



TMRA Amateur Radio Beacon

October 2016



The Prez Sez

Sadly we have to report the deaths of two local amateurs: Ron DeGroff, KD8SEW, died on September 28th. Ron was active on the TMRA Technical Committee and at events such as the antenna building workshops, and active in LCARES. A sympathy card was sent to Ron's family on behalf of TMRA members, and a donation will be made by the club to the Promedica Hospice. Although no longer a TMRA member after he left Toledo, Bob Olszewski, KD8A, who died September 28th, was a longtime member who some of us may remember racked up hundreds of contacts on 80m phone at many Field Days.

Congratulations to Ron, N8RLH, who was awarded the TMRA Amateur of the Year at our September meeting. Among his other activities for the club, Ron is continuing to get a station on the air for the National Parks on the Air.

There has been considerable discussion about how to get new members, especially new Hams, recognized and more involved in club activities. The discussions are by no means over and we're always open for ideas and suggestions. We'll make some changes to our monthly meetings, starting with getting through the "business" parts faster and having more time for open discussions, questions, presentations/programs, etc. If you can't make it to the meetings, please feel free to pass on any ideas you have to any of the Officers by email, telephone etc.

Another reminder that dues were due July 1st for the membership year July 1, 2016 to June 30th 2017: to quote the By-Laws "Section III DUES. 4. If an application form for renewal of membership, together with the appropriate dues, has not been received by the Membership Chairman by September 1st, the person will cease to be a member in good standing. Such a member, in default, will be dropped from the Roll of the Association and thereupon cease to be a member of the Association and forfeit all rights and privileges of membership until such a time that his/her membership has been appropriately renewed." For several reasons, (e.g.: insurance liability, qualification as an ARRL Affiliated Club, membership of TMRA committees) we need to have an up to date and accurate list of active members.

At the September TMRA Executive Committee meeting, it was decided to propose some changes to the By-Law relating to membership dues and TMRA Committees. These are published elsewhere in this Newsletter, and will be presented to the membership at the October General Meeting for discussion and action.

We have been having great turn outs for our last few meetings, thanks to all who were able to be there, hope to see you all at future meetings

73 Brian WD8MXR

Ed. Note: We are also sorry to report that club member Clarence Komorowski, W8WSB, (SK) passed way in August, as reported by his daughter.

Proposed changes to the TMRA By-Laws:

Section II Membership: 3.f.iii) currently is

Seventy (70) years and older waived dues memberships: effective with the membership year that starts January 1st, 2000, a member seventy (70) years and older, having been a member in good standing for at least the previous three (3) consecutive years, will be offered an annual membership, having all the privileges of Regular membership, with dues waived on receipt of a completed application form for each annual membership period.

Proposed change is to not offer this complimentary membership but to replace it with a reduced annual dues for anyone 70 or older, and offer a corresponding reduced Family membership for those living in the same household. We have a chronic problem with many of the 70 and older complimentary members failing to submit annual membership renewal forms, so we do not know if they still consider themselves active members, or if they have relinquished their membership. The proposed new wording for Sect II.3.f.iii is:

“Annual membership dues for Regular membership for persons 70 years of age or older will be \$5.00. Annual dues for family members of such a member will be \$2.00.”

Wording in Appendix A would have added:

d. 70 years of age or older: Five dollars (\$5.00) per year, with family member dues of Two dollars (\$2.00) per year.

All TMRA Committee meetings are open to all TMRA members. The By-Laws currently do not address the presence of non-members at any of the TMRA committees' meetings. To clarify who may attend, it is proposed to add a SECTION that states

“Persons attending a meeting of any TMRA Committee must be a TMRA member in good standing, OR be an invited guest of the Chairperson of that Committee.”

Proposal is to make this SECTION XV, and to renumber the current SECTION XV as XVI

ARES News

The next ARES meeting is October 24 (fourth Saturday) 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. ARES shirts will be available to members in the near future. Steve, N8XSF will have order forms. Plans will be in the works for the Ohio Section SET.

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

Congratulations to Lucas County ARES for the fine mention in the October 2016 issue of *CQ Magazine* in an article titled “Three Events, Five Cities, One Week”. The article reported Ohio ARES activity at several important events. In particular, in a section titled “Up in the Air in Toledo”, Lucas County ARES was praised for its work at the Toledo Air Show in July. The article gave special mention to Brent Stover, WD8PNZ;



Brenda Krukowski, KB8IUP; and to Steve Ashenfelter, N8XSF for setting up a MESH video network at the air show. We can be proud of the hard work and achievements of ARES and all the hams who assisted at the air show.

We regret to inform you that Ron DeGroff, KD8SEW, (SK) passed away on Sept. 28. He was a member of Lucas County ARES and very involved with the hospital test and TMRA. Please keep his family in your prayers.

JOTA

TMRA will once again set up a station to demonstrate ham radio to scouts during Jamboree on the Air, October 14-16, 2016, at Camp Miakonda in Sylvania, Ohio. Hams are needed to demonstrate CW and other radio modes to the scouts. This is a great opportunity to interest young people in ham radio. Call Steve, KC8TVW at 419-467-3734 to see how you can help.

Technician License Class

TMRA's next technician level ham radio license class will be two all-day sessions, November 5 and 19, 2016. Each class will be from 8:00 AM to 5:00 PM at 2127 Jefferson Avenue in Toledo.

Call Steve, KC8TVW at 419-467-3734 for more information.

New Hams and Upgrades

A report from Steve, KC8TVW

Congratulations to the new ham and upgrades from the September VE Session. New Techs: Joe, KE8EZT and Steve, KE8EZU.

Thanks to the TMRA VE Team.

Fox Hunt

TMRA held a Fox Hunt at Oak Openings on Sept 27. Attendees were Darin, KD8WBZ (with wife and daughter); David, KE8DVM; and Steve, KC8TVW.

Next hunt is Oct 16, 3:00 PM at Wildwood

Metropark. Meet at the Stables Parking Lot



Nearing the Fox

kc8tvw photo

National Parks on the Air

On September 20, the TMRA NPOTA team made 131 Contacts from Fallen Timbers National Battlefield Historic Site in Maumee, Ohio. The contacts ranged from Massachusetts to California, Florida to Alberta, Canada. We also had the opportunity to share ham radio with four or five visitors. Thanks to the twelve hams who came out.

This month's TMRA NPOTA is scheduled for October 18, 2016 at Fallen Timbers Battlefield Park in Maumee, Ohio. Ron, N8RLH, will begin set-up at 3:00 and operating at about 4:00 PM. The event is open to everyone. Loggers and operators are always needed. Come out and join the fun.

TMRA 2016 Amateur of the Year Congratulations to Ron, N8RLH!

At the September TMRA meeting, Zack, N8ZAK, last year's Amateur of the Year Award recipient presented this year's award to Ron Hornbeck, N8RLH.

Zack explained that TMRA has been presenting this award for more than 25 years. The award recipient is selected by a committee consisting of previous year's award recipients. They nominate and vote on members deserving of the award. The recipient of the award must be a current member in good standing for at least one year. In the spirit of the award, the recipient typically demonstrates the ability to go above and beyond in order to benefit the club and their community and to further the hobby by passing their knowledge and assistance along to other amateur radio operators.

At this point, Zack had the past winners of the award who were present at the meeting stand and be recognized. "As you can see, previous winners are still heavily involved in the club and its activities," Zack said. "They all have a unique expertise that they bring and share with others. You'll also notice that many of these winners are what I like to call, 'the heartbeat of the club.' They have tirelessly given their time and expertise to make TMRA one of the area's premier clubs. This year's award winner is no exception to that group and the committee felt he should be standing with those distinguished individuals," Zack said.

Zack then listed Ron, N8RLH's, accomplishments. "[He] has held an Advanced Class license since 1997. [He] has been an active member in the club since joining in 2006. Since he's joined the club, he's been active with several committees. These include: the Hamfest Committee, the Technical Committee, the Challenger Committee, and the By-Laws Committee. Although you won't hear him much on the local repeaters or Sunday night net, he has been a Repeater Control Operator for the club and has been known to participate in Skywarn and ARES functions. He has assisted with emergency communications during the Glass City Marathon in practically every category from the SAG wagon, to the Medical Tent," Zack said.



Ron, N8RLH

w8muk photo

He continued, "[Ron] is actively involved with the Lucas County Amateur Radio Emergency Services (LCARES) group and other community agencies. He has been LCARES Secretary for several years, was active and involved with the Toledo Airport Disaster Drill and has been LCARES, Inc. Trustee for several years. He volunteers for LCARES events such as the Lucas County Hospital Drills and has acted as a Net Control station. He has been an Assistant Emergency Coordinator for the Lucas County Hospitals, and is involved in preparing official identification for LCARES personnel and LCARES sponsored events. [He] even has a history of being involved with the Boy Scouts."

"HF bands are [Ron's] bands of choice," Zack said. "Again, you won't hear him rag chewing on 40 meters, but he is an active DXer, and participates in contests and TMRA special events. You may have heard his call at many TMRA sponsored events such as TMRA Field Day, Ohio NVIS Day, TMRA Winter Field Day, Ohio

QSO Party and TMRA Maumee Library Wireless Day. And in all those event instances, you'll find him more than willing to discuss and share his station along with assisting others and teaching proper operation. [Ron] has also been active at several Field Days, rain or shine, and you will rarely see him sleep! He typically operates 80 meters using his own Grab and Go equipment. [He] has a long history assisting TMRA with the Hamfest and with the Hamfest Committee. He is responsible for suggesting and recommending ideas for growing the event. He has attended and assisted with Hamfest setup events. He has procured guests and organized the Forums for several years as Forum Chairman. He has even been a presenter at the TMRA Hamfest,” Zack continued.

“[Ron] has been active at TMRA meetings by giving several presentations encouraging and assisting others to work more DX stations via HF. He has also given presentations regarding the use of LogBook of the World, and has even shown his rare DX QSL cards. [Ron] has been responsible for helping raise thousands of dollars for the club. He has done this by procuring and selling equipment to other hams from Silent Key and Estate Sales, or just hams attempting to liquidate their equipment. [He] also has written articles for the newsletter regarding DX communications and operating procedures. He is also an avid photographer and has several submissions to the TMRA Beacon newsletter showcasing other amateurs at TMRA and other events. [He] is currently activating ARRL National Parks on the Air stations and encouraging others to operate with him - again by teaching and letting them use his equipment,” Zack concluded.

The award presentation continued with Ron, N8RLH accepting the award to much applause. It was an award well earned!

(Zack’s full presentation was shortened somewhat to fit in the available space.)

Tech Committee Report

From Dan, KE8UE, Tech Committee Chair

The Tech Committee held a work party at the PNC Bank Building on September 16. They raised the 900 MHz antenna about five or six feet, rerouted some hardline, and installed the two-meter antenna for APRS.

Thanks to KD8WCB, N8WAC, KE8UE, KD8WCD, W8MAL and AA8HS for their hard work.



Atop the PNC Building

aa8hs photo

DX – The Hamshack, part one, antennas.

The second in a series of articles by Ron, N8RLH



Last month I explained what DX is and why you want to work it. Now let's find out what you need to work all those foreign stations out there in the ether.

About all that ether, isn't it amazing that, all around us, even going through us, are voices encoded in electromagnetic waves? Just imagine that several hams were able to travel back in time for several hundred years and took their handhelds. What kind of magic would that be to the locals! Now imagine that some civilization far more advanced than us happens to be here among us, observing us and talking to each other via some kind of advanced radio. All those voices are floating around us as we read. Amazing, isn't it!

"You can't work them if you can't hear them!" It's an old adage but very appropriate. You need a receiver to hear them and a transmitter to talk back. And you need a way for the signals to get from the ether to the receiver and from the transmitter to the ether and on to a star far, far away...well, maybe just Europe to start. It's called an antenna!

But you may ask, "My HF radio is a transceiver; both the receiver and the transmitter are hooked together in the same box. Why do I want to talk about them separately?" Because receiving and transmitting have different requirements. With a receiver, you just need any type of wire to capture the electromagnetic waves that the DX station created. I used a coat hanger stuck in the back of the radio to listen before I got my license. I listened to the powerful station on 80 meters holding court over their net frequencies. But more is always better, more wire captures more waves. To receive you need as much wire as you can get, as high as you can get it. For transmitting you need a resonant antenna or some way of making the transmitter think the antenna is resonant.

Resonant, what is resonant? Yep, now it rears its ugly head! Wavelength! Now, I've got you scared! It's really not that complicated if you don't worry about all the theory and just remember a few things. A wavelength is how long one wave of our signal is at a particular frequency. Can you guess how long a wavelength is on the 20 meter band? You got it, 20 meters! How about the 2 meter band? Duh, I told you it was easy. Notice that the higher the frequency, the shorter the wavelength is and thus the shorter the resonant antenna needs to be.

We use $\frac{1}{2}$ wavelength wires for our transmitting antennas. Why? So the radio is happy. There is theory behind it, but that's for the extra licenses to worry about ☺. Here is a very helpful formula you will always use, so remember it! The number 468 divided by the frequency in MHz (megahertz, for example 7.2) is equal to $\frac{1}{2}$ wavelength in feet. So an antenna that is "resonant" at 7.2 MHz is 468 divided by 7.2 or 65 feet. Easy! If you're computer savvy, set it up in Excel to calculate it for you. If the transmitter "sees" a half wavelength antenna, it will be very happy and the SWR (standing wave ratio) will be flat or 1:1. Antennas are easy to make, but can be purchased already cut to resonant length. Some are resonant on more than one band of frequencies such as an 80/40 meter dipole, or a 20/15/10 meter tri-band beam, or an all band vertical.

So what antenna should you use to work DX? Your radio, being a transceiver, most likely uses the same antenna to receive and to transmit, so a resonant antenna always works for both transmitting and receiving. Most antennas work, but some of them are better than others (more efficient). Try them all: you will be switching antennas and trying different ones your whole life.

You're thinking, now it's really getting serious. But that's it. There is more, but don't worry about it all, just get your Elmer to help you. Elmer? Oh my! (More about Elmers later!) Elmers help with decisions you need to make, like do I use a vertical ¼ wave antenna or a dipole, or a random length wire with an antenna tuner. (A tuner is a device that fools the transmitter into thinking an antenna is resonant.) Simple, they all work, just some work better than others!

Next month, radios (which you need) and all the stuff you don't need but want!

Grounding and Ham Shack Electrical Safety

The first in a series of articles by Tom, KE8CQG

Grounding is one of the most overlooked and least appreciated subjects in the art of ham radio. The reason, I believe, is that most folks just don't really understand static electricity or the importance of a good ground system. They relegate little effort or money to providing good protection against static electricity (think of it as insurance).

But before you attempt to physically engage in measuring voltage, removing cover plates from receptacles, or removing covers from home power distribution centers -- DON'T! Unless you have MORE than simply a basic understanding of electrical safety, ask for help or hire a licensed electrician to look into suspected problem areas. Let's talk a little about electrical safety.

Some Basic Electrical Safety

120 volts of AC power is one of the biggest killers of people in our homes today. The current it takes to kill is remarkably small as you can see in the following table.

WARNING: Table from CDC.gov

- 1mA Barely perceptible
- 16mA Maximum current an average man can grasp and "let go"
Paralysis of respiratory muscles
- 20mA Ventricular fibrillation threshold
- 100 mA Cardiac standstill and internal organ damage
- 2 Amps Common fuse or breaker opens the circuit*

*Contact with 20 milliamps of current can be fatal. As a frame of reference, a common household circuit breaker may be rated at 15, 20, or 30 amps.

Also, don't use an unfused volt-ohm meter. A cheap meter can (and sometimes does) blow up in your face. Always make sure your meter

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President, Brian, WD8MXR;
Vice-President, Glenn, W8MUK;
Secretary, Zack, N8ZAK;
Treasurer, Rich, KD8WCB.

Board Members: Steve, W8TER;
Skeet, KD8XKD; James, WD8IOL;
Dan, KE8UE; Dave, KD8EVN.

TMRA Home Page
www.tmrahamradio.org
Webmasters, Zak, N8ZAK &
Mike, N8ZLW

TMRA W8HHF Repeaters;
147.270+, 224.140-, 442.850+
(TMRA 2 meter, 220, and 440
repeaters operate with a 103.5
"PL", or a touch-tone access code
of 1-2-3)

D-Star Repeater: 442.750
APRS: 144.390

The TMRA meets at 7:30 PM on
the second Wednesday of every
month in
The Electrical Industry Building,
Lime City Rd. Rossford, Ohio.

leads are plugged into the range and voltage type you are measuring, and the meter is set to the correct range. Don't touch the metal tips of your meter leads while in use.

Before (if) you remove a receptacle cover, open (turn off) the circuit breaker feeding the circuit. Inform everyone in the household not to re-energize the breaker under any circumstance; you will do that when you finish your work. Check by using your meter to be sure the circuit has de-energized.

De-energize the main circuit breaker before removing the main power panel cover. Be very careful! The incoming feeder (service entrance) that provides power to the main circuit breaker is still HOT. The main breaker just de-energizes the panel feeder breakers, not the service entrance main lugs. Remember, the closest fuse at this point is probably the primary side of your feeder transformer on the power pole at the back of the yard or down the street. It is typically rated 100 amps. Keep tools well away from the main lugs. A short-circuited tool can vaporize in a 35,000 degree fire and explosion. This is called ARC FLASH. A real killer!

Before running a conductor into a panel, tape the end of the cable with electrical tape. When you are ready to land the wire on a termination point, remove the tape, strip the wire and make the connection. If possible, get an electrician to pull the utility meter on the house before going into a panel to land a ground conductor.

If you did not understand ANY of the terminology I used in the preceding paragraphs, you're not qualified to go into a power panel. That is not something to be ashamed of; it just means that you should get help that is qualified. Your life may depend on it.

Next month I'll discuss grounding. I'm usually at the TMRA monthly meetings, so feel free to ask me questions.

(Tom Szuba, KE8CQG, is an electrical engineer with extensive experience in the design of oil field electrical equipment and its proper grounding. He was certified to work on electrical equipment up to 25 KV energized or de-energized. At the age of twelve, he held a ham radio technician license and built his own 27 MHz transmitters to fly model airplanes.)

U.S.E.C.A. Hamfest 2016

A message from Ken Coughlin, N8KC, President of USECA

You are invited to attend our 31st annual Hamfest on Sunday, October 30, 2016. Doors open at 8 am until 2 pm. Vendors are welcome to set up at 6:30 am. Talk-in on USECA's K8UO Repeater: 147.180+ 100 Hz CTCSS.

The location is United Food & Commercial Workers 876 Hall, 876 Horace Brown Drive, Madison Heights, MI 48071 (2 blocks south of 13 Mile Road between Stephenson Highway and John R Road). GPS Coordinates N42.516818, W-83.113124

New & Used Sales, Radio test bench, VE Test Session (9 AM - 10 AM), DXCC card check available (Forms need to be filled out in advance.. All bands & awards except 160m). Great Door Prizes, and the delectable food of the USECA Café.

VE Testing: Show up between 9 & 10. Bring \$14.00 cash, photocopies of existing licenses or CSCEs (originals not accepted). Two pieces of ID are also required, one of which must have a photo. You must also provide either your Social Security number or FRN. Pre-registration is preferred but not required. Contact Alec, NF8X nf8x@arrl.net.

Per-person admission is \$5.00 and each table is \$15.00. Tables may be purchased at the swap. Please arrive early if doing so.

Questions may be directed to our Swap Coordinator, Rob Lifton, NY8W. Call our Hamfest Hotline: [\(248\)565-3329](tel:2485653329) or email ny8w@arrl.net

Did You Know?

- 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 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 digital net 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 TMRA general meeting is the second Wednesday of each month.
- TMRA annual dues were due by July 1st. You must fill out a membership renewal form even if you receive a complimentary membership.
- The Lucas County Skywarn Net is the first Thursday of each month at 7:00 PM at the 911 Training Center, 2127 Jefferson Avenue, Toledo, Ohio.
- 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 Lucas County Hospital Net is the first Saturday of every other month at 10:00 AM.
- The NORC Net is the first Saturday of each month. This net typically meets at 11:00 AM on or around +/- 7.200 MHz LSB.
- VE testing is each month. Contact Steve, KC8TVW at 419-467-3734 or kc8tvw@arrl.net.
- The next TMRA NPOTA operating session is October 18.
- The calendar at the TMRA website lists numerous ham radio activities each month.

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