



W8KEA



MARC

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

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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 — Thursday, May 3, 2018, 6:00 PM
Law Enforcement Center, 2727 Rodd St.
Midland ARC Meeting — Thursday, May 3, 2018, 7:30 PM
Salvation Army Bldg, 330 Waldo Ave.
Talk-in 147.000+

May 2018

Static Discharge

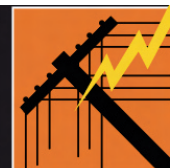
Al Bailey, KA9WCS

Does this spring seem to never arrive? Spent the weekend hunkered down in the home with an ice storm raging around us. I know warmer weather is coming—it *is* coming—and with it a whole host of opportunities to have fun and frolic in the warmth of the summer and radio activities. WE have a whole host of them coming too.

First is the MS walk on April 28th, at the Midland High School. This is always a good time and a chance to practice with your handheld. Don't have one? We can find one or lend you one of the school club radios. So come on out and enjoy one of the first walks of the year.

The famous Dow Run in Midland is on May 19th, our very own swap meet on June 16th, and then Field Day at the end of June. Don't be shy, come on out and join the fun. Plus every Thursday night (except the first Thursday of the month) is the net on 147.000 MHz. Lots to do and lots of opportunities for everyone. We hope to see you when this cold weather ends, soon!

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



The meeting was called to order by Al KA9WCS with 25 members and guests present. A sign-in sheet was passed around and introductions were made.

If you have any corrections or concerns about the minutes please bring them to the attention of the secretary Linda KC8MUD.

The meeting started with a

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: kOacp@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 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)

presentation given by Dennis WD8BPT about DStar. A long discussion followed the presentation.

- Drill- Al KA9WCS- A volunteer opportunity is available on Sunday April 22nd to be a victim in a mass casualty training drill at Meridian HS in Sanford. A sign-up sheet was passed around.

- MS Walk-Chris KB8UIH- Saturday, April 28th is the MS Walk starting at Midland HS. Volunteers are needed to monitor walkers. Let Chris know if you can help with this easy duty activity.

- Swap- Keith KB8SOE- Trunk sales, tickets, set up and clean up were all discussed.

- Dow Run- The Dow Run is on May 19th, volunteers will be needed for that.

- Field Day-Al KA9WCS- After a short discussion there was a motion on the floor made by Art KOACP to join the Saginaw Club in their field day. Seconded by Pat W8PMR. Passed.

- School Club- Art KOACP – The projected balloon launch date is May 5th.

- VE Testing Session – Lee KC8ITI - VE testing session April 7th

at the Salvation Army building.

- Tech Class – Lee KC8ITI - Tech class starts April 26th for more information contact Lee.

NET Control:

April 12th Al KA9WCS

April 19th Lee KC8ITI

April 26th Steve WA8Y

- Treasurer's report-Larry N8CGP-Thank-you to all those who have renewed their memberships.

- Saginaw Club -Mike KD8HMM- Due to lack of participation the Saginaw Club will no longer be able to host the I-75 Coffee Break Care Station on the Memorial Day and Labor Day holiday weekends. If anybody is interested in hosting that event it is available.

A motion to adjourn was made by Larry N8CGP. Seconded by Steve WA8Y.

The meeting was adjourned at 9:00 pm.

Respectfully submitted,
Linda KC8MUD
MARC Secretary

My Two Cents

Pat Mullet, KC8RTW

As I've undoubtedly mentioned before, I use *UI-View32* as my APRS client. "Orphaned" by the death of its creator Roger Barker, G4IDE upon his death in 2004, the program is frozen in time, an example of Windows XP software. The reason that the majority of users haven't flocked to a more modern APRS client, lies in the versatility given the base software by third-party "add-ons." One of these, *PMAPServer*, links *UI-View* to Undertow Software's *Precision Mapping Streets & Traveler*, which itself has been discontinued, but can

still be found on eBay or other sites. This gives *UI-View* scrollable and scale-able vector-based maps without having to be connected to the internet.

If you do have an internet connection, another add-on, *NWSGet*, has allowed the system to download weather radar images and watch/warning shapes from the National Weather service and display them as map underlays through *PMAPServer*. *NWSGet* has become abandon-ware, however, and now that the NOAA websites have

Amateur Radio is a Contact Sport!

transitioned from HTTP: to HTTPS: connections, *NWSGet* no longer knows where to grab the radar images, detracting from *UI-View's* versatility during public service events and severe weather nets.

Last year, however, one of the contributors to the Yahoo *UI-View* list came up with a workaround using *MITMProxy*. As the name implies, *MITMProxy* serves as the “man in the middle,” intercepting the download request from *NWSGet*, then redirecting it to the new NWS URL and the selected radar images are downloaded into the designated folder.

I had begun installing the workaround last year before my surgery, and have only been able to get back to it this last month. Matt, K8KDR, was unable to get *MITMProxy* running on his Windows machine due to DLL errors, so he installed it on a UNIX/Linux box and had *NWS-Get*—running on a WinXP box—grab the images from the proxy.

After running into the same errors on my Win7 64bit laptop, I unsuccessfully tried copying the DLL to the System32 folder. After a bit of googling, I found that I needed to in-

stall *the Microsoft Visual C++ 2015 redistributable* to fix the problem.

I did, but it didn't.

Checking the directories, I noticed that *MITMProxy* was installed in the Program Files (x86) directory—the 32 bit directory—and I'd installed the 64 bit version of the redistributable. After installing the 32bit version, *MITM-Proxy* was up and running and all I had to do was make certain all the paths were correct in *NWSGet* and the settings for the program were proper—not having the “save in native format” box ticked caused a week's worth of correspondence with Matt as we made our way through each step in the process to verify that *MITM* was working.

To make a long story short, I now have both my laptop and the station desktop merrily humming away, downloading NWS radar files, and showing any watch/warning boxes that show up. The multi-talented *UI-View 32* still lives.

That's it for this month. Hope to hear you on the air!

73, Pat, KC8RTW

Upcoming Events

MS Walk	April 29, 2018
Dow RunWalk	May 19, 2018
Museum Ships	Jun1-3, 2018
Midland Hamfest	June16, 2018
ARRL Field Day	June 23-24, 2018

Michigan Hamfests

1/28 Madison Heights
 2/3 Negaunee
 2/10 Traverse City
 2/18 Livonia
 3/17 Kalamazoo
 4/28 Chassell
 4/29 Madison Heights
 5/5 Cadillac
 6/3 Chelsea
 6/16 Midland
 9/16 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

ARES®/RACES

Al Bailey, KA9WCS

If you missed the last ARES®/RACES meeting don't worry. We will get you on to packet with the equipment. We are going to continue down the road of practicing and having everyone get on the equipment one on one, to fire up the laptops and connect to the TNC and the radio. Our goal this summer is to get the equipment up and going and allowing every person at the meeting time to train on how to turn it on, hook it up, and then transmit on packet.

At the end of the summer we will attempt to connect the Homer Township packet equipment and the 911 center equipment—just like we might have to in a real emergency.

Don't know anything about packet—no problem, neither do I so we can learn this together. Plus we have some club members with a lot of experience with this mode. All it needs is you to attend the meeting, sit down with the equipment and then have some fun.

Our next meeting will be on May 3rd, 6:00 pm at the Midand Law Enforcement Center in the conference room. Plan to be there, it will be worth it.

2018 MS Walk

Chris Rose, KB8UIH

Midland MS Walk for 2018 will be on April 29th Midland High School. 1301 Eastlawn Drive. (if you were interested in the trip, Frankenmuth's walk will be May12th.) Hours for the walk are to be determined. Please put

this date on your calendar. 17 operators are requested. Contact Chris, KB8UIH. Please do contact if you are going to help. I need a head count of who may be available to plan on what positions can be filled that day. Thanks in ad-

vance for your help.

Chris, KB8UIH
kb8uih88@charter.net
 Home 989-832-7179
 Cell 989-948-9153

2018 Frankenmuth MS Walk

The 2018 Frankenmuth MS Walk is fast approaching. This year's event will be held on Saturday May 12 at the Frankenmuth Heritage Park in the Kern Pavilion.

The start time has not been determined, but usually operators will need to show up at 8:30 am and are done by 11:30 am. Coffee, hot chocolate and donuts are available

before the walk starts and a lunch is provided after the walk.

At the April club meeting we passed around a signup sheet to work this event and got a good start, but we need more operators to cover all stations.

If you would like to help at this year's MS Walk, please contact Ron Huss at kc8yvf@arrl.net or call 989-

751-2693 so I can get you on the list. We need a total of 20 operators and we have 8 signed up so far, so please consider helping out for a good cause.

Sincerely,
Ron Huss, KC8YVF
Communications Coordinator

2018 Dow Run

The Dow Run occurs this year on Saturday May 19th. I continue to look for operators to help with this activity. Any Amateur Radio Operator

can participate. If you lack equipment we can supply that and if you lack experience we can team you up with another operator. Please contact

me at w8qn@aol.com to ask questions or volunteer to help.

Extra License Class Status

The Extra license class is in the history books. I had 8 students complete the course. Of the 8 that completed the course 6 upgraded to amateur extra at the VE session on April 7th. One student couldn't make the testing session in Mid-

land but has plans to take the test in the near future. I hope to hear that he was successful too. One student was working on his upgrade to general but sat in on the extra classes. Congratulations to all of the successful candidates. I

look forward to teaching this class in the future if there are enough people that show an interest in upgrading to amateur extra.

Lee - KC8ITI

VE Session Results

Dennis Klipa

We had a very successful VE session on April 7th, at the Salvation Army Building, in Midland. There were 14 candidates and everyone left with a new license or an upgrade. There are 4 new Techs, 4 new Generals and 6 new Extra Class licensees, thanks to Lee's recently completed Extra license class. While we tend think about serving the Hams in Midland, only 6 of the 14 candidates were from Midland.

Technicians: Stan Lingsjo,

West Branch; Bruce Osmon, Millington; Michael Brooks, Rosebush and Bradley Watts, Brant.

Generals: Everett VanSickle, Midland; Jack Hutchinson, KD8QAO, Harrison; Fred Fyvie, KE8JJM, Saginaw and Gerald Stackpole, KE8GPX, Essexville.

Extras: Jack Robinson, K8GTG, Midland; Paul Tolly, KE8GEM, Midland; Alan Bailey, KA9WCS, Midland; Martin Crook, KE8FIZ, Midland; Terrance Bruner, KE8EOS,

Standish and Mark Li, KW8MDL, Midland.

My thanks to the Volunteer Examiners who were: Lee Hodges, KC8ITI; Stan Rowe, K6VWE; Pat Russell, W8PMR; Michael Daugherty, KD8MMH; Deborah Cuthbertson, KB8J and Dennis Klipa, N8ERF

Best Regards,
Dennis Klipa, N8ERF
VE Liaison, ARRL VEC

Spring 2018 Technician Class Scheduled

The Midland Amateur Radio Club is organizing an Amateur Radio Technician License class starting Thursday, April 26th and will meet on Mondays and Thursdays for the next eight weeks at Midland High School

Room 321, 1301 Eastlawn Drive. Each class will start at 7:00 pm and run approximately two hours, covering everything you need to know to obtain your first Amateur Radio license. There is no fee for the class, though the textbook

used—ARRL Ham Radio License Manual, Third Edition has a list price of \$29.95. If you order the book through the class, you can get in on the club discount and get the book for \$25.00. NOTE: I will not be ordering extra books for

this class. This is the last time this edition will be used for these classes. A new edition of the book

will be coming out in July. A testing session will be scheduled at the conclusion of this class. For more

information, contact Lee Hodges either via email at kc8iti@arrl.net or by phone at (989) 486-3771.

Electronics and Wireless Communications Clubs

We are nearing the end of another successful year of fun, exploration and learning in the Northeast Middle School and High School Electronics Clubs, which are educational outreach programs of the Midland Amateur Radio Club in partnership with Midland Public Schools.

As has become our custom, the end of the year will be marked with a high altitude balloon adventure. The primary launch date is Saturday May 5th with Saturday May 12th as the backup date. See the end of the article for more specifics.

The students have been exploring the world of electronics all year and are now developing the skills needed to successfully build, launch, track and recover a high altitude balloon and its payload filled with transmitters, sensors and microcomputers to collect and/or transmit flight and atmospheric telemetry. They have learned about electronic components and what they do. They learned to use HTs and radio direction finding while doing some fox hunting. They have built a number of electronic circuits and learned to do some troubleshooting along the way. They also took a field trip to Aerospace Engineering Day at the University of Michigan in December.

In order to have a successful launch and recovery, the students are divided into six teams that focus on the Payload preparation, the Launch Vehicle assembly and launch, Radio Direction Finding for recovery, APRS Tracking, Flight Prediction and Photography.

The payload team is responsible for building the payload and

incorporating all of the transmitters, sensors, cameras, power supplies and ensuring that everything is ready to go at launch. They also are responsible for connecting the payload to the launch vehicle. The launch vehicle team is responsible for preparing the balloon, the parachute and the radar reflector. They are also responsible for filling the balloon with the proper amount of helium as determined by the flight prediction team and then tying off the balloon so it doesn't leak out all the while keeping the balloon from escaping before it is attached to the rest of the launch vehicle and the payload.

The Flight Prediction team has the responsibility to figure out where we can launch the balloon so that it has a good chance to land in Michigan (as opposed to Lake Michigan or Lake Huron) and hopefully not in the woods. They will use the mass of the payload and launch vehicle as well as the desired launch and recovery locations to determine the amount of helium that will go into the balloon at launch.

The APRS team is learning how APRS (Automatic Packet Reporting System) takes GPS signals from orbiting satellites to determine the balloon's position and then sends its location via Amateur Radio to trackers on the ground and to Internet gateways (IGates) that pass the information along to www.APRS.fi, so that everyone can track the balloon while it is in flight. Once the payload is back on the ground, the students will use at least two different APRS applications to help locate the payload, which will no longer be visible to the IGates.

The Radio Direction Finding team is the backup, should be APRS system fail. This is a critical system and has been called into action more often than not. It will also be instrumental for close in final locating of the payload.

The photography team is responsible for the preparation and operation of the GoPro Camera that will be included in the payload. This team is also responsible for documenting all of the preparation, launch and recovery activities of the club with ground based photography.

Based on all of our previous flights, it should be an exciting and fun filled adventure. Every year we learn something new. I wonder what it will be this year.

Our primary launch day is May 5th with the backup date of May 12th, both of which are Saturdays.

We will meet at 7:30 at NE Middle School for preflight instructions and directions to the launch site.

At 8:00 we will head out to the launch site. At this time we have no idea how close or how far that will be. If the distance between the launch site and the recovery zone is close, nearly everyone will head out to the launch site. If the recovery zone is farther away, the recovery folk will head toward the recovery zone instead.

Because of the experimental nature of this activity, we cannot know how long the activity will last, but we will make every effort to meet the timing needs of the participants.

We will need hams to participate in the launch to provide communications as well as RDF

Explore the World with Amateur Radio!

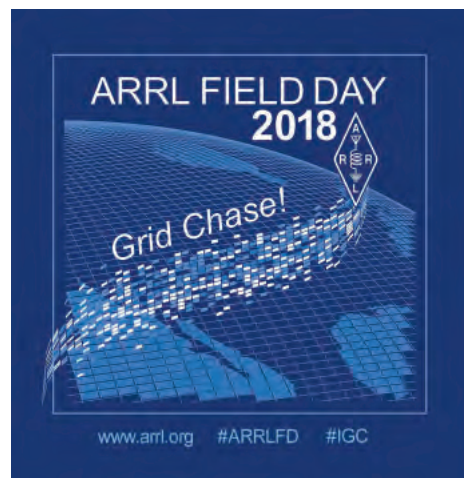
capability. We can supply you with RDF equipment should you not have any.

If you would like to participate please contact Dennis Klipa at n8erf@arrl.net

I want to thank all of the teachers and adult advisors for helping to make this another successful year for our school clubs. Andrew Fawcett (KD8ULJ, MHS), Carman Kessler (NEMS), Bernadette Wood (NEMS), Brian Brown (NEMS), Will Halphen (K8VFO), Jackie Klipa (N8NNA), Lee Hodges (KC8ITI), Art Peters (K0ACP), John

McDonough (WB8RCR). I would also like to thank the high school students who have helped out with the Middle School club; Caroline Zeigelein, Felecia Morey, and Ron Rice.

Best Regards,
Dennis Klipa
N8ERF



Technical Topics and Information

(ARRL Contest Update — Mar 21, 2018) Soldering is a basic skill, made more difficult by the decreasing size of modern components. Adafruit has published the ["Adafruit Guide to Excellent Soldering"](#) which details what good solder joints look like, as well as how to detect, diagnose, and remedy bad solder joints. (Bob, N6TV)

◆ If you'd like to compare two different ADIF log files, try the beta version of the Clublog service *adifdiff* at adifdiff.clublog.org. (Michael, G7VJR, via Twitter)

◆ With nine million Raspberry Pi 3 computers sold since their release, many are finding adoption in a wide range of Amateur related projects and products for their inexpensive cost, reasonable capabilities, and ever-expanding ecosystem. [A new model of the Raspberry Pi, the 3B+, was released last week](#), featuring more computing power, faster network connectivity, and better cooling.

◆ N1MM Logger+ and other logging programs have a voice macro feature which allows the use of audio (WAV) files to transact a contact just by playing pre-recorded message files. Usually a human operator records CQ, Exchange, and Thank You messages, as well as numbers and phonetics for each letter of the alphabet. The logging program sends the appropriate WAV file at the press of a key. N1MM has the additional cap-

ability to look for WAV files for arbitrary full call signs, which sounds much more fluid. Gerry, W1VE, has taken clever advantage of that feature and has combined it with today's cloud computing resources to make a [Synthesized Digital Voice Keyer \(DVK\)](#) that uses entirely computer-generated speech. [Joe, WB9SBD, took advantage of this feature in the Wisconsin QSO Party recently to make 400+ QSOs entirely by this method.](#) I asked Gerry what his motivation was for writing this program, and where he wanted to go with it in the future:

"I'm mostly a CW op. Phone is OK, but I don't like to talk for 24-48 hours in a contest. Of course, it can help you if you are sick, have an accent that makes you hard to understand, or otherwise are impeded from speaking. Why not make phone contesting as easy as CW? I've worked with speech synthesis in my career. A bunch of years ago, I experimented with another speech synthesizer for contesting. It used a different technology, and was a "live" DVK, synthesizing the audio directly from the text at the time the call sign was entered. It was OK, but the "free" voices sounded pretty robotic.

["Amazon's cloud-based Polly offering"](#) is essentially free for our needs: You can have an account for a year with 5,000,000 characters synthesized per month! It offers 24 lan-

guages and 47 voices, all exposed via my application. Rather than a "live" DVK, it is designed to create WAV files that can be used by the N1MM Logger+. Since we have a continuously updated [Super Check Partial \(SCP\) database online](#), my application can use the SCP database to generate full call sign WAV files for **all** the active contest calls. This is very important, as the intonation is perfect when you are playing a full call sign file: e.g. Whiskey-One-Victor-Echo.wav vs Whiskey.wav One.wav, Victor.wav, Echo.wav. When letters files are used to build the call, the intonation sounds robotic. Of course, my application creates files for both types of files. N1MM Logger+ will automatically use the full call sign files if they are found in the directory. The full US/Canada/Territory SCP file generates about 2 GB of audio files.

"Currently, my software generates files formatted to work in the appropriate directories for N1MM Logger+. Some Writelog users have asked for a version that fits that application. My application has only been around a few months. I'll see what people think. If there is enough interest, I'll generate other versions for the other loggers.

"It can be downloaded, free of charge, at <http://files.w1ve.com/W1VE-SYNDVK.zip>."

More Technical Topics and Information

(ARRL Contest Update — Apr 4, 2018) The ARRL CW Sweepstakes contest is in November, but perhaps you'd consider forming a team and practicing to submit an entry in the Multi-operator class. K3NG has added [tx inhibit and tx pause features](#) to his Arduino-based [CW keyer project](#) that could be combined with some lockout circuitry to make it easier to configure a station that complies with the "only one transmitted signal at a time" rule of this contest.

◆ The WSJTX FT8 DXpedition mode will have its [second official on-the-air test on April 7](#). Despite the pro-

gram authors' warnings not to use the new mode except in test configurations, and not to use it in the existing FT8 or other digital mode segments, some have found the potential for reasonable rates under poor band conditions too tempting. Disruption and hard feelings among other band users ensued. WSJTX's DXpedition mode requires the latest software and proper configuration on both ends, and the public test is an opportunity to try the latest pre-release software in a setting that attempts to minimize disruption and maximize the chances for knowledge transfer and success.

◆ The upcoming [VHF and up Spring Sprints](#) allow all modes including digital for valid contacts, and the exchange is the grid square for each station. WSJTX Version 1.9.0 and later can help rover operators using it by accepting current grid location updates via UDP from an external program attached to a GPS device.

◆ The [Club Log](#) API (Application Program Interface) changed to HTTPS-only access as of April 1. Requests via the HTTP protocol will be redirected to the HTTPS version of the same URL.

MARC Vital Statistics

Memberships Expiring in April

K8RI
N8JBW
K8VB

K8VFO
KD8MMH
KC8IHB

K6VWE
KE8GEM
K8AVJ

KB8AWE

Memberships Expiring in May

KD8QAM

KE8DON

Memberships Expiring in June

KB8UIH

N8KRL

Members in Good Standing

K0ACP
K2VMH
K6VWE
K8AVJ
K8RI
K8VB
K8VFO
KA9WCS

KB8AWE
KB8PGW
KB8RCR
KB8SOE
KB8UIH
KC0CJC
KC8IHB
KC8ITI

KC8MUD
KC8RTW
KD0JHX
KD8HID
KD8MMH
KD8QAM
KD8QXK
KD8QXL

KD8ULT
KE8DON
KE8EOX
KE8GEM
N8CGP
N8ERF
N8FUZ
N8JBW

N8KRL
N8NGT
NX8A
W8DOD
W8RBF
W8WOJ
W8ZSX
W8ZSX

WA8LQD
WA8Y
WB8FYR
WB8RCR
WB8WNF
WD8BPT
WD8ODG
WN8QGV

Current Active Club Membership 48

Birthdays Celebrated in April/May

KC8TQS 4/9
KB8TBI 4/14
KC8IHB 4/19
WA8LQD 4/27

KA8Ezt 4/28
N8JBW 4/30
KE8CTI 5/1
KD8QAM 5/5

KE8DON 5/9
W8RBF 5/16
KC8MUD 5/19
WD8AXR 5/25

Anniversaries Celebrated in April/May

AC8RT and Julie 4/26

Information is from data received 10/13/2017
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