

Waveguide

W8LAP / r

146.620 - 100 Hz

442.750 + 123 Hz

Lapeer County Amateur Radio Association

Club Founder: Hollis Hayes W8ACD

Edition for July 2015

***** The next regular club meeting will be held on Tuesday,
July 14th, 2015 @ 7:30 pm at Lapeer County 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. The deadline for submission is the 20th of each month.

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

2015 2015 2015 2015 2015 2015 2015 2015 2015

July						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1	2 ARES net 442.750+ 123 Hz PL at 8 pm	3 	4 
5 	6	7 ARES net 146.620+ 100 Hz PL at 8 pm	8	9 ARES net 442.750+ 123 Hz PL at 8 pm	10	11
12 -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	13	14 LCARA club meeting 7:30 pm at the EOC	15	16 ARES net 442.750+ 123 Hz PL at 8 pm	17	-T&C 18 
19 -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	20	21 ARES net 146.620+ 100 Hz PL at 8 pm	22	23 ARES net 442.750+ 123 Hz PL at 8 pm	24	25
26 -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	27	28 ARES net 146.620+ 100 Hz PL at 8 pm	29	30 ARES net 442.750+ 123 Hz PL at 8 pm	31	
Phases of the moon: 1:☉ 8:☾ 15:☿ 24:☽ 31:☉						
Holidays and Observances: 3: 'Independence Day' observed, 4: Independence Day						

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
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Phases of the moon: 6:☾ 14:☿ 22:☽ 29:☉						

2015 2015 2015 2015 2015 2015 2015 2015 2015

Upcoming events

Public Service Event Schedule

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

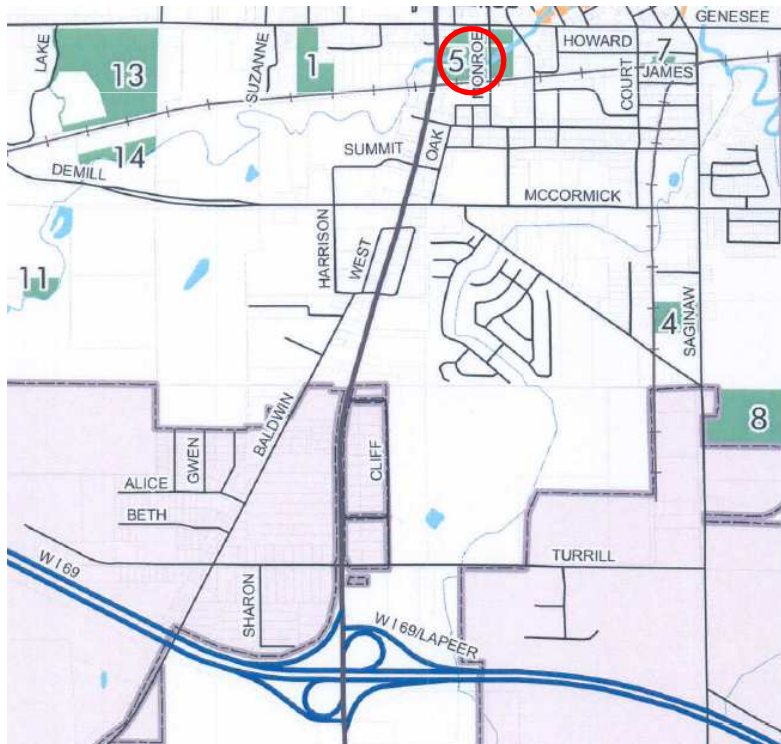


July 4th Op CARE - 03 to 05 July 2015

Atwood - 19 July 2015

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 all.

I see the July 4th Op CARE calendar is still in need of workers. Please, please, please take the time to visit the W8LAP website and signup for your shifts. It is extremely important to the club's future and financial health that we continue supporting this activity.

On the AEC side I have several exercises in mind in the near future. The first one will be an HF exercise to measure just how well the various HF bands perform inside Lapeer County. My intent is to designate an in county HF frequency that not only works well but to maximize the number of hams that can work it.

I don't know what the presentation will be yet in July but we will have one. See you at the meeting.

Kevin KB8TAR

The Treasurer Says:

Greetings to one and all.

As I write this Field Day has yet to come, but when you read this it will have happened. Boy I miss it, all the fun, friends, learning and contesting. Field Day is not a contest, but an Emergency preparedness exercise on a world sized scope. If you have never experienced it you need to visit a Field Day site and witness it. I plan on visiting the Tuscola site if time permits.

That said I need to tell you the Treasury is in good shape. There was a nice sized donation at the last Operation Care, Memorial weekend, and other than the electric bill there were no expenses. So all is good.

Hope to see you at a Field Day or if not, at the July meeting.

73

Respectfully submitted, William Miller KD8VP

Editorial Section

The Trustee Says:

Hello W8LAP Supporters:

There have been no issues that involve the trustee administration function, and no system malfunctions.

This month's Links:

Ultimate Lightning Strike Plotter

You've seen the subject of lightning here before (see July & August, 2014, Waveguide).

I discovered this site recently, and put it through the observation mill during the severe storms that passed through this week. Accuracy and reliability of the plots from this site far exceed the wunderground.com plots, mentioned in the previous articles.

What makes the above statement remarkable is that this site is maintained for free by its developers. Furthermore, the plotting information is uploaded from units that are bought and built by volunteers. These include a mixture of county EOCs, Hams, and others with an interest in electronics. Four of the detectors are in Michigan (Imlay City, Port Huron, and two in Rogers City).

The site is: <http://www.lightningmaps.org/realtime>

The main organization is located in Germany: <http://www.blitzortung.org/Webpages/index.php?lang=en>

The strikes seen on the above map are fed from the above volunteers' detectors. If you are interested in the technical details of the detection units they are in this document:

http://www.blitzortung.org/Documents/TOA_Blitzortung_RED.pdf?1435115066

Basic system function goes like this: When units sense lightning energy, they process its characteristics (signal strength, etc.), and send these, along with time and location information to a Lightning maps server. The server computer determines whether the time information matches that from other detectors. If the time matches, the server uses the additional information sent by the detectors to perform some complex calculations to plot the lightning strike on the map. If the times don't match, the server computer rejects the information as detected local (local to the detector) noise. The plotting occurs within seconds of detection.

The detector locations, used to plot a given strike, can be seen in real time by clicking the "Stations: off" button at the upper right of the map. Information is coming from detectors hundreds of miles distant from the plots. The viewing area can be expanded from very detailed to a world view. Also, by clicking on other map buttons, the depiction map may be tailored to some degree.

Accuracy of the plots is to about 3000 feet. Considering the multiple factors in the plotting problem, and that the entire project is supported by volunteers, the results of the project are amazing.

At the very least, seeing lightning strikes plotted near one's home should provide caution in operating during these times. Also, if you are in open areas, such as golfing, fishing, or farming, and own a portable device (smart phone, etc.), having this site on your screen might be a life saver.

See you at the next meeting,

Mike, KN8Z (kn8z at arrl.net)

Editorial Section

The Secretary Says:

Meeting minutes from June 9, 2015 Lapeer County Amateur Radio Association
Hospital report; Lee N8LJ's wife is hospitalized for surgery.

Minutes from the May meeting were ready by Kevin KB8TAR. Approved.

Treasurers report read by Bill, KD8VP. Approved.

Trustee report, Mike, KN8Z, all OK.

Community Service Report; The Big Fish Triathlon went well due to much help from the surrounding county amateurs that volunteered. There was one incident of hypothermia assisted by amateurs.

Preparation for Independence Day Operation Care will be starting as soon as Kevin can talk to Tom, KD8EBY.

Talked about Jugs for Op-Care. Bill, KD8VP, made a motion to buy three new jugs.

Motion carried with the stipulation that \$100.00 be the limit spent.

Field Day 2015, Kevin announce that the Tuscola club has extended an invitation for all hams to come and participate. Set up will begin Saturday June 27, 2015, at 9:30 am.

There will be a map in the next news letter.

Mike KN8Z brought up for discussion that a 440 portable repeater is for sale. He will forward the information to Kevin for study.

Kevin asked if there were any Elmer questions and Mike Bowman asked about his attempt to make an antenna. There was an extended discussion with board diagrams that followed.

Break at 8:20pm.

Gordon presented a very informative discussion on his experiments with a Software Defined Radio dongle, and the software to make it all work. Followed by a discussion on digitizing signals.

Meeting adjourned at 9:45pm.

Respectfully submitted by temporary recorder.

Bill KD8VP

Information

This is from the ARRL Bulletin:

"US Naval Academy CubeSats Get OSCAR Numbers

[AMSAT](#) has announced that two US Naval Academy-sponsored CubeSats have been assigned OSCAR numbers. BRICsat now will be known as NO-83, and [PSAT](#) has been designated as NO-84. OSCAR Number Administrator Bill Tynan, W3XO, made the assignments in response to a request from Bob Bruninga, WB4APR, at the Naval Academy. "From everything I can determine, these satellites meet all of the requirements for OSCAR designations," Tynan told Bruninga. "Therefore, by the authority vested in me by the AMSAT-NA President, I hereby confer the designation Naval Academy OSCAR 83 on BRICsat and Naval Academy OSCAR 84 on PSAT. I, and the entire amateur satellite community, hope for successful missions for both NO-83 and NO-84 and congratulate you and the rest of the Naval Academy team who designed, built and tested these two OSCAR spacecraft."

The two satellites were among several that were launched on May 20 from Cape Canaveral.

PSAT (NO-84) is a student satellite project, named in honor of USNA alumnus Bradford Parkinson of GPS fame. Its payloads include an APRS transponder for relaying remote telemetry, sensor, and user data from remote users and Amateur Radio environmental experiments or other data sources back to Amateur Radio experimenters via a global network of Internet-linked ground stations.

PSAT's digipeating capabilities are essentially the same as PCSat (NO-44) and the Amateur Radio packet system on the International Space Station. PSAT is on 145.825 MHz (1200 baud APRS), and BRICsat is on 437.975 (1200/9600 baud AX.25).

BRICsat-P (NO-83) -- the Ballistic Reinforced Communication Satellite -- is a low-cost 1.5 U CubeSat built in the US Naval Academy Satellite Lab in collaboration with George Washington University. It was designed to demonstrate on-orbit operation of a micro-cathode arc thruster ($\hat{\mu}$ CAT) electric propulsion system and carries an Amateur communication payload.

PSAT and BRICsat also carry 300 mW [Brno University](#) PSK31 transponders -- 28.120 MHz up/435.350 MHz (FM) down. The PSK31 transponder, PSAT's primary mission, permits dozens of simultaneous users to operate full duplex and maintain a continuous group dialogue throughout a pass."

PSAT - APRS plus a new PSK31 Approach

US Naval Academy Satellite Lab,

Packet Downlink . . 145.825 1200 baud APRS (shared with ISS, PCSAT, UO11 and others!)

PSK31 Downlink . . 435.350 MHz FM (300 mw)

PSK31 Uplink 28.120 MHz PSK31 SSB (25 watts into omni vertical authorized)

PSAT is another APRS satellite that can digipeat user packets just like the original PCSAT (NO44) and the packet system on the ISS. PSAT also supports the same digipeating alias of ARISS so that users do not have to change any parameters when using any of these three APRS transponders. If users want to target only a single satellite, they can use the actual spacecraft callsign. PSAT for PSAT, RS0ISS for the ISS, and W3ADO-1 for PCSAT.

Photos from the Big Fish Triathlon



The last rider with KD8EBY in hot pursuit

We had terrible weather conditions for the Big Fish Triathlon with rain, low temps, and lots of wind. If you look closely you can see the flags moving in the center photo. Rider participation was down about 50% due to the weather conditions.

Special thanks to the following stations for participating:

Chris KB8UIH	Joe N8OSL
Dave N8LBF	Tom W8KTL
Tom KD8EBY	Mitch KD8ZXU
Lee N8LJ	Tim KD8VUI
Mike KD8OTZ	Will KB8YGA
Jamie KC8PMW	Kevin KB8TAR

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

Hamfest information



HAMFEST/CONVENTION

07/18/2015 | 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

07/25/2015 | 2015 CMARC OUTDOOR HAMFEST

Location: Lansing, MI

Type: ARRL Hamfest

Sponsor: Central Michigan Amateur Radio Club

Website: <http://centralmiarc.com>

[Learn More](#)



HAMFEST/CONVENTION

08/01/2015 | UP Hamfest 2015

Location: Escanaba, MI

Type: ARRL Hamfest

Sponsor: Delta County Amateur Radio Society

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

[Learn More](#)



HAMFEST/CONVENTION

08/16/2015 | Seaway Trunk Swap

Location: Port Huron, MI

Type: ARRL Hamfest

Sponsor: Eastern Michigan Amateur Radio Club

[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 information

EXAM SESSION

06/27/2015 | East Jordan MI 49727-9999

Sponsor: Top of Michigan ARC

Location: Raven Hill Discovery Center

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

[Learn More](#)

EXAM SESSION

06/27/2015 | Garden City MI 48135-1376

Sponsor: Garden City ARC

Location: Garden City Park

Time: 3:00 PM (Walk-ins allowed)

[Learn More](#)

EXAM SESSION

06/27/2015 | Owosso MI 48867-9999

Sponsor: Corunna VE Team

Location: Baker College Welcome Center

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

[Learn More](#)

EXAM SESSION

06/27/2015 | Trenton MI 48143

Sponsor: Motor City Radio Club

Location: Community Bible Church

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

[Learn More](#)

EXAM SESSION

07/11/2015 | 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

07/11/2015 | 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

07/11/2015 | Wyandotte MI 48192-9999

Sponsor: Motor City Radio Club

Location: Glenwood Methodist Church

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

[Learn More](#)

EXAM SESSION

07/12/2015 | Saint Joseph MI 49085-8615

Sponsor: NQ8A Testing Group

Location: Church of Christ

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

[Learn More](#)

EXAM SESSION

07/15/2015 | Prescott MI 48756-9108

Sponsor:

Location: Mills Township Hall

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

[Learn More](#)

EXAM SESSION

07/18/2015 | 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

07/18/2015 | Ionia MI 48846-8512

Sponsor: ICARPSC

Location: Ionia Central Dispatch

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

[Learn More](#)

EXAM SESSION

07/18/2015 | Kalamazoo MI 49001-4156

Sponsor: Kalamazoo ARC

Location: Kalamazoo County Sheriff Dept

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

[Learn More](#)

EXAM SESSION

07/25/2015 | 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

07/25/2015 | South Lyon MI 48178

Sponsor: South Lyon Area ARC

Location: Witch's Hat Depot

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

[Learn More](#)

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Stuff for Sale

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Needed 572B vacuum tube(s)
Please contact Lee N8LJ 810-796-9816

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

Emergency App



**The Red Cross
Emergency App**

Real-time severe weather alerts and safety information, all in one app.

AVAILABLE RIGHT NOW ON

Download on the App Store GET IT ON Google play

<http://www.redcross.org/mobile-apps/>

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

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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

