

W8KEA

MARC



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

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	Pat Mullet KC8RTW	(989) 828-6657
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	Chuck Cribley WA8LQD	(989) 488-9409
	Keith Johnson KB8SOE	(989) 488-4337
	Pat Mullet KC8RTW	(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 — April 6, 2017, 6:00 PM
Law Enforcement Center, 2727 Rodd St.
Midland ARC Meeting — Thursday April 6, 2017, 7:30 PM
Salvation Army Bldg, 330 Waldo Ave.
Talk-in 147.000+

April 2017

Static Discharge

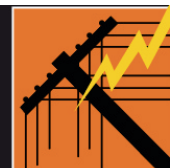
John Wolters, W8QN

I want to thank all of you that attended the Skywarn® meeting in March. I was in St. Louis MO, attending the birth of my newest grandson or I would have been there. It sounds like we had over 50 people attend the session. Glad we were able to move to a new location with more room. I have not been able to talk to our VP about the April meeting agenda so you will have to look for more info in the e-mail I send just before the April meeting. If I don't have your e-mail address, please send me an e-mail to w8qn@arrl.net asking me to add you and I will. You do not have to be a member of the club. I send a copy to anyone that is interested.

We are moving into the busy part of our year with lots of opportunity to use your amateur radio skills to assist.

April 29th — MS walk. Chris Rose KB8UIH is looking for helpers.

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



May — Jr High and High School balloon launches and recovery. An excellent opportunity to practice direction finding skills (fox hunt).

May 20th — Dow Run. John Wolters W8QN is looking for helpers. Let me know if you can

work by sending an e-mail to w8qn@arrl.net.

June 24th-25th — Field Day.

I have not heard from anyone about the possibility of chartering a bus to attend the planned Ham Convention at the Michigan International Speedway on October 7th

and 8th. If I don't hear anything by the end of the April meeting I will drop the discussion. Please let me know if you are interested and I will pursue it more.

Hope to see you in April.
John, W8QN

MARC Minutes

Linda Hodges, KC8MUD

The meeting started at the

MARC MEETINGS

Mark Murray, W8MGM, 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 Marc at (989) 513-7174, or via e-mail: mark.g.murray@icloud.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 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)

Midland High School Auditorium at 7:30 pm. with Weather Spotter Training presented by the National Weather Service.

A short meeting started at 8:30 pm presided over by Al KA9WCS.

Net Controls:

March 9th Martin KE8FIZ

March 16th Steve WA8Y

March 23rd John W8QN

March 30th Al KA9WCS

• Treasurer's Report— Larry N8CGP— Thank-you to everyone who has renewed their membership.

• Al KA9WCS— Please remember that the April EC/RO meeting starts at 6:00 pm. at the LEC.

• Reports— Dave N8LBF— It is important to remember to send in your reports after a NET. Also report participation and time committed.

• Special Event Station—

John WB8RCR— On April 22nd and 23rd there will be a special event station to celebrate the 100th anniversary of the Michigan State Police at the SCOC. If you would like to help out a background check might be required. More details to come.

• MS Walk— Chris KB8UIH— April 29th is the date set for the annual MS Walk. If you can help Chris meet him at 8:30 at the Midland High School. Sign-up at 9:00 A.M. The walk begins at 10:00.

• Contact John W8QN if you can help with the Dow Walk/Run and a half marathon on May 20th. That event runs from 6:30 am. to about 11:30 am. See John for more details.

This shortened meeting ended at 8:46 pm.

Respectfully submitted,
Linda KC8MUD
MARC Secretary

My Two Cents

Pat Mullet, KC8RTW

It's been a short month since the last newsletter, and sad to say, I haven't spent the time on the air that I'd hoped to. Other than weekly nets, most of my time has been spent—at least on decent weather days— out walking and getting exercise per doctor's orders. Otherwise, I've either been doing a bit of household maintenance or updating software in preparation for upcoming contesting

and severe weather events.

The Net Control Station for last Thursday night's net, Steve, WA8Y, posed an interesting question. He asked what we had in the way of antennas for rapid deployment, and did we have any way to erect an HF antenna in an emergency. Replies ranged from j-poles on lightweight masts for VHF/UHF work to HF antennas on crank-up towers. Use of tennis

Amateur Radio is a Contact Sport!

ball slingshots and pneumatic launchers to string wire antennas seemed almost quaint as a goodly portion of the discussion concerned the possible use of a drone to lay support ropes precisely where you wanted them. If someone decides to try that out during the next Field Day, we definitely need to grab some video of the process and post

it.

Time to bet both this column and the newsletter buttoned up so I can put in some time getting ready for some upcoming contests, including the Michigan QSO Party, Saturday, April 15th. Hope to hear you on the air!

73, Pat, KC8RTW

ARES®/RACES

Al Bailey, KA9WCS

It has been a great month for us. We had 48 confirmed people present at the Skywarn Training, and we were able to meet some non-hams who may have an interest in the future. Jeniffer Boyer, the Midland Emergency Management Coordinator, was there to introduce the speaker.

Jeniffer asked to have us put this into the April newsletter.

“April 16th to 22nd is Severe Weather Awareness Week. If last month’s power outage didn’t get you thinking about freshening your stock of batteries, then this is the time to do it. It’s also, a great month to test those smoke detectors and update those that need batteries. Midland residents are encouraged to sign up for emergency alerts from Midland County

911 by going to www.nixle.com and also follow our office on Facebook at: www.facebook.com/midlandcountyemergencymanagement for upcoming events, preparedness information and current issues.”

Bring your hand held and portable radios for the April ARES® / RACES meeting April 6th, at 6:00 pm in the Law Enforcement Center. Many of us are not skilled at being able to change a frequency on the fly. So let’s practice it. Bring your manual, handheld radio and we will pair you up with some of the really experienced hams who will help you, one-on-one, to understand how to do this on your radio. Then we intend to go out into the parking lot and local area to practice this skill. You will NOT want to miss this fun session.

2017 MS Walk

Volunteers are needed for the annual MS Walk scheduled for April 29th. This year’s Walk will start and end at Midland HS. The event runs from 9:00 am to noon and will feature both 1 and 3 mile walks this year. If you’d like to assist in this low impact public ser-

vice event, contact KB8UIH to volunteer. More information will be posted as it becomes available.

Chris Rose, KB8UIH
kb8uih88@charter.net
989-832-7179

Dow Run

The annual Dow Run is scheduled again this year on the third Saturday of May. (May 20th and yes, I know it conflicts with Dayton).

I will again be coordinating the amateur radio operators that volunteer to help cover the race course.

If you are interested in helping, please send me your information via e-mail (w8qn@arrl.net). Your time commitment is from 7am in the morning until around 11 am. If you cannot give up that much time, please let me know and I will adjust to your schedule. If you do not

Upcoming Events

4/15	Michigan QSO Party
4/29	MS Walk
5/20	Dow Run
6/3-4	Museum Ships Weekend
6/24-25	Field Day
7/7-8	Section Outting @ Lupton

Michigan Hamfests

3/18	Kalamazoo Township
4/22	Chassell
5/6	Cadillac
6/3	Hudsonville
6/10	Newberry
6/17	Midland*
6/18	Monroe
7/22	Harrison
8/5	Escanaba
8/19	Alpena
9/9	Wyoming
9/17	Adrian

Area Nets

SVARA; Mn, 147.24 MHz, 2100 ET
Gladwin; Tu, 147.18 MHz, 2000 ET
BARTS; 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.

have a handheld radio, we can provide you a loaner club radio. If you've no experience in working such an event, we can pair you with an experienced ham. And you get a free T-shirt for your time. You do not have to be a

member of the Midland Amateur Radio Club to join, just shoot me an e-mail. The more hams that volunteer the easier it is to coordinate the race. I could use 75 or more volunteers.

Please let me know your

availability and hope to see you there.

John Wolters
W8QN

2017 Michigan QSO Party

(www.miqp.org—3/21/2017)
The 2017 Michigan QSO Party, sponsored by the Mad River Radio Club, from 1600Z April 15, 2017 until 0400Z April 16, 2017. This is noon to midnight local time in Michigan. Stations may operate the full 12 hours.

Phone and CW on 80/40/20/15/10 meters. Single-op, multi-op, EOC and mobile categories.

Stations may be worked once per band and mode. MI-to-MI QSOs are allowed. Work portables and mobiles again as they change county, state or province.

Exchange QSO number and

location (county for Michigan stations, state/province or "DX" for all others).

Suggested frequencies: CW - 3545, 7045, 14045, 21045, 28045; Phone-3825, 7200, 14250, 21300, 28450

Scoring: One point per phone QSO, two points per CW QSO. Count multipliers once per mode. Multipliers are Michigan counties for all entries, plus states, provinces and "DX" for Michigan entries only. Final score is total QSO points X total multipliers.

Reporting: Submit logs no later than 30 days after the contest. Electronic logs in Cabrillo format are

submitted via the MiQP Log Submittal page on the MiQP web site: <http://www.miqp.org/submitLogFileMiQP.html>

Mail paper logs with summary sheets to:

Mad River Radio Club
c/o Dave Pruett,
2727 N Harris Road
Ypsilanti, MI 48198

For full rules, along with free logging software, log and summary sheets, see <http://www.miqp.org>.

Electronics and Wireless Communications Clubs

The High School and Northeast Wireless Communications Clubs continue to have loads of fun. The high school club is busy designing, programming and building the sensor package, based on the Arduino platform, for the upcoming balloon launch. The middle school students, under the tutelage of Will, K8VFO, spent several weeks learning how to write code for the Arduino, doing several projects along the way.

This year's balloon launch is scheduled for April 29th, which will coincide with the MS Walk. Our back up date in case of bad weather is May 6th. Unfortunately, with school scheduling and our need to get the launch in before the end of the school year, we have this small conflict. We will make sure

that our activities don't detract from the MS Walk. The high school station will be the net control for the MS Walk and for the Event Operations Center (EOC) for the balloon launch as we have two separate stations. We have also redesigned the operations for the balloon launch and will be using WD8BPT's communications trailer as a mobile command unit out in the field.

The middle school students have learned how to operate the radios and have done their first Fox Hunt. It was an indoor hunt due to weather but, much to my surprise, all of the teams were able to overcome the large number of reflected signals and were able to find the Fox! At the last meeting we divided the students

up into teams to start learning the skills needed to carry out the launch and recovery. The teams are Radio Direction Finding, Flight Prediction, APRS Tracking, Photography, Payload and Launch Vehicle.

I want to thank all of the volunteers for their invaluable contributions this year: Will Halphen, K8VFO; Lee Hodges, KC8ITI; John McDonough, WB9RCR; Art Peters, K0ACP; Jackie Klipa, N8NNA; Chuck Cribbley, WA8LQD; John Henley, AC8QF; Dave Wallick, N8LBF; Andy Fawcett, KD8ULJ; Carmen Kessler; Brian Brown and Bernadette Wood.

Best Regards,
Dennis Klipa, N8ERF

It's Not Your Grandfather's Amateur Radio!

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My father taught me that the road to hell is paved with good intentions, a truly valuable saying as my intention to provide a monthly column for the W8KEA newsletter made the first two issues then seemed to take a protracted winter break. It would have been great to explain the reason for the gap as I was preparing for an exotic DX run for a contest, but no, the facts are that I just got busy and overcommitted and thanks to a nasty & lingering virus, some things just did not get done, this column included. This introduction is a lead-in to this column's topic, which is to have a plan and a realistic expectation of results.

It is sure fine to pursue winning in every aspect of our lives; however, I have found that sometimes that expectation might be a tad overly optimistic. This can lead to unrecognized accomplish-

ments, which leads to frustration that can lead to walking away from this aspect of Ham Radio, which would be a darn shame.

While I likely like to contest as much as anyone, it would be foolhardy for me to expect to win every outing I attempt.

For me, it is about improving myself and the outcome for every outing. Sometimes, we experience hardware (or software) failures that get in our way — this can often be overcome by spending more time on PM — preventative maintenance. Sometimes, the bands just won't cooperate and you just can't get that last multiplier — even if it is being advertised on the spotting cluster. I realize that I'll never be able to compete with a K3LR or W3LPL, the biggest of the Big Guns; so trying to do so is unwise. However, that doesn't mean that I

can't try and beat myself through better preparation, planning for band openings and propagation, or judicious station work that will allow me to better my results.

Given where I am in my life, that means that my expected outcomes are to catch a quick Q with an acquaintance, perhaps get that "clean sweep" in the annual ARRL Sweepstakes, or to attain better Q rates for a given hour of operating. In any case, for me, it boils down to wanting to have some fun and incrementally improve my skills and station.

Till next month, 73, es God Bless.

73,
Art Peters, KOACP
k0acp@k0acp.com

Michigan Section News March 2017

(ARRL Web—3/15/2017)
Greetings to the hams of Michigan,

We are getting ever closer to the magic of spring here in Michigan.

Aside from a late snow storm or two, we should all soon see warmer weather. Of course, with warmer weather (particularly in spring), comes convective weather. And that means it is time to attend a NWS Spotter Training class, check in with your county ARES® Emergency Coordinator/RACES Officer, double check the contents of your "jump kit" or "go bag" and otherwise prepare your equipment and yourself for the convective season.

When the lightning is flashing, the hail is falling, and the wind is blowing is no time to be trying to replenish your "jump kit" that you looted over the winter. The Boy Scout's motto applies here: "Be Prepared!"

Michigan Section Outing

The planning for the annual Michigan Section Outing event is in full swing. This year's event will take place on July 7 & 8 at the Woodlands Conference Center and Campground near Hale, Michigan.

Once again, this will be a Friday and Saturday event which will feature the annual Michigan Auxcomm/ARES®/RACES Emergency Coordinator's annual meeting. Included in the event will be some very interesting speakers and demonstrations that will make your trip to the woods of Northern Michigan a weekend to remember. We are in the process of scheduling a number of forums/demonstrations/workshops/learning opportunities for the event. We will keep everyone advised as our schedule develops.

Camping is available for anything from tent camping to motor homes and everything in between. This is a radio-friendly location and we are free to set up our antennas

and operate from the woods! Campers can arrive several days before the event and stay a bit after if they like.

You will find the campground to be a very quiet, well maintained facility complete with permanent restrooms and showers. We hope to see many of you there!

Great Lakes HamCon
@Michigan International Speedway
October 7&8, 2017

Planning for this gangbuster event is progressing. There is still a ton of work to do, but we are making progress.

We just received our Dayton Hamvention booth assignment (#6612) in Building 6 and are looking forward to spending three days talking with hams from all over the country (world?) about what a great event GLHamCon will be. If you are going to be in Dayton, please stop by and say hello. If you have

interest in assisting with our GLARA booth during Dayton, we are looking for help. Please send a note to volunteer@glhamcon.org.

As you may know, the Great Lakes Amateur Radio Association or GLARA (parent of the Great Lakes Ham Con) is a 501 (c) (3) corporation and is an ARRL affiliated Council of Clubs. Our club is made up of other ARRL affiliated clubs located within about a 50 mile radius of Michigan International Speedway who have chosen to band together to sponsor and produce the Great Lakes HamCon, which will be the site of the 2017 ARRL Great Lakes Division Convention.

GLARA's partner clubs that are officially signed up are (in no particular order): Oakland County ARS, Michigan QRP Club, Branch

County ARC, Central MI ARC, Arrow Communication Assn, Southern MI ARS, Cascades ARS, General Motors ARC, Livingston ARK, Livonia ARC, and Monroe County Radio Communication Assn.

In addition to these clubs financially supporting the GLARA startup, we acknowledge the Lansing Lunch Bunch as well as two private individual financial donors.

There are an additional eight clubs who are in the process of considering joining the consortium and finalizing their association with GLARA.

We have some really nifty vinyl window stickers (see them at GL-HamCon.org or on our Facebook page (great lakes HamCon) that will be used to advertise the event.

Show your enthusiasm for the

Great Lakes HamCon with a custom vinyl window sticker on the back window of your ride. This premium sticker is weather proof, easily removed (when the time comes) and will not harm your car window. In addition to being great looking, they are available at no cost!

These vinyl stickers will be available free of charge at Hamfests in Michigan, Ohio, and Kentucky, wherever there is a Great Lakes Division ARRL official present. If you just can't wait until the next Hamfest to get yours, you can get one by sending an SASE to WB8R.

73 until next month,

Larry Camp, WB8R
ARRL Michigan Sect. Mngr
wb8r@arrl.org

Technical Topics and Information

(ARRL Contest Update — Feb. 22, 2017) When Microsoft Windows boots, it interrogates serial ports connected to your system to look for peripherals like mice. Unfortunately, this may have the side effect of switching some lines, such as DTR, that are connected to radios or other devices. There were [various techniques](#) in previous *Windows* versions to prevent this, but those techniques don't work with *Windows* 10. However, if you're using FTDI-based USB to Serial port hardware, Tom, VA2FSQ, suggests: "If you open the device manager in Microsoft *Windows* and double-click on the serial port, you can select Port Settings, and then Advanced. In this page, there are two options. One is 'Serial Enumerator' which should **not** be checked, and the other is 'Disable modem ctrl at startup' which **should** be checked. This solves the issue at least for the FTDI chipset." (Tom, VA2FSQ, via Elecraft mailing list)

♦ How low can you go with your HF antennas? If you're space constrained, for 160 meters try this ["No excuses" vertical by](#)

[K6MM](#). At only 25 feet tall, and painted green, perhaps your neighbors won't notice this in your backyard. John [originally presented](#) this as a joint Northern California Contest Club / Potomac Valley Radio Club webinar in 2009.

♦ NXP Semiconductor has a new LDMOS transistor that should be appealing to solid-state amplifier builders -- the [MRF1K50](#). According to the NXP data sheet, the reference design is capable of 1500 Watts CW output power at 27 MHz, with a drain efficiency of 78%. To increase the potential for incorporation into long-lived equipment, NXP is promising to manufacture the device until at least 2031.

♦ Elecraft K3 Users - Here's a technique to eliminate any PTT tail delay in your CW Macros with modern K3 firmware versions, as described by Bob, N6TV, in a [recent e-mail to the Elecraft reflector](#): "The problem of unwanted PTT delay when using the internal keyer with VOX, and computer-generated CW/PTT, was already addressed by the improvements to the RX; command

in K3 firmware 5.46 and later. Sending an RX; command at the end of all computer-generated CW messages will immediately open the PTT line no matter how long you set the VOX delay, so there will be no delay in receiving when the computer-generated message terminates. You will still get the programmed CW VOX delay when hand sending, and the PTT will be held closed for the duration of all computer-generated messages, if you follow all of the steps outlined below." Bob goes on to describe the macros to use with Win-Test, and provides guidelines for other contest logging software.

♦ WRTC 2018 site details require months of [preparation](#) activities. Recent 15-meter Spiderbeam reflector and director element construction required preparation of 120 Spiderbeam elements, nearly a kilometer of wire, 480 insulators, and tying 1920 knots. [The three Saturdays required were described as "hard and boring."](#) Three Amateurs from the [Uetersen Radioclub](#), Malte, DE7LMS, Olaf, DK2LO and Karl-Heinz, DB7BN, tackled the tasks.

More Technical Topics and Information

(ARRL Contest Update — Mar. 8, 2017) [Elektor](#) is starting a [series of posts about building a µTracer tube tester kit](#). This project works in conjunction with a PC to measure and characterize the behavior of a wide variety of tubes. In the first installment, the project is described, the kit is ordered and unboxed.

♦ Remember the "series of tubes" we used to use to get our signals on the air? Many of the higher-power varieties were made by Eimac. Martin, AA6E, briefly [re-](#)

[viewed the history of Eimac on his blog](#), and provided links to classic Eimac documents such as "The Care and Feeding of Grid Power Tubes." Spoiler: [Eimac](#) is now a division of [CPI, Inc.](#)

♦ The March/April 2017 [QEX magazine](#) has an article by Brian, K1LI and Tony, K1KP entitled "The Polar Explorer," which investigates using non-linear amplification for SSB modes. It describes their experiments and prototype to develop a high-efficiency Phone transmitter

using Envelope Elimination and Restoration that also meets FCC emission requirements.

♦ Amphenol RF publishes a [table of different types of coaxial cables](#), which includes characteristic impedances and physical diameters. Quantities of high-performance but lesser-known coaxial cable can sometimes be found at hamfests or on eBay, and could be useful for applications like impedance transformers, chokes, or internal wiring.

MARC Vital Statistics

Memberships Expiring in March						
N8LBF		N8WTQ			W8QN	
Memberships Expiring in April						
K6VWE K8RI		K8VB K8VFO	KC8TQS KD8HIH	KD8MMH KE8DOP	N8JBW	
Memberships Expiring in May						
AG8B		KE8CTI		KE8DON	WN8QGV	
Members in Good Standing						
AC8QF	KB8SOE	KD8MMH	KE8EOW	N8CGP	W8LSS	WB8RCR
AG8B	KB8UIH	KD8MRB	KE8EOX	N8ERF	W8QN	WD8AXR
K6VWE	KC8ITI	KD8QAM	KE8FIX	N8JBW	W8WOJ	WD8BDM
K8RI	KC8MUD	KD8QXK	KE8FIY	N8KRL	W8ZSX	WD8BPT
K8VB	KC8RTW	KD8QXL	KE8FIZ	N8LBF	WA8KJR	WD8ODG
K8VFO	KC8TQS	KE8CTI	KE8FJA	N8NGT	WA8LQD	WN8QGV
KA8ORL	KD8HID	KE8DON	KE8FJB	N8WTQ	WA8Y	
KA9WCS	KD8HIH	KE8DOP	KE8FJD	NX8A	WB8FYR	
Current Active Club Membership 54						
Birthdays Celebrated in March/April						
KD8TCH 3/4	KC8RTW 3/17	W8QN 3/31	N8KFE 4/18	KA8Ezt 4/28		
AC8RT 3/4	KD8QXL 3/18	KC8TQS 4/9	KC8IHB 4/19	KD8MQX 4/28		
KB8VSU 3/9	K8VB 3/20	KC8SRT 4/11	KD8OLC 4/20	W8CVZ 4/28		
NQ8T 3/15	KC8FDM 3/26	KB8TBI 4/14	WA8LQD 4/27	N8JBW 4/30		
KC8RTU 3/16	WD8OEU 3/27	KD8CUX 4/17	KD8HIC 4/27			
Anniversaries Celebrated in March/April						
WN8QGV and Belinda 3/4			WD8BPT and Melody 3/13			
K8RRB and ??? 3/4			WD8OEU and Grace 04/17			
KC8ITI and KC8MUD 3/6			AC8RT and Julie 4/26			
Information is from data received 1/2/2017						
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: 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