



**W8LAP/r**

146.620 - 100Hz  
442.750 + 123Hz

[www.w8lap.com](http://www.w8lap.com)

# Waveguide

## Lapeer County Amateur Radio Association

June

Published Monthly by the Lapeer County Amateur Radio Association

2009

*The next regular meeting will be held on  
Tuesday, June 9 —7:30 p.m.  
at the Lapeer County Central Dispatch Center (911)  
2332 W. Genesee Street in the basement.*

### The Treas Sez:

Hi to one and all. This months (May) report is the start of the summer reports and the replenishing of our treasury.

Thanks to Tom Oliver KD8EBY and the many folks that spent some of their holiday weekend up at Operation Care, our finances received a nice boost. As most of you know Operation Care is what supports our club the most. If it weren't for Op Care and the Swap and

Shop, I hate to think what the dues would have to be to pay for all the insurances and expenses for the repeaters. Thanks to all of you for keeping our club operational. The only expense beyond normal was the purchase of cups and supplies for Op Care, and they paid for themselves.

Thanks again!

73 Bill Miller KD8VP

### The Trustee Sez:

Hello to everyone. No news is good news. The repeaters are working fine and that makes my job easy. There was a little problem earlier in the month with the 2 meter repeater locking up and timing out. I believe this was due to a band opening and more than likely it was on the 220 Mhz link frequency. We do not have a CTCSS (continuous tone coded squelch system) or PL (private line) on the link frequency and since both W8ECG and W8LAP were affected I think that was the problem. Anyway it never happened again so problem solved.

Please use the repeater!!!!!! If you don't use them what good are they????

73 Bill Miller KD8VP

### The Secy Sez:

The meting was called to order at 7:30 by Bob, n8ne with the Pledge of Allegiance to the flag and introduction of members and guest.

Minutes was read by Flo, kc8cab. Accepted by Tom, kd8eby after correction of his call sign and seconded by Dan, kc1bud.

Treasurer's report was given by Bill, kd8vp. Accepted by Dick, kc8vha and seconded by Dan, kc1bud.

Trustees report was given by Bill, kd8vp. The repeater is working just fine. He is leaving it alone. He also mowed

the lawn. He said he will change the repeater door after school is out.

New Business: Operation Care is May 22 to 25.

Tea and Crumpets is on the 3rd Saturday of the month at McDonalds on M-24 from 8a.m. to 11 a.m.

Field Day is June 27 and 28 on the hill at the Rest Area on I-69.

The next testing is May 30. It is now \$15.00 for testing.

Break was from 7:50 to 8:05.

50/50 was won by Dan, kc1bud. Meeting closed at 8:15.

## The EC Sez:

First of all a big Thank you to those who donated their time and effort toward Operation Care this last Memorial Day Weekend, it was a little slower than last years but we came close to our "usual" minimum donations for the holiday.

Second, although I haven't seen anything personally I've been advised that the Ride for Life in Attica which was scheduled on Field Day Weekend has been cancelled due

to lack of participants. So I'm hoping that all that were going to help in Attica will join us on "the hill" and participate in Field Day. And last but not least for now on behalf of the others I want to thank Tom (kd8eoa) for joining the list of Net Control Operators. Your help is truly appreciated.

73 all

Tom, KD8EBY

## From the mailbag:

### One Day Tech Class

Dan, KB6NU, and Bruce, KD8APB, will be conducting the infamous One-Day Tech Class on June 13th class at Trinity Lutheran Church 45160 Van Dyke Avenue Utica, MI 48317

Class starts at 9:00 AM and the exam is given at 3:00 PM. Over **90%** of participants have passed!

PLEASE talk this up on any nets you participate in and forward this email to your club newsletter editor.

**Prospective students should be directed to <http://arri-mi.org> for details on signing up.**

73!

Scott Bicknell, W1BIC

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### A Tale of Two Tubes

By Dan Romnanchik, KB6NU

A couple of weeks ago, I worked N4QR on 40m CW. I could tell by the tone of his signal that he was operating a homebrew transmitter. There wasn't any 60 Hz on his signal, and it didn't chirp exactly, but I could tell it wasn't the pure tone you get out of today's radios.

I asked him about his rig, and he told me that it was a one-tube transmitter made with a 6L6. I forgot to ask him where he got the schematic, but a quick Internet search turned up the following:

\* The May 2005 issue of the K9YA Telegraph (<http://www.k9ya.org>) has an article written by N4QR titled, "The Wonderful One-Tuber," that contains the schematic for the transmitter. The K9YA folks don't make issues of The Telegraph available on their website, but I was able to get a copy of the issue by e-mailing them.

\* A 6L6 Classic (<http://www.io.com/~nielw/6l6/6l6.htm>)

\* WB2MIC 6L6 Transmitter Project ([http://www.metaphoria.us/hamradio/6L6\\_transmitter\\_schematic.htm](http://www.metaphoria.us/hamradio/6L6_transmitter_schematic.htm))

The 6L6 is a pentode that, according to Wikipedia (<http://en.wikipedia.org/wiki/6L6>), was introduced by the Radio Corporation of America (RCA) in July 1936. Apparently, it was used quite a bit in public address systems.

After the tube became successful, tube manufacturers introduced a number of variations, including the venerable 807. The original 6L6 was capable of delivering 19 W; the

latest variation, the 6L6GC is rated for 30 W. The 6L6GC is still used in guitar amps, and is still manufactured in Russia, China, and by Groove Tubes ([www.groovetubes.com](http://www.groovetubes.com)) in the U.S. They sell a number of different 6L6 variants; the cheapest is \$16, the most expensive \$180!!

Tube #2

One of the reasons I was interested in the 6L6 is because about a year ago I came across a schematic for a transmitter using 6A6 dual triode. I had just come into possession of a couple hundred tubes, and while I didn't have a 6A6 (at least I haven't found one yet), I do have a couple of 6J6 dual triodes. They're not quite as high power as the 6A6, but I'm still thinking about building a little transmitter with one.

As you might expect, there's a bunch of information on the Internet about this tube:

\* The Jones Push-Pull Transmitter ([http://wv7g.home.mindspring.com/jones\\_6j6.html](http://wv7g.home.mindspring.com/jones_6j6.html)) was built with a 6J6 instead of a 6A6.

\* Another schematic can be found on the AK0B website (<http://www.qsl.net/ak0b/>).

\* 6J6 data sheet (<http://www.gargnas.net:3000/tubedata/6J6.pdf>) from the GE data book.

One interesting fact about the 6J6 is that IBM used it in the 604 computer. Unfortunately, they found it to be not as reliable as they wanted it to be, but at first none of the

tube manufacturers were interested in making a more robust version. This led IBM to set up a tube-making laboratory where they could experiment with designs. They developed a more reliable version of the 6J6 and finally convinced RCA to manufacture the tube. According to the author of the history of the 604 (<http://ed-thelen.org/comp-hist/IBM-604.html#new>), part of the concern is that IBM would decide to get into the tube business.

perfect, remember that there just might be a story behind it. Ask the op about his transmitter, and listen to what he or she has to say.

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When not pondering the mysteries of vacuum tube part numbers, KB6NU teaches ham classes, works CW on the HF bands, and blogs about ham radio at <http://www.kb6nu.com>.

So, the next time you hear a signal that doesn't sound so

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## Be Radio-Active Participate

### Field Day Tips

(Or – How to make a lot of QSOs at Field Day)  
(Modified from the last ARRL Letter)

- 1) You will get many more stations in your log by calling CQ than by tuning the dial and answering CQs; however, if you're calling CQ and not getting any replies, keep calling. Most major contesters call CQ for several minutes at a time before giving up. Giving up after three or four CQs is giving up too soon.
  - 2) Keep your CQs short and to the point: "CQ Field Day, CQ Field Day, Whiskey-One-Alfa-Whiskey, Field Day." Wait about 5 seconds between CQs -- this gives stations enough time to answer you
  - 3) Use standard phonetics. "Cute" phonetics don't always get through and they can confuse newer operators.
  - 4) When working a station, you should give your exchange information only once and keep it simple. "Whiskey-One-Alfa-Whiskey, ~~copy~~ three Foxtrot Connecticut, QSL?" If they didn't get all of the exchange, they will ask for a repeat. (*NEVER say "copy" or "pleas copy" – just give the exchange! Ed.*)
  - 5) If you are running a pileup: Once you have pulled a call out of the pileup, give your exchange information first. Here's an example: "Whiskey-One-Alfa-Whiskey, copy 3F Connecticut, QSL?" Don't ask for the calling station's information first -- this will reduce any sense of rhythm and timing in the pileup.
  - 6) If you get a pileup of stations and can't make out an entire call, listen for one letter and ask for it specifically: "The station with Delta only, go ahead."
  - 7) When you get the other station's information, keep your acknowledgment simple. "QSL, thanks, QRZ Field Day from Whiskey-One-Alfa-Whiskey."
  - 8) Find a comfortable pace for you and maintain that pace. You will tire quickly if you are screaming into the microphone or trying to work stations too quickly. This leads to inefficiency.
  - 9) Use a headset with a boom microphone and a foot switch -- this frees up your hands to log QSOs. Writing or typing with a mike in your hand slows you down.
  - 10) Go for as many bonus points as you possibly can. Numerous opportunities exist, from copying the Field Day message to sending traffic to using natural power for QSOs.
- These tips should help maximize your score on Field Day. Remember: No matter how you choose to enjoy Field Day, maximize your fun, however you define it.

## **For Sale For Sale For Sale For Sale:**

### **For Sale**

HW-8 Handbook—covers HW-7, 8 & 9 \$15  
COM port boards, ISA, 2 ports \$3.00 ea

From the estate of N8CQA:

Central Electronics 10B \$130

Central Electronics 20A \$130

One VFO's for above \$75 ea

30M two transistor transmitter in a Hershey cocoa can \$15

All offers will be listened to!

Contact Hank K8DD at [k8dd@k8dd.com](mailto:k8dd@k8dd.com) or 810-721-0708

### **Wanted**

Looking for a 50 ohm dummy load for HF – Heath Antenna or equivalent.

And I am looking for a Channel Master Antenna rotator control box right now. Working or not.

Anyone have either of these sitting around your shack that you would like to get rid of?

Todd KD8HBX 810-721-0103 (after 5 PM)

## **Coming Events...**

**June 6, Grand Rapids** I.R.A “Good Old Days Hamfest Info: [www.w8hvg.org](http://www.w8hvg.org)

**June 20, Midland** Swap Info: [www.qsl.net/w8kea](http://www.qsl.net/w8kea)

**June 21, - Monroe** Hamfest Info: [www.mcrca.org](http://www.mcrca.org)

**June 27-28 FIELD DAY!**

**July 25 & 26—Port Huron to Mackinac Special Event Station, USCG Cutter Bramble.**

**August 8, Hale, MI—I.C.A.R.E.** Swap & Shop. Info 989-735-3186

**August 9—Seaway Trunk Swap, Vantage Point** Port Huron at the foot of Water Street. Trunk sales only – no inside sales. Free to attend; Free to sell for licensed Amateur Radio Operators.

## **ARRL Field Day**

**June 27-28, 2009**

Always The Fourth Full Weekend In June

Field Day T-shirts, participation pins and other items [available for order now!](#)

To find a group in your own home area, use the [FD Station Locator](#) or [find a club](#)

The Lapeer County Amateur Radio Association's W8LAP Field Day will be held at the 5 Lakes rest area on Eastbound I-69 between Wilder Road and Lake Pleasant Road.

**Lapeer County Amateur Radio Association**

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

**Officers**

President, Bob Beswetherick, N8NE . 810-653-3856      Vice-Pres., Chris Azelton, KC8TWL..810-245-0073  
Secretary, Flo Haack KC8CAB ..... 810-793-2606      Treasurer, Bill Miller, KD8VP.....810-797-5329

**Committees & Appointees.**

Club Founder.....Hollis Hayes, W8ACD      Club Call TrusteeW8LAP.....Bill Miller, KD8VP  
Club Historian.....Charlie Whipp, KC8JBK      VE Coordinator.....Al Wilson, N8NPR  
Skywarn Coordinator.....Pete Headrick KB8RSG      Swap & Shop Chairperson.....Bill Miller, KD8VP  
Field Day Chairman.....Bill Miller, KD8VP      Meeting Refreshments.....Bill Miller, KD8VP  
Two Meter Net Mgr.....Charlie Whipp, KC8JBK      Newsletter Editor.....Hank Kohl, K8DD  
Public Information Officer.....**It could be you!**

**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.

**Board of Directors'** monthly meetings are held on the first Tuesday of each month at Tim Horton's at 7:30PM (Check on the W8LAP repeaters).

**Newsletter**

Items for the newsletter may be called to the Editor at 810-721-0708, sent by Mail (Box 88, Attica, MI 48412), or as an ASCII or Word file to k8dd@arrl.net The deadline for submissions is the 20th of each month.

This area is for the article that you were going to write!

# ***Remember...DX Is!***

## **N2CQ QRP CONTEST CALENDAR**

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Digital Pentathlon (PSK) 50W Max  
June 5, 1800z to 2200z

Rules: <http://dqso.net/index.files/digipen-en.html>

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Open Season Ten Meter PSK ... QRP Category  
June 6, 0000z to June 7, 2400z

Rules: <http://www.ten-ten.org/oseason/oseason.html>

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Wake-Up! QRP Sprint (CW) \*\*\* QRP Contest \*\*\*  
June 6, 0600z to 0800z

Rules:

<http://qrp.ru/modules/sections/index.php?op=viewarticle&artid=7&page=1>

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IARU Region 1 Fieldday (CW) ... QRP Category  
June 6, 1500z to June 7, 1459z

Rules: <http://www.sk3bg.se/contest/iarur1fd.htm>

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Alabama QSO Party (Ph/CW) ... QRP Category  
June 6, 1600z to June 7, 0400z

Rules: <http://www.alabamagsoparty.org/2009/2009Rules.pdf>

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NAQCC Straight Key/Bug Sprint (CW) \*\*\* QRP Contest \*\*\*  
EDT: June 9, 8:30 PM to 10:30 PM  
UTC: June 10, 0030Z to 0230Z

Rules: <http://www.arm-tek.net/~yoel/contests.html>

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ANARTS WW RTTY/Digital Contest  
June 13, 0000z to June 14, 2400z

Rules: <http://anarts.com.au>

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GACW WWSA CW DX Contest (CW) ... QRP Category  
June 13, 1500z to June 14, 1500z

Rules: <http://gacw.no-ip.org/contest.html>

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ARRL June VHF QSO Party  
June 13, 1800z to June 15, 0300z

Rules: <http://www.arrl.org/contests/rules/2009/june-vhf.html>

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SKCC Weekend Sprintathon (Straight Key CW) ... QRP Category  
June 14, 0000z to 2359z

Rules: <http://www.skccgroup.com/sprint/wes/>

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West Virginia QSO Party (SSB/CW)... QRP Category  
June 20, 1600z to June 21, 0200z

Rules: <http://www.qsl.net/wvsarc/>

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AGCW VHF/UHF CW Contest ... QRP Category  
June 20, 1600z to 1900z (144 Mhz)  
June 20, 1900z to 2100z (432 Mhz)  
Rules: [http://www.agcw.org/en/?Contests:VHF-UHF\\_Contest](http://www.agcw.org/en/?Contests:VHF-UHF_Contest)

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RUN FOR THE BACON (CW) \*\*\* QRP CONTEST \*\*\*  
EDT: June 21, 9 PM to 11 PM  
UTC: June 22, 0100z 0300z  
Rules: <http://www.fqgrp.com/>

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SKCC Sprint (Straight Key CW) ... QRP Awards  
June 24, 0000z to 0200z  
Rules: <http://www.skccgroup.com/sprint/sks/>

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Marconi Memorial Contest (CW) ... QRP Category  
June 27, 1400z to June 28, 1400z  
Rules: [http://www.arifano.it/Contest\\_Marconi.htm](http://www.arifano.it/Contest_Marconi.htm)

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ARRL Field Day (CW/SSB/RTTY)... QRP Category  
June 27, 1800z to June 28, 2100z  
Rules: <http://www.arrl.org/contests/rules/2009/fd.html>

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QRP ARCI Milliwatt Field Day (ALL)... QRP Contest!  
June 27, 1800z to June 28, 2100z  
Rules: <http://www.qrparci.org>

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MQFD Monthly Sprint (CW/PH/Digital) \*\*\* QRP Contest \*\*\*  
June 27, 1800z to 2200z  
Rules: <http://w2agn.net/mqfdsprint.html>

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RAC Canada Day Contest (CW/SSB) ... QRP Category  
Jul 1, 0000z to 2359z  
Rules: <http://www.rac.ca/service/contesting/>

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DL-DX RTTY Contest (RTTY/PSK)  
Jul 4, 1100z to Jul 5, 1059z  
Rules: <http://www.drcq.de/>

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Original QRP Contest (CW) ... QRP Contest!  
Jul 4, 1500z to Jul 5, 1500z  
Rules: <http://www.qrpcc.de/contestrules/oqrpr.html>

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Firecracker Sprint (PSK31 40M) ... QRP Category  
Jul 4, 2000 to Jul 5, 0200 (Local Time)  
Rules:  
[http://www.podxs070.com/contests/40m\\_sprint\\_rules08.htm](http://www.podxs070.com/contests/40m_sprint_rules08.htm)

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MI QRP Fourth of July Sprint (CW) ... QRP Contest!  
Jul 4, 2300z to Jul 5, 0300z  
Rules: <http://www.qsl.net/miqrplclub/contest.html>

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Thanks to SM3CER, WA7BNM, N0AX (ARRL), N2APB, WB3AAL and others for assistance in compiling this calendar.

If you wish to subscribe to the Calendar, send an e-mail to [N2CQ@ARRL.Net](mailto:N2CQ@ARRL.Net)

Please forward the contest info you sponsor to [N2CQ@ARRL.NET](mailto:N2CQ@ARRL.NET) and we will post it in order to give it more publicity. Anyone may use this "N2CQ QRP Contest Calendar" for your website, newsletter, e-mail list or other media as you choose. (Include a credit to the source of this material of course.)

72 de Ken - N2CQ

[n2cq@arrl.net](mailto:n2cq@arrl.net)



# Lapeer County Amateur

## Radio Association

P.O. Box 12

Hadley, MI 48440-0012

### 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.



# MICHIGAN RADIO AMATEUR YOUTH NET

<http://tinyurl.com/mraynetwork>



The MRAY Net can be found on the 2-meter W8HVG Link Repeater System (<http://www.w8hvg.org/>) every Thursday night at 7 PM with Net Control Corey KD8BOQ.



All licensed Amateur check-ins under the age of 22 are welcome!! Even interested non-Ham Youth are encouraged to join us by way of Third-Party Participation, with the help of a licensed Parent or other Ham. If you have young people in your Club, family, or even neighborhood, please help secure the future of Amateur Radio by getting these kids out on the air. In this way, you can do your part in making sure that Amateur Radio will be there to pass on to the next generation. Whether they are licensed or not, you can promote Ham Radio and guarantee it's survival by encouraging the young people in your life to check into the MRAY Net every Thursday night at 7 PM.

Please help them have fun enjoying the good, clean Hobby that you've had the privilege to be a part of. Remember—the Youth are the FUTURE of Ham Radio.



**THANKS FOR YOUR SUPPORT!!!**  
**Contact: Corey J. Bulock KD8BOQ**  
**517-930-2372**  
**[kd8boq@gmail.com](mailto:kd8boq@gmail.com)**