



MIDLAND AMATEUR RADIO CLUB  
PO BOX 1049, MIDLAND, MICHIGAN 48641  
www.w8kea.org

President	Kevin Martin KD8QAM	(989) 513-0100
Vice President	Mark Rodgers, KC8GRQ	(989) 517-1060
Secretary	Linda Hodges KC8MUD	(989) 374-0032
Treasurer	John Wolters W8QN	(989) 832-9122
W8KEA Station Trustee	Larry Macklin N8CGP	(989) 631-7748
Midland County EC/RO	John Wolters W8QN	(989) 832-9122
Midland County AEC	Chris Rose KB8UIH	(989) 832-7179
Newsletter Editor	Pat Mullet KC8RTW	(989) 828-6657
Newsletter Publisher	Keith Johnson KB8SOE	(989) 488-4337
ARRL Liaison	John Tallman KB8PGW	(989) 859-0364
Web Page Chairman	John McDonough WB8RCR	(989) 631-0178
Club Historian	Stan Rowe K6VWE	(989) 837-7252
Quartermaster	Bill French AB8JF	(989) 835-5562
Public Information Officer	Pat Mullet KC8RTW	(989) 828-6657
Field Day Committee	Pat Russell KD8IVZ / Ch	(989) 832-2924
	Keith Johnson KB8SOE	(989) 488-4337
	Jeff Mowery N8KS	(989) 488-4466
	Pat Mullet KC8RTW	(989) 828-6657
Swap Committee	Keith Johnson KB8SOE / Ch	(989) 488-4337
	Jeff Mowery N8KS	(989) 615-3715
	Pat Mullet KC8RTW	(989) 828-6657

#### LIFE MEMBERS

Jack W8PHG (SK), Larry K8SQB, Don W8WOJ, Lee KC8ITI, Dennis N8ERF, Raleigh W8QOI (SK)

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 October 6, 2011, 6:00 PM  
Next CLUB Meeting — Thursday October 6, 2011, 7:30 PM  
Salvation Army Building, 330 Waldo St.  
Talk-in 147.000+

#### October 2011

### ***View from the Top of the Tower***

***Lee Hodges, KC8ITI***

Over the last few club election cycles I've made it known that I thought it was time for some new ideas and leadership for the club. I was adamant that I would not run for reelection this time. Although I was nominated, the club decided to honor my wishes of not serving another term. Your club officers for the 2011/2012 term are:

Kevin Martin - KD8QAM - President  
Mark Rodgers - KC8GRQ - Vice President  
John Wolters - W8QN - Treasurer  
Linda Hodges - KC8MUD - Secretary

Congratulations to the new and returning club officers. Please extend to them the same support and help you have granted me over the years.

**When all else fails ...  
...Amateur Radio!**



Thanks to our outgoing Vice President Chris, KB8UIH for his hard work over the past year.

We're still working on the best way to replace our club generator which developed problems at Field Day. Dennis, N8ERF expects to have a recommendation on the best course of action at the October meeting.

#### **MARC MEETINGS**

Mark Rodgers, KC8GRQ, 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 Mark at (517) 672-1060, or via e-mail: [kc8grq@yahoo.com](mailto:kc8grq@yahoo.com)

#### **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](mailto: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](mailto: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](mailto: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>

#### **AUTOPATCH**

All Midland Club members have autopatch privileges. If you do not have the instructions, contact N8CGP for a copy. Please do not pass on your copy.

#### **SUBMISSIONS FOR NEWSLETTER**

Contact Pat Mullet, KC8RTW at [kc8rtw@arrl.net](mailto: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](mailto: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](mailto:kc8rtw@arrl.net)) or Kevin ([cherryredirocz@sbcglobal.net](mailto:cherryredirocz@sbcglobal.net))

Thanks to John, W8QN, Chris, KB8UIH and Mark, KC8GRQ for helping with the Porter Township Safety Day on September 10th. We were able to string a 40-meter dipole and get on the air with one of the club's transceivers. Chris had an APRS station up and running too. We were able to pass out literature to those that were interested and gathered the names of a couple of people that might be interested in one of our classes this fall. All-in-all a successful day for our club. By the way, we're already invited back next year.

The VE testing session on September 11th was a success. The exams produced 8 new technician licenses and 2 new general licenses. Congratulations to all of the successful candidates. Thanks to all of the VEs on the testing team that donated their time for this effort.

By the time you read this, the MARC Fall Picnic will have passed. I hope you were able to join us year. I'll try to make sure a wrap-up of the event will get into the next newsletter.

A date to mark on your calendar is October 1st for our SET exercise. We will be using several bands and different modes. For more information contact John, W8QN.

Please note that the November 3rd club meeting will be at the Law Enforcement Center on Rodd Street, The National Weather Service will present Winter Skywarn® training at 7 PM with our club meeting following the training session.

Major Pat McPherson, WW9E is going to receive a plaque and award for his contributions to the SATERN Program. Pat has been a long time friend to the Midland Amateur Radio Club. He was instrumental in making sure we have the support of the Salvation Army in our activities. Look elsewhere in the newsletter for

information on how to send congratulations to Pat.

All things have a beginning and an end. It has been an honor to serve the Midland Amateur Radio Club for the past 10 plus years. Over that time the club has gone through both good and bad times and I want to give my heart-felt thanks to all of the club members that have stepped up when needed to accomplish the great things that our club has done. There has never been a lack of support and council when I've needed it and for that again, I thank you. Who would've thought that when I added getting an amateur radio license to my "Bucket List" many years ago that it would lead to such a great opportunity to work with such a great group of people as I've had the pleasure to work with? When I was young and naïve I was under the impression that no company or organization could survive once I left. Of course time and history has proven me wrong as everyone has continued along just fine without my contributions. Not to say that I don't intend to continue to lend my support to the club as I have some projects in mind that I hope will benefit the club and amateur radio. With our support, the new leadership of the club will do just fine. It will be interesting to see their new and fresh ideas come forth. But don't think I'm going away. Look for my byline on some newsletter articles and an occasional "Letter to the Editor" that may have some of the flavor of a crusty old curmudgeon that my wife and some of my grandchildren accuse me of being. Well I've been up this newsletter tower for so many years I hope I can remember how to get down from this thing without breaking my neck.

Best regards, Lee - KC8ITI

## **MARC Minutes Linda Hodges, KC8MUD**

The meeting was called to order by Lee KC8ITI at 7:35 P.M. with 24 in attendance. A sign-in sheet was passed around and introductions were made.

Please bring any corrections or additions to the minutes to the attention of the secretary.

• Treasurer's report- John W8QN- A short repeater phone line discussion after the report. Many thanks to all those who re-

newed their dues.

• EC/RO Report- John W8QN- Equipment testing has been done at Homer Township Park.

Upcoming dates to remember are: September 10th - Porter Township Safety Day; October 1st - SET Activity on several modes, see John if you can help; November 3rd - Winter Skywarn® training at the LEC.

No date determined for a future fun day to work on APRS.

- Old News- Dennis N8ERF- Discussed recommendations for purchasing a new generator or repairing the old one. A committee has been formed to learn more about it. No decision has been made yet. Motion to purchase new generator is still on the table.

- Sale- Lee KC8ITI- Lee's "Pay What You Think It's Worth Sale" did well. Thanks to the generosity of many club members and friends, Lee was able to liquidate many items donated to the club and add \$163.00 to the treasury.

- Safety Day- Denny WD8BPT - September 10<sup>th</sup> is Safety Day at Porter Township.

- Convention-Lee KC8ITI- the Great Lakes Division Convention is being held in conjunction with the Findley Hamfest on September 11<sup>th</sup>.

- Picnic -Linda KC8MUD-The annual MARC Fall Picnic will be held on September 17<sup>th</sup> at the Homer Township Park. Please bring a dish to pass, and table service. We'll meet around 11:00 A.M. and the grills will be fired up.

- Award- Jim KD8HIH- Major Pat McPherson WW9E is going to receive a Plaque and award for his contributions to the SATERN Program.

Send wishes and cards to Pam Sweet, Territorial Disaster Services Resource Coordinator, The Salvation Army Central Territory, 10 W. Algonquin Road, Des Plaines, IL 60016, [www.disaster.salvationarmy-usa.org](http://www.disaster.salvationarmy-usa.org)

- Masters Degree- Congratulations to

John KB8PGW for his hard work and perseverance in earning his Masters Degree from CMU. Congratulations John!

- Contests- Pat KC8RTW told about a contest in the Michigan Section News and Keith KB8SOE gave the score for the Michigan QSO party that some of our members participated in.

- Christmas Party-Dorie N8WTQ- Keep in mind that the Christmas party is coming on December the 2<sup>nd</sup>.

- Elections- Dorie N8WTQ and Linda KC8MUD are nominated for secretary. A motion was made to close nominations. A vote is taken, Linda wins. John W8QN is unopposed for treasurer. Mark KC8GRQ is nominated for vice-president and is unopposed. Kevin KD8QAM and Lee KC8ITI are nominated for president. A vote is taken, Kevin wins.

- The 2011/2012 Officers for the Midland Amateur Radio Club are as follows: President, Kevin Martin KD8QAM; Vice-President, Mark Rodgers KC8GRO; Treasurer, John Wolters W8QN; Secretary, Linda Hodges KC8MUD.

#### NET CONTROLS:

Sept 8 <sup>th</sup>	Keith KB8SOE
Sept 15 <sup>th</sup>	John W8QN
Sept 22 <sup>nd</sup>	Lee KC8ITI
Sept 29 <sup>th</sup>	Pat KC8RTW

An adjournment motion made by Lee KC8ITI and seconded by Chris KB8UIH. Meeting adjourned at 8:30 P.M.

Respectfully submitted,  
Linda KC8MUD  
MARC Secretary

#### Upcoming Events

10/1	Simulated Emerg. Test
11/3	Winter Skywarn®
11/19	Midland Santa Parade
21/2	MARC Christmas Party

#### Michigan Hamfests

10/16	Kalamazoo
10/23	Sterling Heights
2/19/2012	Livonia

\* denotes tentative date based on 2011 event

#### Area Nets

SVARA; Mn, 147.24 MHz, 2100 ET  
Gladwin; Tu, 147.18 MHz, 2000 ET  
BAARC; Tu, 145.31 MHz, 2100 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  
W Mi Trffc Net; MWF, 145.15 MHz, 0900 ET  
TMMTN; Mon-Sat, 147.30 MHz, 2130 ET  
MACS; Mon-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

## My Two Cents

**Pat Mullet, KC8RTW**

I haven't logged much time on the air so far this month, though I have spent some time copying PSK-31, and tried to break though a couple of pile-ups for new countries. Most of the time seems to have been spent trying to re-work my miniature shack, installing a few goodies and troubleshooting some nagging problems.

I repositioned my radio and tuner, making it much more convenient to operate, and as part of that exercise, I found a neat way to steal voltage from the rig's ac-

cessory port to illuminate the cross-needle meter on the manual tuner, so I had to whip up a jumper cable for that.

While I had the soldering iron out, I built a combination switch and junction box for the pair of gooseneck Littlites—12 volt task lights used in the broadcasting industry—that I pick up used, but at a bargain price from All Electronics mail order. They don't throw a great deal of light, but they're perfect for subdued lighting conditions. Since I was digging

*Amateur Radio  
is a Contact Sport!*

#### 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.



around in the rat's nest of cables any ham develops behind his equipment, I resurrected and installed an old RadioShack recording control center, an audio switch matrix that now allows me to control where my received audio goes—speaker, headphones or into the soundcard interface. I'm in the process of constructing a similar box for the input audio from an old computer data switch—I have to replace all the eight pin mini-din connectors with eight pin round microphone chassis jacks.

Last month during one of the Thursday night nets, my dual band rig started acting up. The meter was showing that I was receiving a strong signal, but the audio seemed broken, and sometimes absent altogether. I quickly surmised that the audio amp had died, so I swapped out the rig with the single band rig I have been planning to use for my VHF digital station. After thinking on the matter for a couple of weeks, I began to suspect that the culprit was an ill-fit-

ting audio plug, instead. I swapped rigs again, but this time, didn't use an external speaker, and it seems the problem has been solved. I love cheap fixes!

I kept having problems with my desktop computer locking up, which I finally traced down to the poor WiFi signal the box was receiving. Snaking a temporary Cat5 cable along the baseboard and through a closet has solved that problem, and it's been running 24/7 for the last week—incidentally, it now frees up a slot I can use for another USB controller. Now I just have to clear up the trouble that FLDigi is having with my second soundcard.

My laptop needed some attention as well. The DVD-ROM drive had disappeared from the drive folder once again. When this happened the first time, I thought I'd picked up some malware, which I'd managed to clear using malware removal tools and a registry cleaner. When it happened again, I did a little more research on Google, and it turns

out that this is a known issue with Windows XP/Vista/7, and the fix was relatively easy.

Since I was digging in the guts of my laptop, I tackled a couple of programs that weren't working properly. The fixes for these were a little more involved, but they're back in order again.

Earlier this week, I had a few free minutes, so I started thumbing through *Storm Spotting and Amateur Radio*, an ARRL publication, and came across a list of recommended online Independent Study courses offered by FEMA. I'd only taken about half of the list, so I went ahead and jumped into them with both feet. Luckily, most of the material in these courses had been already covered in the courses we're encouraged to take for ARES/RACES activities.

Hmm, looking back on it, I guess I did get a lot accomplished this month that was related to Amateur Radio.

See you on the air!

73, Pat, KC8RTW

## **ARES®/RACES**

## **John Wolters, W8QN**

There were lots of happenings this last month with more to come. We successfully completed a test of the HSMM-MESH with 5 nodes testing VOIP (Voice Over Internet Protocol/telephone), and video transmission. The longest hop was a little over half a mile. Del, WB8FYR even tested the use of his cell phone over the MESH network with success. A demonstration for the county emergency manager and the 911 manager is in the planning stages.

Porter Township Safety Day has come and gone. Lee, KC8ITI, Chris, KB8UIH, Mark, KC8GRQ and I were there to represent amateur radio. We talked to several people with one expressing interest in the Club's next licensing class. One interesting observation on propagation—during our demonstration there was a solar flare. The 40 meter band became very fluttery and eventually died altogether. It came back about

half-an-hour later. An interesting experience, to be sure.

Saturday October 1<sup>st</sup> is the day for the annual SET (Simulated Emergency Test). Earlier in the month it sounded like we might have a lot of activity during the test but after attending the Region 3 meeting this past weekend I am not so sure. I will be contacting some of you for help but would appreciate everyone that can, check in to the repeater on Saturday morning between 9 am and 11 am to help with the test.

Thursday November 3<sup>rd</sup> we will replace our regular meeting with Winter Skywarn® Training given at the Law Enforcement Center. Please mark your calendar and attend. This training is open to all with and without an Amateur license. No pre-registration is required and there is no cost.

After the HSMM-MESH test there were a few participants who expressed

an interest in a training / testing day with APRS. After bringing it up at the last club meeting I believe there is enough interest to plan such a day. If you have an interest in APRS or just want to know more watch for an announcement of a date in the future.

Lastly, the Dow Run format has changed and the date has been moved from the first weekend in June to May 19<sup>th</sup>. In addition they have partnered with the CRIM run and will include a marathon in the weekend's activities.

Unfortunately, this is the same weekend as the Dayton Hamvention. A quick poll tells me that I may lose up to half of the regular operators who work the Dow Run. That's bad for the 5 and 10k runs but would not come close to supporting a marathon. I am not sure that we will be able to help next year but will bring this up for more discussion at the next meeting.

## **MARC Election of Officers**

At their September 2<sup>nd</sup> meeting, the membership of the Midland Amateur Radio Club held elections for club

officers as provided in the club's bylaws. The attending members elected Kevin Martin, KD8QAM to be President and

Mark Rodgers, KC8GRQ to be Vice President. Running unopposed, Treasurer John Wolters, W8QN was

reelected. Linda Hodges, KC8MUD the current MARC Secretary defeated her

challenger to retain her post for the 2011-2012 term.

## ***Hail to the New Chief***

***Kevin Martin, KD8QAM***

*[The headline is mine, Kevin had nothing to do with it—Ed.]*

Hello everyone. Thank you for your confidence in me and voting for me. I have some big shoes to fill.

I have lived in the Midland area off and on for the last 30 years. I do a lot of volunteer work in the Tri-cities, so if you happen to see me out and about don't hesitate to say hello.

I am in the process of getting the shack pieced together. I am not allowed

any antennas at all, so if anyone has an idea on how to hide one, I am all ears. I currently have a Yaesu FT-897 and a VX-8DR.

I was first introduced to Ham radio back in the early '90s in several Boy Scout outings. I was having trouble with the Morse code, so I passed on it for the time. Several months ago I was searching random things and came across the ARRL's web site. I noticed that the code was no longer a

requirement and bought a book. After I had passed the test I decided to join MARC.

What a wonderful group. It was nice to go to a function where everybody was smiling and very friendly. I was welcomed like I had been there for many years. Thank you.

I look forward to working with everyone.

73,

Kevin Martin KD8QAM

## ***...And our New VP***

***Mark Rodgers, KC8GRQ***

I got into CB radio when I was 13 years old. A fellow CBER/HAM talked me into getting into getting my Ham license. I studied the No-Code Tech book for a few months and passed my test at 14. For my birthday I saved up all of my money to buy my first HT. Since then, I've been into Ham Radio quite a bit, doing all sorts of random projects, attending every Field Day, helping with MS-150 bike tours, Skywarn®, Net Control, and lots more. I don't get on the air

as much as some people, but I am always listening to 2 meters and my scanners. I prefer the hands-on building, modding and experimenting part of the hobby. I love going to swaps and finding other people's junk and creating new uses for it. Recently I have been finding new uses for obsolete consumer products and making them work for Ham use. I have been working on some Amateur paging projects and a simplified packet/messaging setup. My newest interest I

would like to get into is satellites. I am currently trying to get a location for my APRS digipeater and a 900 MHz repeater, so I can share some of my projects and radio resources with others. I still have hundreds of new ideas and plans for what I would like to do with the hobby and am eager to share them with everyone else.

73, Mark Rodgers, KC8GRQ

## ***September 11th VE Exam Results***

On September 11th, the Midland ARC conducted a VE session in conjunction with the two-day Technician Class training session held for the Midland County Search and Rescue organization. A total of twelve candidates sat for their license exams, ten of which walked out the door with either new or upgraded licenses.

The successful candidates were:

New Tech: Kevin Cuthbertson; Richard Ripke; David Thompson; Cody Bartlett; Philip Stephens; Gabriel Hutcheson; Cynthia Wisniewski-Bragiel; Toni Stacy.

New General: Johnathan Schultz

Upgrade to General: Joseph Feinauer, KD8PAP

The VEs who presided over the session were: Dennis Klipa, N8ERF, VE Liaison – ARRL; Lee Hodges, KC8ITI; Pat Russell, KD8IVZ; Glenn Boggs, AA8EJ and Al Barlow, K8BHU.

Thanks to the VE team and congratulations to everyone earning their ticket or upgrading. Welcome to the World of Amateur Radio!

## ***Winter Weather Awareness Training Scheduled***

The Midland Amateur Radio Club and the Midland County Department of Emergency Services are sponsoring a Winter Weather Awareness Seminar, presented by Richard Pollman, Warning Coordination Meteorologist from the National Weather Service Forecast Office in Detroit/Pontiac. The class will last about one hour. Topics will include: Winter

Weather Spotting Reporting and Measuring Snow and Ice; Impacts of Winter Storms; Winter Weather Safety; Winter Weather Products from the NWS; Four Season Spotting Reporting events not associated with Thunderstorms or Winter Storms (i.e., High Winds, Dense Fog, Flooding)

The Winter Weather Awareness Sem-

inar will be presented Thursday, November 3<sup>rd</sup>, 2011, at 7:00 PM, at the Midland Law Enforcement Center, 2727 Rodd Street. There is no cost, and the public is welcome.

For more information, contact John Wolters, (989) 832-9122 or the Midland County Department of Emergency Services, (989) 832-6750.

(ARRL Contest Update, August 31, 2011)— Brian K1BRF relays the link to a Technology Review article <[www.technologyreview.com/blog/arxiv/26965/?ref=rss](http://www.technologyreview.com/blog/arxiv/26965/?ref=rss)> that reports an improved Lithium-Sulfur (LI-S) battery chemistry that increases energy storage capacity by nearly an order of magnitude. That this would have far-reaching consequences is a bit of an understatement and certainly portable operating would benefit greatly.

Gary K9AY provides advice for soldering radials: "For many years, dating from my first career in broadcasting, I have used silver-bearing plumbing solder commonly available in hardware stores and home centers. This is typically tin (Sn) with 0.25% or 0.5% silver (Ag). I tried the cheaper 100% tin, but the silver dramatically improves the solder flow and bond to the copper. Clean copper and the right flux is essential. Scotchbrite or similar pads are good; sandpaper may be needed to cut through deeper oxidation. The liquid acid flux works best, but is messy and corrosive — wear gloves and wash things off when done. Paste flux works fine if the copper is clean, and is a lot easier to work with. I can't say enough

about cleaning the copper — everything is easier that way. A good physical connection helps too, since it will require less solder and flux. Finally, if you're concerned about protecting a soldered joint, a coating of black silicone or "liquid electrical tape" works well."

Along with the observation about knowing when your antennas and towers are big enough, how can you tell that your slingshot is big enough? How about when it has a mount for a laser sight! Tom N4TL wrote in with news about the Big Shot® slingshot <[www.sherrilltree.com/Professional-Gear/BIGshot](http://www.sherrilltree.com/Professional-Gear/BIGshot)> that looks like it would be a lot of fun in many, many ways! [*Looks like another tool for Lee, KC8ITI's Field Day toolbox—Ed.*]

While EZNEC is the gold standard for ham antenna modeling under Windows, Linux users needn't despair. The x nec2c program also provides a lot of functionality as described in this video series by Steve AI4QR <<http://illuminations.com/2011/07/22/antenna-modeling-using-nec2c-on-ubuntu-linux/>>. (Thanks, Art AB4RL/6)

A couple of issues ago, an item described methods for installing masts on tower. Eric K9ES contributes his method

of using two thrust bearings, one on the top plate and one 5 feet below the top plate. You have to build the tower with mast already inside it at the bottom. When complete and guyed and with the rotator not yet installed, lift the mast inside the tower. Use a muffler clamp around mast to secure the rope from the gin pole. Attach the rope 60% of the way up the mast, above the center of gravity. When the mast extends a few feet beyond the top plate, lock the mast in place with thrust bearings. Install the top antennas on the mast and reposition the gin pole rope to the bottom of the mast. Continue to pull the mast through the thrust bearings after loosening the nuts, and tensioning the rope. Continue this procedure until the mast is high enough to allow the rotator to be installed, and lower the mast into the rotor clamps.

John KK9A contributes this handy formula for estimating tower work duration: Actual time = Estimate \* Pi. Your editor can also speak from personal experience that this formula works for developing software, car repairs, the prep time for any recipe, weeding the garden, putting a child to sleep, and numerous other endeavors.

**More Technical Topics and Information****Ward Silver, NØAX**

(ARRL Contest Update, September 14, 2011)—Tom W8JI cautions us against tuning up an amplifier at reduced power because the output matching network controls (TUNE and LOAD) won't be set properly when operating at full power. The low-power tuning increases loaded Q in the tank circuit, leading to high voltage and heating. "Even with a 3-kilovolt supply, you can create over 10,000 volts in the tank by peaking (output) power at low drive and then increasing drive. That can put you off the air with capacitor or bandswitch failures." This is illustrated by a low-voltage demonstration on Tom's website <[www.w8ji.com/demonstation.htm](http://www.w8ji.com/demonstation.htm)>. For best performance and the least distortion

(splatter) Tom recommends, "adjust at full power and then reduce drive to the legal power. This way the bandwidth before readjustment is required as wide as possible and changes in SWR as antennas are changed does not have a negative impact. It is almost always much easier on the amplifier and other people to over-couple (load at higher power) and then back off." You can read more on Tom's website.

Tower climbing pro, Dan K1TO, points out that thrust bearing bolts are not designed to support a heavy mast as described in the previous issue. The way to do this properly is to have at least one muffler clamp with a saddle (or better yet, two saddles with through bolts)

tightened securely to prevent any downward slippage of the mast while moving the rope attachment point.

When installing antennas on a mast, don't forget to leave a "rotator loop" in the feed lines to allow the antennas to turn without pulling on the cables! As Steve K7LXC points out, "There are two rotator loop methods. One has the cable(s) coming off the mast with 5-6 extra feet to just hang off the tower and follows the mast around as it turns. The other way is to loop the cable(s) 2-3 times around the bottom of the mast at the flat top of the tower 2-3 times. The cables sit on the tower top and allow lots of rotation. Either way works Fine Business."

# *Explore the World with Amateur Radio!*



Bob K4HJF has a great idea to save builders some significant scratch - he uses surplus test equipment chassis for his projects. These beautiful and sturdy cabinets are made with top-quality hardware and are easily "repurposed" for ham

projects, such as his new 2 meter amplifier. You'll see many obsolete pieces of gear selling for "get it out of here" prices at hamfests, so take one

Popular Mechanics' "PM Saturday" column describes a one-afternoon project

just right for non-contest weekends. The October 2011 issue's project is a T-shirt cannon made from PVC pipe and an irrigation valve. I don't know about you, but when I see "t-shirt cannon", I think "antenna in tree"...I'm just sayin'.

## ***Wanted - MARC Newsletters***

Looking for any newsletters prior to January 1984 as well as the following:

February 1984  
March 1984  
May 1984

June 1984  
July 1984  
August 1984  
September 1984  
August 1985

September 1985  
January 1986  
If you happen to have any of these newsletters contact Dennis - N8ERF or Lee - KC8ITI

## ***Swap 'n' Shop***

**For Sale**—I have several sections of Rohn tower for sale. Three 10 ft sections and one top section. Three legged. 1ft between legs.

I would like to find someone in the Midland area who would buy this from

me.

Dan Arriola, Midland, MI,  
huckleberryhollow@gmail.com

**Wanted**—Looking for an Icom HM 36 hand mic with up/down function. Fits

Icom 751A transceiver.

Call 989 835 5562 or e-mail  
ab8jf@arrl.net

Thanks AB8JF Bill

## ***MARC Vital Statistics***

Memberships Expiring in September

WB8YAG

Memberships Expiring in October

KD8HIC

KC8MUD

Memberships Expiring in November

KB8PGW

Current Active Club Membership 56

Birthdays Celebrated in September/October

KC8ZMQ 9/6  
N8STF 9/9  
N8FUZ 9/17  
KB8PGV 9/17  
KB8SOE 9/19  
KB8WEE 9/24

W8WOJ 10/3  
KD8JQX 10/5  
N8LTR 10/10  
N8WTQ 10/10  
WD4PIJ 10/13  
KA0KPP 10/16

KC8TQU 10/19  
WB8IDY 10/23  
KB8PGW 10/25  
N8OVT 10/27  
KC0CJC 10/31

Anniversaries Celebrated in September/October

N8LBF and KB8QYC 9/6  
W8JBD and ??? 09/10  
KC0CJC and Sally 9/12  
K8RI and N8JBW 9/26  
KG8YG and Rachel 10/01

KD8CUX and ??? 10/04  
KB8MCI and Cyndi 0/06  
WB8RCR and Eileen 10/12  
WB8IDY and Audrey 10/19  
KB8SOE and Darci 10/19

KC8GQK and Tera 10/20  
KB8LQM and KC8IHB 10/23  
NQ8T and Barbara 10/23

Information is from data received 8/1/2011

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**