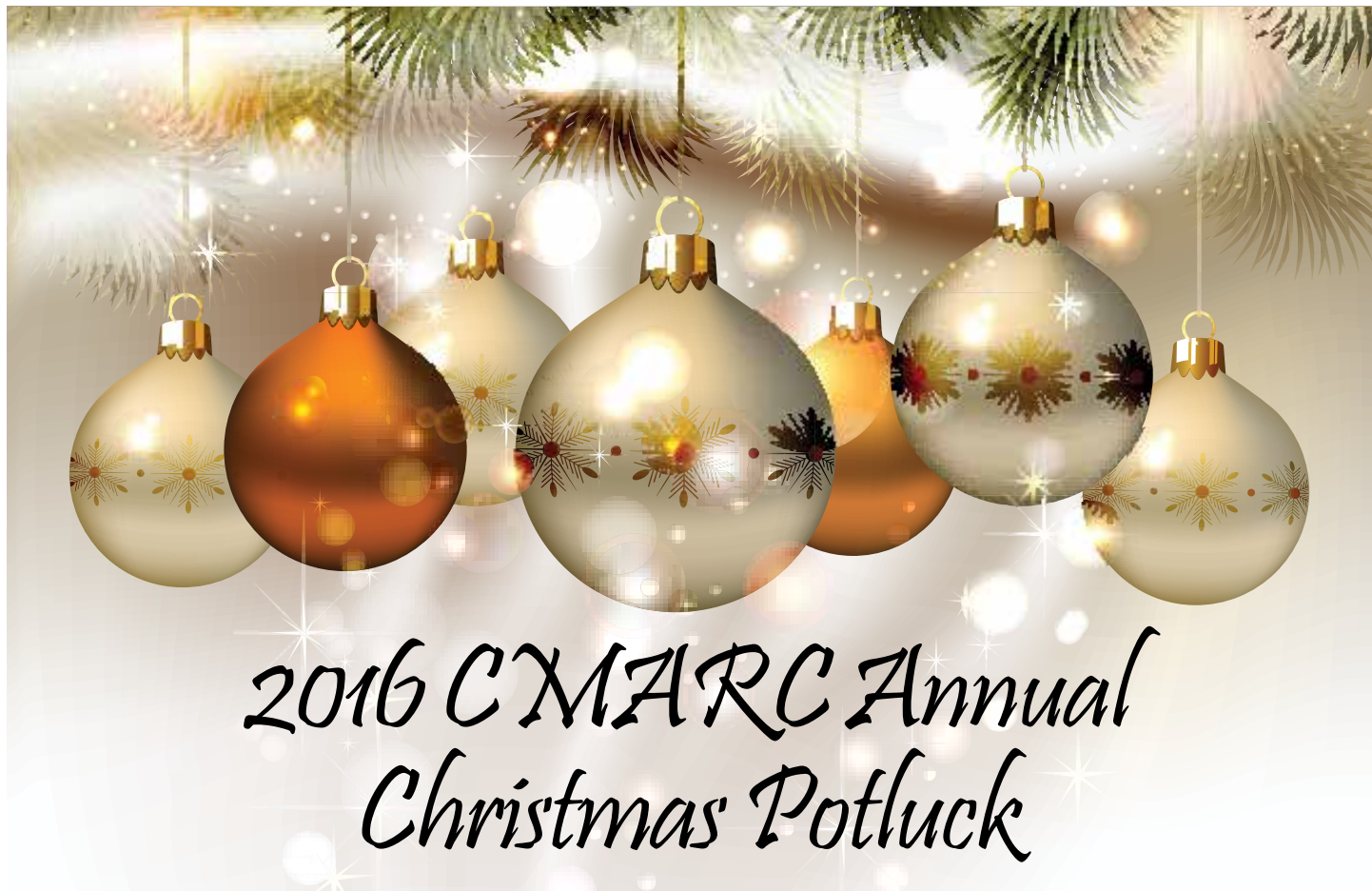




The Scope

Central Michigan Amateur Radio Club Lansing Civil Defense Repeater Association

December 2016
Volume 16
Issue 12



Who?

All Members and Friends of CMARC, Along with Your Families

Where?

The Salvation Army South Corps. Building
Located at 701 W. Jolly Road in Lansing

When?

Friday, December 9, 2016 @ 7:00 PM

What Should I Bring to Eat?

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

**Larry Camp/WB8R will be
joining us at our Annual
Christmas Potluck in
December to make a special
announcement regarding
a multi-club operating
event at MIS (Michigan
International Speedway).**

December Birthdays:

12/5 Jason McLaughlin/KC8RBK
 12/7 Michael Boensch/W8MKB
 12/8 Ted Sadilek/WA8MFQ
 12/8 William Smith/KD8INX
 12/9 Charles Taricska/KD8VJM
 12/11 Russ Fitzgerald/N8FZ
 12/12 Robert Mann/WD8OEV
 12/16 Alan Shaw/WB8YOX
 12/24 John Listermann/KD8ZHC

December Anniversaries:

12/18 Dan Cameron/KD8QFB
 12/28 Dave Hayhurst/K8QH
 12/31 Dan/WX8MOJ and Dawn/KD8MWA Beuchert

Upcoming Meetings:

CMARC

The next meeting for the Central Michigan Amateur Radio Club is Friday, **December 9th** at 7:00 pm at the Salvation Army South Corps, located at 701 West Jolly Road, near the corner of Washington Avenue & West Jolly Road in Lansing.

ARPSC

The ARPSC meeting for the month of November is at 7:00pm on Monday, **December 19th**. We will be meeting at Ingham County Sheriff's Department off Curtis Road in Mason - Sgt. Cole Training Room. For more information about the ARPSC, please check out our website at www.lansingarpssc.com

VE Exam Session:

Charlotte, MI

Date: **12/10/16**
 Time: 12:00 pm (Walk-Ins Allowed)
 Sponsor: Ingham County VE Group
 Contact: Mark Korroch/WB8TGY
 Email: wb8tgy@yahoo.com
 Location: Eaton Cty Sheriff's Dept EOC
 1025 Independence Blvd (Enter Back of Bldg)
 Charlotte, MI 48813-1031

Lansing, MI

Date: **1/14/17**
 Time: 11:00 am (Walk-Ins Allowed)
 Sponsor: Ingham County VE Group
 Contact: Don McLain/KB8RAD 517-701-9745
 Email: KB8RADon@aol.com
 Location: Lansing Fire Station #44 (Community Room)
 1435 E Miller Rd.
 Lansing, MI 48911-5322

Treasurer's Report 2016

John Doornhaag / KD8NNQ - CMARC Treasurer

Bank Balances for November	
Beginning Balance	\$3,758.53
Total Monthly Income	\$429.19
Total Monthly Expenditures	(\$428.09)
Total Business Checking	\$3,759.63
Petty Cash	\$41.00
Sub Total	\$3,800.63
Primary Share Accounts	
Humphrey's Fund	\$1,093.28
Building Fund (Club Station)	\$19.09
Field Day	\$530.31
Total Net Worth	\$5,443.31
Youth Fund Balance*	\$253.90
* Separate from CMARC Funds	

ATTENTION LADIES

If you are interested in having a Ladies Tea Time Christmas party this year, please contact Jane Hosford/KC8FSK and let her know. So far there are several ladies interested, but more would be favorable.

**Home: 517-515-7610 Cell: 517-940-0412
 Email: jlhoford54@hotmail.com**

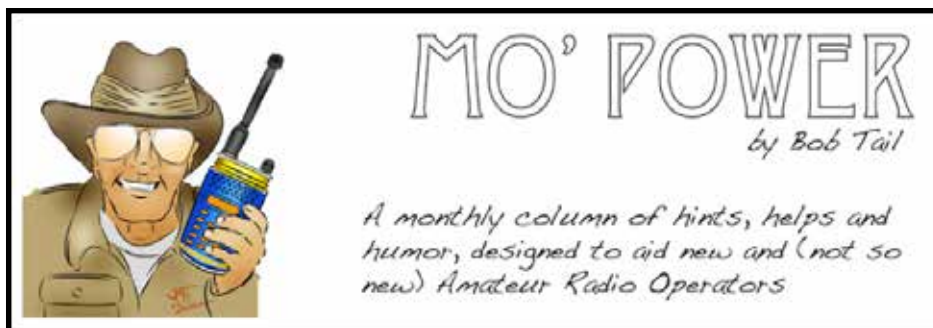
Thank you to the people who donated food to the Salvation Army Food Bank during our September, October, and November meetings.

CMARC Zoo Night

PHOTOS: SHANNON RANES/WA2NVK



A special Thanks to Ted Sadilek/WA8MFQ and Bob Frease for bringing their animals. We always look forward to what they bring us.



Good Day Mates! I just returned from the hammy club meeting, catching a ride with Ned and Nil. You may remember we were trying to solve some aerial troubles for one of the local hams. Jim, who happens to be a new ham with a Foundation ticket, had just installed a half wave wire for 20 meters fed at the end thru a 9 to 1 balun. Jim also has a tuner. It seems he has had some troubles finding low SWR on any band. Last month we suggested that he add about a meter of wire to the entire length and try again. He did so, and although the match was slightly better, it was still not good. Well upon hearing the result we just had to see the aerial for ourselves. After the meeting, we all drove out to Jim's QTH just north of town. Upon arrival, we surveyed Jim's placement of the wire in a nearby tree. All looked fine. Feed point about 3 or 4 meters above ground, and the apex up about 12 to 15 meters, then draped down the other side of the tree. Ned popped the trunk and appeared with an Antenna Analyzer. Still a high SWR reading on all bands. "tried a counterpoise?" Nil inquired. "Not yet," Jim replied. "Well then let us try some more wire." "Just a moment Nil," I said. Let's examine what is happening with Jim's antenna. The reason we had him try adding some more wire and try again is quite simple. The feed point impedance of the halfwave wire by itself is usually very high, on the order of over a thousand ohms. The 9 to 1 balun often transforms that higher impedance to something lower in the hundreds of ohms. With the use of an antenna tuner, a match should be possible. By our adding a meter of wire to the total length, we also changed the feed point impedance slightly, hoping to possibly achieve a better match. Yet the aerial still did not want to cooperate. "What if we're working against simple physics here?" Nil said. I could see the wheels a turn in Nil's eyes as she deciphered what was happening to this simple wire. I thought about it for a moment myself. "Why don't we just try another balun." Ned piped in. "We've been going the wrong direction" Nil proclaimed. "Cut 2 metres off," Nil said. I thought about this for a moment, "Ahhh yes! " We had been adding wire

and "loading" the aerial, but it was already getting loading from the branches of the trees. We needed to try to make the wire capacitive. "Got any Dykes?" Nil asked Jim with conviction in her voice. With a quick snip, we were ready to give her another go. Ned reconnected the coax and Nil, and I followed Jim into the shack with Ned close behind. A quick check of the SWR on the Analyzer showed a big improvement! Several of the bands were now easily tuned with the tuner Jim fired up on 20. "SWR shows 1.5 to 1," Jim said with a smile. With the tuner, we were able to get power out to the wire on 80, 20, 30, and 12 meters. The kids were smiling, Jim was smiling, and I was smiling ear to ear.

We talked about that "feeling" on the way home. You know the one. That feeling you get when you take the time to help someone else out, and your help actually works! Not only did all 3 of us go home "triumphant" in beating this problem, this will pay off big dividends in the future of the hobby. By our taking the time to help this new ham out, he will now have a "positive experience" with his radio and the hobby. Not to mention the fact that he made new friends along the way. Proof once again that a bit of investment in the newcomers to our hobby may also help to swell our ranks. Who knows whom Jim will help out in the future? All because we helped him out today.

In this Christmas season, try to be aware that giving is a wonderful thing. Remember to be patient, look for the good in people, and you may just find it.

'till next time, kindness and caring are contagious, don't be afraid to....■

73, Bob Tail

Is there a market for a \$400 prepper radio?

By Dan Romanchik, KB6NU

Dan, KB6NU, is the author of the "No Nonsense" amateur radio license study guides, and blogs about amateur radio at KB6NU.Com. You can contact him by e-mailing cwgeek@kb6nu.com.



A couple of days ago, a reader wrote:

"I would like to know if it would be feasible to build a radio with the following features:

- * SSB operation (only SSB is required, CW would be an additional benefit)
- * 20 – 50W of power
- * Portable-friendly

(lightweight, capable of operating at lower voltages from small portable batteries)

- * Low receiver current drain
- * Coverage of 40m and 80m bands. Very limited coverage is acceptable. Even channelized coverage of a few select frequencies would be acceptable.
- * S-meter

"It strikes me that there is a large market for ham radio products for "preppers," and there has been a lot of interest in the Baofeng line of radios from that market. I think there would be a LOT of interest in a radio that could go far beyond line-of-sight and contact friends or family hundreds of miles away. Preppers would have little interest in contacts more than a state or two away, and no interest at all in novel operating modes. I wonder if a radio that trims away excess features (all-mode operation, wide frequency coverage, high power output, sophisticated audio filtering) could be produced for a lot less cost than currently available HF rigs. If so, and it was paired with a decent NVIS dipole and some General-class study materials and sold as a package deal, it could be a huge hit – Something you could tuck in a bug-out-bag, set up in the field, and use to make contacts in a reasonably local area, or set up in your backyard at home and use

minimal power to operate.

"Is there a reason why I don't see radios like this on the market, some kind of technological limitation that would make this sort of thing impractical? If something like this was built, what kind of cost and performance would you expect? I'm certainly not expecting any kind of detailed analysis, but even just a speculation about if such a project could be feasible would be appreciated."

I replied:

"I think one of the reasons you don't see radios with the feature set you describe is that more full-featured radios are already pretty inexpensive. The Yaesu FT-450D, for example, costs less than \$800 and offers 100W output. The FT-817ND, which is designed for portable operation, costs less than \$700. Is that too much for preppers?"

"While it might seem like you could sell a radio with fewer features for less, I think that you hit the law of diminishing returns. At some point, removing features, doesn't reduce the cost all that much. For example, removing the CW capabilities from a transceiver capable of SSB operation really doesn't save that much because in a way CW operation is really just a subset of SSB operation. You'll save the cost of a key jack, but how much is that? Maybe a buck or two. Having said that, it could be that the big amateur radio manufacturers are overlooking an opportunity here."

We swapped a couple more e-mails about this. He noted, "Most preppers would probably rather buy a high-end AR-15 or several months worth of storage food for \$800 than a radio." I suggested, "If there was a catastrophic event, and you really needed to communicate, wouldn't it seem silly to have not spent the extra \$400 on a really decent radio?"

What do you think? Is my analysis a little too simplistic perhaps? Are amateur radio manufacturers ignoring a potential market? ■

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.

ARRL Michigan Section News

By Larry Camp/WB8R



Irish Hills Hamfest at Michigan International Speedway

We are still hard at work laying the groundwork for the upcoming Irish Hills Hamfest at Michigan International Speedway (MIS) on October 7-8, 2017. I have been crisscrossing the Southeastern Michigan area meeting with clubs to build interest in the event, and thus far, I am extremely gratified at the positive response. More details soon.....

HB 6857 Update

The Michigan Distracted Driving bill known as HB6857 will most likely time out in the current Legislative session in Lansing and will be reintroduced in the new session with a different bill number. The Michigan ARRL team will work with the author of the bill (Rep. Howyrlak) to ensure that ham radio mobile operations are not compromised. You will be hearing more about this bill in 2017. As a point of clarification, our purpose here is to do our best to ensure that our ability to use our radios while driving our vehicles is not infringed upon. We take no position on the purpose of the bill.

Amateur Radio Parity Act

Urge the U.S. Senate to Pass the Amateur Radio Parity Act
Ask your Senator to support the Amateur Radio Parity Act when it comes to the Senate floor during the lame duck session.

Time is of the essence! The Amateur Radio Parity Act, having successfully cleared the US House, now awaits action in the US Senate. If the bill is not passed before the Senate adjourns for the year in December, it will "die" and we have to begin the entire process in both houses of Congress when the 115th Congress is sworn in come January 2017.

Please use the links below to contact your US Senators and request they support the bill when it comes to the Senate floor during the "lame duck" session, between now and mid-December's adjournment.

The link to the website is:

<https://arrl.rallycongress.net/ctas/urge-us-senate-to-pass-amateur-radio-parity-act>

A Ham Radio Operator's Night Before Christmas

T'was the night before Christmas,
And all through two-meters,
Not a signal was keying up
Any repeaters.

The antennas reached up
From the tower, quite high,
To catch the weak signals
That bounced from the sky.

The children, Tech-Pluses,
Took their HTs to bed,
And dreamed of the day
They'd be Extras, instead.

Mom put on her headphones,
I plugged in the key,
And we tuned 40 meters
For that rare ZK3.

When the meter was pegged
by a signal with power.
It smoked a small diode,
and, I swear, shook the tower.

Mom yanked off her phones,
And with all she could muster
Logged a spot of the signal
On the DX Packet Cluster,

While I ran to the window
And peered up at the sky,
To see what could generate
RF that high.

It was way in the distance,
But the moon made it gleam -
A flying sleigh, with an
Eight element beam,

And a little old driver
who looked slightly mean.
So I thought for a moment,
That it might be Wayne Green.

But no, it was Santa
The Santa of Hams.
On a mission, this Christmas
To clean up the bands.

He circled the tower,
Then stopped in his track,
And he slid down the coax
Right into the shack.

While Mom and I hid
Behind stacks of CQ,
This Santa of hamming
Knew just what to do.

Continued on Page 7

He cleared off the shack desk
Of paper and parts,
And filled out all my late QSLs
For a start.

He ran copper braid,
Took a steel rod and pounded
It into the earth, till
The station was grounded.

He tightened loose fittings,
Re-soldered connections,
Cranked down modulation,
Installed lightning protection.

He neutralized tubes
In my linear amp...

(Never worked right before --
Now it works like a champ).

A new, low-pass filter
Cleaned up the TV,
He corrected the settings
In my TNC.

He repaired the computer
That would not compute,
And he backed up
the hard drive
And got it to boot.

Then, he reached really deep
In the bag that he brought,
And he pulled out a big box,
"A new rig?" I thought!

"A new Kenwood? An Icom?
A Yaesu, for me?!"
(If he thought I'd been bad
it might be QRP!)

Yes! The Ultimate Station!
How could I deserve this?
Could it be all those hours
that I worked Public Service?

He hooked it all up
And in record time, quickly
Worked 100 countries,
All down on 160.

I should have been happy,
It was my call he sent,
But the cards and the postage
Will cost two month's rent!

He made final adjustments,
And left a card by the key:
"To Gary, from Santa Claus.
Seventy-Three."

Then he grabbed his HT,
Looked me straight in the eye,
Punched a code on the pad,
And was gone - no good bye.

I ran back to the station,
And the pile-up was big,
But a card from St. Nick
Would be worth my new rig.

Oh, too late, for his final
came over the air.
It was copied all over.
It was heard everywhere.

The Ham's Santa exclaimed
What a ham might expect,
"Merry Christmas to all,
And to all, good DX."

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CMARC Board Meeting

November 5, 2016

~ President Tom Rocheleau/WA8WPI called the meeting to order at 5:36 with the following Board members in attendance: Secretary Jane Hosford/KC8FSK, Treasurer John Doornhaag/KD8NNQ, Director Chris Ranes/NS8Q and Director Ted Sadilek/WA8MFQ. Vice-President Russ Fitzgerald/N8FZ and Under 22 Director Sam Fitzgerald/N8FPR were absent.

~ The Silent Auction that was held at the October went well, and we'll have to do it again.

NOVEMBER MEETING: Ted Sadilek/WA8MFQ is a docent at Potter Park Zoo, and he will be bringing animals for us to see.

~ At the November meeting we will be taking nominations for the 2017 Board. Four people are up for renomination: Tom Rocheleau/WA8WPI, Jane Hosford/KC8FSK, Chris Ranes/NS8Q and Ted Sadilek/WA8MFQ. The Under 22 position, Sam Fitzgerald/N8FPR, is only a one year term, so Sam/N8FPR would have to be re-elected to stay on as the Under 22 director. Jane Hosford/KC8FSK has decided not to be renominated.

~ You are allowed to nominate yourself if you wish.

~ To make a nomination or to be on the Board, you must be a full CMARC member.

~ A counting committee will be picked in November to count the ballots at the December meeting.

DECEMBER MEETING:

~ Larry Camp/WB8R will be here.

~ The 2017 Board will be elected.

~ We'll have our annual December potluck.

JANUARY MEETING: Tim Jurmo/AC8NI and Chris Striebel/KD8SLU will be here. They are both from SATERN (Salvation Army Team Emergency Radio Network).

UPCOMING EVENTS:

~ Field Day is June 24th and 25th,

~ Hamfest is July 29th.

~ Motion to adjourn made by John/KD8NNQ, seconded by Chris/NS8Q and approved.

~ Meeting adjourned at 6:48 pm.

Respectfully submitted,
Jane Hosford/KC8FSK-Secretary

General CMARC Meeting

November 11, 2016

~ President Tom/WA8WPI brought the meeting to order at 7:00 pm.

~ Board members present: Treasurer John Doornhaag/KD8NNQ, Secretary Jane Hosford/KC8FSK, and Director Chris Ranes/NS8Q. Director Ted Sadilek/WA8MFQ was here as part of the programs from Potter Park Zoo. Director Russ Fitzgerald/N8FZ and Under 22 Director Sam Fitzgerald/N8FPR were busy with the DeWitt football game.

SIGN-IN SHEETS: Please sign the sign-in sheets. There are two sign-in sheets: members and visitors.

~ We started the meeting by doing the Pledge of Allegiance. The flag was held by President Tom Rocheleau/WA8WPI.

~ A moment of silence for our silent keys. A special thank-you to our veterans. Thanks for your service.

ATTENDANCE: There were 28 people in attendance. Our visitors included: Bonnie Carter, Bob Frease from Potter Park Zoo, Bob Reynolds/WB8PPG and Miss Abigail Beuchert.

NEW LICENSES, UPGRADES, AND VANITY CALLS: None.

SILENT KEYS: Dennis Little/WD8RCF and Grace Agnes Campbell-grandmother of Clyde/K8CPT and Jeffery Tompkins.

CARDS AND FLOWERS REPORT: A card was sent to the family of Dennis Little/WD8RCF. A card was sent to Clyde/K8CPT and Jeffery Tompkins, and a \$40.00 donation was made to Eaton County Palliative Care in memory of Grace Agnes Campbell.

~ We received a thank-you from the family of Ruth Stortz who passed away on October 6, 2016. She was the wife of Richard Stortz/K8JNZ.

~ We received a thank-you from the Alzheimer's Association for the \$40.00 donation made in memory of Ruth Stortz.

PLEASE PAY YOUR DUES: NEW HAMS GET ONE YEAR FREE MEMBERSHIP

~ CMARC dues to John Doornhaag/KD8NNQ and LCDRA dues to Michael Boensch/WA8MKP.

OLD BUSINESS: A motion to accept the October secretary's report as printed in the November Scope was made by Jerry/KD8GLN, seconded by Mark/KD8YUY and approved.

~ A motion to accept the October treasurer's report as printed in the November Scope was made by Ben/WD8OVL seconded by Sharon/KD8HHK and approved.

INTERESTING DX/CONTACTS: John Winn/KE8CYC worked a special event station in Ironwood.

NEW BUSINESS:

CMARC DUES: Starting January 1, 2017, CMARC dues will be \$20.00.

~ If you pay your 2017 Club dues by December 31st, 2016, you will still be paying \$15.00.

BOARD MEETINGS: The Board has decided to hold their meetings the Saturday before the regular CMARC meeting at RAD'S/Denny's at 5:30. That way we have more time to discuss things without running into the time that the regular club meeting starts. So that means that the next Board meeting will be on Saturday, December 3rd, @ 5:30 at RAD'S/Denny's. Anyone is welcome to attend the Board meetings.

SALVATION ARMY BUILDING USE: Clyde/K8CPT is the liaison between CMARC and the Salvation Army. We might have to move our Club room, as usage is limited. Wednesday night after 8:30 pm and our Club meetings. Weekends are pretty much off limits; they need advanced notice. Might have to move to the Salvation Army on South Pennsylvania.

~ John/KE8CYC made a motion that the Board looks into getting a different place for our Club room. The motion was seconded by Clyde/K8CPT and approved.

~ It was suggested that everyone, not just the Board keep and eye and ear open for a different place for our Club room.

~ Clyde/K8CPT will be working with Tim Jurmo/AC8NI. He is a SATERN leader with the Salvation Army.

HAMFEST: Tickets will now be \$5.00.

CLUB SHIRTS: Kelly Fitzgerald/K9FTZ is collecting shirt orders and money tonight since Russ/N8FZ could not be here.

CANDY BARS: Bob/KB8DQQ is selling candy bars for a \$1.00 each. Profits from the sale of the candy bars are then donated to LCDRA (Lansing Civil Defense Repeater Association).

General CMARC Meeting

November 11, 2016

50/50: John/KE8CYC won \$5.50.

BREAK: Thank you to everyone who brings in food each month and thank you to everyone who helps in the kitchen each month. It is all very much appreciated.

DECEMBER MEETING: Our meeting will be on Friday, December 9, 2016.

~ Larry Camp/WB8R from the ARRL will be here to talk about an event taking place late in 2017 regarding the MIS (Michigan International Speedway).

~ We will also be voting for four people to fill the Board vacancies for 2017. Must be a full member to vote.

~ Our annual Christmas potluck will also be in December. You are welcome to bring a dish to pass. Gentle reminder: Please be responsible for your dishes, crock pots, leftovers, etc., that you bring. It might be a good idea to put your name/callsign on what you bring so you get it back. Thanks, everyone.

PROGRAM: Ted Sadilek/WA8MFQ, one of CMARC's directors, is a docent at Potter Park Zoo. He and Bob Frease brought animals from Potter Park for us to see tonight.

~ They brought four animals for us to see (and pet):

1. Tenrec from Madagascar
2. Blue-tongued lizard
3. Chilean rose haired tarantula
4. Rabbit

~ Thanks, Ted and Bob, we always enjoy seeing what you decide to bring us.

~ The Club took up a collection for Potter Park tonight of \$74.50. Thanks, everyone!

~ Also tonight we will be taking nominations for the 2017 Board. Four people are up for renomination: Tom Rocheleau/WA8WPI, Jane Hosford/KC8FSK, Chris Ranes/NS8Q and Ted Sadilek/WA8MFQ. The Under 22 position, Sam Fitzgerald/N8FPR, is only a one year term, so Sam/N8FPR would have to be re-elected to stay on as the Under 22 director. Jane Hosford/KC8FSK has decided not to be renominated.

~ Nominations are:

- Tom Rocheleau/WA8WPI
- Chris Ranes/NS8Q
- John Doornhaag/KD8NNQ nominated Clyde Tompkins/K8CPT
- Sharon Waite/KD8HHK nominated Ted Sadilek/WA8MFQ
- Clyde Tompkins/K8CPT nominated Kenny Hazlett/K8NNY

~ John/KE8CYC made a motion to close the nominations.

COUNTING COMMITTEE: Mark Carter/KD8YUY, Dan Beuchert/WX8MOJ, and Bob Strobel/KB8DQQ volunteered to be the counting committee. They will collect and count the ballots after the voting in December and let us know the top four people who will be added to the Board for 2017. They will not tell us the number of votes each person received, and then the ballots will be destroyed.

ABSENTEE VOTING: Absentee voting will be allowed up until midnight the day before the meeting. You may only vote once, either absentee or in person.

MOTION TO ADJOURN: Made by John/KE8CYC seconded by Leota/KD8SQD and approved.

~ With all business concluded, the meeting was adjourned at 8:50 pm.

Respectfully submitted,
Jane Hosford/KC8FSK-Secretary

CLASSIFIEDS

6 element 6-meter Yagi-Uda. This Yagi is being taken down from the W8SH tower. It is a "Force 12" yagi and has been up on the mast for 20 years. It is in working condition, although it could use a good cleanup.
\$75 or best offer.

J-37 Hand Key - \$20

J-38 Hand Key - \$20

Speed-X Hand Key - \$20

Contact: Gregg Mulder/WB8LZG
(517) 646-6257 after 5pm please.

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.

\$90 or Best Offer

Contact: Ed Ozer / W8EO:
eaoyer@gmail.com

Rope for sale - 2 cents/foot

Contact: Mark Carter / KD8YUY:
(517) 231-3108

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

Contact: Gregg Wesley / KD8PA:
(517) 614-6573

Impedence transformer for use in microphones.

Contact: Steve Lyon / W8RQS:
(517) 641-4543

ICOM IC-746 Transceiver - \$750

Comes with hand mic, DC power cord, instruction manual, and service manual.

ICOM SM-8 DESK MIC - \$100.00

Voice Synthesizer UT-102 - \$40.00

Package Deal - \$800

All working great and look nearly new. I have the original boxes for everything.

Contact: Jim Hein/K8UHF:
k8uhf@sbcglobal.net

(2) Tytera MD-380 DMR Handheld Radios - \$150 ea.

Contact: Jason McLaughlin/KC8RBK:
(517) 712-0478 or
kc8rrrbk@gmail.com

(2) Kenwood TMG-707 Mobile Rigs covering 2m/440 - \$175 each

Contact: Joe Urdzela/K8JJU:
JJUrdzela@gmail.com

(4) 1.2 meter Satellite Dishes - FREE

Contact: Brian Monaghan
Call 517-219-8183

NEW

NEW

NEW

NEW

NEW

If you have something to sell or if you are looking for something specific to buy, please send your requests to cmarscope@gmail.com. There is no charge to list a classified ad in our newsletter.

CMARC Puzzle Page

Samurai Sudoku

Here is another Samari Sudoku puzzle for this month. I hope you enjoyed working on last month's puzzle. I would like to hear some feedback from our readers if you would like to continue to see a puzzle in future issues.

One piece of advice when trying to solve this type of Sudoku. You can not solve it by trying to solve each of the five 3x3 grids individually, but by working all five grids together.

Samurai Sudoku puzzles consist of five overlapping grids. The standard sudoku rules apply to each 9x9 grid. Place digits from 1 to 9 in each empty cell. Every row, every column, and every 3x3 box should contain one of each digit. There is only one solution to the puzzle and all you need to use in pure Logic. Guesses are not required.

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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.

[illegible]

CMARC Officers and Appointees

President / Webmaster
Tom Rocheleau, WA8WPI

Vice President / Youth Liaison
Russ Fitzgerald, N8FZ

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Jane Hosford, KC8FSK
(517) 505-7610

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(517) 882-5406

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(517) 881-6093

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Chris Ranes, NS8Q
(517) 487-8376

Under 22 Director
Sam Fitzgerald, N8FRP

Club Contact
Don McLain, KB8RAD
(517) 701-9745

Club Historian
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Jim Hannahs, KC8OWH

QSL/Awards Manager
Don DeFeyer, KC8CY
(517) 641-4533

Photographer
Kenneth Hazlett, N8BVV
(517) 348-5513

Salvation Army Liaison
Clyde Tompkins, K8CPT
(517) 927-3801

Meetings
Held Monthly on the second
Friday of the month at:
Salvation Army-Capital Area,
701 W. Jolly Rd, Lansing
at 7:00 PM. Board Meeting
begins at 6:00 pm.

CMARC Calls: W8MAA & W8PLP

LCDRA Officers and Appointees

President
John Imeson, N8JI
(517) 449-1517

Vice President
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(517) 321-2004

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wd8bcs@arrl.net

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(517) 202-1779

Director
Don McLain, KB8RAD
(517) 701-9745

Director / Membership Chair
Michael Boensch, W8MKB

Repeater Trustee
Dennis Boone, KB8ZQZ

Meetings
Held Quarterly on the third
Thursday of the month at:
Fire Station #48,
Marshall St, Lansing
at 7:00 PM.

**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, N58Q, at cmarscope@gmail.com. **The deadline for each issue is midnight on the 20th of the preceding month.**



Show Your Support for Amateur Radio and Join CMARC & LCDRA Today!



JOIN TODAY!

Central Michigan Amateur Radio Club, Inc.

As a licensed Amateur, you can sign up today as a Full Member. As a Full Member of CMARC, you will receive voting rights and an annual subscription to 'The SCOPE'. This newsletter is filled with Club News, special interests and events.

Sign up today as an Associate Member and it includes an annual subscription to 'The SCOPE'. (no voting rights as an Associate Member)

New licensees are now eligible for a one FREE year membership at CMARC and Under 18 licensees are eligible for FREE membership!

Name		Call Sign
Address		City State
ZIP	Phone	Lic. Class
ARRL Member?	Birthday	Wedding Anniversary
Year 1st Licensed		Please supply email address for SCOPE mailing
<input type="checkbox"/> Full <input type="checkbox"/> Associate <input type="checkbox"/> New Licensee (1yr. free) <input type="checkbox"/> Under 18 (free)		
Full Membership \$15 per calendar year (must be a licensed amateur to obtain Full Membership) Associate Membership \$5 per calendar year		
Mail Your Check or Money Order to: John Doornhaag 1165 S Ainger Rd Charlotte, MI 48813-9540 (Checks made payable to CMARC)		

JOIN TODAY!

Lansing Civil Defense Repeater Association

As a licensed Amateur, you can sign up today for only \$15. As a member of LCDRA, you will receive an annual subscription to 'The SCOPE', as well as voting rights in the Association.

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.

Name		Call Sign
Address		City State
ZIP	Phone	Lic. Class
ARRL Member?	Birthday	Wedding Anniversary
Year 1st Licensed		Please supply email address for SCOPE mailing
LCDRA Membership is \$15 per calendar year (add a Family member for only \$7.50 per person, per year). LCDRA maintains our local repeaters and your support is appreciated. (Membership not required to use repeaters)		
Mail Your Check or Money Order to: Michael Boensch 1897 Sunnymede Ln Lansing, MI 48906 (Checks made payable to LCDRA)		



Central Michigan Amateur Radio Club
P.O. BOX 27321
Lansing, MI 48909-7321

Central Michigan Amateur Radio Club



THE SCOPE



Lansing Civil Defense Repeater Association

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