

W8KEA



MARCA

MIDLAND AMATEUR RADIO CLUB
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www.w8kea.org

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	Pat Mullet KC8RTW	(989) 828-6657

LIFE MEMBERS

Don W8WOJ, Lee KC8ITI, Dennis N8ERF, Larry N8CGP, Denny WD8BPT, John WB8RCR

Midland County Public Service Net, Thursdays at 9 PM
W8KEA Repeater — 147.000 MHz+ PL 103.5 • W8QN Repeater — 443.325 MHz+ PL 103.5
W8KEA Digipeater — 145.090 MHz

Next ARES®/RACES Meeting — Thursday March 6, 2014, 6:00 PM
Law Enforcement Center, 2727 Rodd St.

Next CLUB Meeting — Thursday March 6, 2014, 7:30 PM
Salvation Army Building, 330 Waldo, Midland
Talk-in 147.000+

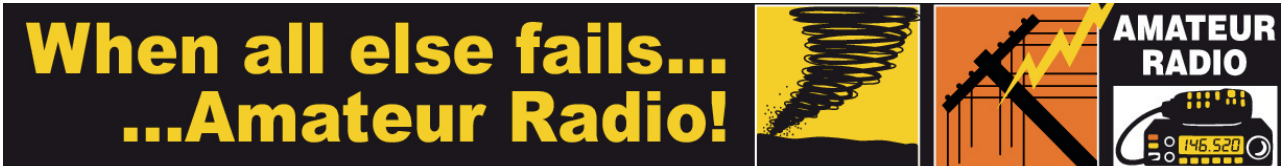
March 2014

Static Discharge

Kevin Martin, KD8QAM

Snow and more snow—I am sure ready for some warm weather. Thank you John, W8QN for your presentation on Software Defined Radios, at last month's meeting. I was under the impression that my rig was high tech, until W8QN had shown all the features of his new radio. It sure will be on my list of things to save for. I hope to see it at Field Day this year. If you have anything you would like to present at a meeting, please contact Art KOACP. See you at the next club meeting.

Kevin KD8QAM



The meeting was called to order by Kevin KD8QAM at 7:40 p.m. with 30 in attendance. Introductions were made

The meeting minutes are published in the newsletter. Any additions or corrections to the minutes should be brought to the attention of Dory N8WTQ, club secretary.

- EC/RO Report- John W8QN-

MARC MEETINGS

Art Peters, KOACP, is in charge of special events and topics for the MARC monthly meetings. If you have any agenda items, or topics for the meetings, please contact Art at (989) 400-3745, or via e-mail: k0acp@arrl.net

COMMUNICATIONS

Pat Mullet, KC8RTW, is in charge of communications and publicity for the club. If you have any questions or ideas regarding these areas, please contact Pat at kc8rtw@arrl.net

EXAMINATION SCHEDULE

Saginaw - All future VE testing will be done on an appointment basis only.

Corunna - Contact Thomas Carpenter (517) 579-0599 ki8as@charter.net.

Bay City - All future VE testing will be done on an appointment basis only.

Isabella/Clare Counties - Contact Gus Glass, K8GUS at k8gus@arrl.net

With all examinations, your original license, a copy of that license, a second photo identification (drivers license, etc.) and a check or money order for \$15.00 made out to "ARRL/VEC" are required.

The address listed below gives testing sessions scheduled for Michigan. <http://www.arrl.org/arrlvec/exam-search.phtml?State=MI>

SUBMISSIONS FOR NEWSLETTER

Contact Pat Mullet, KC8RTW at kc8rtw@arrl.net if you want to submit anything for the newsletter.

I need your items by the 15th of the month. Anything received after that may not make it into the newsletter for that month.

If you prefer to download the MARC newsletter from our web site, or have trouble with delivery via USPS, contact Keith, KB8SOE, at kb8soe@arrl.net.

MEDIA HITS!

Have you seen or heard mention of the Midland Amateur Radio Club in the news or in the paper? If so, please forward it, or mention of it to either Pat, KC8RTW (kc8rtw@arrl.net) or Kevin (cherryrediroc@sbcglobal.net)

Report included weather conditions throughout the state and upcoming trainings. More information to come.

- Treasurer's Report-John W8QN- This extended report included 2013 and 2014 balances. Thank-you to all those members who have renewed their licenses.

- Dow Run- John W8QN- John will be making contacts through phone and e-mail to ask for help with the 2014 Dow Run event. Remember the date, May 17th from 6:30 or 7:30 a.m. to around 11:00 a.m.. Good experience comes with this fun activity.

- MS Walk- Chris KC8UIH- Please consider helping on April 26th with the MS Walk. Starts at 8:00 or 9:00 a.m. Look for the SATERN Communication Vehicle. More details as the date comes closer.

- Great Lakes Marathon - Chris KC8UIH - Shifts can be worked between 6:15 a.m. and 3:00 p.m. There are details on their website. This event starts and stops at the Dow Diamond.

- Auction- Mike from Saginaw- Mike invited our club members to an auction that will be held on February 7th at their club meeting. Thank you Mike.

- High School Club- Dennis

N8ERF- These students are having great fun and are very involved in what they are doing and learning. Up to 18 students participate. They have made many contacts and are collecting QSL cards from several different places. One of the girls developed a club QSL card. Two students have passed their technician class exams. They have a MCTV field trip coming up, a transistor lab and possible fox hunting in the future. They are also going to build a theremin.

NET Controls:

Feb 13th Lee KC8ITI

Feb 20th Chris KC8UIH

Feb 27th John W8QN

- Presentation- John W8QN- A comprehensive look and demo of John's new Flex 6500 and his story about getting it. A very interesting demo with lots of questions afterward. Thank-you John

- A motion to adjourn was made by Larry N8CGP and seconded by Pat W8PMR.

The meeting ended around 9:00 P.M.

Respectfully submitted by Linda KC8MUD

Subbing for Dory N8WTQ

My Two Cents

I've been taking advantage of the raw winter weather to get in some HF operating. While the weather is as good an excuse as any to get on the air, I'm going at it in a concerted effort to reach a goal. Once I'd earned my *Worked All States (WAS)* award last year, I decided I'd go for my *5BWAS*, so I've been chasing states during the various State QSO parties. I'm not really doing hard core contesting, just working each state a few times on various bands so I can get the confirmations I need when the time comes to submit my application

Pat Mullet, KC8RTW

for the award.

Another "arrow" I've added to my *5BWAS* "quiver" is the year long *Centennial QSO party* sponsored by the ARRL as part of the 2014 Centennial celebration. Each week a band of volunteers in a pair of states operate as WIAW "portable" signing with their call district. The states change each week, and each state will have two weeks "in the barrel" during the year. The ARRL web page announces which states are up each week, but don't pass along details such as bands, frequencies or sched-

Amateur Radio is a Contact Sport!

ules. While you could either scan the band looking for targets of opportunity or use any of the dx clusters to improve the odds a bit, I found a better tool.

The *DX for Me Internet DX Cluster* (dxfor.me) is a web-based dx spotting site that does away with the arcane commands used by other sites. Here, it's literally point-and-click. When you first log on to the site, you get the full data stream, all calls, all entities, and all frequencies. Assuming that that's too much information, there is a search box for specific calls which accepts wildcards so you can limit the data by entity. Across the top of the page are buttons that allow you to filter the stream by frequency and mode. It's easy to set up and quite intuitive to use. If you like dabbling with DX, it's a fun toy to play with.

One thing I'm finding in my effort is that depending on one antenna limits you greatly. My G5RV is aligned north to south roughly 30 feet in the

air. I find that on 20-10 meters, my signal tends to not be heard by the nearest states while on 80, I have trouble hitting the west coast and the Pacific Ocean. This is definitely incentive for me to re-site my vertical antenna this spring and finally get around to installing the radial field for it.

Speaking of antenna work, if you want to do some analysis of the best spot to plant your new tower, you might want to look into *HFTA*, the *HF Terrain Assessment* software by Dean Straw, N6BV that is bundled with the *ARRL Antenna Book*. If you check out the *Technical Topics and Information* articles below, you'll see mention of changes in the USGS datasets used for the program. You'll also find links to tutorials as well as a video of a webinar put on by Dean that walks you through the process of using this powerful program.

That's about it for this month. I hope to hear you on the air.

73, Pat, KC8RTW

Upcoming Public Service Events

Skywarn® Class

The White Lake Forecast Office of the National Weather Service will be conducting SkyWarn® training April 3rd at 7:00 pm at the Midland Law Enforcement Center, 2727 Rodd St.

MS Walk

The 2014 MS Walk will be held on Saturday, April 26th. However, due to a scheduling conflict with an event scheduled by the Great Lakes Loons, the Walk is being pushed back to later in the morning. Current plans are for the activity to run from 11:00 am until 3:00 pm. To volunteer, contact Chris Rose, KB8UIH at kb8uih1@att.net

Dow Run

The Dow Run will occur on Saturday May 17th. Volunteers will need to be in place around the course by 7:30 am, and the event will run until approximately 11:00 am. If you wish to help please contact John Wolters at w8qn@aol.com.

Great Lakes Bay Marathon

The 2014 Great Lakes Bay Marathon will be run Sunday, May 18th. Chris expects the operators will need to be in place by 6:30 am and the event to run until roughly 3:00 pm. To volunteer, contact Chris Rose, KB8UIH at kb8uih1@att.net

MARC honors John McDonough

At the January meeting of the Midland Amateur Radio Club John McDonough, WB8RCR, was awarded Life Membership in recognition of his long and dedicated service to Amateur Radio and for exemplifying the spirit of Amateur Radio. John joins Don, W8WOJ, Lee, KC8ITI, Larry, N8CGP, Dennis, WD8BPT and Den-

nis, N8ERF as MARC Life Members.

John earned his Technician license in 1973 and Extra in 2004. John is a past president of MARC and of CMARA (the Central Michigan Amateur Repeater Association) and was Vice President of the Portsmouth, OH Radio Club. John is a teacher. John has taught license classes and

Upcoming Events

4/3	Skywarn®
4/19	Mi QSO Party
4/26	MS Walk
5/17	Dow Run
5/18	GLB Marathon
6/28-29	Field Day
7/10-13	Lupton*

Michigan Hamfests

3/15	Marshall
4/12	Highland
5/3	Cadillac
6/15	Monroe
6/16	Midland*
6/21	Lowell
7/26	Lansing
8/2	Escanaba
10/18	Muskegon

* Denotes date based on 2013 event

Area Nets

SVARA; Mn, 147.24 MHz, 2100 ET
 Gladwin; Tu, 147.18 MHz, 2000 ET
 BAARC; Tu, 145.31 MHz, 2100 ET
 Isabella Co EOC 146.72 Mhz, 1900 ET
 Canadian Lks, Wed, 146.8, 2100 ET
 Edmore, Th, 146.8, 2000 ET
 MARC; Th, 147.00 MHz, 2100 ET
 District 3 ARPSC; Su, 145.31 MHz, 1830 ET
 Mi VHF Trffc Net; MWF, 145.15 MHz, 0900 ET
 TMMTN; Mon-Sat, 147.30 MHz, 2130 ET
 MACS; Sun-Sat, 3953 kHz 1100 ET
 MIARPSC; Su, 3932 kHz, 17:00 ET
 UPN; Sun-Sat, 3920 kHz, 17:00 ET
 MITN; Sun-Sat, 3952 kHz, 1800 ET
 QMN; Sun-Fri, 3563 kHz, 1830 & 2200 ET
 WSSBN, 3932 kHz, 1900 ET
 UP-ARES; Fr, 3932 kHz, 1930 ET
 GLETN; Sun-Sat, 3932 kHz, 2030 ET
 SEMTN; Sun-Sat, 145.33, 2215 ET
 MIDTN - 1900 local Tu, Th, Sat 3.583
 +waterfall, Oivia 8/500

MARC MERCHANDISE

T-Shirt	S- XL	\$10
	2X - 3X	\$12
Long-Sleeve Tee	S- XL	\$12
	2X - 3X	\$15
Crew Sweatshirt	S- XL	\$18
	2X - 3X	\$20
Hoodie	S- XL	\$24
	2X - 3X	\$26
Zipper Hoodie	S- 3X	\$30
Winter Coat	S- XL	\$42
	2X - 3X	\$45
Spring Jacket	S- XL	\$32
	2X - 3X	\$35
Hat		\$10

All garments are royal blue with white print and embroidered name and number. Extended sizes available.

Please call Bill Lee at B&C Sportswear with questions @ (989) 839-4537.

has given several presentations at club meetings. He helped lead an Electronic Specialty Explorer (Scout) Post.

John is a builder and electronics tinkerer. John initiated an effort to install a remote link at the West Midland Community Center, a project which was completed by Larry, N8CGP. John has build a 40 meter transceiver from scratch, the NC-20, 20 Meter transceiver, a PIC based frequency counter, an HTC-10 CW adapter, a PIC CW Reader with digital readout, and a 35 Watt RF Amplifier, to name just a few of his many projects. John has contributed his programming skills to amateur radio. From 1999 to 2011 John developed and maintained the W8KEA web site. He has developed a Raspberry Pi system to log MCSAR (Midland County Search and Rescue) communications traffic. He developed his *QSL Maker* software and shared that with the ham community at no charge. John learned to program PIC controllers and has “elmered” others to in how to program as well. He even wrote an app for his smart phone to announce phone calls in CW by caller!

John’s greatest contribution to amateur radio has been in the area of public service. Early on he recognized the importance of digital techniques to Emergency Communications. He has overseen Michigan’s amateur radio emergency management transition from CW and voice to the digital age.

He established and set up the Midland Digipeater with Del, WB8FYR and Bob, W8LSS. He has written software for ham radio digital communications — sending and receiving packet messages via JNOS and digipeaters. For years, John has been the Michigan National Traffic System Coordinator. He has passed thousands of pieces of traffic and coordinated the nets that handled many times that. He co-authored a study on the National Traffic System which was utilized by the ARRL in Newington and throughout the state of Michigan.

John currently holds the title of ARRL Michigan Section Emergency Coordinator. He is also the State RACES Officer. In my opinion, he has done more for the reputation and stature of the Amateur Radio Community in the eyes of the State government, Michigan State Police and Department of Homeland Security than anyone else in Michigan’s history. John was invited to participate in the Statewide Homeland Security Strategic Planning Committee to represent Amateur Radio. He was asked to be the State Emergency Management Coordinator for Auxiliary Communications (AuxComm), which includes MARS, ARES®, RACES, CAP, SATERN and others. John was asked to participate on a national level ARRL committee to make recommendations for the future of Amateur Radio Emergency Communications. John is working to facilitate the seamless interaction of

the NTS and ARES®. John travels all over the state at his own expense for meetings, including many trips to Lansing.

John “has labored for over two decades to ensure Michigan’s amateur radio community has the skill set and experience to provide emergency communications,” notes Joe Turner, K8CQF. John breathes, eats and sleeps Amateur Radio.

In his own words, there are two major highlights of his amateur radio career; in the late 1970’s, along with W8LSS, trying to establish contact with the Oscar 7 amateur satellite. They used the mainframe at the Dow Chemical Company and a large Fortran program to calculate the orbits and predict when the satellite would appear over Midland and in the early 2000s, building the 2N2/40 40 meter transceiver from scratch.

John has had a long and distinguished amateur radio career. He is an innovator of technology. He is a teacher and mentor. His contributions to Public Service and the stature of Amateur Radio in Michigan are unmatched. He is a first class builder and operator and the finest example of an Amateur Radio Operator. He has more than earned the honor MARC has bestowed upon him.

Best Regards,
Dennis Klipa, N8ERF
Life Member
Midland Amateur Radio Club

Midland High School ARC News

The MHS ARC continues to go well. To date we have held 17 meetings. We have had a total of 28 different students attend at least one meeting. We have learned that there are lots of activities which vie for the time of the students, especially their studies. We did not have a meeting during exam week in January but we probably should have cancelled the meeting the week before as most of

the students stayed home to study, as they should have done. We are learning as we go along. We are averaging about 12 students at each meeting.

The students have learned a lot about amateur radio and electronics. And they seem to be having fun. We wanted the students to choose a project that we could build as a group. One of the students mentioned that

he had wanted to build a theremin, which is an electronic musical instrument. We decided to buy a kit and have the students assemble it. We are in the middle of that process. A couple of the students are building a nice wooden case to house it. One of the students has agreed to perform a piece of music on it. It should be interesting. The antenna challenge is over and John is working with the

It's Not Your Grandfather's Amateur Radio!

4

winning team to build and install the fan dipole.

The *School Club Round Up* happened last week. We made 22 contacts with our new call sign. A few of the students came in and operated along with the adults. The best part of that whole experience was that the three student hams said they wanted to schedule time during the day to get on the air. Exactly what we were hoping for! Speaking of student hams, Max passed his tech exam on January 29th and received

the call, KD8WMC.

This past week Lee, KC8ITI, and I installed the last of the coax that John, W8QN, had terminated for us. We now have the VHF beam and 2m/440 vertical working. Lee was able to get good signal reports from both the Cadillac and West Branch repeaters. We are going to have the students explore what the coverage of the antennas looks like by making contacts on as many repeaters as possible. It should be fun for them.

We have a lot more fun things

planned in the future. Fox hunts are big on the list. The kids will be building antennas and other direction finding equipment.

Dennis Caney, WD8BPT, has scheduled a field trip for the students. We will be visiting MCTV on February 26th.

Best Regards,

Dennis, N8ERF, Chair, MHS ARC Advisory Board.

On behalf of the Advisory Board:
W8QN, KC8ITI, WD8BPT and KD8ULJ

Michigan Section News

Normally by the middle of February we here in Michigan have some expectations of warmer weather and while the short range forecast tells of some moderation, I am pretty sure that we are not out of the woods yet. This has been a really interesting and trying winter and for many, they have a snow machine that they can actually use more than once or twice without having to haul it 3-400 miles north!

Your task for the next month is to think spring!

PRB-1 Update

On February 11, a Senate Hearing was held in Lansing within the Energy and Technology Committee, which is chaired by Senator Nofs (R-19th District). This hearing was a bit different in that there was just slightly over a week's notice and the tone of the hearing was different than what we went through in December 2012.

We testified before the committee using the documentation we had prepared in our short 9 day notice period. In addition to our testimony, there were two organizations testifying that are opposed to our bill along with a village manager.

There are areas of consensus as well as some areas that the involved groups do not agree. The differences are relatively minor and we believe that there is a very good opportunity to work together with those that oppose our bill and come

up with a document that works for everyone.

Senator Nofs has instructed one of his aides to set up a meeting between our team and the Michigan Municipal League where we can set together, work out our differences and hopefully come up with a revised bill that meets the needs of both groups. We have confidence that such a compromise bill will have a good chance of approval within committee, paving the way for House and Senate action to get the bill to Governor Snyder for his signature.

There will come a time when input from the hams of Michigan will again be needed. Be advised that things are happening suddenly and the notice we can give you to communicate with your elected representatives will most likely be short.

It is recommended that you opt to receive Section Bulletins via email. You can do this on the ARRL web page (www.arrl.org) when you log in and edit your profile to receive said bulletins. This is where the call to action will appear when the time comes.

Digital Presentation Team

I am very pleased to announce the formation of a team of Michigan hams who have worked together to provide information and instruction concerning digital HF soundcard mode operation.

This group has prepared a common presentation and has volunteered to be

available for presentations at club meetings, hamfests or other gatherings where hams have an interest in learning how to get on the air via HFdigital.

The team members are:

John Clements, KC9ON Gaylord, MI kc9on@arrl.net

Stephen Smith, WA8LMF, Haslett, MI wa8lmf@aol.com

Joe Miller, KJ8O, Troy, MI kj8o@arrl.net

Brian Johnston, W8TFI, Warren, MI w8tfi@arrl.net

John Mathieson, AC8JW, Kalamazoo, MI ac8jw@arrl.net

If your group is interested in such a presentation, please contact the team member who is closest to you and see what you can work out. Please understand that these gentlemen are volunteers who operate on their personal funds for travel. There is a chance that their availability may not mesh with your needs. Our team will do their best to provide your group with quality information on a reasonable schedule.

ARRL Centennial QSO Party

The ARRL Centennial QSO Party, a year-long operating event is well underway as of this writing. Every week since January 1, two states have been on the air making contacts as W1AW portable stations. The response by the world's radio amateurs has been nothing short of fantastic! The pileups have been huge and the opportunities to work states that

Explore the World with Amateur Radio!

might otherwise be hard to find has made believers of us.

Each state gets two opportunities as W1AW/portable. Michigan comes to bat the week of February 19-25. AA8R, Randy, has done an outstanding job of organizing our response to the challenge by organizing 40+ stations who have

committed to operating 350+ hours on the air so that their fellow hams will have a chance to work W1AW/8 from Michigan.

This fall the K8CC group will be at the helm, working out of their excellent contest station in Ypsilanti.

Complete information concerning

the ARRL Centennial Celebration is available on the ARRL website at www.arrl.org.

73 until next month,
Larry, WB8R
ARRL Michigan Section Manager
wb8r@arrl.org

Technical Topics and Information

(ARRL Contest Update—Jan 29, 2014) After mentioning the iPhone RF calculator app last time, Chip N3IW contributed news of the *Elektor* RF & Microwave Toolbox from Android-Design.nl. "It is really full-featured. I've used it a good bit in my day-day work as an electrical engineer. It does OK on a phone, but a tablet would be recommended for some of the more detailed calculations that use graphs. The free version includes eight tools like VSWR and mismatch calculators and Pi/T attenuators. For \$9.99, you get a total of 55 tools that has the 8 free tools plus tools like a PCB trace calculator, image rejection, mixer harmonics, many converters, and filter design."

- Those SMD components sure are small - here's an [Instructables how-to](#) that shows simple steps to snag some SMD soldering savvy.

- Don't let your amp "tee" you off - try Ian GM3SEK's [designs](#) that combine dc with RF up to 1 kW of power all the way to 6 meters! Tom W8JI notes that using bias tees with sensitive RF instrumentation such as the MFJ-259 series of analyzers can lead to damage of the detector diodes. "You can damage the 259 unless you use a smaller series cap and a shunt choke to protect the 259. The most important point I am trying to make is to *never* connect a bias tee without a shunt choke, especially one with a large series coupling cap, to the 259 input port. The 259 uses 10-volt microwave diodes, and the charging current of the cap can cause that

much or more voltage to appear across the diodes." Tom also cautions us to watch out for relays on the line since the transient caused by turning a relay coil off can also damage the diodes.

- Here's an interesting design [article](#) in *EDN* magazine that discusses how to reduce and control EMI caused by high-speed digital interfaces. With signal components that run into the hundreds of MHz, this can be quite a problem!

- Seen in a recent issue of *Wired* magazine, [littleBits](#) - tiny electronic modules that snap together magnetically. You can add your own household "stuff" to create projects. Great fun for kids and others just learning about electronics.

- Wow - here's quite the [antenna switch!](#) It's a 2-radio/6-antenna design with high isolation from KK1L. David K1TTT also posted a link to his [receive antenna switching unit](#). (Thanks, Larry W6NWS)

- Stew K3ND sends a link to [pictures of his tilt-over mount](#) for a 60-foot 80/160 vertical. It uses two aluminum plates joined by a heavy duty gate hinge. A small winch and gin pole tilt the vertical over for any maintenance or repairs by using the falling derrick method. Another [hinged design](#) for a 160-40 meter vertical comes from Dan K3ZX.

- Peter DJ7WW posted a link and a recommendation to the [SWR bridge](#) descriptions and design information from Dominique F1FRV. If you want some design detail - this

is the place!

- It's common to use an oscilloscope to view the relative timing of the relays in a QSK system. How can you sample the RF as simply as possible when absolute amplitude isn't important, but timing is? Paul W9AC responds that "For quick QSK timing measurements, I often inductively couple the sample point to the scope. You can use a short coaxial jumper with BNC connectors on both ends and connect one end to the scope, the other end to a BNC-to-banana adapter. Then, take an alligator clip test lead and wrap it in close proximity to the sample point. The lead ends are connected across the adapter. Unless you're sampling low power, there's often enough coaxial leakage to just wrap the lead around the coaxial jumper. Then, adjust the scope's vertical amplifier to fill the display. Generally, I can get good display quality without much noise. You may need to experiment with more or less turns around the line."

Technical Web Site of the Week

- Two pages on the *Frets* magazine website dealing with instrument repair and construction are definitely of interest to every home builder - radio hams, included! The first is a large collection of [Shop Tips](#) and the second is a long list of "[how to's](#)" with common shop tools. Great reading! And while you're in the mood, how about some new tools? *Makezine* runs an annual "[Our Favorite New Tools](#)" article that will certainly get your workshop juices flowing.

More Technical Topics and Information

(ARRL Contest Update—Feb 12, 2014) Double-up on tower safety in

the winter! Faults and failures don't wait for good weather and sometimes

you just have to climb in the cold. If you do, Kelly Hill from [RCR Wire-](#)

[less](#) wrote up this helpful [article](#) about cold weather tower work. (Thanks, Eric W3DQ)

- How much air flow is enough through an amplifier tube or tube chimney? Roger K8RI suggests just start by measuring pressure drop across the tube using the simple manometer design in the *ARRL Handbook*. If the pressure drop is right, then by definition you have the right amount of air flow. You might not want to run a blower at full throttle all the time since they can be pretty noisy. Roger's solution is to use a temperature sensor in the exhaust air to control a high/low setting for the blower. A switch to put the blower on HIGH will be helpful during digital operation.

- John G4ATA's nice [web page](#) on low-band 4-squares and other arrays has been updated after a period of inactivity. He has plans for a new 4-square on 40 meters for a portable operation in the CQ WPX Phone contest and will be testing it during the preceding Russian DX Contest.

- Three projects caught my eye in recent emails from the *Instructables*

website. The first is a [Foot-Operated Hold-Down Tool](#) that I can easily see being used in the antenna shop. Anyone who has hauled a big piece of equipment in the trunk will get some ideas from the article on [Configurable Cargo Blocks](#). And if you really want to protect your bike-mounted radio, our favorite Pelican case makes an appearance in this [handle-bar-mounted basket](#) for radio geeks! (Thanks, Frank KR1ZAN)

- Any teachers of analog circuit design reading this issue? I know you're out there...I have been such an instructor and enjoyed this [flyer](#) from Analog Devices features their tools for helping students effectively learn analog design. Whether you use the Analog Devices gear or not, there is plenty to consider about the types of tools to use.

- For *HFTA* users who haven't dealt with *MicroDEM* in a while, *HFTA's* author, Dean N6BV observes that USGS changes the data access websites for terrain data fairly frequently. This causes *MicroDEM* to fail or get the wrong stuff. Dean suggests "that you do a complete re-in-

stall of *MicroDEM* — I suggest that you first uninstall the version you have on your computer now. Then go to

www.usna.edu/Users/oceano/pguth/wbsite/microdem/microdemdown.htm and download the "Complete MICRODEM Install". Run it, followed by downloading the latest executable microdem.exe. This should properly install all the various files that *MicroDEM* needs to function properly." John VA7JW has written an impressive [how-to guide](#) for *HFTA* and *MicroDEM* beginners that is worth reviewing. There is also a Potomac Valley Radio Club webinar on the process that has been [archived](#) by the World Wide Radio Operators Foundation. USGS has confirmed that they have discontinued the GeoTIFF data format that contained the needed .GIF file, as a cost-cutting measure. For the moment, at least, you can still get [un-updated GeoTIFF](#). The default format is ArcGrid, just as it used to be direct from USGS, but you can modify your data request to change to GeoTIFF. (Thanks, Pete N4ZR)

MARC Vital Statistics		
Memberships Expiring in February		
AA8EJ N8STF		W8NON WA8Y
Memberships Expiring in March		
AB8JF	N8WTQ	K8VB
Memberships Expiring in April		
KB8UIH		
Current Active Club Membership 34		
Birthdays Celebrated in February/March		
KC8ITI 2/2 AA8EJ 2/3 K0ACP 2/7 W8NON 2/14		KC8RTW 3/17 KD8QXL 3/18 K8VB 3/19 W8QN 3/31
Anniversaries Celebrated in February/March		
KC8TQS and Julia 02/14 KC8ITI and KC8MUD 3/6		WD8BPT and Melody 3/13
Information is from data received 10/10/2013 Any corrections or questions contact John, W8QN		

Amateur Radio. . . We Do That!



Pat Mullet
Newsletter Editor
171 E. Orchard Ave.
Shepherd, MI 48883

If you desire to join the Midland Amateur Radio Club, the dues are \$20 per year for an individual membership. A family membership is available for an additional \$5 per year which covers all of the individual's family members. Family members must reside at the same address as the primary member to be eligible for the family member rate. The membership dues help to cover the operating expenses of the Club, and its radio systems. Membership includes Autopatch privileges on the W8KEA repeater (147.000+), voting privileges at MARC meetings, and a monthly newsletter. Please supply the following information:

Name: _____ Callsign: _____ License Class _____
Address _____
City _____ State _____ Zip _____
Home Phone (____) _____ Work Phone (____) _____
E-mail address _____
Spouse: _____ Callsign: _____ License Class _____
Birthday: (mm/dd) _____ Anniversary: (mm/dd) _____
Desired newsletter format: Paper copy via USPS _____ or via e-mail _____

Are you an ARRL Member? Y/N Do you want an ARES Application? Y/N

We request this information so we can communicate with you regarding MARC business, and periodically send you newsletters and congratulatory birthday & anniversary greetings. We do not sell this information nor will we knowingly publicize private information without your permission. Information that is publicly available may be distributed to Club members for various purposes, including membership lists, without prior notification.

You may give this completed form to the MARC treasurer, or you may mail it to:

MARC, PO Box 1049, Midland, MI 48641-1049