

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

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LIFE MEMBERS

Jack W8PHG (SK), Larry K8SQB, Don W8WOJ, Lee KC8ITI, Dennis N8ERF, Raleigh W8QOI (SK)

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 — No January Meeting Next CLUB Meeting — Thursday January 5, 2012, 7:30 PM Salvation Army Building, 330 Waldo Ave. Talk-in 147.000+

January 2012

Static Discharge

Kevin Martin, KD8QAM

The little or no snow can complicate Christmas this year. It just seems like another day without a cold white blanket on the ground. In however you celebrate this year, best wishes this season. I haven't found much time to get on the air this past month, but I have been progressing quite nicely with my FT-857 installation. It's mounted and I believe that I have all the odds and ends sorted out. I also am looking for some stealth solutions to a base station antenna. I have about a forty foot run of gutter and a decent size down spout to work with. With a little looking into things I have quite a few choices, and really haven't looked at all the positives and negatives.

I would like to thank Dorie, N8WTQ for putting on a wonderful Christmas party this year. The white elephant gift exchange was wonderful. The party was the best Christmas party I can remember.

Mark, KC8GRQ and I were kicking around the idea of having a project night at one of the MARC meetings. The February meeting appears to be the target date. If anyone has something that they are currently working on over the winter or a past project









or kit they would like to share, that would be great. If it's too big, bring in a photo. I am very excited to see some of the projects that our group has undertaken.

I'm looking forward to the General class that will be started in the spring, and hope to see some of you there.

73, Kevin Martin KD8QAM

MARC Minutes

Linda Hodges, KC8MUD

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 k8qus@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 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) The meeting was called to order at 7:30 P.M. by Kevin KD8QAM with 28 in attendance and introductions were made.

The meeting minutes are published in the newsletter, if there are any corrections or additions please bring them to the attention of the secretary.

- Treasurer's report—John W8QN.
 -Thank you to all who renewed their dues.
- EC/RO Report—John W8QN- Topics included Skywarn® Recognition Day 12/3-4 and an APRS event in February. There is no ARES® meeting in January.
- Old Business—Update on Club Generator. The club paid \$451.00 for a repair to the generator. It is now at WD8BPT's house. The generator trailer box cover will be repaired in the spring.
- Christmas Party—Dorie N8WTQ-34 signed up for a very nice party on 12/2. Thanks to Dorie and Bill for hosting this event for us.
- Santa Parade—Dorie- N8WTQ-Parade was a success. Thanks to all who participated.
- Edenville Water tower—First Draft of a written agreement is well on the way. If our equipment is ready when they have their climber we can have our stuff put up on the water tower.
- Middle School Club—Doing very well, the kids have perks to keep them working toward a goal. Motion made by Dennis WD8BPT on the floor to get \$225.00 to buy tech class books. Seconded by John WB8RCR. Passed.

- Library subscription—renewal notice needs to be located and paid.
- Tech Class-Lee KC8ITI—One student taking classes at Lee's house. He is also studying General license questions. Testing Session coming up at the Salvation Army Building on 12/17.
- K0ACP will be in Johnson Count Iowa. Anybody interested can make contacts with him while he is there make arrangements with Art.
- Vice President Mark KD8QAM—Mark is putting up antennas at his place if anybody is interested in helping contact him.
- Dow Run—John W8QN- Committed to a much smaller operation. John is going to Dayton so event needs a new leader.
- New Business—12/4 Skywarn Day—White Lake will be open for tours. 12/30 Straight Key

Night.

Net Controls-

Dec 8th Wendy KD8IWB
Dec 15th Lee KC8ITI
Dec 22nd Kevin KD8QAM
Dec 29th John W8QN

A motion to adjourn the meeting was made by John KD8JQX and seconded by Cindy KD8JQY.

Respectfully submitted, Minutes taken by Dorie N8WTQ and typed by Linda KC8MUD

My Two Cents

It's been a rather uneven month for me on the Amateur Radio front. I'd hoped to have my APRS digi/Igate up and running on reduced power by this time, but the temporary antenna I'd rigged was too close to the house; every time the rig transmitted, I could hear it over the TV & stereo. Looks as if I'm just going to have to wait until the spring when I can get the

Pat Mullet, KC8RTW

Ringo Ranger properly mounted and scrounge up a new power supply.

On the other hand, Undertow Software released the latest version of their

ware released the latest version of their *Precision Mapping* software this month. My APRS software, *UI-View32*, can use the software engine and database from *PMap* to create scollable, scaleable maps within the program. A little "what else

can I make it do" ingenuity on the part of the beta testers has shown that it is possible to enable *PMap's* terrain shading, landmarks and POIs within *UI-View* as well. Innovations like this serves to keep *UI-View*, a program that officially "died" in 2004 when the source code was destroyed after the creator became a silent key, one of the freshest looking, most capable APRS programs available.

By the way, if you're interested in exploring some of the digital modes but either don't have a computer with a RS-232 serial port or don't want to spend the money for a Signalink or a Rigblaster, I found plans for scaled down, homebrew version of these interfaces on the Internet http://www.g4ilo.com/usblink.html>.

Julian Moss, G4ILO has combined a plug-in USB sound card "dongle" (in this case a 7.1 Stereo USB card, readily available on e-Bay) and the digital interface VOX circuit by "Skip" Teller, KH6TY to create what he terms the *USBlink*. With this little gem, all you need is a USB cable between the interface and the computer and an audio interface cable between the *USBlink* and your rig—no worries about PTT switching from the computer.

Lastly, you may have heard me complaining in earlier editions of this column that I was having trouble getting *FLDigi* to work properly with the *SoundBlaster Live!* card I put into my desktop computer expressly for amateur work, as I didn't want Windows sounds being transmitted when a program alerted me while on the air. *FLDigi* wouldn't recognize the soundcard unless another program, such as *MixW*, had been opened first.

Since I'd purchased the card used, it didn't come with an installation CD, so Windows XP installed the card with generic Microsoft drivers. After scouring the Creative Lab's web site for legacy software, I found the proper installation software and drivers for the card. With the Creative software installed, *FLDigi* happily hooked up to the soundcard and went on its merry way. Now I just have to wait over the weekend for the *FLDigi* website to come back up so I can upgrade to the latest version.

All-in-all, a successful month, but now I've got to free up some spare time to work some stations on hf.

Happy holidays to all, and I hope to hear you on the air.

73, Pat KC8RTW

ARES®/RACES John Wolters, W8QN

Just a quick reminder, there will not be an ARES®/RACES meeting January 5^{th} .

There will be a meeting February 2nd where we will continue the APRS discussion. This will be more of a working session so bring your APRS equipment for more hands on.

On Saturday, January 28th from 10am

until noon, District 3 ARES® will be running a packet test to determine connectivity between the different counties. Chris (KB8UIH) and I will be working the test but if you are interested in helping please let Chris or I know.

John Wolters, W8QN Midland County EC/RO

Dow Run 2012 John Wolters, W8QN

As you may know the Dow Run has changed the date of their activity from June to the same weekend as Dayton in May (May 18-20). As a result the number of hams that will be available to help with the run has decreased. Unfortunately this includes me. Because of this we are looking for a new coordinator for this year's run. I will be available to help with the organization of the run but will not be

here the weekend of the event. If you are willing to take over this position please let myself or the club president know. If no one steps up the club will unfortunately have to drop out of this activity. We have been part of the Dow Run for over 20 years.

John Wolters, W8QN

Amateur Radio is a Contact Sport!

Upcoming Events

	 J
12/31	Straight Key Nite
4/5	Skywarn® Training

Michigan Hamfests

1/15	Hazel Park
2/4	Negaunee
2/11	Traverse City
2/19	Livonia
3/17	Marshall
4/7	Lowell
4/14	Milford
5/5	Cadillac
6/9	Newberry
6/16	Midland
6/17	Monroe

^{*} Denotes date based on 2011 event

Area Nets

SVARA; Mn, 147.24 MHz, 2100 ET Gladwin; Tu, 147.18 MHz, 2000 ET BAARC; Tu, 145.31 MHz, 2100 ET Canadian Lks, Wed, 146.8, 2100 ET Edmore, Th, 146.8, 2000 ET MARC; Th, 147.00 MHz, 2100 ET District 3 ARPSC; Su, 145.31 MHz, 1830 ET W Mi Trffc Net; MWF, 145.15 MHz, 0900 ET TMMTN; Mon-Sat, 147.30 MHz, 2130 ET MACS; Mon-Sat, 3953 kHz 1100 ET MIARPSC; Su, 3932 kHz, 17:00 ET UPN; Sun-Sat, 3920 KHz, 17:00 ET MITN; Sun-Sat, 3952 kHz, 1800 ET QMN; Sun-Fri, 3563 kHz, 1830 & 2200 ET WSSBN, 3932 kHz, 1900 ET UP-ARES; Fr, 3932 kHz, 1930 ET GLETN; Sun-Sat, 3932 kHz, 2030 ET SEMTN; Sun-Sat, 145.33, 2215 ET

MARC MERCHANDISE

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

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

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

VE Session Results

At the testing session conducted on Saturday, December 17th, we had two candidates who sat for their exams and they both earned new licenses, a General and a Technician class.

The VEs at the session were: Dennis Klipa, N8ERF; Lee Hodges, KC8ITI; Bryan Haskins, K8VB; John Tallman, KB8PGW; Del Lefevor, WB8FYR; Art Peters, K0ACP. MARC would like to

thank them for their services as well as the Midland Salvation Army for use of their facilities

> Best Regards, Dennis Klipa, N8ERF

Closing Comments

Dale Williams, WA8EFK

To my friends of the Michigan Section: Well folks, this is it, the last edition of "Dale's Tales". With the coming of January first, my term as your Section Manager comes to a close and I will be moving on to a new adventure as Vice Director for the Great Lakes Division. It has been a short nine years but a wonderful run. During this tenure as Section Manager, I have met thousands of Michigan Hams and enjoyed every minute. I had the pleasure of attending about 230 Hamfests across the state over this period, meeting and greeting those of you who stopped by the ARRL table. Thanks for doing that and thanks for keeping me abreast of how things are going throughout the Michigan Section.

Thanks for allowing me to speak at your club meetings and hopefully giving you a little insight of what is happing across the Great Lakes State. Thanks to all of you who have volunteered your time and talents to serve your fellow Michigan hams. We have about 265 appointees in Michigan that help keep this Section running on an even keel. What a pleasure it has been to see this team take the initiative to make things happen and do it so effectively.

On January 1, taking the helm as our new Section Manager will be Larry Camp WB8R from Coldwater. Larry brings a wealth of experience and leadership to the position. He has served as Branch County Amateur Radio Club President, as Branch County's Emergency Coordinator and has also been the Section Traffic Manager for Michigan and Manager of the QMN. I am absolutely confident that you will welcome Larry in his new capacity and give him your full support as he gets totally immersed in guiding the Section.

If I may leave you with but one parting comment, I suggest to you that this entire "Thing" that we have, is built solidly upon good relationships. If one analyzes the groups that function well, the clubs that are successful and healthy, one finds that these organizations are all maintaining excellent relationships with everyone with whom they interact. These relationships determine the level of trust, respect, honor, confidence, faith and expectations one group has with the other and these attributes will often make up for any other shortcomings.

And now for the "Final"...

My thanks to the wonderful Section Staff

that has made these past 9½ years so easy: Assistant Section Managers: Dan, KB6NU, Jay WB8TKL, & Larry WB8R; Section Emergency Coordinator/Traffic Manager John WB8RCR;

Affiliated Club Coordinator Scott W1BIC; Public Information Coordinator Pat KC8RTW; Official Observer Coordinator Ken N8KC; Section Technical Coordinator Wallace KE8HR; and State Government Liaison Ed WA8QJE. You guys have stepped up to managing the key functions in the Michigan Section and have done it without the meddling fingers of your Section Manager.

Most importantly go my thanks to you, the members of the Michigan Section. You ARE the Section and it is you I have enjoyed working with and serving these past few years. Thank you for all you have done, for how well you have served your fellow hams and ham radio itself. You have made it a better hobby; I only hope that the parts I have touched have made it better too.

As we enter this Holiday Season, Judy and I wish to extend our very best wishes to all.

73, Good luck in the contest! Dale WA8EFK

NTSB Urges States to Ban Cell Phone Use by Drivers

(ARRLWeb—12/15/2011) On Tuesday, December 13, the National Transportation Safety Board (NTSB) recommended that States ban the nonemergency use of all cellular telephones and "portable electronic devices" (PEDs) by drivers of motor vehicles. This would include hands-free cell phone operation and all text messaging while mobile. While this NTSB recommendation has been the lead story in national media, the "distracted driving" issue has been receiving serious attention for several years. A number of states and municipalities have prohibited texting and handheld cellular telephone use by all or some drivers, though none has gone so far as to outlaw all hands-free cell phone use. To avoid unintended consequences

to Amateur Radio operation, the ARRL has been closely involved with this issue for several years. The full text of the NTSB report is not yet available, and it is not yet known whether the broad term "portable electronic devices" might be construed as including all or some Amateur Radio equipment.

On January 30, 2009, the Executive Committee of the ARRL Board of Directors approved and released an ARRL position paper on Mobile Amateur Radio Operation www.arrl.org/files/file/MobileAmateurRadioPolicyStatement.pdf. In that paper, the ARRL encourages licensees to conduct Amateur Radio communications from motor vehicles in a manner that does not detract from the safe and attentive operation of a motor

vehicle at all times, but points out that mobile two-way radio equipment has been in use for at least 70 years and is quite dissimilar from full-duplex cell phones.

"Over the past several years, ARRL Section Managers, State Government Liaisons and ARRL members have monitored hundreds of state legislative bills on this topic," ARRL Regulatory Information Manager Dan Henderson, N1ND, explained. "While ARRL Headquarters is an information resource, it is the hard work of state and local level ARRL leadership that has been the key in our efforts to protect Amateur Radio mobile operation."

The wording of state legislation—and specifically the definition of

the devices that are being regulated—determines what response is appropriate from the Amateur Radio community. The fact that a proposed state bill does not include a specific exemption for Amateur Radio doesn't necessarily mean the bill would prohibit Amateur Radio mobile operation. A well-crafted bill that narrowly defines "wireless mobile devices" or "wireless communications devices," for example, limiting those definitions cellular telephones and text messaging devices, might not need a specific exemption in order to protect Amateur Radio operation. In cases where a bill must be amended in order to add an Amateur Radio exemption, the proposed exemption language is critical. Some mobile cellular legislation, for example, would allow use of Amateur Radio while mobile only in an emergency, and thus routine amateur communications would still be precluded, and amateurs would be unlikely to install equipment that would be needed in an emergency.

The NTSB recommends that all states prohibit the use of cell phones and PEDs by all drivers of motor vehicles. The NTSB does not have the authority to impose such regulations itself, but the re-

commendation is likely to inspire additional legislative proposals. When state legislatures convene after January 1, the State Government Liaisons (SGLs), Section Managers and other volunteers in the ARRL Field Organization must monitor bills introduced into the various state legislatures for any potential problems. Introduction of such state legislation has been the norm for several years now; in fact, bills have been "prefiled" prior to the next legislative session in several states.

When a potential bill is sent to the ARRL, Regulatory Branch staff and legal experts review it to determine the potential impact on the Amateur Radio Service. If the definition of the prohibited activity clearly does not include Amateur Radio communications, it may be best to avoid raising the issue.

In August 2009, the ARRL received correspondence from the National Safety Council, stating that there is no evidence of significant risk by mobile Amateur Radio or other two-way mobile radio usage, and that until there are peer-reviewed studies showing that there is a safety hazard, the NSC does not support legislative bans on mobile Amateur Ra-

dio communications. The NSC has applauded the NTSB recommendations, citing evidence that "cognitive distraction" occurs, even when hands-free devices are used.

The ARRL's position is set out in the Mobile Amateur Radio Policy Statement www.arrl.org/files/file/MobileAmateurRadioPolicyStatement.pdf, and includes suggested legislative language for use where necessary. SGLs and volunteers are encouraged to use the basics of the statement when working with state legislators.

CTIA, the international association for the wireless telecommunications industry, has released a statement reiterating its support for a ban on texting while driving: "As far as talking on wireless devices while driving, we defer to state and local lawmakers and their constituents as to what they believe are the most appropriate laws where they live."

"The bottom line," Henderson concluded, "is that we all support safe driving. Amateurs are encouraged to pay full time and attention to attentive driving while behind the wheel, and to avoid any and all distractions."

FCC Releases New Rules for 60 Meters

(ARRLWeb—11/21/2011) November 18, the FCC released a Report and Order (R&O), defining new rules for the 60 meter (5 MHz) band. These rules are in response to a Petition for Rulemaking (PRM) filed by the ARRL more than five years ago and a June 2010 Notice of Proposed Rulemaking (NPRM). In the R&O, the FCC replaced one of the channels in the band, increased the maximum authorized power amateur stations may transmit in this band and authorized amateur stations to transmit three additional emission designators in the five channels in the 5330.6-5406.4 kHz band (60 meters).

The Amateur Radio Service in the United States has a secondary allocation on 60 meters. Only those amateurs who hold General, Advanced or Amateur Extra class licenses may operate on this band. Amateur stations must not cause harmful interference to—and must accept interference from—stations authorized by any administration in the fixed ser-

vice, as well as mobile (except aeronautical mobile) stations authorized by the administrations of other countries.

Here is a summary of the changes. *Please note that these changes have not yet taken effect.* These new rules will take effect 30 days after they are published in the Federal Register. The ARRL will announce on its website when the rules are published.

- The frequency 5368.0 kHz (carrier frequency 5366.5 kHz) is withdrawn and a new frequency of 5358.5 kHz (carrier frequency 5357.0 kHz) is authorized.
- The effective radiated power limit in the 60 meter band is raised by 3 dB, from 50 W PEP to 100 W PEP, relative to a half-wave dipole. If another type of antenna is used, the station licensee must maintain a record of either the antenna manufacturer's data on the antenna gain or calculations of the antenna gain.
- Three additional emission types are authorized. Data (emission designator 2K80J2D, for example, PACTOR-III),

RTTY (emission designator 60H0J2B, example, PSK31) and (150HA1A, i.e. Morse telegraphy by means of on-off keying). For CW, the carrier frequency must be set to the center frequency. For data and RTTY the requirement to transmit "only on the five center frequencies specified" may be met by using the same practice as on USB, i.e. by setting the suppressed carrier frequency of the USB transmitter used to generate the J2D or J2B emission to the carrier frequency that is 1.5 kHz below the center frequency.

Automatic control on data and RTTY is not permitted; a control operator must be in a position to exercise either local or remote control over the transmitter. The FCC noted that "amateur operators must exercise care to limit the length of transmissions so as to avoid causing harmful interference to Federal stations." This is a very important caveat: If a Federal station requires amateurs to cease using a frequency, the amateur sta-

tion must be able to do so without delay.

A reasonable person might wonder what the difference is between data and RTTY. According to former ARRL Chief Technology Officer Paul Rinaldo, W4RI, there used to be a difference, but there's not much of one today. "Years ago, a B designator (telegraphy for automatic reception [i.e. narrow-band directprinting telegraphy emissions]) meant decoding and display on a teletypewriter (TTY) or other mechanical machine," he explained. "A D designator signified transmission of data, telemetry or telecommand intended for data processing or just storage for possible future use. When computers or computer-like devices were introduced to emulate RTTY transmission and/or reception, the line between telegraphy and data transmission blurred to the point of little or no practical distinction."

PACTOR-III and PSK31 are cited in the new rules as examples of data and RTTY emissions, respectively, that will be authorized; however, in paragraph 28 of the R&O, the Commission states that amateur stations will be permitted to use "any unspecified digital code, subject to the requirements of Section 97.309(b)." Therefore, as a practical matter it appears that any J2D data emission is to be permitted up to a bandwidth of 2.8 kHz, provided that care is exercised to limit the length of transmissions.

Amateur Radio and the 60 Meter Band

The 60 meter band is part of the larger 5.060-5.450 MHz band, which is a federal/non-federal shared band that is allocated to the fixed service on a primary basis and to the mobile (except aeronautical mobile service) on a secondary basis. The 5.060-5.450 MHz band is primarily used by federal agencies for ship-to-shore and fixed point-to-point communications. Non-federal use of the 5060-5450 kHz band includes state government licensees and licensees in the Industrial/Business Pool that operate standby and/or backup communication circuits for use during emergency and/or disaster situations, entities prospecting for petroleum and natural gas or distributing electric power, coast stations and aeronautical fixed stations.

The Commission added the Amateur Radio Service as a secondary allocation after determining that such frequencies could be useful to the Amateur Radio community for completing disaster communications links at times when existing frequencies in the 3.500-4.000 MHz (80 and 75 meter) and 7.000-7.300 MHz (40 meter) bands are not available due to ionospheric conditions. It concluded that such an allocation represented the best compromise available to give the amateur service access to new spectrum while assuring the federal government

agencies that their use is protected.

At the request of the National Tele-communications and Information Administration (NTIA), the Commission restricted amateur stations operating on the five channels in the 60 meter band to upper sideband (USB) voice transmissions (phone emission 2K80J3E), and to a maximum effective radiated power (ERP) of 50 W peak envelope power (PEP). The Commission adopted these operating restrictions to decrease the interference potential between amateur stations and federal stations.

In October 2006, the ARRL filed a Petition for Rulemaking with the FCC, requesting that the Commission amend Parts 2 and 97 of its Rules to replace one of the allocated center frequencies (5368 kHz) with a less encumbered frequency (5358.5 kHz), to increase the maximum ERP from 50 to 100 W PEP and to authorize the use of additional emissions types, limited to emission designators 150HA1A, 60H0J2B and 2K80J2D. In its Petition, the ARRL pointed out that its proposals were designed to facilitate more efficient and effective use of the secondary Amateur Radio Service allocation in the 60 meter band. As part of its petition, the ARRL attached a letter from NTIA, indicating that it would "look favorably" on the ARRL's proposed modifications.

Technical Topics and Information

(ARRL Contest Update—Dec 7, 2011) The Franklin array of half-waves in phase is common in ham radio VHF/UHF omnidirectional antennas but not many hams know that it was once popular, but difficult, in the AM broadcast industry, as well. These required a serious amount of tower and property to put up and guy. (Thanks, Paul W9AC)

- A recent online edition of EE Times included a nice EMC-basics design article on battery charger designs from a standpoint of minimizing RFI. The article is a good introduction to EN standards, as well.
- Don't toss those PL-259 backshells left over from removing a connector put them to work! Cover and wrap the back end with tape or a plastic cap and you will have a nice screw-on water-res-

istant cover for an SO-239. It's not waterproof, but it sure helps!

- The Case of the RF Disturbances is the latest tale of resolving radio-related rebellion from Design News magazine's Tales of Sherlock Ohms series. Get out the aluminum foil, Kenneth!
- In a discussion of using external fans to provide extra cooling for amplifiers, it was pointed out that if the fan is in the exhaust (hot) air stream, avoid fans with blades that age or warp in the heat or that have oiled bearings.
- One of the originals in the field, Radioshack is now selling DIY Arduinobased kits as part of "The Great Create" project for Do-It-Yourself projects. It is encouraging that so much attention is being paid to building electronics and

other gadgetry - an excellent pathway to ham radio if we can get the word out!

- In the latest edition of QRP ARCI's QRP Quarterly I noticed a neat method of homebrewing large air-wound coils by Phil AD5X. http://www.ad5x.com/images/Articles/CoilRevB.pdf It uses flexible grommet strips as the support structure with the result very similar to the B&W Miniductor product. Whether you prefer QRP or QRO, every issue of QRP Quarterly is jam-packed with building ideas applicable to nearly every shack and their contests are fun, too.
- Kevin KI8IR notes that while, "it may be common practice with a lot of hams to refer to the PL-258 as a 'barrel' adapter but in the RF Test/Measurement world an adapter that is female on each end, such as the PL-258, is referred to as

a 'bullet' and the male-male same-series adapters are referred to as a barrel." We learn something new every day!

Technical Web Site of the Week - Mike K5WMG has written and published

a good paper http://radio.n0gw.net/radio12.pdf illustrating the effects of height-above-ground on vertical takeoff angle for beam antennas. It shows why a good "first tower" height of 50 feet

works well and why higher performance antennas need that extra vertical "oomph".

Wanted - MARC Newsletters

Looking for any newsletters prior to January 1984 as well as the following: February 1984 March 1984 May 1984 June 1984 July 1984 August 1984 September 1984 August 1985

January 1986

If you happen to have any of these newsletters contact Dennis - N8ERF or Lee - KC8ITI

September 1985

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

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

Contact Roger, K8RI (K8RI@rogerhalstead.com)

MARC Vital S	Statistics		
	Memberships Expi	ring in December	
KB8QWQ N8STF	KB8	SOE A8Y	KD8MRC
Nobir			
	Memberships Exp	•	
KB8UIH		SPDE	WB8WNF
KD8HID		SPDF	WD8BPT
KD8PDD	N8I		N8ERF
	Memberships Exp	oiring in February	
W8SEX	W8NON	WD80DG	KD8MQX
AA8EJ	WB8FYR	WB8RCR	
Current Active Club Membe	rship 51		
Birthdays Celebrated in December/January			
KC8TQV 12/1	AB8JF 12/21	KB8VNX 1/1	
KD8COB 12/5	NX8A 12/22	KD8FRH 1/12	
WB8WNF 12/7	WD8KEW 12/28	WZ8Z 1/12	KD8JQY 1/28
N8KS 12/10	WD8KTB 12/28	KA8HQW 1/1	
N8ERF 12/10	WA8KJR 1/2	N8NNA 1/14	
KB8TSO 12/13	KD8HIF 1/6	KD8GRQ 1/1	
N8CGP 12/21	K7GTK 1/8	KD8IVZ 1/20	
	Anniversaries Celebrate	ed in December/January	
KB8UIH and Shelley 1	2/8 KD8FQF and K		KC8ZMQ and Karen 1/1
W8WOJ and KD8HIF 1:			KA8EZT and Linda 1/2
KD8IVZ and KD8IWB 1			KD8COB and Bernadette 01/25
AB8JF and N8WTQ 12	/18 KD8JQY and F	XD8JQX 12/23	
Information is from data reco	eived 11/1/2011		
Any corrections or questions			



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		
Amaryan ADDI Mamahan	2 V/NI Do you want on ADEC Amplication?	V/NI	

Are you an ARRL Member? Y/N Do you want an ARES Application? Y/N

We request this information so we can communicate with you regarding MARC business, and periodically send you newsletters and congratulatory birthday & anniversary greetings. We do not sell this information nor will we knowingly publicize private information without your permission. Information that is publicly available may be distributed to Club members for various purposes, including membership lists, without prior notification.

You may give this completed form to the MARC treasurer, or you may mail it to:

MARC, PO Box 1049, Midland, MI 48641-1049