



# TMRA Amateur Radio Beacon

December 2010



## The Prez Sez

I hope everyone had an enjoyable Thanksgiving – tonight (Saturday) as I write this we’ve just had turkey leftovers for the 2<sup>nd</sup> night, but I think that, with a little help from the cat, we can finish it off tomorrow. And speaking of food - it will soon be time for the Club’s Christmas party – see elsewhere in this newsletter for details and how to let Sandy KD8HYS how many of you will be attending and what you’ll be bringing as a dish to share: as usual – the club will provide the meat (no turkey, but roast beef and ham).

At the November General meeting Joe, KJ0EYT was elected to a 5 year term as TMRA Trustee – congratulations and thanks Joe. Due to an equipment (VCR) malfunction, we were not able to show the ARRL taped presentation on antennas as we’d planned: we’ve re-scheduled it on the program for the January meeting.

We are always on the lookout for program items and suggestions – we don’t have a Program Chairperson at present (that position is open for anyone to volunteer to take it on) – but any ideas and suggestions from any member for programs can be sent to any member of the Executive Committee. Also, as we’re planning on having forums at the Hamfest (March 20<sup>th</sup> 2011 at the Owens Community College 30335 Oregon Road, Perrysburg, OH), any ideas and suggestions regarding possible speakers and topics would be welcomed by Ron N8RLH, who is our Forum Chairperson for the Hamfest.

73, Brian



## TMRA ANNUAL CHRISTMAS PARTY

Wednesday, December 8, 6:30 p.m.  
The Electrical Industry Building,  
Lime City Rd. Rossford

Call Sandy, KD8HYS, 734 693 2126 for reservations.

TMRA will supply the meat and table service.  
Please bring a dish to pass.

Christmas Games, Music and Fun

## November 11<sup>th</sup> was Veterans Day. It was also a good day for a Mini Field Day.



Joe, KJ0EYT, prefers the wide open spaces for his portable station. *kd8kxe photo*

There was not much notice given but we did have a good turnout for the event. There was hotdogs and radios.

The location was Olander Park on Sylvania Avenue. We parked the ARES truck and trailer on the pavement there and operated out of the comfort of the trailer. There were a couple of other stations that came and set up around the trailer. All stations were operating HF. That was the primary goal.

The event was successful for a couple of different reasons. One being that an antenna failed and some of the coax failed. Another reason it was successful was because we actually set up in short order and had several failures of equipment and some adjusting to do. How was this successful??? We found out what did not work. Better to find this out now than when we are needed for an actual event.

All said and done, we were able to check into the OSSBN and there was a MARS station operating from our location as well. We did make contacts and demonstrated the trailer and our skills and radios to some curiosity seekers. We gave them a pretty good education about Ham radio. This brings me to a point. In order to be useful we need to be effective amateur radio operators. This means helping in any way we can, even if it means sending a fax over a working twisted pair. Emergency communications does not mean we only provide equipment, if it means receiving and delivering a radiogram, then that is what we train to do. We should be prepared to do what it takes, that means training to find out what works and what doesn't work. I intend

to start putting on these "Mini Field Days" be it winter or summer.

Granted, I may end up operating alone most of the winter but I hope to inspire those who are interested in emergency communications to dust off their grab and go kits, climb into their vehicle and meet at a designated Mini field Day location to set up and operate for a few hours.

As ARRL appointed Emergency Coordinator for Lucas County, I am charged with recruiting and maintaining relationships with all ARES members. I want to thank all of you for your interest in emergency communications. I want to help you train so you can operate when needed. I look forward to future Mini Field Days and seeing you set up and have some fun operating as well as serving a purpose. We should train like we fight, or set up and transmit like we are really needed because when all else fails, and it will.... You know the rest.



Steve, W8TER, showed off the Lucas County ARES® truck and trailer. *kd8kxe-photo*

Thanks to Bob, KD8KXE for the photos.

### *Training Nets:*

I have put together three different nets and I am hoping to encourage any hams to practice net control by volunteering to either run the net or to participate.

The nets are as follows:

On the first Friday of the month at 11:45 AM on the frequency of 147.270 there is the Lucas county Siren training net. This is an excellent opportunity for anyone to gain net control experience.

On the first Sunday of every month at 7:00 PM on the frequency of 146.940 linked to the WJ8E repeater of 442.950 there is the Emergency Power net. This is another excellent time for any ham to practice net control procedures.

On Thursday Evenings at 7:00 PM on the frequency of 443.775 with a PL of 103.5 there is the ARES Training net. This net is a round table of discussion about emergency communications. It is an informal net and constructive criticism and

net discipline are encouraged. I usually try to participate in all of these nets, but like any thing else, I am not always available so I ask that some one run the net. If it were an actual emergency, would you be able start a net and run it? I would hope you could get the job done for the sake of amateur radio and the agencies we serve.

### *Flower Hospital Repeater Site:*

KC8GWH is the call for the repeater on Flower Hospital. ARES has just been given official permission to occupy the site. ARES is glad that Jeremy, KC8GWH has agreed to allow ARES to use his equipment for emergency communications.

I encourage stations to try this repeater. It is 443.775 with a PL of 103.5. Currently this repeater is at the secondary frequency for emergency nets should the primary frequency of 146.940 be unavailable. I have used this repeater successfully with an HT from the Jerusalem TWP. Fire department. It has a great footprint and can make using a 440 ht an effective EmComm tool.

73,  
Steve, W8TER  
Lucas County E C

---

## **Attention All Fists!**

*CQ CQ CQ de KJOEYT!*

For those of you that are not aware, several local hams are learning CW and practicing with each other after the Sunday night TMRA Information net. In addition, I've started an e-mail list for those interested, so if YOU'RE interested, please send me an e-mail and I'd be happy to add you! The point of this small group is to let local CW newbies practice with other local CW newbies and not have to worry about the reaction of/from the HF elders. There are a few people on the list already, however, only Dave KD8EVN and myself have been actively practicing within the group. We're looking for more to practice with! Dave and I have been practicing CW on 40M, usually around 7.064Mhz. However, we have been coordinating via voice on 2M simplex. The 2M frequency sometimes changes, but we're aiming for 147.570 2M simplex. This is why the e-mail list can be helpful, to keep track of where this'll be. However, if more care to actively join the group, we can certainly move this to a local repeater for easier access. If you have a tech license, do not fear, you DO have CW privileges on 40M between 7.025Mhz and 7.125Mhz. You also have CW privileges on 10M and 80M!

Dave has been working on a kit/project to enable the use of CW keys with 2M HTs so practice can be done via 2M (simplex or repeater use). We realize that more hams might be interested and willing to practice if the use of HF is not involved. Steve, KC8TVW has also mentioned another, easier, possibility for those just looking to give it a try... if you have a CW key with a keyer to make the "beeps", then you can use the radio and hold the microphone near the CW keyer so it can simply "hear" those beeps and transmit those on 2M. Pretty easy. The only tricky part here is keying the radio while using the CW key. If you're using an HT, then that means you have to physically hold down the PTT trigger on the radio while trying to use the CW key. For those of you with a "base" microphone, this might be easier as some base mics have a "lock" button so you don't have to hold it down. You might also say "what about VOX"? Don't bother with it, is my reply. It's just not that reliable on most rigs... especially when using with a repeater.

So what do you need to get started? Like anything else in ham radio, it can depend upon what you already have and what you want to do. But basically, you need two or three things...

#1: A CW key. This can be a "straight key", which is what people usually think of when they get a mental image of CW, or have seen a telegraph operator on TV. A straight key is a very simple device (in theory) in which you press down on it and as long as you are pressing down you're making an electrical contact (i.e., causing a "beep"). With a straight key you need to form the dit's (dots) and dah's (dashes) manually. Many hams prefer straight keys. I, however, do not, as a matter of personal preference. When I first started CW, I was given an old straight key that my grandfather had used. I

<p><b>The TMRA Amateur Radio Beacon is published monthly by the Toledo Mobile Radio Association. #224</b> <b>Editors: Brenda, KB8IUP, and Chuck, KB8FXJ.</b> <b>Email, kb8iup @ arrl.net</b></p>
--

really disliked it. Why? Because I'm a big ole' fat guy with no natural rhythm. Having to learn CW -AND- the timing involved made me put it aside for awhile. Later on I found out about an alternative to the straight key. The "paddle". There are different types of paddles, but, in essence, instead of just pressing it down, you move it one way to get a dit, and the other way to get a dah. This is a gross oversimplification of it, but you get the idea. For me, this was the difference between doing CW and not. Every person will vary, and you should certainly try different devices to find out what you like!!!

#2: A keyer. This is the "back end" of the physical CW device. You see, all the "key" itself does is close an electrical contact. That in and of itself is not very useful. Your home light switch can do that. Something needs to take that electrical contact and turn it into a "beep". Some keyers are extremely simple. They use an "oscillator" to generate a tone via a speaker. Other keyers may be even simpler still by using a small piezoelectric buzzer. This is all that a common "code practice oscillator" is... a key and a simple keyer back end to make a beep. However, keyers can also add a lot of features. I mentioned in the above CW key item about paddles. Well, I also found out that my home rig, an Icom IC-7000, has a built-in keyer with lots of bells and whistles. One of those features is the ability to form the dit's and dah's for you, at a user-settable rate (WPM - Words Per Minute). So when I press my CW paddle one way, the built-in keyer makes a dit tone, when I move it the other, it makes the dah tone. I don't have to press the paddle longer for a dah. The electronic keyer circuitry receives the request to make a dah, and it just does it. So all those fat-white-guys-that-can't-dance, rhythm issues kinda disappear! To me, it was a blessing. SO, if you're like me, the electronic keyer can really help with your CW learning adventure!

#3: A radio. Yeah, you can learn CW without a radio. But what fun is that? It might be fun if you enjoy talking to yourself. But if you enjoy sending CW to yourself, well, consult your doctor/therapist. If you're into ham radio, then you're probably here because you want to talk to someone periodically. SO, for this, you'll need a radio. Duh. Now, the above three items are simple concepts. In terms of actual physical devices, it can get complicated. For example, there are items available that combine #1 (CW key) and #2 above (keyer). Do a Google search for the MFJ-422D "Keyer, Bencher Keyer Combo". This is a CW key (paddle) with the electronic keyer back-end circuitry. However, in my particular case, my items number #2 (keyer) and #3 (radio) are built together. My rig has the electronic keyer circuitry built-in. I just need to provide the key (more on my personal key in a moment). But this combination is both a blessing and a curse. In my rig, the electronic keyer circuitry will only work in "CW mode". This is somewhat equivalent to sideband. It doesn't work in modulated modes... i.e., FM. So I can't use the rigs built-in keyer on 2M FM simplex or a repeater of any type. And based on what I'm reading, this is the case with most rigs with a built-in keyer. This is why Dave is working on building a keyer circuit that can be used with HTs (and mobiles/bases). This circuit will provide the keyer circuitry as well as provide the PTT trigger. Then the HT will take the input beeps and modulate that to FM which can be sent out over simplex/repeater. It's basically a circuit to "beep" into the radio, but instead of using the HT's built-in microphone, we're funneling the tone in via the microphone jack, as well as providing the PTT functionality at the same time. This means a "cleaner" sounding tone, and not having to manually hold down the PTT button at the same time. This is also what the MFJ-552 does (but with more bells and whistles, and a higher cost).

So how do YOU get started? Talk to someone. Join our e-mail list. It basically depends on what you have already, and what your objectives are. If you've got a tech license and have no immediate plans for getting your general, or you're not looking at HF yet, then you'll likely want something that will work on FM (2M/220/440, etc...). You can also do CW in "CW mode" and/or sideband on 2M, but at that point you're kind of just doing HF stuff, but not on HF, hi hi. If you do have a general (or tech) and access to an HF-capable rig, then you might already have the keyer/radio part, you might just need a key. This is my point, it can get complicated, so talking to someone who is knowledgeable will get you far in a much shorter time.

For those with general licenses and an interest in CW, I do encourage you to try it out on HF. There is much more involved when learning CW than just the "dit's" and "dah's" on HF... one major item I learned along this adventure has been exploring the filters on my rig to narrow down the bandwidth heard so I can concentrate on just the CW I want to hear and not other extraneous HF noise and/or other signals. There is also the concept of "zero-beating"... just because you can hear the other ham's CW tones, doesn't mean that when YOU go to transmit that he'll hear you! He may have a narrow filter on, and your tone might be outside of that filter... \*even if you're rig reads the same exact frequency as the other hams\*. So, don't assume that if you get good and learn-ed on the CW letters/numbers/punctuation that you can just "jump" onto HF and do it. Practice is vital, just as in anything else related to ham radio.

What do I use? I'm glad you asked (hi hi)! As mentioned before, my home rig has the electronic keyer circuitry built-in. And as also mentioned, I lack the timing ability to use a straight key. So I've opted for a paddle. But I did not buy a paddle, I built one. And my paddle is about as cheap as they come. It's nothing more than a switch from Radio Shack in a



The KJ0EYT East Side Key  
kj0eyt-photo

Radio Shack project box. That's it. Since my rig has all the electronics necessary, all I needed to do was provide the electrical contact necessary to tell the radio to make a "dit" or a "dah". And thusly, I've dubbed my CW key the "KJ0EYT East Side Key". Now that's a fist only a native Toledoan can love! But, as mentioned before, this doesn't allow me to work CW on 2M FM. For that I'm likely to use Dave's circuit project, or use KC8TVW's suggestion of using my IC-7000 to make the "beeps", and then use a secondary 2M rig with mic to send those beeps out via FM.

I hope this article provides a little bit of insight into CW for the newbie. But I'm sure it'll create more questions instead. But that's the nature of ham radio, LEARNING!

## Who's Station Is it

This station belongs to a TMRA member. Do you know who it is? The "before" and "after" photos show what can happen with some new shelving and a lot of time. Let me know at the TMRA Christmas party. The first correct answer gets a prize. If you have a unique station, send in a photo and we will put it in the newsletter too.



Merry Christmas and Happy New Year  
Brenda, KB8IUP & Chuck, KB8FXJ  
*The TMRA Amateur Radio Beacon*

THE TOLEDO MOBILE RADIO ASSOCIATION P.O. BOX 9673, TOLEDO, OH. 43697-9673  
President, Brian, WD8MXR; Vice-President, Steve, W8TER; Secretary, Ron, N8RLH;  
Treasurer, Brenda, KB8IUP; Public Information Officer, Steve, KC8TVW.  
Board Members: Chris, KC8UFV; Steve, KC8TVW; Tom, KB8PAI; Rita, WB8FBG; Dan, KE8UE.

TMRA Home Page [www.tmrahamradio.org](http://www.tmrahamradio.org) Webmaster, Tom, KB8PAI.

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) Please "ID" before using phone-patch.  
(10 digit dialing, \*up and #down)

TMRA W8HHF Packet BBS Frequencies 51.780, 145.690, 223.480, 441.060

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

The TMRA Q & A net meets every Sunday night at 7:30 PM, followed by the TMRA "Information & Swap 'N-Shop" net at 8:30 on the 147.270+ repeater. All amateurs are invited to check-in.