

# Waveguide

**W8LAP / r**

146.620 - 100 Hz

442.750 + 123 Hz

**Lapeer County Amateur Radio Association**

Club Founder: Hollis Hayes W8ACD

Edition for **September 2015**

***\*\* The next regular club meeting will be held on Tuesday,  
September 8th, 2015 @ 7:30 pm at the EOC \*\****

## **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](mailto:kevinboxey@hotmail.com). The deadline for submission is the 20<sup>th</sup> of each month.*

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

2015 2015 2015 2015 2015 2015 2015 2015 2015

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	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	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	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						

October						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 ARES net 442.750+ 123 Hz PL at 8 pm	2	3 
4 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm	5	6 ARES net 146.620+ 100 Hz PL at 8 pm	7	8 ARES net 442.750+ 123 Hz PL at 8 pm	9	10
11 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm	12	13 LCARA club meeting 7:30 pm at the EOC	14	15 ARES net 442.750+ 123 Hz PL at 8 pm	16	17 -T&C
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25 -ARPSC @ 5:00 pm on 3.932 LSB -D3 net 145.31+ 131.8 Hz PL at 6:30 pm	26	27 ARES net 146.620+ 100 Hz PL at 8 pm	28	29 ARES net 442.750+ 123 Hz PL at 8 pm	30	31 
Phases of the moon: 4:☉ 12:☾ 20:☾ 27:☉						
Holidays and Observances: 12: Columbus Day (Most regions), 31: Halloween						

2015 2015 2015 2015 2015 2015 2015 2015 2015

## Upcoming events

### Presentation for September



*The presentation for September will be on Yaesu's digital voice system "Fusion".*

### Public Service Event Schedule



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

Labor Day Op CARE - 04 to 07 Sept 2015



## *Editorial Section*

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### The President Says:

Hello fellow club members.

Well as of today the Operation CARE signup sheet for Labor Day is looking a little ill. Please log on to w8lap.com and take a shift as soon as possible. With the current state of affairs we will have periods of being shut down during the weekend.

This sneaks up on me every year. We need to have nominations and an election at the September meeting for the club officer positions. Please consider offering your services. Some of these positions do not take a great deal of time.

See you all at the meeting. We do have a presentation lined up but if that falls through we will have a spirited "ask Elmer" session in its place.

Kevin KB8TAR

### The Treasurer Says:

Greetings to one and all. Boy where has the summer gone? With all the rain this summer the yard work has been somewhat overwhelming, consequently I haven't gotten around to the antenna work that I had planned. Ok I know that the best antennas are put up in inclement weather, but I wanted to avoid that.

The meeting for August was held in the city park, I hope that because of a last minute pavilion change that there wasn't anyone that missed it. Those that found us did have a good time. There were demonstrations about HF short wave and emergency antenna systems, HSSH Mesh UHF nodes and communications, 2 meter-440 cross band communications, and a failed attempt at a FOX hunting demonstration. The later because I failed to fully check my equipment before coming to the meeting. Hopefully Will Stanton will have the equipment repaired, which will allow a short demo at a future meeting.

Now, as for the treasury, all is well. The only expenses were for the electric bill and I had to buy a box of cups for operation care. OP-CARE, you say!!! Yes it is coming up very fast. Labor Day Op-Care needs your participation. PLEASE sign up for a session to hand out coffee to the weary travelers. There donations are what keep this club afloat and with small dues. Please help.

That's all for now. I know we have a good meeting planned for September. There will be a lecture about the coming of digital amateur 2 meter communications. If you ever wanted to know, be sure to be there.

Respectfully submitted.

KD8VP, William Miller Treasurer

## *Editorial Section*

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### The Trustee Says:

Hello W8LAP Supporters:

The tech team met at the repeater site on Aug. 18 to rectify an issue that dates back quite some time, and to remove a minor glitch from the 2 meter controller.

Previously, a 110v AC relay would energize from DTE power, turning on the 12v DC power supply that powers the transceivers and support equipment. If the 110v supply was interrupted or failed, the relay would de-energize, which would route 12v DC from the backup battery to the equipment.

This scheme worked fine for decades. Every time DTE power was interrupted, the backup battery kept the repeaters in service.

The problem with the above is that, if the 12V DC power supply failed, the DTE power would keep the relay energized, and the backup battery could not supply power. This occurred last year, when a component in the DC power supply failed. DTE power kept the relay energized, and the backup battery stayed disconnected. Both repeaters were off air.

The Tech Team removed the 110v relay, and installed a 12v DC relay. Now, when the 110v DTE power is on, the 12v power supply energizes the relay. When energized, the 12v power supply powers the equipment. If either the DTE power or 12v power supplier fails, the relay de-energizes, and the backup battery is routed to the equipment.

Although the relay change sounds like a quick changeover, it was not. The relays have different mounting screw footprints, and fabrication of several control leads was required. Will, fortunately, gave thought to the time factor, and that we would be working on a net evening. To assure that the repeater would be working at net time, in case the changeover ran long, he brought batteries to backup to the 2 meter repeater. The batteries were not needed, as the work was completed four minutes before net opening. Without the batteries, we surely would have run into unforeseen difficulties.

### This month's Links:

*Accurate, Stable Frequencies - Part 1*

Frequency drift and accuracy in Ham radios is not the problem it once was. Since the introduction of digital radios, one needs only rare tweaking to account for drift, and accuracy to within a few parts per million is perfectly acceptable.

## *Editorial Section*

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### The Trustee Says:

The need for accurate and stable frequency standards is most needed in test gear. A frequency counter that drifts is not going to contribute to accurate adjustments. A signal generator that drifts will lead to distrust in final results, as well. The list goes on...

This part leads into the subject with a link to a W2AEW video. It shows a fairly simple way of using WWV as a stable frequency source for calibrating test equipment, as well as determining the accuracy of a radio's frequency readout:

<https://www.youtube.com/watch?v=QCJ4cQGOQLI>

Part 2 will introduce a recently begun serial project from George (N2APB) and Joe (N2CX), who present the Chat With The Designers (CWTD) live and recorded podcasts. To get a feel for CWTD, go to [www.cwtd.org](http://www.cwtd.org), to surf through and get a feel for their material.

See you at the next meeting,

Mike, KN8Z (kn8z at arrl.net)

## *Editorial Section*

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### **LCARA Meeting Minutes**

08-11-2015

#### **Meeting in the Park!**

The direction finding presentation by Bill Miller, did not go so well. The apparatus for direction finding was not operational, so the presentation turned into a verbal explanation. The technical contingent present decided that the transmit button must have been pushed and let the smoke out of the IC's in the circuit. Chances are that it will be working and ready to demo at a future meeting.

At this point Gordon Miller gave us a discussion about his new camera and routing system that he has been experimenting with. Things are starting to get very complicated and he has had some trials trying to get everything to work together. Will Stanton assisted by establishing a node in the parking lot from the back of his pickup truck. We had very good coverage.

There was also a presentation of cross band repeating, put on by Gordon, utilizing the vhf rig in his car.

Kevin Boxey did a demo using the HF bands and the portable nvis antenna system. Contacts were made and the quickly installed system did work.

There were two guests, father and son, and the father was a technician licensee, that would like to get reconnected with amateur radio.

All in all a good time was had by all. Especially after Will Stanton served Hot Dogs.

Bill Miller kd8vp



## Event wrap up

*So how did everybody do in the Lighthouse event?*

*HF conditions were incredibly rough. I only made 15 contacts as you can see from my log below. Notice there is not one European or even west coast contact. KB8TAR*



### 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**

Date	Mode	Frequency	Call sign	City	State	Country	Additional information
15-Aug-15	USB	14.200	T41C	Cayo Jutias Lighthouse	n/a	Cuba	ILLW CU0009
15-Aug-15	LSB	7.190	N2CMC	Cape May Lighthouse	NJ	USA	ILLW US0011
15-Aug-15	USB	14.270	VE1REC	Peggy's Cove Lighthouse	n/a	Canada	ILLW CA0050, Nova Scotia
15-Aug-15	LSB	7.246	W26SB	Fire Island Lighthouse	NY	USA	ILLW US0019, Long Island
15-Aug-15	USB	14.202	VE9SLH	Swallowtail Lighthouse	n/a	Canada	ILLW CA0018, FN64ps
15-Aug-15	LSB	7.219	W3LR5	Lightship Overfalls	DE	USA	ILLW US0029, Lewes
15-Aug-15	LSB	7.225	WA2DQL	Oak Orchard Lighthouse	NJ	USA	ILLW US0157, Point Breeze
15-Aug-15	LSB	7.205	KD2CPX	Tibbetts Point Lighthouse	NY	USA	ILLW US0134, Cape Vincent
15-Aug-15	BPSK31	14.070	KP4LH	Los Morillos Lighthouse	n/a	Puerto Rico	ILLW PR0001
15-Aug-15	USB	14.256	N4L	Langbakneset Lighthouse	AL	USA	ILLW US0202, Big Spring Park
15-Aug-15	USB	14.222	T45FM	Punta Maya Lighthouse	n/a	Cuba	ILLW CU0005
16-Aug-15	USB	14.250	W4LX	Port Boca Grande Lighthouse	FL	USA	ILLW US0004, #124
16-Aug-15	USB	14.285	N4AU6	St. Augustine Lighthouse	FL	USA	ILLW US0198
16-Aug-15	USB	14.335	W2HAL	Hudson Athens Lighthouse	NY	USA	ILLW US0178, Hudson River
16-Aug-15	LSB	7.214	K2BR	Absecon Lighthouse	NJ	USA	ILLW US0001, Atlantic City



## 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](mailto: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](http://www.CherrylandARC.com)



## *From the Crim 2015*



*Here are the first runners coming through the 6 mile mark - they were running less than 5 minute miles at this point.*



*This is what the crowd looks like about an hour into the race.*



*At the end the cups are scattered roughly 150 yards down the road. The poor sponsors of the water station are starting to sweep up.*

## Swap information

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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

**10/03/2015 | GRAHamfest**

**Location:** Wyoming, MI

**Type:** ARRL Hamfest

**Sponsor:** Grand Rapids Amateur Radio Association

**Website:** <http://www.w8dc.org>

[Learn More](#)



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<https://aa4xx.wordpress.com/2015/08/22/lightnin-g-strikes-aa4xx-radio-shack/#more-154>



## Testing session information

### EXAM SESSION

**09/12/2015 | 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

**09/12/2015 | Houghton MI 49931-1200**

**Sponsor:** Husky ARC

**Location:** Fisher Hall Room 325

**Time:** 12:00 PM (Walk-ins allowed)

[Learn More](#)

### EXAM SESSION

**09/12/2015 | Lansing MI 48911-5322**

**Sponsor:** Ingham County VE Group

**Location:** Lansing Fire Station #44 (Community Room)

**Time:** 11:00 AM (Walk-ins allowed)

[Learn More](#)

### EXAM SESSION

**09/12/2015 | Negaunee MI 49866**

**Sponsor:** Hiawatha ARA

**Location:** Marquette Health Dept Bldg

**Time:** 8:30 AM (Walk-ins allowed)

[Learn More](#)

### EXAM SESSION

**09/12/2015 | 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

**09/12/2015 | Wyandotte MI 48192-9999**

**Sponsor:** Motor City Radio Club

**Location:** Glenwood Methodist Church

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

[Learn More](#)

### EXAM SESSION

**09/19/2015 | 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

**09/19/2015 | Ionia MI 48846-8512**

**Sponsor:** ICARPSC

**Location:** Ionia Central Dispatch

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

[Learn More](#)

### EXAM SESSION

**09/19/2015 | Kalamazoo MI 49001-4156**

**Sponsor:** Kalamazoo ARC

**Location:** Kalamazoo County Sheriff Dept

**Time:** 8:30 AM (Walk-ins allowed)

[Learn More](#)

### EXAM SESSION

**09/26/2015 | Allegan MI 49010-1524**

**Sponsor:** Allegan County ARC

**Location:** Allegan General Hospital - Basement Cafeteria

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

[Learn More](#)

### EXAM SESSION

**09/26/2015 | 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

**09/27/2015 | Saint Joseph MI 49085-8615**

**Sponsor:** NQ8A Testing Group

**Location:** Church of Christ

**Time:** 12:30 PM (Walk-ins allowed)

[Learn More](#)

### EXAM SESSION

**10/01/2015 | 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](#)

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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](mailto: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

## Lapeer County Form 217A

*Below is the ICS-217A form for Lapeer County as provided to District 3 earlier this year. Form 217A is nothing more than a list of communication resources that can be assigned and used during Emcomm events.*

*Print this out and keep it handy with your go-kit for reference.*

District 3 - Communications Resource Availability Worksheet (Form 217A)											
County	Channel Configuration	Channel Name / Traffic	Eligible Users	RX Freq	N/W	RX Tone	TX Freq	N/W	TX Tone	Mode A, D, or M	Notes
Lapeer											
	REPEATER	LAPEER 62	Amateur Radio Operators	146.620	W	-----	146.020	W	100.0	A	Primary phone communication
	REPEATER	LAPEER 442	Amateur Radio Operators	442.750	W	-----	447.750	W	123.0	A	Secondary or tactical phone communication
	SIMPLEX	LAPEER SIMPLEX	Amateur Radio Operators	146.580	W	-----	146.580	W	-----	A	Secondary or tactical phone communication
	SIMPLEX	LAPEER PACKET @ REPEATER	Amateur Radio Operators	145.030	W	-----	145.030	W	-----	D	Secondary or tactical packet communication
	SIMPLEX	LAPEER PACKET @ EOC	Amateur Radio Operators	145.090	W	-----	145.090	W	-----	D	Primary packet communication in/out EOC
	SIMPLEX	LAPEER HF	Amateur Radio Operators	21.380	W	-----	21.380	W	-----	A	Backup phone comm. (repeater failure)

## L.C.A.R.A. MEMBERSHIP APPLICATION

PLEASE PRINT:

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

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

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

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

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

ARE YOU A 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

