

Al Smiley K8NOV

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**For Sale:** Garmin GPS 45 GPS receiver. Operational, but could be cleaned. Includes a copy of the manual. \$45 or trade for Icom IC-02AT or similar HT

**For Sale:** MFJ-1278B multi-mode TNC. Includes manual, power adapter, and various cables. \$50 or trade for Icom IC-02AT or similar HT

Contact Josh, N8CFS 810-724-6790

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**For almost Free:** Several sections of aluminum tower that were cut apart—probably 50 ft total.

**For almost Free:** Big 8' C-band satellite dish, LNA thing, receiver, direction motors, spare board for receiver.

**For almost Free:** 1/2 inch CATV aluminum hard line, no jacket—couple hundred feet

**For almost Free:** 7/8 inch CATV aluminum hard line, no jacket—probably a couple hundred feet.

Looking to get a case of Pepsi for each!

Contact Hank, K8DD 810-721-0708

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**For Sale:** Cushcraft X7 Big Thunder tri-band beam with X-740 40 meter add on used but like new \$500 obo.

Two Cushcraft 13B2-13 element two meter beams with PD-2 Power Divider stacker kit \$250 obo.

Cushcraft A430-11S 11 element 440 MHz uhf beam like new \$50

TH-6-DXX tri-band beam needs tender loving care, but is salvageable, \$30 obo.

Four sections 10 foot long , unknown brand tower with rotor plate and bushing plate very good condition \$50 obo.

Seven sections 8 foot long, Heights aluminum amateur radio tower, has rotor and bushing plates, bottom section starts at 16 inches \$200 obo.

Contact Bill Miller kd8vp at [kd8vp@juno.com](mailto:kd8vp@juno.com) or 810.797.5329

Free coffee for anyone who finds the other mistake in this issue of the Waveguide.

# The World Scramble

## Counties in Michigan

R T X W Z S A V T K R E G L A H A U  
 I F X Q E W N R Z E U C C J H D S P  
 M A H J F I P Z N X M Y D I O H I C  
 A R B A R A G A U T S M D O A F H T  
 C C D I C K I N S O N E E G Z I G U  
 K L O K S X O K Z A L M W D P N F O  
 I O G N N V U U K T O M M P O Q C N  
 N O E G B F B S A N Z U E G Q G H O  
 A H S M R G A V T L M W A Q O O A R  
 C C T K K I F M M E A N F G Y J R I  
 U S O L N A O A N N O T E T N B L J  
 Z E M L N R R O B T M B D Q M W E V  
 V Y W E E Q M H N I I V L R U Z V D  
 K R P N U I P O R C B N U G K H O Y  
 E L C E N C K T F B O H C L Z A I R  
 A Y T E W D N Q U N S X E M D P X N  
 E T E K R A G M D N A G Y O B E H C  
 E F H O U G H T O N K E W E E N A W

CHIPPEWA  
 MACKINAC  
 SCHOOLCRAFT  
 DELTA  
 ALGER  
 MARQUETTE  
 MENOMINEE  
 DICKINSON  
 BARAGA  
 KEWEENAW  
 IRON

HOUGHTON  
 ONTONAGON  
 GOGEBIC  
 EMMET  
 CHEBOYGAN  
 CHARLEVOIX  
 ALPENA  
 ANTRIM  
 OTSEGO  
 MONTMORENCY

And one county is missing .... Which one is it?

# June 2004

If your e-mail address changes please let KD8VP and K8DD know so you get club email!

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3 ARES Net 442.750 9 PM	4	5
6	7 ARES Net 146.62 9 PM	8 <b>LCARA Meeting</b>	9	10 ARES Net 442.750 9 PM	11	12
13	14 ARES Net 146.62 9 PM	15	16	17 ARES Net 442.750 9 PM	18	19
20	21 ARES Net 146.62 9 PM	22	23	24 ARES Net 442.750 9 PM	25	26 <b>Field Day</b>
27 <b>Field Day</b>	28 ARES Net 146.62 9 PM	29	30	ARES Net 442.750 9 PM		



HillCraft Electronics 888-520-2002  
Just North of I-69 on Van Dyke (M-53)  
In the Farmer Jack Plaza

### SPECIAL Through Jul 31, 2004

- On any small parts (the 270 series Radio Shack Part numbers **20% discount!** with your LCARA membership card ~or~ proof of Amateur Radio License.

**Need a new HT (or a spare HT)?**

**Special:**

HTX-400 70cm 200mW (int. batt.) 1W (ext. batt.) HT  
\$129.00 (Limited Quantities)

We also Recycle rechargeable batteries here at the store - any kind up to two pounds of sealed cell. Let's keep the ground water safe for future generations.

**We now can order Diamond Antennas and accessories.**

**Check with us for your wireless networking needs and High Speed internet!**

Not much to do with DX, but true!

### GREAT TRUTHS



#### GREAT TRUTHS THAT LITTLE CHILDREN HAVE LEARNED:

- 1) No matter how hard you try, you can't baptize cats.
- 2) When your Mom is mad at your Dad, don't let her brush your hair.
- 3) If your sister hits you, don't hit her back. They always catch the second person.
- 4) Never ask your 3-year old brother to hold a tomato.
- 5) You can't trust dogs to watch your food.
- 6) Don't sneeze when someone is cutting your hair.
- 7) Never hold a Dust-Buster and a cat at the same time.
- 8) You can't hide a piece of broccoli in a glass of milk.
- 9) Don't wear polka-dot underwear under white shorts.
- 10) The best place to be when you're sad is Grandpa's lap.

#### GREAT TRUTHS THAT ADULTS HAVE LEARNED:

- 1) Raising teenagers is like nailing Jell-O to a tree.
- 2) Wrinkles don't hurt.
- 3) Families are like fudge...mostly sweet, with a few nuts.
- 4) Today's mighty oak is just yesterday's nut that held its ground.
- 5) Laughing is good exercise. It's like jogging on the inside.
- 6) Middle age is when you choose your cereal for the fiber, not the toy.

#### GREAT TRUTHS ABOUT GROWING OLD

- 1) Growing old is mandatory; growing up is optional.
- 2) Forget the health food. I need all the preservatives I can get.

### CAMPING, ANYONE?

Fun for the entire family, the Michigan Section Campout at Wilderness Campgrounds in Lupton July 9, 10 & 11. This years theme is Margaritaville, so plan appropriately. The full details will appear here next month. Even if you camp like your Section Manager (where is the nearest Hyatt?), it is a great time. Join us even if it is only for Friday evening or Saturday.

ARRL Michigan Section  
Section Manager: Dale R. Williams, WA8EFK  
[wa8efk@arri.org](mailto:wa8efk@arri.org)

### Dayton Once Again

Well, the great migration south to the Dayton Hamvention is history. From all accounts a good time was had by all.

Only saw two Lapeer hams wander by the QRP ARCI booth where I spent most of the weekend—Stan N8HN and Steve N8EN.

Weather this time was wet and cool (I thought that was why they switched from April to May, to get away from that kind of stuff!) so it made it hard to spend a lot of time in the flea market.

Highlights included a close look at the ICOM 7800 dual receive transceiver...lots of radio with a hefty price tag. For a mere \$10K+ you could take one home.

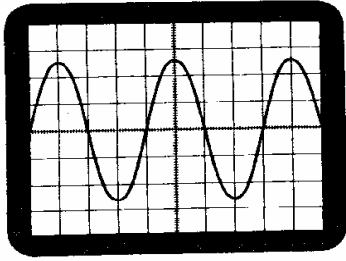
Not to be outdone, YAESU is coming out with a similar package...two receivers, color display that includes a world map, etc and two real meters—not the LCD bar graphs. They had a display model under a plexiglass cover. Estimates are that the 200w version will price out at \$12K while a 400w version can be had for \$14K.

Attendance was announced as around 21,000, slightly up from last year.

US Tower had a new offering, but by all accounts their new towers that were on display will not be offered for sale!

If you've never been to Dayton, or haven't been in a long time, I recommend you consider the trip next year. It's a great opportunity to see the latest and greatest gear, find bargains, meet all the "big guns and little pistols", and just plain have some fun!

- 3) When you fall down, you wonder what else you can do while you're down there.
- 4) You're getting old when you get the same sensation from a rocking chair that you once got from a roller coaster.
- 5) It's frustrating when you know all the answers but nobody bothers to ask you the questions.
- 6) Time may be a great healer, ! but it's a lousy beautician.
- 7) Wisdom comes with age, but sometimes age comes alone.



## RF Noise Identification Website

Allow me a minute to draw your attention to a new website I'm just putting the finishing touches on, called The RF Noise Identification website.

It's purpose is to help hams and SWLs like you and me to identify the noises (QRN) that intrude on our hobby. The web page contains a number of recordings in MP3 format that you can download or listen to while at the page. The recordings are of various types of noises from known sources and one that I can't identify. I have also included small waveform images that provide an additional "fingerprint" for identification.

My hope is that users will visit the site if they have QRN problems and possibly identify noise that's bothering them by comparing it to the recordings. I would also greatly appreciate contributions in the form of recordings of noises at your location as well. I will convert them to MP3 format and add them to the web page (with credit to you) for all to listen to. WAV or MP3 files, audio cassettes or CDs will be gratefully accepted. See the website for additional details.

Last week, after showing the website to Ed Hare, W1RFI and Mike Gruber, W1MG, two of the RFI gurus at the American Radio Relay League (ARRL) Lab, I was asked if I would like to help manage a Sounds Of RFI website for the ARRL...a project they've had in their minds for a while but didn't have the time to implement. I happily agreed and was deluged with over 30 new noise files they've been saving up! These will be added to my site once I have received permission from the original contributors. Eventually, all files will be shared between my RF Noise Identification site and the ARRL's Sounds of RFI site for the benefit of everyone. The ARRL site should be up in a few weeks.

Please visit <http://www.ve3hls.com/noise/rfihome.html>

I'd appreciate your comments, suggestions, and contributions!

73 - Ken, VE3HLS (tnx Bob VE3SRE for the tip!)

## WHITE HOUSE GIVES ARRL DELEGATION ASSURANCES ON BPL INTERFERENCE

ARRL President Jim Haynie, W5JBP, headed an ARRL delegation during a May 20 White House visit to discuss concerns about broadband over power line (BPL). Haynie, ARRL General Counsel Chris Imlay, W3KD, and Chief Technology Officer Paul Rinaldo, W4RI, met with Richard Russell, the White

House associate director for technology in the Office of Science and Technology Policy. The ARRL officials asked the Bush administration to heed its own experts at the National Telecommunications and Information Administration (NTIA) and back away from its support of BPL in favor of less troublesome technologies. The NTIA's Phase 1 BPL study acknowledged BPL as an interference source. Haynie said the meeting was both revealing and encouraging.

"He assured us that based on the NTIA report, the interference issues would be addressed," Haynie said. "That was one of our main purposes for being there." Haynie said, however, that he remains "absolutely" convinced that a political agenda is driving the BPL proceeding. Russell told the ARRL contingent that the administration is "very excited" about BPL and is committed to finding ways to make it work.

Imlay said the League's problems were not with broadband access but with the "rush-to-judgment" approach the FCC seems to be taking in the BPL proceeding. As one example, he cited the timing between the release of the

extensive NTIA study and the comment deadline on the BPL proceeding just a few days later. The Commission denied requests from the ARRL and others to extend the comment deadline. While somewhat sympathetic, Russell suggested that his office was in less of a position to influence the FCC than it was the NTIA.

After Rinaldo presented some of the ARRL's BPL interference test findings, Russell asked the League to provide a breakdown of the BPL systems and providers manifesting both lesser and greater degrees of interference.

Rinaldo also told Russell that representatives of the BPL industry have been double-talking their way around interference claims. Imlay pointed out that the FCC has yet to address dozens of BPL-related interference complaints from amateurs.

The administration does not want a flawed technology to result from the BPL proceeding, Russell said at the session's conclusion, and he offered assurances to the League visitors that the NTIA would work to address the interference.

"We did get listened to," Haynie said afterward. "Did I leave there feeling euphoric? No, I didn't, but at least I have a better feeling now of the overall big picture, of where BPL's coming from, and I hope that I can take to the bank the fact that they're going to address and continue to address aggressively the interference issues."

Derek Riker, KB3JLF, of Chwat & Company, the ARRL's legislative relations consultant, arranged the meeting and accompanied the delegation on the White House visit.

The ARRL already has asked the FCC to put its BPL proceeding on hold to allow more thorough research of its interference potential. The League contended in its comments on the February 23 Notice of Proposed Rule Making in ET Docket 03-47 that the FCC's "overly aggressive timetable" to proceed with BPL deployment will effectively preclude the development of cooperative interference avoidance and resolution mechanisms.

**2004-2005 L.C.A.R.A. MEMBERSHIP APPLICATION**

PLEASE PRINT:

CALL SIGN: \_\_\_\_\_ NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY ,STATE, AND ZIP: \_\_\_\_\_

PHONE : \_\_\_\_\_ LICENSE CLASS: \_\_\_\_\_

SKYWARN NO.: \_\_\_\_\_ RACES NO: \_\_\_\_\_

ARES MEMBER YES\_\_\_ NO\_\_\_ E-MAIL ADD.: \_\_\_\_\_

ARE YOU AN A.R.R.L. MEMBER: YES\_\_\_ NO\_\_\_

L.CA.R.A. MEMBERSHIP IS \$12.00 PER YEAR, RENEWABLE EACH YEAR ON OCTOBER. 1ST. FAMILY MEMBERSHIP \$20.00. ASSOCIATE MEMBERSHIP \$4.00. IF YOU WISH AN AUTODIAL NUMBER FOR THE REPEATER THERE IS AN ADDITIONAL \$3.00 CHARGE.

**Lapeer County Amateur**

**Radio Association**

P.O. Box 12

Hadley, MI 48440-0012