

Waveguide

W8LAP / r

146.620 - 100 Hz

442.750 + 123 Hz

Lapeer County Amateur Radio Association

Club Founder: Hollis Hayes W8ACD

Edition for **August 2015**

**** The next regular club meeting will be held on Tuesday,
August 11th, 2015 @ 6:30 pm at Cramton Park ****

ARES Net

Every Tuesday at 8:00 pm on 146.620 - with 100 Hz PL
(except club meeting nights)

Thursday Night Net

Every Thursday at 8:00 pm on 442.750 + with 123 Hz PL

Meetings




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





Newsletter

Items for the newsletter may be called in to the editor at 810-793-4986 or emailed to kevinboxey@hotmail.com. The deadline for submission is the 20th of each month.

Website: <http://www.w8lap.com>

2015 2015 2015 2015 2015 2015 2015 2015 2015

August						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
2 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm - D3 HF digital net 3.583 USB at 8:00 pm	3	4 ARES net 146.620+ 100 Hz PL at 8 pm	5	6 ARES net 442.750+ 123 Hz PL at 8 pm	7	8
9 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm - D3 HF digital net 3.583 USB at 8:00 pm	10	11 LCARA club meeting 6:30 pm at Cramton Park	12	13 ARES net 442.750+ 123 Hz PL at 8 pm	14	15 -T&C 
16 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm - D3 HF digital net 3.583 USB at 8:00 pm 	17	18 ARES net 146.620+ 100 Hz PL at 8 pm	19	20 ARES net 442.750+ 123 Hz PL at 8 pm	21	22 
23 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm - D3 HF digital net 3.583 USB at 8:00 pm	24	25 ARES net 146.620+ 100 Hz PL at 8 pm	26	27 ARES net 442.750+ 123 Hz PL at 8 pm	28	29
30 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm - D3 HF digital net 3.583 USB at 8:00 pm	31					
Phases of the moon: 6: 14: 22: 29:						

September						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 ARES net 146.620+ 100 Hz PL at 8 pm	2	3 ARES net 442.750+ 123 Hz PL at 8 pm	4 	5 
6 	7 	8 LCARA club meeting 7:30 pm at the EOC	9	10 ARES net 442.750+ 123 Hz PL at 8 pm	11	12
13 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm - D3 HF digital net 3.583 USB at 8:00 pm	14	15 ARES net 146.620+ 100 Hz PL at 8 pm	16	17 ARES net 442.750+ 123 Hz PL at 8 pm	18	19 -T&C
20 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm - D3 HF digital net 3.583 USB at 8:00 pm	21	22 ARES net 146.620+ 100 Hz PL at 8 pm	23	24 ARES net 442.750+ 123 Hz PL at 8 pm	25	26 D3 SET
27 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm - D3 HF digital net 3.583 USB at 8:00 pm	28	29 ARES net 146.620+ 100 Hz PL at 8 pm	30			
Phases of the moon: 5: 13: 21: 27:						
Holidays and Observances: 7: Labor Day						

2015 2015 2015 2015 2015 2015 2015 2015 2015

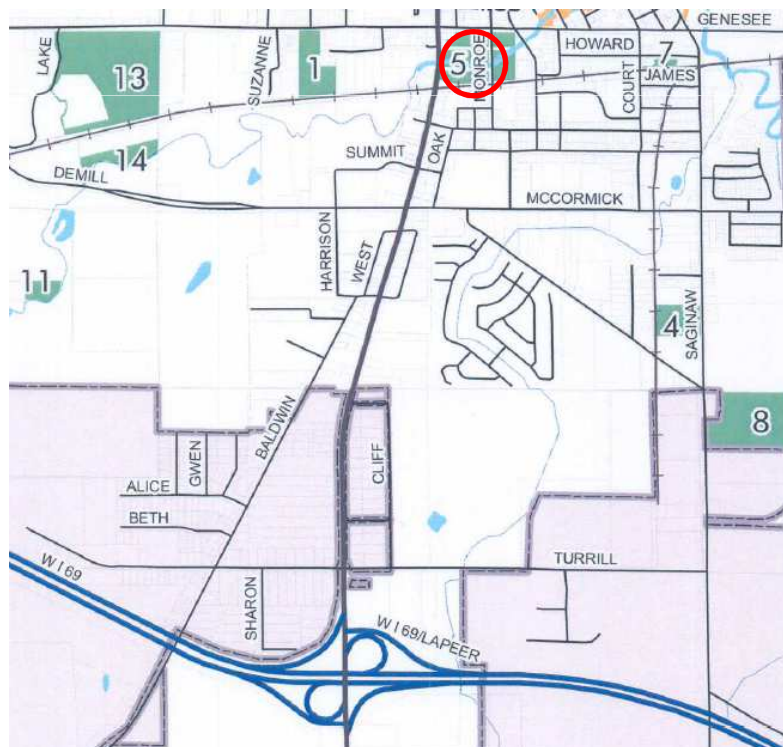
Upcoming events

Public Service Event Schedule

*** please keep these dates open in your calendar ***

Crim - 22 Aug 2015

Labor Day Op CARE - 04 to 07 Sept 2015



The August club meeting will be at Cramton Park at 6:30 pm

Editorial Section

The President Says:

Hello fellow LCARA members.

I will keep this short and sweet this month since there are only 3 items.

- 1) The August club meeting will be held at Cramton Park "as usual". If you would like to set up equipment then please bring it along. Or...only bring yourself for the spirited conversation. Remember that we did not reserve the pavilion this year due to the change in policy for non-profits. So, if you see unfamiliar faces at the normal spot then try another pavilion.
- 2) I noticed that the September club meeting date is a little odd and falls the day after Labor day. Please take note.
- 3) Also note, we are at that time of year again for club officer nominations and elections. Maybe this is the year to raise your hand and help out.

See you at the park.

Kevin KB8TAR

The Treasurer Says:

Greetings to one and all. As I prepare this report I am looking out the window at a beautiful morning. I tell my self that it would be a great day to go out and prepare that four element yagi that's been waiting a couple of years to be put together. That tower sure looks naked without a beam up top. I will just have to see what the day brings. But I digress, the reason I am here is to report on the treasury not tell you my problems.

Our treasury is doing just fine. The proceeds from Operation Care Independence Day were not quite as good as I had thought they might be after seeing the Memorial Day donations, but they were adequate. We did have a little extra expense this month due to the fact that good ole DTE nailed us twice this month for the electric bill. That happens every once in a while due to the 28 day schedule. Also we received a bill from Utech-computers for the W8LAP domain name. That amounts to \$15.00 a year. I anticipate that shortly there will be a bill for the hosting of the web site, that amounts to \$90.00 a year. If there are any of you web tech savvy out there that can find a way to reduce this cost it would be greatly appreciated.

Our repeater tech team has done a wonderful job of reducing our costs at the repeater. Now we need to find a way to reduce the web site costs.

I am looking forward to seeing everyone at the meeting in the park August 11th.

Respectfully submitted
William Miller KD8VP

Editorial Section

The Trustee Says:

Hello W8LAP Supporters:

Only a single issue required attention at the repeater site. The squelch tail of the two meter repeater would react in randomly unexpected ways. During the recent club HF drill, the Tech Team (Will & Lee) attempted to switch various controls to determine whether a control, or something else (ambient conditions, for example) caused the problem. The problem disappeared when the 220 MHz link to the inoperative North Branch repeater was set to off. The suspected cause was the squelch of the 220 MHz radio being set too low, and was being tripped by random noise. Since the setting change, our two meter squelch tail is operating normally. Good work by the Tech Team.

This month's Links:

Understanding Quadrature (I & Q)

Conversations about digital communication modes have arisen at recent club meetings. PSK (Phase Shift Keying), developed in the late 1990s, started the trend in using computer sound cards for modulation/demodulation of keyboard characters. Now, most new rigs use some form of SDR (Software Defined Radio) for modulation/demodulation of AM, SSB, and FM.

The above PSK (and other) modulation schemes require audio tones from the associated software for operation. A monophonic sound card will not work, because the signal is demodulated through the use of quadrature action. With quadrature, the incoming signal is separated into two components: The "I" and "Q," which are 90 degrees apart. Thus, a stereo sound card must be used.

All the pages of a typical Waveguide are inadequate to fully explain why and how the above interact. Fortunately, many resources are available on the web.

One source is a two part video on YouTube, by Alan: [#170: Basics of IQ Signals and IQ modulation & demodulation - A tutorial](#) and [#171: IQ Signals Part II: AM and FM phasor diagrams, SSB phasing method](#)

For a more graphic tutorial, this site will allow you to go through the theory at your own pace: <http://www.fourier-series.com/IQMod/index.html>

If you are new to the subject, my advice is to watch the material in the YouTube videos without trying to absorb the math portions. Just watch, and let the concepts come through in their own time.

Should the above seem too much to grasp, then do a search along the lines of "explain quadrature signals." You're bound to find something that satisfies your needs.

Editorial Section

Off Topic, Non-Ham Link

I have a cousin named Terry Sawchuck. He is named after the famous Detroit Red Wings goalie. My Uncle Pete Sawchuck met Terry (the goalie) shortly after WWII, and, although unrelated, they became good friends. In 1955 or so, my cousin was born, and named thusly.

The link is to show what damage playing hockey could do to someone in the era before protective gear came into being. The shot is of Terry Sawchuck in *Life Magazine*.

<http://buzzlamp.com/glimpse-amazing-past-historic-photos/109/>

See you at the next meeting,

Mike, KN8Z (kn8z at arrl.net)

Editorial Section

LCARA Meeting Minutes

July 14, 2015

The meeting was called to order at 7:30 pm. Eleven members and guests were in attendance.

We welcomed 3 guests, N8OSL (Joe), N8LBF (Dave) and Mark (SWL) almost ready to take his test.

The Secretary's report was read and approved by the members present.

The Treasure's report was read and approved by the members present.

The Repeater Trustee report stated that the 220 link receiver at the repeater sight was breaking squelch and causing the 2 meter repeater to transmit receiver noise intermittently. Most likely cause is the 220 link receivers squelch sensitivity setting changing due to temperature. Disabling the 220 link resolved the noise burst issue. It was also reported that the North Branch repeater has not been operational for some time therefor we will leave the 220 link off for the time being.

Our esteemed president Kevin KB8TAR, was commended for his exceptional support of the Search and Rescue ARISS exercise.

Old Business

-The August Association meeting will be held at Crampton Park. Comradery & eyeball QSO's will begin at **6:30 pm**.

-Local license exam sessions as reported by the ARRL will be included in the Waveguide.

-Kevin and Tom met with personnel from the Health Department to determine feasibility and location for an antenna for location on the roof. A location was found. Next step is to determine the path for a coax connection to a transceiver and its location for ARISS usage.

-Operation Care weekend was held. Information will be available at the next meeting.

-Andy has a cooler jug he will donate.

New Business

-It was reported that Tuscola County Radio Group purchased a Yaesu Fusion repeater. Lee (N8LJ) will contact Jeff Pender for further details and a possibility for a Fusion technology presentation.

- Last Thursday in place of the 440 scheduled net, Kevin scheduled an HF exercise to determine the capability of HF communication within the county. Those participating were Kevin KB8TAR net control, Jeff WB8WKQ, Will KB8YGA, Mike KD8OTZ, and Lee N8LJ. As we cycled through the HF phone spectrum 80 thru 10 meters, it was determined that 15 meter offered the best communication ability between the stations with 10 meters being 2nd best. Kevin will report our ARISS 15 meter frequency on the required Form 217A. At a future date Kevin will schedule a VHF simplex exercise.

Editorial Section

Presentations

-Kevin KB8TAR, Mike KD8OTZ, and Will KB8YGA presented the results of their efforts to put Lapeer County "on the air" during the Michigan QSO party. They were successful in implementing logging software, making QSO's, and submitting their logs to the event sponsor via Cabrillo files.

-Lee N8LJ presented his team's effort to activate the LS Huron during Museum Ships Weekend.

Respectfully Submitted

Lee
N8LJ

Event announcement



International Lighthouse Lightship Weekend

**AN ANNUAL AMATEUR RADIO WEEKEND EVENT.
FOUNDED IN 1995 BY TWO MEMBERS OF THE AYR AMATEUR RADIO GROUP, (AARG), SCOTLAND,
AND HELD ON THE THIRD FULL WEEKEND IN AUGUST.**

15-16 August 2015 - Duration 48 hours from 0001 UTC 15.8.2015

What is regarded as a Lighthouse for this event?

Lighthouse: Generally regarded as a structure which is or has been listed officially as an aid to navigation in a recognized publication such as the British Admiralty List of Light and Foghorns, and which falls into the classic concept of a lighthouse. For example, a substantial tower having an internal staircase, a revolving Fresnel lens and had or has a designated lighthouse keeper. Also permitted are lighthouses which have been moved to a museum for historic reasons.

<http://illw.net/>

OFFICIAL LIST OF ENTRANTS - 2015 Total= 227

Event announcement



AMATEUR RADIO DIGITAL WORKSHOP

Digital Voice Mode Primer:

+D-star +MotoTrbo +System Fusion

A review of the three modes, and discussion of
what might be the "best fit" for your use!

\$10 registration fee required which benefits the Salvation Army.

Lunch and Snacks will be Provided by the Salvation Army.

For information, email: CherrylandARC@gmail.com

Sign up online at: <http://bit.ly/carcdigital>



Salvation Army
1239 Barlow Street,
Traverse City MI 49686
Saturday, September 26, 10am-3pm

Speakers:

D-Star: Chuck Scott N8DNX and Chuck Brew N8NXP

System Fusion: Mike Flynn KC8GW

MotoTrbo: Joe Erlewein N8CN

www.CherrylandARC.com

Hamfest information



HAMFEST/CONVENTION

08/16/2015 | Seaway Trunk Swap

Location: Port Huron, MI

Type: ARRL Hamfest

Sponsor: Eastern Michigan Amateur Radio Club

[Learn More](#)



HAMFEST/CONVENTION

09/19/2015 | GM ARC Trunk Swap

Location: Shelby Township, MI

Type: ARRL Hamfest

Sponsor: GM Amateur Radio Club

Website: <http://www.gmarc.org>

[Learn More](#)



HAMFEST/CONVENTION

09/20/2015 | Adrian Hamfest

Location: Adrian, MI

Type: ARRL Hamfest

Sponsor: Adrian Amateur Radio Club

Website: <http://w8tqe.com>

[Learn More](#)



HAMFEST/CONVENTION

10/25/2015 | USECA's 2015 Swap & Shop

Location: Madison Heights, MI

Type: ARRL Hamfest

Sponsor: Utica Shelby Emergency Communication Association

Website: <http://usecaarc.com>

[Learn More](#)



HAMFEST/CONVENTION

12/06/2015 | LCARC Amateur Radio Swap/Hamfest

Location: Mount Clemens, MI

Type: ARRL Hamfest

Sponsor: L'Anse Creuse Amateur Radio Club

Website: <http://www.n8lc.org>

[Learn More](#)

Hamfest information

2015 COLUMBUS, OHIO HAMFEST AND ARRL GREAT LAKES CONVENTION

Saturday, August 1, 2015

Celebrating our 25th year

Sponsored by:

The Voice of Aladdin Amateur Radio Club - W8FEZ

8:00 AM - 2:00 PM

Talk-in on: 146.760 – PL 123.0

(Doors open at 6:00 AM for vendor setup)

Located at:

Aladdin Shrine Center

3850 Stelzer Road

Columbus, Ohio 43219-3044



Admission	Indoor Tables	Outdoor Space
\$5 at the gate 12 and under free	Free with paid admission	Free with paid admission

- **Forums** - Covering a wide range of fun and informative Amateur Radio Topics,
- **Vendors** – Universal Radio, and big name vendors. See the website for the growing list!
- **Shopping** - Easton Town Center (<http://www.eastontowncenter.com>)
- **V.E. Amateur Radio License Testing**
- **OHIO SSBN Annual Meeting**



For Hamfest information visit our Website

<http://www.columbushamfest.com/>



Testing session information

EXAM SESSION

08/06/2015 | Lansing MI 48911-5322

Sponsor: Ingham County VE Group

Location: Lansing Fire Station #44 (Community Room)

Time: 7:00 PM (Walk-ins allowed)

[Learn More](#)

EXAM SESSION

08/08/2015 | Ann Arbor MI 48108-1516

Sponsor: ARROW Communications Assoc.

Location: American Red Cross Building

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

[Learn More](#)

EXAM SESSION

08/08/2015 | Port Huron MI 48060-4014

Sponsor: Eastern Michigan ARC

Location: St Clair County Library

Time: 10:00 AM (No walk-ins)

[Learn More](#)

EXAM SESSION

08/15/2015 | Flint MI 48507

Sponsor: The KT8Q & W8ACW VE Teams

Location: Baker College of Flint-Tech Center

Time: 9:30 AM (Walk-ins allowed)

[Learn More](#)

EXAM SESSION

08/15/2015 | Ionia MI 48846-8512

Sponsor: ICARPSC

Location: Ionia Central Dispatch

Time: 6:00 PM (No walk-ins)

[Learn More](#)

EXAM SESSION

08/15/2015 | Jackson MI 49204-9999

Sponsor: Cascades ARS

Location: Jackson District Library

Time: 10:00 AM (Walk-ins allowed)

[Learn More](#)

EXAM SESSION

08/19/2015 | Harrison Township MI 48045-650

Sponsor:

Location: Tucker Senior Center

Time: 6:30 PM (Walk-ins allowed)

[Learn More](#)

EXAM SESSION

08/19/2015 | Prescott MI 48756-9108

Sponsor:

Location: Mills Township Hall

Time: 7:00 PM (Walk-ins allowed)

[Learn More](#)

EXAM SESSION

08/22/2015 | South Lyon MI 48178

Sponsor: South Lyon Area ARC

Location: Witch's Hat Depot

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

[Learn More](#)

EXAM SESSION

08/27/2015 | Battle Creek MI 49017-4867

Sponsor: SMARS

Location: Maple United Methodist Church

Time: 7:00 PM (Walk-ins allowed)

[Learn More](#)

EXAM SESSION

08/28/2015 | Owosso MI 48867-9999

Sponsor: Corunna VE Team

Location: Baker College Welcome Center

Time: 7:00 PM (Walk-ins allowed)

[Learn More](#)

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Stuff for Sale

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If you have something to sell please send an email with the details to kevinboxey@hotmail.com to be included in the Waveguide listing.



Don't forget to join your fellow hams on the LCARA nets

- *Tuesday* night at 8:00 pm on 146.620 - with 100 Hz PL
and
- *Thursday* night at 8:00 pm on 442.750 + with 123 Hz PL

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.C.A.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. Financing available.

Lapeer County Amateur Radio Association

P.O. Box 12

Hadley, MI 48440-0012

Lapeer County Amateur Radio Association

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

Officers

President: Kevin Boxey KB8TAR, 810-793-4986
Vice President: Tom Oliver KD8EBY, 810-247-3227
Treasurer: Bill Miller KD8VP, 810-797-5329
Secretary: Lee Dziekan N8LJ

Committees and Appointees

Club Call Trustee W8LAP: Mike Zedan KN8Z
Repeater technical team: Lee N8LJ & Will KB8YGA
Skywarn Coordinator: Tom Oliver KD8EBY
Meeting Refreshments: Bill Miller KD8VP
Newsletter Editor: Kevin Boxey KB8TAR
Net Manager: Tom Oliver KD8EBY
Testing Coordinator: **Volunteer needed**
County EC: Tom Oliver KD8EBY
County AEC: Kevin Boxey KB8TAR
County AEC: Joe Medved KD8CIL

