



THE SCOPE



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

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MAY 2021

CENTRALMIARC.COM

CMARC Field Day June 26 & 27, 2021



CMARC is excited to announce that we will resume our Annual Field Day operations next month. The Board is in the process of deciding where our operating location will be. The ARRL is once again allowing Hams to operate from home as we did last year. If you feel more comfortable doing that this year, you have that option.

Either way, please watch the ListServ and Facebook Group page for more details in the near future.

"What is Field Day," you may ask? Turn to page 8 and read the article written by the ARRL (Amateur Radio Relay League).

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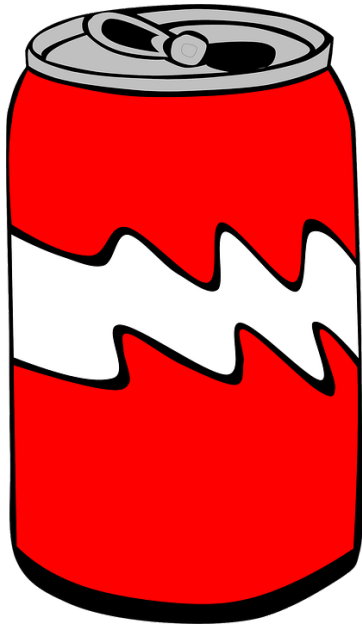
REPEATER TRUSTEE: Dennis Boone / KB8ZQZ

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

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

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

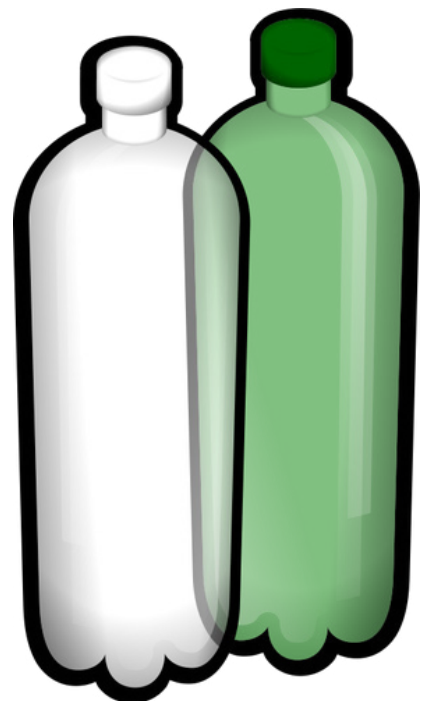
Central Michigan Amateur Radio Club's



CAN & BOTTLE DRIVE

An effort is underway to raise money for CMARC's Building Fund. The Building Fund has been designated by the Board to be used for the purpose of moving our club house / club station.

If you would like to participate, please return the bottles and cans you have been accumulating at home. Then consider mailing a check or money order to our Treasurer, made out to CMARC.



Shannon Ranes, WA2NVK
1728 Cooper Ave
Lansing, MI 48910

Treasurer's Report – April 2021

Shannon Ranes / WA2NVK – CMARC Treasurer

<u>Beginning Business Checking Account Balance</u>	\$4,663.24
Total Monthly Income	\$40.00
Total Monthly Business Expenditures	(\$0.00)
Total Business Checking	\$4,703.24
Petty Cash	\$1.00
Outstanding Checks	(\$80.00)
Sub Total + Petty Cash	\$4,624.24

Primary Shared Accounts

Humphrey's Fund	\$384.50
Club Station	\$19.09
Building Fund	\$260.06
Field Day	\$178.94
Total Net Worth	\$5,466.83
Youth Fund Balance*	\$254.88

*Separate from CMARC Funds

Notes

Checking – Deposited \$40.00 in Dues.

Building – \$0.01 interest.

Two \$40 memorial checks have not cleared.

Make a Tax-Deductible Donation.

Did you know you can make a tax-deductible donation to CMARC because we are a 501(c)3?

Checks can be made out and mailed to:

CMARC

PO Box 54

Mason, MI 48854-0054.

Please include your email address so our Treasurer can email a receipt to you for your records.

Upcoming Meetings Held on the Zoom Platform

CMARC General Meeting held on the second Friday of each month at 7 pm.

<https://us02web.zoom.us/j/89916190971?pwd=bWh4V2lVQXZLZTlMeFBmaWVGK3haZz09>

Meeting ID: 899 1619 0971 Password: 891964

LCDRA Meetings held at 7 pm (January 21, April 15, July 15, and October 21).

<https://us02web.zoom.us/j/82349525177?pwd=TlRYTkJNUUNEbnNIWFY5ZlhzVII2QT09>

Meeting ID: 823 4952 5177 Password: LCDRA

ARPSC Meetings held on the third Monday of each month at 7 pm.

<https://us02web.zoom.us/j/84852196879?pwd=OE9TV2pVcXRHRWFXQm9rSUo1RUVkdz09>

Meeting ID: 848 5219 6879 Password: 601694

Vibroplex Challenge

By: Gregg Mulder, WB8LZG

As many of you know, for many years I have refurbished keys and paddles as a side hobby for my enjoyment in the fine art of Morse code. Many Vibroplex's have passed through the shack restoration process and operate as new when I finish.

What most of you CMARC members may not know is, for years now I have given away Vibroplex paddles and bugs to worthy recipients. 9 of them so far in a 20 year period. "Given away, no fooling" you say. Wow! That's a bunch of Vibroplexes. "How do I get one" You ask?

"When will I be worthy"?

Well here's the scoop.

From now until Field Day 2021 you must convince me that you're a "worthy recipient". No you don't have to impress me with 20WPM speed. Just show that you are learning and using Morse code "on the air". With a little practice you can master CW in as little as 3 or 4 months. Show me that you are learning and enjoying the art of CW by Summer Field Day 2021, and a beautiful Vibroplex Vibrokeyer can be yours! **FREE.**

I CHALLENGE YOU ALL !

Ingham Co. Volunteer Examiner Team

West Lansing Church of Christ

5505 West St Joe Hwy | Lansing, MI 48917

A special Thank You to Michael Wetzel, W8QF for securing a temporary testing facility for us to use during the cold winter months of the pandemic! The pictures below are from the January 9th testing session. We had a total of 22 candidates, with 36 total tests administered. Congratulations to all the successful test takers!

If you are ready to take your exam(s), then feel free to join us on a date(s) listed below. Please contact Don McLain, KB8RAD if you have questions or if you would like to register for your exam. As always, walk-ins are welcome.

Don McLain (KB8RAD) (517)930-7707 KB8RAD@arrl.net



PHOTOS BY: GORDY SMITH / KE8JKS

Test sessions will be held on the dates listed below at 11:00 am.

You may check-in as early as 10:30 am with no check-ins allowed after 11:30 am.

June 12, 2021 July 10, 2021 August 14, 2021 September 11, 2021
October 9, 2021 November 13, 2021 December 11, 2021

Custom Woodworking Pieces by Jim Hannahs, KC8QWH

ginhannahs@gmail.com (517) 589-8346

100% of the proceeds will benefit
LCDRA (Lansing Civil Defense Repeater Association)



Bat House - \$15



Blue Bird House - \$15



Bobbing Head Bird - \$20



Butterfly House - \$20



Large Wheelborrow - \$35



Small Wheelborrow - \$30



Log Cabin Bird Feeder - \$45



Regular Bird House - \$15



Suet Feeder - \$15



Trellis - \$20

PHOTOS BY: GINNY HANNAHS / KD8HPG



What is ARRL Field Day?

Produced by ARRL, the national association for amateur radio <http://www.arrl.org>

ARRL Field Day is the single most popular on-the-air event held annually in the US and Canada. On the fourth weekend of June of each year, thousands of radio amateurs gather with their clubs, groups or simply with friends to operate from remote locations.

Field Day is a picnic, a campout, practice for emergencies, an informal contest and, most of all, FUN!

It is a time where many aspects of Amateur Radio come together to highlight our many roles. While some will treat it as a contest, other groups use the opportunity to practice their emergency response capabilities. It is an excellent opportunity to demonstrate Amateur Radio to the organizations that Amateur Radio might serve in an emergency, as well as the general public. For many clubs, ARRL Field Day is one of the highlights of their annual calendar.

The contest part is simply to contact as many other stations as possible and to learn to operate our radio gear in abnormal situations and less than optimal conditions.

We use these same skills when we help with events such as marathons and bike-a-thons; fund-raisers such as walk-a-thons; celebrations such as parades; and exhibits at fairs, malls and museums — these are all large, preplanned, non-emergency activities.

But despite the development of very complex, modern communications systems — or maybe because they ARE so complex — ham radio has been called into action again and again to provide communications in crises when it really matters. Amateur Radio people (also called “hams”) are well known for our communications support in real disaster and post-disaster situations.

What is the ARRL?

The American Radio Relay League is the national association for Amateur Radio in the USA, representing over 170,000 FCC-licensed Amateurs. The ARRL is the primary source of information about what is going on in ham radio. It provides books, news, support and information for individuals and clubs, special events, continuing education classes and other benefits for its members.

What is Amateur Radio

Often called “ham radio,” the Amateur Radio Service has been around for a century. In that time, it’s grown into a worldwide community of licensed operators using the airwaves with every conceivable means of communications technology. Its people range in age from youngsters to grandparents. Even rocket scientists and a rock star or two are in the ham ranks. Most, however, are just normal folks like you and me who enjoy learning and being able to transmit voice, data and pictures through the air to unusual places, both near and far, without depending on commercial systems.

The Amateur Radio frequencies are the last remaining place in the usable radio spectrum where you as an individual can develop and experiment with wireless communications. Hams not only can make and modify their equipment, but can create whole new ways to do things.

For More Information visit: www.arrl.org/field-day

Updated 3/2021

Where do you go from up?

By Gregg Mulder , WB8LZG

So you finally got your Extra ticket. Congratulations! You have reached the pinnacle of achievement in Amateur Radio! Now, what will you do with all those wonderful new privileges? Get a new rig? Put up a better antenna, perhaps. Well, you've wanted a new mobile radio, right? Well yeah, and there's that dream of a tower too. Oh Yeah! Maybe a new accessory for the shack. Yes, of course. There are many new avenues for the new Extra to try. Plus bunches of new gear and modes to arouse even the most casual operators into action.

What about Award chasing? Have you got your WAS, WAC, or DXCC award? With much of the world staying home, it's easier than ever to bag some DX. And what of those precious 25 Kcs on the bottom of the bands. New playgrounds for the bold and fearless!

Maybe it's finally time to dive into those Digital modes. FT-8 has gained quite a following. With "plug n play" rig interfaces, it's easier than ever to get started. Maybe "Olivia" or "PSK31" is your cup of tea. There are dozens of Digi modulation schemes to try—many of them very robust under poor conditions.

Always wanted to try satellite communications? There may never be a better time. It's never been easier to get going on the "birds." Over a dozen active amateur satellites in orbit, with more planned, built and waiting their turn for a launch vehicle. Handheld antennas and a dual-band HT, VHF/UHF radio is all you need. Plus, the International Space Station now has new Ham gear for the astronauts. In addition to that, a new repeater onboard as well. Simple antennas and low power levels can yield some amazing "out of this world" results. The crew regularly broadcast SSTV pictures from the ISS, which can be received by most home stations' vertical antennas. This makes it easy and fun to get a sample of the satellite operation. Visit the AMSAT website for more information on the multitude of available satellites and pass prediction schedules.

Learning to use Morse code. This has been on the "to-do" list for many hams far too long—time to finally take the

plunge. With a bit of practice every day, you can develop a fair "fist" in just a few short weeks. Join the Straight Key Century Club or the North American QRP CW Club. These clubs are "slow speed" friendly for the budding Morse operator.

Still, feeling restless? Why not try your own mini-DX-pedition. There are a growing number of Hams taking to the fields and parks in our country. POTA (Parks On The Air) and SOTA (Summits On The Air) are gaining popularity. All that's required is a portable Field Day-style setup. Many times these activities can be combined with a family outing or picnic. Plenty of excitement can be had by throwing a wire up in a tree at the park, calling "CQ POTA," and generating your own little "pileup."

Want to get more involved in your community? EMCOMM may be just your "cup of tea." Public service is one of our more critical roles as Hams. Consider becoming a certified ARES or RACES member. We have a very active group here in the mid-Michigan area. Check out the CMARC web page for more details on meetings and activities.

Still looking for a new experience. Try building a kit. Loads of fun to be had while melting solder. It's gratifying to say, "I built it myself" when telling the guy on the other end of the QSO about your station. Plus, kits come in all shapes and sizes to accommodate the novice "first-time" builder and seasoned veterans, from simple SWR meter kits with low parts count to full-blown transceivers with all the bells n whistles.

There are so many different facets to our hobby, you may easily take a lifetime getting to know them all. Keep trying new things. Keep learning. Oh! I almost forgot the most important part. All the fun you'll be having to make contacts in those new bands, making new friends all over the world. Enjoy your new privileges. You earned them. Now explore new horizons and exercise the rewards you studied so hard for. If you find your niche in the hobby, you'll know. Mine just happens to be CW. Perhaps you can find just where you fit in. ■

Operating Notes:

State QSO Parties, how do you decide who to call?

By Dan Romanchik , KB6NU

My state QSO party challenge continues. On Saturday, April 17, I worked the Michigan QSO Party. That was a lot of fun, because, of course, I'm in Michigan and was one of the sought-out stations. I operated for about six hours total, and once I hit 20,000 points, about 9:30 pm, I quit.

My final totals were 161 CW QSOs, 6 phone QSOs, 56 CW multipliers, 6 phone multipliers, and a total score of 20,336. That's not too bad, I'd say, considering that I was only on the air for half of the 12 hours. 3830scores.com has me at #8 in the single operator, low power category.

On Saturday, April 24, I worked the Florida QSO Party. I didn't operate for very long, though, barely enough to qualify for participation in the State QSO Party Challenge.

One thing that was odd is that I was often beaten out in the pileups by European stations. Someone on Twitter opined that the reason for that is because the Florida stations had their beams pointed towards Europe, and I was off the side of their antennas.

This Saturday, I worked the Indiana, Delaware, 7 States, and New England QSO Parties. Working all four was made much easier by the N1MM logging software. Instead of creating four separate logs, you could log all of your contacts with a single log.

There were lots of stations on the air, mostly from New England. Overall, I made 104 QSOs in about 3-1/2 hours of operating. Now, I have to figure out how to separate the QSOs and submit my logs. ■

HOW DO YOU DECIDE WHO TO CALL?

The other night I called CQ on 40m, and immediately got two replies. The first station I heard was on the weak side, while the second was stronger. The first operator was sending slowly, while the second op was sending a bit faster.

I decided to call the first station because it was the first that I heard. I hadn't copied the whole call sign, so I sent the part I did hear with a question mark. Even though he was weak, we still had a nice QSO.

The moral of the story is don't always choose the stronger station. The weaker, slower station might be just starting or getting back on the air and your QSO would mean more to that op than to the stronger, more experienced ham. ■

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the "No Nonsense" amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com). When he's not testing new keys, he teaches online ham radio classes and likes to work special event stations and state QSO parties

Presentation explains latest RF exposure regulations

By Dan Romanchik , KB6NU

On Tuesday, April 27, Dan, W1DAN, ARRL Eastern Massachusetts Section Technical Coordinator, gave a Zoom presentation on the latest FCC regulations on RF exposure evaluation. These are spelled out in [FCC-1926A1](#), “Proposed Changes in the Commission’s Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields; Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies.” The document is as long as the title might suggest—159 pages—but W1DAN boiled it down, focusing on what these changes mean for radio amateurs.

A recording of the presentation can be viewed by going to https://drive.google.com/drive/folders/1_qIGZhHyMrha-axJt87Dcu0UZuJO0t8F.

After explaining how RF exposure can be harmful, Dan explained how the rules are changing: The biggest change, he notes, is that amateur radio’s categorical exclusion has been eliminated. What this means is that now every radio amateur will have to perform an RF exposure evaluation of their stations. This now includes mobile and portable stations, including HTs, SOTA/POTA stations, and Field Day and special event stations.

He noted that you must be able to prove that your station is safe. This includes not only performing the evaluation, but also documenting these evaluations, should this data be requested by FCC personnel.

One thing that’s not changing are the maximum permissible exposure (MPE) limits. These are spelled out in [FCC OET Bulletin 65](#), “Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.” The FCC published this document in August 1997, but it’s still the Bible when it comes to RF exposure. If you don’t have a copy, or have never taken a look at it, you really should do so.

Be careful, though, when reading it. It contains a table (Table 1 on p. 21) that contains a list of output powers at various frequencies. If your station exceeded those limits,

then you were required to perform an RF evaluation. Now, however, all amateurs (and other radio services, for that matter) must perform RF exposure evaluations if their output power exceeds 1 mW. We are no longer categorically excluded from performing these evaluations.

OET Bulletin 65 goes on to give guidance on how to calculate or measure exposure levels. Explaining how to do this is outside the scope of this article, but again, you’ll want to refer to the bulletin for more information.

Besides the elimination of the categorical exclusion for amateur radio stations, what else is new is the dates on which amateur radio stations must perform evaluations. They are:

May 3, 2021(!) for new and modified stations

May 3, 2023 for stations that complied under the old rules.

Having said all that, the ARRL’s [RF Exposure](#) page has a lot of resources to help you understand this topic and perform your own RF exposure evaluations:

- An [RF-exposure FAQ](#) to help hams understand the new rules.
- “[Learning to Live with RF Safety](#),” QST March 2009 pp. 70-71.
- [RF Safety at Field Day QST](#) June 1999, pp. 48-51. A case study of Field Day with NSRC in a public park
- RF Exposure Station [Evaluation and Exemption Worksheets](#)
- [RF Exposure and You](#). This 8 Mbyte PDF file contains the text of the entire book by Ed Hare, W1RFI.
- [Chapter 5 References](#) needed for filling out worksheet.

The page also has links to FCC web pages with information on RF exposure.

I’m sure we’ll all be hearing more about this in the days ahead. Hopefully, someone will come out with a simple way to do the modeling or make the calculations. As always, play safe. ■

Heal yourself while operating CW

By Dan Romanchik , KB6NU

A friend of mine recently sent me a link to [The Healing Frequencies of the Human Body](#). It starts out:

“Humans have understood for centuries that sound has a profound effect on the human body and mind. Ever since our discovery of music and shamanistic chanting, we have been pushing the boundaries of how the healing effects of sounds and frequencies can be measured.

So what are the healing frequencies of the human body? Certain frequencies of sound are used as part of therapies in order to manipulate human brainwaves to promote healing of the body and mind. Sound frequency healing has been used to treat several different kinds of ailments such as insomnia, anxiety, depression, and disorders of the nervous system.”

The article lists 11 frequencies “that are regarded in alternative medicine to be particularly healing to the human body,” including 40 Hz, 174 Hz, 285 Hz, 396 Hz, 417 Hz, 432 Hz, 440 Hz, 528 Hz, 639 Hz, 852 Hz, and 963 Hz.

So, could using these frequencies as your CW sidetone improve your health? 40 Hz is probably too low to be practical, but the other frequencies might be usable. Here’s what the article has to say about these frequencies:

- **174 Hz.** 174 Hz is associated with the reduction of both pain and stress.
- **285 Hz.** 285 Hz is considered to be instrumental in the healing of cuts, burns, and other physical wounds.
- **396 Hz.** 396 Hz helps transform negative feelings, such as fear, grief, and guilt, into positive, joyful ones.
- **417 Hz.** 417 Hz helps remove negative energy, such as the energy surrounding a past trauma or negative energies in the ambient environment.
- **432 Hz.** 432 Hz leads to greater levels of mental

and emotional clarity and a higher level of spiritual development.

- **440 Hz.** 440 Hz aids in the listener’s cognitive development.
- **528 Hz.** Also known as the love frequency, 528 Hz is a sound associated with blessings.
- **639 Hz.** 639 Hz produces positive feelings and encourages clearer communication practices and situational awareness.
- **852 Hz.** 825 Hz keeps the mind from overthinking and helps remove intrusive thoughts, and negative thought patterns.
- **963 Hz.** 963 Hz is known as both the “pure miracle tone” and the “frequency of the gods.” and is associated with higher spiritual development.

Personally, I think 396 Hz, 432 Hz, and 639 Hz show the most promise. We all need more positive, joyful feelings, greater mental and emotional clarity, and certainly better communications! I’m going to give them a try. Beginners, on the other hand, might want to try 852 Hz as their sidetone. Overthinking and negative thought patterns can certainly be a hindrance to learning the code.

Being an engineer, I wonder what the tolerance is on these frequencies. For example, is 433 Hz OK, or does the tone have to be exactly 432 Hz? And, what about spectral purity? Fortunately, my Flex 6400 allows me to set the sidetone with 1 Hz resolution. Of course, to achieve that 432 Hz sidetone, I have to zero beat the incoming signal very accurately.

What do you think? What tones will you try? ■

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (KB6NU.Com), the “No Nonsense” amateur radio license study guides (KB6NU.Com/study-guides/), and often appears on the ICQPodcast (icqpodcast.com). When he’s not testing new keys, he teaches online ham radio classes and likes to work special event stations and state QSO parties

CENTRAL MICHIGAN AMATEUR RADIO CLUB BOARD OF DIRECTORS MEETING MINUTES

Saturday, April 3, 2021

Attendance

Board Members Present: D. Dembinski (KD8YDE), S. Ranes (WA2NVK), D. Vick (W8ZZX), D. McLain (KB8RAD), G. Mulder (WB8LZG) K. Fitzgerald (N9PC)

Board Members Absent: G. Smith (KE8JKS)

Visitors: C. Ranes (NS8Q), J. Doornhaag (KD8NNQ)

Call to Order

- The meeting began at 7:07pm. Vice-President Dembinski (KD8YDE) presided over the meeting, in the absence of President Gordy Smith (KE8JKS).

Club Business

- **VHF Tech Net:** VP Dembinski noted that the Technical VHF net on 145.390 MHz would be temporarily suspended, due to wind damage to President Smith's station. Word will be sent out to the general membership via our social media channels.
- **Volunteer Survey:** Discussion ensued regarding the Volunteer Committee Interest survey executed by Dan Beuchert (WX8MOJ) and submitted to the Board for approval. It was moved by Secretary Vick, supported by Director McLain, to release the Survey to the general membership.
- **Ladies' Night/Ziegenbein Picnic:** Director Fitzgerald stated she was checking out some food trucks regarding food quality, menu selections, and availability. John Doornhaag (KD8NNQ) stated that the Ziegenbein Committee has chosen a recipient for the 2020 Award, and the plaque is engraved and ready to be bestowed. Treasurer Ranes shared that she has reached out to the Lansing Parks & Rec Dept. regarding potentially holding the Picnic at Francis Park Pavilion, provided the City of Lansing will allow a food truck to operate on park property. Further discussion ensued regarding the date and time of the event and contracting a vendor.
- **Field Day 2021:** Discussion ensued regarding the potential use of Raynor Park for Field Day 2021 in June. Dan Beuchert has spoken with Ed Hude at the City of Mason regarding park use, however it is too soon to tell what capacity the park will be functioning at, depending on the various health & safety policies surrounding the Coronavirus pandemic response.
- **Hamfest 2021:** VP Dembinski stated he had started making some calls and working out details, but needed to confirm the dates & rates. It was confirmed that the date is Saturday, September 18th. Secretary Vick stated we should hold to the 2019 pricing of \$5 admission and \$5 table rental for vendors, and give folks a break. Further, it was agreed to give vendors one free admission for each table rented. It was also discussed and agreed to begin publicizing our Hamfest in the ARRL calendars and publications immediately. The Board agreed that it is definitely a good thing we are going ahead with Hamfest this year.

- **2021 Dues Increase:** Secretary Vick noted that the Board neglected to publicize the 2022 membership dues increase that had been approved by the Board at the March General Membership Meeting. He will add it to the April General Meeting agenda.
- **Post-Meeting Speakers:** Treasurer Ranes spoke about possibly having an estate planner as a guest speaker at a general membership meeting. The idea was universally approved by the Board. Treasurer Ranes will follow up with the speaker to ascertain her availability and whether there would be a speaker's fee. It was asked if anyone had a guest speaker for the April General Meeting; there was none. VP Dembinski shared he had spoken with a tower installer, and would follow up with the man to perhaps speak at a future meeting.

Adjournment

- With no further business to discuss, it was Moved by Secretary Vick (W8ZZX), seconded by Treasurer Ranes (WA2NVK) to adjourn the April Board Meeting at 7:47pm.

Respectfully submitted,

Dave Vick, W8ZZX
CMARC Secretary

CENTRAL MICHIGAN AMATEUR RADIO CLUB GENERAL MEETING MINUTES

Friday, April 9, 2021

Attendance

Board Members Present: D. Dembinski (KD8YDE), S. Ranes (WA2NVK), D. Vick (W8ZZX), D. McLain (KB8RAD), G. Mulder (WB8LZG), K. Fitzgerald (N9PC)

Board Members Absent: G. Smith (KE8JKS)

General Members: W8MKB, K8TS, WD8OVL, KE8RNS, N8FZ, KD8VJD, KE8MOA, NS8Q, KCØMYP, KC8ZLQ, KC8QZB, W8QF, WX8MOJ, KD8MWA, WA8WPI, KD2GVS, WA8WFI, KE8QKN, N8UMX, KD8NNQ, WD8PVS, WA8QJE, KE8MIZ, AC8YF, W8EO, K8YHH, Mark Miller

Visitors: Tim Conroy (WB8HRO), Abby Beuchert

Call to Order

- The meeting began at 7:02pm
- Vice-President Dan Dembinski (KD8YDE) chaired the meeting, in the absence of President Gordy Smith (KE8JKS).

Sign-In Sheets

- Secretary Dave Vick (W8ZZX) took attendance from the Zoom register.

New Members & Visitors

- Tim Conroy (WB8HRO) was in attendance.

Treasurer's Report

- It was moved by Mike Wetzel (W8QF), supported by John Doornhaag (KD8NNQ) to accept the March Treasurer's Report as published in the Scope and on the Club website. The motion carried.

Secretary's Report

- It was moved by Secretary Vick (W8ZZX), supported by Ben Barker (WD8OVL) to accept the March Secretary's Report as published in the Scope and on the Club website. The motion carried.

Cards & Flowers Report

- There was no report this month.

General Announcements

- **Dues:** Secretary Vick (W8ZZX) announced that based on the results of the recent Steering Committee survey, the Board of Directors has approved an increase of the membership dues from \$20 to \$30, effective January 1st, 2022. John Doornhaag (KD8NNQ) clarified that any dues paid toward 2022 will be at the increased rate, regardless of what month they are paid in.

- **Field Day 2021:** Dan Beuchert (WX8MOJ) announced that planning for Field Day 2021 is covering many contingencies. We are still not certain of the status of any operations at Rayner Park. Other ideas included the field by the clubhouse at H&H Welding, or using a church parking lot. Mark Filonczuk (N8UMX) asked Dan about potentially using the Ingham County Fairgrounds. Dan will follow up with the Fair Director. Discussion ensued regarding options for running operations and raising antennas in areas with no trees. We will continue planning for any contingency. Mike Wetzel (W8QF) asked if our Field Day events were required to be held in Ingham County, or could it be held “just over the line” in Eaton County. Dan Beuchert (WX8MOJ) stated that there was nothing specifically stated it must be held in Ingham County, however the 501(c)(3) paperwork says we are based in Ingham County, but as long as the event was in or near the general “Served Area” we'd be okay. Mike Bofysil (KE8ZLQ) asked about using the Island Park in Grand Ledge. Secretary Vick (W8ZZX) stated we would most likely have to seek permission from the City of Grand Ledge.
- **Committee Interest Survey:** Dan Beuchert (WX8MOJ) shared that the Club Interest Survey has been published, for those who may be interested in serving on one of the newly-created Club Committees. So far we have four responses.
- **ARPSC:** The ARPSC Training net will be running on 145.390 on Monday, April 12th at 7pm. Brian Vissers (KE8NJT) will be conducting a program on choking & fractures. The next ARPSC Zoom meeting will be on Monday, April 19th and Jim Hannahs (KC8QWH) will be conducting a program on heat emergencies. Dan Beuchert (WX8MOJ) also shared that the ARPSC has uploaded a 30-minute video from the ARPSC Zoom meeting on March 15, 2021 that covered Skywarn procedures to the ARPSC website. The video can be found at <http://www.lansingarpssc.com/skywarn/>
- **LCDRA Fundraiser:** Dan Beuchert (WX8MOJ) shared that Jim Hannahs is selling handmade wooden bird feeders, birdhouses, and &c. as a fundraiser for LCDRA. There is an ad for these items in the recent Scope newsletter. LCDRA will need funding to help offset costs of the upcoming repeater relocation from Potterville back to the WKAR station tower in Okemos. Mike Boensch (W8MKB) noted that the April LCDRA meeting has been cancelled.
- **Clubhouse Sale:** VP Dembinski (KD8YDE) asked Dan Beuchert (WX8MOJ) if he had any new information from Kevin regarding the impending sale of the Kerns Road building. There is no news, aside from a new For Sale sign that has been posted in front of the building.
- **Hamfest 2021:** VP Dembinski (KD8YDE) shared that DX Engineering will be sending items for our Hamfest in September but will not be coming into the State of Michigan to work the event live, because of our tax rules. The regular embroiderer will not be doing any festivals this year, due to coronavirus. He shared that a lot of vendors are remaining inactive. Our event is now published in the ARRL Calendar. VP Dembinski asked of anyone knew of any other vendors or merchants who might like to set up a table at our event. Ed Hude (WA8QJE) stated that he would research the Michigan Tax law for Out-of-State Vendors. VP Dembinski then asked if there should be a cut-off time where we may cancel

Hamfest? Secretary Vick (W8ZZX) stated “definitely not; you get Success by planning for Success.” Treasurer Ranes (WA2NVK) reminded VP Dembinski that we have already paid a non-refundable deposit to the Conference Center, so it would be pointless to cancel. Further discussion ensued regarding possible vendors.

- **Nets:** VP Dembinski stated the morning net on 145.390 will be back on Monday, April 12th. The CMARC Technical Net will be back on the air once President Gordy Smith (KE8JKS) can repair his VHF antenna system.
- **VE Session & Testing:** Secretary Vick (W8ZZX) noted that there will be a VE session on Saturday, April 10th at 11am at the West Lansing Church of Christ on W. St. Joe Hwy. Gene Parker (KE8QKN) asked what he would need to focus on for the General exam. John Doornhaag (KD8NNQ) shared that there wasn't much difference between the Tech and General tests, but it was tough to point to anything specific to study on, since there are five different General tests, so the questions vary widely across the subject matter.
- **MSU Amateur Radio Club:** Ed Ozer (W8EO) shared that the MSU ARC would be running two portable stations somewhere on campus for the Michigan QSO Party contest on April 17th. He also reminded the membership that the club still held its UHF net on Thursday nights at 8pm on the 442.900MHz UHF repeater.
- **Michigan QSO Party:** Chris Ranes (NS8Q) reminded the membership that the Michigan QSO Party contest would be running on Saturday, April 17th from 12:00 noon thru 12:00 midnight. Interested hams can get info and sign up at www.miqp.org
- **Scope Newsletter:** Treasurer Ranes (WA2NVK) reminded the membership that if they had any updates, stories, or classified ads that they would like published in the Scope newsletter, they could send materials to publisher Chris Ranes at "cmarcscope@gmail.com."

Deferred Business

- None

New Business

- None

Adjournment

- With no further business to discuss, it was Moved by Tom Horton (KD2GVS), seconded by Secretary Vick (W8ZZX) to adjourn the business meeting at 7:40pm and move to the social portion of the evening.

Tonight's Presentation

- There was no presentation

Respectfully submitted,

Dave Vick, W8ZZX
CMARC Secretary

CLASSIFIEDS

Ed Hude / WA8QJE
Cell: (517) 420-7550
ebhude@yahoo.com

\$125

Alinco DJ-V27T

222 Mhz handheld radio, unused like new in the box with battery, ac wall charger, belt clip and hand strap along with antenna in factory box. Manual is a reproduction.

Purchased new from HRO and never used.



Jimmy Dunahoo / KD8IWQ
517-743-1604

\$125

MFJ-989C Versa Tuner V (3KW)

Covers 1.8-30MHz, including MARC and WARC Bands. Built-in 300w dummy load. Comes with manual.

\$25

Workman SX-144/430 SWR-Wattmeter

Covers 2m/440 (120-500 MHz). Dial has a cross-needle display. Meter has three ranges (10W, 100W, and 500W).

Dan Stockwell / KD8YVA
Cell: (517) 775-7750
dstockwe52@gmail.com

\$250 Package Deal

Icom ID51a DStar HT

Package comes with the Diamond SRG77CA antenna, wall charger, car charger, Icom microphone, and a car mag mount antenna.

The best way to reach me is via text message or at the email listed above.



Huge Shack Cleanout Sale!!!

Call or email Gregg Mulder / WB8LZG. *Let's haggle!!*
Phone: (517)646-6257 after 1 pm. Email: wb8lzg@sbcglobal.net



Radios and Amplifiers

\$1,200

Ameritron AL-80B HF Linear Amp

CW QSK-5 built-in for full break-in. Not many hours on this amp as I am a QRP OP. Includes 1 new spare EIMAC 3-500Z tube.

\$725

Yaesu FT-990 HF XCVR

Has built-in power supply, tuner, all the filters, mic, and comp infc. Includes the SP6 matching speaker with the Timewave DSP 59Y unit factory installed. Nice HF pair!

\$400

Elecraft K1 HF QRP XCVR Kit

Unbuilt, new in box, 4-band, noise blanker, backlite kit, finger dimple, plus spare 2-band board, extra faceplate, and a customer "Kingswood" spinner knob.

CW Keys and Keyers

All Vibroplex keys are "Like New" in looks and operation!

\$225

Vibroplex "Vibrokeyer Gold" Key

Comes with a gold base and chrome parts, Made in 1994 with Serial No. 80280. BEAUTIFUL!!

\$200

Vibroplex "Original Presentation" Bug

Made in 1963 with Serial No. 235471. It has been under glass for 30 years.

\$150 each

Vibroplex "Lightning Bug" Standard

Made in 1950 with Serial No. 166225. Has a red base and was refurbished to original luster.

\$70 each

K8FF Qrp Kit Key, BUILT

The prototype to the "code warrior". Comes with a black emron base with brass parts, magnetic return action, custom "Kingswood" finger pieces, and plastic dust cover.

\$50 each

J-38 Straight Key

The real deal! The best starter key you can buy!

\$40

KK-1 QRP Straight Key Kit

Includes all the bagged parts needed to build a nice mini key!

\$20 each

Little Bugger Keyer

Reed relays & keys any rig. Very tiny. Runs on 9V.

MFJ "Grand Master II" Memory Keyer

Comes with power supply. Keys any rig! Includes 8 memories.

"Tick 4" Keyer

Self-contained with 9V battery. Has 2 memories.

Power Supplies

\$100

Astron Transformer Power Supply

Supplies 12VDC at 35-Amps. Comes with meter.

\$20

Tripp-Lite Power Supply

Supplies 12VDC at 7-Amps. Good for powering mobile rigs from home.

Antennas

\$100

TH3jr Tribander for 20-15-10m

Oldie but goodie! A small lightweight beam with a big signal! Comes disassembled, but all parts are there. It could use a few new trap seals (available from MFJ).

\$50 each

Hygain "Butterfly Beam" for 20-10m

Needs some TLC, cleaning, and a couple new stainless wire spans which are included. It comes disassembled and wrapped up.

Hygain 15m 3-Element Mono-Bander

Handles full legal power

Hustler HF Mobile Package

Comes with fold over base section with spring top, and coils for 40, 20, 15, and 10 meters.

\$10

75-meter Hamstock Mobile Whip

3 for \$5

5-FT Stainless Steel Whips

Continued on Page 20

CLASSIFIEDS

Huge Shack Cleanout Sale!!!

Call or email Gregg Mulder / WB8LZG. *Let's haggle!!*
Phone: (517)646-6257 after 1 pm. Email: wb8lzg@sbcglobal.net



Coax and Connectors

\$50

200 FT Hughes Sat. Cable on Reel

Brand new. RG8 size, 100% shield, solid center conductor, buriable, good up to 5 GHz, very low loss.

\$30

200 FT, RG-6

Full shielded coax in reel out box.

\$25 each

150 FT, RG58

New, old stock, double shielded, solid inner conductor plenum cable.

Box of Connectors

Box is full of RF cable ends and adapters. N, BNC, PL259, TNC, more.

Accessories

\$30

Kodak Z740 5MP Digital Camera

Includes 10x zoom and 2 extra SD cards, case, and tripod.

\$25 each

Poly-Phasers with "N" Connectors

New in bag (\$69.95 new)

\$20 each

***Palomar Engineers RX Noise Bridge**

***Realistic 30-watt PA Amp**

AC/DC Operation. Comes with PA speaker.

\$10 each

***Weller Soldering "Gun"**

***Step Attenuator w/ SO-239 Connectors**

\$5 each

New Old Stock Ten-Tec TG24

Enclosures nice box for projects!

Books

\$5 each

Beam Antenna Handbook

by Bill Orr

VHF Handbook

by Bill Orr

RSGB VHF-UHF Manual

by The Radio Society of Great Britain

ARRL Antenna Anthology, 1st Edition

by The Amateur Radio Relay League

Electronic Parts for Projects

I have a large selection of parts: speakers, coils, toroids, variable capacitors, diodes, zeners, transistors, wire, coax, stainless whips, plugs and jacks, knobs, and many other Homebrewer needs. **Building or repairing something? Call Me!!**



From the Estate of Dave Hayhurst / K8QH

Call or email Gregg Mulder / WB8LZG. *Let's haggle!!*
Phone: (517)646-6257 after 1 pm. Email: wb8lzg@sbcglobal.net

CW Keyer

\$20

MFJ Grandmaster Model 282B

Antennas

\$25

Cushcraft 440 UHF Vertical

Must be removed from home.

\$20

Antenex Compact 2M Mobile

Comes with mag mount. Only 5" tall.

\$15

MFJ 1738 Mobile Antenna

"On the Glass" type. New in bag.

\$10

75-meter Mobile Whip

It's red! Possible MFJ??

Accessories

\$20 each

Palomar Engineers Model 827

Digital SWR/PWR Meter

(2) RF Detector Pick-Ups

Covers up to 1 GHz with "N" connectors

Power Inverter

Supplies up to 400 watts. Comes with cables.

RTL-SDR Dongle

Comes with antenna. Is used with free Airspy software.

\$10 each

Foot Switch for PTT Contesting

Comes with 8-foot cord and phono plugs

4:1 Balun (100W)

Comes inside a waterproof Cantex box.

(2) GE Mobile Speakers

Tuned for voice.

HAM IV Rotator Control Box

Books

\$5 each

Hints & Kinks

by The Amateur Radio Relay

League, 1992 and 1999 Editions

73 Dipole & Longwire Antennas

by Ed Noll

Gill Cartoon Book

Propagation

Across

1. "WRTC grand ____" - working all 1x1 calls
5. Parts supplier McMaster-____
9. Sword handles
14. Digital music std.
15. Silent Key article, briefly
16. Fill with joy
17. Antenna restrictions might be on this
18. A craving for that last multiplier, say
19. Northern city with F call prefix
20. DXers' mood swings?
23. Decades over S9
24. Sharpens
26. Early term for static crash (1920's)
28. Nothing more, on CW
30. Ocean
32. "Air" for an early ham
33. ____ gum - a thickening agent

34. Hams xmit and rev with them
35. The way, for signals
38. A non-radio bug
39. A hamfest of the Internet
40. Type of eel
41. Code inventor, for short
42. A comfortable ham shack might be here
43. Law school course
44. VK animal
47. Baseball glove
48. A six or ten meter DXer's hope
54. Do this on your meter to measure line voltage
56. Board here, for going /MM
57. Capacitor dielectric material
58. CW predecessor
59. Medical breakthrough

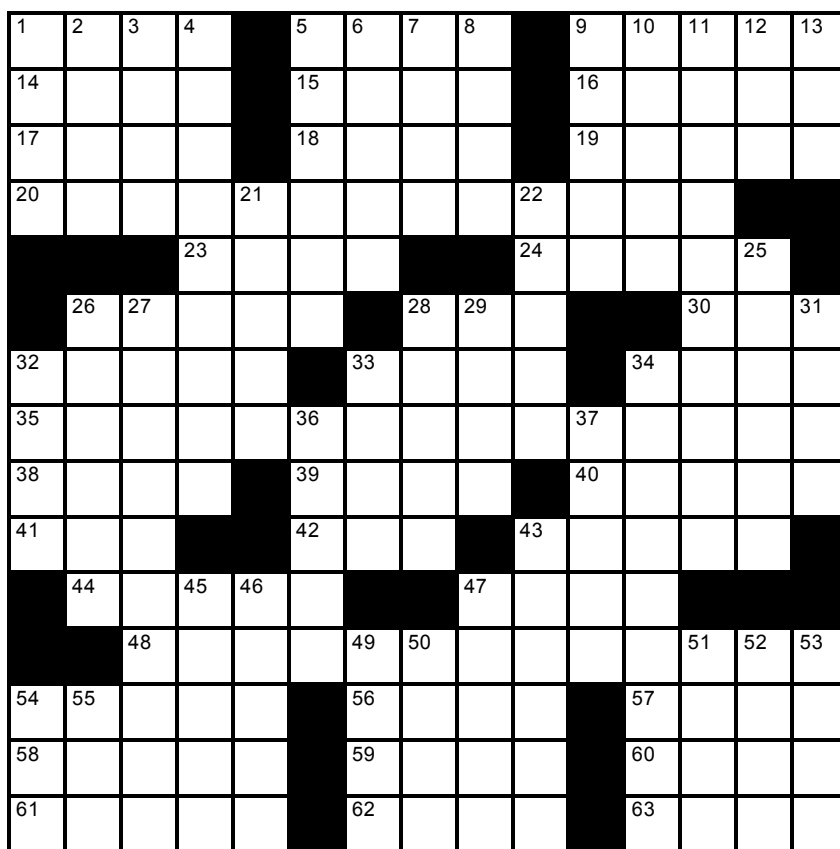
60. Vy much
61. DC power sources, briefly
62. Cluster item
63. Maine prefix, possibly

Down

1. Tiny parts (abbr.)
2. In ____ of (instead of)
3. Gulf of ____, off the 70 coast
4. Where not to change horses
5. VK was once a British one
6. Borders on
7. A microprocessor type, briefly
8. Non-military RATT
9. "____ radio" (testing, sometimes)
10. SETI call answerer

11. Calling CQ TEST one minute before the contest begins
12. Kind of logic ckt
13. You can do it with ATV
21. Lively
22. Boorish sort
25. Told someone to wait, on CW
26. Winning several contests in a row
27. It might increase your amplifier's blower speed
28. Holy book, in HZ-land
29. R-rated, maybe
31. Grayish
32. Oval insulators
33. Jeer
34. A contester, in a broader sense
36. Fragrant wood
37. Ham it up, in a way

43. FCC license, slangily
45. Like an untouched Heathkit
46. Freezes a digital VFO
47. Prefix with chip or wave
49. They feed DSP ckts, usually
50. Arrange, as hair
51. Prefix with watt
52. Clickable image
53. Gourmet cracker spread
54. Particularly slim type of AM
55. 3-land ARRL section



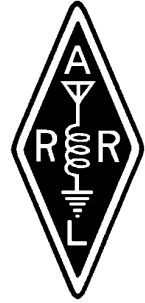


Central Michigan Amateur Radio Club

W8PLP/W8MAA

Membership Form

For Year (s) _____



Please complete **ALL** sections in their **ENTIRETY** before submitting your application.

Membership is for the current calendar year unless otherwise specified above.

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").

John Doornhaag | 1165 South Ainger Rd | Charlotte, MI 48813-9540

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"/> Current Calendar Year Free <i>(must submit your application within first 30 days of licensure)</i>		
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
<i>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.</i>	

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

Lansing Civil Defense Repeater Association

Membership Form



For Year (s) _____

Please complete ALL sections in their ENTIRETY before submitting your application.

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

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

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

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

Membership Type		<input type="checkbox"/> New	<input type="checkbox"/> Renewal
Full:	<input type="checkbox"/> Annual Dues: \$15.00 <i>Includes voting rights.</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 Membership Card <input type="checkbox"/> Yes <i>(Please see above)</i>		

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

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



To: