



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
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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 — **July Meeting Cancelled!**

Next CLUB Meeting — Thursday July 5, 2012, 7:30 PM

Salvation Army Building 330 Waldo Rd.

Talk-in 147.000+

July 2012

Static Discharge

Kevin Martin, KD8QAM

I hope everyone is out enjoying their summer. It has been a busy month here, with all the remodeling. I did manage to get out a few radios to get on the air. I seem to have lost some cables and connectors in the move. It felt good to get back on the air, even if I was away only a short time. I just need to make some time so I can work on the projects I have been saving up.

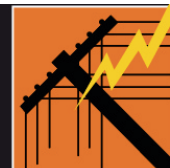
I represented the Midland Amateur Radio Club at last Monday's Midland City Council meeting. There we received a proclamation naming June 17-23 as Amateur Radio Week.

I had a great time at the Swap and seeing everyone there. I made the usual great discovery; after I left, I noticed I should have been looking for something that I really needed. Maybe next year.

I will see everyone at Field Day.

Kevin KD8QAM

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



The meeting was brought to order by Keith KD8QAM at 7:35 P.M. with 35 in attendance, A sign-in sheet was passed around and introductions were made.

If there are any corrections or additions please bring them to the attention of the secretary.

- Treasurer's report-John W8QN- The discussion was about bank fees and

liability. Thank-you to all those members who have renewed their licenses.

- EC/RO-John W8QN- John explained a recent tabletop exercise where the scenario was finding out what would happen in case of a major flood in the Sanford area.

- Swap- Keith KB8SOE- A little over half the tables have been spoken for. Sam Adams out of Virginia has requested 6 tables. Bendle Cable said they are coming, and they are in the connector business. Please talk up the swap on your rounds. Set-up is Friday at 4:00 P.M.

- O'Neil's-Jim KD8HIH-Captain Matt and his family will be moving to a new location. They will be missed.

- Field Day follow-up- Dorie N8WTQ- Dorie wrote a letter to Midland Towne Center Management thanking them for the opportunity to have our Field Day event at the Midland Towne Center.

- School Activities -Dennis Klipa N8ERF- The Central Middle School Radio Club will have to be relocated because of a the school closing.

- Dow Run follow-up- Lee KC8ITI- Thank-you to all who helped. It is much appreciated.

- There is no ARES®/RACES meeting on July 5th.

- Classes- Lee KC8ITI- We are just finishing up the Extra Class. One student has already passed the licensing test.

- Show and Tell- Martin KD8LVZ- Martin brought his new light-weight antenna that he brought from Dayton. Very compact and ideal for back-packing.

- Edenville testing- Del W8FYR and John W8QN will be testing equipment at the Edenville Tower. Please

listen in and let them know how good their signal is.

- Lupton- Ryan KB8RCR-Ryan reminded club members about the Michigan Section outing in Lupton from July 5th to July 8th. Also a short discussion on passing traffic and training.

- Illegal Signals- John W8QN – Whoever has been transmitting illegal signals has now begun to interfere with the fire department's communications. Ignore the signal if you hear it so as not to encourage the person to continue.

- Memorial Day parade- Bill AB8JF and Dorie N8WTQ- A good time was had by all and thank-you for the candy.

- Free Stuff- Lee KC8ITI- Lee brought in a lot more stuff from the quartermaster's treasure trove. Pay what you think it's worth.

- Tube Boxes-Dorie N8WTQ- Dorie mentioned the bad shape the Club's tube boxes were in, a discussion followed. Ryan KB8RCR has offered to donate some totes. Thank-you Ryan.

Net Control

June 14th Keith KB8SOE

June 21st John W8QN

June 28th Ryan KB8RCR

- A motion to adjourn made by Larry N8CGP and seconded by Lee KC8ITI.

The meeting was adjourned at 8:40 P.M.

Respectfully submitted,

Linda KC8MUD

MARC Secretary

(Bill, AB8JF and Dorie, N8WTQ add their thanks to Ryan, KB8RCR for his donation of totes to hold part of the Club vacuum tube collection—Ed.)

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)

My Two Cents

This last month's been a fun one. I've got my new Icom IC-718 hooked up to the supply and antenna, and it sounds great, and I haven't wasted any time delving into all this little rig's bells and whistles.

The *Hints & Kinks* column in the October 2008 issue of *QST* revealed that it was possible to use RadioShack's 20-047 USB Scanner Programming Cable as

Pat Mullet, KC8RTW

a CI-V interface for the Icom transceiver series. Even better, a stereo to mono adapter allows the same cable to fill the bill for Yaesu's CAT interface, and additional adapters can be wired to suit Yaesu's plethora of CAT jacks. I'd purchased the cable shortly after the article came out, and had used it one Field Day with the SATERN van's IC-7000 rig, so I resurected the cable and installed it on my

XP desktop box. My goal was to allow my copy of N3FJP's *Amateur Contact Log* to "talk" to the 718, automatically filling in the frequency, band and mode information. Set up is easy, once you have the interface installed and connected, all you have to do is select "Icom" from the drop down list, then replace the generic rig address in the command string with the specific address of your rig. Which is what I did... again, and again, and again. No response.

I downloaded a small program called *CI-V Test*, which verified that the interface was functioning, but *ACLog* did not want to cooperate. In desperation, I went back to the 718 manual to double-check things and discovered I had been inverting the two-letter address. *D'oh!* On correcting my error, everything began running as advertised. In my current configuration, *ACLog* not only pulls information from the rig, it uses the GPS derived time standard—courtesy of a Pharos GPS puck and *UI-View*—to set the time on- and-off of the QSO. Once the other station's call is entered, it looks up the call at QRZ.com and fills in the name, address, county, state and country of the operator.

A few days later, the rig to TNC cable I had ordered arrived. My soundcard interface uses the 5-pin DIN TNC standard cable, making it easy to interface to any

number of different rigs, and these days, I find detailed soldering such as that required for the Icom's 13 pin accessory plug difficult, so I opted for the easy way out. This time, when I plugged in the cable, everything worked straight off—*FLDigi's* waterfall lit up, and best of all, I didn't have to bother with the rig's audio control.

Now that all the toys were playing well with each other, I fired everything up so I could take 'er out for a "test drive". My first couple of sessions yielded a Caribbean station and a couple domestic contacts during the Museum Ships weekend—for this, I used the DX Summit web page to track the frequencies of the various ships, which got me thinking. *ACLog* is capable of DX spotting via RF or a telnet connection to the web, so I set about adding that capability as well. Once I had that aspect of the program configured, a grid now scrolls up the bottom of the page, showing DX stations reported by stations in the US and Canada. If a call looks interesting, I just click on it, and it automatically tunes the rig to that frequency. That capability allowed me to log Paraiba, Brazil and Moscow.

That's enough for this month. I hope I'll see you on the air. And have a good Field Day!

73, Pat, KC8RTW

Michigan Section News Larry Camp, WB8R

Greetings to the hams of Michigan:

Field Day

June is most widely known within Amateur Radio as the month in which our largest operating event of the year takes place. Of course that is Field Day, and it happens on the last full weekend of June each year. This year on June 23-24, ham groups from over the state are hard at work planning their events and getting portable stations configured, tested and ready to go. Generators are being treated to new spark plugs and the gas cans are starting to be filled. In order to beat the high price of gas, solar panels and batteries are being readied for action as well. Planning is at a fever pitch.

During FD, be sure to send me a radio-

gram telling me that your group is participating in FD. You can get extra points for doing that. The only address you will need is just my call, WB8R. All the traffic nets know how to find me. No access to an NTS net? Send me an email at wb8r@arrl.org.

On June 1, State Representative Steven Lindberg, N8UZP from Marquette introduced a House Resolution calling for the week of June 17-23 to be declared Amateur Radio Week in House Resolution 0287. You can find the text here: <http://legiscan.com/gaits/text/651358>. Thanks to Rep. Lindberg for his leadership and to the other representatives who co-sponsored the resolution.

MI Section Family Outing

Final plans are taking shape for the up-

Amateur Radio is a Contact Sport!

Upcoming Events

6/23-24	Field Day
7/5-8	Lupton

Michigan Hamfests

7/28	Lansing
8/4	Escanaba
8/19	Lapeer
8/25	Owosso
9/8	Wyoming
9/16	Adrian
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
 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.

coming Michigan Section Family Outing which will take place at the Woodlands Conference Center and Campgrounds near Hale, MI on July 5 - 8. This will be great fun and

all are invited to come for a few hours or a few days. More information is available at www.sectionouting.info. We hope to see you there!

73 until next month,
Larry, WB8R

DOW Walk/Run 2012

On behalf of Dennis, N8ERF, John, W8QN and myself, I would like to thank all of the amateur operators that helped us with this year's DOW Run. From a communications standpoint the day was uneventful with everything running smoothly which is a tribute to the dedication and skill of our volunteers. Special thanks to Pat, KC8RTW for taking on the

Net Control duties this year. I would also like to thank Dennis, N8ERF and John, W8QN for their help in setting up our support for this year. Even with the run taking place on Dayton weekend, we had 27 operators listed as follows:

KB8UIH, W8EAB, KC8MUD, W8LSS, WD8AXR, KB8QWQ, N8CGP, N8KRL, AB8JF, , KB8PGW, N8WTQ,

KD8RUC, KC8RTW, KC8ITI, N8LBF, KD8JQY, KD8JQX, KC8TXS, KD8OLD, KD8QXL, N8OSL, KD8MMH, N8XPS, N8ERF, KB8YEB, N8ERL, W8QN.

If I missed anyone, my apologies and I appreciate your participation. From all of us thanks again.

Lee – KC8ITI

Hamfest VE Results Dennis Klipa, N8ERF

We had 6 people take exams at the Swap with 3 successful candidates.

Ben Kuehnemund, KD8RMG upgraded to Extra; Michael Lovelace, N8ZWT, upgraded to Extra; George

Pemberton, N8PJV, upgraded to General.

The VE Team consisted of: Pat Russell, KD8IVZ; Larry Macklin, N8CGP; John Tallman, KB8PGW; Del Lafavor, WB8FYR; Glenn Boggs, AA8EJ; Stan

Rowe, K6VWE; Lee Hodges, KC8ITI; Dennis Klipa, N8ERF.

Best Regards,
Dennis, N8ERF

Just a Note

They say Old Hams never die, they just fade away. Well, Larry Adams K8SQB is not faded and is definitely still with us. He is having a birthday next month and would love to get some

birthday wishes and visitors. His special day is July 16th and his address is The King's Daughter's, 2410 Rodd St. (Room #11) Midland, Mi. 48640. Please take a minute and drop him a card in the

mail, its a small thing but it will make you both have a brighter day.

Linda – KC8MUD

2012 Hamfest Wrap-up

Keith Johnson, KB8SOE

Well, another Swap has come and gone. I'd first like to thank the Salvation Army and Jim, KD8HIH for the continued support for our annual Hamfest. I also need to thank all of the volunteers that helped with setup, operation, and teardown, without which we couldn't put the Swap on.

We were lucky to have some great vendors at this year's Swap and a good turnout of attendees. Numbers of both aspects look to be down as this economic trend continues, but as always, it is great

to meet up with friends that I would not otherwise get to see. In the end, it is the fellowship that I enjoy most from the Swap and I hope that that aspect continues for a long time.

John, W8QN will have the numbers wrapped up and available for an upcoming meeting to give us a good idea of our outcome and a direction for the future.

As I said at the last club meeting, it is time for new ideas and direction for the Swap, and as such, I am not continuing in my chair position for next year.

We are in need of a dedicated individual to step forward and assume that role. I will be happy to continue to help and support the new chair, but it will be nice to be able to enjoy the future Swaps with a little more relaxation.

Once again, I want to extend my thanks to all who not only helped with the Swap but also came out and enjoyed the beautiful day we had.

Keith, KB8SOE
www.kb8soe.com



ARRL Field Day
JUNE 23 & 24, 2012
www.arrl.org

Surfin': Tricks Are for Hams By Stan Horzepa, WA1LOU

(ARRLWeb 6/15/2012) This week, Surfin' demonstrates how ham radio can be a tricky, but well worth it.

Tricking Out A USB TV Tuner

I have been exploring the world of experimenters who have been combining inexpensive USB TV tuners with Software Defined Radio (SDR) technology to come up with inexpensive SDR receivers.

This is a hot subject. There is a lot of stuff on topic on the Internet to wade through and the novice can easily get overwhelmed by it all.

To help sort things out, Balint Seiber has begun a series of videos on YouTube titled GNU Radio Tutorial Series. So far, there are five videos in the series

and more will come if viewers find the videos helpful -- and let Balint know that is the case.

Balint also has an Ultra-cheap SDR Series on YouTube demonstrating "things to do with a \$20 SDR dongle," specifically the RTL2832 DVB-T USB stick. <<http://www.youtube.com/playlist?list=PL3111CA8AE4719400>>

In addition, Balint has a website with links to his blog and various wikis related to his SDR work.

Tricking Out A GPS

Like many people, I own a GPS. In fact, I own more than one GPS. I lost count how many, so I cannot give you an exact number. And do I count the ones that no longer work and the ones that are

in various states of repair/disrepair?

I keep my GPS up-to-date with a subscription for quarterly map updates. While uploading the latest update last week, I discovered a way to personalize the GPS by having it display an image of my own vehicle, rather than the stock vehicle images bundled with the GPS.

So as not to bore all of you with this nerdy trick, here is the link that describes how I did it. <<http://horzepa.blogspot.com/2012/06/nerdy-people-tricks.html>>

Until next time, keep on surfin'!

New Amateur Extra Class Question Pool Effective July 1

(ARRLWeb—06/14/2012) The new Amateur Extra class (Element 4) question pool -- released by the National Conference of Volunteer Examiner Coordinators (NCVEC) in January 2012 -- becomes effective on Sunday, July 1. The current Amateur Extra class pool expires on June 30, 2012 and cannot be

used after that date. This new question pool -- including graphics and diagrams -- will remain valid until June 30, 2016. The new Amateur Extra pool contains 702 questions, from which 50 are selected for an Element 4 examination. As of June 13, three questions -- E1D09, E2A14 and E6E10 -- have been removed

from the new pool. The current Technician class question pool that became effective July 1, 2010 is valid through June 30, 2014. The current General class pool that became effective July 1, 2011 is valid until June 30, 2015.

FCC Expands Part 95 MedRadio Rules

(ARRLWeb—05/29/2012) In a *First Report and Order* and a *Further Notice of Proposed Rulemaking* (ET 08-59) released on May 24, the FCC decided to expand the Part 95 Personal Radio Service rules to allow medical devices to operate on a secondary basis in the 2360-2400 MHz band. These devices -- called Medical Body Area Networks (MBAN) -- provide a way for health care facilities to monitor their patients via wireless networks. Because use of these frequencies will be on a secondary basis, MBAN stations will not be allowed to cause interference to -- and must accept interference from -- primary services, including radio amateurs who operate on a primary basis in the 2390-2395 MHz and 2395-2400 MHz bands.

In July 2006, the FCC released a *Notice of Proposed Rulemaking* and *Notice of Inquiry and Order (NOI)*, regard-

ing the use of the radio spectrum for advanced medical technologies. In December 2007, GE Healthcare filed *ex parte* comments in response, proposing that the band 2360-2400 MHz be allocated on a secondary basis for "Body Sensor Networks" (BSNs). In April 2008, the FCC put the proposal on Public Notice; the ARRL submitted comments, pointing out the potential incompatibility with amateur operations. Nevertheless, in June 2009, the FCC released a Notice of Proposed Rulemaking that also requested comments on possible alternatives, including 2300-2305 MHz. The ARRL followed up in October 2009 with additional comments.

"Even though the Amateur Radio Service retains its primary status at 2390-2400 MHz, it remains to be seen how the addition of a new secondary service in the band will work out in prac-

tice," noted ARRL Chief Executive Officer David Sumner, K1ZZ. "In the past, the FCC has declined the ARRL's request to raise the status of the Amateur Service at 2300-2305 MHz to primary, even though there is no other service to which this segment of the band is allocated. This is now the only portion of the 2300-2450 MHz band -- which at one time was available in its entirety to amateurs -- that is not encumbered by other spectrum occupants. We hope that in the future, the FCC will be receptive to making the Amateur Service primary in this narrow segment, in recognition of the reduced utility of the remainder of the band."

In making the decision to allow these devices in the 2360-2400 MHz band, the FCC noted that the costs of permitting MBAN operation "are limited to the risk of increased interference,

which we minimize by adopting rules to protect other licensed operations in these bands. We find that the risk of increased interference is minimal and is greatly outweighed by the benefits of the MBAN rules we adopt today.”

Sumner observed that with this decision, “the Commission has effectively taken 2360-2400 MHz off the table for consideration for commercial wireless broadband.”

How Does this Affect Amateur Radio?

MBAN operators in the 2390-2400 MHz band will have to account for radio amateurs, who are authorized on a primary basis in this spectrum. “Both Philips and GE Health Care assert that interference from MBAN devices to Amateur Radio is unlikely, citing factors such as the low transmission power and low duty cycle proposed for MBAN devices, as well as geographic separation and the frequency agility of MBAN devices,” the FCC pointed out in its comments. “The ARRL does not anticipate that an MBAN would cause ‘a significant amount of harmful interference’ to amateur users, but it cautions that some amateur operations -- such as weak signal communications that occur on a ‘completely unpredictable basis’ -- could receive interference.”

The FCC said it believed that MBAN devices can “successfully share the band with the Amateur Service. These frequencies are part of the larger ‘13 cm band’ in which Amateur Radio operators already share the adjacent 2400-2450 MHz portion of the band with low-powered equipment authorized under Part 15 of our rules. We expect that

the Amateur Service will likewise be able to share the 2390-2400 MHz portion of the band with MBAN devices because the power limits for MBAN operations will be even lower than that allowed for the unlicensed equipment that operates in the 2400-2450 MHz range. We further believe that MBAN and amateur operations are highly unlikely to occur in close proximity to each other. An MBAN, which will use very low transmitted power levels compared to the Amateur Service, is not intended for mass market types of deployment, and instead will be used only under the direction of health care professionals.”

According to the FCC, the majority of MBAN operations in the 2390-2400 MHz band will be located indoors: “We envision that the most likely outdoor use will occur in ambulances or while patients are otherwise in transit, thus we do not believe that prolonged outdoor use in a single location is likely. In such a situation, any interference that might occur would likely be transitory in nature and would not seriously degrade, obstruct or repeatedly interrupt amateur operations and thus would not be considered harmful under our definition of harmful interference.”

The FCC also addressed the potential for interference from radio amateurs to the MBAN devices. The ARRL, in its October 2009 comments, stated that “amateur operation in the band is unpredictable” and that the “substantial power levels and exceptionally high antenna gain figures used by radio amateurs in the 2390-2400 MHz band will provide no reliability of MBANs in this segment whatsoever,” calling the results of such

interference “potentially disastrous.” The FCC pointed out that MBAN proponents assert that “MBAN devices will have built-in capabilities, such as spectrum sensing techniques to detect in-band amateur signals and frequency agility capability to move MBAN transmissions to other available channels.”

As to the ARRL’s concerns about MBAN’s reliability and the risk presented by interference caused by amateur operation, GE Health Care acknowledged that “medical device manufacturers seeking to develop equipment consistent with the MBAN rules would need to build robust products in order to satisfy FDA requirements and to ensure customer acceptance,” but the FCC did not view that as a barrier to its efforts to develop and deploy MBAN devices.

“We find that factors such as the incorporation of established techniques to avoid interference into MBAN devices, the use of low duty cycles and the separation distances between MBAN devices and amateur operations that are likely to occur in real-world situations will minimize any potential for interference to MBAN devices from amateur users,” it explained. “In the unlikely event that an atypical scenario occurs where amateur operators do receive harmful interference from MBAN operations, we note that amateur operators would be entitled to protection from MBAN interference. MBAN operations will occur on a secondary basis and MBAN operators will thus be required to accept any interference they receive from primary amateur licensees operating in accordance with the rules.”

Technical Topics and Information

(ARRL Contest Update—June 6, 2012) Don WD8DSB recently built two W7IUV <http://www.w7iuv.com/> preamps and has documented <http://sites.google.com/site/rxpreamps/> the project online which might be useful for others considering building the preamp. He used the W7IUV double-sided circuit board method and has artwork for the board at a 1:1 scale along with a parts placement guide that can be downloaded in PDF document format.

- Stew K3ND reports very good

results from reinforcing a CushCraft 40-2CD according to the W6NL modifications. This antenna has survived ice, heavy wet snow, and high winds. The newer model CC XM-240 can be strengthened in the same way. <http://k7vc.com/402cd.html>

• Amphenol UHF connectors are often recommended as “best practice” for coaxial cables at HF (although there are some good versions available from other vendors). There are quite a few variations, though - to be sure you know

which one to get, go to the Amphenol website www.amphenolrf.com where you can view the complete line, including installation instructions (good for just about all UHF connectors), drawings, detail specifications, and even check distributor stock and inventory. Frank W3LPL notes that the base part number for a PL-259 from Amphenol is 83-1SP and anything after the “P” indicates a variation from the standard connector. (Thanks, Gary K9GS)

- The bidirectional Beverage an-

tenna was patented by Harold Beverage in 1922. When he built the huge RCA receiver site at Riverhead, Long Island, the Beverages were built as bidirectional using a passive combiner with variable amplitude and phase to provide steerable deep nulls off the rear of the array. The antenna is described in this seminal article "The Wave Antenna" <<http://www.nrcdxas.org/articles/WaveAntenna.pdf>> published in 1923. Perhaps the largest steerable phased Beverage array ever built was the four-Beverage array at

AT&T's transatlantic radiotelephone site in Houlton, Maine, straddling present day I-95 a few miles west of the Canadian border <www.smecc.org/general_electric_computers/HoultonTelephone2.jpg>. (Thanks, Frank W3LPL)

• Just in time for the summer's sporadic E season comes a timely item by Bruce KØYW in ARRL Propagation Bulletin ARLP018 about noise figure and preamps on 6 meters. "At 6 Meters and below the employment of a preamp ahead of most modern transceivers is not

likely to result in any noticeable improvement as the ambient thermal noise from the earth and sky background is high enough to readily overcome the sensitivity threshold of the existing receiver's RF stage/s, especially if the myriads of local man-made noise sources are added in. It is this combination of factors that will establish the 'Noise Floor' that the radio sees." Bruce goes on to explain why preamps are rarely useful at HF and on 6 meters - the original bulletin has more information.

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 June		
KD8LVZ	N8KRL	WD8SDX
KD8OKX	NX8A	
N8CGP	KA8HQW	
Memberships Expiring in July		
AB8TJ		KC8BOP
KA8EZT		W8QN
Memberships Expiring in August		
KB8QYB	KD8IWB	W8NON
KC0CJC	W8SEX	WB8FYR
KD8IVZ	AA8EJ	WD8ODG
Current Active Club Membership 55		
Birthdays Celebrated in December/January		
W8LSS 6/2	KC8URV 6/28	K8SQB 7/17
K8RI 6/16	WD8ODG 6/30	KD8DWX 7/21
KB8VSS 6/21	KB8RCR 7/2	WB8RCR 7/21
KD8IWG 6/23	KG8YG 7/6	W8OKN 7/30
K8HP 6/24	K8RRB 7/8	
N8POX 6/25	KA8ORL 7/11	
Anniversaries Celebrated in June/July		
N8CGP and N8KRL 6/5	W8LSS and WD8AXR 6/19	AA8EJ and Beverly 6/28
N8KFE and Cheryl 06/12	N8UPP and KC8AVI 06/21	K8SQB and Mary 7/16
KB8VSU and Barbara 06/13	NX8A and Kristina 6/24	KC8RTU and Brenda 07/20
WA8LQD and Kathy 6/16	KB8PGV and Connie 6/27	W8AWS and Delores 07/20
N8STF and Mary 6/16	K8CCE and Clarice 06/28	KD8MQX and Emily 7/20
N8POX and Kris 06/17	KD8HID and ??? 6/28	
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