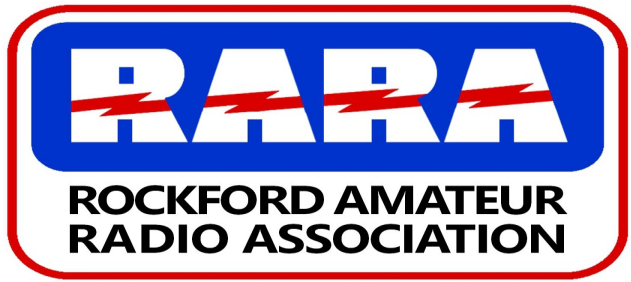


HAMRAG

Visit our website for more club and area ham information at <http://w9axd.org>, or join us on Facebook at this [LINK](#)



RARA Mission Statement

A member association with common interest of public service to the community through the use of amateur radio.

October 2023

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Presidents Message

Hello Everyone,

At our October meeting we will be having a presentation on "The Rock and the Water". If you think you've seen some strange things in ham radio, then be sure to come to our meeting and see what this is all about.

We will also be discussing the upcoming JOTA (Jamboree on the Air) event that RARA will be participating in. JOTA is held every year and allows the Boy Scouts to communicate with other scout troops on the air via ham radio. **We need ham radio operators to act as control operators at the various stations that will be set up.** This is going to be held on Saturday, October 21st, from 8:00am until 5:00pm, at the Camp Winnebago facility. (same place as we did Field Day this year)

Bring your ideas and thoughts to the meeting about planning for next year, so we can plan accordingly to make ham radio fun for everyone.

I have listed below a link (or click on the picture) about the Solar Eclipse which will occur on October 14th, and how it relates to ham radio.

Here's the link: <https://www.youtube.com/watch?v=3R2BdQLMRm4>

Please join us at our meeting on Friday at 7:00pm. I hope to see everyone there.

73,
Kurt Eversole - KE9N

NEXT MEETING

FRIDAY
October 13, 2023
7:00pm

"The Rock and the Water"

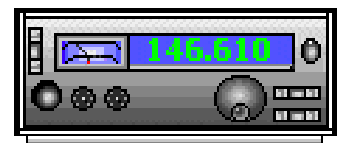
Located in the Foundation Room

Location:
OSF St. Anthony Medical Center
5666 East State Street
Rockford, IL 61108

HAM RADIO Q&A

OCTOBER 14, 2023:

HAM RADIO SOLAR ECLIPSE



Local Events and Information

UPCOMING EVENTS

October 13, 2023 RARA Membership Meeting 7:00pm at OSF

October 21, 2023 JOTA Event at Camp Winnebago from 8:00am - 5:00pm

October 25, 2023 RARA Board Meeting 7:00pm on Google Meet

November 10, 2023 RARA Membership Meeting 7:00pm

November 22, 2023 RARA Board Meeting 7:00pm on Google Meet

2023 RARA Officers and Board

Officers:

President - Kurt Eversole, KE9N, 815-389-2784, kurt.eversole@gmail.com

Vice President - Tom Shouler, N9VJU, 815-633-0089, n9vju@comcast.net

Secretary - Larry McFall, KD9HKX, 815-900-1820, lpmcfall@charter.net

Treasurer - Gordon Seaman, KC9NEX, 815-262-0294, kc9nex@gmail.com

Directors:

Kevin Puckett, N9EGF, 815-218-1551, krpuckett@gmail.com

Ron Callahan, N2RON, 608-289-0198, ron.n2ron@gmail.com

Larry Lisle, K9KZT, 815-397-9595, l.lisle@usa.net

Repeater License Trustee - Gordon Seaman, KC9NEX, 815-262-0294, kc9nex@gmail.com

Hamrag Editor/Repeater Chairman - Kurt Eversole, KE9N, 815-389-2784, kurt.eversole@gmail.com

Webmaster - Position Open

Local Net Information

Mon - 7:00pm - RARA Info. Net & CW Lesson, 146.610 (-) offset, pl 114.8
8:00pm - McHenry Cnty. RACES Net, 146.835 (-) offset, pl 91.5

Tues - 7:00pm - Health & Tech Net & CW Lesson , 146.610 (-) offset, pl 114.8
7:00pm - Rock County Public Service Net, 145.450 (-) offset, pl 123.0

Wed - 7:00pm - Stephenson Cnty. ARES Net, 147.390(+) offset, pl 114.8
7:30pm - Greater Beloit Radio Net, 147.120 (+) offset, pl 123.0

Thurs - 7:00pm - Northern Illinois Skywarn Training Net, 147.195 (+) offset,
pl 114.8, with the Health & Tech Net & CW Lesson following.

Fri - 8:00pm - Friday Night Fun Net, KC9GCR, 146.610 (-) offset, pl 114.8

Sat - 8:00pm - Saturday Ragchew Net, 146.610 (-) offset, pl 114.8
9:00pm - Saturday Night Fun Net Milw., 146.910 (-) offset, pl 127.3

Mon. thru Friday - 8:00am to 9:00am - Senile Net, 14.287 (HF USB)

SAFETY FIRST!

OK, I consider myself to be a fairly safe guy. I don't walk around on the roof, and generally stay off ladders. I try not to poke around in power supplies that might have charged up caps. I always turn the power off when working on a radio or transmitter. Well almost always, after all, you do have to check some things out when they are powered. I had to give up the ladder because it makes my wife nervous and apparently she shared that information with the neighbor because the last time I tried it he came running over and wanted to know what I was doing up on that ladder. So I finally gave that up.

It's something about my age that apparently bothers everybody. It actually started out somewhere in my seventies, but now that I'm an octogenarian it seems to drive everyone mad when they see me on a ladder or not walking down the stairs with a tight grip on the railing. The state has now got in on the act. They now demand that I take a drivers test every 4 years and then once a year after 85. I call that age discrimination, but you can't fight it. Ok, I guess I just have to live with it. But then something happened this past weekend while we were in California that did shake me up a little.

My stepson Jon has been after us to come out for the annual Huntington Beach Air Show, and we decided to make the trip this year. We arrived on Friday and were early enough to watch some of the practice. WOW! They can get those jets to do some amazing things, and the power of those engines just makes your whole body vibrate, plus they were setting off a whole bunch of car alarms every time they made a power pass. Then Saturday we were off for the whole show.

Chairs, coolers, umbrellas and snacks all in hand and we were off to the main event. Perfect seats, stage center, close to the ocean and sunny. Jon and his wife Michelle, Verna and I all set for a great day. They brought out the ARMY parachoots and some other acts, and the clouds started rolling in. The Canadian Snow Birds showed up about the same time the clouds did. The Canadians put on a great show even though they were hampered by the low hanging clouds. They really have a precision jet team. Then the F-35 came on for a show. Again WOW! He made several passes going fast enough to have a vapor shield around him and enough sound and vibrations to set off a number of the car alarms again. The maneuverability of that machine is something else. Again, his show was limited because of not only the clouds, but now the rain and wind as well. For a while the show was stopped, and we decided to leave. We were disappointed that we hadn't seen the Thunderbird's show, but we had another chance Sunday, and we had caught part of their act on Friday. Anyway, we loaded up and headed out, a little chilly and a little damp.

I was following the group, folding chair on one arm and umbrella on the other, maybe a little top heavy. We had already made it most of the way back and were less than a block from the car and crossing the Pacific Coast Highway, known to the Californians as PCH, WHAM I hit a curb somehow lost my footing and down I went. Face first. The chair went one way the umbrella went another, and I was face down on the concrete, thinking what happened. I laid there, kind of dazed for a moment, taking inventory, and someone asked me if I was all right and offered to help me up. I remember saying yes and I hope that I thanked them.

(CONTINUED ON THE NEXT PAGE)

SAFETY FIRST!

Someone else asked if they could get the paramedics for me and I responded affirmatively. I must have really been a site. I was bleeding from my face, my eye, my hand, and both elbows. The paramedics were only about a block away, and they came first. Then the fire department showed up, and the paramedics turned me over to them. They took a quick look and turned me back over to the paramedics who wheeled me over to their ambulance and proceeded with their examination, and then took me to Hoag Hospital. The next 4 hours were spent in the emergency room.

Mostly abrasions, but I somehow ended up with a cut on my lower eyelid which required 6 stitches. I had a CT scan on my head, and an x-ray on my hand. Nothing broken. I also had a big bruise on my thigh with a bump about the size of a softball, which does make walking difficult at times though it is getting smaller, and if you see me any time soon you'll no doubt see the black eye that I now sport.

All of that by just falling off a curb. Nothing to drink. I don't remember how I tripped. It may have been that someone bumped into one of the things I was carrying and threw me off balance, there were a lot of people around me, or it could have been just a wet sandy curb. I'll never know for sure. The point is I was having a great time just walking back to the car when Wham! All of a sudden I'm face planted on the pavement. If a fall off the curb can do that much damage just think what can happen if you fall off of a step ladder or a tower at say 20 feet. I know a friend that can tell you that story, and he's lucky he can still tell it. A lot of us are at an age where we are a lot more fragile than we used to be, and those who aren't are probably hoping to get here some day. Whatever you do, DO IT SAFELY! Hey, if you're reading this I consider you my friend, and I want you around for a while, and no it's not just because I need readers.

To the crew on the Huntington Beach Fire Department and ambulance squad, the people who stopped to help a battered and bloody old man up and summoned help for me in my time of need, and to the professionals at the Hoag Hospital Emergency room who checked me out and stitched me up, I was extremely impressed with your work and the work of the paramedics, not only by what you did for me and for the other patients around me. You are truly a group of people who think of the needs of the patient first, and it shows in everything you do. Thank you, thank you, thank you all. I rate you A+.

I would also like to thank my loving wife who stayed at my side through this ordeal, and her son Jon and his wife Michelle who both sat in the ER waiting room for over four hours waiting for us. Thank you for being there for me.

73,
Larry Schubert, AC9GO

Editors Note

If you would like to have something published, please call me, or email me at kurt.eversole@gmail.com

Cut-off for the November 2023 Hamrag will be Wednesday, November 1, 2023

Kurt - KE9N, Editor

Jamboree-on-the-Air

Jamboree-on-the-Air, or JOTA, is the largest scouting event in the world. It is held annually the third full weekend in October. JOTA uses amateur radio to link scouts and hams around the world, around the nation, and in your own community. This jamboree requires no travel, other than to a nearby amateur radio operator's ham shack. Many times you can find the hams will come to you by setting up a station at your Scout camporee, at the park down the block, or perhaps at a ham shack already set up at your council's camp.

This year RARA will be assisting Jon Lipscomb and his group of scouts for the JOTA event at Camp Winnebago on Saturday, October 21, 2023 from 8:00am until 5:00pm. Camp Winnebago is located at 5804 North Main Street, Rockford, Il. (same place as we had Field Day this year) **We need RARA members or any hams to volunteer to help be a control operator at the operating stations. Please contact me if you can help, or have any questions. The radios and antennas have been arranged, we just need you!**

You can contact me at kurt.eversole@gmail.com or at 815-389-2784. Thank you.



ARISS Call to Students



Hello! My name is Sarah! I am a space science communicator who goes by the name **Space Case Sarah** and I live here in Rockford. I am strongly affiliated with **Amateur Radio on the International Space Station (ARISS)**, who just put out the call for the upcoming fall application window. If you are unfamiliar with them (which I'm sure you likely aren't) they



connect students to make contact with the space station through amateur radio as part of a large educational initiative.

I just so happen to have two young kiddos who attend Spring Creek Elementary. I have already fielded out interest with the principal and some of the PTO members if this would be something they would be interested in applying for and to say enthusiasm is high would be an understatement.

I am reaching out now to see if any members of this group would be interested in being involved in this endeavor! Not only would it be a great way to bring attention to your club, you would also be helping facilitate a life changing experience for kids in our community. If this sounds as cool of a thing to you as it does to all of us, I'd love to talk with you! Feel free to comment either on my post on the RARA Facebook page or send me a message to my account. Thanks so much in advance!

The Fox Hunt

The GBARC, (Greater Beloit Amateur Radio Club) is hosting a foxhunt, this Saturday, October 14, 2023 starting around 10AM. (**weather permitting**) The Fox hunt will begin following the monthly ham breakfast which is held at Denny's Restaurant / Flying J truck stop (IL75 & I90/39) that begins around 8am. All are invited to breakfast, but not required to participate in the fox hunt. There is no official starting point, however, many will be starting from the Denny's parking lot following breakfast. All GBARC and RARA members, other fellow hams, and those interested in amateur radio are all invited.

The fox will be hidden somewhere in Rock County Wisconsin. The official start along with the simplex frequency will be announced on the Janesville Repeater, 145.450 minus offset 123.0 CTCSS. The fox will be monitoring the 450 repeater during the hunt to answer any questions you may have other than "where are you?"

A fox hunt is an exercise in **Radio Direction Finding** – RDF, where amateur operators will use a variety of radio signal receiving equipment (typically 2 meter hand held radio) to find a hidden transmitter that will automatically transmit a re-peated beacon signal. As the receiver's antenna is pointed toward the hidden transmitter, the signal strength will rise and as it is moved away, it will drop. As a result, you can determine which direction the transmitter is located. You will continue receiving the signal from various locations and using mapping/triangulation, you will narrow down the proximity of the hidden transmitter. As you get very close to the transmitter, you will attempt to reduce the signal strength using a variety of methods, either attenuating the signal or just reducing the antenna effectiveness to continue to hone in on the location of the transmitter.

This is a great time to try fox hunting or improve your hunting skills.

Contact brett@k9by.us with any questions.

73, Brett Johnson, K9BY



FRIDAY MORNING BREAKFAST

Meets every Friday morning from 8:00 am until about 9:30 am. An informal gathering of ham folks, no affiliations necessary, good food and good company.

Everyone is welcome to attend.

"The Spring Garden Family Restaurant"

***4820 N. 2nd Street
Loves Park, IL 61111***



E6AM Niue Island

E6AM Team is active from Niue Island, IOTA OC - 040, 10 - 27 October 2023.

Team - LZ1GC, LZ1ON.

They will operate on 160 - 6m, including WARC and 60m Bands, CW, SSB, FT8.

QSL via LZ1GC, LOTW, ClubLog OQRS, QRZ com Log Book.

Ads for direct QSL:

Stanislav Vatev, ul. "Gen.Karcov" 6 A, 4300, Karlovo, Bulgaria.



T2C Tuvalu

T2C Team is active from Funafuti, Tuvalu, IOTA OC - 015, 10 - 30 October 2023.

Team - DG2RON, DJ7TO, DJ9KH, DJ9RR, DK3CG, DL1KWK, DL2RNS, DL4SVA, DL6KAC, DL7JOM, DL7VEE.

They are operating on 160 - 6m Bands, CW, SSB, Digital modes.

QSL via DL4SVA, LOTW.



W8S Swains Island

W8S Team is active from Swains Island, IO-TA OC - 200, 4 - 17 October 2023.

Team - DJ9RR, DL2AMD, DL6JGN, KO8SCA, NG7M, PA2KW, PA3EWP, PA4WM, PA5X, PG5M.

They will operate on All HF Bands, CW, SSB, FT8, RTTY.

DXCC Country - Swains Island, KH8/S.

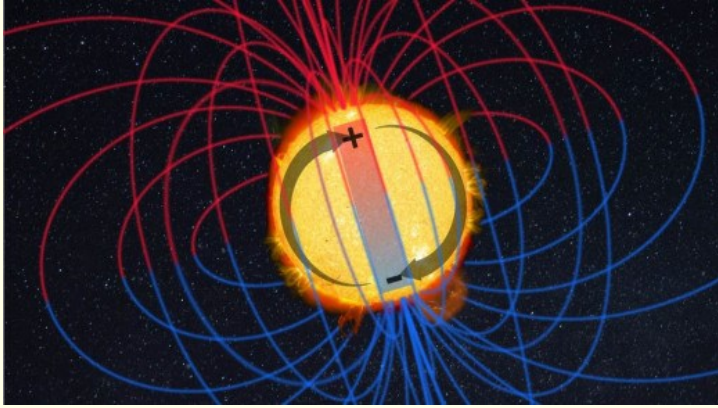
QSL via M0OXO, LOTW, ClubLog OQRS.



The Changing Sun

THE SUN'S MAGNETIC POLES ARE DISAPPEARING: The sun is about to lose something important: Its magnetic poles.

Recent measurements by NASA's Solar Dynamic Observatory reveal a rapid weakening of magnetic fields in the polar regions of the sun. North and south magnetic poles are on the verge of disappearing. This will lead to a complete reversal of the sun's global magnetic field perhaps before the end of the year.

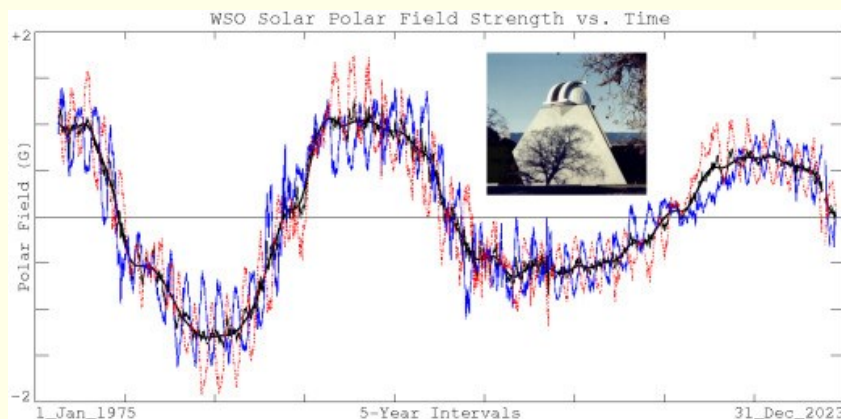


An artist's concept of the sun's dipolar magnetic field. Credit: NSF/AURA/NSO.

If this were happening on Earth, there would be widespread alarm. Past reversals of our planet's magnetic field have been linked to calamities ranging from sudden climate change to the extinction of Neanderthals. On the sun, it's not so bad.

"In fact, it's routine," says Todd Hoeksema, a solar physicist at Stanford University. "This happens every 11 years (more or less) when we're on the verge of Solar Maximum."

Vanishing poles and magnetic reversals have been observed around Solar Max in every single solar cycle since astronomers learned to measure magnetic fields on the sun. Hoeksema is the director of Stanford's Wilcox Solar Observatory (WSO), that is observing its fifth reversal since 1980.



The last five polar field reversals observed at the Wilcox Solar Observatory (inset)

"One thing we have learned from these decades of data is that no two polar field reversals are alike," he says.

Sometimes the transition is swift, taking only a few months for the poles to vanish and reappear on opposite ends of the sun. Sometimes it takes years, leaving the sun without magnetic poles for an extended period of time.

"Even more strange," says Hoeksema, "sometimes one pole switches before the other, leaving both poles with the same polarity for a while."

The History of the Car Radio

It's an almost universal experience: People get in the car and turn on their favorite music. But the first car radio wasn't sold until Chevrolet offered one as an option in 1922. And at first, radios in cars weren't a popular feature. In 1930, laws were proposed in Massachusetts and Missouri that would ban automobile radios, and a poll in 1934 found that 56% of people thought car radios were a dangerous distraction. Motorola kept refining the idea, though, and designed a more attractive and better-functioning radio. By 1946, around nine million cars had a radio installed in them. The technology improved over time, and by 1963, more than half of all cars driven in America had a radio in them.

A head unit is like the motherboard of a car's audio system. Originally, head units only controlled the radio, but over time, they were used to control everything from 8-tracks to CDs. Today's head units incorporate touchscreens and smartphone integration. The size of the head unit is dictated by the size and design of the car's console and the size of the front faceplate of the stereo system. Most head units are a size 1DIN or 2DIN; DIN is an acronym for a German company, Deutsches Institut fur Normung.

Lee de Forest invented the vacuum tube, which made radios possible. In 1904, he gave a demonstration of his invention at the Louisiana Purchase Exposition, and afterward, he was nicknamed the "Father of Radio." It wasn't until 1922 when Chevrolet put a Westinghouse radio into a car. But the first successful commercial automobile radio is considered by most experts to be the Motorola 5T71, which was released in 1930.

The radio was first invented for the military, and its purpose was to allow for short, simple, person-to-person messages. Even these very simple radios were large and bulky at the beginning. The first radios meant to play music were even larger and bulkier, and they don't at all resemble what most modern people would consider a portable radio or music player. Early radios were housed in a large box, which was accompanied by a second box for the speaker. They featured several large batteries and an antenna consisting of a long piece of wire. All of these elements would be put into what amounted to a large wooden suitcase to make the radio portable.

Early car radios of the 1920s and 1930s looked different from what most people today consider automobile radios. There was a tin box with:

- A speaker
- An audio receiver
- A tuning mechanism
- Sometimes (but not always) batteries

The car's battery would heat the radio's tubes, and the radio needed a separate box for its anodes. All of this equipment actually blocked the radio from getting clear reception from radio towers. The invention of the vacuum tube solved a lot of problems for car radios, making them more user-friendly as well as improving the quality of the audio.

On Sept. 26, 1928, the Galvin Manufacturing Corporation, located in Chicago, IL, began production. In 1930, the company would introduce its Motorola car radio, the very first mass-produced automobile radio offered for sale. The name "Motorola" comes from combining "motor" with Victrola.

(continued)



This reproduction of Motorola's first car radio, 1930's model 5T71, included (left to right) a radio receiver, tuning control and speaker.

The History of the Car Radio

By the 1940's nine million automobiles had built-in radios by the beginning of the post-war period. Head units became smaller and better designed. Many started to take on Art Deco styling to match the interiors of the cars of the moment.

AM radio ruled the airwaves at the beginning of the 1950s, but the first automobile radio with an FM receiver was put on the market in 1952. One year later, the first radio with a fully capable automatic station-search feature was introduced. Chrysler also decided to experiment by selling cars with record players installed as a part of the in-car entertainment system.

Two major technological advances had a great impact on car radios in the 1960s. General Motors and Ford teamed up with Motorola to create the Super 8 (better known as the 8-track) cassette and began putting 8-track players in their cars. At almost the same time, in 1964, Philips introduced the compact cassette. Even from the beginning, compact cassettes offered better sound quality than 8-tracks. But thanks to the involvement of two automotive powerhouses, 8-track players continued to be installed in cars into the 1970's.

Cassette players took over the market in the 1970s. The '70s were a time of great advancement in the field of automotive audio systems. Vacuum-based amplifiers, which were bulky, were replaced with smaller models with better sound quality. Pioneer began selling car systems that provided almost the same sound quality as at-home stereo systems. The Supertuner, for example, offered a cassette player and FM radio tuner with excellent reception.

Pioneer once more led in-car stereo innovation when they introduced the first automotive compact disc (CD) player in 1984. The sound quality was much, much better than that offered by cassettes, but in-car CD players didn't achieve widespread popularity until the 1990s. The 1980s also saw rapid advancement in speaker technology and sound. Systems with at least six speakers became popular. High-end automotive audio setups rivaled the best at-home systems. General Motor's Delco division paired up with Bose to make a high-end system for people buying luxury GM products, which at the time included Corvette, Cadillac, Oldsmobile, and Buick customers.

One reason the popularity of in-car CD players skyrocketed in the 1990s was that CD changers, capable of being loaded with up to 18 CDs, hit the market. Suddenly, drivers could truly curate their listening experience, even on very long drives. Sony attempted to compete with the rising popularity of the CD when it released the Minidisc in 1992, but the smaller format never caught on with customers.

Two huge new technological advancements ushered car audio systems into the new millennium. The first was GPS technology, which allowed for navigation systems to be added to car entertainment systems. Navigation systems meant larger screens, and soon, infotainment systems became a larger part of a car's dashboard. The other major advancement was Bluetooth. This technology allowed drivers to make and accept hands-free calls through their audio systems. At the same time, portable digital music players hit the market. Soon, people were using a variety of adapters to connect their music players to their car's audio system, but Bluetooth would go on to make this a seamless experience.

The increase in people working from home coupled with people viewing their smartphones as their primary source of information has changed what people listen to in their cars and how they listen to it. The popularity of radio stations dwindles each year. Now, people are more likely to listen to podcasts or music streaming services as they drive.

Happy Driving!
-KE9N-

HI, MY NAME IS JOHN



AND I BUY RADIOS I DON'T NEED

imgflip.com

*if it smells like
chicken*



*you're
holding it wrong*



website: w9axd.org
email: w9axdrara@gmail.com

2024 RARA Membership* Form

Dues are \$25.00

(This is an editable PDF Form. Fill in the information with your keyboard, then save the PDF, and then attach it to an email to: w9axdrara@gmail.com. See below for mail in information and/or PayPal information)

Date: _____ (mm/dd/yyyy)

Name: _____ Callsign: _____

Street Address: _____

City: _____ State: _____ ZIP: _____

E-mail Address: _____

Phone - Home: _____ Cell: _____

Can we release your e-mail and phone number to members only? Yes _____ NO _____

Are you a member of the ARRL (American Radio Relay League)? Yes _____ NO _____

What things do you like to do with ham radio?

What things do you want to do, but need more information to do so?

Would you be available to make a presentation on some part of our hobby and what?

Do you have any questions that we can help you with presently? If so, explain below.

Mail In: Please fill out all the information on the form and mail it with \$25.00 to the following address:

Rockford Amateur Radio Association
P.O. Box 8465
Rockford, IL 61126

Make your check payable to: Rockford Amateur Radio Association.

For Internet application and payment:

To use PayPal, click on the link below. After clicking "Send" and then logging in, enter \$25.00 in the "Dollar Amount", and click "Send", to complete your payment to RARA. Also, **DON'T** forget to email your completed form to: w9axdrara@gmail.com for your membership application. *Thank you for your support!*

PayPal Link:



*Membership is based on approval of the RARA Board. The membership fee will be returned if you are not approved. New memberships are good from 10-1-2023 thru 12-31-2024.