

Get Your Free Field Guide! Page 9

What's Killing Ham Radio Pages 10-11

Dan Romanchik (KB6NU)





Official Field Day Wrap-up!Dan Beuchert (WX8MOJ)
Gregg Mulder (WB8LZG)

July/August 2018 Volume 18 Issue 4

Pages 12-13



The Scope

Central Michigan Amateur Radio Club Lansing Civil Defense Repeater Association

CMARC Annual Summer Indoor Picnic

CMARC will be providing the hot dogs and hamburgers (with all the fixings) and Iced Tea and Lemonade. Everyone else is asked to bring all the things that make for a good Summer picnic, like potato salad, baked beans, watermelon, etc. And don't forget all the yummy desserts and other non-alcoholic drinks of your choice too!

When: CMARC Monthly Meeting

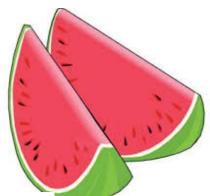
7:00 pm, Friday, August 10, 2018

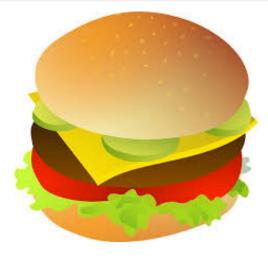
Where: Lansing Mason Area Ambulance

Training Facility

807 Kerns Rd., Mason, MI 48854

For more information, you can check out our website at www.centralmiarc.com or get a hold of Club contact Don McLain/KB8RAD at KB8RAD@arrl.net.









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Treasurer's Reports 2018Daniel Beuchert / WX8MOJ- CMARC Treasurer

Bank Balances for May		
Beginning Balance	\$2,661.38	
Total Monthly Income	\$1,065.00	
Total Monthly Expenditures	(\$971.72)	
Total Business Checking	\$2,754.66	
Petty Cash	\$1.00	
Outstanding Checks	(\$178.11)	
Sub Total + Petty Cash	\$2,577.55	
Primary Share Accounts		
Humphrey's Fund	\$383.56	
Building Fund (Club Station)	\$19.09	
Field Day	\$478.11	
Total Net Worth	\$3,458.31	
Youth Fund Balance*	\$254.28	
* Separate from CMARC Funds		

Bank Balances for June		
Beginning Balance	\$2,754.66	
Total Monthly Income	\$188.00	
Total Monthly Expenditures	(\$53.11)	
Total Business Checking	\$2,889.55	
Petty Cash	\$1.00	
Outstanding Checks	(\$125.00)	
Sub Total + Petty Cash	\$2,765.55	
Primary Share Accounts		
Humphrey's Fund	\$383.59	
Building Fund (Club Station)	\$19.09	
Field Day	\$478.15	
Total Net Worth	\$3,646.38	
Youth Fund Balance*	\$254.30	
* Separate from CMARC Funds		

Clyde (K8CPT) and the rest of the Board would like to say thank you to each and every person who came out to make this year's Outdoor Hamfest a huge success, including those who were vendors and just came to browse around! We could not have done it without everyone's hard work and dedication!

Beginning next year, the Board is requesting a sub-committee to handle the planning and organization of the Outdoor Hamfest. The committee chairperson will be the liaison with the Board. If you are interested in chairing or helping on that committee, please contact Club President Clyde Tompkins (K8CPT).

July Birthdays:

- 7/3 Joe Norton / KD8ZZL
- 7/6 Dennis Dann / KE8ACA
- 7/7 John Schuster / KD8VON
- 7/7 Joe Urdzela / K8JJH
- 7/14 William Cote / WD8NYW
- 7/17 Carl Canfield / K8YHH
- 7/22 Arthur Cherkinsky / WA8BMT
- 7/24 Carl Woodard / KE8FOO
- 7/24 Eric Woodard / KE0IGK
- 7/26 David Bryson / KD9WBR
- 7/28 Daniel Burk / NE8K
- 7/30 Doug Goodrich / N8ECL
- 7/31 Anthony Parker / KF8IU

July Anniversaries:

- 7/3 Gerry / KD8GLN and Sharon / KD8HHK Waite
- 7/11 Daniel Burk / NE8K
- 7/22 John / KE8CYC and Evelyn Winn
- 7/26 Matthew Taylor / KD8JIA
- 7/31 Jean Wixson / K8MUS

August Birthdays:

- 8/1 Charles Stahl / N8DWI
- 8/2 Dan Cameron / KD8QBF
- 8/3 Joe DeNomme / N8VYS
- 8/3 Joel Zachrich / NOKEX
- 8/5 Mark Anderson / KD8RQU
- 8/5 Mark Lovegrove / KE8GQX
- 8/7 Jeremy Kapella / KD8ZZJ
- 8/8 John Tyree / W8JTT
- 8/9 Dan Stockwell / KD8YVA
- 8/11 Debbie Headley / KD8YUX
- 8/12 Jon Seaver / N8SUA
- 8/14 Sam Fitzgerald / N8FPR
- 8/17 John Strong / AC8ML
- 8/21 Dave Hayhurst / K8QH
- 8/27 Matt Beha / N8BPI
- 8/27 Chris Ranes / NS8Q

August Anniversaries:

- 8/7 Ben / WD8OVL and Luwanna Barker
- 8/7 Russ / N8FZ and Kelly / N9PC Fitzgerald
- 8/9 Mark Lovegrove / KE8GQX
- 8/10 William Wing / W2PMH
- 8/11 Don McLain / KB8RAD
- 8/12 Chris / NS8Q and Shannon / WA2NVK Ranes
- 8/14 John / KC8QZB and Jane / KC8FSK Hosford

Upcoming Meetings:

CMARC Monthly Meeting

When: 7:00 pm, Friday, August 10, 2018

Where: Lansing Mason Area Ambulance

Training Facility

807 Kerns Rd., Mason, MI 48854

For more information, you can check out our website at www.centralmiarc.com or get a hold of Club contact Don McLain/KB8RAD at

KB8RAD@arrl.net.

ARPSC Monthly Meeting

When: 7:00 pm, Monday, July 16, 2018

7:00 pm, Monday, August 20, 2018

Where: Lansing Fire Station 48

off Marshall Rd. South of Grand River.

For more information, ou can check out our

website at www.lansingarpsc.com

LCDRA Quarterly Meeting

When: 7:00 pm, Thursday, July 20, 2018

Where: Lansing Fire Station 48

off Marshall Rd. South of Grand River.

8/22 Dan / W8VVR and Barb Fuller

8/24 Scott Norris / KD8ZFS

8/26 Don / WB8NUS and Mary Lou Tillitson

8/28 Peter / AC8YF and Karin Miller

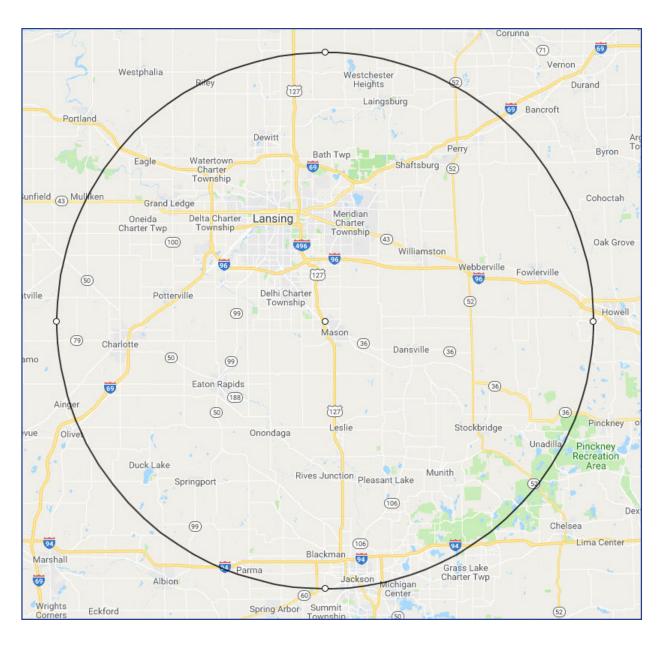
8/28 Tim Schuchaskie / KE9HIY

8/31 Ray / KD8ZDX and Geraldine Jenks

CMARC APRS Test!!

Saturday, August 25, 2018 Noon to Midnight

Operators are needed to drive or walk around the area within the circle with their equipment operating on 144.39. Packets received will not be released onto the Internet, but will be logged for testing purposes only. The results of our test will be available on the CMARC website at a future date. We look forward to having as many of you participate as possible. Thank you for your time!



ARRL Volunteer Exams



Sponsored by the "Ingham County VE Group"

To best accommodate 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

First Thursday of the Month at 7:00 PM

February 1st
April 5th
June 7th
August 2nd
October 4th
December 6th

Second Saturday of the Month at 11:00 AM

January 13th March 10th May 12th

June 23rd (Field Day - 11:00 AM - Rayner Park, Mason, Michigan)

July 14th

July 28th (Hamfest - 11:00 AM - Holt Christian Church, 2424 Washington Rd., Lansing, Michigan)

September 8th November 10th

Congratulations to our Successful July Hamfest Exam Candidates!!



Alan Huang of Mt Pleasant, MI passed his Tech.



Charles Senger (N8LPI) passed his General and Extra.



Ben Swanson of Ravenna, MI passed his Tech.



Dave Vick (W8ZZX) passed his Extra.



Eric Wyman of Mt Pleasant, MI passed his Tech.



Mason VerSluis of Nuncia, MI passed his Tech.



John Vassel (K8RFD) passed his Extra.

A Pictoral Review of the 2018 Outdoor Hamfest



CMARC HamFest Prizes 2018

Proof that it's not ALL about the prizes. This year we offered a choice for all prizes before the "big money" gift certificates, Baofeng UV-5R+ radio, and uBITX HF Radio Kit GRAND PRIZE, and a number of people chose the RTS Systems Stylus/Pen or Icom luggage tag © Note: ALL tickets were returned to the drum before the "bigger" prizes were drawn for.

N8OCA Far Circuits DVD

NC8A Learn Morse Code CD
Jan O'Brien RTS Systems Stylus/Pen
N4ZKS Learn Morse Code CD
KA8MSU RTS Systems Stylus/Pen

KE8CZD Far Circuits DVD

N8CGY RTS Systems Stylus/Pen N8AB RTS Systems Stylus/Pen KB8DQQ RTS Systems Stylus/Pen K8GUK ARRL Gift Certificate \$25

W8RQS Icom luggage tag

W8MKB RF Adapter Guy Gift Certificate \$25 KD8VJM ElectroCraft Dummy Load Kit \$30

WA8HEA RTS Systems Radio Programming Software

WD8BDR Far Circuits DVD

WA8HEA Baofeng UV-5R+ HT (Bill Brezina)

K8RMM ARRL Gift Certificate \$25

KB7ZGB WireMan Gift Certificate \$50 (Robert Rai)
N8RBS DX Engineering Gift Certificate \$50 (George)

N8VD ARRL Gift Certificate \$50

KB8MWA ARRL Gift Certificate \$50 (Dawn Beuchert)

KD8PA Far Circuits DVD
KE8GUL Far Circuits DVD
K8NNY Far Circuits DVD
K8RMM 2 Comet bar glasses

KC7JDB GRAND PRIZE uBITX HF Radio Kit (Jeff Brace)

Get your free copy of A Field Guide to Simple HF Dipoles

By Dan Romanchik / KB6NU

link to A Field Guide to Simple HF Dipoles (http://www.dtic. mi l/dtic/tr/fulltext/u2/684938. pdf) was posted to reddit recently, and I liked this document so much that I thought I would share it with you. It was originally written for the military but is now available for free from the Defense Technical Information Center.

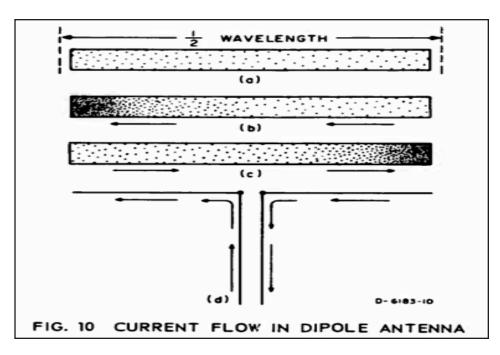
The preface to this document reads:

"Under project Agile, Stanford Research Institute has supplied several teams to assist operating personnel in improving the performance of field radio networks. In this work, it has been observed that U.S. military and civilian antenna manuals often contain misleading information regarding the operation of field antennas and tend to be overly complex. Consequently, this guide has been prepared to assist in training personnel concerned with the construction of simple HF antennas in the field."

I must say that A Field Guide to Simple HF Dipoles does this very well. It not only explains how dipole antennas work, it also does a very good job of describing the basics of radio waves and propagation. And it does this without getting overly technical.

The Field Guide reads:

"Electric current in a conductor consists of the flow of small particles called electrons. Figure 10(a) represents a dipole with electrons in it. When the transmitter is turned off, the electrons distribute themselves evenly



throughout the dipole, as shown. All electrons repel each other and try to get as far from each other as possible; that is how they achieve the uniform distribution show in Figure 10(a). When the transmitter is turned on, the electrons flow back and forth from end to end as shown in Figures 10(b) and 10(c). First the electrons flow to the left and crowded at one end as shown in Figure 10(b). Second, since the electrons repel each other, the push off to the right and get crowded together at the other end, as in Figure 10(c)."

It then uses this description to talk about voltage and current distribution along a dipole antenna:

"The difference between voltage (volts) and current (amperes) in a dipole is also illustrated by Figs. 10(b) and 10(c). You can see that the maximum flow of current is going to be in the middle of

the dipole. An observer at the center of the dipole would see the electrons rush past, first one way and then the other. The center is the maximum current point. Very little current flows near the end of the dipole; in fact, at the extreme ends there is no current at all for there is no place for it to go. However, at the ends of the dipole, there is a great change of voltage; when the electrons are densely packed, this represents a negative voltage, and when there is a scarcity of electrons, it represents a positive voltage. Thus, you can see that the voltage at each end swings alternately positive and negative. An end of the dipole is a maximum voltage point."

A Field Guide to Simple HF Dipoles is packed with all kinds of goodies like this. Download it (http://www.dtic.mil/dtic/tr/fulltext/u2/684938.pdf) right now.

Is the internet, millennials, or FT-8 killing ham radio?

By Dan Romanchik / KB6NU

mateur radio bloggers love to write about the demise of amateur radio. To wit, we have:

- K0NR's Is the Internet destroying amateur radio? (http://www.k0nr. com/wordpress/2017/11/internet-destroying-amateur-radio/)
- NOSSC's Millennials are killing ham radio

(http://n0ssc.com/posts/583-millennials-are-killing-ham-radio)

- PE4BAS' Is FT-8 damaging amateur radio? (https://pe4bas.blogspot.com/2018/04/is-ft8-damaging-hamradio.html)
- NZ0T's Did Joe Taylor K1JT Destroy Amateur Radio? (http://www.ei5di.com/jt.html)

Of course, none of these posts are really saying that the internet, millennials, or FT-8 has killed amateur radio. What they are saying is that all of these are changing amateur radio as we know it. Well, duh, the way we live our lives changes every day. Why should amateur radio be any different?

For example, Bob, KoNR, discusses how the operation of remote stations is changing the game of DX. Can you really claim that you worked a DX station if you rented time on a superstation? I've written about that topic, too (https://www.kb6nu.com/dx-advisory-committee-wants-to-put-the-screws-to-remote-operation/).

There has also been much written about how FT8 is changing the amateur radio game. One blog post



hackNY.org Spring 2013 Student Hackathon

(h t t p s: // v e 7 s l . b l o g s p o t . com/2017/10/16om-ft8-end-of-era.html), talking about the effect of FT8 on 16om operation, even goes so far to say that this is the "end of an era." On DX World, the results of the poll, "FT8 – Damaging to Amateur Radio?" (https://dx-world.net/yes-or-no-a-poll-on-ft8/) show more than half of the respondents think that FT8 is damaging amateur radio.

I specifically used the word "game" in the previous two paragraphs because that's exactly what's changing. The physics of amateur radio certainly isn't changing. Our transmitters are still generating electromagnetic waves like they have been for decades, and on the HF bands, anyway, those radio waves are bouncing off the ionosphere just as they have been for more than the past 100 years.

What's changing is the human

component. By that I mean what's changing is how we think people should participate in the hobby. The hams that are complaining that the internet or millennials or FT8 is killing amateur radio are just complaining that people aren't participating in amateur radio the way they want them to participate.

Here's where we talk about millennials. In his blog post, Sterling, NoSSC, suggests that setting up remote stations is one way to engage young people. He writes, "I believe that remote operating, and other internet-assisted means of ham radio operation, are critical to youth engagement."

He's also big on an idea he calls "ham radio hackathons." He writes,

"A hackathon isn't a coding competition. It's explained well in this Medium article (https://medium.

Killing Ham Radio? Cont'd

com/hackathons-anonymous/wtf-is-a-hackathon-92668579601). It goes even further than that, not limited to coders and engineers, but open to thinkers, doers, philosophers, system engineers, math people, teachers, students, artists, stakeholders...anyone with an interest in solving a problem with technology."

I support both ideas, but I think that millennials (and, to be fair, it isn't just millennials we're talking about here, but any newcomers to the hobby) need to step up and get these things going. I don't think it's my job to try to get kids interested in amateur radio. I don't

even know if that's really possible. What I can do, however, is be there to encourage and support kids (and anyone else that expresses a sincere interest in amateur radio).

For example, I'm not sure how fruitful it would be to set up my station to be remotely operable and then saying to some kids, "Hey, come and operate my station." What I think would be more fruitful is to say to a kid, "Hey, come help me set up my remote-control station, so that we both can use it." Then, it turns into a learning situation, and we both gain from the exercise.

The same kind of thing has to happen with ham radio hackathons. The motivation has to come from the ground up, not the top down. I do hope that this idea gets off the ground, though, and I'm standing by, ready to support this effort however I can.

I think that millennials (I'm really getting tired of that term, by the way) need to grab the bull by the horns and take amateur radio in the direction they want it to go. Feel free to kill amateur radio as we know it. Make it better!

Thank You to this Year's Field Day Sponsors



A&W (Mason) - Root Beer & Diet Root Beer
ACE Hardware (Leslie) - Bottled Water
Amy's Catering (Lansing) - Hamburgers
Big Boy (Mason) - Ice
Biggby Coffee (Mason) - Coffee
City Limits (Mason) - Pizza
Hungry Howies (Mason) - Pizza
Independent Bank (Mason) - \$50
Little Caesars (Mason) - Pizza

Little Caesars (Mason) - Pizza

Merindorf Meat's (Mason) - Hot Dogs

Supreme Rental (Mason) - Porta John

Tom's Food Center (Okemos) - Doughnuts

ValuLand (Leslie) - Buns

Zano's Pizza (Mason) - Pizza

Field Day 2018 Wrap-Up

By Dan Beuchert / WX8MOJ

ooking back to the Field Day operations for 2018, I feel honored to have been able to serve as the Field Day Chair. From the first Field Day after I was licensed (the summer 2010 Field Day), a seed was planted. Over the years I have looked forward to Field Day as a day to test out my skills as an operator, and lately even some of my equipment.

To borrow from a veteran Field Day Chair, Ron Harger (WD8BCS), Field Day is an Emergency Preparedness Exercise disguised as a contest. This is one of my favorite pieces of Field Day operations. We get a group of people out into a Field, put up antennas, hook up radios, and try to not blast each other out of the water (well air) while we operate HF Phone (two stations when the GOTA is active), HF CW, HF Digital, and VHF voice. I'm always impressed that thoughts of cutting each other's feed lines during the height of the contest never materializes in the flesh. I also greatly enjoy the collaboration between the Central Michigan Amateur Radio Club and the Lansing / Ingham Amateur Radio Public Service Corps. This is one of the few major events when large numbers from each group get together to play radio. My favorite part, by far, is how we all come together as Amateur Radio Operators for a common cause. We look out for each other, we help each other, and we engage in friendly competition. As we do this we become Amateur Radio Operators who are better prepared after Field Day for any emergency deployments than we were before Field Day.

For an event as large and encompassing as Field Day, without a lot of hard work from many individuals, this event would not be possible. From the Field Day Station Chairs (Gregg Mulder



- CW, John Hosford - Phone, John Tyree - VHF, Randy Williams - Digital, Clyde Tomkins – GOTA), to the numerous helpers that each chair had to setup and operate, to the people who helped us setup on Friday night, Saturday morning, and tear down on Sunday afternoon when all most of us can think of is sleep, to those who kept us fed and full of caffeine (thanks Shannon!), there were a lot of people who pitched in to make Field Day 2018 possible. Kenny Hazlett worked to get us media coverage, Ed Hude (WA8QJE) helped to work with the City of Mason because of our use of Rayner Park, Randy Williams helped setup the generator and power runs, Gordy Smith and Brian Wellwood helped with the GOTA while Kenny Hazlett helped guide visitors through the Amateur Radio materials setup at the PIO table, Ted Sadilek (WA8MFQ) headed the VE session with volunteers helping make sure people could earn their license at Field Day, and the list goes on. So many people from the CMARC, the ARPSC, and the greater Amateur Radio Community came together to make Field Day possible, and I am grateful for all the contributions

from each of you. If you were in any way, shape, or form part of Field Day: thank you for making it possible and enjoyable!

I also want to thank the City of Mason for graciously offering up Rayner Park for our Field Day operations. We were visited by City Councilmember Mike Waltz and Mason Police Chief Don Hanson (his son even made some GOTA contacts) during our Field Day operations. Please also take some time to thank any of the businesses that you frequent that helped make Field Day possible by donating materials, funds, food, or services to us!

This year we had about 60 people attend the event, had 10 GOTA station visitors made over 40 GOTA contacts, and CW might have outdone themselves this year. We even made it onto the news! As for competitive contacts VHF made 4 contacts, Digital 28, HF SSB 227, and CW with 690! I hope that everyone had a good experience at Field Day 2018, learned something, got better at operating, and is looking forward to the fourth full weekend in June 2019 to do it all again!

Field Day 2018 CW Station

By Gregg Mulder / WB8LZG

he week before Field Day the HF bands were buzzing with activity. There were even several 6 and 10 meter openings due to some friendly E-Clouds. The mw sprint was a success two days before, and I had high hopes for some good wx and good propagation for our weekend.

Friday afternoon Ken Faiver W8HNI and I were out at the site to get some antennas up before the rain. The trusty bow n arrow method proved to work FB, and we soon had several lines in the trees. All seemed ok until our ol'pal Murphy showed up. The lines closest to the intended campsite were NOT cooperating. We had some lines get VERY caught up in branches, but as sprinkles started to fall, we finished up for the day just in time. We decided to treat ourselves to an ice cream cone on the way out, for getting it done before the rain.

Field Day morning brought us a few more unexpected line in tree problems, but they were quickly remedied, and we soon had 2 FB skyhooks to capture some FD fun. We used 2 "time proven" designs. A five element "Bruce Array" curtain type, on 20 meters, with over 4.5 Dbd gain, and a 340 foot long "Super-Zooka." Both proved that "bigger IS better" once again this year, providing us with some PUNCH on the air.

It is always fun for me to be able to use some bigger and different antennas at FD. My own city lot does not give any room for more than an 80 m half wave dipole. So putting several hundred feet of wire high up in the air is fun and rewarding. The Big Wire feed point was about 55 feet up, and the ends were even higher. This long dipole works very well on 80, 40, 15, and 10 meters

The Bruce Array was up 50 feet on



the high end and 35 feet on the bottom.

We started out on 20m with the K2 at 10 watts running on solar power to earn our natural power bonus. The first 5 QSOs went into the log swiftly, and then we changed over to the big rig for the remainder. With great antennas and good propagation, we were filling up the log at a nice pace. Then it happened again! Murphy struck the logging computers! Something happened, and we lost some "dupe data" into the bit bucket. Oh well, a quick disconnect from the server computer and we logged on. I was doing some good rates with Chris Ranes NS8Q logging, but could not quite get to the elusive 1 per minute or better.

We swapped up ops fer chow relief at dinner time, and the trenchermen were not disappointed. They really put out a FB spread for the group. Pizza, pop, beans, burgers, dogs, slaw, plus some of the guys brought a smoker along, and we enjoyed smoked brisket, and chicken. Along with all the chips, donuts, root beer and every thing else, it was quite a good dinner, to say the least. (again this year I gained a few pounds) Early

in the evening I took another turn in the Hot Seat and switched to 40m fer a new band. 40 was packed, and rates climbed as we filled the log. All was going well when I called it a night at around 1030pm. Ron Harger WB8BCS and Ken were going to take er through the "night shift."

I set the alarm for 4 am, and was out to the FD site by 5, coffee in hand and ready to go. The guys had gone to 80m sometime during the night, and it was producing a steady rate of QSOs. The band was still going strong, and the rates were great. 55/hr, 62/hr, and even better. Then mid-morning we decided to go to 15m fer another new band, and we were not disappointed. After once up n down the band, I parked on a clear spot an started calling CQ. They just kept on coming! This was more like it! Rates jumped to 65/hr and even got 78 in one hour. I was in Ham Heaven fer sure! Finally, lunch time and Ed Oxer W8EO and Ken took over to finish us out. Somewhere over 600 QSOs made this FD a lot of fun.

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

May 5, 2018

Attendance

Current Board Members Present: Clyde Tompkins (K8CPT), Judy Crawford (K8JKC), Dan

Beuchert (WX8MOJ), Chris Ranes (NS8Q), Tom Rocheleau

(WA8WPI), Shawn Crawford (WA8MXJ)

Shannon Ranes (WA2NVK), John Hosford (KC8QZB), Steve Guests:

Lyon (W8RQS)

Call to Order

President Clyde Tompkins (K8CPT) called the meeting to order at 4:30 pm.

New Club Tools

- Our new club member Gordy Smith (KE8JKS) donated approximately \$300 worth of new tools to be used for club activities in the club building. The tools should never leave our building. They are located in a locked case and the Board members will have a key.
- During the June meeting Gordy requested that he can speak a little bit about the tools, and challenge the membership to donate tools of their own.
- A physical inventory will be written up and it will be posted inside the lid of the box.

New Board Member to replace Dennis Shubitowski NS8H

• Per the bylaws, the Board has decided to pick a person from one of the two remaining people from last year's election.

MOTION: Judy moved that we nominate Michael Boensch (W8MKB) to fill the

Directorship position once held by Dennis (NS8H), seconded by Dan, approved,

and the motion carried.

APRS

- In lieu of installing a separate antenna for APRS, the idea was discussed that we use the main antenna at the top of the large tower for APRS. When we want to use the antenna for our own VHF/UHF activity at the club station, we either disconnect the APRS setup or use an antenna switch.
- The Board is also looking at leaving the main vertical for our own club station use, and installing a secondary antenna on the smaller tower, with a slightly taller mast pipe.
- The Board is researching purchasing better quality coax to make sure the system is as efficient as possible when we put it up.
- The Board is also considering installing a temporary APRS setup using a Signalink USB Soundcard Interface, and one of the club laptops, and use that for testing purposes.

- We are considering creating a future event where we will have all APRS users in the area to get out in their cars to test out how well our coverage will be in the RF holes around the Dansville area.
- We are in the process of drafting a letter to Kevin Ammerman to explain our intentions with the APRS installation, especially when it comes lightning protection, internet access, and with any other security issues.
- No further votes will take place until we hear officially from Kevin and we finalize our research.

Conflict of Interest Policy

- The purpose of the conflict of interest policy is to protect CMARC interest when it is considering entering a transaction or arrangement that may benefit the private interest of one of the Board Officers or Directors.
- This document needs to be signed by each member of the Board on a yearly basis as part of our IRS 501(c)3 filing requirements.
- All six Board members who are present signed the document and it will be scanned and then the physical copy stored in our cabinet.

Member Appreciation and Public "Get On The Air" Event

- Our goal with this event is to welcome newly licensed members and those who have been licensed for a while, but have never touched a radio before.
- We are looking at tying this event to the August meeting. The meeting with be a potluck type event.

Upcoming General Class

- Tentative dates are September 29 December 15, allowing for a nine-week course. There will be two flexible weeks as well, and class will not be held the weekend immediately following Thanksgiving.
- Classes should run from 10:00 am Noon with adjustments dictated by the needs of the students. "Study Hall" sessions will run for sessions 3-8 and will follow after the class period.
- There will be a special VE session following the last class period with a tentative start time of 1:00 pm.
- We will be using the ARRL General Class license manual
- Instructors are Dan, Shawn, and Tom with additional volunteers as available.
- All dates and times will be confirmed with Kevin Ammerman and an official notice will be made in the future.

Soldering Class

• Clyde is looking at starting up the second soldering class towards the end of this month, assuming there aren't any building room conflicts. He will check with Kevin to see if it will work out.

Possible Update to Bylaws

• CMARC Property Accountability Policy - the Board is looking at adding this policy to our Bylaws which describes how the handling of club assets should take place. The policy will safeguard our assets, so if someone borrows something, we will know where it went, and will be able to get that item back if need be. Once implemented, the current Board and all future Boards will be set up for success. The policy should be signed yearly, beginning in January, with the incoming new Board members.

501(c)3

- We received a letter from the IRS with our EIN number, Tax Form Number, Document Locator Number, and Assistance Number. The letter is proof from the IRS that they received all our documents and the application fee.
 - o For all applications that are filed, they are divided into two groups those that can be processed by as information submitted, and those that require more information before they can be processed.
 - If our application falls within the first group, we will receive a determination letter within 90 days of the letter we received (dated April 23, 2018) stating we are exempt from federal income tax.
 - If our application falls within the second group, we will be contacted when our application has been assigned to an exempt organization specialist for review. We can expect to be contacted within 180 days of the letter.

Adjournment:

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

The meeting was adjourned at 7:33 pm.

Chris Danes

Respectfully submitted,

Chris Ranes (NS8Q) **CMARC Secretary**

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

June 2, 2018

Attendance

Current Board Members Present: Clyde Tompkins (K8CPT), Judy Crawford (K8JKC), Chris

Ranes (NS8Q), Dan Beuchert (WX8MOJ), Shawn Crawford

(WA8MXJ), Michael Boensch (W8MKB)

Current Board Members Absent: Tom Rocheleau (WA8WPI)

Guests: None

Call to Order

President Clyde Tompkins (K8CPT) called the meeting to order at 6:45 pm.

Field Day:

- Clyde and Gordy will be working together for the GOTA Station.
- We hope to have our PIO tent next to the GOTA Station this year.
- Station Chairs:
 - John Hosford KC8QZB (SSB Digital)
 - o Randy Williams KD8MOK (SSB Digital)
 - Gregg Mulder WB8LZG (CW)
 - John Tyree W8JTT (6M VHF)
- Randy Williams KD8MOK will bring the State-owned generator again this year.
- Shannon Ranes WA2NVK will be handling food.
- Ted Sadilek WA8MFQ will be running the VE Session this year.
- We are looking at coming up with flyers for Field Day to put around town.
- We are unsure if we are going to be able to use the mobile trailer this year for the SSB and Digital stations. Dan is looking into other options.
- Laptops Jeff Goeke-Smith will be providing laptops for us again this year. With the two club laptops we own, and the units from Jeff, we will have a spare.

Upcoming Ladies Night Events:

- We received positive feedback from everyone who attended this years event.
- The planners are looking into changing the venue from time to time.

Hamfest:

- Flyer Shawn is working on updating the flyer.
- We are currently searching for a grand prize valued around \$200.
- Dan Dembinski is going to donate the pulled pork, make the dry rub, and come up with a sauce. Judy is planning to have approximately 100# of pork since we ran out pretty early in the event last year.
- We need to find people who can stick around to help clean up afterwards.

Licensing Class:

 We are planning a General Class to start September 29th and run until December 1st. Class will not be held the week of Thanksgiving (November 24th).

Club Printers:

- We would like to have a printer that we can keep here at the club to use for when we need to make some quick print-outs as needed.
- We are going to check to see if the printer that John Hosford has still works. If not, we will look at purchasing an inexpensive laser printer.

Printing and Mailing the SCOPE Newsletter:

- We are looking at the idea of possibly asking for an increase in membership costs for those who would like to have the SCOPE Newsletter mailed to them.
- This is strictly to cover the cost of paper, ink, and postage.
- The increase, if approved, will begin next year.

Locks and Keys:

- We will be making a couple copies of the key for the lockable cabinet in our storage room.
- We received permission from Kevin to make a duplicate copy of the outside door key a Board member.
- We do not have keys to the doors leading to our storage room. If for some reason the doors are locked, we may not be able to access it. Clyde is going to check with Kevin to get his input.

Gin Pole Policy Waiver Information:

• We are still looking into possible requirements for those who want to use our gin pole.

<u>Alternative Means for Board Members to Attend Meetings:</u>

 We are looking at other ways Board members can remotely participate in a meeting while away.

Adjournment:

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

The meeting was adjourned at 8:33 pm.

Chris Danes

Respectfully submitted,

Chris Ranes (NS8Q) **CMARC Secretary**

CENTRAL MICHIGAN AMATEUR RADIO CLUB MEETING MINUTES

June 8, 2018

Attendance

Board Members Present: Clyde Tompkins (K8CPT), Judy Crawford (K8JKC), Dan Beuchert

(WX8MOJ), Chris Ranes (NS8Q), Shawn Crawford (WA8MXJ), Tom

Rocheleau (WA8WPI), Michael Boensch (W8MKB)

Board Members Absent: None

General Members: 37 Members Visitors: 3 Visitors

Call to Order

• Clyde (K8CPT) called the meeting to order at 7:00 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

- We sent a Thank You card to Kelly and Russ Fitzgerald for organizing and planning this year's Ladies Night/Ziegenbein Award Banquet.
- Mike Pederson (Dan Dembinski's) Brother is back in the hospital with advanced stage renal failure.

New Members / Visitors

- Bill Coon (KC8LRM) former member
- Kerby Rials (N8FLK)
- Smith from Lansing (No Callsign or First Name given)

Treasurer's Report

MOTION: John (KE8CYC) moved to accept the Treasurer's Report as published on the CMARC website, seconded by John (KD8NNQ), approved, and the motion

carried.

• Remember to pay your dues for 2018. See our Treasurer, Dan Beuchert (WX8MOJ) if you need a membership form and to pay with check or cash.

Secretary's Report

MOTION: Ben (WD80VL) moved to accept the Secretary's Report as published on

the CMARC website, seconded by Bob (K8ZAP), approved, and

the motion carried.

New Licenses and Upgrades

• Bill Coon (KC8LRM) received Extra class upgrade in Tennessee 3 months ago.

Interesting DX or other Contacts

- Bob Crawford worked W8PLP from Missouri during the Michigan QSO party.
- Clyde and Michael worked several DX contacts from the club station including several stations for the FIFA Soccer Competitions.
- Several 10m and 6m contacts have been made recently. The bands are starting to open nicely.

State Parks on the Air

- Mspota.org for more information
- Two-thirds of the parks in Michigan are or have been activated.
- If anyone has interest in activating a park, especially a local park like Sleepy Hollow, contact Clyde (K8CPT) for more information. This is a great idea for those who may not have a General or Extra class license.
- Dan Dembinski (KD8YDE) will be active from the Huron National Forest in the UP during the first week of August.
- Gordy Smith (KE8JKS) will be activating Interlochen State Park just after Field Day this Summer. The dates will be June 28-30.

Old Business

- Status of the our 501(c)3 application
 - Our check has been cashed and are currently waiting for a reply from the IRS.
- General Licensing Class
 - o 9-week course running from September 29 to December 1st. Classes begin at 10am 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.
 - Don McLain (KB8RAD) is the contact for those wanting to sign up.
 - o The club station may be activated at the end of the class session during the contest weekends.
- Soldering Class Recap
 - o There were 8 people who showed up to finish soldering their interfaces and were able to use their interfaces on the air from the club station.
- Field Day
 - o Dan (WX8MOJ)
 - We need to try and get a meeting with the City of Mason

- John Hosford SSB Chair, Randy Williams Digital Chair. Both guys could use a co-chair to help run the station.
- John Tyree is going to chair the VHF/6m station
- Gregg Mulder will chair the CW station
- Clyde and Gordy will run the GOTA Station
- Setup on Friday night will be anytime after 3pm depending on station chairs. Dan will be available to make sure the park is open to us to get in there to set up antennas ahead of time.
- On Saturday, the time for loading at the club station is between 7-8 am.
- VE Session will be at 11am.
- Fox hunting will be at 3pm.
- Picnic is at 6pm.
- Operation ends at 2pm on Sunday afternoon with teardown/cleanup to start immediately after, or as early as 1pm.
- For those who want to operate their own station from the park with their own equipment and antennas, they need to coordinate with the appropriate chair.
- Dan will be working with Ed Hude and the City of Mason to find out if campers are allowed to stay overnight in the park.
- As far as the trailer from the county is concerned, the roof still leaks, and the county has not been able to patch it. The floor also has holes that need work done to them. It is unclear whether or not we will be using it this year. John Tyree will possibly bring his RV trailer and Dan will have his popup trailer. Dan is going to check with Kitsmiller RV to see they will be able to loan us a trailer for two days this year. Dan Dembinski offered his RV and his portable air conditioning unit to house one of the stations if need be.
- Dave Hayhurst will be bringing the large generator from the State of Michigan.
- Dan has a signup sheet for those people interested in operating or helping with a particular station, or if you want to help with any other aspect of the event.
- John Hosford started the club generator and everything is working fine on it. We may need it for a backup.
- We have a Porta-Jon donated again this year, thanks to Jim and Ginny Hannahs.
- The two club laptops along with the computers donated by Jeff-Goeke-Smith should allow all stations to have a laptop to log with.
- Shannon (WA2NVK)
 - Pizzas are coming for lunch on Saturday as well as later on in the day.
 - At the picnic, we will be having hot dogs, brats, and burgers with side dishes to be supplied by others.
 - We are in the need of coolers.
 - We need help along with a vehicle to pick up food and other supplies around noon that day.
- Any other old business?
 - We will be conducting a one-day test for the APRS station coming up this summer.
 Depending on the results of the test, will determine whether or not we install it.

New Business

Hamfest

- o If you would like to volunteer and still have not signed up, please see Clyde. We still need 5 or 6 people to fill all the necessary positions.
- If you are more interested in working with food, please see Judy.
- The church now charges \$125 building use and \$125 deposit. We are not charged for building use because of our prior relationship, and will receive the deposit back if nothing is damaged at the end of the event.
- Brian Wellwood will be operating the GOTA station.
- Meet at the club at 5pm on Friday to load the trailer and then unload at the church.
- Dan Dembinski will be staying the night at the Hamfest site.
- The club owns a few traffic cones, but we could use some more.
- We could use someone with power supplies, meters, and other test equipment who would be willing to help test equipment for those purchasing equipment.
- The announcers tent will be towards the front, near the church's canopy.
- If the new Michigan Section Manager can not make it, Ed Hude may be able to step in to represent the ARRL.

Gordy Smith

- Gordy donated a brand new tool box, full of tools, to help encourage more members to get involved in building projects.
- He is calling it the CMARC "Go-To" box, and can be used for any member who needs a quick tool.
- He also had two brand new banners made up to use for Field Day, Hamfest, or any other event. The banners were printed by www.hamcrazy.com.
- Gordy is challenging the members to donate money towards what has not been purchased for the club tool box, talk to Clyde and see if we can't finish out the list.

Any other new business?

- Bob Strobel (KB8DQQ) has an opportunity to help with a one-day Field-Day at the 4H county fair in St. Johns. The idea is to demonstrate the general public, including many young people, to amateur radio.
 - Woldumar Nature center will also hold another similar event in September.
 - Contact Bob if you are interested in one or both events.

<u>50/50 Raffle</u>

• Ben (WD8OVL) won \$24.00

Weekly Nets

- Wednesday Night Traders Net at 8pm on the 145.39 Repeater
 - We currently have two net control stations, but could use some more.
- Michigan VHF Traffic Net on the IRA Link System
- Thursday HF Net at 9pm on 28.495.

- Bob Strobel (KB8DQQ) is acting as net control and is perfect for those Technician operators out there. It will help if all operators are running the same polarization on their antennas, making it easier to hear each other.
- Sunday SSTV net on the 145.39 at 8pm during the Summer
 - o Carl Canfield (K8YHH) is net control. For those who need help in getting started in SSTV, contact Carl.
 - o For those who build sound card interfaces during our class, this is the perfect net to use them.
- Tuesday Night QCWA Net on 146.700 at 8pm
 - o This net is open to everyone, and not just members of the QCWA.
- WoFAA on Echolink

Storage Room

• Bins in the storage room must stay in their required spot. A list is available showing where each bin goes.

Adjournment

MOTION: With no further business to discuss, Dan Dembinski (KD8YDE) moved that we adjourn the meeting, seconded by Bob Crawford (K8ZAP), approved, and the motion carried.

The meeting was adjourned and at 8:38 pm.

Refreshment Time

Presentation by Steve Lyons W8RQS

Respectfully submitted,

Chris Danes

Chris Ranes (NS8Q) **CMARC Secretary**

CLASSIFIEDS

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

\$4 Each

Cleaning off the book shelves in the shack. I have the following books available. Many are in "brand new" condition. Good time to stock your library at a big savings!

- The Complete DXer
- · The Joy of QRP
- QRP Operating Companion
- The DXCC Companion
- QRP Notebook 1st Edition
- Best of the IDEA Exchange
- International QRP Collection Vols 2, 3, & 4
- ARRL Antenna Compendium Vols 1 & 2
- ARRL RF Exposer & You
- Death Valley QTH

\$550

Complete Yaesu HF station in nice condition. FT-990 Transceiver with built in power supply, wide range tuner, and CW filter. It comes complete with hand mic, manuals, and a homebrew CAT interface.

\$100

Yaesu SP6 External Speaker with Time Wave DSP 599YZ Unit built-in.

\$100

Yaesu SP6 External Speaker with Time Wave DSP 599YZ Unit built-in.

\$50

Kenwood TM-241 2m Mobile Rig with Mic - 5, 10, 50 watt

Ed Oxer / W8EO eaoxer@gmail.com

\$90 or Best Offer
Alinco DJ-V57T HT for 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.

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 **TBD**

Treasurer

Dan Beuchert (WX8MOJ) wx8moj@arrl.net

Secretary / Scope Editor

Chris Ranes (NS8Q) kc8caj@gmail.com cmarcscope@gmail.com

> **Under 22 Director TBD**

Director

Tom Rocheleau (WA8WPI)

Director

Michael Boensch, W8MKB

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@arrl.net

Treasurer

Jeff Oberg, KB8SXK

Director

Jan Bradfield, KC8BFK (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 Informa-

tion to the editor, Chris Ranes, NS8Q, at

cmarcscope@gmail.com.

The deadline for each issue

is midnight on the 20th of the preceding month.

Seaway Trunk Swap

August 13, 2017 8:00 A.M. to Noon

Presented by:
The Eastern Michigan Amateur Radio Club

Vantage Point

Great Lakes Maritime Center in Port Huron

51 Water Street,

Downtown at the foot of Court Street where the Black River

joins the Saint Clair River

Free Admission & Free Parking
Trunk Sales Only
Refreshments available at the Waterfront Deli

Talk In 146.800, 100 Hz P.L.

Admission - Free

Trunk Space - Free

六式RL DXCC Card Checker available (no 160M)

Information email Bob K8WMW at <u>k8wmw@sbcglobal.net</u> or Stan AC8W at <u>ac8w@arrl.net</u> This is an ARRL approved Hamfest



Central Michigan Amateur Radio Club W8PLP/W8MAA Membership Form



For <u>new</u> CMARC applicants: Please complete all sections.

For <u>existing</u> 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 B	Daniel Beuchert PO Box 27275 Lansing, MI 48909-7275			
Membership Type				
Full: Ann	ual Dues: \$20.00 Includ	des voting rights and an ann	ual subscription to The Scope.	
Associate: Ann	ual Dues: \$5.00 Includ	des an annual subcription to	The Scope but NO voting rights.	
New Licensee: Ann	Annual Dues: 1st Year Free			
Under 18: Ann	ual Dues: Free			
Contact Information				
First Name:	First Name: Last Name:			
Call Sign:	all Sign: License Class: Phone #:			
Address:	Address: Apt/Unit:			
City:		State:	Zip Code:	
Birthday:		_ Anniversary:		
Email:	Sign up for the List Serv: 🗌 Yes 📗 No			
Note: Email is used by club officers to communicate club business and may appear in the club directory for use by club members. <u>CMARC does not share/sell contact information to other parties.</u>				
Club Communications				
Newsletter Preference	☐ I will download f	rom the web site.		
(select only one option)	Please mail to my	y address (Note: Direct m	ailing increases postage costs.)	
ARRL Affiliation	☐ I am an ARRL me	☐ I am an ARRL member		

Lansing Civil Defense Repeater Assocation Membership Form

For <u>new</u> LCDRA applicants: Please complete all sections.

For <u>existing</u> 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

Membership Type			
Full:	Annual Dues: \$15.00 Includes voting rights and an all	nnual subscription to The SCOPE.	
Family Mbrs:	Annual Dues: \$7.50 ea. No. of Family Member	rs:	
ARRL Affiliation			
Contact Informa	ation		
First Name:	Last Name:		
Call Sign:	License Class: Phone #	:	
Address:		Apt/Unit:	
City:	State:	Zip Code:	
Birthday:	Anniversary:		
Email:			
	by club officers to communicate club business and may appear in topes not share/sell contact information to other parties.	in the club directory for use by club	

STAMP

To:









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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