



# TMRA Amateur Radio Beacon

September 2011



## The Prez Sez

Our September meeting is the Annual Meeting at which we elect officers and the TMRA Amateur of the Year is revealed (and, hopefully, is in attendance to receive the plaque).

For this year, so far the only nominees for the 4 officer positions are the current 4 officers, all of whom have agreed to run again. Nominations are open until they are closed at the September meeting. The By-Laws Review Committee will be presenting some proposed recommendations for changes: these are published elsewhere in this Newsletter for members to review in advance of the meeting, and at the meeting we'll discuss these prior to voting on the proposals.

The Audit Committee met in August and I'll have at the meeting the committee's report.

73, Brian

## TMRA By-Laws Review

The TMRA By-Laws review committee, consisting of Ron, N8RLH; Rita, WB8FBG; Joe, KJOEYT and Brian, WD8MXR, met on August 12, 2011. The following are their recommendations for changes in the current By-Laws; these will be presented at the September TMRA General Meeting and voted on by the membership present.

Section II. Membership: f. i) and iii). Proposed change: replace "regular" with "Full" membership.

Section III. Dues: #2 Currently reads: Dues shall be: a. Regular member: \$12.00 per year. b. Family member: \$3.00 per year. c. Full-time student member: \$3.00 per year.

Proposed change: Dues shall be determined by the Executive Committee and approved by the general membership. See Appendix A of these By-Laws.

#5 Currently reads On or after September 1<sup>st</sup> in any year, a person may apply for membership by completing an application form and submitting the appropriate dues ..... Proposed change: On or after September 1<sup>st</sup> in any year, a person may apply for membership by submitting an application and the appropriate dues .....

Section IV. Meetings: #3a Currently reads A quorum shall consist of 15% of the voting members. Proposed change: A quorum shall consist of 15% of the voting membership.

#4. Proposed new: At the start of each Association meeting the following shall be performed: a. The membership chairman shall announce new members, and if present, allow them to introduce themselves. b. The VE Coordinator shall announce all new and upgraded licenses as a result of TMRA VE testing.

Section V. Board of Trustees: #1 proposed, change "regular" to "Full" member.

#12 Currently reads: The President may be invited to the meetings of the Board of Trustees, but he/she shall only vote in the event of a tie decision. Proposed change: In the event of a tie decision in which all the trustees have voted, the President shall be the tie-breaker.

Section VI. Officers: #2: change "to be present" to "shall be present".

#2 b (iv) delete "Equipment Manager".

#5. The Secretary: a. Currently reads: Shall mail out all notices stating time and place for meetings..... Proposed change: Shall publish all notices stating time and place ..... Later in that sentence, proposed change "or" to "and".

#6g. Proposed change: change "Annual Meeting" to "Annual Business Meeting".

Section VII. Executive Committee: #5. proposed change "regular" to "Full" member. #6. Proposed change – delete #6. and renumber #7 to #6.

Section VIII. Budget and Finance: #6. Proposed change: delete , with the exception of Section XI #4 of these By-Laws.

Section XI. Technical Committee. #3 Proposed change : delete , packet equipment. #4. Proposed change: delete unless deemed an emergency to maintain.... at its next meeting. #9a Proposed change: Add as 9a Be appointed by the Technical Committee chairperson. Change current a., b., and c. to b., c., and d.

Section XIII. Agreements and Contracts. #1 Currently reads: All written contracts will be negotiated by no less than 3 Full members ..... Proposed change to read: All written contracts will be negotiated and signed by no less than 3 Full members.....

Section XIV. Amateur of the Year. Proposed change: add See Appendix B for written guidelines.

## Ohio State Parks on the Air

The Ohio State Parks on the Air contest is sponsored by the Portage County ARS and will occur on September 10. The contest involves working as many portable or mobile stations operating from Ohio State Parks as possible. Stations operating from Ohio State Parks work only other stations in the parks. Stations outside Ohio State Parks similarly work only stations operating from these parks. The operation runs for 12 hours from noon to midnight.

QSOs may be made using AM, SSB, CW and Digital. These contacts may be made on the 80, 40, 20, 15, 10 and 6 meter bands.

Full details are at <http://parks.portcars.org/ospota/index.php>.  
Certificates and plaques are available in six categories.

*From "Weavers Words" July 27, 2011*

## Adrian Amateur Radio Club

38th Annual Hamfest and Computer Show  
Sunday, September 19, 2010  
Event Starts at 8:00 AM  
Talk-In: 145.370 - 85.4 pl  
Tickets are \$5.00  
Will be having VE Testing  
More Information can be found at [www.w8tqe.com](http://www.w8tqe.com)

**The TMRA Amateur Radio Beacon is published monthly by the Toledo Mobile Radio Association. #233**  
**Editors: Brenda, KB8IUP, (poof-reeder) and Chuck, KB8FXJ.**  
**Email, kb8iup @ arrl.net**

73 de Brian, KG8CO

## The American Legion Amateur Radio Club

700 N Pennsylvania Street  
Indianapolis, IN 46204

The American Legion Amateur Radio Club is open to wartime military veterans who are members of The American Legion and FCC licensed amateur radio operators. Members of The American Legion Auxiliary, the Sons of The American Legion, and The American Legion Riders who are licensed are also eligible.

The club station, K9TAL-The American Legion, is located in the national headquarters building of The American Legion on Legion Mall in downtown Indianapolis, Indiana.

With over 2.4 million members, The American Legion is the nation's largest veterans organization with nearly 14,000 posts across the country. It is affiliated with the Dept. of Homeland Security in the promotion of disaster preparedness and response.

For information or to join: [k9tal@legion.org](mailto:k9tal@legion.org)

## It's Back to School Time...for Ham Radio, too!

By Dan Romanchik, KB6NU

As I write this, it's about 85 degrees, and I'm sitting on the patio of a cottage overlooking Elk Lake in northern Michigan. This idyllic spot is about as far away from school as you can get. And yet, in less than a month, kids will be back in school, and if kids are going to be back in school, why not ham radio operators?

The fall is a good time to begin teaching a new group of Technicians. I favor the "Tech in a Day" or "Ham Cram" type of class. This type of class focuses on teaching students the answers to questions on the test rather than the material itself.

There's a lot of controversy about this, and many decry this method of teaching, but I think the best way to learn about ham radio is by actually doing it, and you can't do if you don't have a license. Besides, how much more instruction will students actually get in a more traditional eight-week or ten-week course, maybe 16 hours? Will those 16 hours make that much of a difference?

For the sake of argument, let's say that you've decided to offer a one-day Tech class. Now what? Well, the first thing you have to do is to find a place to teach it. Possible sites include your local public library, a township hall, a community college, perhaps even your church.

Now that you have the place, you need to find some students. Your local emergency-management group would be a good place to start. Also, make sure a notice gets published in your amateur radio club's newsletter. Chances are most of the subscribers already have licenses, but they may have friends or relatives who would be interested. Also, make sure the class gets listed in the upcoming events section of local newspapers or magazines.

Once people start signing up, you should suggest that they either purchase a study guide or download my free study guide ([www.kb6nu.com/tech-manual](http://www.kb6nu.com/tech-manual)). Because I use my study guide when teaching the class, I always advise them to get a copy, but if you'll be using other materials, then your advice may differ.

I counsel the students to read through my study guide a few times and take some online practice tests before coming to class. That will make them familiar with the material, especially areas they may be weak in or have questions about. By bringing those questions to class, we can address those areas in a little more depth, which will, hopefully, give them the help they need to pass the test.

The class itself is six hours long, running from 9am to 3pm, at which time we give them the test. This is not a lot of time for the amount of material I have to cover, so I move along at a pretty brisk pace. I concentrate on giving them the answers, but with enough context to that it all makes sense.

OK, let's say your class was wildly successful, and you now have a group of newly-minted Techs. What do you do now?

Well, you might consider offering some short sessions on what ham radio operators do--Ham Radio 101, so to speak. The topics could include how to choose your first radio, the basics of FM repeater and net operation, and building your first antenna (say a 2m ground plane). They'll be more enthusiastic about these classes now that they actually have a license.

It might also be a good idea to schedule a General Class license course for sometime shortly after the Tech class. This will encourage them to upgrade while they are enthusiastic about the hobby.

I hope that this has encouraged you to offer some ham radio courses of your own. If you have any questions, feel free to e-mail me at [cwgeek@kb6nu.com](mailto:cwgeek@kb6nu.com) or phone me at 734-930-6564. Good luck, and let me know how your classes turn out.

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When not preparing for his next ham radio class, Dan publishes the "No-Nonsense" study guides for the Technician and General Class license exams. Free versions and print version are available from his website at [www.kb6nu.com/tech-manual](http://www.kb6nu.com/tech-manual). E-book versions are available for the Kindle and devices that run the Kindle app on Amazon.Com and for the Nook on BarnesandNoble.Com.

## D-Star Is Here!

If you've not heard already, the TMRA now has a D-Star repeater. It has been recently installed at our current backup repeater site - the PNC bank building, downtown. Initial signal reports have been extremely encouraging, with hams from as far away as Sandusky, Tiffin, Napoleon, Defiance, and Windsor (Ontario, Canada) reporting being able to get into it via RF. The system is also hooked into the Internet, allowing communication with any other D-Star repeater across the world also hooked into the Internet. There are also D-Star "reflectors" and nets just like with Echolink and/or IRLP.



TMRA D-Star installation team.

The TMRA procured this repeater through an Icom promotion in which if the TMRA met certain conditions the equipment cost would be refunded, minus shipping costs. I'm happy to announce we've met these conditions and by the time this article is published we will have submitted this to Icom. Icom claims the refund could take four to six weeks to process. However, one note here, at the most recent TMRA Executive Committee meeting it was reported that Icom never actually cashed our check for the equipment.

The other costs to the club have been minimal. We already had the repeater site equipped with a 440Mhz antenna, feedline, cabinets, duplexer, power supply, and an Internet connection. We also had the gateway computer server donated to the club (two actually, one for

backup), courtesy of TMRA club member Doug, AB8XW. We did have to have the duplexer cans re-tuned for the new frequency, but that cost was minimal. Why did we have all this available? A short time ago the TMRA FM repeaters were housed there. A number of factors caused us to purchase new ones and place them at what is now our primary site, at the University of Toledo. However, we still had our old equipment set up at PNC, as a backup, ready to go at a moments notice. So we cannibalized the backup 440 equipment to make the D-Star system. The backup 2m system is still in place there. Thanks to all this the D-Star repeater install was almost painless, and at minimal cost... a beautiful thing.

We were initially skeptical of the possible coverage. Icom lists the output power of the 440Mhz repeater as 25W. When we installed it at PNC and tested with a meter we got a reading of 20W directly out of the repeater. The output of the duplexer cans reduced this to a measured 18W. Yikes! But D-Star is a narrow-band mode. Normal FM amateur repeaters use a 15Khz bandwidth. D-Star is only 6.25Khz wide. So that 18W is not spread out as wide, it's more concentrated. Plus, we're on 440Mhz, which is bit more adept at going through objects, like buildings. We're also at a good height, which further increases our reach, and not to mention a great antenna and low-loss feedline. But we're also in the middle of summer and propagation has been treating us well locally, so time will tell here.

Icom has been criticized for this promotion. "They want to sell more radios". Duh. With D-Star it's become apparent that many hams are unwilling to invest in these expensive radios if there are no repeaters around. We knew that going into this. Toledo is a perfect example. There are a few of you who've purchased D-Star equipment. Many have not... why? Expensive for one, and, of course, no repeater. But this has a side effect. I for one have learned an amazing amount of information about D-Star thanks to this promotion. I'm not going to go down the road of "D-Star is the future" or anything like that. But what I will say is that D-Star is exciting, especially for those of us interested in computers and/or the Internet. It's a marriage of ham radio and network technology. It's voice and data, at the same time. There are lots of opportunities, and many avenues for learning and new experiences in ham radio. I will be delving more into these topics in my next D-Star article.

But I digress...

So if you've got a radio capable of D-Star, here is what you need to know to get on the air digitally, D-Star style. The frequency is 442.750Mhz, positive duplex. Set your radio to "DV" mode (D-Star Voice). Set your "RPT1"/"R1" setting to "W8HHF B" (W8HHF space B). Set your "RPT2"/"R2" to "W8HHF G" (W8HHF space G). Set your "URCALL"/"UR" to "CQCQCQ". Set your "MYCALL"/"MY" to your callsign. Press the PTT button and talk.

How do you know if you have a D-Star capable radio? Firstly, only Icom is currently making RF ham radio hardware with D-Star built-in. So if it's not an Icom, then it doesn't have it. If it is an Icom, does it have a D-Star logo on it? That's a good sign. Some radios need an extra microchip/circuit board installed. The radios with a model number beginning

with "ID-" (as opposed to "IC-") already likely have it built in (ID-800, ID-880). The HT's with an "AD" at the end already have it (IC-91AD, IC-92AD), those with just the "A" do not (IC-91A) and require the optional microchip/circuit board purchased/installed. Don't know if you've already paid for the chip and need to know? Push the "mode" button on your radio (you may need to hold it down) and see if you have "DV" mode in addition to "FM". If "DV" comes up, you're good to go... see the above paragraph for what to put in to talk to our repeater. There are also two readily available pieces of hardware you can add to your computer that allow you to talk to/through both our D-Star repeater and any other D-Star repeater via the Internet. The first is the Internet Labs DV-Dongle. This is a small, blue, device which hooks up to your computer via a USB port and uses the computers microphone and speakers instead of a radio mic/speaker. More information can be found at [www.dvdongle.com](http://www.dvdongle.com). The second is the Internet Labs DV-Access Point (DVAP). This is a small, red, device which has a short antenna on it. This device DOES NOT do the same thing as the blue dongle. It will NOT allow you to use your computers speakers or microphone to talk. Instead it allows you to use a D-Star radio via RF to talk to it, and then it translates that RF to digital data and spits that out through the Internet to the D-Star network. What's the point of the DVAP? Well, up until now we didn't have a D-Star repeater in Toledo. So a few members interested in D-Star bought radios and didn't have a way to talk to anyone else. The DVAP allowed them to do that. The DVAP is also useful if you're at a location which may have a weak signal into the repeater. Or if you have an HT and like to use it inside your home, but it's not reliable enough to get into the repeater. Or if you like your HT battery to last more than a few hours, you can put it in low power mode and go through the DVAP. As you can see, there are more than a few scenarios where it may be useful. But again, only the blue dongle will allow you access to the D-Star network via the Internet using your computer and NO radio. The red dongle (DVAP) requires a radio, but uses your computer and your Internet connection to give you D-Star access. More information can be found at [www.dvapdongle.com](http://www.dvapdongle.com). Both of these options require a computer and an Internet connection. Both of these devices will allow you to talk and listen to the TMRA W8HHF D-Star repeater, and to talk to others on our repeater even if they're using RF/radio. The DV-Dongle (blue) costs around \$200. The DV-Access Point (red) costs around \$250.

What if there are Internet issues and the repeater loses it's connection? Then the repeater will still act as an RF repeater (D-Star only), just like normal. You just won't be able to talk to other D-Star repeaters through the Internet (or use a DV-Dongle or DV-Access Point from the Internet).

What if you want to use an existing radio you may have that is not D-Star compatible for use with D-Star? Stay tuned for a follow-up article in the near future regarding D-Star Home-Brew/DIY!

If you wish to be heard by other Internet D-Star users and/or use the Dongles, then you must register your callsign with the D-Star Internet network. You only ever need to do this once. For more information about this please see the D-Star section of the TMRA website - [www.tmrahamradio.org](http://www.tmrahamradio.org). Specifically, refer to the "REGISTRATION" section and follow the instructions there!

So what's up with the URCALL, RPT1, RPT2, and MYCALL settings? If you only ever wish to talk to other local hams on our D-Star repeater, then all you need to know is to leave your URCALL set to it's default - "CQCQCQ" and put in your callsign in "MYCALL". But if you want to gain access and be heard by others on other D-Star repeaters and/or dongle users, that's where the RPT1 and RPT2 settings come into play and the URCALL can get a little more complicated. The RPT1 and RPT2 settings can be described as defining how you get to the Internet (or another module on the same system) from RF. RPT1 is normally set to "W8HHF B", which is how you're connecting to the repeater through RF. The "B" part refers to our 440Mhz module. "A" usually refers to 1.2Ghz (which we don't have on our repeater), "C" usually refers to 2m (again which we don't have). RPT2 is "where you want to go". In order for dongle users or other D-Star repeaters to hear you, you must set this to "W8HHF G". Here, the "G" means gateway... i.e., "Internet Gateway". So you can kinda picture it like this: RF --> W8HHF B --> W8HHF G --> Internet. If you do NOT set your RPT2 to "W8HHF G", then you might find that some people are unable to hear you. This might be because they're coming from the Internet, and since, without this setting, your voice isn't getting to the Internet, so they can't hear you. So you'd be well advised to go ahead and set your RPT1 and RPT2 as described here.

The "MYCALL" setting is a nice thing. Why? With D-Star you don't technically have to voice ID your callsign. Your callsign is being transmitted automatically as data, constantly, during your transmission. This also shows up on other D-Star users radios while you are talking. Hence, if your MYCALL is set properly, you are ALWAYS identifying during your transmissions! However, it is courteous to voice identify your ID from time to time. Especially on your first transmission. Not all are likely looking at their radios front panel all the time, especially if no one is talking. So if you key up and no one is there, you'd likely say your callsign and "listening". Because D-Star repeaters may often be connected to other repeaters or reflectors, some choose to state their callsign as well as the repeater they're using, so others

know where they are... i.e., "This is XY1ABC on the W8HHF repeater, module B, Toledo, OH". This has an added benefit for those of us who may have our radios on scan... we may not pick up the first part of your transmission. But since it's longer we may have a better chance of hearing the latter part. Even if we don't catch the callsign, we know someone is there looking to chat and can either visually see your callsign on the radio front panel or just key up and ask for a fill.

There is another benefit to "MYCALL". Because the repeater is hooked up to the Internet, neat things can be done here. For example, whenever you transmit via our repeater, you'll show up on our gateway status web page (also called a "Dashboard"). You can find our dashboard link on the TMRA website in the D-Star section ("Gateway Status Page"). This page will also list Dongle users who are currently connected, as well as display if our repeater is linked to another repeater or reflector. Lots of helpful information if you're sitting at your computer and wondering if there is any action on our D-Star repeater. Of course, this can also be accessed by cell phones with web browsers too. What this page will NOT show is RF radio users who may be tuned to our repeater but have not transmitted recently. So there may indeed be lurkers out there listening even if they don't show up on this page... so don't be afraid to put your callsign out there even if nothing new shows up on the web page. You never know who may be listening!

And "URCALL"? This describes who you want to talk to. The default is "CQCQCQ" which simply means you want to talk to, and hear, anyone available. But this can also be used for other things. Let's say you want to talk to your buddy, XY1ABC. Your buddy travels a lot and frequents different D-Star repeaters depending upon where he is. Well, the D-Star system makes this easy. Simply put in "XY1ABC" into "URCALL". When you hit your PTT button, the D-Star system will attempt to locate that user based on which repeater he accessed last. If the system successfully finds him, then regardless of which repeater he's using, your voice will make your way to his radio, assuming his radio is on, he's within distance of a D-Star repeater, and he's talked on that repeater - i.e., the repeater knows he's around. If he doesn't transmit when he gets within distance of a particular D-Star repeater, it has no way of knowing he's there. D-Star radios don't "phone home" automatically or anything. Unless you have a GPS hooked up and you are transmitting your coordinates periodically, but that's another topic. When you're done talking to your buddy don't forget to set URCALL back to "CQCQCQ", otherwise you might find yourself not able to talk to others!

There are other uses for "URCALL". Primarily, repeater linking. The D-Star repeater can be "linked" to other repeaters, and/or reflectors, via the Internet. Just like with IRLP or Echolink, you need to have a way, via RF, to tell the repeater where you want to link to. All the normal rules of courtesy apply here. If people are talking, don't just go linking the system somewhere and start talking. If the repeater is already linked and people are talking, don't go and unlink it without checking first to see if anyone local is making use of it (or just listening). So, if you're not sure if the repeater is in use, then just key up and ask. Once you've done this, the first thing you want to do is unlink it. You don't have an easy way to tell if it's currently linked or not, unless you have access to the Internet and look at our repeaters status page. So just issue the unlink command... if it's not linked you'll simply getting a message stating so, no harm done. So what is the unlink command? It's the letter "U" in the EIGHTH POSITION of the URCALL. So the full URCALL is seven spaces and a "U". If you just put in a "U" in any position other than the eighth, it won't unlink. You do not need to specify what you are unlinking from, all you need to do is tell it to unlink. When you key up (just need to key up for a second or two, you don't need to talk) you should get a message back stating if it has unlinked or if it was already unlinked. Step one done. Your next step is to tell the repeater what you want to link to. You're either going to link to another repeater or a reflector. Repeaters have callsigns. Reflectors have numbers (more on those in a bit). The D-Star repeater in Lima, OH has the callsign KT8APR. You also need to specify the "module" you want to link to (remember, A=1.2Ghz, B=440, C=2m). Like our repeater, Lima is a 440Mhz only repeater. So they only have a "B" module. The URCALL link command is constructed like this... the first six characters of the URCALL contain the callsign. The 7th position is where the module letter goes. In the 8th position you put in "L"... guess what that's for? L="Link"! So if you want to link our repeater to the Lima 440 repeater, then you would set your URCALL to "KT8APRBL". You would key up for a second or two, and you should get a message indicating the repeater is now linked. You might also get a message stating the other repeater is busy. This means that repeater is already linked to somewhere else and the link failed. Try again later or link to somewhere else. What if the repeater callsign you want to connect to has less than six letters? If it's a four character callsign, then you would add TWO spaces between the callsign and the "XL" portion (i.e., W1AW SPACE SPACE XL or "W1AW XL"). If it's a five character callsign, then you would add ONE space between the callsign and the "XL" portion (i.e., W8HHF SPACE XL or "W8HHF XL"). In these examples the "X" in "XL" refers to the module (A, B, or C). The main thing to remember here is that the module letter (A, B, or C) ALWAYS goes in the 7th position and the "L" (link command) ALWAYS goes in the 8th position, when you are trying to link a repeater. Step two done, just one to go. After you've keyed up and get a message back indicating the repeater has linked or not, you need to set your URCALL back to it's default - "CQCQCQ". If you don't, then every time you key up you will be commanding the repeater to link

again, and each time it'll tell you it's already linked! So don't forget to put URCALL back to "CQCQCQ". That's step three. Done. You can now call out and see if anyone is around to talk to! But be sure to listen first! You might have dropped in on an on-going QSO or net!

| September Birthdays |            |     |
|---------------------|------------|-----|
| Callsign            | First Name | Day |
| w8clm               | Chris      | 1   |
| kg8ec               | Ron        | 8   |
| kd8gfo              | Robert     | 17  |
| ke7hul              | Jerry      | 25  |
| wd8mxr              | Brian      | 12  |
| kc8mzv              | Leonard    | 5   |
| kd8njy              | David      | 6   |
| w8nyy               | Bob        | 5   |
| kd8qbh              | James      | 4   |
| kd8qbq              | Corie      | 2   |
| kc8tcr              | Richard    | 29  |
| w8uel               | Arthur     | 23  |
| n8wac               | Tony       | 13  |
| w8wgc               | Glenn      | 3   |
| kc8wqu              | Patricia   | 14  |
| w8wsb               | Clarence   | 12  |
| ab8xp               | Hiram      | 1   |
| wb8yrs              | Terrance   | 6   |

When you're done, if no one else is around that wishes to use the link, don't forget to unlink the repeater. How do you do that? Tisk tisk, so forgetful. Re-read the last paragraph!

So what are reflectors? Reflectors are places where multiple repeaters can link to. These can be used for larger nets. D-Star reflectors are similar to D-Star repeaters in that each reflector has three "modules", again, "A", "B", and "C". But unlike repeaters these letters can mean anything. Some reflectors are general purpose, anyone can join and chat. Others have specific purposes. The NODIG club in the Cleveland area operates two reflectors, 38 and 39, with a total of six modules. The 38 reflector is Ohio-oriented. The 39 reflector is Ohio EmComm related. These are defined on the NODIG website at [www.nodig.us](http://www.nodig.us) (click on the "Port Assignments" link near the bottom of the left-hand side). I like to link us to the 38A reflector when there isn't a lot of local action. That way, there may be others out there connected to the reflector, and if there is no one local around to talk to, maybe there is on another repeater connected to the reflector. Reflector 38A is defined for use by other Ohio users. Of course, anyone is free to connect to it, but more than likely you'll be talking to a fellow Ohioan (unless yer one of them Michiganders, in which case - GO BLUE, and SLOW DOWN yer speedin' for God sakes). 38C is specified for use during the Dayton Hamvention, but at other times it can be used for general use. When there are EmComm events going on, we can connect to the 39 reflector modules. 39A is specified as "Ohio ARES", 39B is "Ohio EMA", and 39C is "Ohio Severe Weather". I'm not sure if these are officially coordinated in any way, time will tell.

So, how do we connect our repeater to these reflectors? It's very similar to the process of linking to repeaters. Except here the format is "REF0##XL". The "REF" part stays there, REF=Reflector. Then you put in three digits corresponding to the reflector number. As of this writing there are less than fifty reflectors, so after the "REF" part you put in a 0 (ZERO). Then you add the two-digit reflector number. Then you add the module letter (again, A, B, or C). Finally you add the "L" (LINK). So if you want to connect to reflector 38A, the link command is "REF038AL". Again, be courteous. If you connected to a reflector for the purpose of a net or talking to someone else, then, if no one else is interested in using the link, please unlink the repeater. An exception here can be made for reflector 38A. As stated above I like to leave it linked

to this reflector at times so your chances of finding someone to talk to are greater. Of course, the opposite may also be true. You may only want to talk locally. So of course you may unlink the repeater for that purpose, assuming you've checked to see that no one else is currently using a link. There are other uses for URCALL, but these are the majority.

Can Dongle users connect to reflectors? Yes! In fact there is a known issue where only four dongle users can connect to a given repeater at one time. This means if there are already four dongle users connected and a fifth tries, they'll be unable to. Reflectors typically don't have this limit, therefore many dongle users may connect to them. This is another reason to have a repeater linked to a reflector.

So, how do you find out which repeater or reflector you want to connect to? The Internet is your friend. A major source of information is [www.dstarusers.org](http://www.dstarusers.org). The front page of this website shows the most recent D-Star users who've transmitted, and which repeater or reflector they're connected to. This is a great way to find someone to talk to if there is no one around and/or the usual spots are dead. Of course, the rules of courtesy also apply here. If you link somewhere, listen before you transmit. You may be interrupting a QSO or a net!

The D-Star users website also has a D-Star repeater directory. This lists all the D-Star repeaters connected to the D-Star network via the Internet, which modules are hooked up (A, B, C), and what frequencies they're using. This is great for travels! This site also has a link for "JFindU D-Star Maps", this will bring you to a Google Maps based map of repeater locations. Another great travel aid!

For a list of D-Star reflectors, check out <http://www.dstarinfo.com/reflectors.aspx>. This lists all current D-Star reflectors, their specific purpose (if any), and location. It also lists website links that may provide more information for a given reflector. A side note, my browser (Firefox) has an issue with this particular web page, it doesn't show all the reflectors. I have to reduce the font size in order for the whole list to show up (CTRL + MINUS KEY will reduce the font size).

Helpful D-Star websites on the Internet:

<http://www.tmraradio.org/d-star.php> - TMRA related D-Star information

<http://www.nodig.us> - The North Ohio Digital Interconnect Group

<http://www.dstarusers.org> - D-Star Users Site. Repeater directory, maps, etc...

<http://www.dstarinfo.com> - D-Star Info - lists of newest D-Star repeaters, reflectors, full reflector directory, D-Star net dates/times, D-Star news, etc...

Next month I'll be publishing another article relating to home-brew/DIY D-Star information. There is an amazing amount of activity here and a large community of both hardware and software guys out there. This article will also be clearing up some misconceptions and confusion about D-Star, i.e., what's free/open and what's not.

Stay tuned and have fun on D-Star!

73 de KJOEYT

## The DEC and ARES®

You may be saying "What the heck is a DEC?" Well we will cover that real quickly.

First, ARES (Amateur Radio Emergency Service®) is a function of ARRL (the Amateur Radio Relay League). The ARRL membership in the state, elect a person (Section Manager) to lead the ARRL function in the state. In Ohio Frank Piper, KI8GW, is the current Section Manager (SM) The Section Manager appoints a staff to run the function in the state. One of those people is the Section Emergency Coordinator (SEC) who in Ohio is Jack Sovik, KB8WPZ. The Section Emergency Coordinator (SEC) in turn appoints the District Emergency Coordinator (DEC) who helps with a group of counties, and also the County Emergency Coordinator (EC).

In Ohio there are ten (10) districts, of which District One Ohio, consists of the following eight counties: Lucas, Wood, Hancock, Ottawa, Sandusky, Seneca, Huron and Erie Counties. The DEC is there to help and advise the county emergency coordinator when needed, and also collects the monthly reports from the counties and forwards them on to the SEC.

If and when there is an emergency in the district the DEC notifies the SEC and keeps him/her informed as to what is happening, and what the status of man power needed is. As DEC, if a county contacts me and says they have an event that will need a given amount of radio operators, for so many hours, I will get information from the EC's in the district as to the availability of man power. I would also arrange to them to report when and where needed. If the need cannot be met, I would contact the SEC and he will arrange for help.

*Note: The SEC is kept informed at all times of what is happening.*

The DEC also helps in locating people willing to fill the EC positions and sends that information to the SEC. Please notice, the DEC does not hire or fire EC! This is a common fallacy and it does not happen! The DEC only advises the SEC, when asked, and that is all.

Many of the DEC have an assistant DEC and in district one that person is Steve Ashenfelter, N8XSF. The ADEC keeps informed of happenings in the district and can step in and take over if the DEC is not available.

Moving on to the Emergency Coordinator (EC): As said previously he/she is appointed by the SEC and like all of the above appointments MUST be a member of the ARRL! The EC can appoint assistant emergency coordinators as he needs, to assist him to run the county emergency communications. PLEASE NOTE that to be an AEC you do not need to be a member of the ARRL, however, only members of the ARRL are able to wear the ORANGE field service badge. The AEC are a very important part of the organization so if you are asked to help the EC, please think hard before turning him/her down!

ALSO Please remember the NTS (National Traffic System) and learn how it works! Nets of all sorts need members to help keep them going. The Ohio Single Sideband Net needs not only people to handle messages going into and out of the



state, but it also needs Net Controls (NCS). The OSSBN ( not an ARES® function but it supports ARES®) meets three times daily on 3972.5 at 10:30 AM, 4:15 PM and at 6:45 PM. Locally there is the Northwest Ohio ARES® Traffic and Training net. This net meets on 147.375 at 6:40PM when there is no Skywarn in operation They have an alternate frequency of 146.610, (PL 103.5). On this net you can learn how to send and receive messages.(commonly called TRAFFIC). Also learn to be a liason to other nets in your license class. Remember, to operate in most HF frequencies you need to have a general class license or better.

In closing, I hope this helps you better understand the ARES organization. If you have questions, please send me an email to WB8HHZ@arrl.net and I will attempt to answer you, maybe even in another short news article.

73, de  
George E. Henzler, WB8HHZ  
Interim DEC District One Ohio.

## Great Lakes Division Convention At The Findlay Hamfest

The Findlay Hamfest will be on Sunday, September 11. The location is the Hancock county Fairgrounds. Talk-in on 147.150. More info at [www.w8ft.com](http://www.w8ft.com)

This year the ARRL Great Lakes Division convention will be held in conjunction with the Findlay Hamfest, September 11, 2011. Your admission ticket into the Hamfest will also be your admission to the Convention. The agenda is as follows:

8 AM – Registration

9 AM -- Welcome from the Division and Keynote Speaker - Allen Pitts, W1AGP (Allen's address will be on the changes in Amateur Radio since 9/11) (A Q&A will follow the discussion)

10 AM -- NTS (OSSBN - moderator) and DX (SE Michigan DX Association - moderator) (concurrent sessions)

11 AM -- EmComm (WA8EFK - moderator) and ATV/Digital ATV (WA8RMC - moderator) (concurrent sessions)

12 Noon -- D-Star (Ohio Digital Interconnect Group - moderator) and "You can be a Winner - How you can Benefit from Low Power Contesting" (K8ZT moderator) (concurrent sessions)

2 PM -- Luncheon/ Awards Presentation – Royal Buffet (American & Oriental cuisine), 2551 Tiffin Ave. Findlay 45840-9512

Directions from hamfest: East on Sandusky St. to second traffic light. Turn left onto County Road 236. Restaurant is on left about 1 mile north (just before the first traffic light on CR 236).

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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.  
Board Members: Chris, KC8UFV; Joe, KJ0EYT; Tom, KB8PAI; Rita, WB8FBG; Dan, KE8UE.  
TMRA Home Page [www.tmrahamradio.org](http://www.tmrahamradio.org) Webmasters, Tom, KB8PAI & Joe, KJ0EYT  
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)  
  
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.  
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