



# *TMRA Amateur Radio Beacon*

November 2011



## **The Prez Sez**

One of the revisions that was made to our By-Laws was that the annual membership dues are set by the Executive Committee, subject to approval by the membership in attendance at a general meeting of the Club. Dues were discussed at the October Executive Committee meeting, where we reviewed our financial situation – taking into consideration several factors.

TMRA membership dues have not been raised since at least 1978 – I joined TMRA in the early 1980s and paid \$12.00 – what’s that in 2011 dollars? Other clubs in our area have annual dues of \$20.00. Our income from other sources, notably the Hamfest – both tables and admissions – is declining. Owens Community College is charging us more in 2012 than they did this year, and has already told us that the charges for 2013 will be higher than for 2012. Although we have what might be considered a “healthy” balance in the bank, it would only take one or two years of really low attendance at the Hamfest, e.g., really bad weather that weekend, to make us use a large amount of our reserves. We need that money as a buffer against a “disastrous” Hamfest weekend.

With all of this in mind, the Executive Committee is proposing that, effective January 2012, we raise the annual membership dues to \$20.00; family members of a full dues-paying member would be \$5.00, as would the student membership. I don’t want to sound like a National Public Radio or PBS announcer during “pledge week” (is it really only a week??) – but \$20.00 per year - that’s only \$1.67 a month, only 39 cents a week – our meeting programs are worth more than that! We will vote on this at the November general meeting. Our complimentary membership for those over 70 years old is unchanged.

Our By-Laws allow for members to pay in advance for as many years as they wish, so – if you renew for the 2012 membership year (or additional years) before January 1<sup>st</sup>, 2012 – dues are still only \$12.00 per year.

Also at the November general meeting we’ll be voting for a new Trustee for a 5 year term, as I will not be rotating onto the Board of Trustees.

Long-time member Arthur Ketcham, W8UEL, died recently: a sympathy card was sent to his family and a donation in his memory was made to an organization of the family’s choice.

73, Brian WD8MXR.

## The TMRA Amateur of the Year Award for 2011

The TMRA Amateur of the Year for 2011 is a younger ham as well as being a newer ham. I am not well aquatinted with this ham, so I asked for input from fellow amateurs and previous recipients and this is what we know.



Joe, KJ0EYT, receives the 2011 TMRA Amateur of the Year award from Dan, KE8UE, at the September TMRA meeting.

*kc8ufv photo*

This person can be found on the 2meter \ 440 repeaters, 6 meters and the HF bands in the analog mode. This ham participates in the ARRL Field Day activities and mini field days. He has participated in contests and used FLDIGI. The amateur in question enjoys asking questions about ham radio procedures and techniques, learning from others while assisting others to learn. This ham seems to enjoy all facets of amateur communications.

Now for a few hints to help you guess who we are talking about. This ham is on several TMRA committees and has shown a willingness help improve the clubs operating procedures. He is computer savvy and willing to share his knowledge of combining computers and amateur radio including most of the digital modes. At Field Day he can run on battery power all weekend. He is: on the Tech Committee, a Trustee of the club, the Website manager and has a subcommittee for the new D-Star repeater.

Congratulations, Joe Thielen KJ0EYT, the 2011 TMRA Amateur of the Year.

73,  
Dan, KE8UE

## D-Star Home-Brew/DIY

There is a lot of activity going on in the home-brew/DIY D-Star community right now. Before I jump into this let me state some facts, as there is a lot of confusion out there. Icom does not own D-Star. If you buy a DV-Dongle, DV-Access Point, or some other non-Icom product, Icom does NOT get a "cut" of that. There IS a company that is getting a cut from all this, and that's a company called DVSI (Digital Voice Systems, Inc.). They are the ones who make "the chip" that every one talks about. This chip takes your voice and turns it into a small amount of digital bits, ones and zeroes. This IS a proprietary chip, this is the most glaring critique of the D-Star system, and rightly so. However, when D-Star was being developed there were no other existing solutions that could take analog audio and compress it into a very very very small number of ones and zeroes. In fact, there still isn't another viable solution. There are efforts underway to create "open source" solutions, but this is a serious amount of work, a serious amount of math, and, to my knowledge, it hasn't been done yet. One such project is the "Codec2" project, more information can be found on their website - [www.codec2.org](http://www.codec2.org).

SO, the only real way to move forward was to license what did exist and was available... a product called "AMBE" from this DVSI company. This portion of D-Star is the part where the audio is concerned, and is the ONLY portion of D-Star that requires this proprietary chip. Icom does not have an exclusive license of this chip. Any radio manufacturer can implement D-Star. They just haven't yet. Some speculate that they're waiting to see if it fails. Others are speculating they're waiting for more repeaters to be installed. DVSI does sell chips to individual hams for \$20 or \$35 reportedly, depending upon which chip it is. What does this mean? There is a fledgling home-brew community starting to pop up!

There are a number of projects out there to create non-Icom repeaters and even smaller coverage "hot-spots". It's possible we may add a 2m module to our D-Star system using one of these projects in the future. Additionally many of these projects also allow for regular 2m/440 FM ham radios to be used for D-Star!

The most popular non-Icom product which contains the AMBE voice codec microchip is made by a company called Internet Labs. The product is the "DV Dongle". This device is intended to be hooked into a computer via a USB cable. Most of the projects out there which allow regular ham radios to be used for D-Star require a DV-Dongle. More information on the DV Dongle can be found at the following website: [www.dvdongle.com](http://www.dvdongle.com)

In order to use D-Star with a traditional 2m/440 FM ham radio, the radio must support "9600" output, which bypasses the discriminator to provide "raw" output. The radio must also support narrow-band FM TX/RX, since D-Star is a narrow-band mode. The actual modulation for D-Star is called "GMSK". An additional device is necessary to modulate/de-modulate ("modem") this GMSK signal into data which can then be fed into a computer (or an embedded circuit) and the DV Dongle to produce the D-Star voice and/or data. This device is referred to as either a "GMSK Board" or "GMSK Modem".

Jim Moen, K6JM, has a website which offers a substantial amount of information about home-brew/DIY D-Star: <http://www.k6jm.com/dstar.htm> This particular document offers a lot of great information: <http://www.k6jm.com/hotspot/Pacificon2010Oct16K6JM.pdf>

K6JM also offers a commercially produced GMSK modem. I have purchased one of these and can confirm it does work! I've tested it with my Icom IC-208h with our own TMRA D-Star system (using a computer and a DV Dongle).

More information on K6JM's GMSK modem can be found at: [www.moencomm.com](http://www.moencomm.com) There are other projects which offer GMSK modems: Dutch\*Star Products/Projects: <http://www.dutch-star.eu/> DVRPTR: <http://www.dvrptr.de/>

There is another ham in the U.S. who was previously selling GMSK modems, but has since stopped. However, his website is still operational and appears to be taking orders, but he is -NOT- responding to orders placed on this website, and is causing quite a negative uproar in the D-Star home-brew/DIY community. SO PLEASE AVOID THE FOLLOWING WEBSITES/PRODUCTS AT ALL COSTS!!! This information has been taken from several Yahoo Groups and is not reflective of my own experiences, I'm simply passing this information along to help hams avoid a negative experience.

<http://enicomms.com/> (DO NOT ORDER ANYTHING FROM HERE!)

<http://www.embedistar.org/> (DO NOT ORDER ANYTHING FROM HERE!)

<http://www.gmskhotspot.com/> (DO NOT ORDER ANYTHING FROM HERE!)

There are also a number of Yahoo Groups which offer further information on home-brew/DIY:

DVDongle: <http://groups.yahoo.com/group/DVDongle/>

DVRPTR: <http://tech.groups.yahoo.com/group/DVRPTR/>

gmsk\_dv\_node: [http://groups.yahoo.com/group/gmsk\\_dv\\_node/](http://groups.yahoo.com/group/gmsk_dv_node/)

gmsk\_dv\_modem: [http://groups.yahoo.com/group/gmsk\\_dv\\_modem/](http://groups.yahoo.com/group/gmsk_dv_modem/)

pcrepeatercontroller: <http://groups.yahoo.com/group/pcrepeatercontroller/>

## Mark Your Calendar

November 9-- Next TMRA meeting.

November 19, 20-- Fort Wayne Hamfest. Allen County War Memorial Coliseum & Exposition Center.  
Talk-in on 146.88-

December 14-- December TMRA meeting / potluck Christmas party at 6:30. Call Sandy, 734 260 3834 for reservations.

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**Editors: Brenda, KB8IUP, (poof-reeder) and Chuck, KB8FXJ.**  
**Email, kb8iup @ arrl.net**

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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.