

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

	www.wakea.org	
President Vice President Secretary Treasurer W8KEA Station Trustee Midland County EC/RO Midland County AEC Newsletter Editor Newsletter Publisher ARRL Liaison Web Page Chairman Club Historian Quartermaster Public Information Officer Field Day Committee	Kevin Martin KD8QAM Mark Rodgers, KC8GRQ Linda Hodges KC8MUD John Wolters W8QN Larry Macklin N8CGP John Wolters W8QN Chris Rose KB8UIH Pat Mullet KC8RTW Keith Johnson KB8SOE John Tallman KB8PGW John McDonough WB8RCR Stan Rowe K6VWE Lee Hodges KC8ITI Pat Mullet KC8RTW Mark Rodgers, KC8GRQ/Ch Ryan Lughermo KB8RCR Bill French, AB8JF Dorrie French, N8WTQ Cindy Hall, KD8JQX Jack Hall, KD8JQY Steve Linley, WA8Y Pat Mullet KC8RTW	(989) 513-0100 (517) 672-1060 (989) 374-0032 (989) 832-9122 (989) 631-7748 (989) 832-9122 (989) 832-7179 (989) 828-6657 (989) 488-4337 (989) 859-0364 (989) 631-0178 (989) 837-7252 (989) 374-0032 (989) 828-6657 (517) 672-1060 (989) 835-5562 (989) 835-5562 (989) 835-5562 (989) 496-7566 (989) 496-7566 (989) 496-7566 (989) 496-7566
Swap Committee	Keith Johnson KB8SOE / Ch Pat Mullet KC8RTW	(989) 488-4337 (989) 828-6657

# LIFE MEMBERS Larry K8SQB, Don W8WOJ, Lee KC8ITI, Dennis N8ERF

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 May 3, 2012, 6:00 PM Next CLUB Meeting — Thursday May 3, 2012, 7:30 PM Salvation Armmy Building 330 Waldo Rd. Talk-in 147.000+

> > May 2012

## Static Discharge

Kevin Martin, KD8QAM

With Mother Nature showing her wrath this early in the season, I hope you all are able to get outside for some activities. I am still in the process of relocating the QTH. What a mess. If anyone has prior experience painting, there are extra brushes available. Don't worry; I carry both the left and right handed models. I had every intention of hanging a dipole today, but moving took everything over.

I was able to make it to the VE session this morning and was very pleased to see a student from the Central Middle School there testing for her Technician license. Everyone that participated in Lee's (KC8ITI) General class, tested and now holds that license.

I am hoping to hear a few new voices on the nets next month. If you haven't hosted a Thursday night net, it's a great time to try



it. There really isn't a whole lot to it. If anyone needs a copy of what to say for

the net there are several floating around, or please ask for one.

## MARC Minutes

### Linda Hodges, KC8MUD

The meeting came to order at 7:00 Forecast Office. PM at the Law Enforcement center training presented Meteorologist Philip Kurimski from the

• At 8:40 PM a brief business meeting starting with summer severe weather was brought to order by Kevin KD8QAM Senior with around 33 in attendance.

Please bring any corrections or National Weather Service White Lake additions of the minutes to the attention of the secretary.

- · There was no treasurer's report at this time.
- Communication's Report -Pat KC8RTW- Please let Pat know if you have seen or heard the media ads or announcements for our club's events and activities. It's a good way to track the best way to get our news out about amateur radio.
- Middle School Club- Denny WD8BPT- Denny brought in a homemade Antenna that his club members made to go on a fox hunt. Each student made his own antenna out of old measuring tape It's a great way to get the youngsters interested in amateur radio. Denny also reported on the status of the SATERN Vehicle and its licensing.
- · Field Day-Mark KC8GRQ- Mark gave short report on possible Field Day sites. He also asked if there were any other people who may like to be on the Field Day committee.

• VE Tests- Lee KC8ITI- The exams are at the Salvation Army Building on April 14th. Check-in at 8:30 AM and Tests starting at 9:00 AM. But as of yet no one has signed up for the Extra class.

• Dow Run-Lee KC8ITI- Date is May 19th and at least 17 operators are needed. See Lee KC8ITI or Dennis N8ERF if you can help on that morning.

**NET Controls-**

April 12<sup>th</sup> Kevin KD8QAM April 19<sup>th</sup> John W8QN April 26<sup>th</sup> Lee KC8ITI

• ARRL Request-Kevin KD8QAM-Comments and remarks are needed by the ARRL by April 25th regarding extending PRB-1 protection to CC&R contracts. The FCC is also seeking public comments on Emergency Communications by Amateur Radio and Impediments to Amateur Radio Communications. (Proceeding Number

A motion to adjourn the meeting was made by Larry N8CGP and seconded by Chris KB8UIH.

The meeting adjourned at 9:10 PM.

Respectfully submitted, Linda KC8MUD MARC Secretary

#### **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: kc8grg@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

#### **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/examsearch.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 (cherryredirocz@sbcglobal.net)

## My Two Cents

I wasn't able to accomplish as much when it came to ham related activity this month as I'd hoped.

I did make to the Skywarn® training session presented during the April meeting; every time I attend one of these seminars, I learn something, and this time was no exception. I hope you were able to make time to attend.

I was also able to make a start on the publicity for this year's Field Day activity. The proclamation requests went out to the County and the City, and I got started on the flyer and this year's media blitz, though I am a bit hamstrung by not having a specific site nailed down as yet.

I'd planned on setting up an temporary j-pole antenna for APRS in a better location, which should allow me to go to

## Pat Mullet, KC8RTW

full-time digipeated mode, rather than the receive-only Igate that I'm forced to run now; the temporary antenna I'm currently using is too close to the shack, causing EMI in entertainment equipment each time it beacons. Unfortunately, I haven't been able to follow up on this, as my aunt, the last of my late father's siblings, suffered a stroke last week, and as I write this, finally succumbed yesterday, so any plans I had are pretty much out the window.

I should be able to finish up the newsletter on time, but I rather suspect I'll pretty much be wining it until the end of the month. Until then, I hope to hear you on the air.

73, Pat, KC8RTW

# ARES®/RACES John Wolters, W8QN

The May ARES / RACES meeting will begin the training process to familiarize everyone with the new computers and software that will be used for Packet at the EOC, CSB, and County Communication Vehicle. Hope to see you there. W8QN

Public Service opportunities:

Saginaw:

Covenant Hospital 1/2 Marathon April 10 6:30 AM to Noon. 12 to 15 operators being requested at this time. Contact Ron Huss at: kc8yvf@rhuss.cncfamily.com

Frankenmuth MS Walk

May 12 8:00 AM to Noon Contact Emmett Bengry at: w8eab@arrl.net

Run for Windy (Swan Valley High School) May 13 9:00 AM to Noon. Contact Dave Schneider at: n8erl@arrl.net

Genesee:

Crim Race.

Aug. 27 (Flint) 5:30 AM

Any and all operator's that volunteer

will be worked.

At this time contact Joe Tuscher at jt14888@aol.com

## MS Walk Volunteers Needed

We need volunteers to provide communications support for the annual Midland MS Walk. The walk will occur Saturday April 21, and originate from the Central Middle School, 305 East Reardon. Registration runs from 9:00 a.m. though 10:30 a.m. with Opening Ceremonies at 9:45 a.m. The official Walk start time is 10:00 a.m. Around fifteen volunteers are needed to cover the three-mile course—operators need to be in place by 8:30 AM.

Last year Walk MS-Midland welcomed more than 400 walkers and volunteers while raising over \$59,500!

Plans are underway to make this year's event a great day of fun and festivities in support of those living with multiple sclerosis, their families, and caregivers.

A light breakfast and snacks will be provided. You are welcome to bring drinks, snacks, or lunch for yourself.

The MS Walk is a low impact event, giving hams interested in public service a chance to get their toes wet in an emergency services-type environment. For more information, please contact me.

73, Chris KB8UIH

## Dow Run Volunteers Needed

The Annual Dow Run will occur on Saturday May 19<sup>th</sup>, and as in the past, Midland ARES and the Midland Amateur Radio Club will be providing race communications and volunteers are needed to man the checkpoints. This is a change from the usual first weekend of June date to the same weekend as Dayton in May (May 18-20). As a result the number of hams that will be available to help with the run has decreased, so we will need every volunteer we can get.

If you have not signed up to help, please contact Lee, KC8ITI, or Dennis, N8ERF. We need the information quickly not only for planning purposes, but so we can get your information into

the race officials so they can order your t-shirts.

Responsibilities of each operator include reporting passing of the lead and trail vehicles and any injuries or emergencies that occur. If you want to help but are new and "don't want to mess up," we'll can pair you with an experienced operator. There are some freebies that will be given to each volunteer and your name will be included in a prize drawing for all volunteers. We have had at least 3 winners in recent years.

All packets containing assignments and other goodies will be passed out at the May 3<sup>rd</sup> MARC meeting. If you are unable to attend the meeting come to the

#### **Upcoming Events**

4/21	MS Walk
5/18	Dow Run
6/23-24	Field Day
7/5-8	Lupton

#### **Michigan Hamfests**

5/5	Cadillac
6/2	Hudsonville
6/3	Chelsea
6/9	Newberry
6/16	Midland
6/17	Monroe
7/8	Lansing
8/4	Escanaba
9/8	Wyoming
9/16	Adrian

<sup>\*</sup> Denotes 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

#### MARC MERCHANDISE

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

Communications Vehicle to pick up your assignment. Talk-in will be on the 147.00 repeater. Remember that the

roads close by 7:30 am the morning of the Race, so you should be in your assigned place before that. The event is typically over before noon. If you need to leave early just let us know.

# April 14 License Exam Results

We had 8 folks take exams. Seven of them either got new licenses or upgraded. Two of them went from nothing to General. The following folks either upgraded or got new licenses: Kevin Martin, KD8QAM; Douglas Purtill, KD8OLC; Cindy Hall, KD8JQY; Kevin

Cuthbertson, KD8QXL; Edward Greenhoe, Bay City; John Turek, Sanford; Tom Meskill, Farwell.

The session went very smoothly, thanks to the following VEs who volunteered at this session: Lee, KC8ITI; Larry, N8CGP; Al, K8BHU; Pat,

KD8IVZ; and Bryan, K8VB.

The next exam session is scheduled for the Midland swap on June 16<sup>th</sup>.

Best Regards, Dennis, N8ERF ARRL VE Liaison

# Extra Class License Class Organizing

The Midland Amateur Radio Club will be sponsoring an Extra Class licensing class starting April 23, 2012 and running through June 13, 2012. The class will meet on Monday and Wednesday nights from 7 PM until 9 PM at the Salvation Army Building which is located at 330 Waldo Ave. here in Midland Michigan. Our study guide will be the

ARRL Extra Class License Manual, Ninth Edition. If you need a study guide, let me know and I can order you one at an instructor discounted price of \$23. Other than the cost of the manual there is no charge for this class. PLEASE NOTE: The Extra Class License question pool changes on July 1, 2012 therefore I WILL NOT be ordering any additional

manuals for this class beyond those that are requested. A testing session will be offered at the conclusion of this class. If you have questions or are interested in taking this class please contact Lee Hodges at (989) 374-0032 or email me at KC8ITI@ARRL.NET

## Central Middle School Fox Hunt

## Dennis Klipa, N8ERF

We continue to have 9 or 10 students show up for the Central Middle School Amateur Radio Club meetings. The following hams have been working with the kids to bring amateur radio to life for them; Bill, N8FUZ, John, W8QN; Lee, KC8ITI; Denny, WD8BPT and Dennis, N8ERF. Throughout the year we have done a number of activities and projects from learning the phonetic alphabet, learning how to make voice contacts, actually making contacts on the school station, building a computer, building an AM receiver, a scavenger hunt using clues based on electronics, an electromagnetism demonstration and radio wave propagation to name a few.

On March 14th, working in teams,

the students built three 2 meter tapemeasure, 3-element Yagis. It was a fun class and we were able to get it done in one club session. On March 21st we had our first Fox Hunt. With four teams using Yagi beams, a loop designed by KA8HUY and a paper clip looped designed by WD8BPT. The Fox was provided by Mark, KC8GRQ. transmitter was a Yeasu VX-1 and the controller was an Arduino board built and programmed by Mark to send out "N8ERF Fox Hunt" in Morse Code though the VX-1 at 200 mW into a dummy load. Even with that arrangement the receivers were overloaded at close range. But the Fox was found in less than 15 minutes. The loops worked better at close range than the yagis did. It pointed out the need to have attenuators on the receive side and a way to shield the HT's so that the signal has to come in through the antenna instead of directly into the HT.

We plan to have several more Fox Hunts in the future. We are going to try to have two Fox transmitters on different frequencies to lessen the congestion. Thanks again to Mark for the loan of his Fox! And special thanks to our sponsoring Teacher, Mrs. Jennifer Lenon, KD8BUM.

Best Regards, Dennis, N8ERF



ARRL Field Day JUNE 23 & 24, 2012

www.arrl.org

# Michigan Section News

#### Michigan QSO Party

As a note of interest, April 21 is the date of the Michigan QSO Party. This contest runs from noon to midnight (local time) and is great fun. I encourage everyone to get involved, even if it is just to give stations an opportunity to work you! For those in the less populated counties, this is a great chance to be at the sharp end of a pile up! You could easily be the most popular ham in a given county for a day. More information is available at http://www.miqp.org/. See

you on the bands!

#### **Michigan Section Outing July 5-8**

Planning for the Michigan Section's 14<sup>th</sup> Annual Summer Family Outing to be held July 5-8 continues. More information is available at www.sectionouting.info. A multi transmitter Fox Hunt along with some related construction projects are being scheduled and should be great fun and very informative. Watch this column for additional information as the event date come closer. Make your plans early and I hope to see you there!

#### Media Hit

Sincere congratulations and thanks for the great representation that ham radio received in the aftermath of the Dexter tornado in March when Mike Swartz, W8EFM, Jeff Cowall, KN8A and Pat Clouse, KC8UAV were interviewed by Lucy Ann Lance from WLBY 1290 AM in Ann Arbor. You can listen to the interview here: http://lucyannlance.com/?p=19455.

Larry Camp, WB8R ARRL Michigan Section Manager

# FCC Seeks Public Comments on Emergency Communications by Amateur Radio and Impediments to Amateur Radio Communications

(ARRLWeb—04/05/2012) In response to the Congressional directive to prepare a study to assess Amateur Radio's role in emergency and disaster communications and the impact of private land use regulations on the amateur community's ability to provide such communications, the FCC issued DA 12-523 soliciting comments from the public. The period for public comment runs until May 17, 2012.

"As part of the study contained in Public Law No. 112-96, the Commission has opened a 45 day period for comments to be filed on the issue," said ARRL Regulatory Information Manager Dan Henderson, N1ND. "Because of the short deadline for the study to be completed and presented to Congress -- before the end of August -- the ARRL and the amateur community must quickly mobilize their response."

The FCC Public Notice focuses on two specific areas for comments. The first is the role that Amateur Radio has played and continues to play to support emergency and disaster relief organizations, such as FEMA and local/state emergency management agencies. The second is to determine impediments to enhanced Amateur Radio communications. This would include the impact that private land-use regulations -- such as deed restrictions and homeowner association covenants -- have on the ability of licensed amateurs to fully participate in providing support communications to the served agencies.

"This study is not about zoning or-

dinances or regulations adopted by the local or state governments," Henderson explained. "Amateurs already have the limited protection of PRB-1 to assist them with those situations. The areas of concern here are the limitations that are placed on a property when it is purchased, either as part of the deed of sale or by restrictions imposed by the neighborhood/homeowner's association. Those restrictions -- sometimes referred to as CC&Rs -- are not currently covered by the FCC's PRB-1 decision from 1985."

To allow the ARRL to quickly collect and collate relevant information from the amateur community to help support the filing it will make with the FCC on this issue, a website has been setup. The site -- www.arrl.org/ccr-study-information -- provides details about what kind of information is needed by the ARRL.

Also on the site, you will find links to two online data collection forms. The first form allows you to provide information about specific emergency communications in which Amateur Radio has played a role since January 2000. The second form asks for specific information on the CC&Rs/deed restrictions that control your property. It also asks you to provide information on how those restrictions have impacted your ability to fully support emergency communications.

"Whether you are an ARRL member or not, your information and situation are important to helping us make the case for all amateurs," Henderson said. "Whether your support communications are with ARES®, RACES, SKYWARN®, CERT or other emergency and disaster groups, your voice should be heard. If you cannot operate effectively from home during an emergency because CC&Rs prohibit adequate antennas on your property, that is important to document and quantify. This issue affects all of Amateur Radio, not just ARRL members."

Henderson said that due to the short timeframe that the FCC has allotted for public comment, time is of the essence. In order to allow the ARRL to develop its comments, the ARRL asks that all information sent by the amateur community be received at the ARRL no later than April 25, 2012: "We realize this is a very short turnaround asking for your response, but this is based on the time provided by the Commission for the comment window."

It is important that when you provide specifics of your CC&R, you also provide the ARRL with a copy of its actual wording. If you have the CC&R in a digital format (or you can scan the document into a file), it can either be uploaded through the website above or it can be sent via an e-mail to CCRinfo@arrl.org . If you do not have an electronic format, a hard copy may be sent via US mail to: CCR Study Information, ARRL, 225 Main St, Newington, CT 06111.

"We need factual, specific details," Henderson said. "The more accurate information we have -- including copies of the CC&R language -- the stronger case we can make. Having copies of the exact

CC&Rs is important. It allows us to demonstrate the wide variation of restrictions. Including the specific text is as important as any other piece of information you provide."

If you have questions about what is being requested, you may contact the ARRL Regulatory Information Office via e-mail at reginfo@arrl.org. "Again, time is of the essence in this matter," Henderson said. "This is the best oppor-

tunity that amateurs have had to address the impact of overly burdensome private land use restrictions. If Amateur Radio is to succeed in this effort, it is going to take all of us working together."

Allen Pitts, W1AGP, ARRL Media & PR Manager adds, "If you know of people who would have become a radio amateur, but did NOT because CC&R restrictions would not allow them to have antennas at home, we need to hear from

them for the current FCC inquiry. They do not have to be licensed nor ARRL members. But if they desired to become a ham but didn't because of CC&R issues where they live, then they too should be included in the survey.

To participate help them participate in the study, ask them to please fill out the form as best they can at http://www.arrl.org/ccr-regulations."

# **Technical Topics and Information**

(ARRL Contest Update—March 28, 2012) Mike WØBTU has created an informative web page on Beverage antennas < www.w0btu.com/Beverage\_antennas.html> - especially how to build and control a two-wire Beverage. Everything from binocular-core transformers to an explanation of how to use a pulley to equalize tension on parallel wires is covered here.

- What watts are inside a 40-watt LED bulb? You can find out from this EDN "teardown" of a typical LED bulb. < www.nxtbook.com/nxtbooks/ubm/edn 20120315/#/22>
- · Another "Oh, By The Way" from Glenn K6NA about using Nyloc nuts -"Always have a few regular hex-nuts in your shirt pocket, so when the antenna comes up to you on the tower you can quickly spin on a couple of regular nuts to hold things together. Then you can relax and add all the Nylocs to finish it off. If using stainless steel hardware, you must use some anti-seize on the threads... but now you have a problem. The compound should be confined to just the seating area where the Nyloc nut will reside (i.e. below the nylon). The controlled application on the male thread should be done with a very small acid-

brush so the nylon part of the nut will not reach the anti-seize. If you later back-off the nut, it will drag a little anti-seize up the entire thread (good, during removal). Ideally a new Nyloc nut should replace the old one, after cleaning the bolt-threads first." Glenn also recommends the *Nuts, Bolts, Fasteners and Plumbing Handbook* by Carroll Smith.

- Steve K1SG recommends the Brother P-Touch Label Printer for equipment labeling. "You can connect it to your computer via a USB port, change font and size, print onto either white or clear substrate, and all the letters come out in nice, straight lines. After applying the labels to a panel, I give them a couple of light coats of Krylon for protection." Steve Watkins recommends the decal kits from Pulsar Professional. <a href="https://www.pulsar-profx.com/decalpro/">www.pulsar-profx.com/decalpro/</a>
- If you are concerned about animals stepping into holes for conduit or other vertical rods and tubes, Bob W7LR describes "metal mushrooms" made from farm castoffs that cover his winter-time Beverage support pipes. "The covers are made of farm harrow disks with a metal rod welded on to go down into antenna

support pipes. The pipes stick up a bit and so the cover keeps the horses from tripping on the pipes, and are sturdy enough if they walk on them."

Trying to figure out where to place your tower? Debby N7FL has solved her problem, "I find it handy to have my tower close to the house so when elements blow off the beam in high winds, the gutter catches them."

• Technical Web Site of the Week -Tracking down a knotty sub-harmonic problem led to David K1TTT discovering unbypassed diodes and poor shielding techniques in a Daiwa power meter's 12-volt power input circuit. RF picked up by the power cord was rectified and mixed by the diodes, generating all manner of products. A single 0.01 uF capacitor at the connector solved the problem. This reinforces the need to bypass diodes and rectifiers connected unfiltered to external leads of any sort in order to prevent creating your own RFI. wiki.k1ttt.net/%28S%28ity0gz3hln02dbv2bcbtryig%29%2 9/2008%20Maintenance%20and%20Up-

grade%20Blog.ashx#daiwameter> (Thanks, Tim K3LR)

# More Technical Topics and Information

(ARRL Contest Update—April 11, 2012) Ken WØLSD offers an inexpensive method of improving your rotator's grip on the antenna mast. "Go to your local tire shop and get an old inner tube. Cut a piece that will fit in the area between the rotor clamp and the mast. When you tighten the clamps it is almost impossible for the mast to turn. It also seems to act as somewhat of a cushion for vibration and I have not had nuts loosen on the U bolts." Dan N5AR ob-

serves that baler belting is another similar material and widely available in hay country.

- Pat AA6EG discovered a source of HV air-dielectric capacitors. His local Goodwill store has large numbers of air cleaners, each of which includes a low-current HV supply, for a few dollars. The capacitor consists of a stack of well-insulated interlaced metal plates with 1/8 to ½-inch spacing through which the fan pulls incoming air to trap the dust.
- To minimize noise conducted from a tower attached to a building, John NA6L recommends some form of sound insulation between the tower and the house brackets or between the brackets and the structure. He added some 1/4" thick by 2" wide strips of neoprene between the tower legs and the house bracket and that got rid of about 70% of the noise. Perhaps this is another use of that baler belt mentioned previously!
  - Jim VE7RF points out that a safety

choke at the output of an amplifier's pi network may not work when the amplifier is in receive mode. To function in both receive and transmit, the choke should be connected directly to the center conductor of output coax connector. This point is in-circuit at all times.

• A cheap heat gun (~\$20) can make quick work of desoldering a PCB, says MAKE author Steve Hobley. Place the PCB upside down over a bucket, heat the board with a stream of hot air, and listen to the parts drop off.

• Tim K3LR reports clearing an audio distortion problem on an IC-7700 by resetting the radio's firmware. Some configuration setting had been changed - no one remembers which or why - causing problems with the output audio. Now added to the Pre-Contest K3LR Checklist resetting all of the radio firmware to the factory defaults so that changes made (and forgotten) in the heat of the contest are not carried forward unwittingly to cause problems in the next contest. That returns all filters back to "normal", clears

VFO settings, all examples of the innumerable small details that you never think of when sitting down to the radio with the pre-contest adrenaline pumping.

• Grounding a bulkhead connector can be made a little easier with an electrical panel box ground lug. Because of the dissimilar metals of the coax adaptor and the ground lug, either use stainless steel washers or some anti-oxidation compound. (Thanks, John KO4XJ)

# Swap 'n' Shop

Any corrections or questions contact John, W8QN

For Sale: Yaesu FT897D. \$700. Wanted to Buy: Power tubes such as but not limited to 4CX series, 3CX400 and larger. 4-250 and larger, 3-500 and larger. Sockets for same and particularly for 4CX1500B and 4CX3000A7. Old Repeater amp that used a Push pull pair

of tubes. I could use some 7/8" to 1.5" Heliax with connectors, but need a minimum of 200' for each run. Looking for HV power transformers in the range of 2400, 2600, 2800, and 3000 VAC, 2KVA and up as well as 800VAC to 1 KV AC for screen supplies. 6V@10A

(4CX1500B), 9V @ 8.5-9A (FU728F), 9.0V @ 41.5A (4CX3000A7), and 10V@10A, filament transformers. High power tuning caps including vac variables.

Contact Roger, K8RI (K8RI@rogerhalstead.com)

	Memberships Expiring in April None	
	Memberships Expiring in May	
	KD8QAM	
	Memberships Expiring in June	
KC8IHB	N8KRL	WD8SDX
KD8LVZ	NX8A	
KD8OKX	WA8KJR	
N8CGP	KA8HQW	
urrent Active Club Membership	54	
	Birthdays Celebrated in April/May	
KC8TQS 4/9	KD8HIC 4/27	KD8FSI 5/12
KC8SRT 4/11	KD8MQX 4/28	KD8MRC 5/12
KD8CUX 4/17	KA8EZT 4/28	KD8MQZ 5/18
N8KFE 4/18	W8CVZ 4/28	KC8MUD 5/19
W8AWS 4/19	N8JBW 4/30	K8CCE 5/20
KC8IHB 4/19	KC8KOC 5/5	WD8AXR 5/25
KD8OLC 4/20	KD8QAM 5/5	WD8SDX 5/27
WA8LQD 4/27	KC8YHQ 5/11	
	Anniversaries Celebrated in April/May	
	WD80EU and Grace 04/17	
	KD8OLC and Lori 5/14	
	KB8QWQ and Kate 5/16	
	KD8EUR and Julie 05/17	



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		
Amarian an ADDI Manahan	2 V/NI De view went on ADEC Amiliantian?	V/NI	

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