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The Scope

Central Michigan Amateur Radio Club Lansing Civil Defense Repeater Association

March /
April 2018
Volume 18
Issue 2

March CMARC Meeting



Our program speaker for February is none other than Meteorologist Jim Geyer (KD8CHU), who will give us a PowerPoint presentation that is sure to please! Jim brings with him over 35 years of weather forecasting experience in Michigan, including 13 years with WJR-AM radio in Detroit,

4 years in the Flint/Saginaw TV market and more than 20 years with WLNS-TV6.

Jim is eminently qualified to speak on any weather topic since he not only graduated from Concordia

University with an Associate of Arts degree and the University of Michigan in Ann Arbor with a Bachelor of Science in Atmospheric and Oceanic Science degree, but is also a member of the American Meteorological Society and a charter member of the National Weather Association. Jim also holds the American Meteorological Society's Seal of Approval for both television and radio weathercasts. Whew!

Therefore, we are honored to have such a great guest, so come on out and join us for a very interesting and informative meeting! And as always, we look forward to having good food, good fun and good fellowship. So, see you ALL there!

73,
Don McLain/KB8RAD

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**When: CMARC Monthly Meeting
7:00 pm, Friday, March 9, 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@arri.net.

Treasurer's Reports 2018

Daniel Beuchert / WX8MOJ- CMARC Treasurer

Bank Balances for January	
Beginning Balance	\$4,429.81
Total Monthly Income	\$99.00
Total Monthly Expenditures	(\$315.71)
Total Business Checking	\$4,213.10
Petty Cash	\$1.00
Outstanding Checks	(\$40.00)
Sub Total + Petty Cash	\$4,174.10
Primary Share Accounts	
Humphrey's Fund	\$383.41
Building Fund (Club Station)	\$19.09
Field Day	\$477.91
Total Net Worth	\$5,054.51
Youth Fund Balance*	\$254.18
* Separate from CMARC Funds	

Bank Balances for February	
Beginning Balance	\$4,213.10
Total Monthly Income	\$140.00
Total Monthly Expenditures	(\$1,050.28)
Total Business Checking	\$3,302.82
Petty Cash	\$1.00
Outstanding Checks	(\$144.79)
Sub Total + Petty Cash	\$3,159.03
Primary Share Accounts	
Humphrey's Fund	\$383.44
Building Fund (Club Station)	\$19.09
Field Day	\$477.95
Total Net Worth	\$4,039.51
Youth Fund Balance*	\$254.20
* Separate from CMARC Funds	

Ongoing License Plate Project for the Club Room:

By Russ Fitzgerald / N8FZ

The club is trying to collect as many ham call license plates as possible from our members for a display in the club shack redesign project. Check your garage, shed, or basement and see if you have an old plate kicking around. Year or condition doesn't matter. Can't find one but still would like to participate? No problem. Here's what you do. The State of Michigan will let you order a replacement plate at any time, you do not need to wait for a renewal. All you need is a copy of your license, Amateur Radio Operator form from the state (I have

plenty of these), and a check to the state for \$2.00 for the standard plate or \$7.00 for the graphic bridge plate. When it arrives you use the new plate on your vehicle and donate the old one or donate the new one.

If you have any questions please call 517-899-2622, or email russf2211@aol.com, or see me at the next meeting. I have the forms with me.

March Birthdays:

3/3 Jolyon Vincent / KD8HZY
3/5 Roger Goodman / KB8YQX
3/11 Jacob Emling / KE8GMB
3/16 Edward Hude / WA8QJE
3/16 James Fick Jr. / KE8ABZ
3/17 Charlie Swieringa / AC8YO
3/19 Peter Miller / AC8YF
3/20 Robert Crawford / K8ZAP
3/23 Alton Stoddard / KD8MB
3/23 Herbert Terbrack / KB8QEZ
3/28 Bob Leder / WJ8D
3/28 Tyler Head / KC8LWG
3/29 Dennis Kelly / AC8UO

March Anniversaries:

3/4 John / KD8NNQ and Paula Doornhaag
3/11 Jacob Emling / KE8GMB
3/12 Paul Keefer / KB8YQZ
3/17 Tom / KB8ZL and Sharon / WB8YAC Cain

April Birthdays:

4/2 Ben Barker / WD8OVL
4/7 Don Hunsaker / WB8PPB
4/7 Jim Hannahs / KC8QWH
4/8 Troy Creed / W8TCC
4/9 Erv Bates / W8ERV
4/10 Bob Berger / K8RDN
4/12 Alan Shaw / WB8YOX
4/14 William Smith / KD8ZFR
4/15 Richard Lee / KE8HMN
4/20 Scott Norris / KD8ZFS
4/22 Dan Fuller / W8VVR
4/27 Sharon Waite / KD8HHK
4/28 Matt McCormick / KE8CRV
4/29 Waybe Barker / KE8GUL
4/30 William Rude / KE8BEN

April Anniversaries:

4/2 Bob / K8RDN and Ann Berger
4/12 Stephen / KD8WVG and Yvonne Binns

Abby Beuchert would like to thank those of you who bought Girl Scout cookies from her at the January CMARC Meeting. She really appreciates your support!

Upcoming Meetings:

ARPSC & LCDRA

The ARPSC meeting for the month of March is at 7:00pm on Monday, [March 19th](#). For the month of April, we will meet on Monday, [April 16th](#). LCDRA will meet on Thursday, [April 19th](#) at 7:00pm. We will be meeting at Lansing Fire Station 48 off Marshall Rd South of Grand River. For more information about the ARPSC, please check out our website at www.lansingarp.com.

Mark Your Calendars!



Please join us at the Club station on Saturday, April 21 for the Michigan QSO Party. The contest begins at noon!

See Page 7 for more details.

LCDRA Update from January 18th meeting @ Lansing EOC:

There is some exciting news from the latest LCDRA meeting. WKAR has worked an LCDRA antenna into the latest load study, which is needed because WKAR plans to replace some antennas. Once WKAR has completed this antenna work, which is expected to be completed within the next few months, LCDRA will be able to install an antenna on the WKAR tower in Okemos. WKAR has also offered LCDRA a building to house the repeater equipment. This would allow the 145.39 repeater to return to Okemos, even a little higher than before, leaving the current Pottsville location open for a possible move of the 146.70 repeater. Some new equipment is needed, but this opportunity allows LCDRA some options in expanding the footprint of two repeaters (the 145.39 and 146.70), bringing more options and opportunity to Amateur Radio in the Greater Lansing Area into the future!

Ziegenbein Nominations

It's time to begin thinking about who you would like to nominate for the 2017 Ziegenbein Award.

For those of you who are not familiar with the award - it is presented each May to the Full CMARC member who has contributed the most to Amateur Radio, in general and CMARC, in particular for the previous calendar year.

Nomination Guidelines

1. The recipient must be a *full, current* member of CMARC
2. Nominations to be made in writing, in your own words, *no* chain letters to be accepted, stating nominees contributions to CMARC and Amateur Radio.
3. All nominations are to be kept secret until the award is presented.
4. All nominations are to be mailed (regular postal mail *OR* email).
5. The same person can receive the award more than once.
6. The Committee shall consist of the last three recipients; the senior member shall be the chairman.
7. All nominations are to be closely checked and discussed by the Committee.
8. If the Committee feels the nominees are not deserving, the award does not have to be given.
9. Nominations are to be submitted before *March 15th* of each year, so the Committee can make the selection and have the plaque engraved.
10. The recipient will be announced at the annual Ladies' Night.

REMEMBER

Your nominations for the Ziegenbein Award are due March 15th. This year's Senior Chairman of the Ziegenbein Committee is Dan Beuchert (WX8MOJ).

Send your e-mail nominations with a subject line of "**Ziegenbein Nomination**", to wx8moj@arrl.net.

If you prefer to use snail mail:

Dan Beuchert
P.O. Box 27275
Lansing, MI 48909-7275

Write "**Ziegenbein Nomination**" on the envelope.

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

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

Ham Radio Classes Forming Now!

The Central Michigan Amateur Radio Club (CMARC) will be holding an 8 week course where you can learn everything you need to earn your Technician (entry level) FCC Amateur Radio License.

**The Technician license is your gateway to the world-wide excitement of Amateur Radio ...
... And now you do NOT need to learn Morse code!**

**Class begins on
January 20, at 10:00 am
Michigan EMS Educational Services
807 Kerns Road, Mason**

Pre-registration is not required but appreciated.

To join, or for more information, contact:
Don McClain, KB8RAD
at kb8radon@aol.com

www.centralmiarc.com

ARRL The national association for
AMATEUR RADIO®

2018 Michigan QSO Party

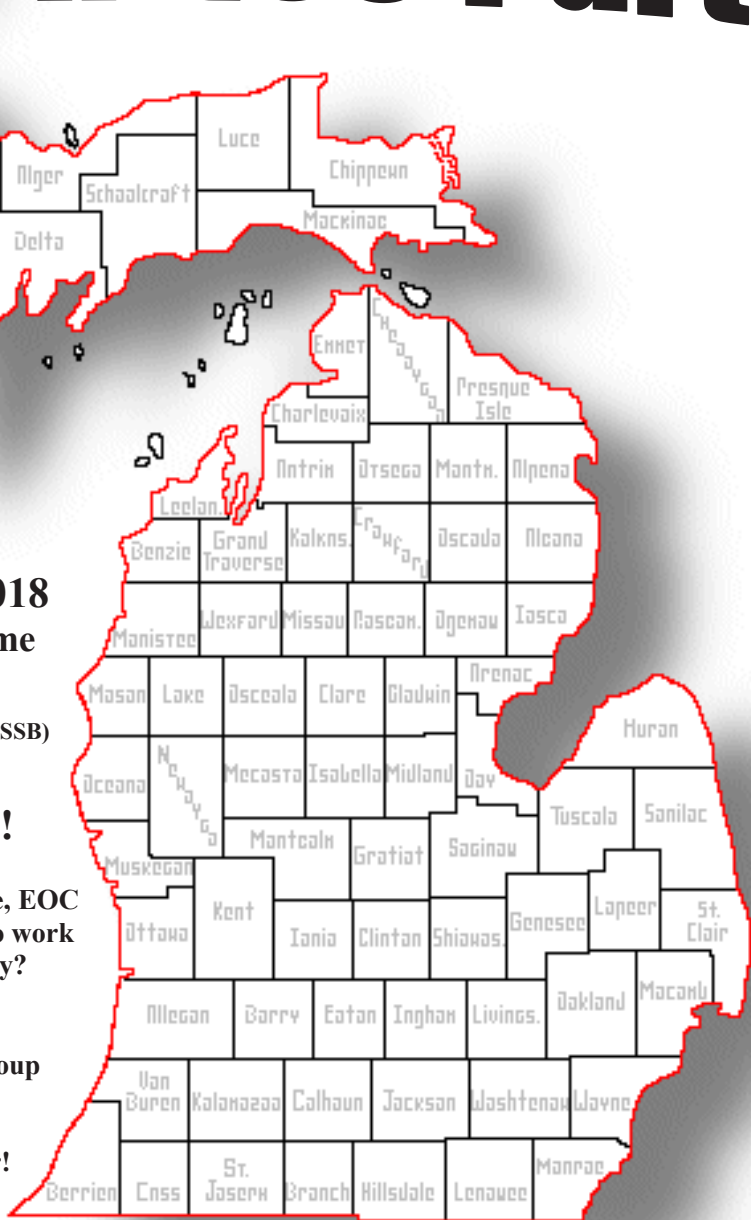
What? Michigan QSO Party

When? Saturday, April 21st, 2018
Noon to Midnight local time

Where? 10 thru 80 Meters (CW & SSB)

Why? Just Have Some Fun!!!!

- Chance to get on the air
 - Single Op, Multi Op, Mobile, EOC
 - Be the station others want to work
 - Maybe activate a rare county?
- Excellent Club Activity
 - Reason to get together as group
 - EOC station category
 - Excellent training in HF ops
 - Get new members on the air!
 - Friendly Competition



Let's all help make Michigan "radio-active" on the 21st of April!!!!

Rules & More Info: <http://www.miqp.org/>

Sponsored By: The Mad River Radio Club

Which way does current really flow?

By Dan Romanchik / KB6NU



I was recently taken to task by one of my blog readers regarding my description of current flow in my No Nonsense Technician Class License Study Guide. He wrote:

“You casually say that current flows from

Positive to Negative (with cool accompanying directional arrows), without any accompanying qualifying statement. Over the years I have looked at ALL the views on the subject. Positive to Negative is NOT what I was taught 48 years ago, and I have never seen a good reason to change my view.”

In a subsequent email, he pointed me to a Nuts ‘n Volts article, “Which Way Does Current Really Flow?” (<http://www.nutsvolts.com/magazine/article/which-way-does-current-really-flow>) and asked my opinion. In the article, the author, who is a ham by the way, does a good job of explaining the various types of current flow.

I agree that in electronic circuits electrons flow from negative to positive, but it really doesn’t matter. I agree with one the article’s commenters who says,

“This is a silly argument. It’s like comparing apples and oranges and challenging people to take sides.

“Electron flow is not current flow. Electron flow is easy to understand, an actual physical property, and a real help in understanding vacuum tube operation. But it falls apart when one needs to understand complex electronic systems.

“[Conventional] current flow is a mathematical abstraction. It is defined as a net flow of positive charge,

irrespective of the polarity of the physical charge carriers — whether electrons, holes, positive or negative ions, or whatever.

“When looking at any circuit containing a resistance with a voltage across it, conventional current through that resistor says that the voltage drop occurs as the current through it meets resistance. On the other hand, in negative (electron) flow, a voltage INCREASE will correspond to the ‘current’ flow through it, clearly violating physical laws. Conventional current flow is consistent with the laws of physics and those of other engineering disciplines.

“You are correct that engineers, professors and scientists use conventional current flow. That is not because they are too obtuse to understand electron flow; I assure you they fully understand it. It is because in their world they have to solve more general problems involving complex math and science, and, again, conventional current flow is consistent with physical laws.

“It is unfortunate that electron flow and current flow are so often confused. They both have their place.”

After reading that article, I thought I’d see what the ARRL Handbook has to say about current. In the 1963 edition, they don’t mention electron flow at all. They have one diagram showing the direction of current flow in both series and parallel circuits, but the voltage source has no polarity. It’s simply labelled “Source of E.M.F.” Diagrams giving practical examples of series and parallel circuits do include a battery, and if the reader were to mash up the two diagrams, they would conclude that current flows from the positive terminal to the negative terminal.

The most recent edition of the Handbook that I have is the 2005 edition (it might be time to get another copy!). It says,

Which way does current really flow? *Cont'd*

“Electrons move from the negative to the positive side of the voltage, or EMF, source. Conventional current has the opposite direction, from positive to negative. This comes from an arbitrary decision made by Benjamin Franklin in the 18th century. The conventional current direction is important in establishing the proper polarity sign for many electronics calculations. Conventional current is used in much of the technical literature. The arrows in schematic symbols point in the direction of conventional current, for example.”

Having said all that, I really don't see that there's much of a controversy here. I did learn to think of current

as conventional current in college, although it was mentioned that electrons actually flow in the opposite direction. Using the concept of conventional current has never seemed to hold me back. I've been able to design circuits and repair electronic equipment thinking that current flows from positive to negative.

Although it's a departure from my “no nonsense” style, I am thinking of including a sidebar, similar to the paragraph above from the 2005 Handbook explaining the two ways of looking at current flow. What do you think? ■

This Addictive Grid Chase Thing!

By Don Keith / N4KC



I swore I would not allow myself to become addicted to another one of these year-long operating events. But like an old drunk standing at the barroom door, I once again find myself inside, swilling the good stuff.

Yes, we are just completing the first month of the ARRL's International Grid Chase event. Just as I did with the League's Centennial celebration operating event and the National Parks on the Air commemoration, I promised myself I would simply dabble in this latest shebang, only to shake my head and realize I am up to my eyeballs and sinking fast.

See, it's pleasurable! It brings out the competitive spirit in folks like me without having to block and tackle big dudes the way I once did on the football field. It actually allows me to test my operating prowess—including in a mode I only adopted the week the event started...more

on that later—my station, including antennas, and my personal stamina.

And this from a guy who has leapt right up to the very middle of the pack, completely undistinguished in any way, and completely in awe of some of those iron men and women who are up there at the top.

Look, I know that this sort of thing does not put wind in everyone's sails. Chasing grids at all hours of the day and night and in every nook and cranny of the RF spectrum does not yank everybody's crank. Didn't think it would mine either. But the deep-seated reasons for having succumbed remain between me, my mental health professional, and the long-suffering XYL.

I'm just having so much fun I really don't care.

If you have no idea what I am talking about but are even mildly curious, visit <https://igc.arrl.org/index.php>. They will explain it nicely there. If you just want to get your toe wet, give it a whirl. But have your scuba tanks full. You may soon be in over your head and plunging toward the deep water.

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The Addictive Grid Chase Thing! *Cont'd*

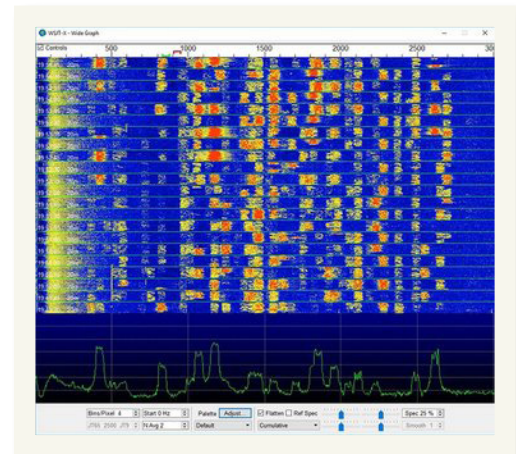
Right: Looking for activity on a day when there are zero sunspots and solar flux hovers at about 60? This is an FT-8 waterfall in the middle of a weekday on 20 meters. No, no ragchews. But lots of guys to talk with...or grab grid squares.

Now, some observations on the Grid Chase from my perspective and my perspective alone. There must be a million hams in grid square FN20! This has—at least so far in the early going—developed into primarily an FT-8 event.

Maybe that is simply because that particular digital mode is so new and interesting. But K1JT's newest little invention and software are perfect for this type operating. After all, a station's grid square is usually part of the initial exchange, including a CQ, so it is easy to spot grids that remain yet unworked or frustratingly unconfirmed.

Though I have primarily operated the event to this point on FT-8, I hear very little other Grid Chase activity on other modes. I do hear stations calling "CQ Grid Chase" some on weekends and see the occasional spot for SSB and CW chasers. But to my eye, FT-8 is the alpha mode thus far. As we grab most of those each month, though, I would assume we will have to mine other modes, too. There is apparently not a single licensed amateur radio operator in CM23 or EN48.

I suspect when the weather improves, you will begin to see plenty of "grid-peditions," people loading up the go-gear and striking out to rare and semi-rare grids to become very popular in a hurry. There has been some of that already. Some buds of mine spent their New Year's Day not watching football but activating EL79. Buds or not, I did not manage to work them. Fi! Fi, I say!



Logbook of the World is rapidly gaining in popularity and use, and especially with folks using PSK-31, JT-65 and, of course, FT-8. I usually check to see if the station I am chasing is an LoTW user (my logging software, N3FJP's Amateur Contact Log, allows me to observe that useful info) and I see a huge jump there, especially with DX stations. (Except with Cuban hams. What gives? A few use the system and seem to confirm within seconds but so far only about 10% of my many, many CO contacts have been confirmed through LoTW.)

Oh, and LoTW seems to be functioning flawlessly. The League's "Leader Board" web site remains pretty

bare bones as of this writing, but they promise more features coming soon. I can only imagine what kind of programming it takes to make this thing work, though.

Speaking of LoTW usage, what gives with those guys who show as users but their last upload was in 2016? 2016! Yes, the system was a bit touchy back then and they may have abandoned it. But the thing works beau-

tifully now. Thanks to the folks who gave up their own ham radio time to work on it.



USED WITH PERMISSION BY THE ARRL

The Addictive Grid Chase Thing! *Cont'd*

May have been my imagination, but the participation in the North American QSO Party radio-sport event seemed to have been way, way up over previous years. And despite miserable propagation conditions. Could it have been that many operators took part in the contest—as I did—primarily to score a bunch of those elusive SSB grid points? As I write this, the CQ 160-meter CW contest is coming up. It will be interesting to see how that might be affected. And the Winter Field Day, an event I have never played in before. But I will this year. Because I am greedy for grids. I just hope all players upload to LoTW. Hint! Hint!

There had been a great deal of speculation about what the ARRL might do as a follow-up to the Centennial and the NPOTA events, both universally proclaimed as massive successes. The jury is still out on the grid chase thingy.

We will need to see how it plays out when we all realize that we will need to start over every month. Or modify tactics to concentrate on the year as a whole. That seems to me to be a decision we will have to make, spending our limited operating time chasing every

available grid to try to place high for year's end or just try to tally as many of the same ones as possible over and over each month.

Trust me. FN20 is an easy one. CM23 or EN48? Not so much. Especially for someone like me in EM63, which is, as they say, ubiquitous. Now, can't wait for Bouvet, not for the ATNO (all-time new one) but for that rarest of rare grid square.

Either way, though, this deal seems like a decent antidote to miserable conditions and non-existent sunspots.

With the previous two competitions, the excitement built all year and the last few days were absolutely spectacular on the airwaves. We will see how this one goes. We may well be sick of grid squares by December. And of working yet another guy in FN20.

But for right now, I am breaking out in a rash and getting the DTs. EM59 just popped up on FT-8 on 80 meters.

And I GOT to go! ■

News Snippets from the Amateur Radio Newline (March 2, 2018)

UPDATE: R.S.V.P. REQUESTED FOR BOUVET ISLAND

We begin this week's newscast with yet another update on plans to activate Bouvet Island. There's speculation this adventure could become an even bigger team effort, as we hear from Jim Meachen ZL2BHF.

In the spirit of cooperation so characteristic of amateur radio, the organizers of the 3Y0I Bouvet Island Expedition have extended an invitation to the team members from the recently scrapped 3Y0Z Bouvet expedition to operate together from the coveted DX location. The Polish-led team issued a statement in late February saying [quote] "we are fully aware and full of sympathy of their disappointment." [endquote] The team said it believes the shared operation will not only keep costs down for both teams but provide more opportunity to the global ham community. Although there has not yet been any response from the 3Y0Z team, it should be noted that their radio equipment meanwhile remains in storage in South Africa.

Meanwhile, another team - the Saint Brandon Island DXpedition 3B7A -- has announced that they expect to reach

their Indian Ocean destination by early April. The eight-member team expects to be active from the 5th to the 17th of April. Saint Brandon Island is Number 28 on the DXCC most-wanted list.

HAMVENTION-BOUND? TEXT TO KEEP IN TOUCH

The Dayton Hamvention has added yet another way to communicate the more time-sensitive types of information: text alerts. According to the hamvention.org web site, hams can sign up for text alerts from the official Hamvention staff and National Weather severe weather watch and warning service. To sign up for the text alert service, text Hamvention18 to 888777. Once again, that's Hamvention18 to the text number 888777. Once you successfully sign up, you'll receive a confirmation text welcoming you to the service. When I signed up a few days ago, 123 people had already registered. There's no charge for the service, but as always message and data rates may apply depending on your cell phone plan.

CENTRAL MICHIGAN AMATEUR RADIO CLUB
BOARD OF DIRECTORS
MEETING MINUTES

January 6, 2018

Attendance

Current Board Members Present: Tom Rocheleau (WA8WPI), Russ Fitzgerald (N8FZ), John Doornhaag (KD8NNQ), Chris Ranes (NS8Q), Ted Sadilek (WA8MFQ), and Clyde Tompkins (K8CPT)

Current Board Members Absent: Sam Fitzgerald (N8FPR)

Incoming Board Members Present: Dan Beuchert (WX8MOJ), Shawn Crawford (WA8MXJ), Judy Crawford (K8JKC), and Dennis Shubitowski (NS8H)

Call to Order

President Tom Rocheleau (WA8WPI) called the meeting to order at 5:30 pm.

Election of Officers

- **President: Clyde Tompkins (K8CPT)**
MOTION: *Shawn moved to make Clyde President, seconded by Judy, approved, and the motion carried.*
- **Vice President: Judy Crawford (K8JKC)**
MOTION: *Dan moved to make Judy (K8JKC) Vice President, seconded by Tom, approved, and the motion carried.*
- **Treasurer: Dan Beuchert (WX8MOJ)**
MOTION: *Judy moved to make Dan (WX8MOJ) Treasurer, seconded by Shawn, approved, and the motion carried.*
- **Secretary: Chris Ranes (NS8Q)**
MOTION: *Chris moved to remain as Secretary, seconded by Tom, approved, and the motion carried.*
- **Under 22 Director: Shawn Crawford (WA8MXJ)**
Per the bylaws, the person with the fourth highest number of votes is automatically chosen for the Under 22 Director, if a person not under the age of 22 has been nominated.
- **Director: Dennis Shubitowski (NS8H)**
- **Director: Tom Rocheleau (WA8WPI)**

Treasurer - John Doornhaag

- **Final Report:**

- John passed out his final report, listing all of the deposits and expenditures for the year. He touched on money spent on filing for our 501(c)3 status, Hamfest, and the tower project, which stayed under budget.

- **Christmas Gift to Kevin Ammerman:**

- As you may remember in years past, we gave \$300 to the Salvation Army (\$150 twice a year). Last year the Board voted to give Kevin (the building owner) the same \$300 gift, but in one lump sum. This represents a token of thanks for allowing us to meeting in his building, and to install our towers and antennas. Due to scheduling conflicts, the Board has not been able to meet with Kevin to give him the check. We are looking at possible dates where everyone will be available.

- **New checks:**

- We currently have one pack of checks left. Once we receive our new PO Box number from the Post Office, Dan , the new Treasurer, will need to order more checks through the Credit Union.

Old Business

- **Club PO Box:**

- Judy is going to check on setting up a PO Box in Mason. Since our club location is in Mason it only makes sense to have a Mason address.

MOTION: *Judy moved that the Board set up a PO Box in the City of Mason, as long as it is under the \$75 price we were paying through the City of Lansing. The motion was seconded by Tom, approved, and the motion carried.*

- **2018 Field Day and the SSB/Digital Trailer:**

- Our Field Day Chairman, Ron Harger (WD8BCS), called Tom Rocheleau (WA8WPI) and said Jon Barber (NO8T) spoke with him regarding the trailer we use every year for our SSB and Digital Station. Last year, there had been talk of CMARC possibly purchasing the trailer from the Ingham County Sheriff's Department for \$1, and then make any necessary roof repairs ourselves. He mentioned at this point, the Sheriff's Department decided they do not want to sell the trailer. Instead, they do have a POD type storage container they may want to sell for a \$1, but it may require a special truck to transport it, and we would require a place to store it. Chris asked if we are still able to use the current trailer even though they do not want to sell it to us? Further investigation is required to answer Chris's question, as well as to determine if a POD type storage container would benefit us.
- Ron Harger will be out of the country this Summer and may not be able to coordinate Field Day this year. He is asking for someone else to be the Chairperson. Dan Beuchert (WX8MOJ) said he would step up and take care of it since he has had experience in the past.

- Due to an agreement with the City of Mason, our Field Day operation will remain at Rayner Park for this year and next year's event. A new agreement will need to be drafted before the 2020 event date.
- **Club Callsign Renewals and Trustees:**
 - **W8PLP** has been renewed for another 10 years and Chris Ranes (NS8Q) has been assigned Trustee.
 - **W8MAA** has also been renewed for another 10 years and Ron Harger (WD8BCS) has been assigned Trustee.
- **Soldering Class:**
 - Clyde is waiting for the interfaces to come in and waiting for some additional parts. A future date and time will be decided.

New Business:

- **Cards and Flowers:**
 - A Thank You note was received from Jeremiah Sevrey (KC8EIA) after the passing of his sister-in-law Dana. Dana was married to his brother Joe. *(For reference, Jeremiah and Joe are Don and MaryLou Tilitson's grandsons.)*
 - A \$40 donation was made to St. Jude's Research in memory of the Mother-in-law of Mark Carter (KD8YUY), Artis Hastings.

Adjournment:

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

The meeting was adjourned at 7:20 pm.

Respectfully submitted,

Chris Ranes

Chris Ranes (NS8Q)
CMARC Secretary

CENTRAL MICHIGAN AMATEUR RADIO CLUB

MEETING MINUTES

January 12, 2018

Attendance

Board Members Present: Dan Beuchert (WX8MOJ), Judy Crawford (K8JKC), Shawn Crawford (WA8MXJ), Chris Ranes (NS8Q), Tom Rocheleau (WA8WPI), Dennis Shubitowski (NS8H), Clyde Tompkins (K8CPT)

Board Members Absent:

General Members:

Visitors:

Call to Order

- President Tom (WA8WPI) called the meeting to order at 7:02 pm.
- Shawn (WA8MXJ) held the Flag for the Pledge of Allegiance.

Welcome

Introduction of the new 2018 Board of Directors

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

- Mark Carter's (KD8YUY) Mother-in-Law
- Thank you card from Jeremiah Sevrey (KC8EIA) on the passing of his sister-in-law Dana.
- David Collingham (K3LP)

Moment of Silence for our Silent Keys

Recognize any Visitors

Treasurer's Report

MOTION: *John Winn (KE8CYC) moved to accept the Treasurer's Report, seconded by Ben Barker (WD8OVL), 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: *Bob Crawford (K8ZAP) moved to accept the Secretary's Report, seconded by Ted Sakilek (WA8MFQ), approved, and the motion carried.*

New Licenses and Upgrades: None

Interesting DX or other Contacts

- Gregg worked 13 or 14 countries using 1W. He worked the Santa Station O1YX in Finland
- Kirby (N8FLK) would like to set up to make a contact with a club station in Finland from our Club Station.
- Dan (NS8H) received a QSL card from the southern tip of Chile. He was using 100W and a dipole on 40m and SSB.

State Parks on the Air

- We are waiting for the ARRL to come up with a QSL card for Sleepy Hollow.

Old Business

- Status of the new P.O. Box
 - Judy confirms we did get a new Mason PO Box at a cost of \$76. Kevin does not want us to receive mail at our club location. Any Board member can pick up a mail, but Judy and Dan have the keys are live the closest.
 - P.O. Box 54 Mason, MI 48854

New Business

- Ziegenbein Award nominations are due by 3/15/18 and should be sent to Dan Beuchert (WX8MOJ), the Senior Committee Member. All the rules and requirements have been published in the Scope and will be on the website as well.
- Technician Class
 - Begins January 20th and will run for 8 weeks from 10AM to Noon.
 - At the end of the last class on March 10th, a special VE Session will be held for those student who would like to take their tests immediately.
 - If anybody is interested in the class, they should contact Don McLain (517-930-7707).
 - There is no cost for the class, but it is recommended that the applicants obtain the licensing book. Tom Rocheleau (WA8WPI) is able to get them at a discounted rate through the ARRL VE. He is asking for those interested to let us know so he can order the proper amount of books.
- Soldering Class
 - Clyde Tompkins (K8CPT) is putting together a soldering class where computer interfaces will be built. Classes will being in January after the next meeting to give us time to finalize some details. He is asking to bring your own soldering iron so you can learn on the equipment you will be using yourself at home. Steve Lyon (W8RQS)

purchased trays for us to use to protect the tabletops. You can sign up via email, Facebook, or talk to Clyde.

- A month after the class, Carl Canfield (K8YHH) wants to teach a class on how to operate digital modes.
- Clyde has ordered components but he has not received them yet. Gregg has also donated some kits for those interested to build. The kits are already assembled, so they are ready to be soldered together.
- Clyde is looking for people with experience who are willing to help with the class.
- Hamfest Volunteers
 - There are signup sheets for Hamfest volunteers. If there is a job you want to do, signup. The Hamfest is July 28th at the Holt Christian Church. The sooner you sign up, the better chance it is that you get the position you want to work in.
- Presentations
 - If there is a topic you would like to hear about or if you would like to make a presentation yourself, get with Judy and see if we can make that happen. Presentations do not need to be elaborate.
 - There has been discussion about moving the presentation time at the beginning of the meeting so it's easier for those who need to leave right away, can still enjoy the presentation.
 - Before and after every meeting, we are going to have the club radio on to allow people contacts while they are here.
 - There is talk of setting up a remote station here for club members to use. More research needs to be done before that happens.
- APRS, Remote Operating at the Club Station

50/50 Raffle

- Bob Berger (K8RDN) won \$9.50

Adjournment:

MOTION: *With no further business to discuss, John Winn (KE8CYC)) moved that we adjourn the meeting, seconded by Michael Boensch (W8MKB), approved, and the motion carried.*

The meeting was adjourned and at 7:53 pm.

Respectfully submitted,



Chris Ranes (NS8Q)
CMARC Secretary

CENTRAL MICHIGAN AMATEUR RADIO CLUB
BOARD OF DIRECTORS
MEETING MINUTES

January 27, 2018

Attendance

Board Members Present: Judy Crawford (K8JKC), Dan Beuchert (WX8MOJ), Chris Ranes (NS8Q), Tom Rocheleau (WA8WPI), Shawn Crawford (WA8MXJ)

Board Members Absent: Clyde Tompkins (K8CPT), Dennis Shubitowski (NS8H)

Guests: John Doornhaag (KD8NNQ), Ron Harger (WD8BCS)

Call to Order:

Vice President Judy Crawford called the meeting to order at 12:15 pm.

Field Day:

- Tom invited Ron Harger and Jon Barber (NO8T), who did not make it, to talk about Field Day and the POD container that the Ingham Co. Sheriff Department has offered us.
- We have confirmation from the City of Mason for this year and next year - a total of 3 years if we include last year.
- Ron is stepping down as Field Day Chair for this year and asked if someone else had come forward to take the position in his absence. Dan Beuchert volunteered to take over the position while he is gone. Ron has a Field Day file containing all of his organizational/planning notes which he plans to share with Dan.
- Tom posted our Field Day information to the ARRL website.
- John Doornhaag (KD8NNQ) posted the special VE session on the ARRL website.
- Shawn posted information on the event as well as loading/unloading times to our club calendar.
- Judy will be creating an event on the Facebook group page.
- GOTA Station - Ron and Dan agreed that Clyde (K8CPT) should run the station again this year and even see if Brian Wellwood (KD8ONC) would like to help out.
- Instead of using Ron's License for the N3FJP logging software, the Board is considering purchasing our own license for the logging software at a cost of \$50 for the entire suite of programs. It costs roughly \$400 to buy each program individually, or \$50 for the suite. The developer is no longer developing new features, but does keep releasing updates as needed if the rules of a specific contest changes or if a bug is made known to him. Any logging program we purchase needs to be capable of exporting the log to .ADIF format for the use of our log checker Don DeFeyter (KC8CY), and for uploading to the respective organization (ARRL, CQ, etc.) which the N3FJP lines of software does.

MOTION: *Judy moved that we purchase the suite at \$50, seconded by Shawn, approved, and the motion carried.*

- Dan will purchase the software, load it on a CD, and get it to Chris so he can load it on the computers for the Club Station. When Field Day comes, it will be ready to load on the computers we use for the event.
- Ron is not sure if the county will continue to allow us to use the trailer we have been using for the SSB and Digital stations. The county wants to keep the trailer, but not maintain it. However they do want to get rid of their POD container. After further discussions, it was decided that the POD would not suit our needs, mainly because of storage and transportation issues.
 - We need to contact Jon Barber (NO8T) or Sgt. Mary Hall with the Ingham County Sheriff's Department to see if we are still able to use the trailer.
 - We need to contact Randy Williams (KD8MOK) or Dave Hayhurst (K8QH) about using the large generator.
- Ron plans to meet with Dan sometime soon to make sure he has all the information he needs.
- Since Dan's daughter is in Girl Scouts this year, he mentioned there may be members of his daughter's troop and others from the region, visiting our Field Day site this year. Dan is going to try and get a handle of how many kids they are expecting to show up, so we can prepare, and if need be, make some logistical plans for scheduling operating times.

Hamfest:

- Clyde is looking for volunteers to help run Hamfest committees.
- Dennis Shubitowski has volunteered to be the donation coordinator for the Hamfest this year. He is in charge of getting donations for the event.
- Judy has planned to take her ServSafe Food License exam before this year's Hamfest.
- Tom will update the website to tell people we have more information to follow on this year's Hamfest.

Possible 2018 Meeting Presentations:

- Judy Crawford (K8JKC) is compiling a list of speakers and/or presentations for this year. She has volunteered to take this month's presentation spot, but has not decided on a topic as of yet.
- Steve Smith (WA8LMF) - APRS.
- Tom Rocheleau (WA8WPI) - operating CW.
- John Imeson (N8JI) - update on the 539 repeater move sometime this coming spring or when his schedule allows.
- Jim Geyer from WLNS
- Jim Kvochick (K8JK) - the new ARRL Michigan Section Manager
- Steve Lyon (W8RQS) - digital communications.

Reminder: CMARC policy states if our presenters drive more than 50 miles to our meeting, we are to pay them \$25.

501(c)3:

- John Doornhaag and other Board members shared background information to bring the new Board members up to speed on why we chose Biz Central USA to help us file our paperwork.
 - Biz Central USA prepared the documents we need to file for us, but they do not have a legal right to file anything on our behalf. The same goes for any other firm we choose to use. We are responsible to file our own paperwork.
- If we decided to use a different company to file our new paperwork, we are able to take the paperwork we paid to have prepared by Biz Central USA, and send the documents to the new company we choose to use.
- The Board is considering using Floyd Green, CPA in Atlanta, GA over going back to Biz Central USA.
 - The client agreement of Floyd Green, CPA states, “If the IRS denies your organization’s 501(c)3 status, Floyd Green Financial Services will refund the CPA Service Fee of \$595.”
 - We did receive a check from the IRS for the fee they charged us to file our paperwork, but we lost out on the \$436 we were charged by Biz Central USA.
 - It does cost \$100 more than Biz Central USA, but it comes with the guarantee we get our money back.
 - It will take approximately three weeks to prepare our 501(c)3 application and submit to the IRS.
 - Once the IRS receives our application, it takes the IRS on average 6 months (sometimes longer) to approve the 501(c)3 status.
- Items we need to accomplish to refile:
 - The general questionnaire
 - The names of the new Board members will need to be added to the paperwork (President, Treasurer, and Secretary).
- Shawn is going to call Floyd Green, CPA and ask the following questions:
 - How does tax season play into the three week preparation time frame promised by your firm?
 - Is the six month approval time by the IRS accurate, or is that an outside estimate?
 - If the IRS does not approve the application, the fee for preparing the 1023 is refundable?
 - What paperwork is needed to start the process other than the completed questionnaire?
 - What is the next step we need to take to formally start the process?

MOTION: *Tom moved that we use Floyd Green, CPA for the 501(c)3 filing for the amount of \$595 refundable contingent on favorable report from Shawn approved by the Board, seconded by Dan, approved, and the motion carried.*

No More Sidelines:

- The Superintendent of the Ingham Intermediate School District is part of an organization called “No More Sidelines of Central Michigan”. This organization that helps people with special needs become involved in community activities.

- Judy presented the idea of inviting some special needs people from this organization to experience what Ham Radio is all about - possibly at Field Day and our GOTA station.
- The individuals and their families are invited so club members are not responsible for supervision.
- Further investigation into how we can logically make this happen with Field Day and possibly the Girl Scout event that day.

Club Station Equipment:

- After talk at the January CMARC meeting of the possibility of allowing remote access to our club station, the Board discussed the various pros and cons regarding remote operation. All present Board members agreed that allowing remote operation into our club station is not in our best interest.

MOTION: *Shawn moved that we keep the club station reserved for club members to use locally and not remotely, seconded by Judy, approved, and the motion carried.*

- The Board discussed the fact that all decisions must be made together as a Board before they are officially presented to the CMARC membership at our monthly meeting as something we are going to do.

Adjournment:

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

The meeting was adjourned at 2:50 pm. We will not have a Board meeting next Saturday unless we hear that Kevin Ammerman is available to meet.

Respectfully submitted,

Chris Ranes

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

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

\$40

Knight-Kit R-100a Receiver with matching speaker. Yes it works!

\$75

LDG-11 Auto Tuner with Wall Wart power supply (100 watt)

\$100

Vibroplex Code Warrior Jr. with Zebrawood Finger Pieces. Like New

\$110

Vibroplex Vibro-Keyer 1969 Ser. 258959. This was a DELUXE Chrome Model but the base has been repainted. "Vy nice feel".

\$75

Vibroplex Knock-off Keyer "Look alike", Red Base, "Vy nice feel"

\$100

Kent Single Lever Paddle with Homebrew Custom Finger Pieces

\$10

Code Practice Oscillator

Ed Oxe / W8EO
eaoyer@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.

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

Judy Crawford (K8JKC)
k8jkc2017@gmail.com

Treasurer

Dan Beuchert (WX8MOJ)
wx8moj@arrl.net

Secretary / Scope Editor

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

Under 22 Director

Shawn Crawford (WA8MXJ)
wa8mxj@arrl.net

Director

Tom Rocheleau (WA8WPI)

Director

Dennis Shubitowski (NS8H)
shubitowski@gmail.com

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 DeFeyer, 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, 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 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.

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

CERT Basic Training

Howell Emergency Services

**1911 Tooley Road
Howell, Michigan 48843**

March 16-18, 2018

FRIDAY, MARCH 17

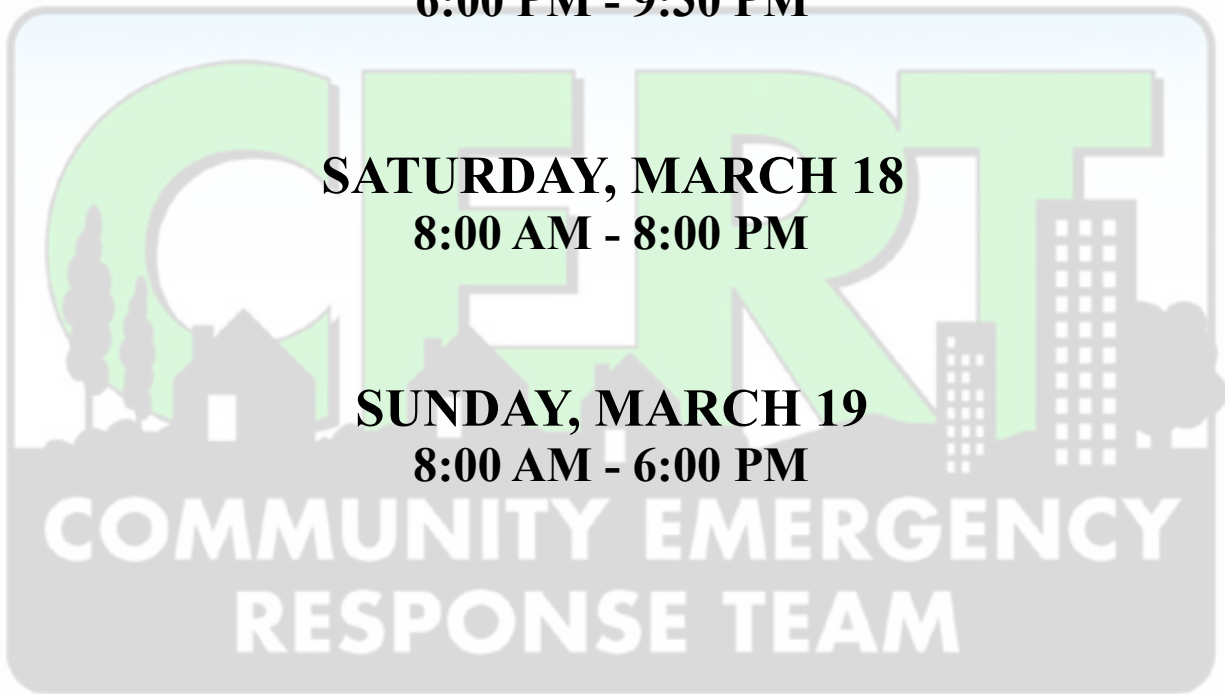
**Registration begins at 5:00 PM
6:00 PM - 9:30 PM**

SATURDAY, MARCH 18

8:00 AM - 8:00 PM

SUNDAY, MARCH 19

8:00 AM - 6:00 PM



Register at:

http://bit.ly/2018CERT-Basic_LivCoMI



58th Annual

Michigan Crossroads Hamfest & Radio Swap

Saturday, March 17, 2018

Wings Event Center

3600 Vanrick Drive, Kalamazoo Township, MI 49001

Sponsored by the Southern Michigan Amateur Radio Society

Vendor set-up: Friday, March 16th, 6:00 PM - 9:00 PM Saturday,
March 17th, 6:00 AM - 8:00 AM



General Admission: Saturday, March 17th, 8:00 AM - 12:00 PM

\$5.00 admission fee at the door

Vendor table or 8' space rental \$10.00

2000 Free PAVED parking spaces

Door prizes

Amateur Radio Examinations (10:00 AM)



Talk-in: 147.000 MHz (+600 kHz offset) KARC Repeater PL 94.8

For more information, visit our website <http://www.w8df.com/hamfest>,
call (269) 815-8007 or via email at crossroadshamfest@w8df.com.

Registration Form

Name _____

Company _____

Call sign _____ Email address _____

Phone (____) _____ - _____

Mailing address _____

City _____ State _____ Zip _____

Check boxes for: Electrical hookup ☐

Wall table(s) preferred ☐

_____ Tables (8ft) at \$10.00 each =
(Or 8' space) _____

_____ Tickets for hamfest @\$5.00 _____

_____ Electrical Hookup \$10.00 _____
(Does not include table)

Total amount enclosed _____

To order, please send a copy of this
form, check or Money Order payable
to SMARS, and a SASE to:

SMARS
PO Box 934
Battle Creek, MI 49016

NOTE: NO RESERVATION WITHOUT THIS FORM AND PAYMENT.

There is NO SMOKING in the building. Adult material and alcohol are prohibited.
Reservations by mail accepted until March 1, 2018, Please call after March 1st.



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

Contact Information	
First Name: _____	Last Name: _____
Call Sign: _____	License Class: _____ Phone #: _____
Address: _____	Apt/Unit: _____
City: _____	State: _____ Zip Code: _____
Birthday: _____	Anniversary: _____
Email: _____	Sign up for the List Serv: <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	
Newsletter Preference (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.)
ARRL Affiliation	<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

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

Contact Information	
First Name: _____	Last Name: _____
Call Sign: _____	License Class: _____ Phone #: _____
Address: _____	Apt/Unit: _____
City: _____	State: _____ Zip Code: _____
Birthday: _____	Anniversary: _____
Email: _____	
<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



Date	Time	Event	Place
3/3/2018	10:00 AM	Technician Licensing Class - Session #6	The Club Station in Mason
3/9/2018	7:00 PM	CMARC Meeting	The Club Station in Mason
3/10/2018	10:00 AM	Technician Licensing Class - Session #7	The Club Station in Mason
3/10/2018	12:30 PM	Introductory Soldering Class	The Club Station in Mason
3/17/2018	10:00 AM	Technician Licensing Class - Session #8 with Special VE Session	The Club Station in Mason
3/19/2018	7:00 PM	Amateur Radio Public Service Corp Meeting	Lansing Fire Station #48
4/5/2018	7:00 PM	VE Session	Lansing Fire Station #44
4/13/2018	7:00 PM	CMARC Meeting	The Club Station in Mason
4/16/2018	7:00 PM	Amateur Radio Public Service Corp Meeting	Lansing Fire Station #48
4/19/2018	7:00 PM	LCDRA Meeting	Lansing Fire Station #48
4/21/2018	12:00 PM	Michigan QSO Party Contest	The Club Station in Mason