



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 (SK), Don W8WOJ, Lee KC8ITI, Dennis N8ERF, Larry N8CGP, Denny WD8BPT

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 December 6, 2012, 6:00 PM

Next CLUB Meeting — Thursday December 6, 2012, 7:30 PM

Salvation Army Building 330 Waldo Rd.

Talk-in 147.000+

December 2012

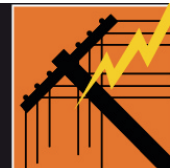
Static Discharge

Kevin Martin, KD8QAM

Happy Holidays to all! This month I would like to give a special thanks to all that helped to make this year's Santa Parade a blast. Ryan KB8RCR, let the club use his truck and trailer for the float and tow vehicle. Ryan also really helped to outfit everything with his generator and Christmas lights. Dorie N8WTQ, Linda KC8MUD, Jack W8ZSX, and Cindy WD8BDM worked at an amazing pace with everyone to get things decorated for the parade. Dennis WD8BPT and Lee KC8ITI drove the communications vehicle. There was a lot of hard work at the last minute to get everything decorated in the Christmas spirit. Everyone had a great time, and I hope that you all will be able to make it to the next parade. Everyone who wanted to ride the float did, and those who wanted to walk had their chance. Everyone did a great job to make sure everybody had a fair share of sugar.

I also would like to thank Dennis N8ERF, for his tireless effort to move the youth radio club into Midland High School. The countless hours that he has spent already, trying to get the forms and backing to make this happen have been invaluable. The pro-

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



**AMATEUR
RADIO**

cess is just getting started and there is a considerable amount left to do.

I am still trying to get an antenna up. I have removed the vertical from my car with plans to put it near the peak of my roof for a temporary fix. So far it's just holding a bench vice down. I am getting

good reception on 2m and 440, but anything else is a stretch. I am doing quite a lot of volunteer work this month and I am not sure I will be up on the air at all. I should have a few great stories of life to add to my collection. Giving a gift of a smile to someone is just as rewarding

as watching someone open something on Christmas morning.

Happy Holidays and I hope to see everyone at the Christmas party on December 7th.

Kevin KD8QAM

MARC Minutes

Linda Hodges, KC8MUD

The meeting was called to order at 7:30 P.M. by Kevin KD8QAM with 25

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)

people in attendance. Introductions were made and a sign-in sheet was passed around. If there are any corrections or additions to the minutes please bring them to the attention of the secretary.

• Treasurer's Report- John W8QN- Thank you to all who have renewed their dues.

• EC/RO Report- John W8QN- A packet test was held in Midland two weeks ago. Discussion followed about several items that need to be corrected. There may be another test in January or February. There is no January ARES meeting.

• Christmas Party- The party is on Friday, December 7th at the Lee Township Hall. Don't forget your white elephant gift. More details at the next meeting.

• Santa Parade-Ryan KC8RCR- Takes place on November 17th. Line up is at 9:00 A.M. and the parade starts at 10:00. See Ryan if you can help.

• Isabella County- Pat KC8RTW- Isabella County ARES®/RACES will have its first directed NET on Wednesday, Nov. 7th. Joseph Rivard, KD8TCH is NET control.

• Video- Kevin KD8QAM- Kevin attended a SVARA meeting and brought back a video about what Field Day is all about. The movie was exceptional and enjoyed by all. A lively discussion followed the viewing. The SVARA club meeting is held on the first Friday of the month at the Red Cross building in Saginaw.

• Club Trailer-Denny WD8BPT- Denny brought up the idea of the club owning a trailer that our club could use to store and haul equipment to radio events. A long discussion followed. More information will be forthcoming. Lee KC8ITI will chair a committee that will look into the cost.

• Stuff- Del WB8FYR - A man contacted Del to evaluate a large amount of radio equipment that he has in a storage unit. Kevin KD8QAM has offered to check it out and get more information.

• Testing session-Lee KC8ITI- A testing session will be held at the Salvation Army Building on November 30th with a 6:30 check-in and testing beginning at 7:00 P.M.

• Middle School Club-Denny WD8BPT- Denny N8ERF bought four electrical snap- kits for the students in the club to use. In addition, they may be applying for some grant money to purchase some radio and antenna equipment for the high school club.

• NET Control:

Nov 8th John W8QN

Nov 15th Larry N8CGP

Nov 22nd Kevin KD8QAM

Nov 29th Jack NX8A

An Adjournment motion was made by Larry N8CGP and seconded by Chris KB8UIH.

The meeting ended at 8:20 P.M.

Respectfully submitted by

Linda KC8MUD for

Dorie N8WTQ

My Two Cents

Pat Mullet, KC8RTW

For the last couple of months, I've been putting in a couple of hours each weeknight on the HF bands. Nothing intensive, mind you, just looking around on 20 through 15 meters for anything interesting. I usually make a contact or two each night. After finally bagging Hawaii

and Alaska, I'm not concentrating so much on working all states, but building up my state counts so that it will be easier when I make the submission for Worked All States. Maybe I'll start work on Five Band WAS.

I've also been playing with DX spots.

My logging software has a function that displays the latest DX spots and with a single mouse click will tune your radio to the proper frequency. This is a fun feature, but I find that when running 100 watts and a wire antenna, it's nearly impossible to break through the pileups all the rare contacts seem to generate.

That certainly was the case in the recent Japan International DX contest a couple of weekends ago. Every JA station had 'em piled up so deep that you could try for an hour and not make a dent. And there's nothing so depressing as hearing the DX station come back to a station a state or two further away after you've been trying for the last half hour to break through.

For the last few weeks, I've been par-

ticipating in the Isabella County EOC net on Wednesday nights at 7:00 pm. While I'm not used to the format, Joseph Rivard, KD8TCH, the Isabella County EC/RO and net control, does a fine job in keeping the net moving and managing the flow of check-ins. As I indicated, the format is structured, with net control asking for check-ins against a list of registered Isabella County amateurs, but the last segment of the net asks for "guest" check-ins. If you've a spare moment, we'd be pleased to hear from you.

Since the time change at the first of the month, I'm finding that the extra hour of evening darkness makes an ideal time to go "play radio." Try it, and maybe we'll meet up on the air.

73, Pat KC8RTW

MARC Christmas Party

The MARC Christmas Party will be Friday, December 7th at the Lee Township Hall. Door will be open for social gathering at 5:30 PM and Dinner will begin at 6:00 PM. Cost for the meal is \$10 per person. Carousel Catering will be preparing the food again this year.

You may pay at the door but reservations are due by Friday, November 30th to allow the caterer to prepare to have suffi-

cient goodness on hand.

Don't forget to bring your white elephant gift.

The Lee Township Hall is located at the corner of 9 Mile Rd. and Olsen Rd. Talk-in will be on the Midland repeater, 147.00 MHz.

You may contact Dorie French to make reservations at (989) 835-5562, or via email at wm_here4u@yahoo.com.

Online Scanning

Mark Rodgers, KC8GRQ

Many of us use our radios for more than just making QSOs, Contesting and Nets. Some of us like to listen to what else is out there in the radio world. While most radios will monitor out of the Ham bands, some of us are limited to just one radio to use and can't listen to everything we want to at once. I am lucky enough to have collected (too) many radios over the years, yet for the longest time, most have sat unused, collecting dust. Since I am a big fan of VHF/UHF scanning and monitoring Public Service bands, I always have 1 or 2 scanners going at my desk, mobile, workbench and garage. I figured since I already have these scanners on 24/7 and also have extra computers and now multiple tower sites, I would share my extra radios with the general public. How do I do this? I provide online scanner feeds. Currently I only have 1 feed online, but in the past I have had multiple feeds at once. I am getting back into adding more. This helps the public, by allowing them to

listen in to the scanner audio online, with a computer or even a smart phone. In addition to Hams being able to listen in, *anyone* can listen in. This saves many people from having to buy a \$80-500 scanner and learning how to program it. It also allows you to listen in anywhere with your phone and an app, without needing to carry around another electronics device. You can be anywhere in the world with a phone or computer and listen in to your home area's activity.

The feed I currently am providing is for Midland County Sheriff, City Police and Fire Depts. You can find it online at RadioReference.com under the Live Audio tab, or with this link, <http://www.radioreference.com/apps/audio/?feedId=12168>.

There are many apps available for smart phones, most are free, some add extra features for the paid version.

All my feeds and info can be found at my website at <http://www.mark-rodgers.com/scanner/>

Upcoming Events

12/7 MARC Christmas Party

Michigan Hamfests

12/2 Harrison Township
1/20 Hazel Park
2/2 Negaunee
2/17 Livonia
3/16 Marshall
4/20 Highland
10/5 Petoskey

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

MARC MERCHANDISE

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

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

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

At the Next Meeting...

More details on the annual MARC Christmas Party.

December's presentation is by Ryan, KB8RCR: "So you want to get your "Worked All States?"

I am also looking for some extra equipment, either cheap or donated, to be able to provide more live feeds. I am looking for some VHF/UHF antennas,

coax, DDR2 Ram, 30-40GB hard drives and sound cards for the feed computers. If you have anything, please let me know. You can Email me at kc8grq@ya-

hoo.com

Mark Rodgers - KC8GRQ

Club Auction

The following equipment that has been donated to the Midland Amateur Radio Club has been deemed surplus to the needs of the club by the executive committee. Bids will be taken on the listed equipment until 6 PM on December 31st, 2012. Bids may be placed by emailing your bid to kc8iti@arrl.net, mailing them to me at Lee Hodges, 134 N. Homer Rd., Midland, MI 48640 or call-

ing Lee, KC8ITI at (989) 374-0032. I will not take bids over the air. When bidding please identify the item you are bidding on, your name and/or your call sign and the amount you are bidding. If your bid is low, I'll notify you to that effect and let you know what the current bid is on the item. The club through the quartermaster and/or the executive committee reserves the right to reject any bid

on any item if the bid is deemed not in the best interest of club. All equipment listed is "as is". If you are interested in examining any item up for bid, please call Lee, KC8ITI, to make arrangements to view the equipment.

Lee Hodges, KC8ITI - Quartermaster, Midland Amateur Radio Club

Heathkit IT-11 Capacitor Checker
Heathkit T-3 Signal Tracer
MFJ-202B RF Noise Bridge
Nibbling Tool
Micronta Transistor Tester Micronta 22-024
Realistic Microphone Stand 33-370A
Qual-Comp SWR Power Meter
Adjust-a-Volt variable transformer
Ten Tec 215 microphone
Kenwood TS-530S Transceiver SN#4020298
WC-528B RCA Transistor Tester
Micronta Digital Multimeter 22-191
Micronta VOM 22-201U
CB-170-2 SWR meter

Kenwood BC-9 wall charger
Alpha Delta-4 coax switch
Daiwa CN-103 VHF/UHF Wattmeter
Knight SWR meter
Icom BC-77a DC car charger
Yaesu MH-19 earphone/mic
GE base CB
TRC-417 CB
TRC-30A CB
Midland SSB CB
Larsen 2m antenna
Heathkit IM-25 solid state VOM
Boman CB

Dayton Hamvention Announces DX Theme for 2013

(ARRLWeb—11/15/2012)

Throughout its 62 years, the Dayton Hamvention® has showcased the best that Amateur Radio has to offer. Each year, a specific theme — such as Amateur Radio clubs, global friendship or the advent of digital modes — spotlights one of the many facets of the Amateur Radio Service. And when Hamvention opens on May 17, 2013, at Hara Arena, the 2013 theme DX Hamvention will reflect an important part of ham radio: the distant contact. "Hamvention is often an important DX destination for amateurs from all over the globe, Hamvention General Chairman Charles Kaiser, KD8JZR, explained. "Working DX is often a mix of magic, conditions and the

diligent application of radio theory."

Kaiser — who served as Hamvention Assistant General Chairman in 2012 — noted that many attendees to return each year to Dayton to meet other hams whom they have talked to on the radio. "The quest for that distant contact advances Amateur Radio on many levels," he said. "This year, the Hamvention team is honoring DX in all of its forms."

ARRL's large exhibit area at Hamvention, ARRL EXPO, has always included significant attention for on-air DX activities and the participation of many international visitors. "In addition to our many activities at ARRL EXPO — such as hands-on kit building, forums and membership services — we are

proud to support DXers from all over the world," said ARRL Marketing Manager Bob Inderbitzen, NQ1R. "We know hams appreciate our on-site QSL card checking services and enjoy being able to drop off their cards for the ARRL Outgoing QSL Bureau. In recent years, the ARRL exhibit area has included representatives the International Amateur Radio Union (IARU) and from our partner radio societies in the UK, Germany, Japan and Qatar."

Jim Tideman, N8IDS, will serve as the 2013 Hamvention Assistant General Chairman. "Jim has been active in Hamvention for many years, and he brings a natural leadership style to the Hamvention team," Kaiser said. "I will be asking

Jim to lead many important responsibilities to enhance the event. It is very important to note our team is all-volunteer and we continue to work in the spirit of collaboration.”

A number of key vendors have already committed to returning to Hamvention; the Dayton/Montgomery

County Convention & Visitors Bureau estimates that the annual event produces an economic impact of about \$4 million for Montgomery County, and nearly \$10 million regionally. Hamvention, the world’s largest Amateur Radio gathering, brings about 25,000 people to the greater Dayton area. The three-day event —

scheduled for May 17-19 — includes exhibits, a flea market, forums, education sessions and license exams.

QST — There’s an App for That!

(ARRLWeb—11/15/2012) ARRL members who use Apple iOS mobile devices — iPhone, iPad and iPod Touch — can now download a new dedicated app to access and browse all issues of the digital edition of *QST*. This app allows ARRL members to read *QST* online or download individual issues of the journal for offline reading. This free app is available to ARRL members in the Apple App Store.

Using the New *QST* App:

- From your iOS device, go to the Apple App Store to search for and install the free *QST* app.
- Verify your Apple ID password.
- Open the app and go to the “*QST* Catalog” to browse available digital issues.

- Tap on the cover of an issue and select “Read” or “Download.”

- Log in with your ARRL website username and password. If you do not have an ARRL website username and password, please register at www.arrl.org/myarrl

- Each time you download an issue in the app, it is added to the “My *QST* Library” to view offline. Note: Before viewing issues offline, you must first initialize each issue online using your ARRL website login.

- To stream embedded video and audio, you must be connected to the Internet.

- This app may send anonymous usage statistics to ARRL and our service providers to help us improve *QST* and to

better meet the needs of our members. To disable sending usage information, turn ON the “Disable Tracking” feature for the *QST* app in your iOS device settings. For more information, visit the Digital *QST* FAQ page and the ARRL Online Privacy Policy.

Using an Android or Windows Mobile Device?

At this time, a native app is only available for Apple iOS devices. Users with Android or Windows devices can access the digital edition of *QST* from a web browser. The web version runs in an Internet browser on nearly any device, including desktop or laptop computers, smartphones, tablets and e-book readers.

Michigan Section News for November

Greetings to the Hams of Michigan:

The beginnings of winter are upon us. We have had our first taste of snow and cold weather and Thanksgiving is fast approaching. Firearm deer season begins on the 15th and many of the Michigan hams will take to the woods. If you are a hunter, please hunt safely.

PRB-1 Update

The latest information is that our Senate Bill 1244 is scheduled for a hearing later this month. Our committee leaders will be present to point out to the members of the Local Government and Elections Committee the need for this common sense legislation. We will ask that they amend our bill to add some additional language to clarify any appeal processes in the event that a municipality unreasonably restricts amateur antennas. We will be notifying the hams of

Michigan soon of the need to write their Senators in support of the bill and will provide a letter for you to use. Please wait to do so until we notify you. You can find more information at our PRB-1 website at <http://www.miarrlprb1.org/>.

ARRL Card Checker Program

Attention Michigan hamfest committee chairpersons: You can provide a valuable service to those who attend your hamfests by making arrangements to have one of our qualified Card Checkers at your event. The only cost to your group will be providing a table for the checker to do his work. You can find information about the card checking program at <http://www.arrl.org/dxcc-field-checking> and a list of Michigan card checkers at <http://www.arrl.org/dxcc-card-checker-search>.

Special Recognition

On Monday, October 22, 2012, Theodore Davis, N8ZSA and Kip Kammer, N8KIP as they often is the case, were having a conversation on the amateur radio two-meter band. Ted became confused, his voice began to slur and his conversation wondered. Ted, a diabetic, was suffering a hypoglycemic episode. The extremely low level of glucose in blood left his brain starved of nutrition, a condition that can rapidly lead to coma and death. Kip, knowing his friend’s medical condition, recognized the symptoms and contacted Ted’s wife to alert her. Aid was summoned, and the Fire Department and Sheriff entered the home to find Ted semiconscious with his head lying on the desk. Steps were taken to reverse the hypoglycemia and return Ted to consciousness. Kip’s prompt and

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considered actions not only saved Ted's life, they are an example of all that epitomizes the Spirit of Amateur Radio.

Congratulations go to Kip, N8KIP for his quick thinking on behalf of a fellow ham.

Noteworthy Happenings

The Branch County ARC recently conducted a One Day Ham Class which produced 10 new Technicians and an upgrade to Extra. Thanks to that group for their efforts to provide a path into amateur radio.

James French, W8ISS recently established a Yahoo user group which encourages Bicycle Mobile Hams. James is hoping to help promote bicycle mobile usage within the state of Michigan. The

list will be moderated to help protect from spamming. When asking to join, please include a call sign so membership can be approved quickly. You can find information at: <http://groups.yahoo.com/group/bmh-m/>.

Club Updates

ARRL affiliated clubs need to make sure that your club information which is submitted in your annual report has a person whose email address is listed as the contact person for your club. Also be sure to update your Special Service Club status when it is due. If your SSC information contains a correct email address you will receive an email from W1BIC, our Affiliated Club Coordinator advising you of the need to update your

SSC status in order to be considered current. Please be sure to send to me the results of club officer elections so that I might recognize them here in this column for taking on leadership roles within their respective clubs.

Thanks to all Michigan clubs who forward copies of their monthly newsletters to me. It is always very interesting to see all of the activities that take place in our clubs. Clubs are truly the lifeblood of ham radio. For those that are not yet emailing me copies of your newsletters, please do so at wb8r@arrl.org.

73 until next month,
Larry Camp, WB8R
ARRL Michigan Section Manager

Technical Topics and Information

(ARRL Contest Update —Oct 24, 2012) Episode #42 of Chat With The Designers is about Homebrewing VHF/UHF Antennas illustrates examples of antennas for getting on 6m, 2m and 70cm (440 MHz). Get ready for the ARRL's January VHF+ Contest now! The "whiteboard material" <http://dl.dropbox.com/u/43021514/CWTD/Oct16.html> is online and you can watch live and archived presentations, too. <http://dl.dropbox.com/u/43021514/CWTD/TeamspeakInstructions.html> (Thanks, George N2APB and Joe N2CX)

When you need a little more "oomph" for a heavy job, Dan KØDAN suggests, "Another improvised 'leverage amplifier' is a large tire iron used to mount/unmount truck tires...about 5' long made of really hard 3/4" steel. It does NOT bend, and has a nice tapered lip on it for where it's supposed to pry the tire rubber on/off the wheel rim." Woof!

Switchmode power supplies are not the mysterious beasts we may think - with the right design tools, building them is easy. Try the Texas Instrument's "Simple Switchers" web site for an example. A good project is building a little

dc-to-dc converter to change 12 V into the 28 V needed to operate surplus aircraft relays. Don't forget the input and output filtering! http://www.ti.com/ww/en/simple_switcher_dc_dc_converters/index.html

Making a PC board for power distribution looks simple but how do you know if the traces are wide and heavy enough for the load? It's pretty easy to tell when they weren't by using your olfactory senses. Here's an online calculator for safe PC board current that goes up to 35 A and will help minimize the chance of you saying, "Something smells hot..." <http://www.desmith.net/NMDS/Electronics/TraceWidth.html>

At a recent special event station setup, KL7VIC installed a hinge assembly that allows installation of a Yagi at ground level on a tilted-over tower without bending the elements. The assembly consists of two steel plates connected together with high-quality barn door hinges (see photo at right). Plate A is attached directly to the mast that is mounted in the rotator. Plate B is attached to Plate A with hinges, free to hang perpendicularly to Plate A when the

tower is horizontal as in the photo. A short stub mast installed on plate B holds the Yagi boom by its normal boom-to-mast mount. While the tower is raised from horizontal the Yagi elements stay level all the way up as Plate B folds toward Plate A and the main mast. (Thanks, Rich KL7RA)



Let gravity be your friend by using this hinged Yagi mount designed by KL7VIC. (Photo by KL7RA)

More Technical Topics and Information

(ARRL Contest Update—Nov 7, 2012) Here's a good description by Roger K8RI of the "shadow method" for finding true north using a line from the

tower to its shadow. "With your watch synchronized to WWV...mark the end of the shadow right on the count for solar noon (and) you should be within seconds

for actual accuracy. Even doing it with a good inexpensive watch, you can be well under one degree or even under a minute of angle." This method also indicates

true south in the southern hemisphere. The line from the tower to the marked point can be extended as far as necessary to allow good alignment of an antenna with the line. Perhaps a "true north tree" or building can be identified in the far distance to be used any time.

The use of a high-pass or broadcast band notch filter is common to allow antenna analyzers with wideband detectors to operate in the presence of strong broadcast signals. These filters do affect the impedance reading, however. With vector network analyzers (VNA) such as the AIM4170 becoming more common, you can take advantage of the VNA's ability to calibrate through the filter and feed line, effectively subtracting out the effects of the filter. (Thanks, Guy K2AV)

Can you use regular signal relays at RF? Larry WØQE recently ran some fairly extensive tests on common signal relays at RF frequencies. This is interesting as these relays are as fast as vacuum relays and can hot-switch medium power levels. <<http://www.w0qe.com/Technic->

[al_Topics/small_signal_relays_at_rf.html](#)>

Roger K8RI also contributed a method of attaching guy ropes to a vertical antenna or mast. "I use Plexiglass or Lexan and two hole saws to make a ring that just fits over the section where I want to mount the guys. I cut the OD first, then use the center hole as a guide for the saw to cut the ID. I mark off the location for the guys at 120 degrees and drill holes just large enough to insert the guys. Either 1/2" Lexan or Plexiglass (two 1/4" sheets epoxied together will work) for taller and larger verticals or just 1/4" thick pieces for 40m 1/4-wave verticals. 1/4" should work with 3/16" line for 66' verticals."

QRM is by no means limited to the amateur bands - it is a growing problem for commercial satellite services, too. For a look at how those folks view the problem, read "Tackling Satellite Interference" in the August 2012 issue of Microwave Journal. Getting a look at a familiar problem from an unfamiliar per-

spective - such as 0.75-degree beamwidth antennas - is often refreshing and productive!

WORD TO THE WISE

Retired Emergency Room physician, Alan K6SRZ writes, "Here's my contest advice: take a baby aspirin before putting your butt in the chair for an extended period." An enteric-coated low-dose aspirin also helps. Why? "Deep venous thrombosis [a blood clot - Ed] can definitely cut into your score."

OPERATING TIP

Numerous comments following the first Worked All Provinces of China contest and then the CQ WW SSB contest have me thinking that we need to develop a set of phonetics suitable for Chinese-speaking hams who may not be familiar with English phonetics yet. I asked David BA4RF if there was a preferred set of English phonetics. He suggests that we use simple words, such as "Boy", "Dog", or "Fox". The word "Sugar" is easier to understand than "Sierra" which is an unfamiliar term to a Chinese speaker.

MARC Vital Statistics

Memberships Expiring in December

None

Memberships Expiring in January

KD8RMG

Current Active Club Membership 47

Birthdays Celebrated in November/December

K6VWE 11/13
N8UPP 11/14
KC8GQK 11/19
KD8FQF 11/21
KB8UIH 11/27
N8NVL 11/28

KC8TQV 12/1
KD8COB 12/5
WB8WNF 12/7
N8KS 12/10
N8ERF 12/10
KB8TSO 12/13

N8CGP 12/21
AB8JF 12/21
NX8A 12/22
WD8KEW 12/28
WD8KTB12/28

Anniversaries Celebrated in November/December

KB8QWO and N8DHF 11/17
KC8KOC and Jennifer 11/23
KB8UIH and Shelley 12/8
W8WOJ and KD8HIF 12/12
KD8IVZ and KD8IWB 12/16

AB8JF and N8WTQ 12/18
KD8FQF and KD8GRQ 12/19
K7GTK and WZ8Z 12/22
KD8JQX and KD8JQY 12/23
N8ERF and N8NNA 12/23

Information is from data received 11/14/2012

Any corrections or questions contact John, W8QN

Amateur Radio... We Do That!



Pat Mullet
Newsletter Editor
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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