



# MCRC Spark Gap



The Longest ARRL  
Affiliated Club in Michigan  
**November 2020**  
Volume 68 Issue 11

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## On-Air Activities

### MCRC 2 Meter Net:

Join us every Tuesday night at 9PM for the Motor City Radio Club 2 Meter net on the 147.24 Wyandotte Repeater. 100 Hz tone. or use EchoLink WY8DOT-R.

### CW (QMN) Traffic Nets:

<u>Net Name</u>	<u>MHz</u>	<u>Days</u>	<u>Time</u>
Michigan Net	3563	Sun-Sat	18:30 hrs
Michigan Net	3563	Sun-Sat	22:00 hrs

### Digital Traffic Nets:

<u>Net Name</u>	<u>MHz</u>	<u>Days</u>	<u>Time/Mode</u>
Michigan Digital Traffic Net (MIDTN)	3583	Tue, Thurs, Sat.	20:00 hrs Olivia 8-500

### Southeast Michigan Traffic Net:

2215 hours each night on the Spirit of 76 repeater. 146.76 with a 100 Hz pl.

## General Membership Meeting Via Google Meet November 13th



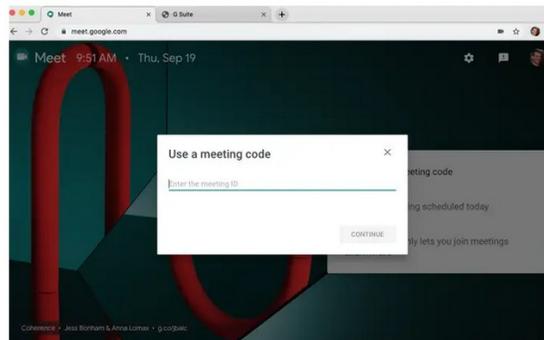
### What is Google Meet?

Google Meet is a video-chatting service which lets folks chat using video and text. Anyone with a standard Google account can join and participate in Google Meet meetings at no cost.



You join a Google Meet session by using a code that's created when the event organizer schedules the meeting. See link below.

On both the Meet mobile app and on a computer, simply pull up Google Meet and click or tap "Use a meeting code" (it may say "Enter a meeting code" on mobile). Once your code is in, provided the session has started, you'll enter the call and can join the meeting.



You'll be asked to enter a customized meeting code before you join. Steven John/Business Insider

*Just remember that you need to allow Google Meet to access your phone or your computer's camera and microphone when you set it up, or the program won't function properly.*

For more information on how to join the meeting, go to the club website <http://www.w8mrm.net> and click on Upcoming Events. The November meeting will be listed.

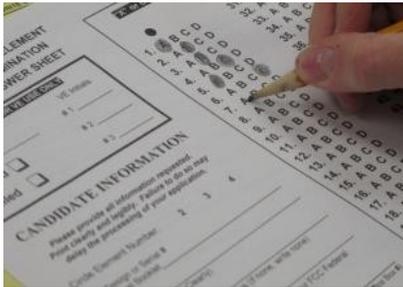
The meeting starts at 1900 hours (7pm) but the Google meeting room will be open fifteen minutes prior to the start of the meeting. Topics for the meeting will be posted soon. If you have other questions on how to use Google Meet, please reach out to one of the Board members.

Our next Ham Radio Test Session will be held at the First United Methodist Church, 72 Oak Street Wyandotte on Saturday, November 14th at 9AM. Due to the limit of 10 persons for indoor gatherings, no walk-ins will be allowed until the governor removes her restrictions. Those interested can register for the exam ahead of time on the Motor City Radio Club's website. Go to [w8mrm.net](http://w8mrm.net). On the main page, right under "Club News" is "Exam Schedule". Just click on the one you want!. On that page, you can register for the exam and also pay beforehand using PayPal. Credit Cards accepted online. Only cash will be accepted at the exam site.



Items to bring with you:

1. \$15.00 exam fee (Exact Amount Required, No change will be given.)
2. Number 2 Pencil and a Black Ink Pen
3. An original of your current FCC license (if you have one)
4. A copy of your current FCC license (if you have one)
5. Two pieces of Identification (at least one photo)
6. Your email receipt if you choose to pay online
7. Your FRN Number if you choose to pre-register



Please arrive at 9:00 am. Testing will begin after paperwork is completed and we should be finished by 11:00am.

Although not mandatory, we strongly recommend you pre-register for your FRN number at: <https://apps.fcc.gov/coresWeb/regEntityType.do> to avoid using your Social Security number on the NCVEC QUICK-FORM 605.

To find out how to obtain an official FCC license copy, click on the link below:

[Obtain License Copy 2015.pdf](#)

Contact: Woody Kirkman - VE Liaison  
Cell: 734-818-0484  
Email: [N8MWQ@arrl.net](mailto:N8MWQ@arrl.net)



### Tuesday Night Code Practice

Tune into the Wyandotte Repeater at 2045 hours to learn Morse Code. Every Tuesday night, 15 minutes before the Motor City Radio Club Two Meter net, Bob K8HV runs code practice. Many folks are saying this has been a great way to learn the code.



Another great link from DX Engineering's blog On All Bands



<https://www.onallbands.com/>

Learn the Basics about Operating Amateur Radio Satellites:

<https://www.onallbands.com/space-race-part-1-learn-the-basics-of-operating-amateur-radio-satellites/>

**The Wyandotte Amateur Radio Repeater Association** maintains the repeater on 147.240. This group is all volunteer, and maintenance of the machine depends on contributions from users like you. If you use the machine, consider donating to the repeater fund. It's easy to do, just fill out the form below, clip and mail this form and your donation to the address on the form.  
Or give this form and your donation to any MCRC board member.

<b>Wyandotte Amateur Radio Repeater Association</b>	
<b>1885 Pinetree</b>	
<b>Trenton, Michigan 48183</b>	
Name _____	Call _____
Address _____	
_____	
Email _____	
Donation Amount _____	

Checks and money orders can be made to the: **"WYANDOTTE AMATEUR RADIO REPEATER ASSOCIATION"**.

Another great season of fox hunting has come to an end for this year. Everyone that participated. You're never too old to play Hide and Go Seek.

## Hidden Transmitter "Fox" Hunt

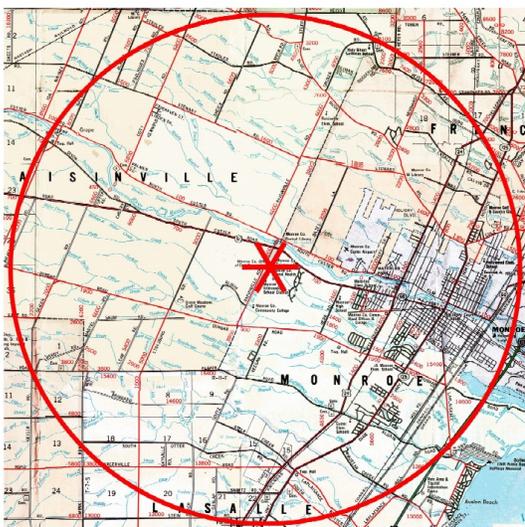
**Here's a list of this year's winners:**

- May 30th Bob K8HV and Larry KE8HCD for finding the first fox of the season.
- June 20th Woody N8MWQ and Linda.
- July 18th Bruce AC8KD, Rena KE8NKC and John KE8NKD.
- August 15th Bob K8HV and Larry KE8HCD.
- September 19th Woody N8MWQ, Linda and Amy.
- October 17th Bruce AC8KD was the winner for the last Motor City hunt of the year.



## Monroe Club Fox Hunt November 14th.

Fox Hunt Map 5 mile radius from the EMD



Still yearn for one more Fox Hunt this year? Well, you are in luck.

The Monroe Club is going to have a Fox Hunt on November 14th. This hunt starts earlier than the Motor City Hunt, and the circle to hunt within is only a 5 mile radius.

MCRC club members Bruce AC8KD, Woody N8MWQ, Mark W8MCW, Larry KE8HCD and Bob K8HV have participated in two Monroe hunts so far the year. Larry and Bob won the September hunt, and will be the foxes in November. How cool is that?

Meet in the parking lot of the Monroe County Emergency Management Offices at 987 S Raisinville Rd, Monroe, MI 48161. If you've been to the Monroe Swap, this is south of the fairgrounds. The time is 08:45. You will be given a pre-hunt brief (instructions and information specific to the hunt).

If you have any questions about the Monroe Hunt, give a shout out on the net to any of the MCRC club members listed above.

## Here is a list of the some of the VHF/UHF nets here in the Southeastern Michigan area

*courtesy of kb6nu.com:*

- Southeastern Michigan Traffic Net (Detroit): Daily at 10:15pm on 146.760- PL 100.0
- Utica Shelby Emergency Communications Association Information Net: Sundays at 1pm on 147.180+ PL 100.0
- University of Michigan Amateur Radio Club Net (Ann Arbor): Sundays at 8pm on 145.230- PL 100.0
- South Lyon Area Amateur Radio Club Net: Sundays at 8pm on 147.040+ PL 110.9
- Tin Lizzy Net (Dearborn): Sundays at 8pm on 145.270- PL 100.0
- Utica Shelby Emergency Communications Association Traders Net: Sundays at 8pm on 147.180+ PL 100.0
- Washtenaw County ARPSC Net (Ann Arbor): Sundays at 8:30pm on 145.150- PL 100.0
- Toledo Mobile Radio Association Information Net: Sundays at 8:30pm on 147.270+ PL 103.5 and 442.850+ PL 103.5
- Livingston Amateur Radio Klub Net (Howell): Sundays at 9pm on 146.680- PL 162.2
- Hazel Park Amateur Radio Club Net (Oak Park): Sundays at 9pm on 146.640- PL 100.0
- ARROW Communications Association Net (Ann Arbor): Mondays at 8pm on 146.960-
- Clarkston Repeater Association Net: Mondays at 8pm on 146.840- PL 100.0
- Monroe County ARPSC Net: Mondays at 8pm on 146.720- PL 100.0
- Chelsea Amateur Radio Club Net: Tuesdays at 8pm on 145.450- PL 100.0
- Motor City Radio Club Two Meter Net (Trenton): Tuesdays at 9pm on 147.240+ PL 100.0**
- Livonia Amateur Radio Club Net: Thursdays at 8pm on 145.350- PL 100.0
- Oakland County ARPSC Net (Pontiac): Thursdays at 8pm on 146.900- PL 100.0
- Macomb County ARPSC Net (Mt. Clemens): Thursdays at 8pm on 147.200+ PL 100.0
- L'Anse Creuse Amateur Radio Club Net (Sterling Heights): Thursdays at 8:30pm on 147.080+ PL 100.0
- Novi Amateur Radio Club Net: Thursdays at 9pm on 444.800+ PL 110.9
- Utica Shelby Emergency Communications Association Hoot Owl Net: Saturdays at 11pm on 147.180+ PL 100.0

*For a list of all repeaters in the southeastern Michigan area, check out the [W8SRC Repeater Guide](#).*

## **SP3RN** Saint Maximilian Kolbe Radio Net

at 3814 kcs Sundays at 2400Z  
and at 7195 kcs Thursdays at 1130Z  
and at 14,341 kcs Sundays at 2200Z

***Net Controls: K3QNT – Lloyd (primary),***

***W1JMJ – Ted (secondary), 40 & 75 meters,***

***WA5KBH – Deacon George, 20 meters.***



*SP3RN radio shack*

Dr. Ted Figlock – W1JMJ of Taunton, MA – and Lloyd  
Roach – K3QNT of Bedford, PA – founded the net in 1998  
to commemorate the life and martyrdom of Saint Maximilian Maria Kolbe – SP3RN.

– thanks to Larry KE8HCD for this information

## Greetings fellow Great Lakes Division hams

*A message from ARRL Great Lakes Division Director Dale Williams WA8EFK*

It is time to protest the imposition of fees for Amateur Radio Licensing.

The fees Notice of Proposed Rulemaking was published in the October 18th Federal Register (<https://tinyurl.com/yyk8f2yp>). The deadline for comments is November 16, and the Reply comment deadline is November 30.

With this in mind, I am extending the following suggestions you might consider using in writing to the FCC in response to the NPRM. Our thanks to Dave Siddall K3ZJ, ARRL Counsel, for these guidelines. Be sure to carefully review the paragraphs; "Some Suggestions" as the information therein will assist with much of the applicable background.

This subject is critical, the timing is critical. I urge you to contact the FCC. Address and related information is contained in the article referenced in the Federal Register. Please use your own words to express your objections to the proposed fees.

### **(Good) Arguments Against FCC Fees for Radio Amateurs**

Amateurs contribute to the public good. In many areas they provide an emergency communications backbone capability at no taxpayer cost.

Consistently we have witnessed storms and natural disasters completely wipe out internet, cellular, and other means of communication. Radio amateurs often fill that void on an unmatched, flexible basis when needed. One recent example is the California wildfires.

Unlike operators in other FCC licensed services, Amateur Radio operators by law – domestic and international -- must eschew using their license for any pecuniary interest. Amateurs are prohibited from earning or charging any money for any communications activity. The expenses for their equipment and activities come out of their own pockets, with no opportunity for reimbursement or payment of any kind.

The United States is experiencing a severe lack of RF engineers and expertise at the very time it is needed by the burgeoning wireless industries. Amateur radio is helping to meet the deficit, but much more is needed and youngsters (High School and College-aged) are least able to afford licensing fees. RF knowledge and related digital expertise is needed to maintain U.S. leadership in wireless industries.

At a minimum, young people (below the age of 26) should be exempt from the proposed license fees.

Amateur radio is self-regulating. (a) Amateur examinations are written and administered by radio amateur volunteers. (b) Examination results and paperwork most often are submitted electronically to the FCC.

Electronic submission could be required if there would be a cost savings to the Commission. (c) Amateur radio educational classes are conducted by volunteers who by-and-large do not charge fees or tuition for teaching. (d) The amateur service, in cooperation with the FCC's Enforcement Bureau, has a volunteer corps that monitors the amateur airwaves and has programs that try to prevent their misuse before FCC involvement might be needed. The amateurs also observe non-amateur signals both within amateur spectrum and outside it, and report unusual or suspicious signals.

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Amateur radio continues to be a source of significant technological innovation that should be encouraged, not discouraged.

## Some Suggestions

We do not recommend arguing that the \$50. fee every 10 years, which amounts to \$5.00 a year, will “kill” amateur radio, even though as proposed this is for each covered application, which includes upgrade applications. Tech-General-Extra could be \$150. If exams taken at different sessions, a substantial amount. But it “rings” the wrong way to say the whole service turns on \$5/year for each licensee. If that’s all it would take ....

The Commission argues that the charges are required by the statute. The word used is “shall”, which is mandatory, not optional. But the statute does not set the amount, nor does it prohibit reasonable exceptions – evidenced by the Commission’s proposal to exempt from fees administrative update applications based on policy grounds.

This is not “aimed at amateur radio to kill it.” There is a long history and precedent on charging fees for the licensing service involved, just as there is for passports, green cards, drivers' licenses (issued by states), etc. Better to make pertinent arguments on why the fees would impair the public benefits of the amateur radio service than argue that the whole service might die as a result of a fee that, in fact, is less than the fee many of us paid in the 1960’s and 1970’s.

For background: this proceeding is being handled by staff unfamiliar with amateur radio. It is being handled in the FCC’s Office of Managing Director (OMD), not in the Wireless Telecommunications Bureau where the amateur-specific Part 97 matters are handled. The focus of OMD is accounting – budgets and the like for the entire Commission.

The fee proposals cover every FCC license and service across the board and the consideration was directed by Congress. It is recommended keeping “ham jargon” out of comments, it won’t be understood by the intended recipients.

Thank you.

ARRL Great Lakes Division

Director: Dale R Williams, WA8EFK

[wa8efk@arrl.org](mailto:wa8efk@arrl.org)



Great Lakes Division



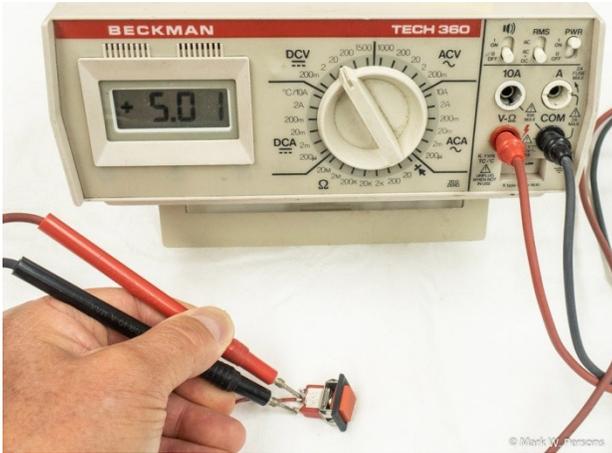
In amateur radio, **QRP operation** refers to transmitting at reduced power while attempting to maximize one's effective range. QRP operation is a specialized pursuit within the hobby. QRP operators generally limit their transmitted RF output power to 5 watts or less for CW operation and 10 watts or less for SSB operation. The practice of operating with low power was popularized as early as 1924, with a variety of reports, editorials and articles published in U.S. amateur radio magazines and journals that encouraged amateurs to lower power output, both for purposes of experimentation, and for improving operating conditions by reducing interference.

- text courtesy Wikipedia



## Making Sense of Component Level Troubleshooting by Mark Persons

Dig inside those devices and figure out what's going on to save time and money. It's important to learn and use component-level troubleshooting skills to diagnose and repair electronic problems, even in today's world.



The process involves digging into an electronic device, usually analog, to find and replace a failed component. Sometimes this means tuning and/or calibrating the equipment to manufacturer's specifications before returning it to service. This has been a part of broadcast engineering since the beginning, when every piece of gear was hand-crafted. (I described that in a story in November titled "[Yes, You Can Build Your Own.](#)")

*Fig. 1: Use a voltmeter to figure it out.*

New transmitter designs make troubleshooting easier, with displays and lights indicating which module has failed. But that only goes so far. What if the front-panel push-buttons fail to work? Do you assume the button is bad and should be replaced? You might find a new button won't get the transmitter up and running again. Imagine that — ordering and waiting for a replacement pushbutton switch to be delivered while a transmitter is off the air. That assumes a lot. Don't laugh — I've heard of it happening!

Test with a multimeter to see if normally open push-button switch contacts have voltage across them, which goes to zero when the button is depressed. You might even use a clip-lead jumper to see if the transmitter might be restarted without the switch ... assuming you can do it safely. First, read the schematic diagram to confirm the switch is normally open and determine what the expected voltage is across it. I know this sounds elementary to many broadcast engineers, but it illustrates how troubleshooting can be simple yet still solve a big problem.

Guessing is a bad troubleshooting technique. It's best to visualize what the circuit should be doing and determine likely reasons it is not performing as expected. Measure voltages to see what isn't working as designed. My self-education started by reading books that showed simple circuits with switches and lights, much as you'd find in a home electrical system. Learning progressed from there, one step at a time.

One standard troubleshooting procedure is called "divide and conquer." You use that now when a station goes off the air due to an STL failure. The equipment is in series, so it is relatively easy to diagnose where the audio stops. Analog audio consoles are similar in that the audio goes in and may stop along the way before it can come out. It's nothing difficult, just think it through. Old-time engineers often built equipment to solve problems around their stations. An example is a microphone cough switch. It might be as simple as a box that intercepts a microphone cable with a normally open pushbutton switch to short the two wires of microphone audio when depressed.

It's not magic, just common sense.

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## FAILED COMPONENTS

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Electronic components can look perfectly good on the outside and be bad on the inside.

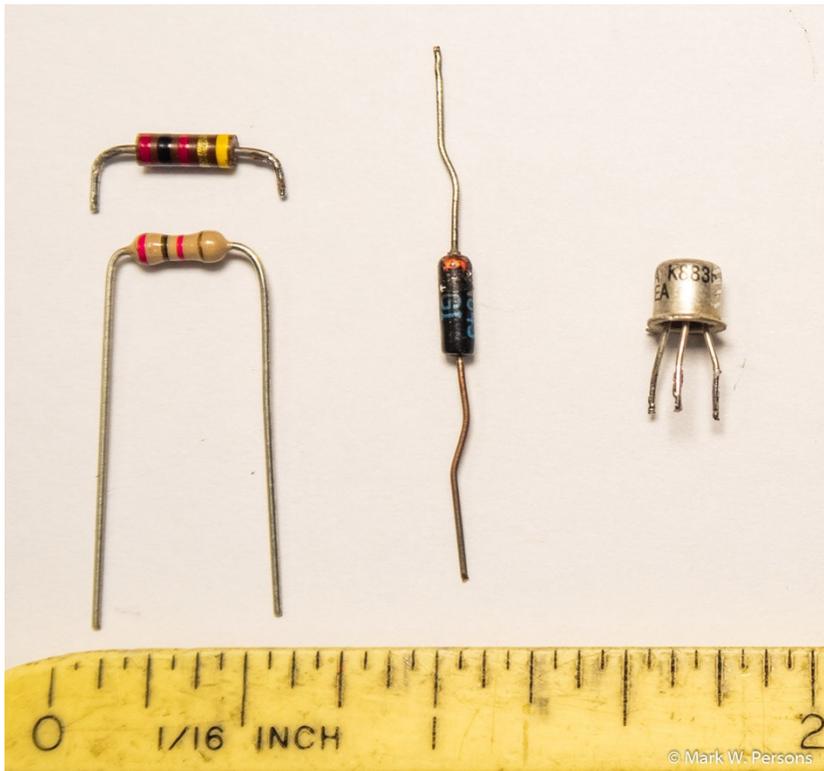


Fig. 2: Failed parts that look perfectly good on the outside.

Fig. 2 is a case in point. The part in the upper left of the photo is a carbon composition 2000 ohm resistor. It shows no sign of heating or cracking. I found this one in an FM exciter causing trouble. It measured in at about 20,000 ohms — some 10 times its rated value. The resistor below it is of a carbon film design, which made an excellent replacement. Carbon film resistors are much more reliable but have some inductance, which could be a problem in a very high frequency RF circuit.

The diode in the center of the photo came from a 1960s vintage Collins 5 kW AM transmitter. It's job was to steer DC logic to turn the transmitter on. The diode opened and disabled the start function. We normally think of diodes as failing shorted. Not in this case, it went open! Diodes are easy to check using the diode function on most multimeters. They should show about 0.6 volts drop in one direction and open in the other.

The transistor in the right side is a 2N2222A. I found this one going open in a Continental 802 series FM exciter. It is used in the RF mute circuit. Without it working properly, I couldn't get the exciter's RF to turn off. It took component level troubleshooting to find all three of these. Learning and using that skill is still important in today's plug'n'play throw-away world. What is the sense of trashing a \$5,000 FM exciter when a \$2 part might make it run again?

## ELECTROLYTIC CAPACITORS

When you find one aluminum electrolytic capacitor has failed, the best approach is to replace *all* electrolytic capacitors in that unit. It's called the "shotgun" method. I've done that many times while servicing equipment on the bench. The reasoning is that other electrolytic capacitors, of the same age, will fail soon too. I wasn't going to send a piece of equipment back into the field and then have an unhappy customer complain of yet another failure.

Electrolytic capacitors are something like batteries. They are charged with energy and then they release it, as planned in a circuit design. A good example is capacitors in a power supply. If they are preceded by a full-wave rectifier system, the capacitors will charge and then discharge at a 120 Hz rate to keep the DC level constant. They do this while circuits in the equipment are drawing current from them. That is a hard job and they get tired after 10 years or so of continuous use. They lose their capacity to do the work and are often referred to as "dried

- continued on page 9

out.” In an analog piece of gear, the first symptom is usually hum or no bass in the audio. As I said, save time and trouble by replacing them all. You’ll be glad you did.

Have spare capacitors on hand. In my business I stocked almost all values so they were available immediately when a piece of equipment came in for service. The downside is that the stock will go bad with time. It must be rotated to make sure all capacitors are fresh. The good side is that electrolytic capacitors are inexpensive. You might purchase a 470 mfd/50 VDC capacitor for just \$0.68 from Digi-Key or Mouser. I usually ordered at least 10 at a time.

Let me warn you that not all electrolytic capacitors are the same. They are rated for current handling, temperature and reliability. If you don’t feel comfortable making buying decisions, let a more experienced technician do the work. Or order directly from the manufacturer of the equipment you are repairing. They will know exactly what is needed, and will charge accordingly. Usually you won’t go wrong when replacing capacitors, but some circuits require capacitors that are heavy duty or have low ESR (Equivalent Series Resistance) found in tantalum or more exotic capacitors. You don’t want to mix those. You are safe when using a 50 volt capacitor in a lower voltage circuit where only say 25 volts will be across it. Don’t do it the other way around. Capacitor voltage ratings should not be exceeded.

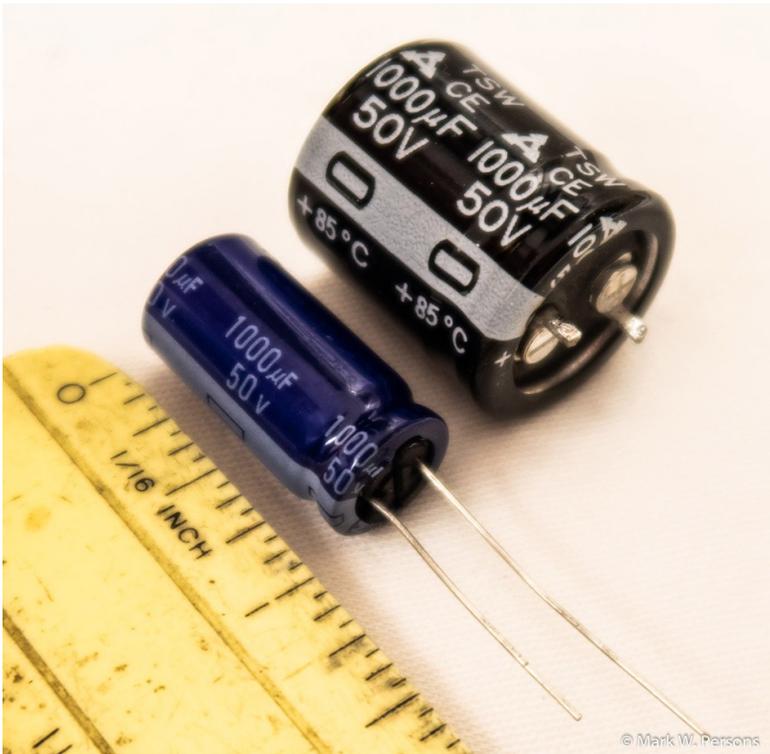


Fig. 3 shows 1-inch-long capacitors of the same electrical value. What is the difference — and isn’t cheaper better? Well, the larger one, 0.866 inch diameter, is used in a power supply where it needs to work hard to take pulsating DC and turn it into steady DC. The smaller one, 0.492 inch diameter, might just stabilize a circuit with little or no voltage ripple. Using the smaller one where the larger one belongs will likely work for only a while. You’ll probably be back working on the equipment less than a year down the road. Not a good choice!

*Fig. 3: Two capacitors of the same value for different jobs.*

Think the job through to save yourself time and trouble. It makes perfect sense..

*This is a reprint of the article which appeared in the online version of Radio World at: <https://www.radioworld.com/tech-and-gear/making-sense-of-component-level-troubleshooting> Comment on this or any article. Write to [radioworld@nbmedia.com](mailto:radioworld@nbmedia.com).*

*Mark Persons, WØMH, is an SBE Certified Professional Broadcast Engineer. He recently retired after more than 40 years in business. His website is [www.mwpersons.com](http://www.mwpersons.com)*



On November 10, 1975, the freighter SS Edmund Fitzgerald sank during a storm while en route from Superior, WI to Detroit, MI. 29 crew members were lost when the vessel went down in 530 feet of water 17 miles northwest of Whitefish Bay, near the twin cities of Sault Ste. Marie, MI, and Sault Ste. Marie, Ontario, Canada.



On the 2nd Weekend in November each year, the Livonia Amateur Radio Club operates Special Event Station W8F commemorating the sinking of the “Mighty Fitz”. This year’s event will take place on Saturday, November 14, 2020, at the Dossin Great Lakes Museum at 100 The Strand on Belle Isle in Detroit. Operations begin around 10:00 AM with equipment and antenna setup and end at 3:30 PM. Everyone interested is invited to come to the Dossin museum and take part in operating the special event station on the air.

**W8F SPECIAL EVENT STATION**  
 Commemorating the Forty-First Anniversary of the Loss of the SS Edmund Fitzgerald

The S.S. Edmund Fitzgerald, a 729-foot bulk carrier, was constructed by The Great Lakes Shipbuilding Union at the Blue Water yard located on the Detroit River. She sailed the Great Lakes 17 years later (1962) every day. The first voyage began in Superior, Wisconsin when the ship was loaded with 26,119 tons of iron ore pellets bound for a steel mill in Detroit, Michigan. On November 10, 1975, the "Fitz" encountered winds in excess of 50 knots and 33-foot plus waves on Lake Superior. Shortly after 7:10 pm she was lost with her entire crew of 29 men, just 17 miles from Whitefish Bay, Michigan.

Confirming Contact with:	Date:	Time:	Frequency:	Mode:	Report:

**Livonia Amateur Radio Club**  
Operating W8F November 14, 2020. QTH November 14, 2020 (Dossin Great Lakes Museum) on Belle Isle, Detroit, Michigan, MI.  
 The Edmund Fitzgerald's course would have taken it past the museum.

QSL certificates are available via Tas K8TAS. Those wanting certificates need to send a large SASE to K8TAS. 37255 Eureka Rd., Romulus, MI 48174.

QSL and general information is also available in QST, on the ARRL website (on the Special Event page), or on QRZ.

This year the event has been granted use of the W8F callsign for an extended period beginning at 0000 UTC November 2 (1900 EST November 5) and ending at 2359 UTC November 16 (1859 EST November 16)

## National Traffic System™ (NTS™)

During disasters or other emergencies, radiograms are used to communicate information critical to saving lives or property, or to inquire about the health or welfare of a disaster victim.



To get involved with NTS™, find your local NTS affiliate on the air: [ARRL Net Directory Search](#).

To learn more about the NTS National Traffic System, here is a link to a YouTube video. This great video provides an introduction to the system, how traffic is moved, and how you can join in traffic handling:

<https://www.youtube.com/watch?v=LCMDJ5Xca0Q>

# Annual Dinner 2021



The 2021 MCRC dinner will be held February 13th at CW

Sportsmen's Grill on Sibley in Riverview. Arriving at 6:00pm,

and serving dinner at 6:30pm.

The price will be \$26.00 per person, which includes the gratuity. Registration and dinner selections are available now on the club website at <http://www.w8mrm.net/event-4006132/Registration>

Menu choices Please check one on the below form for each Person:

New York Strip Steak

Las Vegas Chicken

Perch & Shrimp Combo

Shrimp Scampi

Chicken Parmesan



As expected, baked potato, vegetable, salad, garlic bread, water, soft drink, Iced tea and coffee refills are included for each dinner reservation.



**Registration for the February 2021 Club Dinner**

1st name \_\_\_\_\_ Call \_\_\_\_\_

2nd name \_\_\_\_\_ Call \_\_\_\_\_

*Please circle each item and place a #1 or a #2 by it:*

	New York Strip Steak	
Cost is	Las Vegas Chicken	Reservations due
\$26.00 each	Perch & Shrimp Combo	January 24th
	Shrimp Scampi	
	Chicken Parmesan	

Register online, or at the December or January meeting.  
As expected, baked potato, vegetable, salad, garlic bread, water, soft drinks, ice tea and coffee are included with your dinner.

Adult Beverages available through the wait staff only

**Above form and your money can be sent to the club mailbox (see last page of Spark Gap for address). You can also register and pay via PayPal on the club website. Go to Upcoming Events, go to February 2021 events, and click on "2021 Annual Dinner"**





AmazonSmile is a simple and automatic way for you to support the Motor City Radio Club every time you shop, at no cost to you. And Amazon Smile works with Prime just the same as it does on regular Amazon. When you shop at [smile.amazon.com](https://smile.amazon.com), you'll find the exact same low prices, vast selection and convenient shopping experience as Amazon.com, with the added bonus that Amazon will donate a portion of the purchase price to the Motor City Radio Club

On your first visit to AmazonSmile [smile.amazon.com](https://smile.amazon.com), you can select the MCRC to receive donations from eligible purchases before you begin shopping. Amazon will remember your selection, and then every eligible purchase you make at [smile.amazon.com](https://smile.amazon.com) will result in a donation to the club.

The AmazonSmile Foundation will donate 0.5% of the purchase price from your eligible AmazonSmile purchases to the Motor City Radio Club. The club is happy to report that we have already had money donated to the club due to purchases made on Amazon.

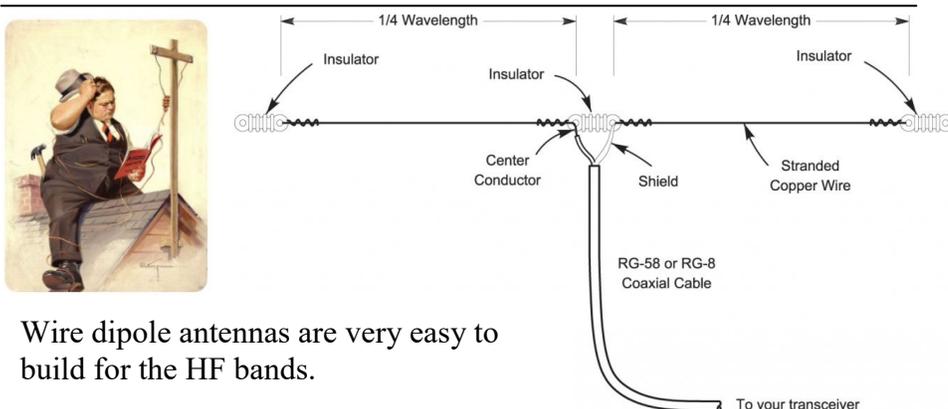
## MOTOR CITY RADIO CLUB TWO METER NET

Every Tuesday night at 2100 hours is the Motor City Radio Club Two Meter Net. Mark your calendar to check in each week.

Net control is John N8KAM.

The net starts with announcements, then check in's are taken. Everyone has a good time, and the net is a great place to hear of any cancellations or postponements of club events due to the governor's mandates.

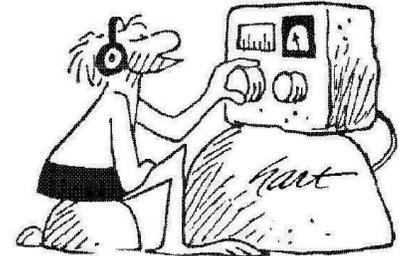
Listen on the Wyandotte Repeater. 147.240 with a 100 Hz pl tone.



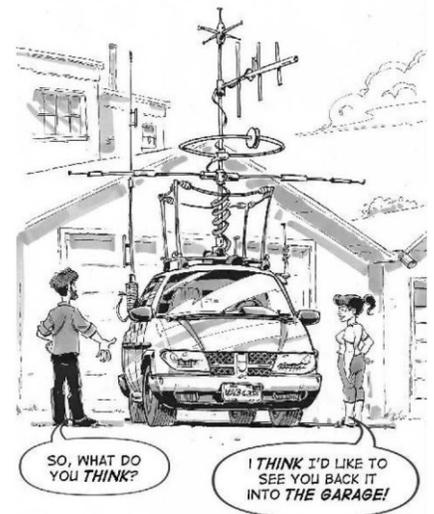
Wire dipole antennas are very easy to build for the HF bands.

- dipole diagram courtesy arrl.com

The "grey line" is a band around the Earth that separates daylight from darkness. Propagation along the grey line is very efficient. One major reason for this is that the D layer, which absorbs HF signals, disappears rapidly on the sunset side of the grey line, and it has not yet built upon the sunrise side. Ham radio operators and shortwave listeners can optimize long distance communications to various areas of the world by monitoring this band as it moves around the globe.



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Some of our club members "ragchew" on 28.330 USB throughout the day. Give a listen if you get a chance. Interesting QSO's, and sometimes the band opens for some nice DX.



November Sweepstakes is this month. A great opportunity for ham radio operators in the United States and Canada (including territories and possessions) to exchange QSO information with as many other US and Canadian stations as possible on 160, 80, 40, 20, 15 and 10 meter bands.

**Dates:**

**CW:** First full weekend in November (November 7-9, 2020).

**Phone:** Third full weekend in November (November 21-23, 2020).

**Contest Period:** Begins 2100 UTC Saturday and runs through 0259 UTC Monday.

**2020 Update:**

There are now a total of 84 ARRL/RAC sections, as RAC has separated Prince Edward Island (PE) from the Maritime (MAR) Section. Make sure your contest logging software and "country" (CTY) files have been updated so that those abbreviations are recognized and credited properly.

In addition, effective April 1, 2020, RAC has realigned the Ontario South (ONS) and Greater Toronto area (GTA) sections- with the City of Hamilton and the Regional Municipality of Niagara moving from ONS to GTA.

Visit [contests.arrl.org/contestmultipliers.php](http://contests.arrl.org/contestmultipliers.php) for a complete list of contest multipliers and their abbreviations.

Contest rules are now maintained as a single downloadable document (see below).

For contest information contact [contests@arrl.org](mailto:contests@arrl.org) or (860) 594-0232

For complete contest rules, visit <http://www.arrl.org/sweepstakes>

This year, the club will be awarding a prize to the station with the most points for November Sweepstakes. You may submit your points for code **or** phone, whichever is higher. Prize will **not** be awarded for combined total points for both code and phone. Monitor the Tuesday Night Two meter net for more info.



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## Coming Events

**November 7th CW Sweepstakes.** See page 13 of this month's Spark Gap for more details.

**November 13th. General Membership meeting** will be a virtual meeting using Google Meet. For more information on how to use Google Meet, see page one of this month's Spark Gap.

**November 14th VE Exam** at 0900 hours. First United Methodist Church, 72 Oak St, Wyandotte, MI 48192. See page 2 for more details

**November 21st Phone Sweepstakes.** See page 13 of this month's Spark Gap for more details.

**The following events will probably be cancelled or done virtual.** Please listen to the Tuesday night net (see page 12 for more details on the net), and visit the club website <http://www.w8mrm.net/> to keep updated on where and when (and if) events will be held:

**November 19th Board Meeting** at 1930 hours. Leo's Coney Island, 19230 Fort St, Riverview MI.

**November 21st Club breakfast** at 0900 hours. Leo's Coney Island, 19230 Fort St, Riverview MI.

**December 11th General Membership Meeting** at 1900 hours. General Membership meeting and Christmas Celebration. Copeland Center 2306 4th Street Wyandotte 48192.