



W8KEA



MARC

MIDLAND AMATEUR RADIO CLUB
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www.w8kea.org

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	Pat Mullet KC8RTW	(989) 828-6657
Swap Committee	Keith Johnson KB8SOE / Ch	(989) 488-4337
	Pat Mullet KC8RTW	(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 August 2, 2012, 6:00 PM

Next CLUB Meeting — Thursday August 2, 2012, 7:30 PM

Salvation Army Building 330 Waldo Rd.

Talk-in 147.000+

August 2012

Static Discharge

Kevin Martin, KD8QAM

This heat is getting to everything. I am finding more and more reasons to stay inside where it's cool. The shack is really showing it too. I am envious of those that have air conditioning in their shacks. The garage has been cool enough in the evenings to allow some progress. A few more odds and ends and the essentials will be there. A few opportunities to get on the air have kept my hopes up.

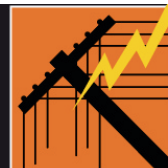
It was quite a turn out for this month's meeting, being so close to the 4th. Hope that everyone had a safe holiday.

I am looking forward to seeing everyone at the fall picnic. The date hasn't been set yet, but it will be held at the Homer Township Park on South Homer road.

73,

Kevin KD8QAM

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



MARC Minutes

Linda Hodges, KC8MUD

The meeting was called to order at 7:30 P.M. by Kevin KD8QAM with 19 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.

- There is no treasurer's report or EC/RO report tonight.

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

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 (cherryredirocz@sbcglobal.net)

- SWAP-Keith KB8SOE- Attendance was a little down, 180 tickets were sold. The Salvation Army received a check for the use of the building. Thanks to everybody especially Jim KD8HIH for all your help. Keith is looking for somebody who would like to take over the Swap reins next year.

- Field Day- John KB8PGW- Get your logs into John so that he can tally the final field day report. The food and especially the turkey was terrific, our thanks to Dorie N8WTQ and Bill AB8JF for all your hard work. There was one complaint to Mark KC8GRQ that someone was using an improper frequency.

- Lupton- This camping weekend is still coming up in July.

- Edenville- Del WB8FYR- The emergency power is working at the Edenville site.

- Special Event Station- Art K0ACP- On Friday, July 27th. Art has applied for a special event station at the Dow Credit Union. The call is K8D.

- Happy Birthday- Linda

KC8MUD- Please send birthday wishes to Larry K8SQB. The address is King's Daughters, 2410 Rodd St. Midland, Mi. (room #11).

- Search and Rescue- Jack NX8A- The Isabella County search for a missing child was discussed. If you are interested in learning more about the Search and Rescue team in Midland County, go to their website.

- Class- Lee KC8ITI-Lee and Dennis N8ERF may be starting a Technician Class in Isabella County. More details to come.

NET Control:

July 12th Kevin KD8QAM

July 19th Chris KB8UIH

July 26th Pat KC8RTW

A motion to adjourn the meeting was made by Keith KB8SOE and seconded by Art K0ACP.

The meeting was adjourned at 8:00 P.M.

Respectfully submitted,
Linda KC8MUD
MARC Secretary

My Two Cents

Pat Mullet, KC8RTW

As I'm sure everybody is aware, I missed Field Day due to my passing out in my garage the week of the event. I've since followed up with my cardiologist, and after a battery of tests he confirmed the diagnosis that I was slightly dehydrated by my medications and that combined with the heat caused my blood pressure to drop, causing me to pass out. We adjusted my meds and I'm making sure to drink enough each day, and things are back to what passes for normal.

So, I participated in Field Day at home, operating 1-Delta. Since I wasn't with the group, I didn't put in nearly the amount of time as I did last year, only working about five to six hours all told during the weekend. I decided since I was operating under my own call, I'd search-and-pounce the bands with my main goal not being to see how many contacts I could rack up, but to try to work the two states that have thus far eluded me—Alaska and Hawaii.

Having the contest software set up to talk to the radio proved to be

sweet—I'd listen to the station, type in the call, whereupon the software queried QRZ.com for the operator's name or club, location and whatnot and telling me if I'd worked the station before during the contest. The software read the band and frequency, automatically adding it to the log, and all I had to do was fill in the rest of the exchange, then set back and drop my call into the pile-up. When the station came back to me, I read off my exchange, hit return, and the software logged the contact and cleared the decks for the next contact.

I cruised up and down 20 meters, making more than a dozen or so calls, not really noticing any trouble with the bands that others would later claim. My biggest problem was coming across a station, trying to make a contact, only to have another strong station start calling CQ a few kc down and obliterate the station I was trying to work! I really need more experience with the notch filtering and the DSP on the IC-718.

Later Saturday evening, I ran across

a good, strong signal from an Alaska station on 20 meters—my chance to achieve one of my goals! I settled in, knowing I'd be fighting I pile-up. I must have fought the pile-up for 45 minutes, but my hundred watts just wasn't making it through, so I decided to go play on 15 meters, intending to come back later and try to bag Alaska later.

After working a few on 15, I stumbled across a club station on Hawaii—another pile-up, naturally, but I hoped to have better luck this time. After

another hour of trying to fight through a cacophony of bigger signals, I called it a night.

I fired up the rig Sunday morning, and began working stations on the East Coast. While I did work W3AO, who were running 27-Alpha this year, I didn't hear either Alaska or Hawaii. I ended up making 30 Phone contacts over the weekend and had a lot of fun, though I really missed working with the Club.

73, Pat KC8RTW

CQ Field Day!?

Sound familiar? If so, John wants your logs so he can register us with the ARRL.

I'm sure we are bound to come in first place in having the best time.

Send your logs to John John Tallman

(kb8pgw@hotmail.com) or get them to him somehow.

Thanks

de .. W8LSS Bob Winchester

Note from the Historian

Recently Stan, K6VWE and Dennis, N8ERF went through the Historian's files and organized them into the following categories: Certificates and Proclamations, Clippings, Field Day Logs, Incorporation and other Official Papers, Meeting Attendance, Meeting Minutes, Member Data, Miscellaneous, Newsletters, Photographs, Repeater, and Treasurer's Data. Some of these categories only have a few papers or documents and some are quite

old. There is also a notebook of club history by decade from the 1940s through the 1990s.

If you have data that you believe should be in the club's history files (instead of your own), please contact Stan on the repeater or at (989) 837-7252. Also, if you have a need to look through the history, contact Stan and arrange a time to look through the files.

Stan Rowe, K6VWE - Historian

The Search for Carmel Chamberlain

On July 22, 2012 at 2:15 AM, Midland County Search and Rescue's (MC-SAR) Leadership was contacted by the Isabella County Emergency Manager in Mt. Pleasant, MI. A request was made for immediate assistance in the search for a missing four-year-old boy named Carmel Chamberlain, who was reported missing by his mother at 10:20 PM the previous evening on her return home from shift work. Attempts to locate the child by local law enforcement and fire service personnel in the ensuing hours were unsuccessful. Survivability statistics for this

category of the missing drop dramatically with each passing day, so a rapid and meaningful response is critical to a successful resolution of the case.

After obtaining permission from Midland County Sheriff Jerry Neilson to respond to the "out of county" request, approximately seven searchers and three staff members responded to the call and were on the scene by 3:45 AM. Over the course of the following seven days, 27 MCSAR personnel participated in the search and lead planning efforts to field more than 25 search teams and search

Upcoming Events

9/15 MARC Picnic

Michigan Hamfests

7/28 Lansing
8/4 Escanaba
8/5 Port Huron
8/19 Lapeer
8/25 Owosso
9/8 Wyoming
9/16 Adrian
10/7 Madison Heights
10/13 Muskegon
10/21 Kalamazoo
12/2 Harrison Township
2/17 Livonia

* 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
Mi VHF Trffc Net; MWF, 145.15 MHz, 0900 ET
TMNTN; 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.

*Amateur Radio
is a Contact Sport!*

over 2500 acres inside the Saginaw Chippewa Indian Reservation in Isabella County. Ham radio operators and search and rescue resources from all over the state responded to the call, a fact that is greatly appreciated as a vital resource in executing the search with the assistance of civilian volunteers. By the end of the search, hams had poured more than 547 man-hours of effort into the event. Midland County Search and Rescue alone contributed more than 515 man-hours (ham and non-ham) and MCSAR logs show nearly 700 total man-hours of trained resources went into the search. This tally does not count untrained civilian efforts, preparation, travel time, or the follow up efforts on-going to the date of this writing.

Sadly, the child's remains were discovered by an HRD (human remains de-

tection) dog team under circumstances which point to foul play and the incident is now firmly in the hands of law enforcement officials.

In the course of the search, Isabella County Incident Management Leadership recognized the value of having so many trained and capable ham radio resources available and expressed wonderment over the capabilities of operators and equipment. Fred Cantu, Incident Commander for the event and Saginaw Chippewa Tribal Fire Chief, said "We wouldn't have been able to field this many teams or have provided the communications for the teams with the resources available to us". Fred also commented on the clear channel communications and range provided by the two-meter gear used for tactical and administrative channels.

Because of the search, interest in ham radio has peaked in Isabella County, and a number of its citizens have indicated interest in attending Technician class training and licensing program. As a result, the Midland Amateur Radio Club is planning an outreach ham class for Isabella County. As one who participated in early efforts in the search for Carmel, I think I speak for both Midland and the Isabella communities when I give my heartfelt thanks to the hams, trained search personnel, and civilians that spent so many hours in 95°F temperatures searching for a lost four-year-old boy. In times of disaster and calamity, communities come together and Ham Radio is there.

John Hutcheson, NX8A
Wednesday, July 11, 2012

Weaver's Words

Jim Weaver, K8JE

(Great Lakes Section Newsletter—7/1/2012)

Band Plan Approved for 9 cm

The US Amateur Radio 9 cm. band is from 3,300-3,500 MHz. ARRL Bulletin 14 provides new recommendations for using the 9 cm. band. There are changes from current practice. These changes are largely intended to meet operating methods that have developed since the earlier plan developed. Amateurs who use 9 cm. are encouraged to move to the newer plan as time and resources permit. ARRL Bulletin 14 states in part: "The ARRL Board of Directors has unanimously voted to approve the 9 cm band plan, as presented by the ARRL UHF/Microwave Band Plan Committee. Earlier this year, the committee asked radio amateurs for comments on a proposed 9 cm band plan, explaining that the purpose of these band plans is to share information about how the amateur bands are being used and to suggest compatible frequency ranges for various types of application. The committee also recognized that local conditions or needs may necessitate deviations from a band plan, and that regional frequency coordinating bodies may recommend alternatives for use in their respective regions.

The new 9 cm band plan includes the following notations:

- This band plan includes all other emission modes authorized in the 9 cm amateur band whose necessary bandwidth does not exceed the suggested bandwidths listed.

- Weak Signal Terrestrial legacy users are encouraged to move to 3400.3-3401.0 MHz, as time and resources permit.

- Broadband segments may be used for any combination of high-speed data (e.g. 802.11 protocols), Amateur Television and other high-bandwidth activities. Division into channels and/or separation of uses within these segments may be done regionally, based on need and usage.

- Per ITU RR 5.149 from WRC-07, these band segments are also used for Radio Astronomy. Amateur use of these frequencies should be first coordinated with the National Science Foundation.

Tech Licensees can Talk to the World

Chuck, AA8VS wrote saying, "...many Techs do not realize they have Novice privileges on HF..." Of course, he is correct. While it takes a modest amount of time and effort to learn the in-

formation needed to pass the General Class exam, upgrading is not all that difficult. The pay-off in operating flexibility is more than worth the time and effort required to get the higher class license. Upgrading truly opens a great new operating world.

Tech licensees also can, if they wish, learn enough Morse code to "get by," and operate on Novice bands that very often provide communications worldwide — regularly throughout the Western Hemisphere.

The bands that offer long distance communications and that are open to Techs using Morse code are 80 meters (3,525-3,600 kHz), 40 meters (7,025-7,125 kHz), 15 meters (21,025-21,200 kHz) and 10 meters. Technicians may operate Morse Code from 28,000-28,500 kHz and SSB phone on 28,300-28,500 kHz. All that is needed to make these contacts is a very modest transceiver (or transmitter and receiver) and a simple wire antenna. Beam antennas are particularly helpful on 15M and 10M.

As scores of former no-code licensees will attest, most people have found learning Morse to the very basic level of proficiency is not particularly difficult. All it takes is a little persever-

Explore the World with Amateur Radio!

ance and enough confidence to make the first few QSOs. Children under 10 years old and oldsters as young in their 90s have learned the code.

If one is looking for challenges beyond VHF/UHF operations, it just might be worth a little effort to become able to enjoy the low bands.

For information about learning Morse code, see: www.arrl.org/learning-morse-code. There are online programs for learning Morse. Search for Morse Code. Some of these are free, others have a cost associated with them.

Hamfest Committees: Your Support is Necessary for Total Success

DXing is a phase of Amateur Radio that appeals to a very large number of amateurs — in this country, these are particularly likely to be ARRL members and be working toward any number of DXCC-related awards. Until recently, most of these amateurs found it most practical to send the QSL cards they received to HQ to be processed for the awards. This is a rather time-consuming and costly process because of the need to hand-enter data from the cards by HQ staff members. This process historically has been responsible for fairly extensive delays in processing DXCC submissions and for the investment of substantial expense in overtime pay. The overtime pay has been for staff members who are willing to spend extra time to help clear the backlogs that traditionally have occurred near the end of the year. These backlogs and the delays that have resulted from them have predictably caused consider-

able displeasure among "the faithful" who anxiously await confirmation of their new country and band-country award levels. This displeasure has frequently been voiced rather vigorously.

A few weeks ago, a new route for submitting QSLs for confirmation was introduced by HQ at the urging of the Board of Directors. This route fully bypasses the major source of delay — hand entering QSL data by HQ staff. This wrinkle in an old procedure is direct, online entry for DXCC awards. This wrinkle involves DXCC Field Checkers and entering by the applicant of QSL data into Logbook of the World. The results of the new procedure is that QSLs do not need to be sent to HQ and that staff does not need to enter data by hand.

There is an aspect of DXCC online entry that requires support from hamfest/swap committees to make the new procedure most effective. This is to give Card Checkers access to locations throughout our Sections where amateurs with cards to have processed can meet with the Checkers who will perform the review process.

What is needed is for hamfest/swap committees to arrange for a Card Checker to come to their event, provide a table for his work and publicize he will be there to alert people they can have their submissions verified at the hamfest.

The benefit to hams with cards to have checked is they will receive the awards for which they have submitted more quickly and at less expense. The benefit to ARRL is that the more cards

that are checked through the online system, the fewer there will be to check at HQ — especially at the end of the year. The benefit to members in general is that less money will be needed to pay for overtime associated with clearing card backlogs.

The benefit to hamfest committees is there will be another reason for amateurs to attend their event. To be sure, this will not bring bucket loads of increased revenue, but any increase is useful. You will also have the knowledge you are doing something good for your fellow amateurs and Amateur Radio.

I do not propose that every hamfest/swap host a Card Checker. These fellow amateurs work for nothing and we do not want to ask them to run off to every hamfest held in our Sections. However, Card Checkers have agreed to travel a reasonable amount for reasonable distances. Spreading their services throughout the Sections is a reasonable objective. Of course, other personal commitments checkers may already have must be considered, also.

As one source of publicity for hamfests/swaps that will host a Card Checker, I will indicate in my monthly listings of hamfests that this checking will be available at their events — provided the hamfest committee advises me in time to include the information.

Please contact me or Vice Director Dale Williams, WA8EFK (wa8efk@arrl.org) with any questions or comments.

Jim Weaver, K8JE (k8je@arrl.org)

Who's Hearing You? Reverse Beacons at Your Demos

(ARRL Contest Update—July 4, 2012) If you expect to have visitors during a contest or are setting up in a public place, here's an idea for some eye-

catching PR. Connect a tablet or laptop to the Reverse Beacon Net web site and use the call sign filter to show only spots of your call. The screen will display a

zoom-able map of where your signal is being heard, worldwide. (Thanks, Pete N4ZR)

Walt Maxwell, W2DU (SK)

(The ARRL Letter—July 12, 2012) M. Walter Maxwell, W2DU, died July 3 at his home in DeLand, Florida, of natural causes. He was 93. Maxwell was best known in the Amateur Radio realm for his ground-breaking series of articles, "Another Look at Reflections."

Published in QST in seven parts from 1973-1976, the series explained in plain English concepts such as line loss, SWR, baluns and antenna tuners. The articles were later compiled into a book, Reflections: Transmission Lines and Antennas, which included additional

material on matching networks, antennas and the Smith Chart. It was first published by the ARRL in 1990 and went through several editions. Later editions were published by CQ Communications. Read more at <http://www.arrl.org/news/walt-maxwell->

w2du-sk-wrote-reflections. (Readers might remember that Walt attended our Hamfest several years ago when we hosted the presentation "Stand Up for Standing Waves." I had met Walt—who summered in Mt. Pleasant—the

preceding year after emailing him when I discovered a post from him online concerning his work in getting WCEN-AM on the air. I spent a pleasant lunch in the company of this very knowledgeable and accomplished man,

and I will remember it fondly for the rest of my life. The local obituary for Walt Maxwell can be viewed online at <http://www.legacy.com/obituaries/themoringsun/obituary.aspx?n=m-walter-maxwell&pid=158469978> -Ed)

Tips: DIY Equipment Labeling

(ARES E-Letter—July 11, 2012) Here is an interesting DIY project for labeling your equipment with tape < <http://blog.makezine.com/2012/02/18/make-projects-soda-can-label-embossing/> >. This tape should be fairly permanent if you use pop rivets to fasten it to

something. Seems like it would make a good equipment ID for when you have to take expensive stuff into the field (emergency exercises, Field Day, or actual emergencies). And several locals swear by E-6000 glue as an alternative for application of the labels. --Rick Herndon,

K5FNI, Mathis, Texas; Life Member, ARRL; Official Emergency Station (*The article in question deals with using aluminum pop cans as the source for "tape" strips to run through an inexpensive Dymo tape labler to create permanent tags for equipment.*-Ed.)

Technical Topics and Information

(ARRL Contest Update—July 4, 2012) To pass cables underneath a driveway or walkway and if you have access on each side underneath, you can "drill" a hole with some PVC pipe and leave the pipe in place for use as a conduit. What's needed is a nozzle of some kind at the "drill" end of the pipe, and a threaded garden hose connection at the other. The nozzle can be a PVC pipe cap with some small holes drilled in the end. Water pressure will wash away the soil ahead of the nozzle. Use stiff PVC sections with fittings that can be screwed together. Add more sections as you work the pipe under the drive. Note that if you run into a rock, you're "done" and will have to try another location. Hardware stores may also have "water drill" kits that do the same job. (Thanks, Charlie NØTT and Mike K6BR)

- The ARRL web site offers a three-part series about lightning protection <<http://www.arrl.org/lightning-protection>> and the IEEE also publishes a lightning protection guide <http://www.lightningsafety.com/nlsi_lhm/IEEE_Guide.pdf>. (Thanks, Tom WØIVJ and Larry WØQE)

- Here is a simple RC filter for the high-frequency hiss in audio output stages based on the LM386 <<http://www.wentztech.com/radio/Technical/Misc/lm386.html>>. Originally described in the *SPRAT QRP* journal <<http://www.gqrp.com/sprat.htm>>, quite a number of audio accessories and rigs use

this IC. Getting rid of the hiss reduces operator fatigue quite a bit! (Thanks, Brien VE3VAW)

- If you are just learning how to use an oscilloscope (or want to learn) the *Instructables* web site offers a nice introductory tutorial on learning to use the eyes of the electronic workbench <<http://www.instructables.com/id/Oscilloscope-How-To/>>.

- Why are the outer shells of some coaxial power connectors positive when most are grounded? Steve KD1JV answers the question. "The reason the shell is positive is so when you have a battery-operated device with an ac adaptor jack, the shell is what activates the switch inside the jack to disconnect the internal battery...having the plus (contact) on the shell simplifies the jack wiring. Otherwise, you'd be switching the ground to the battery, and that could lead to complications. For stuff which does not have internal batteries, you will often find the adaptor which comes with the device has a negative shell."

- Dink N7WA recommends the Pyle-Pro PHA40 4-Channel Stereo Headphone Amplifier that the Mike & Key Club uses at Field Day every year. Another recommendation comes from Scott W5WZ - he says, "I've had great luck using an ART HeadAmp 4 Headphone Amp. They seem to be pretty immune to RF and have independent audio gain for each of the 4 outputs. A plus is that all inputs and outputs have par-

alleled 1/8" and 1/4" jacks."

- One of the annual thorny problems is trying to minimize coupling between Field Day antennas while staying within the site size rules. Tom W8JI tackles this problem on his website and opines, "Having two antennas in the nulls of each other is worth a whole lot more than distance." <http://www.w8ji.com/antenna_coupling.htm>

- The W1PNS/WAØITP/AB8XA Battery Life Estimator is a really handy tool for testing battery capacity - something important at Field Day and for portable or emcomm use all year long <http://www.4sqr.com/Battery_Capacity/index.php>. (Thanks, TJ WØEA)

- Here's a tip from TS-590S owner Mark K6UFO that might also have some utility in other radios with adjustable display colors or shading - "I've read that you should configure the Menu A settings in amber and the Menu B settings in green, so you can tell them apart. Menu A/B settings are discussed in the manual on page 14."

- *Popular Mechanics* has published the plans for an Arduino-based EMI detector that translates RF field strength into an audio tone. It's designed to help sniff out emitters of radio energy around the house. I wonder what it would do during a contest weekend? <<http://popularmechanics.com/emidetector>>

Magazine roundup:

• *National Geographic* for June 2012 - "Solar Super Storms - How they could impact our high-tech world". Along with numerous fetching photos, the story covers the history of solar storms beginning with the enormous flare of 1859. Operators who were on the air during the 2003 CQ WW SSB contest will remember well the effect of the large flare, filling the bands with hiss and reducing the strongest signals to whispers.

• *Popular Mechanics* for July 2012 - "Welcome to the new solar max-

imum", more coverage of solar storminess which seems to have captured the public's attention. The article includes a good summary of the current solar monitoring satellites. The issue also includes "Build Your Own Telegraph" that lists parts and diagrams of a neat project for kids and students.

• *Elektor* for May 2012 - part three of the "AVR Software Defined Radio" adds an active ferrite antenna kit for VLF-MF reception and instructions for changing the tuning higher in frequency.

• *Wired* for June 2012 - Mythbusters host Adam Savage authors a great article on science and tech projects for you and your kids. He doesn't mention ham radio but you can run with the idea!

Technical Web Site of the Week - From *ARRL Propagation Bulletin ARLP026*, the Kyoto World Data Center for Geomagnetism publishes planetary K and A indices all the way back to 1932. With a perpetual calendar you can find your favorite contest weekend for any year, as well

Swap 'n' Shop

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" Heliac 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)

MARC Vital Statistics

Memberships Expiring in July

AB8TJ
KA8Ezt

KC8BOP
W8QN

Memberships Expiring in August

KB8QYB
KC0CJC

KD8IVZ
KD8IWB

Memberships Expiring in September

KC8RTW
KD8HIH
WA8LQD

Current Active Club Membership 48

Birthdays Celebrated in July/August

KB8RCR 7/2
KG8YG 7/6
K8RRB 7/8
KA8ORL 7/11
K8SQB 7/17
KD8DWX 7/21
WB8RCR 7/21

N8LMS 7/27
W8OKN 7/30
N8XD 8/1
KB8QWO 8/3
KB8QYB 8/9
N8LBF 8/17
WB8BPT 8/18

W8JB 8/23
KD8MRB 8/24
WB8FYR 8/24
KD8IWB 8/27
N8DHF 8/29
KD8EUR 8/31

Anniversaries Celebrated in July/August

K8SQB and Mary 7/16
KC8RTU and Brenda 07/20
W8AWS and Delores 07/20
KD8MQX and Emily 7/20

WB8FYR and WD8ODG 8/13
KA0KPP and Gail 08/19
W8JB and NT8Y 08/21

Information is from data received 6/12/2012

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