

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

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Swap Committee	Pat Russell W8PMR Chuck Cribley WA8LQD Keith Johnson KB8SOE Pat Mullet KC8RTW	(989) 832-2924 (989) 488-9409 (989) 488-4337 (989) 828-6657

LIFE MEMBERS

Don W8WOJ, Lee KC8ITI, Dennis N8ERF, Larry N8CGP, Denny WD8BPT, John WB8RCR

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, 2018, 6:00 PM Law Enforcement Center, 2727 Rodd St. Midland ARC Meeting — Thurday, December 6, 2018, 7:30 PM Salvation Army Bldg, 330 Waldo Ave. Talk-in 147.000+

DECEMBER 2018

View from the Top of the Tower

Lee Hodges, KC8ITI

The holiday season is fast approaching. Now is the time to spend time with friends and family and enjoy their company. If you get a chance slip in a mention of what a great hobby amateur radio is. It never hurts to do a little recruiting.

Hopefully by the time you read this some of the new repeater equipment will have arrived and setup will have started. The repeater committee has been working on the new power design for the repeater site. They have been deciding which main power supplies are needed and what the capacity of the backup power supplies should be.

Just a reminder that new RACES cards will be issued at the beginning of 2019. Check with Midland County Interim EC/RO Jack, K8GTG to see if he has all of your information for the new cards if you are a



current RACES member. If you would like to become a RACES member give Jack a call for the requirements for becoming a RACES member.

I am still working on the list of club positions for the club. If your name is listed on the banner page of the newsletter let me know if you're still interested in holding that position for the club. Also check your contact informa-

MARC MEETINGS

Art Peters, KOACP, 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 Art at (989) 400-3745, or via e-mail: k0acp@arrl.net

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

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 http://www.arrl.org/arrlvec/examsearch.phtml?State=MI

SUBMISSIONS FOR NEWSLETTER Contact Pat Mullet, KC8RTW at kc8<u>rtw@arrl.net</u> 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

If you prefer to download the MARC newsletter from our web site, or have trouble with delivery via USPS, contact John, W8QN at w8qn@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 John (w8qn@arrl.net)

tion and if it is not correct let Pat, KC8RTW or me know.

Dennis, N8ERF, let me know that Jefferson Middle School will be starting an electronics club. This school year it will be low key and part of their science club. Depending how it goes it may become a full time electronics club next year.

At the last meeting we voted to replace the January 3rd club meeting with the club Christmas party. The Christmas party will be at Annabelle's Own on M-20 west of town at 6:00 PM. We will be ordering off the menu. Start looking for your white elephant gifts to bestow on some lucky party attendee. Look for a sign-up sheet at the next meeting along with more details to come.

I must be getting old. It just seems like I'm spinning my wheels. I have all kinds of projects in the works but none of them seem to be getting done. Some of them get started and part way through it comes to mind that there should be a better way to do them. So I start over again on a new track. Some of the projects, once started, bring up doubts that even if they are completed will they ever be good enough to be used? Of course new projects come along and old projects get pushed back to be resumed who knows when. When they do come to the forefront again, it takes time to come up to speed again on what needs to be done and they may fall into the new track bucket. And to add to the mix there are projects that have definite deadlines that can't be put off. Of course add a large dose of lack of ambition to the mix and you can see that I'm in quite a dilemma. Even when the project gets finished instead of satisfaction on getting them competed I kick myself for taking so long to get them done.

I have taken some steps to lighten the load. Most of my working career I was a salaried employee. As such I never gave much thought to my hourly wage. A couple of weeks ago I sat down and came up with a couple of ideas on what my hourly rates were. The light came on that I should hire out some projects and use my time for things I want to do or can't be delegated to someone else. Of course the stuff that gets farmed out to someone else are tasks I could do myself. I've done these types of jobs before but I don't have to prove I can do them again. I've also discovered that some projects I have on the list have already been done and for a price I can purchase someone else's work. In most cases the cost is less than the hours I would spend doing the job myself if I look at that hourly rate I came up with. I'm always looking for new ideas for managing my life. How do you manage your projects and tasks? Let's compare ideas.

Lee - KC8ITI

MARC Minutes Linda Hodges, KC8MUD

The meeting was brought to order at 7:30 pm by Lee KC8ITI with 27 members and guests present.

Introductions were made and a sign in sheet was passed around.

Please bring any corrections or additions to the minutes to the attention of the secretary.

• Treasurer's Report — Larry N8CGP — Thank-you to all those hams who have renewed their dues.

• No Presentation — Art K0ACP — We would like to hear from you if you have a presenta-

Amateur Radio is a Contact Sport!

tion topic you would like to know more about. Or let art know if you have a presentation you would like to bring to the club meeting.

• No EC/RO Report

• Repeater Report — Larry N8CGP — Larry has bought some equipment. There has been no change or remodeling at the repeater site yet.

• School Report — Dennis N8ERF — Each student gets a basic fundamental project that he or her can work on at their own pace. They have had a fox hunt experience and demolition day. Rip apart items can be donated. Kids are enjoying Morse Code practice and they have been able to play with a new 3-D printer and some other new equipment. Dennis says it's all fun stuff.

• STEM Program — Light participation.

• Science Olympiad — At N.E. Middle School

• Christmas Party — Dorie N8WTQ — This year's Christmas party will be at Annabelle's Own. By a show of hands the members have decided to have it on Thursday, January 3^{rd} at 6:00pm. Don't forget to bring a white elephant gift.

• Donations — Walt WB8WNF — Walt brought some items from his basement to share with the club. Thank-you Walt.

• Saginaw Club — Mike

KD8HMM — Saginaw Club will be doing Santa-grams. They'll be at the Children's Zoo on Friday, Nov. 16th and at the Castle Museum on Saturday Nov. 17th. See Mike if you would like to help.

• Ham Fest — Larry N8CGP — Larry says there is a hamfest in Fort Wayne, Indiana on Nov. 17th and 18th.

> Net Controls: Nov 8th Paul KE8GEM Nov 15th Chris KB8UIH Nov 22nd Informal Nov 29th Lee KC8ITI

• Query — Lee KC8ITI — Does anybody remember if there was an agreement with the hospital regarding the equipment there and use of their space.

• Tech Class — Lee gave a short report on the status of his next class.

A Motion to Adjourn was made by Larry N8CGP

Seconded by Walt WB8WNF. The meeting adjourned at 8:14 pm.

> Respectfully Submitted by Linda KC8MUD MARC Secretary

Upcoming Events

SkyWarn Recognition Day Dec 1 Straight Key Night Dec 31 /Jan 1 Michigan QSO Party April 21 Midland MS Walk April 27, 2019 Museum Ships Weekend June 7-9 Midland Hamfest June 15 Field Day June 22-23

Michigan Hamfests

12/2/2018	Madison Heights
1/27/2019	Madison Heights
2/17/2019	Livonia
3/16/2019	Kalamazoo
10/19/2019	Muskegon

Area Nets SVARA: Mn, 147.24 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 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

My Two Cents

Shortly after I earned my Technician's ticket, I ran across an article on eHam.net entitled "Re-Inventing the Tape Dipole." The article went on to describe construction of a portable dipole antenna composed of a pair of stainless steel tape measures mounted back-to-back on a homebrewed aluminum frame, connected to an SO-239 connector via a pair of jumpers constructed of bulldog clips. Neat Idea, but a bit of a kludge, especially after researching the military's Hy-Gain HA4000 tape dipole the idea was based on. Not only did the HA4000 not need jumpers, the tape was marked in meters, making setup nearly goof-proof.

Pat Mullet, KC8RTW

After getting my FT-817 at the swap a few years ago, I decided I needed a light-weight HF antenna, especially since one of the reasons I bought the little rig was to set up a portable digital mode station, "JIC." I thought about the homebrew tape dipole, but immediately abandoned the idea, since the antenna would probably weigh more than the radio, and I couldn't find any stainless steel metric tape measures, anyway. Then I remembered another qrp portable antenna—the "Yo-Yo" or clothesline antenna. Designed around a pair of abs plastic clothesline reels intended for camping, the poly string on the reel is replaced with flexweave antenna wire. Connecting to a common feedpoint gives you 20 to 6 meter coverage.

A quick Google search yielded the construction process. Looking further down the Google list, I found a mention of the antenna on a forum, recommending copper fishing leader as the antenna wire—strong, smaller gauge, and best of all, cheaper than flexweave.

So, I ordered the parts, and should have my own version of the

ARES®/RACES

So hard to believe how fast this year has gone by! Lots of changes in the ARES[®]/RACES space. With the elections now over and a new governor coming on board, all existing RACES credentials will expire. That's okay, we've been working as a team to re-certify RACES memberships, and at the time of this printing we have 16 club members who have been approved for RACES going forward into 2019. (And 3-4 more working on their paperwork.) This is great news for a club our size here in Midland county.

Migration to the online ARES-

"Yo-Yo" ready to roll by spring.

That does it for this month. Hope to hear you on the air.

Jack Robinson, K8GTG

Connect tool continues, with Lee (KC8ITI) and myself learning how to "admin" the system, add meetings, record hours, etc. Future club and ARES[®] meetings will give club members some tutorials on how to use the system. It's actually pretty straight-forward and makes it easy to see at a glance upcoming meetings in the area. Speaking of Lee - he and I went out and replaced a repaired amateur radio at the Homer fire station this past week - regular testing determined it was in need of repair.

Lastly, a big thanks to the radio club members who assisted in Octo-

ber with the city/county siren tests. We stationed a dozen folks around town to listen to a Saturday morning monthly test - and the results indicated that there were some sirens in need of maintenance. Just got word from the city that they have engaged a company to test/maintenance/certify that each and every one is in proper operational order. Our documentation we supplied helped make that happen.

See you next year! Jack Robinson, K8GTG

Michigan Section News

(ARRLWeb—Nov 2018)

Greetings to all the Amateurs of Michigan,

Happening in the words below are Homage, Holidays, and Hope. This and more awaits you in the November 2018 Michigan Section Newsletter. Grab a glass or mug of your favorite beverage (can't single out just one kind, because that wouldn't be "equal and fair") and read the mostly politically free sentences.

Veterans Day

I'm one of that weird folk who think that Veteran's Day should be a daily event. Remember that those who have served or are serving in the Armed Forces protect and preserve our rights to do just about anything we've come to take for granted. My dad would often comment that "free just means that you might not have paid for it directly". I am grateful to all those who have and are serving our country. Bill Loeber, NU3D, has hit the ground running in the role of our new Section Affiliated Club Coordinator, and if you haven't heard from him, you soon will.

Bill will be trying to clean up the club database. There are a great majority of our clubs with records that are way out of date. Having current contact information lets prospective member contact the club and lets ARRL HQ know the club is active. Please update the records with current information to avoid being moved to inactive status.

To remain listed as an active AR-RL affiliated club the club record must be updated at least once per year. If an update is not made in two years, the club will be moved to the inactive roster. Updating your club record is easy and is done on line.

It is a good idea to print this email and include the information with other important documents given to incoming club officers. If you're impatient, you can reach out to Bill before he finds you! I often used to joke about the greeting card companies and their desire to create more new holidays, would come up with "HannaHallowThanksMus", to be able to market more of their products.

It does appear that retailers have adopted this approach, and so everyone is preparing to celebrate with family and friends. Be ready to talk about your hobby, what got you (and keeps you) interested and engaged and encourage others to join our ranks. All too often, we put a huge level of confidence in existing infrastructure to satisfy our need to communicate, and it isn't until those services are readily available that we see one of the many values of Amateur Radio. You only have to travel outside our section to understand how Amateur Radio stepped up their game to assist those in need. As my good friend Joni Mitchell crooned, "Don't it always seem to go, that you don't know what you got 'til it's gone."

100 New Michigan Section Members by January 2019

Affiliated Clubs

Holidays

We are sneaking up on this goal, but just in case you missed it the first time - Ok, here's the ask. To prove a point, we need to add 100 new ARRL members to the Michigan Section roster by the end of the year. To encourage all of you to recruit, drop me a note after someone you've influenced has joined (with your callsigns). I will enter you into a small raffle (funded by me). These should be new members, not renewals. I've been told that this is impossible, but I think it's easy goal.

Final Thoughts

I'm looking forward to hearing from all of you, and to visit your local club or group. Thanks to all of the radio amateurs who continue to make the hobby great! Get Active, Get Involved, and Get On The Air!

73 James A Kvochick, K8JK ARRL Michigan Section Manager:

k8jk@arrl.org

Dale's Tales

Dale Williams, WA8EFK

(ARRLWeb site— Nov 2018)

Greetings, welcome to "Dale's Tales" for October 2018.

Congratulations to the Dayton Amateur Radio Association[®] for their selection as the host club for the 2019 ARRL National Convention!! The ARRL National will be held in conjunction with Hamvention[®] at Xenia next year.

Here is the official announcement:

NEWINGTON, CONNECTICUT – ARRL, the national association for Amateur Radio[®], has announced that Hamvention[®] will host the 2019 ARRL National Convention in Xenia, Ohio, May 17-19, 2019. Hamvention is the largest annual Amateur Radio gathering in the US. Hamvention and the ARRL National Convention will share a joint theme, "Mentoring the Next Generation" of Amateur Radio operators.

As host of the 2019 ARRL National Convention, Hamvention will feature dozens of forums covering a variety of topics in Amateur Radio, such as technology, public service, on-air operating, training, and learning. A track of presentations will be organized to build on the convention theme, encouraging more individuals and radio clubs to serve in mentoring roles, leading new and inexperienced radio amateurs to become more active, involved, and engaged.

A special event Amateur Radio station, call sign W8BI, will be set up and operating from the fairgrounds—inviting attendees to join in for some on-air fun.

The National Convention will also feature ARRL EXPO—a large assembly of ARRL-sponsored exhibits, activities, and representatives for ARRL programs and services. Several ARRL-sponsored presentations and forums will be given. Information will be posted to www.ar-rl.org/expo as it becomes available.

2019 will be the third Hamvention to be held at the Greene County Fairgrounds and Expo Center in Xenia, Ohio since the event relocated from Dayton. At 28,417 visitors, Hamvention recorded its third-largest attendance ever in 2018. It attracts many international attendees.

Since 1952, Hamvention has been sponsored by the Dayton Amateur Radio Association[®] (DARA), an ARRLaffiliated radio club, and is supported by volunteers from radio clubs throughout the country. In past years, Hamvention has received regular sanctioning as the ARRL Great Lakes Division Convention. Hamvention[®] hosted the ARRL National Convention most recently in 2005 and 2009.

Hamvention features multiple buildings of indoor vendor exhibits, an outdoor flea market, and many food trucks and concession stands. There is free parking onsite and at nearby remote parking lots served by free shuttles.

Hamvention The website www.hamvention.org will include details for convention tickets and information about forums, exhibits (including information for vendors and flea market), travel, and preferred hotels with special rates. Convention tickets are \$22 in advance; or \$27 at the gate. Each ticket includes convention admission for all three days. Electric scooter rental information can be found at the Hamvention website. Onsite RV camping is managed by the Greene County Fairgrounds.

Ham radio operators are encouraged to bring family and friends, and extend their convention trip by visiting nearby popular attractions. The National Museum of the US Air Force, the oldest and largest military aviation museum in the world, is located at Wright-Patterson Air Force Base in Dayton, Ohio. The Dayton region also boasts many parks, museums, shopping, entertainment, and dining options.

All major airlines serve the minutes-away Dayton International Airport (DAY), and some travelers use the airports in Columbus and Cincinnati, Ohio, driving the final 60 to 90 minutes to Dayton/Xenia. Plan your trip to Hamvention at www.greenecountyohio.org and www.daytoncvb.com.

Interested parties will find complete details for the 2019 ARRL National Convention at www.arrl.org/expo (coming soon).

For information about ARRL and Amateur Radio, visit www.arrl.org and www.arrl.org/what-is-ham-radio.

IN OTHER NEWS:, "Well how did that work out for you Dale?" Oh yeah, that was for my commitment to make contact with several of the local hams in my community that seem to be inactive. That is my personal effort to get involved in mentoring inactive hams and help in any way to get them active and on the air. This did turn out to be a bit tougher than I had expected, so it is still a work in process. First, one has moved from the area according to his dad. And then it seems most have no listed phone so that puts a limit on accessibility right from the start.

Now, it my effort is to try to locate an e-mail address and go on from there. That has met with limited success and a couple of contacts are in the works. One chap even found me! He is new to the area and was not yet on the local list, but has already participated in the local Saturday lunch. So, I'll keep at this and report again next month. Hopefully November will be a little less busy and more time can be devoted to the effort. How about you? Did you give this effort a shot?

A SPECIAL NOTE from AC8W: Fellow Great Lakes Division DXers

Given the evident popularity of the new FT8 mode of communication demonstrated by the data collected in LoTW showing a seven figure increase in the number of monthly QSOs year over year resulting from the explosive adoption of the mode by hams worldwide, and the extremely high percentage (approximating 40%) of all QSOs being made with this mode at

the current sunspot minimum.

The DXAC is investigating the advisability, feasibility and desirability of creating or modifying one or more digital mode awards in the DXCC program to accommodate encourage and reward new modes of amateur radio activity on the bands.

How do you feel? Should we:

a.) Create endorsement stickers for the existing Digital DXCC (i.e. RTTY-100; PSK31-100, JT65-100, FT8-100, etc with incremental stickers 125, 150, 200 and so on) b.) Create a separate DXCC award for each mode

c.) Do nothing at all and leave new digital modes under the existing Digital DXCC.

Are there other options?

Your opinion is important so let me know at ac8w@arrl.net. Deadline for responses is Wednesday, November 14. Thanks

> Stan Arnett II AC8W DXAC Representative Great Lakes Division

TOM'S COMMENTS: Comments from our Vice Director Tom Delaney W8WTD Excitement was in the air as the students at Tallmadge Elementary School in Lancaster (Ohio) filed into the auditorium for their much-anticipated contact with the International Space Station. There are many ways to introduce people to amateur radio, but this has to be the best. Only problem is that there are so few opportunities for contacting the ISS.

Congratulations to the Lancaster & Fairfield County Amateur Radio Club. They worked more than a year on the project, and that hard work paid off with a great contact!

Another activity that seems to have a lot of promise for interesting young people is a balloon launch with tracking. Kids get interested in weather and other science experiments that they can observe and/or participate in.

Dale and I have talked a lot about recruiting new hams and getting people of all ages interested in ham radio. We all have opportunities to show off ham radio, ranging from the dramatic (the ARISS contact) to the everyday. What works for your community, and your club? It's important for all of us to remember that what got us interested in ham radio is not necessarily of interest to new people. Maybe they will eventually get interested in whatever you like, whether it is DX, weak-signal, traffic handling, public service, or any of the numerous other things we do. But reaching out to them requires finding out where their current interests in science and technology are, and showing them how ham radio can be a part of that. Let's all follow the example of the club in Lancaster by planning an activity and carrying it out with great results!

--73, Tom W8WTD Vice Director, Great Lakes Division

73, Let's go light up the bands,

Dale Williams WA8EFK Director Great Lakes Division wa8efk@arrl.org

Technical Topics and Information

(ARRL Contest Update — Oct 31, 2018) Jim, K9YC, has published a new paper on his website, entitled "Chokes and Isolation Transformers For Receiving Antennas." One key takeaway includes using chokes or transformers to break up the feed lines to your receive antennas into non-resonant lengths, like you would with guy wires. This helps to reduce the influence on your transmit antenna's pattern, and makes the the feed line a less efficient antenna. Jim has tested a number of types of magnetic material for chokes, and presents practical

designs you can use.

♦The Pacific Northwest VHF Conference included W6PQL's talk "SSPA's - A ORO UPDATE." Jim discussed some new 65 V LDMOS devices that are appealing for a solid-state power amplifier builder, and some completed designs using the popular BLF188. Jim notes that some of the single-band PA designs for UHF EME are suitable for placement at the antenna, minimizing feed line losses. His single-device LDMOS 600 W power amplifier for 1296 is interesting, MHz as it eliminates the use of high-power

RF capacitors by careful printed circuit board design and layout.

OPERATING TIP

Work Local Stations on a Dead Band

This tip is courtesy of Rod, W7OM: In contests that have perband multipliers, it pays to work at least one local station on every "dead" band. A mult is a mult, and sometimes a mult can be two mults: In CQWW, one local contact could count for a Zone and Country multiplier. Work you at 12:30pm local on 10 meters?

More Technical Topics and Information

(ARRL Contest Update - Nov 14, Application Programming 2018) Interfaces (APIs) are the new wires since more of how we process radio signals, or control equipment is about moving data from one application to another. In version 1.0.7336 of N1MM a new feature, "UDP Logger+ Broadcast for DXers" was added, described as: "... new XML broadcast for external call sign lookup that other applications can use to improve integration. Trigger point in N1MM+: Operator uses the TAB or space key when in the call sign box. The new DXLab N1MM to DXKeeper Gateway takes advantage of it by doing a call sign lookup in all appropriate applications." Besides the explicit use with DXLab, this feature could be used by a DXpedition and appropriate external program to thank donors as they are worked. By exposing integration points each application can concentrate on doing what it does best. N1MM Logger+ doesn't have to add features to support QSLing, award tracking, and QSO uploads, and DX Keeper doesn't have to handle contest features.

• When Ol' Sol erupts with CMEs (Coronal Mass Ejections), there can be real consequences. Power grids can be disrupted, satellites become unreliable or damaged, GPS can degrade. During the Vietnam War in the 1970s, CMEs were likely responsible for the premature detonation of sea mines. The CMEs influenced the Earth's magnetic field to the extent that the munitions were fooled into thinking a ship was passing near.

◆"Antenna Fire" is not something you'd expect at US Amateur power levels, but here near Seattle an FM antenna <u>shared by a number of local</u> <u>stations caught fire last week</u>. One local radio station <u>tweeted a picture of the</u> <u>antenna burning at about the 200 foot</u> <u>level.</u>

MARC Vital Statistics						
		Memberships Exp	ring in November			
	AD8BA		-	KC0CJC		
Memberships Expiring in December NONE						
Memberships Expiring in January NONE						
		Members in C	Good Standing			
AC8RT AD8BA K0ACP K2VMH K6VWE K8GTG K8RI K8VB Current A	K8VFO K8WSR KB8PGW KB8RCR KB8SOE KB8UIH KC0CJC KC8ITI Active Club Membe	KC8MUD KC8VOA KD0JHX KD8HID KD8HIH KD8MMH KD8OLC KD8QAM	KD8QXK KD8ULJ KE8DON KE8EOS KE8JNA KE8KDP N8CGP N8ERF	N8GEM N8JBW N8NGT N8WTQ NU8U NX8A W8LSS W8NYO	W8PMR W8QN WA8LQD WA8Y WB8RCR WB8WNF WD8AXR WD8BPT	
	Bir	thdays Celebrated in	November/Decem	ıber		
K6VV	QGV 11/4 VE 11/13 IH 11/27	KE8CTH 12/5 WB8WNF 12/7 N8ERF 12/10		KE8DOP 12/18 N8CGP 12/21 NX8A 12/22		
Anniversaries Celebrated in November/December						
N8GEM and Maryann 11/22 KB8UIH and Shelley 12/8 W8PMR and K8WSR 12/16			N8ERF and N8NNA 12/23 W8ZSX and WD8BDM 12/23			
Information is from data received 9/6/2018 Any corrections or questions contact Larry, N8CGP						
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: Pape	er copy via USPS or via e-mail	

Are you an ARRL Member? Y/N Do y

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