



# THE SCOPE

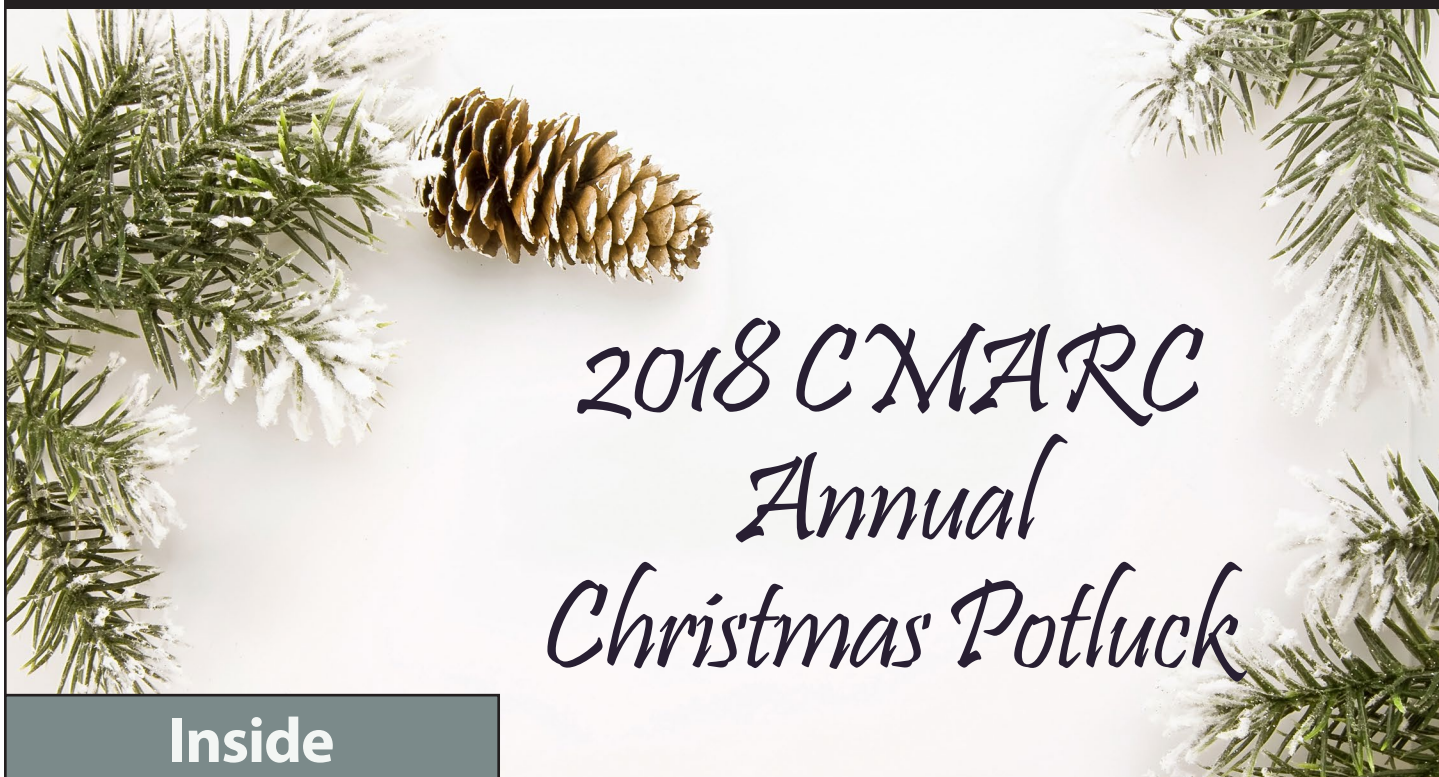


The Central Michigan Amateur Radio Club and Lansing Civil Defense Repeater Association

VOLUME 18, ISSUE 6

NOVEMBER / DECEMBER 2018

CENTRALMIARC.COM



## Inside

Treasurer Report	Pg 2
Birthdays/Anniversaries/	
Upcoming Meetings	Pg 3
VE Exams	Pg 4
2019 Board Nominees	Pgs 5-7
A Perfect Key	Pgs 8-9
MichiganSection	Pg 9
48-Year Radio Journey	Pg 10-13
ARRL Board Changes	Pg 14
Meeting Minutes	Pgs 15 - 24
Classified Ads	Pgs 25-26

### Who?

All Members and Friends of CMARC, Along with Your Families

### When?

Friday, December 14, 2018 @ 7:00 PM

### Where?

Lansing Mason Area Ambulance Training Facility  
807 Kerns Rd., Mason, MI 48854

### What Should I Bring to Eat?

Bring your favorite Appetizer, Casserole, Salad, Holiday  
Dessert, Christmas Candies, or Non-alcoholic Beverage.  
Crock pots of hot food are always welcome too!

# Treasurer's Reports 2018

Daniel Beuchert / WX8MOJ- CMARC Treasurer

Bank Balances for September	
<b>Beginning Balance</b>	<b>\$3,950.19</b>
Total Monthly Income	\$75.00
Total Monthly Expenditures	(\$104.00)
Total Business Checking	\$3,921.19
Petty Cash	\$1.00
Outstanding Checks	(\$0.00)
Sub Total + Petty Cash	<b>\$3,922.19</b>
Primary Share Accounts	
Humphrey's Fund	\$383.68
Building Fund (Club Station)	\$19.09
Field Day	\$528.27
Total Net Worth	<b>\$4,853.23</b>
Youth Fund Balance*	\$254.36
* Separate from CMARC Funds	

Bank Balances for October	
<b>Beginning Balance</b>	<b>\$3,921.19</b>
Total Monthly Income	\$60.00
Total Monthly Expenditures	(\$956.70)
Total Business Checking	\$3,024.49
Petty Cash	\$1.00
Outstanding Checks	(\$0.00)
Sub Total + Petty Cash	<b>\$3,025.49</b>
Primary Share Accounts	
Humphrey's Fund	\$383.71
Building Fund (Club Station)	\$19.09
Field Day	\$528.31
Total Net Worth	<b>\$3,956.60</b>
Youth Fund Balance*	\$254.38
* Separate from CMARC Funds	

The Scope is a bi-monthly joint publication of the Central Michigan Amateur Radio Club and the Lansing Civil Defense Repeater Association.

Please send any articles, classified ads, or other items to the Editor, Chris Ranes, NS8Q at [cmarscope@gmail.com](mailto:cmarscope@gmail.com). Pictures should be mailed in .jpeg format, and articles in Microsoft Word or TXT format.

The views and opinions expressed by our contributing authors do not necessarily reflect the views of the Central Michigan Amateur Radio Club or the Lansing Civil Defense Repeater Association.

## December Birthdays:

4th Justin Leblank / KE8FEZ  
5th Jason McLaughlin / KC8RBK  
7th Dave Vick / W8ZZX  
8th William Smith / KD8INX  
9th Charles Taricska / KD8VJM  
11th Russ Fitzgerald / N8FZ  
12th Leon Langridge / KD8ZPE  
13th Gordy Smith / KE8JKS  
15th Phillip Woodard / KD8ZZK  
17th Michael Boensch / W8MKB  
24th John Listermann / KD8ZHC  
Joseph Listermann  
28th Timothy Clay / KC8THC

## December Anniversaries:

5th Michael Yager / KE8BIH  
18th Dan Cameron / KD8QBF  
19th Justin Leblank / KE8FEZ  
21st Charles / KE8DVQ and Jen / KE8DVP Coslor  
23rd James Fick Jr. / KE8ABZ  
28th Ed / W 8EO and Tina Oser  
31st Dan / WX8MOJ and Dawn/ KD8MWA Beuchert

## January Birthdays:

2nd Friedrich Vedder / KE8BLP  
5th John Winn / KE8CYC  
8th Bob Reynolds / WB8PPG  
13th Allan Ostrander / KD8VJD  
23rd John Ingraham / NG8L  
Mary Lou Tillitson  
24th Pam Denomme / KB8PSF  
28th Martin Groom  
31st Ed Oser / W8EO

## January Anniversaries:

9th Bob Reynolds / WB8PPG

## Upcoming Meetings:

### CMARC Monthly Meeting

**When:** 7:00 pm, Friday, December 14, 2018

**Where:** Lansing Mason Area Ambulance  
Training Facility  
807 Kerns Rd., Mason, MI 48854

### ARPSC Monthly Meeting

**When:** 7:00 pm, Monday, December 17, 2018

**Where:** Lansing Fire Station 48  
off Marshall Rd. South of Grand River.

*Attention all CMARC  
Ladies and Girls*

Stay tuned for details on the  
upcoming CMARC Ladies & Girls  
After Christmas Gathering!

# ARRL Volunteer Exams



## Sponsored by the "Ingham County VE Group"

To best accomodate the various schedules of those wishing to test, the Ingham County VE team meets on either a Saturday morning or Thursday evening, every other month. We test in the Community Room at Lansing Fire Station #44 1435 E Miller Rd., Lansing MI 48911-5322.

Contact: Don McLain (KB8RAD) (517) 930-7707 [KB8RAD@arrl.net](mailto:KB8RAD@arrl.net)

## Exam Results

The "Ingham County VE Group" would like to congratulate the following people from who earned new or upgraded Amateur Radio licenses:

### Saturday, November 10, 2018

#### Technician Class Licenses Processed

Ryan S Grisdale - KE8KYE  
Jacob C Nichols - KE8KYA  
Ali H Alsatarwah - KE8KXX  
Xuan Zhao - KE8KXZ

Cameron A Crump - KE8KXV  
Volkan Yildirim - KE8KYB  
Alec D Castiglione - KI5CIB  
Chris J McIntire - KE8KYD

Ramzy M Samara - KE8KYC  
Kyle A Oliynyk - KE8KXW  
Tyler T Peterson - KE8KXY

#### Examiners Participating in this Test Session

John Doornhaag - KD8NNQ  
Shawn Crawford - WA8MXJ  
Kelly Fitzgerald - N9PC  
John Kuchart - KD8TMW

Chris Ranes - NS8Q  
Judy Crawford - K8JKC  
Russ Fitzgerald - N8FZ

Ben Barker - WD8OVL  
Ted Sadilek - WA8MFQ  
Don McLain - KB8RAD

### Upcoming Exam Sessions

**December 6, 2018 @ 7:00 PM**

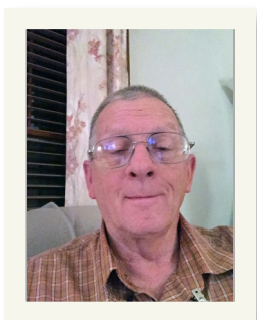
**January 12, 2019 @ 11:00 AM**

**February 7, 2019 @ 7:00 PM**

**March 9, 2019 @ 11:00 AM**

# 2019 Board Member Nominees

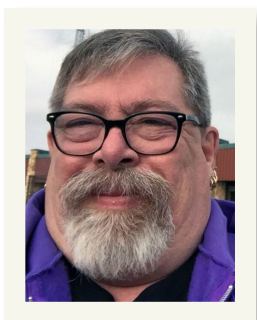
## Carl Canfield / K8YHH



Carl has been a ham since December 22, 1960, and still loves amateur radio. He runs the Sunday night slow scan TV net, and has been doing so for almost 10 years. Carl

is active on HF, VHF, and UHF Bands. He loves to operate CW, SSB, many of the digital modes, amongst others. Carl has previously served on the Board, and will do his best for YOU, the club members. He encourages everyone to have fun with amateur radio and learn while doing so.

## Dave Vick / W8ZZX



Dave is a 35-year veteran of the Entertainment Industry; a freelance Theatrical Technician currently traveling in the US on touring Broadway musical productions. When he's not touring somewhere in the world, Dave lives in Lansing and works on the backstage

crew of the Wharton Center for Performing Arts at Michigan State University, among other theatres and concert venues around the State of Michigan. Dave often works as a stage rigger; one of the people charged with suspending thousands of pounds of lighting, sound equipment, and scenery over the heads of performers and audiences. Dave was the first rigger to be Certified for both Theatrical Rigging and Arena Rigging in the State of Michigan, and only the 427th Certified Rigger in the US and Canada.

Dave first developed a love of two-way radio work in the CB craze of the early 1970s, but let it slip away as he left school. The love of electronics stayed with him, though, allowing him to work on many of the highest-tech show-biz automation systems in the world. Dave earned his Tech

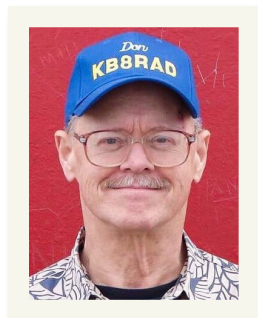
ticket in March of 2018, immediately progressed to General Class in May of 2018, and advanced to Extra Class in July of 2018, at the CMARC HamFest in Holt. He enjoys rag-chewing and contesting on HF, primarily 40m and 80m, and can also be found in the evening Lansing area nets on 2m - 145.39 and 146.70. He runs a Yaesu FT-897 transceiver and MD-100 microphone on an Alinco DM-330MV power supply, driving a 134' End-Fed Half-Wave long wire HF antenna and a homebrew Open-Stub J-Pole for VHF and UHF, and he plans on raising a 6-band HexBeam on a 48' tower in the spring... Maybe; he is also saving up for an Icom IC-7300, and he sports a Yaesu FT-60R dual-band VHF/UHF H/T in his car. He also enjoys designing and engineering all sorts of homebrew antennas for HF and VHF frequencies, and recently served the CMARC group as Chair of the Beam Antenna Replacement Committee.

In addition to amateur radio, Dave enjoys riding his old British Royal Enfield motorcycle, doing graphics work on his computers, shooting competitive skeet and sporting clays all over Michigan, designing and reloading high-performance shotgun ammunition for competition, and is a member and Past Master of a few area Masonic Lodges and appendant groups.



# 2019 Board Member Nominees

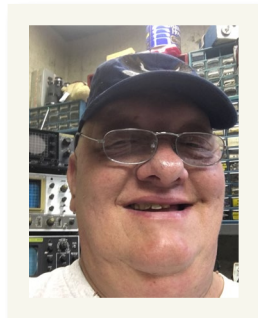
## Don McLain / KB8RAD



Don has enjoyed being a Ham for the last 25 years and an Extra class operator for the last 20. He has been a CMARC and an ARRL member since he was first licensed in 1993. Over the years, he has served on the Board of Directors of CMARC for a combined total of 14 years. He has been involved in many CMARC activities including holding the following positions:

Vice President, Club Contact, Youth Liaison, New Ham Contact, Chairman of the CMARC Speaker/Entertainment Committee, and the CMARC Facebook Group Admin. Don was also awarded the 2011 Ziegenbein Award. In addition to these activities, Don serves on the Board of Directors of the Lansing Civil Defense Repeater Association (LCDRA) and is an active ARRL Volunteer Examiner and the Founder and Host of "RAD's Coffee Break". He really loves Ham Radio and his CMARC Family and it will truly be a great honor to serve you on the Board, once again.

## Gordy Smith / KE8JKS



Gordy has not been a Ham for very long but has an extensive background in HF radio transmitters, broadcast television, electronics repair, and telecommunications. After high school, Gordy began his electronics training in a two-year vocational program.

After graduation, he enlisted in the United States Navy, where he served for six years on the aircraft carrier USS Dwight D. Eisenhower. During his Navy service, he spent four years working in the "on board" broadcast facility, taking care of the studio cameras, lighting, videotape machines, audio, and video production equipment, RF distribution system, and the TV and radio sets used by the 5,000 sailors and Marines aboard the ship. Towards the end of his enlistment, Gordy has applied for a duty transfer to the onboard HF transmitter room where he maintained and repaired the HF transmitters and their associated antennas and matching equipment.

After his honorable discharge, Gordy joined the RCA Service Company, where he worked for four years running road service on TVs and other consumer electronic products. Later he joined the commercial and telephone division, where he was involved with various commercial system installations, including satellites, paging, telephone, voice mail, antenna, RF headends, for the health care and lodging industries.

Since that time, Gordy has worked for various other large interconnect companies and in 2003 started his own electronics and telecommunication company. His electronics hobby and work experiences have given him a vast array of disciples, and he is always willing to help others learn and grow in the electronics and communication fields.

Currently, Gordy holds a General class license and is studying for his Extra. He teaches a bi-weekly electronics class held at the CMARC meeting location. He strives to help others learn and to promote the hobby of HAM radio.

# 2019 Board Member Nominees

## Shannon Ranes / WA2NVK



Shannon was licensed as a Technician nine years ago, in December 2009, and received the call sign KD8MOH. She now has a vanity call sign, WA2NVK, which belonged to her great grandfather. She has been involved with CMARC since 2008. Julie McLain's Tuesday night Ladies Tea Time Nets began her regular use of the 145.39 repeater. She planned Ladies Night 2009 and 2011 and has been involved with Field Day Food since 2012. She currently helps provide refreshments at our monthly meetings. She says, she and her husband, Chris Ranes (NS8Q, formerly KC8CAJ), a ham since 1995, encourage and support each other in ham radio

related activities and events. She enjoys contesting at Field Day and at home with Chris. She is currently studying to take the General class license test.

You can read more about Shannon in the "What's My Sign" column on page 2 of the [October/November 2010 CMARC SCOPE Newsletter](#):

Outside CMARC, her experience as a team member on various committees and boards began in high school and continues to this day. She works for a student travel company, planning educational and performance trips for groups. She is also active in her church with kids, youth, adults, and music.

## ABSENTEE VOTING INFORMATION

For those voting members who are unable to attend the Friday night meeting, you may vote by sending an email to [cmarcvoting@gmail.com](mailto:cmarcvoting@gmail.com).

You have until 11:50 pm on Thursday, December 13.

Please **DO NOT** vote by email and in person at the meeting.

**Next year's Ziegenbein Award nomination deadline is fast approaching. Be thinking about who you think would like to nominate. More details to follow.**

# Quest for The Perfect Key



**H**ow do you know when you have found the perfect key? A good question, and one that has perplexed many a CW operator. I'll let you in on a little secret. It isn't something that is reviled over night. The process of finding the perfect Morse sending apparatus is one that may take many years to discover. In that discovery, there is a very special reward. One earned and learned only by many years of vigilant CW operation. This is my story of such a quest.

My very first key was an old military signal corps key/buzzer combination set. A high school electronics teacher had acquired several sets and had given one to my friend Jim Lundy and one to me upon earning our Novice tickets in 1972. At the time I believed it to be the ultimate in CW sending equipment. Indeed, it sends great CW and has a great feel. As the years went by and I advanced up the ham ladder I had the chance to use many other hand keys of various makes and manufacturers. Most of them felt "foreign" to me compared to my old signal corps set. Many were just too stiff. Some had springs that were too tight. Still, others had just

plain sloppy mechanisms. Another friend had purchased a hand key from Radio Shack, and it felt fairly good, so I got one too. These were a relatively inexpensive key made in Japan and had small ball bearings to hold the fulcrum in place. One had to be very careful when adjusting them or the ball bearings would come out of the race, and end up on the floor! They were very small and easily lost forever in the carpet.

As my CW speed picked up, I soon realized that there were better and worse instruments for sending the code. Around 1985 I started collecting hand keys. At first mainly for beauty, but later for the "feel" of a good sending key. After my collection grew to 8 or 10 keys, I found that I had a few favorites, but always in comparison to my old signal corps key. A J-38 purchased at a ham swap seemed to be the right combination of speed, feel, and forgiving handling. After a few more hamfests more J-38's were acquired. It was then that I realized that even keys that were supposedly identical and made by the same manufacturer had big differences in their "feel."

Around 1990 my collection had grown to about 40 keys, and I found I had favorites made by the same maker, Bunnell. It would seem that some key makers took more pride in making a quality key than others. I found that I liked the ones that had a natural resonance the best. By "natural resonance" I mean that while in operation, when the key was

depressed, it would have a natural ring to it, similar to the sound a tuning fork makes when it is struck, yet also be effortless in sending for long periods. The keys that were too tight, poorly adjusted, or poorly constructed, would invite a good case of "glass arm" and fatigue the operator in short order.

As my code speed increased above 20 WPM, I found I was topping out at the speed limit of a hand key. It was then that I acquired my first Vibroplex paddle. As I quickly learned to master the code with this key, I thought to myself, "I wished I'd known about them years ago!", because I'd had several opportunities to purchase bugs and paddles but had never acted on the inclination. (To this day I could still kick myself for this lack of good judgement.) During the 90's my quest continued, and I acquired more paddles and bugs. I had thought I'd reached the pinnacle of CW enlightenment when I got used to the first Vibroplex, but soon, realized that even in the top of the line CW gear, there were big differences in "feel" even with identical keys! I found my CW journey was not over but, had merely just begun.

As my collection grew, I found myself trying anything I could get my hands on in hopes of finding the best CW instrument available – everything from Vibroplexes, Benchers, Shurres, Ham Keys, Bunnells, SpeedX's and many others.

As we approached the new century, I started to restore old beat

See PERFECT KEY, Page 9



■ **PERFECT KEY**, from Page 8

up keys to bring them from a state of disrepair and junk to “like new” condition. At a hamfest in Jackson, Mich. in 1999 I happened upon an old set of Vibroplex paddles that were perty broken and very beat up. I felt sorry for the decrepit little key. It was rusty, had no finger pieces, and had seen better days. After a bit of haggling with the owner, I walked away with it, convinced that I could restore and refurbish it and give it a new life. Upon disassembling it, I began to see this was not going to be an easy task. The base was sand blasted and then repainted with black

hammer finish paint. As it had no finger pieces, I decided to fashion my own from walnut. These turned out to be very beautiful and also gave the key that “personal touch.” Careful polishing of all the chrome and silver parts reviled a very nice key under all that dirt and rust. After reassembly, I was even more pleased to find that after careful adjustment the key handled quite nicely and had a wonderful feel. Upon hooking it up to my transceiver, I was surprised how well it played. It sent CW as if it were “music sung by angels”! The handling was superb! Had I finally realized morse nirvana? So, it seemed. After many QSOs with

this new key, I truly had found a one in a million.

Now after having hundreds of QSOs with this fine instrument, again I began to question. Is there something better? Maybe keying at the speed of thought? Or possibly a key that would automatically correct my sending errors even before I made them!

So, the quest continues. Is there a perfect key? Maybe I’ll find it someday. Perhaps the search has no end. Here’s hoping you may one day achieve a state of Morse Code Zen! ■

## November 2018 Michigan Section Report

By: Jim Kvochick / K8JK

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.

### Holidays

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” ■

# Ham Radios I Have Known and Loved



**GREGG  
MULDER**  
**WB8LZG**

When I finally got my novice ticket in 1972, I was already familiar with radio and kit building. In the 60's and 70's tube gear was still king. Kits and kit manufacturers were plentiful. Many of the rigs of the era also boasted how many transistors were in the rig, as well as the tube compliment. Many were "hybrid" of sorts. Using transistors for many of the low power circuits, and tubes for the driver and power amp stages of the rig. Separate receivers and transmitters were rapidly being replaced by transceivers. Names like Knight-Kit, Heath, Drake, Hallicrafters, Collins, Lafayette, Eico, Ameco, Johnson, and many more were all vying for the Hams dollars. With new rigs coming out of Japan, competition was plentiful, prices became more attractive, and ham gear was selling. In the nearly half century of hamming, I've had my share of radios. Some great, some not so great. All have given me many hours of fun and some wonderful memories along the way. So, thought I'd share some of the rigs that I've tried along the way. There are NOT very technical reasons for some of my picks, just a "feeling".

Many of my favorites are yours too.

My 1st fav, the Heathkit HW-16. As a Novice in 72, kits were the logical entry for a 16-year-old. Easy to build. Easy to tune and operate. The 3-band rig ran a full "Novice gallon" of 75 watts on the lower end of 80, 40 and 15 meters. It was good rig on 40 and 80 but suffered from weak sensitivity on 15. Even so I made many of my 1st DX contacts on 15 meters with this rig. I even took it on vacations and had a ball with it.

Then Ten Tec came out with some little "QRP" rigs, all transistor, the PM1, PM2 and PM3. They were small and light weight, offered the user several popular bands, and you could power it for months on a small battery supply.

My high school ham buddy had the PM1 and loaned it to me for a test run. After working several stations in Europe with 2 watts and a wire, I was hooked on this new movement called QRP.

I joined the Navy in 1974 and soon found out that Ham radio did have some advantages in the service. Seems the Base commander there in San Diego was a Ham. Instead of standing "guard duty" out at the gate all hours of the night, us hams got to "serve" out our duty in the base ham shack. Nicely equipped too. I thought I was in Ham Heaven for sure! This is also where I ran into favorite, rig #2. A sailor was shipping out and liquidating much of his ham gear. He had a new rig from Ten Tec

## BRIEF HISTORY OF HEATHKIT

- Ed Heath began the company in 1926 with an airplane kit, that ultimately killed him during a test flight in 1935.
- After WW2, Howard Anthony purchased surplus electronics and released his first successful kit, a small oscilloscope for \$50.
- Expanded into audio equipment, TV sets, and other consumer products during the 1950s and 1960s.
- Started their education and publishing product lines in the 1970s.
- Their first Hero robot kit was released in 1982.
- Zenith purchased the company in 1979 and started to transition into the world of computers and to phase out of the kit business.

called an Argonaut. He let me play with it from the base shack. The 509 was a winner! 5 watts of QRP power on 80- 10 meters CW and SSB! I was hooked and soon went home with a new rig. The Argo went to a lot of places with me. It was like a faithful friend. Anywhere I went, I just hooked up some wire thrown up in the trees with the use of a wrench as counterweight, and the world was mine.

A couple years later, back at the base shack is where I met favorite rig # 3. They had a new Kenwood TS-520 xvr with a remote VFO and CW filter! 150 plus watts of CW, feeding a 3 element tribander overlooking the Pacific. I worked most of the world from that shack in my spare time and fell in love with

See Ham Radios, Page 11

# BRIEFS

Amateur Radio Newline  
Report #2141 for Friday,  
November 9, 2018

## FCC switches to new online registration system.

The FCC is retiring its present version of the Commission Registration System, also known as CORES. As of March 1 of next year, anyone applying for an FCC Federal Registration Number, or FRN, must first create a username and password on the system before they can receive the FRN itself. That's already the case - but on the new CORES website - anyone who already has an FRN from the old Commission Registration System will need to create a user name to continue managing it under the new system. You can find the website using the URL included the text version of this report. This is especially important for Volunteer Examiners while administering amateur radio license exams. FRNs are used in place of Social Security numbers. Hams who do not have Social Security Numbers must instead use their Taxpayer Identification Number to get an FRN. An FRN is required for everyone using this system. All hams who are already licensed and wishing to conduct business with the FCC, such as renewing their license or changing their address, also need to be registered properly through the new Commission Registration System so they have access to the online Universal Licensing System. It should also be noted that individuals with a new FRN will be able to log into the FCC's Universal Licensing System and set their preferences from receiving electronic copies of your documents to getting them on paper by postal mail, if desired. Again, look at the printed version of this report at [arnewline.org](http://arnewline.org) and you'll find the link to the CORES website.

<https://apps.fcc.gov/cores/userLogin.do>

## A 48-year journey of radios

■ **HAM RADIOS**, from Page 10

that radio. Apparently, I'm not the only one, as there are many of them still in FB operating condx around today over 50 years later. I also met some very knowledgeable Hams who were Navy radiomen, and keen in their craft.

The late 70's and early 80's was a turning point in radio and electronics worldwide. All the manufacturers were clamoring to build all solid-state rigs. Yet there was still much competition from the tube guys. Heath-kit was still going strong, they were still producing the popular SB-101, but had just introduced the HW-7 and Hw-8 QRP xcvrs, and HW-5400 all transistor "big rig" to compete with the others. Yaesu had their FT-101, Kenwood had the TS520, Hallicrafters had the FPM-300, and Collins was still "king" of the tube gear.

Then came restructuring and new WARC bands. Not only were radios getting more bands and features packed into them, they were getting noticeably smaller in size. Many even had dual AC/DC power supplies to give the radios that "portable" readiness. Hams were traveling and wanted to take their radios with them. Heath-kit had the HW-8, Yaesu the FT-707, Ten Tec the Argonaut and Scout, and Kenwood the TS-50. All of them trying to grab a piece of the "portable" market. I was a civilian again, working for Harris Data and now had a good income. That's when I ran into favorite #4. I had been using a used Ten Tec "Triton" for a while and liked it for its simplicity. It only had about 8 controls on it, so simple anyone could use it. No

tuning and a great noise blanker. It filled many pages in the log. Simple and functional.

The 80's 90's brought an all solid-state revolution, and favorite rig #5. Icom had a good rig in the new IC 720. It was built like a tank. I bought one used and liked it, but the band switching solenoid was loud. Objectionably loud. You could "wake the dead" switching bands! But other than that, I liked it for its rugged design. It had a good cw filter too. Took it out in the field several times. Used it at FD with CMARC a few years. I beat mine up mechanically and electrically, and it always played on. I ended up giving it to a college student in need of a rig years later. It's still on the road.

In the 90's Kenwood introduced the TS-940 and I had the good fortune to operate the one at MSU's W8SH shack. It became favorite rig #6. This was Kenwood's best rig to date and was dressed out with all of the goodies a DXer needed. It was a winner in every respect, but quite pricy. It had an excellent noise blanker, and a sweet variable bandwidth IF filter. Easy and intuitive to use. One of the best radios I ever operated to this day. A pure joy to use.

Yaesu introduced the FT-990 had all the goodies necessary to compete with Kenwood. Icom had it's IC-737 and IC-765.

The 90's also brought out the finest in what could be packed into a radio. It was also the beginning of interfacing computers to the rig. The FT-1000 was introduced. I had the opportunity to use one, and thought it was the pinnacle of the radio art. I also used the FT1000 on the Queen

See Ham Radios, Page 12



# A 48-year journey of radios

■ **HAM RADIOS**, from Page 11

Mary. A very nice radio. The decade also marked the end for struggling Heath-kit company.

Turn of the century brought us computers embedded in the rigs, which both shrunk the size and put in more features, and a new level of complexity. No longer did the buttons have just “one” function. Now there were menus and sub-menus of different functions. Radios were becoming very complicated to operate, and with surface mount parts, they were not easily serviceable by the average ham.

Enter Elecraft. This company offered kit radios with all the features of commercial rigs, and a step by step assembly similar the famous Heath manuals. The K1 and the K2 were revolutionary for their time. I built a K1 and it was a super QRP radio. So impressed was I with the K1, I just HAD to try a K2.

I built a “base k2” with no options. It quickly became favorite radio #7. The K2 was revolutionary for a kit. The builder could build a basic cw only 9 band xcvr and add internal modules to make a very high end performance rig. I was soon adding goodies like the internal tuner, and the CAT control. I took this radio many places, and even used it at Field Day. The receiver performance is second to none. Elecraft got a winner here for sure. The K2 is still a popular kit, with a lot of builder support and modifications readily available.

While working at MSU I became interested in portable satellite operation and eventually considered SAT radios. Got a Kenwood TS

2000. It had many features and covered HF- UHF, with Sat tracking and sync. It had such a poor keyer and keying characteristics, that I sold it.

Enter favorite rig #8. Got a used Yaesu FT -817 and was very happy with the result. The FT 817 was a super idea. HF, VHF, and UHF, all modes, packed into a case the size of a paperback novel. I quickly programmed in many of the functions and frequencies I liked, and the radio really surprised me with its performance. Now don't get me wrong. It won't outperform the “big rigs” specs, but for a rig that weighed in under 5 lbs with the battery, it was very fun and very portable. Yaesu had originally intended to make the 817 for just a few production runs. The radio caught on so well that they are still in production years later, and still selling strong. I take mine with me everywhere. In the shack, I have it hooked up to a homebrew CAT interface to work weak signal digi modes. I also have a GO KIT bag that goes along with me on vacations and other outdoor excursions. It was the perfect solution for portable satellite ops. I was taking it with me every place I went to gain new grid squares via satellite. It also performed admirably on HF cw. No it did not have the sensitivity or a great noise blanker, or some of the other bells n whistles the big rigs have, But it did offer surprising flexibility at home and in the field. Easy to use and learn, and just plain fun to operate. It's definitely a winner.

About this same time, I ran into a pair of Yaesu FT-990's from a

**See Ham Radios, Page 13**

## BRIEFS

Amateur Radio Newsline  
Report #2141 for Friday,  
November 9, 2018

**Kicker: No valid license? Well, no valid traffic tickets either.**

We all know that getting on the air without a license isn't legal. As Andy Morrison K9AWM tells us in this week's final story, that's true even for the local traffic cops.

Hams are not the only ones who can get in trouble for not having an appropriate and valid FCC license. Take the case of the Buckeye Lake Police Department in Ohio. Village officers have been writing speeding tickets, as police are known to do, for any motorists driving in excess of the 35 mph village limit - but apparently every ticket that's been handed out since 2013 has been unlawful, according to Buckeye Lake Police Chief Vicki Wardlow. According to an Associated Press story quoting the local Newark Advocate newspaper, the chief told the village council members at a meeting in October that the department's license with the FCC expired in 2013, which means the radar guns used to measure the speed of motorists whizzing by cannot be calibrated for use. No one applied to renew the license so the tickets issued in the past five years simply aren't valid, she said. She told the council that the law requires the department to have that license in order to operate both its radar units and its radios. That means the department can't write valid tickets, at least for now. A new license could cost anywhere from \$840 if she files the application herself, or a total of \$1,400 if the village outsources the process and would not expire for another 10 years. It was unclear what penalty if any would be assessed for the department's 5 years of unlicensed operation. The Village's clerk treasurer Rochelle Menningen said the police department's budget has the funds to cover the cost of a new license and so, presumably, it will apply as quickly as possible for its FCC license - but of course, at a speed within the legal limit.

# BRIEFS

Amateur Radio Newline  
Report #2143 for Friday,  
November 23, 2018

## Their eyes on Bouvet Island

We begin this week with an update on what is easily one of the most anticipated DXpeditions in the ham radio community: the Bouvet Island DXpedition. While there are no specific dates for when the 3Y0I (Three-Y-ZERO-Eye) team becomes an on-air reality, the operators are now assembling in Cape Town, South Africa and making preparations for what is expected to be at least a two-week stay. The team includes Dom/3Z9DX, the group's leader, as well as Jose/CT1DSV, Tack/JE1CKA, Mietek/SP3CMX, Marcin/SP5ES, Stanislaw/SP8S and Branko/YU4DX. It is expected to take 12 days for them to arrive at their destination in the South Atlantic before getting on the air. They will be operating on frequencies from 160 to 6 meters and using SSB, CW and FT8. Their preferred QSL is via ClubLog's OQRS but they will accept LoTW or via 3Z9DX. The team estimates the total cost for the trip at about \$225,000 U.S. dollars. As the team continues to work out security measures and logistics, this venture takes on even more importance for all interested hams. It follows the scrapping of the 3Y0Z (Three-Y-Zero-Zed) DXpedition in February of this year after one of its ship's engines developed problems, forcing the team to reverse course, even as the coveted island destination was well within their sights.



## A 48-year journey of radios

■ **HAM RADIOS**, from Page 12

silent key estate. The rigs were in FB condx and were on par with the TS-940 for features and ease of operation. I built a homebrew CAT interface, and it quickly won me over as favorite rig #9. Sharp IF filters, variable SCAF filter, built in AC/DC power, a nice keyer, and an auto tuner that will match virtually anything metal, made it a winner. No, it won't outperform some of today's radios for specs. However, easy operation and comfortable intuitive layout, keep it on my operating desk.

Got the building itch again. Favorite rig # 10 was born. I built a single band 40m xcvr from Small Wonder Labs kit, but I didn't stop there. I packaged 2 other kits into the same enclosure. A surface mount "TICK" keyer, and a "Freqmite" frequency counter. All tucked in to a small Ten Tec style box. It put out a solid thundering 2 watts. The rig is fun to use and works like a charm. Worked most of the 50 states with it and even took it the Fla. on vacation to give it a work out. I gave it to a fellow QRPer for a spell, and it came back to me later with a smile. Now I'm reliving some FB on the air QRP fun.

OK you say. "that's a good buncha rigs thar. Whats ur favorite one of em all?"

Well that's a tough one. I haven't even mentioned some of the other great rigs I played with. Like the iCOM-7600, Collins "S" line, Kenwood TS830, Heath HW101,

SB300, SB400, Drake TR4, Ten Tec Orion II, Flex 3000, Yaesu FTdx 1200 and many others along the road of hamming. But... this is about favorites, and mostly can only come from a "gut feeling" more than anything else. My fav..... The Ten Tec Argonaut 509!

Yeeup! still gives me that "like a kid" feeling whenever I have a QSO with it. Hard to beat the elation of working a station halfway around the world, with a rig that's the size of a loaf of bread, and a mere 5 lbs. Best of all, it's simple. With only 8 knobs, the only thing to do is make QSO's! I use it in several of the monthly NAQCC, SKCC contests, and I use it nearly every year in the ARRL Phone Sweepstakes in the QRP category. No, I don't use it for CW Sweeps. The Argo's IF is "wide as a barn door", and while I am a glutton for punishment I'm not CRAZY! Hee Hee

Hope you all enjoyed my trip down memory lane through ham radio yesteryear. It's amazing, all the changes we have seen in the "radio art" since the invention of the transistor. Hold on to your hats! With the advent of Software Defined Radio being implemented into the hobby, we are all in for some big changes and new fun for sure!

### DISCLAIMER:

Dates and radio numbers may have been jumbled due to memory stick loss in the cranial computer. ■



# Big changes ahead for the ARRL Board



The results are finally in. No, I'm not talking about the national mid-term election results. As I'm

writing this, some of those votes are still being counted. I'm talking about this year's ARRL board elections. ARRL members have spoken, and they have elected four new faces to the board in what was the most hotly-contested election in a long time.

Three of the five incumbents, plus an incumbent vice director running for the Northwest Division director position, were defeated by candidates calling for more transparency and for changes in the way that the ARRL operates.

Here are the results:

## Central Division Director

- Kermit Carlson, W9XA 1,898
- Valerie Hotzfeld, NV9L 1,755

## Hudson Division Director

- Ria Jairam, N2RJ 1,292
- Mike Lisenco, N2YBB 1,239

## New England Division Director

- Fred Hopengarten, K1VR 1,432
- Tom Frenaye, K1KI 1,383

## Northwestern Division Director

- Mike Ritz, W7VO 1,589
- Bonnie Altus, AB7ZQ 1,308
- Horace Hamby, N7DRW 495

## Roanoke Division Director

- George Hippisley, W2RU 1,891
- Dr. James Boehner, N2ZZ 1,365

In the only two contested vice director elections, Mark Tharp, KB7HDX defeated Daniel Stevens, KL7WM and Delvin Bunton, NS7U in the Northwest Division and in the Roanoke Division, William Morine, N2COP defeated John Humphry, W4IM. All newly elected officials will take office at noon on January 1, 2019.

I was kind of surprised here that Valerie Hotzfeld, NV9L, failed to win in the Central Division. She has certainly made many contributions to amateur radio, both in the DX/contest community and on Ham Nation. Apparently, though, she made some statements that she was forced to retract, and that probably hurt her campaign, and as some pointed out to me, Kermit Carlson, W9XA, was well thought of in the Central Division and in the VHF/UHF community.

Overall, though, I'm very pleased with the results. Although some of the margins of victory were small—K1VR won by only 49 votes and N2RJ won by 53 votes—I think it's pretty clear that the members want change. Now, it's up to the board, including its newest members to effect that change. As always, I'm ready to help in any way that I can. ■

**CENTRAL MICHIGAN AMATEUR RADIO CLUB**  
**BOARD OF DIRECTORS**  
**MEETING MINUTES**

September 8, 2018

**Attendance**

Current Board Members Present: Clyde Tompkins (K8CPT), Chris Ranes (NS8Q), Tom Rocheleau (WA8WPI), Dan Beuchert (WX8MOJ), Michael Boensch (W8MKB)

Current Board Members Absent:

Guests:

**Call to Order**

President Clyde Tompkins (K8CPT) called the meeting to order at 6:40 pm.

**APRS**

- All equipment worked as expected. We did learn that the data we received was overwritten when Chelsea digi-peats the signals. Because we were running the test in receive-mode only, the Chelsea digi-peater was picking the signals from the individuals helping in our test, retransmitted them, and then our computer wrote entries to our log file with labels reading as being received by Chelsea. This was a condition unbeknown to all of those involved.
- The only way to get accurate data is to change frequencies and run the test again.
- A report will be made to the general membership on how the first test went. We will take thoughts and input from them and present the idea of a 6-month or one-year test period.

**MOTION:** *Dan moved that we bring to the membership a vote on the implementation of the trial run of the APRS system, seconded by Tom, approved, and the motion carried.*

**Committees**

- The idea of forming committees will be presented to the membership, to allow members to take ownership of projects we are doing at the club. The APRS system will be one such committee as well as Hamfest and Field Day.

**Future Class and Presentation Ideas**

- We are going to ask the membership on what types of classes or presentations they would like to participate in, teach, or present.

**Club Tri-Band Antenna**

- The Board is weighing our options of fixing the tilted element on the beam or just replacing the antenna altogether. The idea will be presented to the membership at the next meeting.

### **Hamfest**

- We made a total of \$1,034.14 after all expenses and returns on unused items were made.
- We are going to send a tithe of \$104 to the Holt Christian Church.

### **Cards and Flowers**

- A card was sent to Ed Hude on the passing of his brother Don. A \$40 donation was made to Hospice House of Mid Michigan.
- A card was sent to Bob Strobel for the passing of his wife Leota.

### **New Board Candidates**

- Ed Hude has officially removed himself from the list of candidates
- John Doornhaag will help fill the remainder of this year if needed.
- The list of candidates are Carl Canfield (K8YHH), Don McLain (KB8RAD), Gregg Mulder (WB8LZG), Kenny Hazlett (K8NNY), Ken Faiver, John Tyree
- The Board has decided to appoint Gregg Mulder to the one-year Director position which will expire at the end of 2019. The Board also decided to appoint Don McLain to the Youth Director position to fill out the rest of 2018.

### **Adjournment:**

**MOTION:** *With no further business to discuss, Tom moved that we adjourn the meeting, seconded by Clyde, approved, and the motion carried.*

The meeting was adjourned at 9:23 pm.

Respectfully submitted,



Chris Ranes (NS8Q)  
CMARC Secretary

**CENTRAL MICHIGAN AMATEUR RADIO CLUB**  
**MEETING MINUTES**  
September 14, 2018

**Attendance**

Board Members Present: Michael Boensch (W8MKB), Dan Beuchert (WX8MOJ), Chris Ranes (NS8Q), Tom Rocheleau (WA8WPI), Gregg Mulder (WB8LZG), Don McLain (KB8RAD)  
Board Members Absent: Clyde Tompkins (K8CPT)  
General Members: 28 Members  
Visitors: 2 Visitors (Diane Clay and Brian Adams, KD8IUL)

**Call to Order**

- Michael (W8MKB) called the meeting to order at 7:01 pm.
- Dan (WX8MOJ) held the Flag for the Pledge of Allegiance.

**Sign-in Sheets**

- Please make sure to sign the sign-in sheets circulating around the room at each meeting. There is one sheet for members and another for visitors. We use these sheets to keep track of how many people visit us each month.

**Cards and Flowers Report**

- Ed Hude (WA8QJE): His brother Don passed away. A card was sent and a \$40 donation made to the Hospice House of Mid Michigan.
- Bob Strobel (KB8DQQ): His wife Leota (KD8SQD) passed away. A card was sent and a plant was sent to the funeral service.

**New Members / Visitors**

- Brian (KD8IUL)
- Diane

**Treasurer's Report**

**MOTION:** *Dave (W8ZZX) moved to accept the Treasurer's Report as published on the CMARC website, seconded by Ben (WD8OVL), approved, and the motion Carried.*

**Secretary's Report**

**MOTION:** *Don (KB8RAD) moved to accept the Secretary's Report as published on the CMARC website, seconded by John (KD8NNQ), approved, and the motion carried.*

**New Licenses and Upgrades:**

- Dave Vick (W8ZZX) obtained his Extra at this year's Hamfest

### **Interesting or other Contacts**

- Dave (W8ZZX) worked Costa Rica, France, and Serbia on 40m and is reporting very good conditions
- John Winn (KE8CYC) worked Scotland

### **Old Business**

- Hamfest profits
  - \$1,034.14 after all expenses and returns on unused items were made.
  - A tithe check for \$104 will be sent to the Holt Christian Church
- APRS Test Results
  - Several stations drove around the area on Saturday, August 25th. The APRS station was set to receive only. The problem we ran into was Chelsea heard all of the stations we were hearing and rebroadcasting them, skewing our log files. We know that we were able to make it to Stockbridge. Others were walking around Mason and we did not lose packets from them. In order to have accurate test results, another test would have to be run on another frequency.
  - The Board has decided to bring it to the membership to see if a longer term test period should be considered, possibly around 6 months.
  - The ideas were brought up that we narrow down the test period into time slots, such as two or three hours blocks, and to provide specific tracks that we could send people down in there were areas we want to test further.

**MOTION:** *John (KD8NNQ) motioned that we install the APRS system in our club station try it out for a six month time period from the time we receive the equipment, seconded by Dan (KD8YDE), approved, and the motion carried.*

### **New Business**

- Introduction of new Board Members
  - Gregg Mulder (WB8LZG) will serve the remainder of Judy Crawford's term through the end of 2019 as a Director.
  - Don McLain (KB8RAD) will serve the remainder of Shawn Crawford's term as the Under 22 Director through the end of the year.
- General Licensing Class
  - 9-week course running from September 29 to December 1st. Classes run for two hours beginning at 10 am each Saturday and will be held at the Mason EMS Training Facility in Mason. There will not be a class held the Saturday after Thanksgiving.
  - The class will be based on the current ARRL General Class book.
  - There will be a special VE session held the day of the last class on December 1st for those who want to test.
  - Don McLain (KB8RAD) has two current ARRL General Class License manuals for those who may want to borrow them. Please let Don know if you are interested in purchasing



a license manual through the club. The regular price is \$29.95 but we are able to purchase them at a discounted rate of \$25.

- Formation of Committees for APRS, Hamfest, Field Day, etc.
  - The Board is looking at forming committees to help to organize the events with one person to work with the Board.
  - Gordy would like to head up a committee for training and classes.
  - At this point, any committees will probably not begin until after the first of the year.
- 501(c)3 Update
  - We are currently waiting to hear from the IRS. As soon as we find out our acceptance status, Tom will publish it on the ListServ.
- Club Triband Antenna
  - Dave (W8ZZX) volunteered to be the chairman of the antenna committee.  
**MOTION:** *Don (KB8RAD) motioned that we purchase a new antenna with the provision that we do the research on which model would be best and report back to the membership in October, seconded by Dan (KD8YDE), approved, and the motion carried.*
- Any other new business?
  - Dan (KD8YDE) is interested in doing an organized trip up north, either in northern lower Michigan, the UP or over at Isle Royale.
  - Ed Hude (WA8QJE) thanked everyone for the money donated to Hospice and the nice card that the family received for the passing of his brother Don.
  - MIS Hamcon has been cancelled for this year due to unresolved differences in the leadership. We are not sure if it will return in the future.
  - This coming year (2019) is the last year our agreement with the City of Mason is valid. We need to think about redrafting a new letter of agreement.
  - Nominations are coming up soon in November.
    - Tom, Chris, Clyde, and Don's position are up for re-election.

### **Adjournment**

**MOTION:** *With no further business to discuss, John (KE8CYC) moved that we adjourn the meeting, seconded by Dan (KD8YDE), approved, and the motion carried.*

The meeting was adjourned and at 8:14 pm.

Respectfully submitted,



Chris Ranes (NS8Q)  
CMARC Secretary

**CENTRAL MICHIGAN AMATEUR RADIO CLUB**  
**BOARD OF DIRECTORS**  
**MEETING MINUTES**

October 6, 2018

**Attendance**

Current Board Members Present: Clyde Tompkins (K8CPT), Chris Ranes (NS8Q), Tom Rocheleau (WA8WPI), Dan Beuchert (WX8MOJ), Michael Boensch (W8MKB), Gregg Mulder (WB8LZG), Don McLain (KB8RAD)

Current Board Members Absent:

Guests: John Doornhaag (KD8NNQ), Dave Vick (W8ZZX), Gordy Smith (KE8JKS)

**Call to Order**

President Clyde Tompkins (K8CPT) called the meeting to order at 7:08 pm.

**Antenna**

- The committee met two different times looking at the various options for repairing and replacing the tri-band antenna on top of the tall tower, with a budget of between \$500-\$800. The antenna in question is the Mosley TA-33-M.
- The committee decided to purchase the Heavy-Duty Mosley CL-33M tri-bander, which will cost between \$700-\$800. The boom is 4-ft longer than what we have now giving a nice increase in gain. Our goal is to order this antenna as soon as possible to lock in a shipping date and to avoid surcharges from the new aluminum tariffs.
- The committee discussed the idea of repairing the antenna we have now to get us through the winter, by renting a cheap boom-lift. This will allow one person to be in the lift and one person on the tower, while they straighten the reflector, lock it down, and leave it alone.
- Next spring, once the weather has stabilized, we can take our time to build the new antenna correctly, then rent the boom-lift again, fly the antenna in place, and tune it for maximum gain.
- At this point, the Committee and the Board has not decided what to do with the old antenna once it comes down.

**October Meeting**

- We have not been able to find a speaker for the October meeting.

**APRS**

- The APRS station has been installed and was initially operational but there must be some other network or internet issues. We are looking at the problem and will have a solution.

**501(c)3**

- Clyde received an email from Floyd Green CPA, notifying him that CMARC received our non-profit status from the IRS.

- Anything that has been donated by a member after March 30, 2018, can be considered a tax write-off.
- The Board will look at the rules regarding donations and how it will apply to us as a club.
- Any changes to the by-laws that we were considering in order to receive our status need to be brought up to the membership and voted on before they are officially enacted. We are going to bring the changes up to the membership at the October meeting, with an official vote to occur at the November meeting.
- Dan and Chris will meet together to talk logistics as to how donations should be handled.

### **Membership Directory**

- Gregg is proposing that we re-introduce the idea of creating a club directory just for use by members and not to be published online.
- He will contact those people on the membership roster to see if they would like to be in the directory and what information he/she would consider including.

### **Electronics Class**

- Gordy (KE8JKS) has started an Electronics class to run every other Saturday, beginning today.
- The class will start at 12:00 pm and run a couple of hours.
- It is anticipated that the classes will run into December and correlate with what is being talked about in the General class.

### **Access to the Building for Special Classes**

**MOTION:** *Clyde moved that we ask Kevin to produce an extra door key to be loaned to the Special Event Coordinator, who is approved by the Board, and who will be responsible for all lights and security of the building, seconded by Dan, approved, and the motion carried.*

### **End of Year Gift to Kevin**

- A discussion has been made about giving Kevin \$300 for a year-end gift.
- Dan will create the check and Clyde will contact Kevin to give him the check.

**MOTION:** *With no further business to discuss, Gregg moved that we adjourn the meeting, seconded by Tom, approved, and the motion carried.*

The meeting was adjourned at 9:13 pm.

Respectfully submitted,



Chris Ranes (NS8Q)  
CMARC Secretary

**CENTRAL MICHIGAN AMATEUR RADIO CLUB**  
**MEETING MINUTES**  
October 12, 2018

**Attendance**

Board Members Present: Michael Boensch (W8MKB), Dan Beuchert (WX8MOJ), Chris Ranes (NS8Q), Tom Rocheleau (WA8WPI), Gregg Mulder (WB8LZG), Don McLain (KB8RAD)

Board Members Absent: Clyde Tompkins (K8CPT)

General Members: 28 Members

Visitors: 4 Visitors

**Call to Order**

- Michael (W8MKB) called the meeting to order at 7:05 pm.
- Tom (WA8WPI) held the Flag for the Pledge of Allegiance.

**Sign-in Sheets**

- Please make sure to sign the sign-in sheets circulating around the room at each meeting. There is one sheet for members and another for visitors. We use these sheets to keep track of how many people visit us each month.

**Cards and Flowers Report**

- Joe DeNomme (N8VYS) passed away on October 10th. Details are unknown at this time.

**New Members / Visitors**

- Gary Cook WA8UGA, Alan Jansen N8OEB, Ed Oxer W8EO, Stephen Smith WA8LMF

**Treasurer's Report**

**MOTION:** *Bob (K8ZAP) moved to accept the Treasurer's Report as published on the CMARC website, seconded by John (KD8NNQ), approved, and the motion Carried.*

**Secretary's Report**

**MOTION:** *Dan (KD8YDE) moved to accept the Secretary's Report as published on the CMARC website, seconded by John Tyree (W8JTT), approved, and the motion carried.*

**New Licenses and Upgrades:**

- Josh Scheuneman KE8KOI - New Technician
- Wayne Barker has a new callsign - W8CLN

**Interesting or other Contacts**

- John Winn (KE8CYC) made his first digital contact to Chile using FL-DIGI

## **Old Business**

- General Class is currently going on with two sessions completed so far. It should run another seven weeks except for the week of Thanksgiving.
  - A special VE session will be held at December 1st following the last session and is open to anyone.
- 501(c)3:
  - We have been officially granted the non-profit status.
  - All donations from after March 31st of this year are able to be written off for taxes purposes.
  - The State of Michigan is very clear on holding raffles of any kind - until we figure out what process we need to go through, all 50/50 raffles will be on hold until that point.
  - All donations should be listed on the Treasurer's report - the Board will look into the requirements of that.
- APRS:
  - The station is currently up and operational for our six-month test.
  - There is an issue with the internet connection in our building and we still do not have a fix for that at this time.

## **New Business**

- Club Triband Antenna
  - The final report from Dave Vick (W8ZZX), Chairman of the Antenna Committee outlined the replacement of our current Mosley TA-33-M with the heavy-duty Mosley CL-33M tri-bander. He is suggesting that we order the antenna as soon as possible to lock in a ship-date and to avoid the extra surcharges coming from the new tariffs on aluminum.
  - The report also outlined a plan to repair the current antenna, just to get us through the winter. Safety is a concern, especially in our all-too-common Michigan ice storms. The plan entails renting a boom-lift, with one person in the lift, and a second person on the tower. Both individuals will straighten the reflector, lock it down, and leave it alone.
  - Next spring, once the weather has stabilized, we can take our time building the new antenna, without rushing. Once it is built, we will rent another boom-lift, fly the new antenna into place, and tune it for maximum gain.
  - The Board has not made a decision on what to do with the old antenna once it comes down.
- Club Directory
  - Gregg Mulder presented the idea of restarting the idea of the club directory.
  - Based on the overwhelmingly positive response from the membership, he will proceed with the project.
  - All upcoming membership renewals forms should be very complete and specific as to what phone numbers and emails you would like included. He will take that information and combine it with current existing databases to make up the content of the directory.
  - A pre-release version will be made available for the members to look at before it is finalized.



- The basic information is what we are looking for (Names, Call Signs, Addresses, Phone Numbers, and Email).
- The new membership forms for next year will be revised with checkboxes for you to check what information you would like to have included in the directory.

**MOTION:** *John Winn (KE8CYC) moved that we proceed with the creation of the club directory, seconded by Dan (KD8YDE), approved, and the motion carried.*

- Upcoming Events
  - Gregg Mulder has a couple more ideas to build projects to begin early winter. If you were unable to be at the meeting, please contact him for more information.
  - Boy Scouts JOTA is coming up next weekend.
    - A troop had contacted us about using our equipment for the event.
    - It will be after the General class.
    - More details will be available after we try and work out the logistics.
  - Ed Oser (W8EO) mentioned next week is the school club roundup. It runs the entire week of October 15th, normally during the day.
  - Nominations for Board positions will be taken in November. There are three regular Board positions open as well as the Under 22 Director.
  - Bylaws
    - Because we are now a 501(c)3 and not a 501(c)7, we need to update our bylaws to reflect the new status.
    - Advanced notice of the changes will be given before the meeting of when we will vote on the changes.
    - The Board would like to make sure the changes are enacted before the new year.

### **Adjournment**

**MOTION:** *With no further business to discuss, John (KE8CYC) moved that we adjourn the meeting, seconded by Dan (KD8YDE), approved, and the motion carried.*

The meeting was adjourned and at 7:59 pm.

Respectfully submitted,



Chris Ranes (NS8Q)  
CMARC Secretary

# CLASSIFIEDS

**Gregg Mulder / WB8LZG**  
(517) 646-6257 after 4pm

**\$80**

**LDG AT-11 Auto Antenna Tuner**

*Covers HF 160m-10m and handles 150 watts.*

**\$40**

**Turner 251 Microphone**

*Oldie with the "fin" on top.*

**\$30**

**4 State QRP Digital Wattmeter and Dummy Load**

*Comes inside a homemade wood enclosure.*

**\$35**

**MFJ 422 Keyer**

*Keyer is made to sit on top of a Bencher key*

**\$100**

**Kent Single Lever Paddle**

*Key is in nice condition!*

**Ed Hude / WA8QJE**  
Cell: (517) 420-7550

**\$180**

**Kenwood TS-120s.**

*Covers 80-10m, and comes with AC Power Supply, MC-50 hand mic, antenna tuner, and a copy of the manual. The rig is small in size and is in great condition.*

**\$500**

**Kenwood TS-850S.**

*Rig is in excellant condition with built in antenna tuner, matching AC power supply, external speaker, MC-50 Microphone, and operators manual.*

**\$275 Ea.**

**(2) Radio Shack PRO-652 Digital Desk Scanners.**

*Both scanners are programmed and unused in their original boxes.*

**\$275**

**Radio Shack PRO-651 Digital Handheld Scanner.**

*Scanner comes with AC adapter and is also unused, programmed, and in the original box.*

**\$300**

**Icom ID-880H**

*Covers 2m/440 - FM/D-Star. It is brand new with programming software and cable. Excellant condition!*

**Ed Oxe / W8EO**  
[eaoyer@gmail.com](mailto:eaoyer@gmail.com)

**\$90 or Best Offer**  
**Alinco DJ-V57T HT**

*Covers 2 meters and 70 cm. Radio includes a speaker mic and car battery charger. It runs 5 watts max and has 200 memories.*

**Gregg Wesley / KD8PA**  
(517) 614-6573

Aluminum Tubing, Masts, and other odds and ends for antenna building.

**Jim Hannahs / KC8QWH**  
(517) 589-8346

**\$275 Ea. or \$525 for the Pair**  
**(2) Yaesu VX-7R Tri-Band HTs.**

*Each comes with the original microphone, case, charger, battery, manual, and original boxes. The radios are in excellant condition.*

**\$25**

**RT System Cable and Software Disk for programming the HTs.**

# CLASSIFIEDS

## From the estate of Don DeFeyter (KC8CY)

Kenwood R-1000 receiver & matching speaker	\$150
Kenwood TS-820 HF xcvr with SP820 speaker	\$250
Kenwood TS-820s HF xcvr with SP820 speaker	\$250
Kenwood TS-700s 2m all mode w/VFO700s & SP70	\$ 200
Kenwood TM-291a 2m mobile xcvr	\$ 100
Kenwood TR-9130 2m mobile xcvr	\$100
Kenwood TL922a HF linear amp	\$ 800
Kenwood H21 at 2m HH xcvr	\$ 40
Pakratt PK232 pake controller	\$50
MFJ Grandmaster keyer	\$40
Signal link data interface	\$75
Rigblaster data interface	\$50
Hal 6000 terminal unit and CRT (RTTY interface)	\$50
KLM 140 watt amp (2m)	\$75
DSI 3600a freq counter	\$25
Yaesu FT1000D HF xcvr & SP5 speaker	\$700
Yaesu FT 991a HF/VHF/UHF xcvr w/ SP10 speaker	\$1000
Astron 20m power supply	\$50

Many books, and Ham related software items. Need something, just ask.

There is also a 30' Rohn tower and Hy Gain rotator that need to be taken down. Atop of the tower is an HF Yagi, 2m Yagi, 2m log periodic, & 2m vertical. All for sale. Hy Gain "Hy Tower" all band HF vertical antenna.

The antennas and towers are in good condx and need to be taken down safely. ( an antenna party in the spring ?) I will entertain any reasonable offer on the antennas and towers.

These items are all for sale but many have not been tested. They will be tested upon sale to satisfaction of the buyer.

**Please call Gregg Mulder WB8LZG at 517-646-6257 after 5pm.**

# Greater Lansing Nets

The “**Central Michigan Slow Scan TV Net**” meets every Sunday evening from 7:00- 8:30pm on the 145.39 repeater (PL 100 Hz), with Net Coordinator Carl Canfield/K8YHH. EVERYONE is welcome to join in and have fun learning and using this interesting and useful mode of communication. Other digital modes will be explored from time to time. For more information, call Carl at: (517) 755 6627.

The “**Ladies Tea Time Net**” meets every Tuesday night at 7:00 pm on the 145.39 repeater (PL 100.0), with Net Coordinator Janine Lieber/KK6GYM.

The “**Quarter Century Wireless Association Net**” also meets every Tuesday night but at 8pm and on the 146.70 repeater (PL 107.2 Hz), with Net Coordinator Don Tillitson/WB8NUS.

The “**Mid-Michigan Information & Trader’s Net**” meets every Wednesday evening at 7:00pm on the 145.39 repeater (PL 100 Hz), with Net Coordinator Clyde Tompkins/K8CPT.

The “**MSUARC Friends and Info Net**” meets every Thursday evening at 7:00pm on the 145.39 repeater (PL 100 Hz), with Net Coordinator Gregg Mulder/WB8LZG. The first half of the net is time for chatting, while the second half is for Morse Code practice. If you wanted to learn Morse Code, but didn’t know how to go about doing it, then please join us. The speeds are kept down to a minimum, to make it easier to learn.

**ALL are welcome on these nets, so be sure to check in to show your support. And as with all Nets, 3rd party check-ins are welcome, but must have Control Operator present at check-in time.**

## CMARC Officers and Appointees

### *President*

Clyde Tompkins, K8CPT

### *Vice President*

Michael Boensch, W8MKB

### *Treasurer*

Dan Beuchert, WX8MOJ  
[wx8moj@arrrl.net](mailto:wx8moj@arrrl.net)

### *Secretary / Scope Editor*

Chris Ranes, NS8Q  
[kc8caj@gmail.com](mailto:kc8caj@gmail.com)  
[cmarcscope@gmail.com](mailto:cmarcscope@gmail.com)

### *Under 22 Director*

Don McLain, (KB8RAD)

### *Director*

Tom Rocheleau, WA8WPI

### *Director*

Gregg Mulder, WB8LZG

### *Cards & Flowers*

Jane Hosford, KC8FSK  
(517) 515-7610

### *Club Contact*

Don McLain, KB8RAD  
(517) 930-7707

### *Club Historian*

William Cote, WD8NYW

### *Antenna Projects Chairman*

Gregg Mulder, WB8LZG

### *Lansing ARPSC Liaison*

Jim Hannahs, KC8QWH

### *QSL/Awards Manager*

Don DeFeyter, KC8CY  
(517) 641-4533

### *Photographer*

Kenneth Hazlett, N8BVV  
(517) 348-5513

**CMARC Calls:  
W8MAA & W8PLP**

## LCDRA Officers and Appointees

### *President*

John Imeson, N8JI  
(517) 449-1517

### *Vice President*

Don Tillitson, WB8NUS  
(517) 321-2004

### *Secretary*

Ron Harger, WD8BCS  
[wd8bcs@arrrl.net](mailto:wd8bcs@arrrl.net)

### *Treasurer*

Jeff Oberg, KB8SXX

### *Director*

Jan Bradfield, KC8BFB  
(517) 202-1779

### *Director*

Don McLain, KB8RAD  
(517) 930-7707

### *Director / Membership Chair*

Michael Boensch, W8MKB

### *Repeater Trustee*

Dennis Boone, KB8ZQZ

**LCDRA Call:  
W8BCI**

The Scope is a bi-monthly joint publication of The Central Michigan Amateur Radio Club and the Lansing Civil Defense Repeater Association. Please send all articles, classified ads, or other information to the editor, Chris Ranes, NS8Q, at [cmarcscope@gmail.com](mailto:cmarcscope@gmail.com).

**The deadline for each issue is midnight on the 20th of the preceding month.**



# Central Michigan Amateur Radio Club

## W8PLP/W8MAA

### Membership Form



For new CMARC applicants: Please complete all sections.

For existing CMARC members: Please include your Name and Call Sign along with only the information you would like changed.

Mail completed form to Membership Chairman (see address below) or take to Club meeting for processing. Please include payment if applicable. (Checks or Money Orders should be made payable to 'CMARC').

Daniel Beuchert | PO Box 27275 | Lansing, MI 48909-7275

Membership Type		<input type="checkbox"/> New	<input type="checkbox"/> Renewal
<b>Full:</b>	<input type="checkbox"/> Annual Dues: \$20.00 <i>Includes voting rights and an annual subscription to The Scope.</i>		
<b>Associate:</b>	<input type="checkbox"/> Annual Dues: \$5.00 <i>Includes an annual subscription to The Scope but NO voting rights.</i>		
<b>New Licensee:</b>	<input type="checkbox"/> Annual Dues: 1st Year Free		
<b>Under 18:</b>	<input type="checkbox"/> Annual Dues: Free		

Contact Information	
<b>First Name:</b> _____	<b>Last Name:</b> _____
<b>Call Sign:</b> _____	<b>License Class:</b> _____ <b>Phone #:</b> _____
<b>Address:</b> _____	<b>Apt/Unit:</b> _____
<b>City:</b> _____	<b>State:</b> _____ <b>Zip Code:</b> _____
<b>Birthday:</b> _____	<b>Anniversary:</b> _____
<b>Email:</b> _____	<b>Sign up for the List Serv:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<small>Note: Email is used by club officers to communicate club business and may appear in the club directory for use by club members. CMARC does not share/sell contact information to other parties.</small>	

Club Communications	
<b>Newsletter Preference</b> (select only one option)	<input type="checkbox"/> I will download from the web site.
	<input type="checkbox"/> Please mail to my address (Note: Direct mailing increases postage costs.)
<b>ARRL Affiliation</b>	<input type="checkbox"/> I am an ARRL member





# Lansing Civil Defense Repeater Association

## Membership Form

For new LCDRA applicants: Please complete all sections.

For existing LCDRA members: Please include your Name and Call Sign along with only the information you would like changed.

LCDRA oversees the operation and maintenance of all Lansing Area repeaters. Use of the repeaters does NOT require LCDRA or CMARC membership, but your support is welcome and appreciated.

Mail completed form to Membership Chairman (see address below) or take to a meeting for processing. Please include payment if applicable. (Checks or Money Orders should be made payable to 'LCDRA').

**Michael Boensch | 1897 Sunnymede Ln | Lansing, MI 48906-1356**

**If you would like a membership card mailed to you,  
please include an SASE with your payment. Thank you.**



Membership Type		<input type="checkbox"/> New	<input type="checkbox"/> Renewal
<b>Full:</b>	<input type="checkbox"/> Annual Dues: \$15.00 <i>Includes voting rights and an annual subscription to The SCOPE.</i>		
<b>Family Mbrs:</b>	<input type="checkbox"/> Annual Dues: \$7.50 ea. <b>No. of Family Members:</b> _____		
<b>ARRL Affiliation</b>	<input type="checkbox"/> I am an ARRL member <b>Membership Card</b> <input type="checkbox"/> Yes (Please see above)		

Contact Information	
<b>First Name:</b> _____	<b>Last Name:</b> _____
<b>Call Sign:</b> _____	<b>License Class:</b> _____ <b>Phone #:</b> _____
<b>Address:</b> _____	<b>Apt/Unit:</b> _____
<b>City:</b> _____	<b>State:</b> _____ <b>Zip Code:</b> _____
<b>Birthday:</b> _____	<b>Anniversary:</b> _____
<b>Email:</b> _____	
<i>Note: Email is used by club officers to communicate club business and may appear in the club directory for use by club members. <u>LCDRA does not share/sell contact information to other parties.</u></i>	

Central Michigan Amateur Radio  
P.O. Box 54  
Mason, MI 48854-0054

STAMP

To:

Activities Calendar			
<div></div>			
Date	Time	Event	Place
8/2/2018	7:00 PM	VE Session	Lansing Fire Station #44
8/4/2018	6:30 PM	CMARC Board Meeting	The Club Station in Mason
8/10/2018	7:00 PM	CMARC Meeting	The Club Station in Mason
9/8/2018	11:00 AM	VE Session	Lansing Fire Station #44
9/8/2018	6:30 PM	CMARC Board Meeting	The Club Station in Mason
9/14/2018	7:00 PM	CMARC Meeting	The Club Station in Mason
9/29/2018	10:00 AM	General Licensing Class #1	The Club Station in Mason
10/4/2018	7:00 PM	VE Session	Lansing Fire Station #44
10/6/2018	10:00 AM	General Licensing Class #2	The Club Station in Mason
10/6/2018	6:30 PM	CMARC Board Meeting	The Club Station in Mason
10/12/2018	7:00 PM	CMARC Meeting	The Club Station in Mason
10/13/2018	10:00 AM	General Licensing Class #3	The Club Station in Mason
10/20/2018	10:00 AM	General Licensing Class #4	The Club Station in Mason
10/27/2018	10:00 AM	General Licensing Class #5	The Club Station in Mason
11/3/2018	10:00 AM	General Licensing Class #6	The Club Station in Mason
11/3/2018	6:30 PM	CMARC Board Meeting	The Club Station in Mason
11/9/2018	7:00 PM	CMARC Meeting	The Club Station in Mason
11/10/2018	10:00 AM	General Licensing Class #7	The Club Station in Mason
11/10/2018	11:00 AM	VE Session	Lansing Fire Station #44
11/17/2018	10:00 AM	General Licensing Class #8	The Club Station in Mason
12/1/2018	10:00 AM	General Licensing Class #9	The Club Station in Mason
12/6/2018	7:00 PM	VE Session	Lansing Fire Station #44
12/8/2018	6:30 PM	CMARC Board Meeting	The Club Station in Mason
12/14/2018	7:00 PM	Annual CMARC Christmas Party	The Club Station in Mason