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.

August 2024

From the Board

RARA is a volunteer run organization of individuals donating their time each month to develop activities, maintain repeaters, nets, and education. There are associated expenses and when you become a club member, your dues are providing a service to your community and furthering the hobby of amateur radio.

Congratulations to:

- RARA 2023 Ham of the Year, Kurt Eversole (KE9N) and to,
- Larry Schubert (AC9GO) on his article published in ARRL's "On the Air" publication.



Please put the following dates on your calendar:

- * Belvidere Hamfest—Sunday, Sept 22
- * Family Picnic—Saturday, Sept 28 —Hononegah Forest Preserve
- * JOTA (Scouts, Jamboree on the Air) Saturday, Oct 19 at Camp Lowden, Oregon IL.
- * 2025 Summer Field Day- June 28-29, 2025

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FRIDAY— September 13, 2024 - 7:00pm



OSF St Anthony Med Center—lower level (Foundation Room) 5666 East State Street, Rockford



Program to be determined and announced in the September Hamrag

Local Events and Information

August 9, 2024 RARA Membership Meeting 7:00pm September 10, 2024 RARA Board Meeting 7:00pm on Google Meet

2024 RARA Officers and Board

Officers:

President - Tom Shouler, N9VJU, 815-633-0089, n9vju@comcast.net Vice President - Larry McFall, KD9HKX, 815-900-1820, lpmcfall@charter.net Secretary - Larry McFall, KD9HKX, 815-900-1820, lpmcfall@charter.net Treasurer - Verna Schubert, KD9YUM, 815-505-8170, schubie2@charter.net

Directors:

Dan Larson, KD9SAZ, 312-292-1989, kd9saz@gmail.com
Larry Lisle, K9KZT, 815-397-9595, lisle@usa.net
Matt Marshall, W3MBX, 815-222-5959, matthew.marshal@gmail.com
Kevin Puckett, N9EGF, 815-218-1551, krpuckett@gmail.com

Hamrag Editor - Verna Schubert, KD9YUM, 815-505-8170, schubie2@charter.net
Webmaster - Verna Schubert, KD9YUM, 815-505-8170, schubie2@charter.net
Repeater License Trustee - Gordon Seaman, KC9NEX, 815-262-0294, kc9nex@gmail.com
Repeater Chairman - Kurt Eversole, KE9N, 815-389-2784, kurt.eversole@gmail.com

Upcoming Opportunities:

<u>Belvidere Hamfest (Sunday, Sept 22):</u> RARA will once again have a booth at the event and invites members to assist, as they can, with setup/tear-down, and/or working at the booth to promote RARA. A two-hour commitment would be great but if you only have an hour, we'll take it! If you are ready to help out your club with your presence, please contact Matt Marshall (W3MBX) at Matthew.marshal@gmail.com or at 815-222-5959.

JOTA (Scouts Jamboree on the Air-Saturday, October 19): RARA will be assisting at this event and is seeking volunteers to help with setup/tear-down, running stations, and assisting as needed. Matt (W3MBX) will be reaching out via Facebook and at the monthly meeting.

Editor's Note

If you would like to have something published, please call me, or email me at schubie2@charter.net

Articles are welcome and encouraged from all hams.

<u>Due Date for the September 2024 Hamrag is Friday, August 30, 2024</u>

73, Verna—KD9YUM, Editor

Local Events and Information

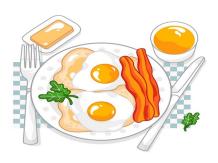


FRIDAY MORNING BREAKFAST

Meets every Friday morning from 7:30 am until about 9:00 am. We order breakfast at 8:00 am.

An informal gathering of ham folks, no affiliations necessary, good food and good company.

Everyone is welcome to attend.



Local Net Information

Mon - 7:00pm - RARA Info. Net & CW Lesson, 147.195 (+0.6) offset, pl 114.8

- 8:00pm - McHenry County RACES Net, 146.835 (-0.6) offset, pl 91.5

Tues - 7:00pm - RARA Tech & Social Net & CW Lesson, 147.195 (+0.6) offset, pl 114.8

- 7:00pm - Rock County Public Service Net, 145.450 (-0.6) offset, pl 123.0

Wed - 7:00pm - RARA Chat Net, 147.195 (+0.6) offset, pl 114.8

- 7:00pm - Stephenson Cnty. ARES Net, 147.390(+0.6) offset, pl 114.8

- 7:30pm - Greater Beloit Radio Net, 147.120 (+0.6) offset, pl 123.0

Thu - 7:00pm - Northern Illinois Skywarn Training Net,147.195 (+0.6) offset, pl 114.8

Fri - 8:00pm - Friday Night Fun Net, KC9GCR, 147.195(+0.6) offset, pl 114.8

Sat - 8:00pm - Saturday RARA Ragchew Net, 147.195 (+0.6) offset, pl 114.8

- 8:00pm - Pink Hamsters YL Net, Milw., 146.910 (-0.6) offset, pl 127.3

- 9:00pm - Saturday Night Fun Net Milw., 146.910 (-0.6) offset, pl 127.3

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

Feature Article

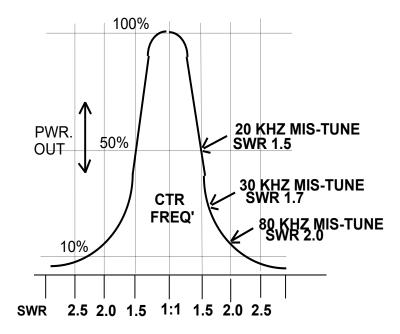
A MAG-LOOP IS A DIFFERENT ANIMAL Dave Gauger, W9CJS

A Mag-Loop typically has a very high Q. This being the case what follows is that the tuning to resonance on any given frequency becomes narrow, and requires such devices as vernier drives, trimmer capacitors, and very steady hands.

I took data on my loop to illustrate what happens to the antenna efficiency as the loop is tuned off resonance.

This crude curve, plotting output PWR versus SWR was constructed using measured data. obtained by using an IC-703 at 12VDC for 8 watts total output in FM mode. I tuned for peak resonance, SWR=1.1 and moved the transmitter frequency off resonance in steps of 10 KHz, taking SWR and PWR OUT data at each step.

Note: If the loop is detuned (about 20Khz) so that SWR rises to only 1.5 output power is down 50%. In the dipole world 1.5 is hardly worth worrying about, but not here.



IN SUMMARY

This curve should aptly illustrate how important precise tuning is when using a Mag-Loop.

Do not use an external tuner or an in-rig tuner. These only hide the problem. Your loop could easily be down to 10% efficient, but look great if you push the "TUNER" button.

Incidentally, even though your loop may be well off resonant frequency, you can still hear most signals easily. I find no need to constantly retune the loop as I tune up and down the band .

Feature Article

With a Mag-Loop, efficiency is indicated by sharp resonance. Therefore if your loop tunes broadly, it is in-efficient and needs adjustment. If it tunes very sharply, then the efficiency is probably optimum.

Think about it ... at 2:1 SWR your radiated power will be half that supplied. The remainder ends up as heat. So having said that, if you run say 50 watts to your loop at 10% efficiency on 80m, your loop must dissipate 45 watts as heat ... whoa ... that's a lot of loss and a lot of heat, but not uncommon on the lower bands.

Loops of manageable size are more efficient at higher frequencies. Mine works best at 20 meters and up. Although it will tune down to 40 meters, my contact list is limited on 40 meters.

Dave Gauger W9CJS



Feature Article— K9KZT published article Oct 1991

With the CQ WW DX CW Contest coming up, it's time to dust off "Old Reliable" and perhaps tweek it a bit. If you're about to use one of these gems for the first time, here's how to get it up and running.

Attitude Adjustment For Your Bug

BY LARRY LISLE**, K9KZT

hen a piece of electronic equipment designed over 100 years ago starts increasing in popularity, that's news! That's exactly what's happening with semi-automatic telegraph keys, better known as bugs.

More and more amateurs are collecting them and using them on the air because a bug lets you put more personality into your sending than an electronic keyer or keyboard. They're also fun to use.

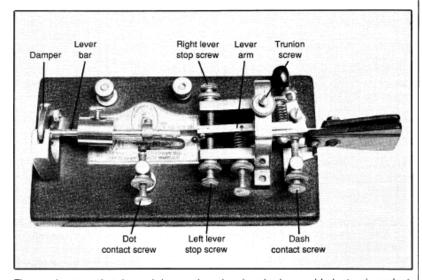
Even more amateurs might pull an old relic off the shelf and give it a try if they knew how to adjust all those screws and springs and weights. Actually, it's very easy and in this article I'll tell you how.

There have been hundreds of different bugs made, either in factories or at home, but they all work about the same. I'll use the names on the Vibroplex parts diagram, but you should be able to figure out what I mean if yours is a little different.

You can adjust a bug by ear using a code oscillator, but a moving needle (not digital) ohmmeter makes it easier. If you don't have one, you can series connect a milliammeter, a battery, and a variable resistor that will make the meter read full scale instead.

The first step is to clean the contacts. Rubbing a piece of paper—a dollar bill works fine—across them is good for a quick cleaning. If the contacts are really dirty, an ordinary soft pencil eraser will usually do the job. If your bug is an ancient one that's been neglected for half a century, try silver polish or a contact burnishing tool. Don't use a file or abrasive paper.

Next put the bug on a level surface and make sure the paddle moves easily but not sloppily on the **trunion screw**.



The semi-automatic telegraph key, or bug, is a hundred-year-old electronic gadget that's getting more popular all the time. This article will tell you how to adjust bugs and put them on the air.

Now adjust the **right lever stop screw** until the **lever bar** lightly touches the damper and will come to rest without bouncing.

Next adjust the **left lever stop screw** until it clears the **lever arm** by about 1/32 inch. Some operators prefer a closer spacing of .015 inch or even less, but I think bugs give cleaner sounding dots with a wide spacing. Try it both ways and see what you think.

The next step is the one that really determines how your bug sounds. Connect the ohmmeter to the binding posts and pull the paddle to the right, or dot side. Stop the vibrations of the lever bar and adjust the dot contact screw until it just makes solid contact as indicated by the meter. Tighten the lock nut and send

short strings of dots. The ohmmeter should read mid-scale if the dots and the spaces between them are equal, as they should be. If the meter reads low, the **dot contact screw** is in too far, the dots are longer than the spaces between them, and the sending will sound "mushy." Hook the bug to a code oscillator and you'll see what I mean. On the other hand, if the **dot contact screw** is too far from the **lever bar**, the meter will read high and the dots will sound scratchy.

Some operators believe that a bug should make 40 dots or more before the vibrating **lever bar** comes to rest. I've found this usually makes the dots scratchy. In the wire telegraph days a string of eleven dots was considered just about right. Since the longest string of dots in

*3030 Rutgers PLace, Rockford, IL 61109

Say You Saw It In CQ

Feature Article— K9KZT published article Oct 1991

Morse Code is eight for "error," I think the old timers had the right slant on things.

Next adjust the dash contact screw so that about the same paddle movement is required for dashes as for dots. A common error in using a bug is to send dots at 30 words a minute and dashes at 10. A good rule to remember is that two dots and the space between them should sound as long as one dash. You can practice this by sending the letter $\mathbf{U}(\ldots -)$ or D(— ..).

The speed of the bug is controlled by the amount of weight on the lever bar and where it's located. Weights that can be used separately or in combination to give almost any speed you want are available. but you easily can make your own. An old trick is to slip a metal nut over the screw in the speed weight to slow down the lever bar. A few turns of solder wire through the nut will make it fit snugly but allow it to be removed easily when you want to go fast.

Finally, adjust the dot and dash springs to suit yourself and you're done.

These suggestions are just a guide. Don't be afraid to change things and listen to what happens on a practice oscillator.

The perfect code generated by keyers and keyboards is easy to copy, but after a while it all sounds the same. A bug will make your signal stand out from the crowd, and give you something to talk about when you make the contact.



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BP-5	10.8v	500mah	\$21.00
BP-7	13.2v	500mah	\$23.00
BP-8	8.4v	800mah	\$21.00
BP-22	8.4v	270mah	\$22.00
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600mah



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-8	8.4v	800mah	\$60.00	
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-8S	9.6v	1200mah	\$59.00	

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7.2v	1400mah	\$59.00			
7.2v	600mah	\$35.00			
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Say You Saw It In CQ

CIRCLE 121 ON READER SERVICE CARD

October 1991 • CQ •



RARA Family



Date: Sat 09/28/24

Time: 11:00 a.m.-4:00pm

Hononegah Forest Preserve 80 Hononegah Rd, Rockton IL 61072 Indian Rest Shelter (has electricity, if you want to bring a crockpot.



FUN SOCIAL EVENT FOR THE ENTIRE FAMILY!

FOR RARA MEMBERS AND ANYONE INTERESTED IN AMATEUR AND GMRS RADIO AND THEIR FAMILIES!

RARA will take care of the grill supplies, paper goods, condiments, and water. You will bring what you would like to grill for your family and one or two dishes to share with others (salads, desserts, casseroles, baked beans, chips, etc.) Covered shelter, plenty of tables, and electricity!

Feel free to bring lawn games!

Prize drawing 3:00 p.m.

Must be present to win

Yaesu FT-65-R 5W VHF/UHF FM Dual Band Handheld

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Contact person: Verna Schubert, KD9YUM vernas.kd9yum@gmail.com or 815-505-8170

Upcoming Exams

Looking to upgrade or know someone looking for a testing location? More information available at ARRL.org Click here for link to VE Teams offering Online Exam Sessions

08/18/2024 | Northbrook IL 60062-2704

Sponsor: North Shore Radio Club **Location:** Northbrook Public Library

Time: 1:00 PM (**No Walk-ins** allowed/Register or Call) **Learn More**

• 08/20/2024 | Woodstock IL 60098-2953

Sponsor: McHenry County Wireless Assoc

Location: Free Methodist Church

Time: 7:00 PM (**No Walk-ins** allowed/Register or Call) **Learn More**

09/07/2024 | Madison WI 53715-2143

Sponsor: Four Lakes ARC

Location: Univ of WI Space Place

Time: 8:00 AM (Walk-ins allowed) **Learn More**

09/14/2024 | McHenry IL 60050-4422

Sponsor: NW IL S WI Amrron

Location: McHenry Masonic Lodge

Time: 10:00 AM (Walk-ins allowed) Learn More

09/19/2024 | Geneva IL 60134-2725

Sponsor: Fox River Radio League **Location:** Geneva Lutheran Church

Time: 6:00 PM (Walk-ins allowed) Learn More

09/21/2024 | Milwaukee WI 53223-4736

Sponsor: MRAC VEC, INC **Location:** Ham Radio Outlet

Time: 8:30 AM (Walk-ins allowed) Learn More

09/21/2024 | <u>Janesville WI 53545-3024</u>

Sponsor: Wisconsin Area VEs (WAVE) **Location:** Saint John Lutheran Church

Time: 1:00 PM (Walk-ins allowed) Learn More

Miscellaneous Resources

Universal Coordinated Time (UTC)

Universal Coordinated Time (UTC) is the time at the zero or reference meridian.

To convert AM/PM local time to UTC use the chart below. 24-hour format is standard.

Example:

10 AM Eastern Standard Time is 1500 UTC

Note: Be sure to use the correct date if the conversion results to UTC are after midnight as shown in the following example.

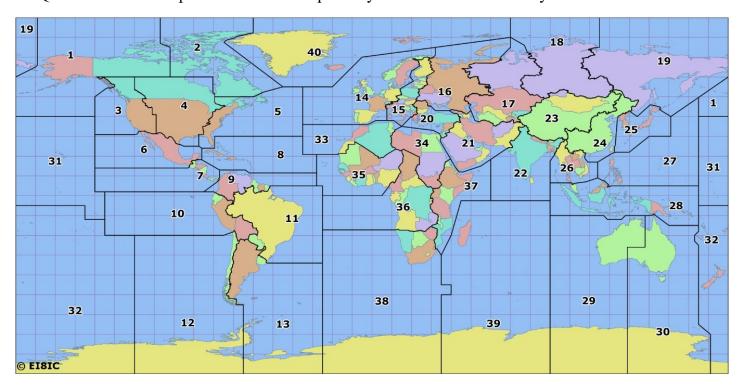
Example:

Dec 31, 2023 7 PM Pacific Standard Time is 0300 Jan 1, 2024 UTC

Standard Time Zone Daylight Savings Time

Atlantic + 4 hours + 3 hours Eastern + 5 hours + 4 hours Central + 6 hours + 5 hours

CQ Zones - this map is provided by https://www.mapability.com/ei8ic/maps/ituzone.php
When working DX, Contesting, and/or actively seeking contest awards, you may be asked for your "CQ zone". This link provides several maps and you can also use it to ID your ITU zone.



DXpedition to Jarvis Island

From the RARA Facebook group:

If you chase DX, be on the lookout for N5J, which is Jarvis Island. They plan to be on the air from August 7th to August 19th. Jarvis has only been on the air two times since WWII. Operations will be on CW, SSB, and digital. More information is found at:

https://jarvisisland2024.com/ Don't miss this one! 73, Kurt Eversole



Frequency List (may change based on other DXpeditions and QRM encountered)

Band	CW	SSB	SuperFox
160m	1827.5 kHz	_	1836 kHz
80m	3527 kHz	3760 kHz	3567 kHz
60m*	-	-	5357 kHz
40m	7027 kHz	7082 kHz	7056 kHz
30m	10103 kHz	-	10131 kHz
20m	14027 kHz	14210 kHz	14091 kHz
17m	18079 kHz	18130 kHz	18095 kHz
15m	21027 kHz	21285 kHz	21091 kHz
12m	24897 kHz	24932 kHz	24911 kHz
10m	28027 kHz	28485 kHz	28091 kHz
6m	50105 kHz	-	50310 kHz

W9DXCC Convention

I have been to W9DXCC a number of times and enjoy the convention and have had the opportunity to meet a lot of top-tier Contestors and DX'ers. I will probably never have the abilities or the stations these people have bit I am thankful for what they do for this hobby.

Chuck K9LC



W9DXCC Convention

The W9DXCC convention is held annually in the Chicagoland area. Sponsored by the Northern Illinois DX Association, this convention is one of the premier DX conventions in the country. Enjoy the day filled with quality programs, equipment vendors, QSL card checking, prizes, and socializing. Be sure to end the day by staying for the convention banquet. There is a charge of \$60 to attend the convention and an additional charge for the dinner choice for the banquet.

Contest / DX University

Contest and DX University will take place prior to the W9DXCC convention. Contest U and DX U will allow you to gain knowledge to improve your contesting scores and to improve your DXing skills. Contest U/DX U is two separate programs that will have presentations during the day. You are free to attend presentations in either program and can switch between presentations if you desire. There is a \$45 charge to attend the Contest/DX University.

Banquet

The banquet will be held Saturday evening following the W9DXCC convention. An excellent dinner, conversation, and keynote speaker will be on tap. Please feel free to register your spouse, or significant other, as a guest if they wish to join you for the banquet only. Meal Choices include: NY Strip Steak with Peppercorn Cognac Sauce (\$68), Grilled Chicken with Lemon Caper Sauce (\$59), or Grilled Salmon with Citrus Burre Sauce (\$60).

2024 Convention Dates and Location

Friday, September 13th, 2024 Saturday, September 14th, 2024 Contest and DX Universities W9DXCC Convention & Banquet

Location

Both W9DXCC and the Universities will be held at the:

Chicago Marriott Naperville 1801 North Naper Boulevard Naperville, Illinois 60563.

There is a link on the registration page for special rates for the convention.

W9DXCC Convention



Prizes

You can purchase raffle tickets for two different raffles. These raffles are used to support DXpeditions.

Raffle #1- Prize: **Icom IC7300**. Tickets will be \$5.00 each or priced in discounted blocks. If you purchase them during registration, they are 1 ticket for \$5, 3 tickets for \$10, or 7 tickets for \$20. This prize will be drawn at the end of the W9DXCC convention programs.

Raffle #2 – Prize **Flex 8400**. Tickets will be \$10 each or priced in discounted blocks. If you purchase them during registration, they are 1 ticket for \$10, 3 tickets for \$20, or 7 tickets for \$40. This prize will be drawn at the end of the banquet. Attendance to the banquet is not necessary.

In the past there has been other prizes given away during the convention and other smaller raffles too.

Registration

To register to attend the W9DXCC, the universities, and banquet go to: https://w9dxcc.com/registration

W9DXCC is an ARRL sanctioned event.





Hamfests

RADIO EXPO 2024

Illinois Largest Hamfest

Dealers!

Radios!

Computers!

Electronics!

Raffles!

Sunday September 22nd, 2024

Boone County Fairgrounds 8791 IL-76 Belvidere, IL 61008

Indoor Market 8am-3pm

Flea Market 6am-3pm

Breakfast - Lunch

Bring The Family

Hourly Drawings

VEC Testing 9am-Noon

RV's or Motor Homes Camping

Water-Electric \$45

Contact Fairgrounds for Permit

Talk-In Repeater 146.760 - 107.2 WA9ORC



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Outside Power	\$10.00		
Inside Tables	\$20.00		
Inside Power	\$10.00		
For event questions: Call 773-614-4733, or Fmail wa9orc@gmail.com	Make Check payable to: Chicago FM Club 3619 S. 54 th Ct.	Or, Pay by Zelle:	TOTAL

Vendor setup is Saturday, September 21st from 9:00 AM - 4:00 PM with security overnight. CFMC reserves the right to make changes as required

Cicero, IL. 60804

Radio Expo 2024 04

Hamfests

HRO Superfest 2024

Event Details:

Start Date: September 20, 2024End Date: September 21, 2024

Location: Ham Radio Outlet Milwaukee, 5710 W. Good Hope

Rd., Milwaukee, WI 53201Sponsor: Ham Radio Outlet

Type: ARRL Hamfest

• Talk-In Frequency: 145.130 127.3 pl

•

Contact Information:

Public Contact: Tom Pachner, W9TJP

Mailing Address: 5710 W. Good Hope Rd., Milwaukee, WI 53223

• Phone: 414-358-0333 Email: w9tip@hamradio.com

Event Highlights:

• Explore a wide range of ham radio equipment, accessories, and parts from various vendors.

Participate in exciting forums and workshops.

• Network with fellow ham radio enthusiasts and share experiences.

Enjoy special promotions and discounts available only during the Superfest.

• Participate in prize drawings and win amazing ham radio gear.

Join us for the HRO Superfest 2024 at Ham Radio Outlet Milwaukee. It's a great opportunity to discover the latest in ham radio technology, learn from experts, and connect with the ham radio community. We look forward to seeing you there!

Did you know? ARRL offers a free Student Membership!

ARRL Student Membership was established to increase youth participation and long-term involvement in amateur radio. Student members can access ARRL membership benefits including the digital versions of ARRL magazines, and the extensive courses and training materials available through the ARRL Learning Center.

Please note: ARRL requires age verification for all student members. Parental/Guardian consent is required for applicants under 18 years of age. Student memberships are not eligible for add-on printed membership magazine subscriptions. Student membership benefits are subject to other restrictions and exclusions.

Free Student Membership. This no-cost, Associate membership option is available to full-time students aged 21 years or younger. Applicant must be a resident of the US, its possessions, or Puerto Rico. Free Student Membership excludes access to the ARRL E-mail Forwarding Service, and Associate members may not vote in ARRL elections. Other restrictions and exclusions may apply. **Become an ARRL student member today!**

Student Membership JOIN





website: w9axd.org

email: w9axdrara@gmail.com

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/c	dd/yyyy) New M	lembership	Renewal		
Name:	Callsign:				
Street Address:					
City:	Sta	ıte:	ZIP:		
E-mail Address:					
Phone - Home:					
Can we release your e-mail and	phone number to	members only?	Yes NO		
Are you a member of the ARRL (American Radio R	elay League)? Ye	s NO	_	
What things do you like to do w	ith ham radio?				
What things do you want to do,	but need more inf	ormation to do so	o?		
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 w	vith presently? If s	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.

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