



# *TMRA Amateur Radio Beacon*

March 2016



## **The Prez Sez**

Sadly, once again we have to announce the death of two local amateur radio operators, both with long-term associations with the TMRA. Martha Hanna K8AAC died on February 24<sup>th</sup>; together with her husband Bob (SK), K8ADK, they were very active not just in the TMRA, but LCARES and GTARA. For many years she assisted Bob when he was the Table Chairman for the Hamfest. Both were recognized as TMRA Amateurs of the Year. A condolences card has been sent to Martha's family and the Club will make a donation in her memory to one of the specified organizations of her choice. Hubert Appert, W8LRT, died February 8<sup>th</sup>. Although not a member in recent years, he was active at many Field Days; we sent a condolences card to his family.

The 2016 TMRA Hamfest is only about 3 weeks away – March 20<sup>th</sup> – and volunteers are needed to help with various activities: Skeet, KD8KXD, is in charge of tickets, Chris, KC8UFV, talk-in, Tom, KB8PAI, set-up and tear down, Steve, KC8TVW, VE exams, Mike, W8MAL, security (manning the doors). We'll have food vouchers for all who volunteer at least an hour of their time to help.

One of the activities after the Hamfest, when all the financial details are known, is the development of a Budget for our next Financial Year, which starts on July 1<sup>st</sup>. I need 3 or 4 members to be on the Budget Committee for the FY 2016-17 – please contact me if you're interested in helping.

We also need an Audit Committee – again 3 or 4 members, to review the financial records of the Club. And lastly (for now) –we need a Nominating Committee to prepare a slate of members who are willing to run for election (in June) for an office.

The ARRL has a program for ARRL Affiliated Clubs, and we are one, where they can retain part of the ARRL membership dues when either a renewal or a new membership is submitted to the ARRL through the Affiliated Club. This is not a new program, but TMRA has not taken advantage of it for many years: for renewals we would keep \$2.00, and for new members we would keep \$15.00. So when the time comes to renew your ARRL membership, or if you plan on joining the ARRL, contact me, or Zack, N8AZK, or Rich, KD8WCB, for the form to use.

Just another reminder of the TMRA digital net that Steve, W8TER, is running on Tuesday evenings 8:00pm – to at least 9:00pm. It's an informal, easy-going, instructional, learn-by-doing net. It's on the 147.27 repeater for voice and simplex 145.555MHz for the Fldigi. As we (LCARES) continue the monthly tests/drills with the LCARES/ASPR radios on the first Saturday of each month, we'll be introducing digital messaging as part of those drills – so the weekly TMRA net is a good place to learn about Fldigi, Flmsg, Flwrap etc., and get in some practice sending and receiving digital.

73, Brian WD8MXR

## **ARES News**

The next ARES meeting is March 26 at 9:00 am at St. Luke's Hospital, 5901 Monclova Road in Maumee, Ohio in the private dining room in the basement. Arrive early and enjoy breakfast in the basement cafeteria at 7:30 a.m.

Tune into the ARES IN BRIEF Net on Sunday nights at 7:30 pm on 147.270. It is open to all.

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## **Lucas County SKYWARN® TRAINING**

The National Weather Service (NWS), in conjunction with Lucas County SKYWARN® and the Lucas County Emergency Management Agency, will be holding a SKYWARN® Severe Weather Spotter Training class on Saturday, March 26, 2016. Training will be at St. Luke's Hospital, 5901 Monclova Road in Maumee, Ohio. Registration starts at 9:00 AM and training begins at 10:00 AM.

The class will last about 2 hours and includes a multimedia presentation. Steve Aushenfelter, N8XSF, District One Skywarn Coordinator, presents this training each spring. The training is recommended for Fire, Police and all emergency service responders. It is open to all citizens interested in severe weather recognition, reporting, and safety. It will inform you about:

- Basics of thunderstorm development
- Fundamentals of storm structure
- Identifying potential severe weather features
- Information to report
- How to report information
- Basic severe weather safety

SKYWARN® Storm Spotters form the first line of defense against severe weather. It's more than just a weather class. It is information that could save many lives by advance warning!

All interested individuals are encouraged to attend this free training for all ages and it is not necessary to pre-register for this training. Those who attend and complete the program will be registered with the National Weather Service Cleveland Forecast Office and will be issued a SKYWARN® Spotter ID card at the training.

For more information contact:

Tim Gray, KD8IZU  
Lucas County Skywarn® Coordinator  
[boxcar@toast.net](mailto:boxcar@toast.net)

## **TMRA Hamfest**

The 2016 TMRA Hamfest is March 20 at Owens Community College. Many volunteers are needed to help. We'll have food vouchers for all who volunteer at least an hour of their time to help.

## **Glass City Marathon**

Remember, the Glass City Marathon is April 16, 2016. Many volunteers will be needed. If you are a newly licensed ham and are looking for ways to use your new skills and equipment, you couldn't find a better way than to volunteer for the Glass City Marathon. Don't worry about knowing what to do. You can be paired with an experienced ham, who will show you how to operate. As a bonus, you will be learning important skills useful in emergencies.

## **Ohio NVIS Antenna Day**

I would like to get a couple volunteers in District 1 with NVIS capability to man their station for the ARES NVIS antenna day, April 23.

One station will work 40, the other 75 meters. We will try to set a frequency (plus or minus QRM) for the stations that we can publicize. We will also use Twitter to spot frequencies.

The stations must be able to commit to the following requirements:

- Must be on the air for the full day
- Must be well-outfitted for receiving NVIS signals
- Must be able to give critical reports to stations who are testing their signals
- Must keep an accurate log
- Could be a great exercise for an EOC HF station
- Can use several operators (although reports must be consistent)

Those interested, please contact me at my included email address.

***Brent Stover, WD8PNZ***

***District Emergency Coordinator, District 1 Ohio ARRL***

**E-mail:** [wd8pnz@arrl.net](mailto:wd8pnz@arrl.net)

## **New Hams and Upgrades**

Congratulations to new ham Don, KE8DHO, who earned his tech license at the February 13, VE Session. And congratulations to those hams upgrading their licenses: Charles, AC8VS, (extra); Steve, N8SRH, (extra); and Gary, KA8AUJ, (general).

## Dale's Tales

Greetings everyone. Welcome to "Dale's Tales" for March, 2016.

The Great Lakes Division was well represented in the current issue of Radio Waves, published by the League <http://www.arrl.org/files/file/Radio%20Waves%20Newsletter/Winter%202016%20Radio%20Waves.pdf>. This ARRL periodical is aimed at instructors and educators, keeping them informed about ham radio and STEM Programs. Ohio's West Chester Amateur Radio Association teamed up with National Voice of America Broadcasting Museum to host "Pi Day + 6" in honor of May 14. (This year it really stacks up as 3.14.16 and is also Albert Einstein's birthday). In addition, the West Michigan Aviation Academy in Grand Rapids has started a ham club as the result of its prep work for their scheduled ARISS Contact. This publication may offer your club an introduction to STEM instructors in your area and open an opportunity to begin a local school program for prospective hams. Check it out.

As announced in this column last month, Chief Operating Officer, Harold Kramer W1JB is entering the world of retirees. Knowing Harold, I suspect this is not the last we will hear from him. I spoke with him on the phone Friday and we talked a little about some of his plans. These will include an opportunity to do a little writing and probably make some other interesting contributions to ham radio. Please feel free to extend your well wishes to Harold at [WJ1B@arrl.org](mailto:WJ1B@arrl.org).

A special thanks goes out to the Cherryland Amateur Radio Club for their warm hospitality when Michigan Section Manager Larry, WB8R Monroe County EC, Dave AC8SI and your ARRL Director Dale WA8EFK "dropped in" for a visit at their February club meeting. The three of us were attending the Michigan Statewide Interoperability Conference in Traverse City and could not pass the opportunity for an evening visit with the club.

I am pleased to report that Amateur Radio is playing a continually more important part in Michigan's overall emergency communications plan. This Interoperability Conference, which was hosted by the Homeland Security Division of the MI State Police, devoted several hours time to Auxiliary Communications, which is based upon ARES®, NTS, CAP, MARS, SATERN how these groups are organized, operate and respond in emergencies. Michigan Section manager John McDonough WB8RCR also detailed RACES, covering what it is and what it is not. The several hundred conference attendees were from police, fire, EMT, Emergency Management and first responder teams from across the state.

UPDATE for AMATEUR RADIO PARITY ACT: HR 1301 is the Bill number for the House of Representatives. Progress continues, as last month the House version had 118 Co-Sponsors, today the number is up to 123. The Senate version of the bill is number S 1685. If you have not done so, please contact your Senators and Congressman in Washington and encourage their support for the Act. You can find more information at <http://www.arrl.org/amateur-radio-parity-act>. Please be sure to route your letters through ARRL Headquarters for personal delivery: ARRL, Attn: Amateur Radio Parity Act grassroots campaign, 225 Main St., Newington, CT 06111.

HAMFESTING: Here is the current Great Lakes Division ARRL Sanctioned Hamfest Schedule for the next few weeks. These swaps have received their sanctioning approval from ARRL HQ at the time of this publication. We have approximately 65 hamfests each year in the Great Lakes Division. I do encourage each Hamfest Chair to register early for ARRL Sanctioning. It is never too early to register your hamfest with Headquarters. Be sure to invite your ARRL Officials as soon as your date is set. Help avoid date conflicts, do it early!

Mar 5 - Cave City - Cave City, KY  
 Mar 6 - NOARS - Elyria, OH  
 Mar 19 - Crossroads - Kalamazoo, MI  
 Mar 20 - TMRA Hamfest - Perrysburg, OH  
 Mar 26 - MOVARC - Gallipolis, OH  
 Apr 2 - Portsmouth - Portsmouth, OH  
 Apr 9 - Cuyahoga Falls - Cuyahoga Falls, OH  
 Apr 19 - Letcher County - Whitesburg, KY  
 Apr 24 - Athens - Athens, OH  
 May 7 - Cadillac - Cadillac, MI  
 May 14 - Chassell Hamfest - Chassel, MI  
 May 20-22 - Dayton HamVention - Dayton, OH

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73, See you on the bands.

Dale Williams, WA8EFK  
 Director, Great Lakes Division

(Dale's Tales was edited to fit the space available.)

## Portable Power Supply

By Rich Peper, KD8WCB



Rich, K8WCB

How many times have you heard, “portable power,” then tried moving a regular power supply unit? You will soon learn that they are heavy, some 50 plus pounds or more, large, and with little thought of making them portable (wheels would have been nice touch). They are great for producing consistent, clean direct current for our radios and equipment, but not so much for traveling. Being what they are, they are not for placing in a backpack, or taking on a trip, or to the annual field day event and dealing with weather conditions like rain. They also produce a lot of heat. They make a great foot warmer in the shack in the winter time, but not so a desirable trait in the summer. But, now we have switching power supplies that are smaller, lighter and more portable.

Being a retired auditor on a set income I desired something a little more fitting for being picked up and moved or taken on a trip. So I assembled a portable power supply unit that is ideal for back packing, travel or for the annual field day. Weather has been an issue at our field day event, super hot and of course several inches of rain. During the field day last year my portable power unit was still on the work bench in the design stage; but it would have fit our needs perfectly. Some pros about the unit are:

- ✓ The container is very rugged, weather resistant, easy to tote and comes with a handle
- ✓ Light in weight, only three pounds and provides additional storage for power cord
- ✓ Provides for both 110 volt and 220 volt AC input and automatically switching as required
- ✓ Has both screw terminals and power pole outputs, with metered out put
- ✓ Maintains a constant 13.5 volts DC at up to 75 amps output (capable of 100 amps on 220 volts)
- ✓ Does not create interferences nor transmit RF noise

The computer switching power unit (only 9 by 4 by 1½ inches thick) fits nicely into a plastic ammo box purchased from a local vendor. The outside dimensions of the box are 11½ inches long, 7 inches tall and 5 inches wide. I wanted a separate container for the power supply. You could however, mount the switching power unit directly into your rapid deployment radio “go-box.” The switching unit has a metal case, its own cooling fan and weighs about one pound.

It is no secret, power supply units can cost into the hundreds of dollars. I have less than \$85 dollars invested in the prototype. The lion’s share of that cost was the modified switching unit. I recommend computer switching power supplies as they have increased filtering required by computers. If you like to do a little shopping around at a hamfest, I am sure you will find the parts for even less. My switching unit (already adapted) came from the Fort Wayne Hamfest, also the cooling fan, wiring and terminals. Only the electrical volt-watt analyzer was obtained from the internet.

A computer switching power supply unit requires some changes for operation outside the computer rack. You will need to place a capacitor across the output contacts, also solder terminal lugs to the output contacts to provide attachment points for the output wires. The unit I have has a small cooling fan installed. But, I felt additional cooling was required when placed in a box. I installed a volt-watt current analyzer in the output circuit and mounted it in the lid for easy viewing to advise how it was working. For safety and convenience, I placed the fused output terminals on the end of the box with a pair of power poles available. The bonus part, there is enough room is inside the box to store the 110 volt power supply cord and a few other small items.

Computer switching power supply units can be purchased for under \$30 on the internet. However; they need to be modified slightly to function outside the computer rack. You will need to place a capacitor (470 uf - 25 volt PM(W) across the output power terminals to facilitate start up. Also, solder terminal contacts to the output points for your output wires. These switching power supplies are redundant in their output terminals so be sure you solder both top and bottom sides of the output terminals to ensure good contact. Also, if you wish, you can ‘tweek’ the output voltage inside the power unit to get the power level desired.

The portable power unit will be a great addition to your shack. It is light weight, highly portable and ready for the rugged life. My unit weighs in at just three pounds. And if Ham Fest browsing is not for you, all of the items can be purchased on the internet. The following is a parts list of items used in creating the portable power unit:

Ammo Box, part number 61451	Harbor Freight	\$ 9.00
Sunon, DC12V 1.5 watt cooling fan, KDE1206PHS3	Hamfest	1.00
GT Power R.C. 130 Amp power analyzer	Internet	10.00
HP switching power supply, part number 438202-002	Hamfest	55.00
DC #12 Ga. Multi stranded wire (3 feet)	Hamfest	2.00
Miscellaneous hardware; nuts and bolts	Hardware	3.00
Two fused links, 60 amp each	Hamfest	1.50
Power poles, one set - red/black	Hamfest	1.00

I have had my unit working for a while with no issues noted. It has supplied both my Alinco radio at 50 watts output and simultaneously feeding my Yaesu HF unit at 100 watts output. The output of the unit has not caused any interference to surrounding equipment nor created any RF noise in my radio transmissions. You too can enjoy the new mobility that a portable switching power unit can provide without breaking the bank.



## Field Day 2016

Last month I wrote about getting started with our field day planning and suggested you begin with your rig and antenna. Perhaps I got a little ahead of myself. I really should have suggested that you start with what bands and modes on which you would like to operate. That will determine which rig and antenna you will use.

Typical field day bands are 160, 80, 40, 20, 15, 10, and 2 meters. The bands you choose will be partly determined by what time of day you want to operate and the band conditions at that time. Also, you will need to coordinate the times you operate with nearby hams who may also want to operate on the band you select.

Typical modes are voice, CW, and digital. You will have more opportunities to operate with the CW and digital modes because there will be less competition for bands and times. As you can guess, voice is the most popular and has the greatest potential for interference.

Interference? Unfortunately, when two or more operators want to use the same band at the same time, there will likely be interference because it is difficult to provide proper antenna separation and orientation at the field day site. The solution? TMRA uses a system of Band Captains to coordinate band usage to minimize interference while welcoming everyone who wants to operate. The idea is to maximize proper band use by locating antennas and scheduling operators so as not to cause interference. Also, operators can use their own rigs while sharing antennas by alternating with other hams. In this way, every ham that wants to operate can have a good experience. All of this requires much patience and mutual cooperation, but the results are worth it!

Glenn, W8MUK, Editor.

## Did You Know?

- The TMRA digital is Tuesday at 8:00 PM to at least 9:00 PM on the 147.27 MHz repeater for voice and on 145.555 MHz simplex for the Fldigi.
- The Lucas County Siren Net is the first Friday of each month from 10:30 to 11:30 AM on 147.270 + W/103.5 PL and 442.850 + W/103.5 PL.
- The Tech Committee meets the second Monday of each month at Maumee Fire Station #2 on Dussel Drive (in front of the water tower).
- The TMRA general meeting is the second Wednesday of each month.
- The Lucas County ARES Informational Net is every Sunday at 7:30 pm on 147.270.
- The TMRA Newcomers and Elmers Net is every Sunday at 8:00 pm on 147.270.
- The TMRA Hamfest is March 20<sup>th</sup> at Owens Community College. Set-up will be Saturday, March 19<sup>th</sup>. Many volunteers will be needed both days.
- The TMRA bus to the Dayton Hamvention travels on May 21.
- The calendar at the TMRA website lists numerous ham radio activities each month.



Field Day 2012

w8muk photo

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**March 2016**