



FIRESIDE CHAT

The Fireside Chat is held on the first and third Tuesday of the month. This month it is on Tuesday September 7th and Tuesday September 21st at 7:00 p.m. It will be a Webex virtual meeting at:

<https://richardlroberts.my.webex.com/meet/rlrobert>

The format is open and will be without an agenda or focus. It will be a great opportunity for both new and experienced hams to ask questions and share experiences. Please join us!

SEMARC BOARD MEETING

Our next meeting for the board is September 14th. We plan to have a virtual meeting. Joe Hibberd will send out an email to all members the day before with instructions on how to join in on the meeting.

REGULAR MEMBER MEETING

Our next regular member meeting is September 28th. No program has been planned at this time.

NOTE FROM THE PREZ, RYC KDØZWM

It's been a great summer as far as activities and now we're back to our in-person meetings. More events are still planned and we look forward to more of our members becoming involved. We have been granted storage space in the Old Cottage Grove Fire Department and able to use the station much more. This is a great opportunity for us! I want to thank all of you that have made this possible! If you ideas for more events or even club projects please pass them on. Thank you for your continued support and involvement over a very trying year.

Ryc Lyden, KDØZWM

Starting in August membership meetings started in person again at our regular meeting location in **Cottage Grove** at the

Zion Lutheran Church 8500 Hillside Trail South

We meet on the LAST Tuesday of the month at 7:00 p.m.

New members, especially those who passed one of our VE exam sessions, are encouraged to attend so that we can meet you in person.

We hope to see you there.

(As is our tradition anyone with a birthday in the meeting month is asked to bring cookies or other snack to share.)

August Meeting Presentation - The German Enigma machine

During WWII the use of HF communications played a major role for both sides -- both on the battle field, and between the fighting forces and the higher command. Communication security was a major issue and the German forces used the Enigma cipher machine for the encryption of it's messages.

This presentation will provide an overview of the German Enigma machine including it's design and practical use. The presentation proceeds with a demonstration of the Enigma-E, which is a fully functional electronic version of the original Enigma Machine. We end with an exploration of the British Enigma code breaking operations.

John, KØJDD

NOTICE:

146.985 repeater is out of service for repair and users should switch to the 147.18 South with 74.4 tone or 147.18 north with 100 tone till further notice. Our Wednesday will be held there.

Dick, NØUC

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MEMBER MEETING PROGRAM SURVEY

The Board is always looking for program ideas for the member meetings. What would you like to see for programs this year? Please send your ideas to Dick Roberts n0uc@comcast.net and he will bring your ideas to the Board meeting.

ARES REPORT

Just a reminder that our ARES repeater frequencies are 147.180, PL 74.4 in Newport, or PL 100 in Forest Lake.

INFORMAL CW ROUND-TABLE NET

Every Wednesday evening at 1900 hours on 28.110 MHz

WEDNESDAY NIGHT 2M NET

Our club holds a 2-meter net every Wednesday at 8:00 p.m. It is an informal, but controlled, net on the 146.985 repeater. We are in the need for several alternate Net Control Stations who can fill in when one of the scheduled NCS is not available.

If you are interested, please contact:

Dick Roberts at
n0uc@comcast.net

THE DIGITAL CORNER

Digital Net follows SEMARC net on Wed pm.

Go to www.w1hjk.com for software & help.

Fldigi v. 3.23.09 Flmsg v. 2.0.17
Flamp v. 2.1.03 Flwrap v. 1.3.4

Meet on 146.985 and QSY to 144.950.

Mode is BPSK125. Other modes possible.

Sign up with NØUC
n0uc@comcast.net for net bulletins & help.

SEMARC will be holding their second **Parks On The Air** field event Saturday, September 11th at Jaycee Park in Hastings.

<https://tinyurl.com/ynt4m2hp>



Radio from K-2466

Team lead, Dave, KE0HAL, chose the only stretch of dry weather in several days to coordinate a Parks-on-the-air (POTA) activation from Afton State Park, designation K-2446. Set-up included the opportunity to work the WOCGM call on SSB, FT-8 and CW. All told, seventy contacts made it to the log, well in excess of the requirement to successfully activate the park consistent with POTA rules.

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Photos on page 7

August VE Session Report

I was not there however, the VE session was ably handled by Joe Hibberd, Roger and VE Team 2. Thank you!

There were 5 candidates, 4 new Technicians and 1 upgrade to General.
Congrats to the Candidates!

As always, Test sessions are the 3rd Saturday of the Month at Zion Lutheran church beginning at 9:00am. The next session will be September 18th. Any Questions call the club hot line at 651-769-0358 or email

wd0gup@hotmail.com.

VE News, we will be normalizing VE operations as it relates to COVID. For the time being I will still preregister candidates and VE's. That means no walk-ins but we also will not have head count restrictions. I also have incorporated a self-survey and ask anyone that answers yes to any of the questions to call me.

Thanks to all VE's that helped us get through this tough COVID time.

Thanks,
Dan Franz, WDØGUP

Planning Calendar

September 14th (T) Board Meeting
September 18th (S) VE Session & B'fast
September 28th (T) Club Meeting

October 12th (T) Board Meeting
October 16th (S) VE Session & B'fast
October 26th (T) Club Meeting

SEMARC VE Sessions

VE exam sessions are held every 3rd Saturday. The next VE session is on September 18th. Exams are held at 9:00 am at Zion Lutheran Church. Call 651-769-0358 for information, to register or to arrange for special needs. Information is posted on the webpages also. No testing in December.

FCC Application Fees Unlikely to Go into Effect Until 2022

The previously announced schedule of FCC amateur radio application fees likely will not go into effect before 2022. FCC staff confirmed during a recent virtual meeting with Volunteer Examiner Coordinators (VECs) that the agency is still working on the necessary changes to the Universal Licensing System (ULS) software and other processes and procedures that must be in place before it starts collecting fees from amateur applicants. Earlier this year, the FCC said it would not start collecting fees from amateur applicants before this summer. The new estimate is that the fees won't go into effect until early next year.

Once it's effective, a \$35 application fee will apply to new, modification (upgrade and sequential call sign change), renewal, and vanity call sign applications. All fees will be per application. Administrative update applications, such as those to change a licensee's name, mailing, or email address, will be exempt from fees. ARRL VEC Manager Maria Somma, AB1FM, said Volunteer Examiner (VE) teams will not face the burden of collecting the \$35 fee.



"Once the FCC application fee takes effect, new and upgrade applicants will pay the exam session fee to the VE team as usual, but they'll pay the \$35 application fee directly to the FCC using the [FCC Pay Fees](#) system," she explained. When the FCC receives the examination information from the VEC, it will email a link with payment instructions to each successful candidate, who then will have 10 days from the date of the email to pay.

After the fee is paid and the FCC has processed an application, examinees will receive a second email from the FCC with a link to their official license. The link will be good for 30 days. Licensees also will be able to view, download, and print official license copies by logging into their FCC ULS account. The FCC no longer provides printed licenses.

Licensees can log into the [ULS](#) with their 10-digit FRN (FCC Registration Number) and password at any time to view and manage their license and application, [print their license](#), and update anything in their FCC license record, including adding an email address.

Welcome to the Washington County ARES website (ARES Unit 163MN01).... Face - to -face ARES activities are in suspension until further notice due to Covid-19....We are entering the TORNADO season; Have your personal home plan ready. The three WORST MONTHS for tornadoes in Minnesota are May (15%), June (37%) and July (25%) according to MN DNR (More Info under News tab).....Check the two ARES Digital Nets in Minnesota and participate; Info under the [Events tab](#) gives details.....60 Meter Interoperability exercises scheduled = see events tab and participate with us!!....The 147.180 Repeater is running at the Newport site (PL 74.4) and Forest Lake site(PL 100); we use this repeater for drills and activations. This covers the entire county and is in our WashCoARES Emergency Communications Plan... Support our Amateur Radio Clubs through your participation.

John Regan, KAØYHR

Stillwater Amateur Radio Club

SARA has graciously welcomed SEMARC members to attend their events, and more...

[Radios in the Park 2021](#) - 09/02/2021 - 5:30 pm - 8:00 pm

[Radios in the Park 2021](#) - 09/23/2021 - 5:30 pm - 8:00 pm

[Round Robin Ragchew on the SARA repeater](#)

147.060 - info to access the repeater is here [WØJH Repeater](#)

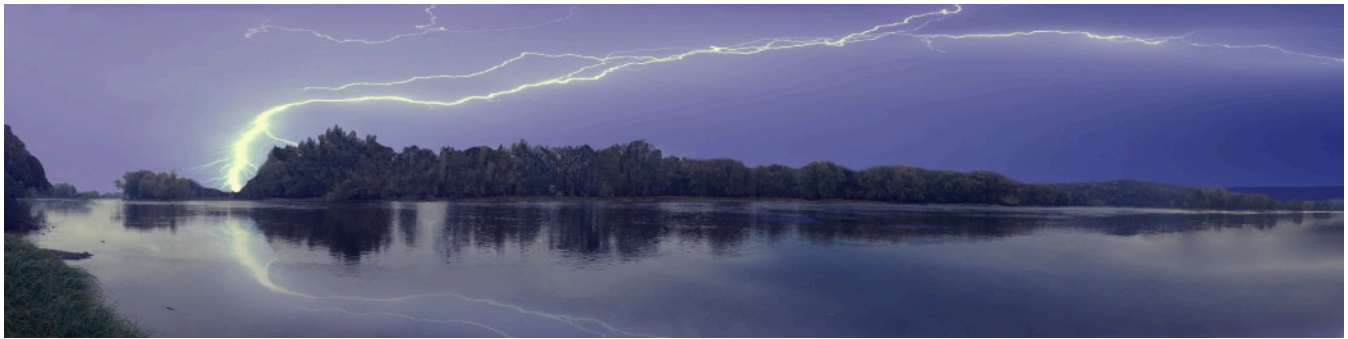
Tuesday's - 7:00 pm - 8:00 pm Wednesdays - 9:00 pm - 9:30 pm

[Social/Special Meetings](#)

Thursday Evenings: Social and informal "Eyeball QSO" sessions from 6PM to 8PM

South East Metro Amateur Radio Club

Dick Roberts, NØUC
1655 - 68th Street West
Inver Grove Heights, MN 55077-2222
651-208-0889



Once in awhile something sparks (pun intended) me to explore details of things I am aware of but not entirely sure of. And so (briefly)...

According to this article I stumbled upon in the Smithsonian magazine from July 1, 2020 there was a lightning strike in Brazil in 2018 that stretched 440 miles long! As far as I know it still holds the record for the longest recorded strike.

<https://www.smithsonianmag.com/smart-news/record-breaking-lightning-bolts-spark-excitement-180975223/>

This map gives some perspective on the distance that would cover. The *radius* of 440 miles shown here is centered on the SEMARC club meeting site. Amazing! Imagine, a strike originating in Kansas City could wipe out your station, in seconds. Think about that. Now - storms in this part of the US are usually not nearly that strong, but it does give one pause.

I personally knew lightning could extend 10, 20 or more miles but had *no* idea it could travel *that* far.

The longest recorded distance for a single lightning flash previously was 199.5 miles on June 20, 2007 across the state of Oklahoma. (Closer to home than Brazil)



The longest duration of a flash was in Argentina in 2019 lasting 16.73 seconds.

<https://public.wmo.int/en/media/press-release/wmo-certifies-megaflash-lightning-extremes>

Some interesting facts about lightning:

Strike average duration is 0.2 seconds (compare that to Argentina above)

Lightning can have 100 million to 1 billion volts, and contains billions of watts. In only a few millionths of a second!

Lightning can heat the air to 18,000° Fahrenheit to up to 60,000° Fahrenheit. The surface of the sun by comparison is about 10,000° F

Does lightning strike from the sky down, or the ground up?

Answer is - both

On average 20,000,000 lightning strikes hit the lower 48 states every year

Lightning can occur from forest fire smoke which creates pyrocumulonimbus clouds

Lightning can also form in snowstorms. Then it is called thundersnow

<https://www.nssl.noaa.gov/education/svrwx101/lightning/faq/>

https://en.wikipedia.org/wiki/Lightning_strike

What are your thoughts - when do you really need to disconnect antennas?

Roger, AEØTE

Cont. from page 2 - Radio from K-2466

As with many SEMARC activities, more hands made for lighter work. Antennas included a 20–40-meter dipole, a 40-10 vertical and a screwdriver antenna atop NOUC's truck. All battery power, so it made for a quiet outing in the park. We were glad to have several visitors to the site and a chance to explain amateur radio and its many facets.

With the exception of the FT8 operation, individual ops were paired with a logger, making QSOs more enjoyable. Of course, the usual banter among the group kept everyone in good humor, too. The group used the N3FJP logging program, as we have done with Field Day and Winter Field Day in the past. Chuck, KFOGFK took a number of pictures and the link to them is:

Thanks to Dave, KE0HAL; Dave, KD0IRF; Chuck, KFOGFK; Dick, NOUC; Roger, AE0TE; and Brian, NOBM for the activation and getting the W0CGM call on the air.

ARRL Volunteer Monitor (VM) Program

New hams may not know about this program. It is an agreement between ARRL and the FCC for enforcement of misconduct and also show appreciation for commendable operation.

More information and an example of a report are in the links below.

<https://www.arrl.org/volunteer-monitor-program>

<http://www.arrl.org/news/view/july-volunteer-monitor-program-report-released>

REMEMBER

Members can advertise items for sale AND items you are looking for.

The fee for placing ads is a membership in the SEMARC club, a small price to pay for access to all the club benefits and the many club members and their friends in other clubs that may be looking for just what you have to offer.

Also we can use articles in any aspect of Ham Radio that is of interest to you that may benefit the rest of us.

For example, EME. I would love to try my hand at it but have neither the money nor access to sky to make it possible. And yes, portable for sky access would be possible, but the funds still hinder my desire.

But, this is a prime example of where someone could share their experiences and insights on having fun doing various unique aspects of the hobby.

Rambling over...

Hello my fellow Hams

It has become necessary for me to down size. Please forward to any one you think might be interested.

For Sale a Butternut HF2V (160-80-40) Vertical Antenna with 160 meter Addition.

This includes original documentation, and in addition, other helpful documents applicable to the antenna.

New this antenna was \$280. **NOW!** new from DX Engineering the Butternut HF2V is \$453.99; and **NO** 160 meter options!

I am asking \$100 for this complete 3 band vertical Antenna, when assembled it is 32 feet in length, including an optional mounting post (6"x6") you remove and wire for elevated radicals. Cash only you pickup.

I have various length of RG-8/U coax at very low price. New this coax is over a \$1.00 per foot.

Contact: Fred at kd0co@embarqmail.com

KENWOOD 570D G PLUS FILTERS FOR SALE

Very lightly used and well cared for rig, including factory mike, manual, power cord, extra fuse, and two highly sought after International Radio Corp. crystal filters (never used and still in the boxes).

Purchased from another SEMARC member 4 years ago who seldom used this radio.

\$500 including the extra filters. Rig only \$350. INRAD Filters only \$150 for both.

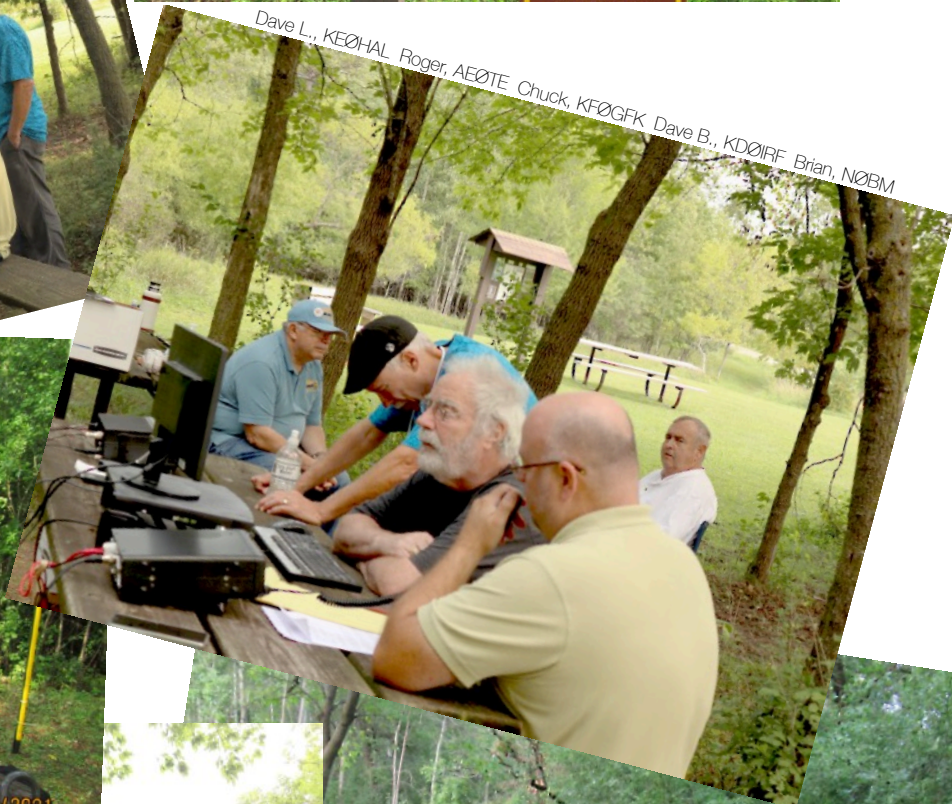
Dave Larson daveanddanita@usfamily.net



Thanks to Chuck KF0GFK & Roger AE0TE for photos



Dave L., KE0HAL
Dick N0UC
Brian, N0BM
Chuck, KF0GFK
Dave B., KD0IRF
Roger, AE0TE



Dave L., KE0HAL Roger, AE0TE Chuck, KF0GFK Dave B., KD0IRF Brian, N0BM





DICK, NØUC

Dave L., KEØHAL Brian, NØBM Dave B., KDØIRF Roger, AEØTE DICK, NØUC