

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 — Cancelled
Law Enforcement Center, 2727 Rodd St.
Next CLUB Meeting — Thursday July 7, 2016, 7:30 PM
Salvation Army Bldg., 330 Waldo Ave.
Talk-in 147.000+

July 2016

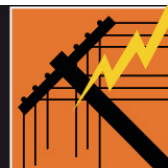
Static Discharge

John Wolters, W8QN

Well at the time I am writing this, two-thirds of June is gone. What a busy weekend has just passed with the balloon launch and recovery, and Swap. I will leave the details of the balloon launch to Dr. Klipa but for me it was a lot of fun, stress, and joy with a happy ending. The Swap is also in the books and hopefully our two co-chairs will add some comments later. Again, from my viewpoint, I saw a lot of people attending presentations, many happy faces walking out of the testing sessions, and a lot of stuff changing hands. What else could you ask for? Field Day is yet to come so if you would like to join, see you at Homer Township Park around noon on June 25th. Otherwise I will see you at the July Club meeting on July 7th at 7:30.

John Wolters, W8QN

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



The meeting came to order at 7:30 p.m. with 34 members and guests present. Introductions were made and a sign-in sheet was passed around.

- The meeting started with a presentation of several members telling about their HF rigs and home and car set-ups. A lot of discussion followed.

MARC MEETINGS

Keith Johnson, KB8SOE, 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 Keith at (989) 488-4337, or via e-mail: kb8soe@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)

- Swap—Pat W8PMR—The day is June 18th, Pat is looking for help setting up on Friday night at around 5:00 P.M. Setting up tables can start on Saturday morning at 6:00a.m. Seminar sessions, VE exams, food sales and door prizes were discussed.

- Field Day—John KB8PGW—The days are June 25th and 26th. We'll meet at Homer Township Park after breakfast on Saturday morning. Breakfast is at Big Boy at around 8:30 to 9:00 a.m. with set-up at the park afterward. Pot Luck meal at 5:00 p.m. and the generator were discussed.

- Treasurer's Report—Larry N8CGP—Thank-you to all who have renewed your licenses.

- Dow Run—John W8QN—John says everything went well except a few barricades were taken down a little bit too soon. Thank-you to everybody who helped.

- Lupton—John W8RCR—Times and dates about Michigan Section Outing at Lupton and other upcoming events and an invitation to go to an AUXCOMM Class in Indiana.

- Discussion about the Club Web site and some modifications it needs.

- Silent Key—Jim KD8HIH—A tribute or memorial was discussed in memory of Pat McPherson WW9E. Discussion tabled until next meeting.

- Technician Class —Lee KC8ITI — Lee's latest class will soon be finishing up and has a few students who will be taking their tests at the Swap.

- Classes—Chuck WA8LQD — Chuck told about FEMA Class times and location.

Net Control

July 9th Art K0ACP

July 16th Dennis N8ERF

July 23rd John W8QN

July 30th Lee KC8ITI

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

The meeting ended at 9:15 p.m.

Respectfully submitted,
Linda KC8MUD
MARC Secretary

My Two Cents

As I'm writing this, it's the first day of summer; the Midland Hamfest is over and Field Day is this coming weekend. I was able to find a ride to the Hamfest, and had myself a fine time. Just having a chance to get together with many of the MARC club members was fun, but it was great being able to connect with folks I haven't seen in what seems like forever. Just being able to set around and talk ham radio with other hams is something I've missed far too much lately. And hey, a couple of items caught my

Pat Mullet, KC8RTW

eye and managed to follow me home—frosting on the proverbial cake!

The Midland ARC's Field Day will be held at the Homer Township Park, this year, home to the Club's annual picnic for many years, so many will be familiar with the area. It looks like the Park will be conducive to spreading out the antennas for minimal interference between the different stations, and the facilities should make for a comfortable operation.

Myself, I plan on operating a 1D station (home station/commer-

Amateur Radio is a Contact Sport!

cial power), and don't think I'll be running the full 24 hours, but I do plan to have fun, never the less.

The bands will be crowded this

weekend, hope to hear you on the air!

73, Pat, KC8RTW

ARES®/RACES John Wolters, W8QN

Let's take a summer break and pick up when it cools off and everyone is back from vacation.

There will be no ARES®/RACES

meetings in July or August.

See you in September.

John Wolters, W8QN

Future Club Meetings

The following is a list of the future presentations that will be made at club meetings. We reserve the right to change, substitute, or change the date as the case requires.

July—Presentation by Keith (KB8SOE) and Ice Cream Social, Salvation Army Building, 7:30 pm.

August—SDR Receiver Discussion and Demo, Larry Macklin, Salvation Army Building, 7:30 pm.

September—WSPR Demonstration, Will Halphen, Salvation Army Building, 7:30 pm.

October—Satellite Communications Basics.

Dow Run

John Wolters, W8QN

I had hoped to wrap up the Dow Run with a thank you to a long list of operators in this column. Unfortunately the computer with the list is sitting in St. Louis, Missouri and I don't want to go from memory.

I will say thank you to all for

now and include the list in the next Newsletter.

Thank you, thank you, thank you.

We, amateur radio, were well represented by the professional people that assisted with the run.

John Wolters, W8QN

Spring 2016 Technician License Class

The spring technician license class finished on June 9th. We had nine people start the class and four people finished the full class. Three of the four people tested at the Midland Hamfest and each passed their Technician License test. Our fourth person was visiting

her son in Chicago and successfully tested for her Technician License in the Windy City. All are anxiously awaiting their call signs to be issued. Plans are to offer more license classes starting this starting this fall.

Lee – KC8ITI

2016 Hamfest Wrap-up

Another great Hamfest is under our belts. I had a great time, thanks to the tireless efforts of so many folks! I cannot begin to remember everyone that lent a hand, but I personally, and the club thanks each of you!

I do not have the financial report, but some of the other high-

lights are:

VE session with 20 persons testing and 17 successful; two demonstrations; one on satellite communications, and one on coax connector assembly; two seminars on PIC and Raspberry Pi use, and one on DX and contesting. A trailer full of equipment donated to the

Upcoming Events

6/27-28	Field Day
7/18-19	Tall Ships Weekend
8/27	Dirty Dog Run

Michigan Hamfests

7/16	Shelby Township
7/16	Lowell
7/30	Lansing
8/6	Escanaba
8/7	Port Huron
9/10	Shelby Township
9/18	Adrian
9/24	Wyoming
10/8	Alpena
10/15	Muskegon
10/16	Kalamazoo
10/30	Madison Heights
12/4	Madison Heights

Area Nets

SVARA; Mn, 147.24 MHz, 2100 ET
 Gladwin; Tu, 147.18 MHz, 2000 ET
 BAARC; Tu, 145.31 MHz, 2100 ET
 Isabella Co EOC 146.72 Mhz, 1900 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.

club, and offered to the public for a donation.

Great trunk sales, with everything from a Hammerlund radio to portable antennas.

We are a little sparse on our indoor vendors, but as described "with today's weather, why would you want to be inside!"

So for everyone that helped,

attended, learned, or participated, thank you! It was a great time!

Pat Russell, W8PMR

Hamfest VE Exam Results

Dennis Klipa, N8ERF

At the Midland Hamfest on June 18, 2016, we had 18 people sit for exams, 16 of whom walked away with a new license (11) or an upgrade (5- General).

The successful candidates were:

Technician: Cody Wright, Midland; Terrance Bruner, Standish; Mark Murray, Midland; Martin Wylie, Midland; Andrew Scheffer, Midland; Deborah Cuthbertson, Midland; Anthony Lupo, Bay City; Thomas Lind, Midland;

Richard Herzberger, Bay City; Michael Curerri, Sanford and Odin Drake, Midland. Odin and Andrew are middle school students and members of the North-east Middle School Electronics and Wireless Communications Club!

General: Horst Wojtowicz, KD8ZXR, Saginaw; Al Bailey, KA9WCS, Midland; Keith Michael, Midland; Paul Filiczowski, KC8ELQ, Birch Run and John Greenough, K8JGG, Saginaw.

The VE Examiner Team was; Dennis Klipa, N8ERF; Lee Hodges, KC8ITI; Larry Macklin, N8CGP; Del Lafavor, WB8FYR; John Tallman, KB8PGW; Robert Winchester, W8LSS; Michael Dougherty, KD8MMH; Pat Russell, W8PMR and Art Peters, K0ACP.

Best Regards,
Dennis Klipa, N8ERF
ARRL VE Liaison

W8WOJ Comments on K6VWE article

I just read the fine article in the May newsletter concerning Stan's DXCC accomplishment. I have known Stan for a long time and he is indeed a DXer of the highest order.

Long before many of our group was licensed amateurs, a gentleman named Hugh Cassidy wrote the monthly DX Column for *CQ* magazine. There never was nor will there ever be another like Cass. He told DX stories like no one else. One was simply a DX saying. It was "DX IS!!" He said you need go no further because when you said "DX IS" you've

said it all. Well the upshot of all the above is to say that in my opinion K6VWE comes under the "DX IS" category.

Now I did want to fill in the missing info about W8WOJ just for the record. When I quit DXing almost 10 years ago, I had been listed on the No.1 DXCC Honor Roll for many years and I currently am listed at 362 total mixed credited entities. The only country on the DXCC Entities list that I have not worked is Southern Sudan.

Thanks for reading and 73 de Don, W8WOJ

[To which Stan, K6VWE replies]

Thanks for forwarding Don's nice note. Don is clearly the king of DXers in Midland if not the entire Great Lakes Region. Be sure and include his note in the next MARC newsletter to follow up on my story. Don has worked more entities than I will ever contact!! His ham radio history would make a great article in itself for the MARC newsletter.

Stan, K6VWE

Dale's Tales-Great Lakes Division Newsletter

(ARRLWeb—6/3/2016) Greetings everyone, welcome to "Dale's Tales" for June, 2016.

AMATEUR RADIO PARITY ACT: Last week, the House Subcommittee on Communications and Technology received a letter from

Community Associations Institute (CAI) supporting the Amateur Radio Parity Act. Our Legislative Action Team has been working extensively with CAI and staff from the House of Representatives to reach this agreement. This action is a vital step

in gaining support from Homeowners' Associations as CAI is the national advocate for those groups. Having this agreement is a positive step in securing passage of the Bill in the House of Representatives and improves the likelihood of similar

It's Not Your Grandfather's Amateur Radio!

action in the Senate.

You can find the latest information at <http://www.arrl.org/amateur-radio-parity-act>. Thanks to so many of the Great lakes Division hams who have sent letters supporting the legislation. If you have not done so, you can find a sample on the listed web page. Please be sure to route your letters through ARRL Headquarters: ARRL, Attn: Amateur Radio Parity Act grassroots campaign, 225 Main St., Newington, CT 06111. Our Legislative Action Team will hand deliver the letters, thus avoiding delays caused by the postal inspection system in DC.

A LITTLE OFF THE WALL - THE UNEXPECTED SCIENCE EXPERIMENT. I have a tower located about 6 feet from the house. My antenna transmission lines run via messenger cable from the tower to the soffit and then inside to the ham shack. I can see this cable run clearly from the shack window. One morning, I glanced out and saw a glint of bare copper on one coax line. Visible braid!! I went outside and up the tower, only to find little teeth marks on the cable jackets. Yes, jackets, as three cables had the braid exposed. So out comes the silicone waterproofing and a lotta tape to do the necessary repairs, still not knowing what varmint had done

the damage.

An hour later, I spotted a grey squirrel climb the tower, traipse across the cable bundle, pause for a late morning snack of PVC and hurry on his way to bother someone else. Aside from squirrelcide, which would have its own set of problems, it just seemed a protective cover for the cables would be the best solution. Running the cables through a 3 inch Schedule 40 pipe looked pretty reasonable, that is, except for the mechanical problems of actually snaking 9 cables with connectors through the pipe.

Splitting the pipe to make a "roof", then covering it with some black semi-gloss just appeared to be the best solution. A quick run across the table saw to split the tube should be simple enough. After all, I have a long fence on the saw and all the safety equipment to insure a straight run and no twisting, while keeping all my digits. The plywood blade in the saw should make a very clean cut. Onward! It is only a 6 foot pipe.

Two feet into the cut, I began to hear a lot of strange snapping sounds and then I noticed that all the hair on my arms was standing up. I look behind me to see the plastic chips from the saw cut shooting out of the end of the tube at about 80

miles an hour, dust collection system be darned. Let's see, insulated particles shooting down an insulated tube; OMG! I have a Van de Graaff generator running in my hands and everything is now charged to some absurd voltage level with static electricity.

I hit the power switch and watched as the saw slowed to a stop and the few remaining plastic chips hit the wall. They were all there, hanging on the wall, in kind of a big ugly clump. Then the chips began scattering... the like-electrical charges of the chips began to repel each other; the spot on the wall was growing like some beast from a "B" Sci-fi flick. It finally reached about a 2 foot diameter and then began to collapse onto the floor. What fun!

After vacuuming the wall, the floor and me, I decided that next time, I will give serious consideration to the fine qualities of a hand saw. Oh, the "roof" works very well, and I think the squirrel has finally lost his taste for coax cable.

73, See you on the bands, (squirrels permitting).

Dale Williams WA8EFK

Director

ARRL Great Lakes Division

wa8efk@arrl.org

June 2016 Michigan Section News

(ARRLWeb site—6/15/2016)
Greetings to the hams of Michigan:

Summer is finally arriving and it certainly feels good to have the days warmer and longer. Be sure to get outside and enjoy ham radio while you are out there. Make an excuse to set up a portable operation and have some fun. Ham radio attracts those passing by and it is an excellent opportunity to explain a bit about amateur radio and what a great hobby it is.

MI Section Outing

The 18th annual Michigan Section Family Outing (July 8-9, 2016) will be held at the Woodlands Conference Center and Campgrounds located at 318 S. Sage Lake Road, Hale, MI 48739. The outing will be a 2 day affair with activities beginning on Friday afternoon and a full day of presentations on Saturday. Saturday will be the Michigan Emergency Coordinator's annual meeting with a number of inter-

esting and important presentations by a variety of individuals.

Everyone is invited to attend both days and one does not have to be an EC to attend. Everyone is welcome join us and learn more about how amateur radio interfaces with Michigan Emergency Management at the state, county and local levels.

Full conference details are available at www.sectionouting.info

The conference center is located about 20 miles from West

Explore the World with Amateur Radio!

Branch which has a number of hotels and a Tanger Outlet Mall in addition to local stores for shopping.

Remember, any day in the

woods of northern Michigan is a great day!

I wish you all a good field day and I look forward to meeting you at hamfests and on the bands.

73 until next month,

Larry, WB8R

ARRL Michigan Section Manager

wb8r@arrl.org

Technical Topics and Information

(ARRL Contest Update—June 1, 2016) There's new online content to go with the *ARRL Antenna Book*. Ward, N0AX, writes:

"I've added a couple of cool things to the *Antenna Book* web page at www.arrl.org/arrl-antenna-book-reference. Since we can't update the *Antenna Book* every year like we do the *Handbook*, I'm going to start adding the occasional article to the website from time to time. You can find this content under the 'Supplemental Information and Files' menu on the *Antenna Book* web page.

Antenna Designs - Additional articles providing interesting and special-purpose antenna designs. The list will expand with more articles over time. Check back from time to time for new additions!

"An Ultra-Light Yagi for Transatlantic and Other Extreme DX" by VE1FA from the Mar/Apr 2016 issue of *TCA (The Canadian Amateur Magazine)*. This rope-suspended antenna was designed by VE1FA for his team's pursuit of the Brendan Quest award for the first two-way transatlantic QSO on 2 meters using only natural propagation. So far, they've been heard "across the pond," but haven't completed the necessary QSO. Here is the *EZNEC* model (in compressed .zip format) for the antenna as well as a [text file](#) with measurements of the antenna.

Article Lists -- The downloadable *Excel* spreadsheet "An-

tenna Article Master Directory" contains the Tables of Contents for the entire *ARRL Antenna Compendium series*, Volumes 1-8, *Wire Antenna Classics* and *More Wire Antenna Classics*, *Yagi Antenna Classics*, *Portable Antenna Classics*, and *Simple and Fun Antennas*. The articles may be sorted according to a number of topics that apply to the articles, making it easier for you to find articles for your particular situation or application. (Updated 1 April 2016)

♦ There's not an SSB Skimmer, yet, but here's an example of someone using cloud-based speech recognition APIs (Application Programming Interfaces) for a non-trivial application: "Say-what," an agent that pays attention to an online meeting for you. Here's [how it works](#), according to the author, Josh Newlan: "I wrote a script that listens to meetings I'm supposed to be paying attention to and pings me ... when my name is mentioned. It sends me a transcript of what was said in the 30 seconds before my name was mentioned and everything within 30 seconds after." The program pipes audio to [IBM's Watson Speech to Text API](#) in real-time. Josh has even made the [source code available](#). It would be an interesting test to see what Watson could do with listening to a run frequency.

♦ Imagine expanding the ICs in our rigs into discrete components, using transistors, resistors, and so on. Well, someone has done that with a popular micro-

processor of yesteryear, the 6502. Dubbed the [MOnSter 6502](#), with added LEDs it is quite the conversation starter. It was on display at the [Bay Area Maker Faire](#), which ran concurrently with the Dayton Hamvention.

♦ UK Researchers have determined that [bumblebees can sense electric fields using the hairs on their body](#). It remains unclear whether they actually use this ability to better find food, or navigate.

♦ Will [televisions of the future](#) be susceptible to RFI? They may not have tuners, and may more resemble computers with large screens.

♦ Wi-Fi at 2.4 GHz is saturated in many areas, and it's predicted that the 5 GHz band will be as crowded in 2 to 3 years. The [next frontier of Wi-Fi operates at 60 GHz](#), with support beginning to show up from some smartphone vendors. There's also new name: WiGig.

♦ As one of the fundamental building blocks for SDRs in their many implementations, the [Fourier Transform's history began in the 18th century](#). It became practical to process signals in real-time only after Cooley and Tukey's 1965 re-discovery of the "fast" algorithm first described by Gauss in 1805.

♦ Just in time for that summer radio project! Here's a [survey of free PCB design software](#) by *EE Times*.

More Technical Topics and Information

(ARRL Contest Update—June 15, 2016) A [hybrid of silicon](#)

[wafer and vacuum tube technology](#) may allow electronics to

continue to shrink. While the ever-diminishing physical size of

conventional silicon wafer devices increases the potential for leakage via quantum tunneling, vacuum technology exploits the same effect for faster switching. This research is sponsored by Boeing.

♦ Titanium Dioxide, a chemical typically known for its use as a component of paint pigment, [is being used to make high-resolution lenses](#). The method of their construction is novel, akin to the way that silicon wafers are fabricated. In some anticipated uses, focus would be achieved by computation instead of physical movement. [Researchers are also](#)

[examining the potential to electrically tune parameters](#) of the lenses, which can modulate optical transmission.

♦ [TAPR has had a Raspberry Pi shield available for 20 meter WSPR](#) use for a while. This is a complete WSPR transmitter, including low-pass filter, on a single board. What you may not know is that the board is not confined to just WSPR modes. [With suitable software, CW, SSB, SSTV, and other modes can be used with the hardware](#).

♦ SDR "dongles" continue to be used as building blocks for ex-

perimentation and utility, such as [receivers for the Reverse Beacon Network](#). In a recent blog article, [GOMX-3 satellite data is decoded using Gnu Radio by](#) some enthusiasts including some Amateur Radio operators. The GOMX-3 satellite's mission is to collect ADS-B transmissions over portions of the globe not covered by terrestrial receivers for retransmission to ground stations. For even more SDR inspiration, the [RTL-SDR website](#) provides a wide range of information.

MARC Vital Statistics

Memberships Expiring in June

KB8UIH
N8KRL

N8NGT
NX8A

WA8KJR
WA8Y

WB8FYR
WD8ODG

Memberships Expiring in July

NONE

Memberships Expiring in August

NONE

Members in Good Standing

AC8QF	K8VFO	KC8IHB	KD8IWB	KE8CTH	N8JBW	W8LSS	WA8Y	WN8QGV
AC8RT	KA9WCS	KC8ITI	KD8MMH	KE8CTI	N8KRL	W8PMR	WB8FYR	
AG8B	KB8PGW	KC8MUD	KD8MRB	KE8DON	N8LBF	W8QN	WB8RCR	
K0ACP	KB8SOE	KC8RTW	KD8QAM	KE8DOP	N8LOU	W8WOJ	WB8WNF	
K6VWE	KB8TBI	KC8TQS	KD8QXK	N8CGP	N8NGT	W8ZSX	WD8AXR	
K8RI	KB8UIH	KD0JHX	KD8ULA	N8DHF	N8WTQ	W8ZSX	WD8BPT	
K8VB	KC8CTG	KD8HIH	KD8ULT	N8ERF	NX8A	WA8KJR	WD8ODG	

Current Active Club Membership 57

Birthdays Celebrated in June/July

W8LSS 6/2	N8POX 6/25	K8RRB 7/8	WB8RCR 7/21
N8LOU 6/8	KC8URV 6/28	KA8ORL 7/11	N8LMS 7/27
K8RI 6/16	WD8ODG 6/30	N8NGT 7/14	WA8JGQ 7/28
KB8VSS 6/21	KD8MMH 6/30	K8SQB 7/17	W8OKN 7/30
KD8IWG 6/23	KB8RCR 7/2	AG8B 7/18	
K8HP 6/24	KG8YG 7/6	KD8DWX 7/21	

Anniversaries Celebrated in June/July

N8CGP and N8KRL 6/5	N8STF and Mary 6/16	WB8WNF and Rebecca 6/22	KD8HID and ??? 6/28
N8KFE and Cheryl 06/12	WA8LQD and Kathy 6/16	NX8A and Kristina 6/24	AA8EJ and Beverly 6/28
KB8VSU and Barbara 6/13	N8POX and Kris 06/17	K8VFO and Mayumi 6/27	KE8CTI and Molly 7/8
W8SEX and Myrna 6/13	W8LSS and WD8AXR 6/19	KB8PGV and Connie 6/27	KC8RTU and Brenda 07/20
WA8LQD and Kathy 6/16	N8UPP and KC8AVI 06/21	K8CCE and Clarice 06/28	KD8MQX and Emily 7/20

Information is from data received 6/12/2016

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