

President Vice President Secretary Treasurer W8KEA Station Trustee Midland County EC/RO Midland County AEC CQ DX Editor Newsletter Editor Newsletter Publisher Field Day Chairman Web Page Chairman Club Historian Quartermaster Public Information Officer Swap Committee

Lee Hodges KC8ITI (989) 652-6213 Chris Rose KB8UIH (989) 832-7179 Linda Hodges KC8MUD (989) 652-6213 John Wolters W8QN (989) 832-9122 (989) 631-7748 Larry Macklin N8CGP John Wolters W8QN 989) 832-9122 Chris Rose KB8UIH (989) 832-7179 '989) 835-1307 Don Christensen W8WOJ Pat Mullet KC8RTW (989) 828-6657 Michael Vecchitto KB4EIZ '989) 832-3932 John Tallman KB8PGW (989) 859-0364 John Tallman KB8PGW 989) 859-0364 John McDonough WB8RCR (989) 631-0178 Stan Rowe K6VWE (989) 837-7252 (989) 835-5562 Bill French AB8JF Pat Mullet KC8RTW (989) 828-6657 Keith Johnson KB8SOE / Ch (989) 488-4337 Michael Vecchitto KB4EIZ (989) 832-3932 Jeff Mowery N8KS 989) 615-3715 Pat Mullet KC8RTW (989) 828-6657

LIFE MEMBERS

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

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

> Next ARES® /RACES Meeting — Thursday May 6, 2010 Salvation Army Building, 330 Waldo 6:00 PM

Next CLUB MEETING — Thursday May 6, 2010 Salvation Army Building, 330 Waldo 7:30 PM Talk-in on 147.000 MHz +

May 2010

View from the Top of the Tower Lee Hodges, KC81TI

I haven't started to count the hours till retirement yet but I'm getting close. I have to apologize to you all for being a little slow on following up on club business and emails. It has been a real hassle getting all of the paperwork done so I can leave. After 10 plus years the guys I work with have decided that they should know what I do every day so I've been doing nothing but training them and writing notes on everything I'm responsible for. Add to that the sale of this house over here in Frankenmuth and you can see that I don't even have time to scratch. At least as I write this, the house is sold. We're still negotiating all of the details but it looks like I'll be unemployed and homeless soon. We are still looking for that perfect place closer to the action in Midland and of course, closer to all of our friends in the club.

Thanks to all of you that came out for Skywarn® training at the last meeting. Rich Pollman from the National Weather Service did his usual excellent presentation. If you didn't make it, ask some of the members who did attend what happens when a tornado intersects train tracks when a freight train happens to be at the exact same spot. Thanks to Rich for spending time with us again. We









will return to the Salvation Army building for our May meeting,

On May 1st our club is supplying support for the 2010 MS walk. It's still not too late to sign up so give Chris, KB8UIH a call if you would like to help.

The Dow Walk/Run is taking place on June 5th. John, W8QN,

MARC MEETINGS

Chris Rose, KB8UIH, 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 Chris at (989) 832-7179, or via e-mail: kb8uih@arrl.net

COMMUNICATIONS

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

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

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

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

Isabella/Clare Counties - Contact Gu 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. ht-tp://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 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 Michael, KB4EIZ, at kb4eiz@yahoo.com.

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 Lee, KC8ITI (kc8iti@arrl.net) passed around a sign-up sheet at the last meeting. It takes quite a few operators to support an event of this size so your help will be appreciated. Please let John know if you can lend a hand.

June 19th, 2010 is the date of our annual swap. If you are attending any upcoming swaps please be sure to take some flyers with you. I'm sure sign up sheets will be at the next couple of meetings for you to let us know what tasks you would like to help with. If you need flyers or want to have your ideas for the swap considered, contact Keith, KB8SOE or any of the swap committee.

2010 Field Day will be at Dow Diamond. This looks like it will be a good PR event for the club. Of course, it is a change of venue so the logistics will be very different than in years past. Jeff, N8KS and the Field Day committee are working with the Dow Diamond folks on our setup for the weekend. If you have any questions or concerns give Jeff or any member of the field committee a call.

Last year we participated in the Dow Diamond Community Organization of the Night by setting up some stations inside of the stadium for an evening home game. We are going to try this again. Pat, KC8RTW just emailed me that we have Wednesday July, 21st as our date. Mark your calendars and join us for some radio fun and day at the ball game.

There's lots of club related stuff coming up in the next couple of months so if you can find the time to give us a hand on any of our projects be sure to let us know.

Last weekend all of the Midland realtors held open houses to get people to make offers before the tax incentives expire at the end of the month. When I brought up a list of open houses there were 157 of them scheduled. Linda and I made a list of 9 of them that were in our price range to take a look at. Some of them were nice and some of them were just not what we were looking for. I think we have settled on one that we may make an offer on if we're sure the deal will go through on this house. The down side of all of this is that I'll have to take down all of my antennas and get all of my radios ready to move. Plus I have to box up a few more years of accumulation. Hopefully my radio down time will be really short.

Best regards, Lee – KC8ITI

MARC Minutes Linda Hodges, KC8MUD

The meeting started at 7:00 P.M. at the Law Enforcement Center with a two hour long informative presentation by Rich Pollman from the National Weather Service.

At 9:00 P.M. Lee KC8ITI brought the Amateur Radio Meeting to order with 27 in attendance. A sign-in sheet was passed around and introductions were made. A motion to approve the minutes from the last meeting was made and passed. The treasurer's report was put on hold until the next meeting.

EC/RO John W8QN- John says operators are needed for Simulated Emergency Training on April 10th and May 13th.

A sign-up sheet was passed around for the Dow Run taking place on June 5th. Please let John know if you can help with any of these events.

QSO Party-Lee KC8ITI- On April 17th and 18th the Michigan QSO party sponsored by the Mad River Radio Club will be on frequencies 10m thru 80m. Put

your county on the list of participants.

MS Walk-May 1st is the day and operators are needed between 7:45 A.M. and noon. The start/finish location is the Central Middle School on Rodd Street between Reardon and Collins streets. Lunch is provided. Please let Chris KB8UIH know if you can help on that day.

Swap-Keith KB8SOE- Vendors have invitations and we are waiting for the response. One main focus is on the main presentation.

Press Releases and Field Day -Pat KC8RTW- One week before Field day has been proclaimed Amateur Radio Week. Classes query? No immediate plans. Please send Pat your newsletter articles.

Cadillac Swap-Lee KC8ITI- That date is May $1^{\rm st}$ at the Cadillac High School.

Repeater Status -Larry N8CGP- The repeater voter is on the bench awaiting repair, updates at next meeting.

Tower Help-Bob W8LSS- Bob needs help lowering a tower. Please contact Bob if you can help.

QST Magazines - Bill AB8JF- Bill would like to find someone who would house Raleigh's W8QOI (SK) QST collection dating back many, many years. This is a very interesting collection and one that should be preserved.

Public event –Jack NX8A- Jack's period attire and Morse code event has been put on hold until a new venue has been found. Give Jack your ideas for this fun and informative event.

NET Controls:

April 8th Ryan KC8PMX April 15th Keith KB8SOE April 22nd John W8QN April 29th Michael KB4EIZ

A motion was made by Keith KB8SOE to adjourn the meeting and seconded by Jeff N8KS. The meeting ended at 9:50 P.M.

Respectfully submitted, Linda KC8MUD MARC Secretary

My Two Cents

Pat Mullet, KC8RTW

Things are starting to get hectic in the PR side of the Club. The flyers for the Swap have been created and are being distributed and the press releases have been drafted and will be going out in June, including a special announcement to be sent to clubs throughout the state announcing the "Standing Up for Standing Waves" seminar.

We've secured permission to use the Dow Diamond and Great Lakes Loon's logos in our Field Day flyer, which has also been created—both flyers will be run in the May and June editions of the Newsletter, and should be available on the website so that members can print them out and distribute as needed.

Field Day press releases have been drafted and are ready for last minute tweaking before being sent out in late May/June so as to keep them as up-to-date as possible. I've made an effort to slant the releases to highlight the fact that we will be conducting Field Day at Dow Diamond

Efforts are afoot to secure proclamations from both the City and County of Midland, as we do every year. This year, I'm planning an added twist by inviting the City Council and the County Board of Commissioners to the site to recreate the presentations as a photo-op, including getting them on the air for a couple of contacts

I've a few other tricks up my sleeve that I'm going to keep mum about until things are finalized, and the ARRL will be conducting an online Webinar April 22 to expand on Field Day PR ideas, so there may be more forthcoming.

As noted above, this year we will be operating Field Day from Dow Diamond.

It appears we'll be set up on the lawn at the end of Main Street, between the main gate and the river. There's nary a tree to be seen in that area, so we need to consider ways to support antennas. In years past, Lee, KC8ITI has used his crank-up PVC towers, and Denny, WD8BPT has allowed us to use his vertical antenna. I have a couple of fiberglass mast kits that will support my G5RV, but we need to think about other ways to support antennas. The Club does have a beam antenna, either a duo- or tri-bander, and I have suggested that we use an aluminum extension ladder as an ersatz "crank-up" tower to support that. Similar supports could be used to support our dipoles, though the metal ladders could de-tune the antennas. One last note-the Dow Diamond management has asked that we keep the site looking presentable, so I think we should use that request as an excuse to do some planning in regards to siting our antennas. Often, we put them up using any available support and end up having to live with one antenna interfering with another. During past Field Days, many of us have worked the massive 24A site of W3AO, the Potomac Valley Radio Club & the Columbia Amateur Radio Association—they manage to keep 24 different transmitters up and running on different modes and bands all weekend, and this takes a great deal of planning. If you follow this link <www.kkn.net/dayton2009/ W3AO 2009.pdf> you can get an idea of what goes into running this kind of effort.

That will do it for this month—I've got to get back to work. Hope to see you on the air.

73. Pat KC8RTW

Upcoming Events

May 1 MS Walk Jun 5 Dow Run Jun 26/27 Field Day

Michigan Hamfests

Apr 17	Milford
May 1	Cadillac
Jun 5	IRA Hamfest,
	Hudsonville
Jun 6	Chelsea
Jun 19	Midland
Jun 20	Monroe
Aug 7	Escanaba
Aug 15	Lapeer
Sep 19	Adrian
Oct 16	Holland
Oct 17	Kalamazoo
Dec 10	Mt. Clemens

* denotes tentative date based on 2009 event

Area Nets SVARA; Mn, 147.24 MHz, 2100 ET Gladwin; Tu, 147.18 MHz, 2000 ET BAARC; Tu, 145.31 MHz, 2100 ET Edmore, Th. 146.8, 2000 ET MARC: Th, 147.00 MHz, 2100 ET District 3 ARPSC; Su, 145.31 MHz, 1800 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

S-XL \$10 2X - 3X \$12 S- XL \$12 2X - 3X \$15 S- XL \$18 2X - 3X S- XL \$24 2X - 3X \$26 S- 3X \$30 S- XL \$42 2X - 3X \$45 Spring Jacket S- XL \$32 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.

73 and gud DX

After writing the CQ DX column in the MARC newsletter for 25 years or so, I've decided to put away the pen/pencil and retire. These days there are multiple sources for timely DX information much more comprehensive than my small piece. Keep those keys/keyers on the ready and keep your ear open for those

exotic DX callsigns.

73 de Don W8WOJ

ARES®/RACES

As with last month I will start with dates for your calendar.

Sat. May 1st - MS Walk, 7 am to noon

Thur. May 13th - District Disaster Exercise

Sat. June 5^{th} - Dow Run, 7 am to noon

I want to thank Roger, KB8VSS; Pat, KD8IVZ; Jeff, N8KS; Keith, KB8SOE; John, NX8A; Chris, KB8UIH, and Bob, W8LSS for their assistance in the April 10th ARES exercise. We acted as a relay station to our northern neighbor - Gladwin County. We were able to communicate via simplex VHF to Saginaw, Tuscola and Genesee counties in the morning with Tuscola and Genesee dropping way down as the day progressed. I don't quite know what I had expected but we did pass traffic to and from the District 3 EC and other county EOC's. I think it was a good educational experience for Pat and Jeff. Look for more exercises in the not too distant fu-

May 13th is the District Disaster Exercise. This is a working exercise for the emergency services of Midland, Bay, Saginaw, and Flint. As I learn more it is apparent that we will need assistance from Amateur Radio Operators during this exercise. As I said last month, my estimate is that Midland will need 6-10 operators with Saginaw needing many more. If you are available to help that Thursday please let me know. Assignments include riding in a bus, providing communications at the hospital and EOC, shadowing several of our political leaders and others. Look for more at the May Meeting.

Speaking of the May Meeting, I will be covering the basics of Packet Radio and if time is available other digital communications. We should have examples of 3 types of equipment setup for use in packet. Chris (KB8UIH) will have a

John Wolters, W8QN

TNC setup, I will have a modem and software setup, and Keith (KB8SOE) will have an entirely software setup. The intent is to make you knowledgeable enough to operate the equipment currently installed at our 3 county ARES sites and possibly answer any questions you have about setting up your own packet station. I had hoped to have an exercise with the county packet equipment in May but too many other opportunities have popped up. Perhaps after the June madness.

And finally - Need of help from other counties.

Sat. May 15^{th} - MS walk in Frankenmuth, 8 am to Noon

Sun. May 16^{th} - Swan Valley H.S. Run/Walk $\,\,$ 8 am to 2 pm $\,\,$

Contact Ron Huss KC8YVF, Saginaw EC, (989) 799-2679

Until next time,

John Wolters W8QN Midland County EC/RO

MARC Goes Out to the Ol' Ball Game Pat Mullet, KC8RTW

MARC members will remember last year's successful opportunity to do some public relations while enjoying a great baseball game as a part of the Great Lakes Loon's Community Organization of the Night promotion. Evidently, we made a favorable impression with the Loon's management, as we've been invited to participate in the promotion again this year, and the Club has decided to accept. MARC night has been scheuled for Wednesday, July 21st.

During the game, we'll be able to set up and man a display table on the mezzanine, will have our logo shown on the scoreboard and have a short promotional spot read over both the PA system and on WLUN 100.9 FM, the Loon's ESPN affiliate which will be covering the game.

As we did last year, we're planning on making this a club outing and social event. Members and their guests will be responsible for their own tickets, but we'll try to arrange to have first call on a block of seats so we can all sit together. As such, we'll need a head count of everyone who might be interested. A sign-up sheet will be passed around at the Club meetings, or you can email me at kc8rtw@arrl.net. We'd like to see as many members as possible attend and give the community a good impression of our group.

Good Turnout for Midland Skywarn®

The NWS presented the annual Skywarn® training session for Midland County to a packed house at April's meeting. Pleased with the results, Rich

Pollman, Warning Coordination Meteorologist of NWS Detroit's White Lake Forecast Office reports that 60 people were in attendance. The MARC sign-in sheet only logged 27 members, so the public was well represented.

Volunteers Needed for MS Walk May 1st - Chris, KB8UIH

Please consider stepping up and supporting the MS Walk this year.

This is the longest running event we do next to the Dow Run.

I have a vested interest in seeing that this event is successful. I have a relative that suffers from a form of MS and work daily with others that suffer from other forms of this hideous disease.

I may have promises from about 5

operators so far including myself. This event needs at least 10 to make it happen the right way. I would love to have 15.

We will start and end at the Central Middle School on Rodd near Collins Streets.

As of this time, we are planning to be in the school as the SATERN vehicle isn't available. Operators are needed from 8 AM through about Noon. There is one rest stop at the Farmers' Market near the Tridge. Other ops are needed as shadows and will need to be mobile; intersections need to be watched; two are needed at the Net Control Station.

Food and refreshments are usually supplied for everyone. I will see about shirts as new people are in charge again this year.

"Standing Up For Standing Waves" Demo at the Midland Swap

In 1986 I was blown away by a demonstration at the 1986 ARRL Great Lakes Convention in Saginaw. Smith, W8YZ, had put together a 200 ohm open wire transmission line made from 3/8" stainless steel rods about 12 feet long. He hooked up a 2 meter transmitter, making the transmission line about 2 wavelengths long, then terminated the transmission line in various items of different impedance values, including open and short circuits. Nothing too amazing about that but then he pulled out several little devices with little incandescent bulbs that allowed me to see the standing waves on the line!

With one device he was able to show the voltage between the two conductors of the transmission line. You could actually see the high and low voltage points along the line as the bulb brightened and dimmed as it slid along the transmission line! He also had a current detector with a bulb the behaved the same way but not at the same points! He had another sled, as he called it because

they are all constructed to slide along the horizontal transmission line, called a directional coupler or reflectometer, which measured, by brightness, either the forward power or the reflected power depending on which way he oriented the sled on the line. With this set up you can perform a host of experiments and see the results with your own eyes, immediately.

In life there are certain events which are permanently burned in your brain. For me, this was one of them. Ever since then I have wanted to build one of these units. Now that I am retired, I started looking into doing just that. When I contacted W8YZ about this, I found out that he has passed the torch to Bill Hays, AE4QL, and that Bill has upgraded and expanded the demonstration.

The good news is that now you, too, will be able to see this demonstration which he calls, "Standing Up For Standing Waves. Bill Hays has agreed to bring his demonstration to the Midland Swap on June 19th. If you're confused

about SWR, reflected power, or matching an antenna to a feed line, you won't want to miss this demonstration. If you are like me, you learn better by seeing than reading something in a book. You will actually get to see a Standing Wave on a transmission line. You will get to see firsthand the effect of dielectrics on the velocity factor of a transmission line, the SWR upstream and downstream from a matching device, stub tuners in action and what happens to the standing wave as you change the impedance at the end of the transmission line and MUCH MORE. If you just got your ham ticket or you are an old timer, you will be amazed. Here is a link to Bill's web site where you can learn more and see pictures of his apparatus. tp://home.windstream.net/whays101/

Mark your calendars for the Midland Swap on June 19th. You won't want to miss this one."

Best Regards, Dennis, N8ERF

Field Day Supplies Now Shipping!

The ARRL has started shipping the 2010 line up of Field Day merchandise. Available are the 2010 Field Day pin, as well as a limited selection of past year's pins, and the GOTA pin. This year's version of the Field Day T-shirt sports

the 2010 logo over the left breast on a navy blue shirt, with this year's motto emblazoned across the back. New this year is a 16 oz. ceramic coffee mug, just the thing to keep you awake during the long overnight shift.

This and other gear is available online at the ARRL website: http://www.arrl.org/catalog/?item=NO-0021#top

MARC Finds New Site for 2010 Field Day

MARC has a new home for Field Day this year. We've been granted permission to operate from the grounds surrounding Dow Diamond in historic downtown Midland for the entire weekend. Current plans are to set up shop on the southwest lawn off of the main gate. Details such as layout of the site and parking are still being worked out by the Field Day committee.

The Committee will need volunteers to help set up and tear down, as well as those willing to volunteer to operate or bring their gear to help in the cause. Because we'll be in such a public place this year, and since the Loons will be playing a home game Saturday night, we expect more in the way of foot traffic in and around the site. Volunteers will be needed to help show folks around and ex-

plain things, as well as make certain no one gets into trouble by grabbing the wrong wire. If you'd like to help out, contact Keith, KB8SOE. And don't forget our traditional pot-luck dinner Saturday night!

In 2009, a record 2,642 clubs, groups and individuals across the US and Canada submitted score-sheets to the ARRL, who sanctions and conducts the exercise. These logs recorded participa-

tion by 37,592 individuals all over the world--over 1.36 million two-way contacts were reported during the all-too-short 24-hours of the event. MARC made 456 contacts and received a score of 2,348, working as a 7A (seven radios, emergency power.) With any luck, the bands will be in better shape this year so our score should be a bit more impressive.

Strays

(ARRL Contest Update, April 14, 2010) Let's say you have some scraps of surplus CATV hardline - not long enough for antenna feed lines, but what ham could throw them away? David K1TTT suggests making stub filters out of them. Assume a velocity factor of 0.81 to 0.83 (or measure it with an antenna analyzer) and create your own set of high-Q RF filters. The lower loss of hardline, compared to flexible coax, will result in better cancellation of the undesired signal.

From the Amateur Radio Newsline for 1 April, we learn that the Consumer Electronics Association says many consumers are unaware of local options for recycling unused consumer electronics products. The CEA maintains a Web site to find electronics recycling opportunities in a specific area and other information as well. This is a great way to find out where to properly dispose of that old analog TV set, used up household batteries, broken electronic devices, etc.

Hams love a good map and a map-making tool attracts them (well, your editor, anyway) like flies to honey. Tom K5RC found a link to NS6T's azimuth mapmaking Web site http://ns6t.net/azimuth/azimuth.html— it's easy to use and the price is right! Enter your location, tell it how far to extend the map's outer reaches and back comes a PDF map that will look great right above the rotator control box! The map's coverage can be all the way to the antipode (great for HF DXing) or a smaller radius for local or regional coverage.

Why should you trade in that comfy old lineman's belt for a full-body har-

ness? Dave N4ZKF sent a link to a Gravitec

http://www.gravitec.com/about-us/GRAVITEC-VIDEOS.html video showing falls into a waist belt and into a harness. Just click on the button that says "Articulated Mannequin Drop Tests." Put your mouse over the lower left of the screen and click on the arrow to start the interesting video. Food for thought.

Solar cell technology continues to make incremental improvements on many fronts. The latest is somewhat counterintuitive - a new and cheaper way of turning the cell surface black. The Technology Review story "Black Silicon Makes Solar Cells Cheaper" describes the process and why the black surface improves cell efficiency.">http://www.technologyreview.com/energy/24968/>describes the process and why the black surface improves cell efficiency.

Residents of rural areas and Field Day antenna planners might be interested in using the ARRL's online QST archive to read the Aug 1956 article, "Multiple V Beams - High Gain In All Directions With Only Four Wires". The clever design uses some relays and one unusual V beam to cover the globe sans rotator. Old-timers will be surprised to learn the author's name and, especially, his call sign! (Thanks, Chuck WØDLE)

Why buy the fancy "lawn staples" to hold down radials (or sod or hose or anything else, for that matter)? Armed with a stout wire cutter, you can make hundreds from roll of galvanized or aluminum fence wire at a fraction of a cent per staple. Or use the even more inexpensive iron rebar tie wire that will rust quickly

away without a trace. Regular hair bobby pins can also work in firm soil. (Thanks to the denizens of the Towertalk email reflector)

If you live near an airport, putting up a tower takes on additional requirements for avoiding interference with air traffic. Here's your first stop, the FCC TOWAIR Web page. You can get your exact geographic coordinates from Geoand your elevation from Veloroutes, for example. Should the results indicate a conflict (or a near conflict), the airport manager can put you in touch with additional resources. Obstruction evaluation can be done on-line with the FAA, as well. The applicable rules about who needs to file information about their towers is stated in CFR Title 14 Part 77.13. (Thanks to the Towertalk Reflector inhabitants)

Daniel K7DGL notes a new iPhone app, "Allocations", that places the FCC frequency allocation reference database at your fingertips. The iPhone could be an emerging platform for all sorts of wireless-over-wireless applications.

OPERATING TIP: Late spring early summer contests open a window of 20 meter propagation (and 30 and 17 meters, too, on occasion) in the evenings across northern polar paths. (Similar southern path enhancement occurs in late fall for our Southern Hemisphere friends.) Later in the season, increased absorption reduces signal levels on this path. With the rapidly improving solar flux levels, don't assume the higher bands are dead after dark as they have been over the past couple of years.

Admission \$5.00 Tables \$5.00 Trunk Sales \$5.00

> Talk in: W8KEA +147.00 MHz

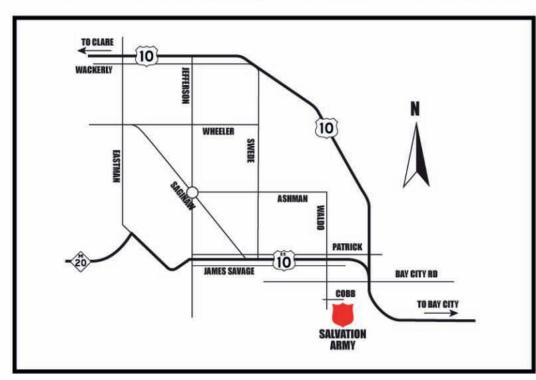
www.w8kea.org

VE Exam Registration 8:00 am Testing starts at 8:30 am

Presentation Schedule TBA

For Information & Table Reservations:
MARC Hamfest
PO Box 1049
Midland, MI 48642
or call
Keith, KB8SOE at
[989] 488-4337
email: kb8soe@arrl.net

SALVATION ARMY BUILDING 330 WALDO, MIDLAND, MI





Featuring a must-see seminar entitled "Standing Up For Standing Waves" by Bill Hays, AE4QL

New & Used Amateur Radio Equipment Parts & Coax & Connectors Large Selection of Vacuum Tubes



Midland Amateur Radio Club

Invites You to Field Day 2010



2:00 pm Saturday, June 26 through Noon, Sunday, June 27 at



Dow Diamond 825 East Main Street, Midland

Come Watch • Come Participate • Come Get on the Air Learn How You Can Explore the World with Amateur Radio Everybody Welcome • No Charge

> Demonstrations of Different Communications Techniques from Classic Morse Code to Cutting Edge Digital Voice and Satellite Communications All Without Cellular or Internet Technonlogy

> > For More Information Contact: Keith Johnson, (989) 488-4337 Talk-In Repeater: W8KEA - 147.000+ MHz www.w8kea.org

AMATEUR RADIO Goodwill • Service • Fun





Amateur Radio is a Contact Sport!

Swap 'n' Shop

For Sale: 2.4" #31 mix toroid cores. These are the proper cores for building common mode chokes (current baluns) with high isolation. 5 cores used with 5 or 6 turns of LMR-400, RG-8 or 8X will give the equivalent of the high-priced baluns for the cost of the inexpensive ones. Contact Roger, K8RI

Want to Buy: An older 2 meter transmitter or transceiver that does not have the automatic SWR activated shut down circuit. Crystal controlled is OK. I need something in the 20 watt range. Dennis, N8ERF

Wanted: I'm looking for the drop-in battery charger that was supplied with

the old Radio Shack handheld model HTX-202. Email or phone W8WOJ

For Sale: Mt. Pleasant 442.8250 MHz repeater for sale—\$1200.00. \$100.00 down and \$50.00 per month until paid in full. Jack, KC8RTU, 989-828-6154



ARRL FIELD DAY 2010 June 26-27

www.arrl.org/contests/announcements/fd/locator.php

MARC	Vital	Statistics
		0 00000

Memberships Expiring in April 2010

W8QN WA8LQD

Memberships Expiring in May 2010

KB8LQM KC8ZMQ KC8IHB W8CVZ

Memberships Expiring in June 2010

N8CGP NX8A WD8AXR KA8HQW N8KRL W8LSS WA8KJR WD8SDX

Current Active Club Membership 66

Birthdays Celebrated in April/May 2010

 KC8TQS 4/9
 W8CVZ 4/28
 KD8FSI 5/12

 KC8IHB 4/19
 KA8EZT 4/28
 KD8MQZ 5/18

 KD8HIC 4/27
 N8JBW 4/30
 KC8MUD 5/19

 WA8LQD 4/27
 KD8HIG 04/??
 WD8AXR 5/25

 KD8MQX 4/28
 KD8MRC 5/12
 WD8SDX 5/27

Anniversaries Celebrated in April/May 2010

KB8QWQ and Kate 05/16

Information is from data received 3/5/2010 Any corrections or questions contact John, W8GN



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	S	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-m	nail		

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