



# TMRA Amateur Radio Beacon

March 2017



## Prez Sez

Up-coming TMRA events that I'm assuming are covered in more detail elsewhere in this Newsletter include Field Day – June 24<sup>th</sup> and 25<sup>th</sup>, and the activating of a station (K8E) on the SS Col. James E. Schoonmaker June 4<sup>th</sup> and 5<sup>th</sup>.

March 19<sup>th</sup> is our annual Hamfest at Owens Community College and club members volunteering in a variety of roles is essential to a successful event – see previous Newsletters, or contact me at the General meeting Wednesday March 8<sup>th</sup>.

At the last TMRA Executive Committee meeting we discussed restarting the concept of a library of ARRL books that members could borrow, and \$300.00 was approved for book purchases. Unlike the previous time we had a library that was housed at a member's home (a volunteer "librarian"), this time we will donate the books to the Lucas County Library System, the books to be housed at the Maumee branch. Anyone, not just TMRA members, can borrow them, and from other branches of the library system too – it's not necessary to check them out only at the Maumee branch. We will identify the books a being donated by the TMRA, with contact information should the borrower need more information on amateur radio. We'll purchase the books from vendors at the Hamfest as a show of support for our vendors.

We vote for Officers at our June meeting, so it's not too soon to be thinking about that, but first we need a Nominating Committee to contact members and seek their permission to nominate them for the positions as Officers – any volunteers for the Committee and/or running for an office?

73, Brian WD8MXR

## ARES News

From Lucas County EC, Skeet, KD8KXD

The next meeting will be held on March 25 (fourth Saturday) at St. Luke's Hospital 5901 Monclova Road in Maumee, Ohio in the private dining room in the basement. Come early and have breakfast in the cafeteria.

Please continue to complete the NICS IC 100,200,700, and 800 courses. Remember to tune into the ARES In Brief Net every Sunday night at 7:30pm on the 147.270 repeater. The net is open to all.



## TMRA Hamfest

Yes, it's finally here! The TMRA Hamfest will be Sunday, March 19, at Owens Community College Student Health and Activity Center, 30335 Oregon Road, Perrysburg, OH 43551. GPS: N 41° 35.575' W 83° 32.051'. Talk-in: 147.270+ (W8HHF - 103.5PL).

We expect the usual fine selection of vendors, forums, food, door prizes, and general table sales of those items that every ham needs. Many volunteers will be needed for set-up on Saturday, March 18, and on Sunday for the hamfest. Don't forget we also need lots of help to clean up **after** the hamfest ends.

Contact Skeet, KD8KXD, to volunteer with ticket sales; Chris, KC8UFV, to help with talk-in; Steve, KC8TVW, for VE testing; Tom, KB8PAI, for set-up and tear-down; and Mike, W8MAL, for security on the many doors. Volunteers who help out for one hour or more will receive a food voucher good at the concession stand during the hamfest.

And don't forget the forums:

#### 10:00 AM - DMR, D-Star and Fusion - Which One Is Right For You?

Confused by all the different digital modes? Unsure of which new radio to buy? This will expose new and seasoned hams to various digital technologies and explain the pros/cons of each. These exciting new technologies allow for world-wide communication for the Technician Class ham and up.

*Presented by Zack, N8ZAK*

#### 11:00AM - JT-65A, a unique digital mode.

Have you ever wondered how much of the noise you hear on the HF bands is actually comprised of signals too weak to be copied? JT65A is a weak-signal digital mode that allows you to pull great DX out from under the noise on the high frequency spectrum. Designed for EME (Earth-Moon-Earth) HF and VHF work, this is an ideal digital mode for the bottom of the sunspot cycle. *Presented by Rob, KV8P*

#### 12:00PM - Search for the Super Battery, A Nova PBS Presentation.

## **Technician License Classes**

Technician License Classes will be March 11 and 25, with VE testing on the 25<sup>th</sup>. Contact Steve, KC8TVW, at 419-467-3734 or [kc8tvw@arrl.net](mailto:kc8tvw@arrl.net) for more information.

## **CW Classes**

Steve, KC8TVW held another CW class on Saturday, March 4 at Trilby United Methodist Church on Secor Road just north of Alexis Road. In addition to the usual TMRA members, he was pleased to welcome two non-members who happened to hear about the class. See the following article about CW by Ron, N8RLH, for more about Steve's classes.

If you want to learn CW, it's not too late. Steve's next class is Saturday, April 1 (no fooling) in the same location from 1:00 to 4:00 pm.

## **Observations by Ron, N8RLH**

Recently, I became interested in working CW again. I should just say interested because I never really worked anyone using Morse code even though I could decode CW at over twenty words per minute. Back in the day I actually passed the 18 WPM requirement for the extra class license, but because of babies and other family

concerns, I only have an advanced. It took years to get to the place in my life where I could afford an HF rig so by then I took the road “most” travelled and stayed on SSB. They tell me CW is like riding a bike, once you learn it, it comes back quickly...I’ll let you know, hi hi. (code for Ha Ha)

CW can get thru when SSB just won’t cut it, and with the sun spots almost gone, I’m counting on CW to keep my DX work going. It really does work when SSB doesn’t because it uses much less bandwidth. Also, the human brain can hear the tone even in the midst of lots of noise. An example would be when you can hear your phone beep that you have a message. You have mail!

I attended Steve’s, KC8TVW, code class this last Saturday and was pleasantly surprised. Steve is a good teacher and is very organized. He knows that ‘hands on’ is the best way for most of us to learn and we sure put our hands on all the keys and sent lots of code. I learned a lot about ‘learning’ the code, but even more about getting on the air. He knows that without actually making contacts, there is no reason to learn the code. I can’t wait for the next class and I plan to practice some before then. If you’re interested in practicing with me, either on the air or face to face, let me know.

I’m experimenting with various keys and some memory keyers, but I learned on a straight key so I’m leaning towards going that way. Steve says that he switches keys as his mood changes so maybe that’s where I’ll end up, who knows. I’m not comfortable with iambic keying with a double paddle keyer so I’m trying a single paddle. I like the paddle but still am uncomfortable with iambic. It’s fun trying them all. I have an old WW II J-38 straight key that I really like. We’ll just have to see.

I have a great free app for my iPhone called “Ham Morse” so I can practice anywhere at any time. I carry some ear buds and a sheet of paper folded up to fit my pocket so I can practice. Another great program is “Koch Method CW Trainer - G4FON” Check it out at <http://www.g4fon.net/CW%20Trainer.htm> .

I’ve tried several of the CW decoders, but never found a great one. However, computers are getting faster and the algorithms are getting better so I keep trying, but I kind of think of those as cheating. Know what I mean?

From time to time I’m going to share my observations with you here so stay tuned. If you would like to hear my thoughts on any topic just let me know at [rlhornbeck@att.net](mailto:rlhornbeck@att.net) or text 419-345-6382.

73, Ron, N8RLH

**THE TOLEDO MOBILE RADIO  
ASSOCIATION P.O. BOX 9673,  
TOLEDO, OH  
43697-9673**

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

Board Members: Steve, W8TER;  
Skeet, KD8XKD; Tom, KD8WCD;  
Dan, KE8UE; Dave, KD8EVN.

TMRA Home Page  
[www.tmrahamradio.org](http://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.

## Tech Committee

By Rob KV8P

It has been a busy month for the Technical Committee, so I thought I should share some updates. (Warning... I've never been accused of being "brief"... ha-ha.) All of our repeaters are tuned and functioning well at the moment. A few general comments before discussing specific repeaters.

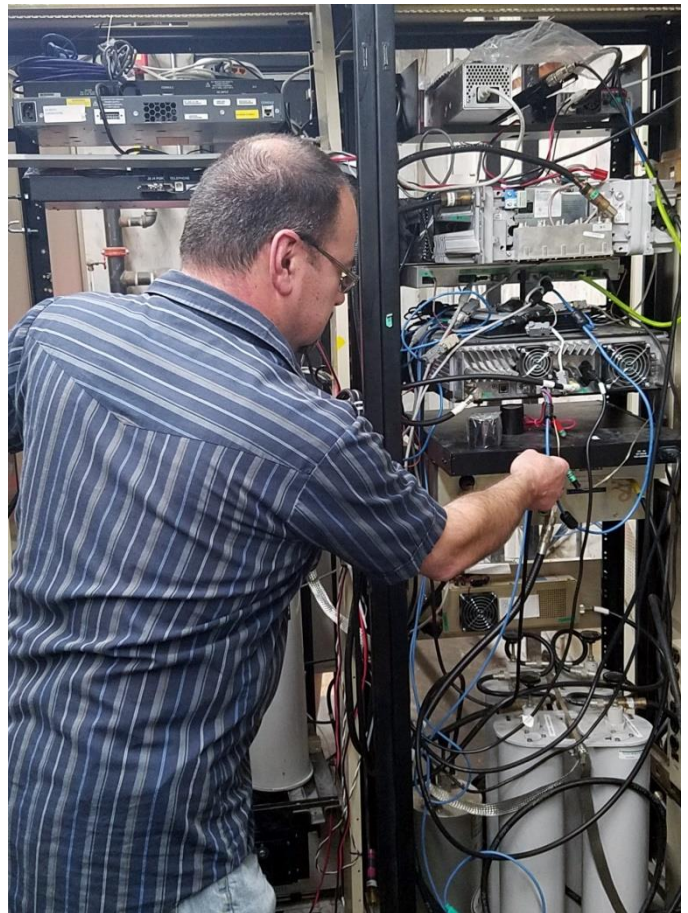
The 224.14 and 442.850 repeaters are now automatically linked and unlinked for both the Newcomers and Elmers Net on Sunday nights as well as the monthly Siren Nets. You may occasionally hear the link and unlink messages, as well, depending on repeater activity. During linking for nets, you will now start hearing 4 distinctly different courtesy tones. From those, you can tell which repeater (or link) the user is coming in on. Those courtesy tones include:

- A. **Three Rising Beeps** – Standard access through 147.27 (103.5 pl) through the UT campus repeater site.
- B. **Three Falling Beeps** – User is coming in through the 442.850 (103.5pl) site on UT campus.
- C. **Single very low beep (lower than downtown link beep).** User is coming in through the 224.14 (103.5pl) site on UT campus.
- D. **Single beep** – User is coming in through the downtown 147.27 (250.3pl) link receiver. You will also notice that the audio has been "digitized" for users on that link. While hearing users through it takes some getting used to, it is normal for the technology used. If you are having trouble getting in via 103.5pl, try it! It offers HT coverage and expanded rx coverage for 147.27 to the East, but also helps north and south of Toledo.

Some specifics on recent work done to the repeaters are listed below.

**147.27 Repeater on UT Campus:** Nothing has changed recently on this repeater or it's audio. However, the link receiver audio (from downtown) was audio adjusted to better match the audio on the main 103.5pl receiver. Users should now notice a comparable audio "loudness/deviation" now.

**224.14 Repeater on UT Campus:** The 222.140 repeater has been working well, but some adjustments have been made recently. The PL tone access (103.5 Hz) has been re-enabled on the new Bridgecom repeater due to occasional localized light interference. After some light re-tuning, the decoder seems to be working well and the repeater has been placed back onto the club controller (which also controls the 442.850 and 147.27 repeaters on the site). This allows us to link and unlink all three repeaters whenever we would like to. The amplifier for the 224.14 repeater is still having some issues, and is not installed at the site. This is something we are looking into. Next steps for this repeater (possible summer work-party) will be to move the antenna to a better location



on the site, away from the tower, and there are some discussions about potentially adding a pre-amp/pre-selector to the receiver which could effectively increase the receive coverage in weak signal areas. The Tech committee is researching and discussing options.

**442.850 Repeater on UT Campus:** The Fusion repeater while on 442.850, had been experiencing some strong desense issues with the duplexers. This was found to be a loose connector on the duplexers and was repaired. The result is that the 442.850 repeater is now back on the duplexers and a single antenna. Afterwards, during the work-party, the Fusion repeater was removed (more on it below). The FM Only ICOM FR4000 repeater was then placed on the air in place of the removed Fusion repeater. One immediately realized benefit was that, due to built-in pre-amp/pre-select filtering in the commercial Icom Repeater, the ICOM receiver is much more sensitive on FM than the Fusion repeater is on the same frequency.

After installation of the Icom there were some over-deviation audio issues that have been resolved. Software adjustments were made that allowed the proper wide-band FM deviation and all the repeater audio was re-balanced. According to our users, it now sounds A LOT better.

**146.835 Fusion Repeater Downtown Toledo (coming soon):** The Yaesu Fusion repeater, once removed from service at Parks Tower from 442.850, was returned in mid-February to Yaesu for a free warranty digital upgrade. (This upgrade can only be done by Yaesu and is done to allow direct connection of Wires-X digital technology directly to the repeater) The expectation, upon its return, is that this repeater will be installed at our downtown site on 146.835 (in place of the current 2 meter D-Star repeater which only has light/minimal use due to the fact that 442.750 D-Star has the majority of users). The HRI-200 is already here and is being configured along with a new tablet computer by Chrissy, KC8UFV, for connection to the Wires-X network via internet at our downtown site. Look for this repeater to go live on Wires-X soon upon its return. The tech committee will make several announcements around that time. A preliminary check-out of the 146.835 duplexers and antenna was done, in preparation as well. They look great. Please note that D-Star users can continue to use the club 442.750+ repeater for access.



**927.025 Repeater Downtown Toledo** – This repeater continues to be used regularly, has a great coverage area, and has many regular users. It is working well and coverage great, especially sound and east. Many hand-held radios and scanners can listen (if not transmit) on the 927.025 band, so take a listen. I personally use a TK-981 with a remote control head in the car, which I love! See options for radios at [www.kw902.com](http://www.kw902.com) website. Many users also found Alinco DJ-G29 220/900 hand-helds on e-bay!

**Future 6 meter repeater?** We are looking at potentially/eventually building a 6 meter repeater up in the future. This project may take a while, but is a worth-while effort since so many in the area actively use 6 meters (and no 6-meter repeaters exist here currently). The Technical committee is currently considering building 6 meter duplexers out of 1 5/8" heliax and will be currently looking for about 40 feet for this project. Please let

Rob, KV8P, know if you find some used anywhere. These duplexers are very effective and inexpensive to build, making a 6 meter repeater a worthwhile, yet reasonably inexpensive possible addition for TMRA in the future.

Big thanks to all that helped with the repeater modifications recently. Special thanks to Tom, KD8WCD, Chrissy, KC8UFV, Rich, KQ6EF, and Bruce, AA8HS, for the help! The recent work, above, was very efficient and the site visit durations were kept to a minimum with their help!

**Elmer sheets** were provided during the last general meeting. These are lists of those in the club that have indicated a willingness to help both new hams and existing members with about every aspect of amateur radio. We'll continue to keep these sheets updated and available for club members at the meetings. Thanks to everyone that sent along input!

We are in current discussions with the Findley Amateur Radio club about a potential work-party at their location this spring/summer. Stay tuned for more information related to that.

The technical committee is also completing some discussion and research related to possible kit and antenna building projects for our membership. Stay tuned for further discussion on that.

*Editor's Note: Photos courtesy of the Tech Committee and Rob, KV8P.*

## **Field Day 2017**

### **From Steve, W8TER**

This year the TMRA Executive Committee has approved a different approach to field day. We hope this new approach will be seen as more fair to the new hams and to those hams who have wanted to participate in field day, but felt left out.

TMRA field day will be organized around the four **primary bands**: 80 meters, 40 meters, 20 meters and 15 meters. Experience has shown that these are the most productive bands with regard to the numbers of contacts made at field day. Emphasis will be on 24 hour operation and maximizing contacts.

Each primary band would have one **primary station** that is restricted to that particular primary band. **Primary station operators** are completely responsible for their assigned stations. They are responsible for antenna and equipment setup, modes of operation, and station operation. They can setup alternate stations and additional antennas for their assigned primary bands as needed. However, they must cooperate with the other primary band operators to be sure to NOT interfere with other stations, and to maximize contacts.

All four primary stations and their operators must cooperate with each other in planning and setup to ensure all four primary bands are fully operational on a 24 hour basis. Those assigned to a band are responsible for getting operators on the air and filling time slots for their band.

If a primary band is dead, the operators may float to other primary stations to assist in operating or logging. The primary station on the dead band may not change operations to another band.

So that everyone will have an equal opportunity to operate on a primary band, a **random drawing** will determine to which primary band each participating ham will be assigned. TMRA members wanting to operate at field day should inform Steve, W8TER, or Glenn, W8MUK, so their names can be placed in the drawing.

Any ham unhappy with the primary band drawn, may trade with a willing ham who also wants to make a change.

Ideally, each primary band will have an Elmer who could assist the primary station operator, newcomers, and alternate operators with equipment and antenna setup and/or construction. Emphasis will be on helping newcomers to build antennas and set up alternate field day stations.

Hams wishing to operate on 160, 10, and 6 meters may set up their stations and antennas after the primary band stations and antennas have been set up and tested. Any station found to be interfering with any other station must shut down until the interference problem is corrected.

## **Museum Ships Weekend 2017**

Mark your calendars for Museum Ships weekend on June 4 and 5, 2017. We will set up on the SS Col. James E. Schoonmaker in downtown Toledo. Many volunteers are needed to operate and log.

## **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 general meeting is the second Wednesday of each month at the Electrical Industry Building, Lime City Rd., Rossford, 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.
- ARES meets the fourth Saturday of each month at St. Luke's Hospital, 5901 Monclova Road, in Maumee, Ohio, at 9:00 AM.
- VE testing is each month. Contact Steve, KC8TVW at 419-467-3734 or [kc8tvw@arrl.net](mailto:kc8tvw@arrl.net). This month the testing will be at the TMRA Hamfest.
- Technician license classes will be March 11 and 25. Contact Steve, KC8TVW.
- **The TMRA Hamfest is Sunday, March 19, at Owens Community College. Set up is Saturday, March 18. Much help is needed both days.**
- The calendar at the TMRA website lists numerous ham radio activities each month.

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**Editor: Glenn, W8MUK**  
**Email: W8MUK @ arrl.net**

**TMRA  
P.O. BOX 9673  
TOLEDO, OH  
43697-9673**

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