

# HAM RAG



Visit our website for more club and area ham information  
In the Rockford area at <http://www.w9axd.org>

## RARA Mission Statement

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

## Presidents Column

Greetings All,

Here it is February already and I do not know about you, but I am wishing for some warmer weather. The first thing I would like to report on was the Awards Banquet RARA held on January 9<sup>th</sup> at Lino's. For those of you unable to make it this year, we had a good-sized group and we had a very good meal along with some very good fellowship. I would like to thank Shari, N9SH, for the great job she did setting up the event and arranging for a wonderful meal. As most of you know, we use the banquet as a way of also thanking those in the club who help by volunteering their time over the year. All the awards given for their service hold equal merit, but there is also a Ham of the Year award for the individual(s), who club members feel did indeed go up and beyond the regular criteria and deserve this prestigious title. For the year 2009, I would like to congratulate Kurt Eversole, KE9N, for being selected as Ham of The Year. For those of us lucky enough to have worked with Kurt, we realize why he was nominated, and chosen, even though he just says he was just doing his job. Again Kurt, congratulations on your award, it was well deserved! Moving on to new things, I want to remind everyone about the February 12<sup>th</sup> membership meeting. This month we have a presentation given by Jack Hudson, W9MU, covering Antennas, Tuners, and Transmission Lines. You will not want to miss this one. In addition, here are the dates for the following events this year so check your calendars and keep these dates open:

June 12, 2010, Breakfast in the Park, Alpine Park, shelter #2.

June 26 and 27, 2010, Field Day, Hononegah Forest Preserve.

August 22, 2010, RARA family picnic, Alpine park shelter #1.

September 3, 4, 5, 2010, On The Waterfront, keep this date open, we need your help selling tickets.

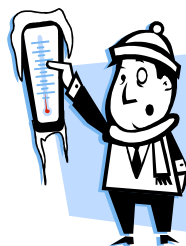
October 16 and 17, 2010, this is JOTA weekend, still up in the air if we are doing anything.

That is enough rambling for this month so I hope to see you at the February membership meeting.

73,

Gordon Seaman, KC9NEX

2010 RARA President



## February 2010

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### NEXT MEETING

**FRIDAY**

**February 12, 2010**

**7:00 pm**

**Presentation:**

**Antennas, Tuners & Transmission Lines**

**by:**

**Jack Hudson, W9MU**

**Location:**

**St. Anthony  
Medical Center**

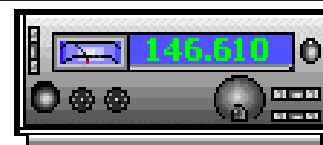
**Foundation Room**

**5666 E. State Street  
Rockford, IL**

**\$\$\$ Membership Dues Are Due \$\$\$**

It's time once again to renew your membership.  
See Paul Franklin, K9RNR, to pay for your dues.

Latest news and events on our web page: <http://www.w9axd.org>



# 2010 RARA CALENDAR OF EVENTS

**February** 12 - RARA regular meeting 7:00 pm in Foundation Room  
23 - RARA board meeting 7:00 pm in Saint Francis Room

**March** 12 - RARA regular meeting 7:00 pm in Foundation Room  
30 - RARA board meeting 7:00 pm in Saint Francis Room

**April** 9 - RARA regular meeting 7:00 pm in Foundation Room  
27 - RARA board meeting 7:00 pm in Saint Francis Room

**May** 14 - RARA regular meeting 7:00 pm in Foundation Room  
25 - RARA board meeting 7:00 pm in Saint Francis Room

**June** 11 - RARA regular meeting 7:00 pm in Foundation Room  
**12 - Breakfast in the Park, Alpine Park, Shelter #2**  
**26 & 27 - Field Day, Hononegah Forest Preserve**  
29 - RARA board meeting 7:00 pm in Saint Francis Room

**July** 19 - RARA regular meeting 7:00 pm in Foundation Room  
27 - RARA board meeting 7:00 pm in Saint Francis Room

**August** 13 - RARA regular meeting 7:00 pm in Foundation Room  
**22 - RARA Family Picnic, Alpine Park, Shelter #1**  
31 - RARA board meeting 7:00 pm in Saint Francis Room

**September** **3, 4, & 5th - On the Waterfront**  
10 - RARA regular meeting 7:00 pm in Foundation Room  
28 - RARA board meeting 7:00 pm in Saint Francis Room

**October** 8 - RARA regular meeting 7:00 pm in **Saint Joseph Room**  
26 - RARA board meeting 7:00 pm in Saint Francis Room

**November** 12 - RARA regular meeting 7:00 pm in Foundation Room  
30 - RARA board meeting 7:00 pm in Saint Francis Room

**December** 10 - RARA regular meeting 7:00 pm in Foundation Room  
28 - RARA board meeting 7:00 pm in Saint Francis Room

## VICE PRESIDENT NOTES

I am pleased to hear the favorable comments about the meeting programs that were put together for this year's club meetings. When I pondered the topics, my intention was to cover subjects on amateur radio that would interest a variety of people. Several suggestions were passed on to me that I pursued and was fortunate enough to get the presenters.

Our February meeting topic was suggested by Paul, K9RNR and Steve, K9LLI. At the time I did not realize that Jack Hudson, W9MU is a retired head of the Electronics Program at College of Lake County in Grayslake, IL and a published co-author of "Basic Communications Electronics". His presentation on "antennas, tuners and transmission lines" in February and "HF radios .... survey of features" at the September meeting should be of interest to all levels of ham operators.

At the March meeting we are also privileged to have Duane Ingram, N9ZKR, a retired physicist to talk about the sun and how it affects radio waves. This has been a topic of great mystery for me so I am looking forward to gaining a better understanding. Al, KD9CA provided me the opportunity to work with Dr. Ingram.

On a different note, during the past year, I heard a comment on a local radio station as well as in a local news letter that talked about things "Time to say goodbye to". Ham radio was one of the items on the list. There is no question that ham radio has been losing ground and is getting grayer. Part of the problem is that there are so many advancements and infrastructures available today that are taking away what ham radio has been doing for years. Examples are cell phones and the internet. Ham radio is not the instant gratification of these new devices, but just remember the thrill of that 1<sup>st</sup> contact and what it took to make it. I think that the people saying that ham radio is gone just don't understand the satisfaction and enjoyment of the various aspects of ham radio. We each need to talk up our hobby.

On another note, we all have talents and interests that could be put to use. Currently there are only a handful of people keeping our club going. My challenge to each of you is to ask yourself "what can I do to help the club prosper?" There are several activities coming up this year, Breakfast in the Park, Field Day, annual picnic, our fund raiser (On the Waterfront), nominating committees, club meetings, that need volunteers. Don't be afraid to volunteer your time or talent, others will help you. An example was last year we needed a Breakfast in the Park chairman. Chuck, K9SAN, volunteered and several of us helped pull it off.

73,  
Gene, KA9BOD

**Former ARRL President Named QCWA President Emeritus** (Jan 29, 2010) -- Harry Dannals, W2HD -- who led the ARRL as President from 1972-1982 and was [named ARRL President Emeritus in 1984](#) -- has been named President Emeritus of the Quarter Century Wireless Association ([QCWA](#)). Dannals also served as President of QCWA from 1989-1994; he is the only person to ever serve as President to both organizations. In addition to his work with the QCWA and ARRL, Dannals is a Fellow in the Radio Club of America ([RCA](#)), a member of the Society of Wireless Pioneers ([SOWP](#)), the Old Old Timers Club ([OOTC](#)) and the Veteran Wireless Operators Association ([VWOA](#)). In 2002, [he was inducted into the CQ Magazine Amateur Radio Hall of Fame](#). "I was pleased to learn that the QCWA's leadership has conferred upon Harry Dannals this very well-deserved accolade," said ARRL President Kay Craigie, N3KN. "As the only person to have served as President of the ARRL and the QCWA, he is unique among amateurs."



# Secretary's Report



**January 9, 2010**

No regular club meeting was scheduled in January. RARA held its annual banquet at *Lino's* with a turnout of 35 hams and guests. Gordy, KC9NEX, our president welcomed and thanked everyone for attending.

After dinner Gordy began the awards presentations and thanked all the officers, board members and all others who volunteered for chairing and participating in our various events.

The awards certificates were presented as follows:

Club Officers:        Gordy, KC9NEX    President  
                             Steve, K9LLI    Vice President  
                             Al, KD9CA     Secretary  
                             Rich, K9PK     Treasurer

Board Members:     Chuck, K9SAN  
                             Carl, W9TQ  
                             Bob, KC9ICH  
                             Mike, AB9AY

Ham Rag Editor:     Kurt, KE9N

Web Master:         Bob, KC9ICH

Repeater Chairman: Chuck, AB9KA  
                             Herb, K9AMJ 2009

Repeater Trustee:   Don, W9DRR  
                             Rich, K9PK 2009

Committee Chairman: Chuck, K9SAN, Breakfast in the Park  
                             Kurt, KE9N, Field Day  
                             Gordy, KC9NEX, Club Picnic and On the Waterfront  
                             Chuck, AB9KA, Ham of the Year committee

Monday Night Net  
Coordinator:         Gene, KA9BOD

Monday Night Net Control Operators:  
  
                             John, W9JGO  
                             Kurt, KE9N  
                             Steve, K9LLI  
                             Tom, N9VJU  
                             Steve, W9SWT  
                             Gene, KA9BOD  
                             Gordy, KC9NEX  
                             Al, KD9CA

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# Secretary's Report *(continued)*

Gene, KA9BOD, then thanked Shari, N9SH, and Chuck, AB9KA, for being on the nominating committee with him for the Ham of The Year Award.

Gene then presented Kurt, KE9N, with the Ham of the Year award and went on to compliment Kurt for the excellent job that he does as Ham Rag Editor, for his efforts as Field Day Chairman, and for showing exemplary service to the club.

Submitted by,  
Al, KD9CA  
RARA Secretary



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## Q is for Quality

The quality, or figure of merit, of the resonant series circuit, in terms of sharpness of resonance, is indicated by the factor Q. We calculate  $Q = X_L/R_S$ , where  $X_L$  is the reactance at the resonant frequency, and  $R_S$  is the resistance in series with  $X_L$ . At resonance  $X_L = X_C$ , but  $X_L$  is used, as  $X_C$  has no resistance.

A high Q (the ratio of reactance to resistance) means a narrow bandwidth with sharp resonance. The bandwidth of a resonant circuit depends upon the frequency and Q, and is expressed as  $f_2 - f_1 = \Delta f = f_r/Q$  (MHz).  $f_r$  is the resonant frequency.

For an antenna (when considered as a tuned LCR series circuit), the formula becomes  $Q = [F_0 \times (X_1 - X_2)] / [2 \times R \times \Delta F]$ , where

$F_0$  = mean frequency (MHz)

$X_1$  = reactance at lower frequency ( $\Omega$ )

$X_2$  = reactance at higher frequency ( $\Omega$ )

R = average resistance at the feed point ( $\Omega$ )

$\Delta F$  = frequency change between high and low frequencies (MHz)

A low Q is obtained by a high radiation resistance, and/or a low reactance. An antenna with a low Q (say, less than 30) will have a larger SWR bandwidth. An antenna with a high Q (more than 30) will have a smaller SWR bandwidth.

*Short Circuit 2009*

## RARA Information Net

The purpose of the net is to disseminate RARA related information as well as other Amateur Radio related information. As a club sponsored activity, please check in with Net Control and help make this net a success. The Net Control is rotated between the club members, with all amateur radio operators encouraged to check in. (RARA members as well as non-members)

Let any of the officers and board know your thoughts and ideas. If you wish to be a net control operator, let any of the officers know. All are encouraged and welcome to participate.

**146.610 (pl 114.8) repeater at 8:00 pm, every Monday, except on holidays.**

## FRIDAY MORNING BREAKFAST

Meets every Friday morning from 8 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 Stockholm Inn”***  
***2420 Charles Street***  
***Rockford, IL 61108***



## NEWS FROM AROUND THE GLOBE

**ARRL Board Elects 15th President: Kay Craigie, N3KN** (Jan 16, 2010) -- As its first order of business at the 2010 Annual Meeting, the ARRL Board of Directors elected ARRL First Vice President Kay Craigie, N3KN, of Blacksburg, Virginia, as the organization's new President. She will take over the reins from outgoing President Joel Harrison, W5ZN, at the close of the Annual Meeting. In October, Harrison advised the Board that he would not seek re-election.



**2009 Sees Surge of New Amateur Radio Licensees** (Jan 6, 2010) -- This past year was a banner year for new Amateur Radio licensees. According to ARRL VEC Manager Maria Somma, AB1FM, the FCC issued more than 30,000 new ham radio licenses. "In 2009, the demand for Amateur Radio exam sessions remained elevated and is still running at a higher rate than before the FCC's restructuring of the license requirements in 2007," Somma said. "This high level of exam session activity has produced an elevated influx of new applications, far outpacing recent years."



### Editors Note

If you would like to have something published, please call me or email me at ke9n@arrl.net.

**Cut-off for the March 2010 issue will be Saturday, February 27, 2010**

Kurt - KE9N, Editor

## AMATEUR RADIO EXAM NOTICE

January 16th there were 2 applicants resulting in 1 new license and 1 upgrade

New License

Gary L. Engelsen

Upgrades

Michael W. Heckel, KB9QNC, General

Northern Illinois Volunteer Examiners will be holding the next Amateur Radio exam session in Rockford, IL on Saturday, February 20, 2010.

Location:

St. Anthony Hospital

5666 E. State Street

Rockford, IL

Exams will be held in the St Francis Room (just right of the front entrance after you enter).

Check-in is from 9:00 AM until 10:30 AM.

What You Need To Bring To A W5YI-VEC Session

1. Your original Amateur License (unexpired or within the 2 year grace period) and a copy to attach to the paperwork.
2. Any valid CSCE that you are using for credit. Again the VE's have to see the original and have a copy to attach to the paperwork.
3. Two forms of Identification with your signature on them. One must be a picture ID (drivers license, passport, school ID, library card, credit card, etc.)
4. Test Fee \$14.00 cash or check. (please make checks payable to W5YI-VEC)

Contact Information

Randy Scott, W9HL

W9HL@arrl.net

815-877-4328



## *KØFF Homebrew Tips*

**Subject: Make Your Own Loading Coils DE KØFF**

**OR: "If they look like DUX and walk like DUX and quack like DUX, maybe they ARE DUX"**

**(then again maybe not)**

"Air Dux" inductors were once plentiful and inexpensive. Not so today. Even if they were, HAMs like to make their own apparatus when possible. Here is one method that I have long used to make evenly spaced, nice looking coils of all sizes.

Make your own loading coils for antenna projects using Caterpillar Grommet strips. Also called flexible grommets, flexible bushings etc.

These are used by installers to form protective bushings around the edges of holes cut into sheet metal, and come in strips that are cut to desired length then snapped into the hole to cover the raw edge. We used to use them when installing 2-way radios to line the holes we made in the firewall to pass the heavy 12V wires. The evenly spaced notches make an ideal form and support for AIR DUX knockoffs. Use Duco or Testors model cement to secure the wires in the strips before removing from the temporary forms. Nylon grommet strips can be purchased at McMaster Carr, as well as many other supply houses.

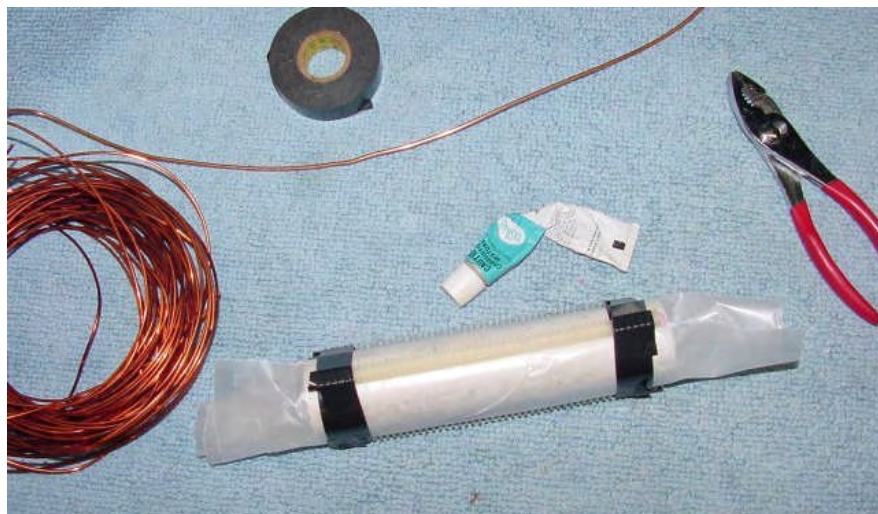
*Fig 1 is the caterpillar grommet material as purchased from the supplier:*



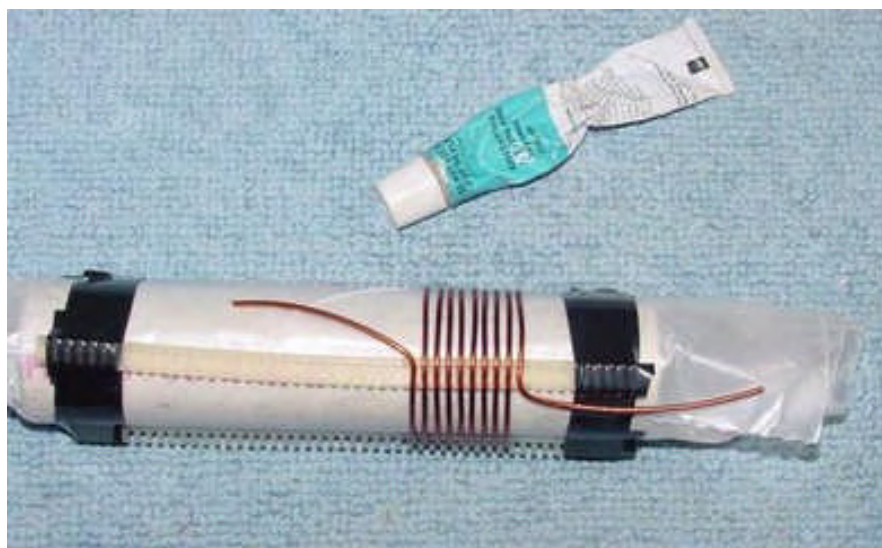
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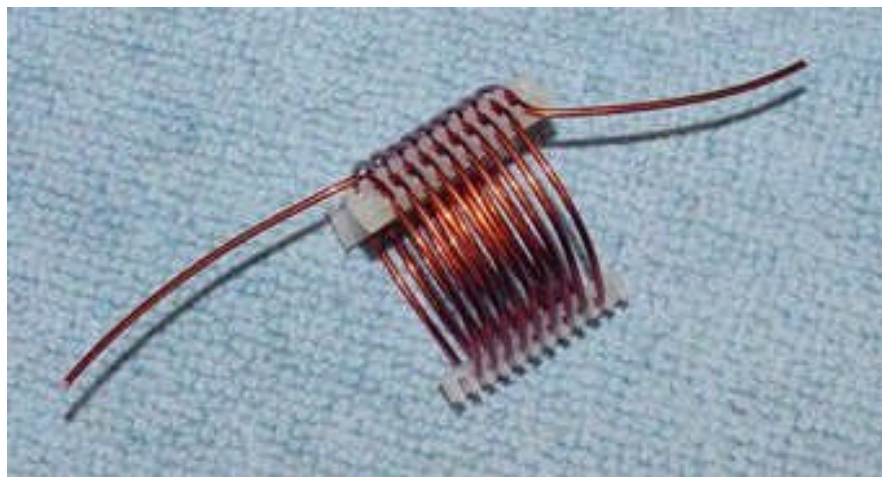
***Fig 2 - Next Wrap the form (whatever size you need) in wax paper and temporarily tape the plastic strips on there:***



***Fig 3 -Wind the coil using the notches as a guide. Seat the wire all the way down into the notch and wrap the coil tightly. Spread plastic cement down the strips when the coil is wound:***



***Fig. 4 - When the glue is dry, slip the assembly off the form and trim the strips to correct length:***



# DX NEWS AND CONTESTS

## SCHEDULED DXPEDITIONS

CALLSIGN	QTH	WHEN	QSL VIA
<b>XU7AFU</b>	CAMBODIA	FEB. 2 TO FEB. 15	BUREAU
<b>XR9JA</b>	SOUTH SHETLAND IS.	FEB. 2 TO FEB. 27	CE5JA
<b>J5NAR</b>	GUINEA BISSAU	FEB. 7 TO FEB. 13	HA0NAR
<b>TX4T</b>	FRENCH POLYNESIA	FEB. 9 TO FEB. 25	LotW
<b>T88SM</b>	PALAU	FEB. 10 TO FEB. 16	JA6EGL
<b>J38XX</b>	GRENADA	FEB. 10 TO FEB. 23	DL5AXX
<b>9U1VO</b>	BURUNDI	FEB. 22 TO MARCH 6	HOME CALL
<b>8Q7JK</b>	MALDIVES	FEB. 23 TO MARCH 5	OE6VHF
<b>XR0ZN</b>	JUAN FERNANDEZ	MARCH 1 TO APRIL 30	LotW
<b>VK9C</b>	COCOS KEELING	MARCH 3 TO MARCH 10	K8NA
<b>C56KR</b>	GAMBIA	MARCH 5 TO MARCH 24	OZ8KR
<b>YI9PSE</b>	IRAQ	APRIL 3 TO APRIL 11	N6NKT
<b>3W6C</b>	VIETMAN	APRIL 10 TO APRIL 18	TBA

## UPCOMING CONTESTS

Ten-Ten Winter QSO Party, SSB, Feb. 6, 0001Z to Feb. 7, 2359Z  
 North American Sprint, CW, Feb. 6, 0000Z to Feb. 7, 0400Z  
 North American Sprint, SSB, Feb. 14, 0000Z to Feb. 14, 0400Z  
 ARRL DX Contest, CW, Feb. 20, 0000Z to Feb. 21, 2400Z  
 CQ World Wide 160 Meter Contest, SSB, Feb. 26, 2200Z to Feb. 28, 2200Z  
 North American QSO Party, Digital, Feb. 27, 1800Z to Feb. 28, 0600Z

### AREA Repeaters

146.610 - ENC/DEC pl 114.8 W9AXD  
 147.000 + ENC/DEC pl 114.8 W9AXD  
 223.880 - ENC/DEC pl 118.8 W9AXD  
**ATV** input 1250 Mhz/ 434 Mhz W9ATN  
 output 421.25 Mhz

146.805 - ENC/DEC pl 114.8 K9AMJ  
 224.440 - ENC/DEC pl 118.8 K9AMJ  
 147.255 + ENC/DEC pl 114.8 WX9MCS

444.725 + ENC/DEC pl 107.2 WX9MCS  
 Linked to FISHFAR

### 2010 RARA Officers and Board

#### **Officers:**

President - Gordon Seaman, KC9NEX, 815-234-5034  
 Vice President - Gene Stankiewicz, KA9BOD, 815-226-1806  
 Secretary - Al Fischer, KD9CA, 815-885-3926  
 Treasurer - Paul Franklin, K9RNR, 815-298-2251

#### **Directors:**

Shari Harlan, N9SH, 815-398-2683  
 John Lawrence, N9OTC, 815-397-4624  
 Tom Shouler, N9VJU, 815-877-9129  
 Steve Thorne, K9LLI, 815-399-9161  
 Web Master - Robert Larson, KC9ICH, 815-226-1875  
 Ham Rag Editor - Kurt Eversole, KE9N, 815-389-2784  
 Repeater Chairman - Chuck Ingle, AB9KA, 815-979-1049

**RARA BOARD MEETING MEETS ON THE LAST TUESDAY OF THE MONTH AT 7 PM**  
**St. Anthony Medical Center 5666 E. State St. Rockford, IL**



P.O. Box 8465, Rockford, IL 61126

Website: www.w9axd.org

E-mail: ke9n@arrl.net

Nets

Monday 8 PM	RARA Info.	146.610 - 114.8
Thursday 7 PM	ARES	147.195 + 114.8
Thursday 8 PM	SATERN	146.610 - 114.8

place address label here

# February 2010

## ROCKFORD AMATEUR RADIO ASSOCIATION MEMBERSHIP APPLICATION

Single Adult: \$25.00 Adult w/Family: \$30.00  
 Single Senior: \$15.00 Senior w/Family: \$20  
 Student: \$15.00

Above rate includes the RARA monthly newsletter, Ham Rag, via email.

Ham Rag Via U.S. Postal Service: \$12.00 extra

Name \_\_\_\_\_ Call Sign \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Home Phone \_\_\_\_\_

Work Phone \_\_\_\_\_

Email \_\_\_\_\_

Renewal \_\_\_\_\_ New \_\_\_\_\_ Retired \_\_\_\_\_

Radio Interests \_\_\_\_\_

Other Interests \_\_\_\_\_

Suggestions: \_\_\_\_\_

RETURN COMPLETED FORM TO:

ROCKFORD AMATEUR RADIO ASSOCIATION  
 P.O. BOX 8465  
 ROCKFORD, ILLINOIS 61126