

HAM RAG

Rockford Amateur Radio Association, Inc.

Visit our website for more club and area ham information
in the Rockford area at <http://rara.tripod.com>

March 2004

LOCAL NEWS NEEDED

For the last few months of newsletters I been doing, there has been a request of me for more local news of the ham community. I do try to put in what I can, but I don't have the resources of having paid reporters like the local tv and newspapers have.

Currently, I spend about 25 hours in generating this newsletter from start to finish. First, to do this I have to collect what I can get of news locally, presidents letter, secretary's letter and any submitted articles. Secondly, I must try to format them into something that can be easily read. I print the newsletter out and attempt to proof it, before I do the final draft and then take it to the printers. I place the newsletter on the website while it is being printed. Send emails out to the people who want it electronically. Once back from printers; I print out mailing labels which comes from a list generated by the club secretary. Next, comes a 4 step process of folding the newsletter, affixing the mailing seal, labeling and applying the stamp. Finally, try get it to the post office before their 8:00 pm cutoff time.

Here is your chance to make the HamRag a local edition. If you are a committee head or group leader submit an article about your group or an article that applies to your group that you want share with the rest of the club by the first of the month for publication. Volunteer reporters are needed as well as for the numerous empty positions in the club.

**RARA Need's YOU to volunteer
to make the club successful.**

**The next meeting is at
7:00 pm March 12, 2004**

The program for this month's meeting will be:

ANTENNA ROUNDTABLE

*Saint Anthony Medical Center
5666 E. State Street Rockford, IL.*

To get to the meeting room go to the main entrance - turn right at desk - go to the end of hall to the meeting rooms.

ANTENNA ROUNDTABLE

An exchange of antenna information and experience between everyone at the meeting. Moderators will be Dave Bond, W9MG, Gary Hilker, K9LJN, Jim Miller W4JR, Bob Davidson, WA9NTT, and Larry Snyder, N0HNM.

With more Hams about to get more HF privileges. there is more interest in home-made antennas like dipoles, ground planes, ground mounted verticals and so on.

Please come prepared to tell about your favorite antenna, and maybe also about what didn't work and what you had to change. Maybe even put a diagram on the board.



**Wayne Hansen, KA9IMX
will be doing the
Skywarn training at the April meeting.**



Presidents Log March 2004

We just completed two Saturday's of Technician class, and there are eight new hams waiting for their new call signs! The class went very easy as Carl, W9TQ, loaned the club the technician video tapes from the ARRL. After showing a segment we would answer questions or explain a little more in detail what was said, but the tapes really help in doing all the work of teaching. They also help keep the class on a schedule as I will, once in awhile (?) digress and spend a little too much time on all the fun things in ham radio. If you are interested in helping teach in the fall, give me a call. It is very rewarding and with the tapes, just about anyone can do it.

This coming Saturday, March 6th and again March 20th, we get together for the General course. Right now we have 4 people signed up, but a couple from the Technician class said they might sign up yet, so we will see. Again, we have ARRL videos to help us (this set owned by RARA) so it should go well.

Last month's meeting was great, thanks to Gary Hilker and the DXpedition video that he provided. I learned lots and enjoyed seeing the fun they had as well as the problems they encountered getting ready and planning. What an experience it must have been.

I am looking for a volunteer for Field Day. It will not take much work as the park (Alpine Park this year) has been reserved and there are bathrooms so a porta-potty does not need to be ordered. We have lots of room and the main thing is to find out from those that raise their hands at the meeting what bands they will operate and where in the park they would like to be located. We also need to discuss what we will do over the weekend for food. We could just do pot luck or everybody on their own. At the next meeting I will ask, unless I get the volunteer, in which case they can ask, what the group would like to do for food. Did I say that I need a volunteer???

The meeting this month should like fun and the

new hams should especially enjoy it if they come. I understand it will be about antennas in a round table format, I believe. I am in Minneapolis as I write this and do not have my notes. So, if you have antennas that you would like to talk about or questions about antennas that you could never get answered, come to the meeting and share your knowledge or be prepared to ask questions.

Did I say I need a volunteer for Field Day?

Just so you can be thinking ahead, our April meeting is on April 9th which is also Good Friday. It is our plan to go ahead and have the meeting at that time, although there will be some out of town on Easter vacation.

At this moment we are planning a Breakfast In The Park on June 12th. We have Alpine Park for this event as well. We will not have a meeting on Friday June 11th. At our Saturday meeting we will talk about Field Day activities and maybe more. Stay tuned.

Did I say I need a volunteer for Field Day?

Our RARA Picnic will be on August 8th. Please note that this is NOT the Sunday after our normal meeting day but the Sunday before. Again, because of the special event, we will NOT hold our normal Friday night meeting on the 13th.

See you at the meeting!

73

Gene Harlan -
WB9MMM



The RARA 2004 Membership Roster is being prepared for this year. It is going to be done as a handout which will be made available to the RARA membership at the April club meeting. It will also be made available at request after the April meeting.

If you *Do Not* want your address, phone or e-mail address listed. Please notify Gene Harlan, WB9MMM, before April 1ST.

**IMPORTANT NOTICE:
FREQUENCY CHANGE
EFFECTIVE
IMMEDIATELY**

After serious consideration, the Winnebago County Emergency Coordinator (Sue Peters, KA9GNR) and her assistant EC's have decided to move ARES and SKYWARN operations to the **147.255+ (PL 114.8)** repeater for safety reasons.

As many of you know, the 147.195 repeater has been out of service for several months, and does not appear as though it will be back up in time for the start of the Severe Weather Season that is rapidly approaching.

Our concern is for the safety of our people in Severe Weather Events. We feel it is important to have the ability to track and communicate reliably, where ever our spotters might be in the County. At the present time, that is not possible on 147.195.

Rest assured, the 147.195 repeater is being replaced, and will be back on the air as soon as possible.

Until further notice, please look for SKY-WARN and ARES Net operations to be conducted on the 147.255 machine.

We would appreciate your cooperation in programming this information into your equipment, and apologize for any inconvenience this may cause.

In order to facilitate a smoother transition, the weekly Winnebago County ARES and Information net will also move to the 147.255 repeater effective immediately.

If you have any questions, or need assistance please feel free to call any of the officials and ask. Working together we shouldn't have any problems.

Sincerely,

Sue Peters - KA9GNR

Winnebago County Emergency Coordinator
Assistant EC's

Bill Peters, WB9MCZ,
Wayne Hansen, KA9IMX
John Lawrence, N9OTC,
Eric Hultgren, N9MCS
Dan Hunt, KC9ATR

For additional information,
please see the Winnebago County ARES
and Information Net webpage at:
<http://www.angelfire.com/tv2/skywarn>

ATV Repeater Update

At this time, the ATV Repeater is up and running for the most part. We just need to get a final destination, but that is being worked on. It's been too cold till now to climb anyway, but we all hope that will change soon.

I took a day off from work last week and worked on a 1.2 GHz filter that should help us with our problem of the third harmonic getting into the 1.2 GHz receiver. I've never made one like this before, and we will find out soon what it does. Interesting about how at these frequencies that the "electronics" is copper and brass rods in a metal case with adjustment screws.

When the final site is determined, we will have to pay to have the antennas installed, so your 2004 ATV Repeater dues would be helpful anytime you can part with the cash. The dues are \$50.00 again. If you write a check, make it out to "RARA ATV" and send it to Gene Harlan, 5931 Alma Dr., Rockford, IL 61108. Donations of any amount are welcome as well!

Gene Harlan - WB9MMM
Secretary/Treasurer Amateur Television
Network of Illinois

**Rockford Amateur Radio Association
Monthly meeting of the membership**

February 13, 2004
St. Anthony Hospital

Members present: 27 present.

RARA President Gene Harlan called the meeting to order at 7:10 pm.

Minutes: The minutes from the January meeting were read by Secretary Wendy Owano, KC9BCF. Colleen Peterson, KC9EWJ moved to accept the minutes as read, second by Chuck Liljegren, WB9UMC motion carried.

Treasurer's Report: Treasurer Carl Cacciatore, W9TQ reported a balance of \$5,710.77 as of January 31, 2004. Dave Bond, W9MG moved to accept the report as presented, second by Larry Snyder, KOHNM motion carried.

Old Business

Shari Harlan, N9SH reported that the application for the International Space Station is being submitted. Volunteers and equipment (2 meter radio with an odd split) are needed to make this effort with Christian Life Schools a success. Contact Shari if you can help.

Testing: The license testing is no longer being held at North Suburban Library. The new location is at St. Anthony's Hospital in the room just next to the location where the monthly meeting takes place.

RVC Classes: Technician—2/21 and 2/28
General—3/6 and 3/20

New Business

Shari reported that the FCC is putting together a notice for rule making regarding Broadband Power Lines (BPL). Public comment concerning BPL can be submitted once the FCC completes its application. Shari also reported on federal legislation, HR1478, which is co-sponsored by our local congressman Don Manzullo. This legislation deals

The monthly Board of Directors Meeting are held at Saint Anthony Medical Center 5666 E. State St. Rockford, IL on the last Tuesday of each month at 7:00 PM. *Except for December.*

with accommodating home owners with communication towers, antennas, etc. consistent with PRB1.

ARES: Sue Peters, KA9GNR reported that Dan Hunt, KC9ATR has been added to her ARES committee. An ARES organizational meeting will be held on March 25. Pat Ryan will be speaking. Weather spotting classes hosted by DuPage County will be held at Wheaton College on March 5 and 6. A tornado shelter workshop is on March 5 and March 6 is advanced weather spotting. Contact Sue for other details if interested.

Ham Fests: Sterling on March 14 and North Shore Radio Club at Gray's Lake on March 28.

Field Day: The members indicated that there was enough interest to hold the event but no chairman volunteered yet. Contact Gene if you want to help plan this weekend event.

ARRL: Shari reported on the proposed license restructuring for ham operators. The new (old) classifications would be novice (novice), general (technician, tech plus, and general), and amateur extra (advanced and extra).

Tim Peterson, KC9DNN moved to adjourn the meeting, second by Jim Miller, W4JR motion carried.

The A52A Bhutan DVD was viewed for the remainder of the meeting.

Respectfully submitted,

Wendy Owano,
RARA Secretary



SCHEDULED DXPEDITIONS

By K9LJN & W9GD

| CALLSIGN | QTH | WHEN | QSL VIA |
|-----------|-----------------|----------------------|--|
| 5V7C | TOGO | NOW TO MARCH 13 | F5TVG |
| V8JIM | BRUNEI | NOW TO MARCH 15 | G3SWH |
| V8NOM | BRUNEI | NOW TO MARCH 15 | GM4FDM |
| MJ/K8PT | JERSEY | NOW TO MARCH 17 | K8PT |
| MJ/K3PLV | JERSEY | NOW TO MARCH 17 | K3PLV |
| 8Q7BA | MALDIVES | NOW TO MARCH 20 | DL – BURO |
| P40A | ARUBA | NOW TO MARCH 28 | WD9DZA |
| V31AD | BELIZE | MARCH 13-20 | N5DD |
| KP2/W6DXO | U.S. VIRGIN IS. | MARCH 14-19 | W6DXO |
| A35DA | TONGA | MARCH 15-29 | DL5DAN |
| A35DH | TONGA | MARCH 15-29 | DH3WO |
| A35DJ | TONGA | MARCH 15-29 | DJ2HD |
| 3B9C | RODRIGUES IS. | MARCH 16 TO APRIL 12 | www.fsdxa.com/3b9 |
| IS0/N2WB | SARDINIA | MARCH 22-27 | N2OO |
| IS0/W4WX | SARDINIA | MARCH 22-27 | W4WX |
| 6Y2RZ | JAMAICA | MA4CH 24-30 | WB2NVR |
| D4B | CAPE VERDE | MARCH 27 TO MAY 30 | K1BV |
| MU2Z | GUERNSEY | MARCH 27-28 | M5RIC |
| 4L6AM | GEORGIA | MARCH 27-28 | DIRECT |
| C56JJ | THE GAMBIA | MARCH 29 TO APRIL 5 | PA9JJ |
| JW/F8DVD | SVALBARD | APRIL 4-10 | F8DVD |
| T33C | BANABA | APRIL 4-15 | F5CWU |

CW SAVVY: A MORSE CODE SYMBOL FOR THE "AT SIGN"

Computer fanatics who also like operating CW listen up. Radio Currents Online for February 16th says that the International Morse Code is being updated to include a new character for the "at sign".

In December, the International Telecommunications Union voted to create the character which will be known as a commat. The commat is made up of dot-dash for the letter A and dash-dot-dash-dot which we all know is the letter C. The two characters are combined with no space between them giving Morse code web surfers an easy way to send an e-mail address or the location of a webpage. (CGC)

@ = .- -.-.

Recently Heard/Worked DX
From the Rockford Area By K9LJN & W9GD

| CALLSIGN | QTH | QSL VIA |
|-----------|-------------------------|-----------|
| 5W1SA | WESTERN SAMOA | JH7OHF |
| 8Q7VV | MALDIVES | AI6V |
| 9G5BF | GHANA | OE6LAG |
| A61AJ | UNITED ARAB EMIRATES | K2UO |
| AP2IA | PAKISTAN | DIRECT |
| AY1ZA | SOUTH ORKNEY | LU4DXU |
| CN2MP | MOROCCO | EA9AM |
| CN8KD | MOROCCO | EA5XX |
| EX2M | KYRGYZSTAN | W3HMK |
| FK8GJ | NEW CALEDONIA | F6CXJ |
| H44MS | SOLOMON ISLANDS | DL2GAC |
| TF/OH2NIN | ICELAND | OH - BURO |
| TG7/OH3JF | GUATEMALA | OH3OJ |
| TU8/F5TLN | IVORY COAST | F5TLN |
| VK9LB | LORD HOWE ISLAND | DL7AFS |
| VP8LP | FALKLAND ISLAND | DIRECT |
| YI3DX | IRAQ | W3ICM |
| ZK3SB | TOKELAU ISLAND | I2YSB |



Wanted:

RARA

Field Day Chairman

For 2004

**The following 8 attended and
passed the
Technician Class License:**

- Nancy A. Gilbert, KC9FOD
Rockford
- Sherm Buetsch, KC9FOB
Rockford
- Mark Germain, KC9FOC
Dakota
- James S. MacConnell, KC9FOF
Poplar Grove
- Richard Schlee, KC9FOH
South Beloit
- Kenneth T. Ponsck, KC9FOG
Rockford
- Anton Kramer, KC9FOE
Roscoe
- Donald Smith, KC9FOI
Winnebago
- Attended class only:**
- Ronald Freigo, N9VEZ
Belvidere
- John M. Bednar
Poplar Grove
- Congratulations to our new
Hams in the area.**

- RARA Officers for 2004**
- President:** Gene Harlan WB9MMM
Vice President: Scott Allshouse KB9YRW
Secretary: Wendy Owano KC9BCF
Treasurer: Carl Cacciatore W9TQ
Director: Dan Hunt KC9ATR
Director: Gary Hilker K9LJN
Director: Nicolas Lager KB9SKW
Director: Larry Snyder K0HNM
Newsletter and Web Site:
John Auerswald KA9SOG

**Have anything or would like to
submit an article to be put in the
Ham Rag or the website?
Contact me by e-mail at
ka9sog@arrl.net and visit http://
rara.tripod.com for any late
breaking news and information.
Please submit any articles before
the 1st of each month.**

FCC Proposes Rules for BPL Systems:

The FCC this week released its Notice of Proposed Rule Making (NPRM) on Broadband over Power Line (BPL) systems. The 38-page NPRM--in ET Dockets 03-104 and 04-37--proposes amendments to FCC Part 15 rules to define so-called "access BPL," make rules specific to BPL systems and provide measurement guidelines for BPL devices and systems. It would make no changes to Part 15 emission limits for unintentional radiators, however. ARRL CEO David Sumner, K1ZZ, says that while Part 15's current limits on unintentional radiators on HF may be appropriate for short-duration, narrowband emissions, they are inappropriate for the sort of long-duration, broadband emissions BPL would employ. He compared short-duration, narrowband emissions at the Part 15 radiated emission limit to a helicopter flying overhead.

"The noise is deafening, but is tolerable because it doesn't happen very often nor last very long," he observed.

"To a radio user, having BPL in the neighborhood would be like having the helicopter hovering constantly overhead."

ARRL Lab Manager Ed Hare, W1RFI, offered an example most hams could relate to. "The limit for an unintentional emitter on HF is 30 uV/m at 30 meters from the source," he said. "If you take a dipole cut for 3.5 MHz and put it in a 30 uV/m field, you'll have a noise reading of S9 plus 16 dB at your transceiver."

The FCC proposal takes a broader view of interference. "There is significant disagreement among the commenting parties regarding the interference potential of Access BPL," the NPRM declares. "Amateur operators and amateur organizations in general are opposed to Access BPL and advocate emission limits that are lower than the existing Part 15 limits."

Still, the NPRM concedes, Amateur Radio operations "are likely to present a difficult challenge in the deployment of Access BPL in cases where amateurs use high-gain outdoor antennas that are located near power lines." Noting that power line noise already presents a significant problem for hams, the FCC said, "we therefore would expect that, in practice, many amateurs already orient their antennas to minimize the reception of emissions from nearby electric power lines."

The NPRM goes on to point out that because BPL has the capability to stay clear of specific frequencies, BPL providers can simply "avoid the use of amateur frequencies when in close proximity to amateur outdoor antennas." The NPRM also briefly mentions the possibility of interference to BPL systems from Amateur Radio, an issue ARRL and others raised in their comments on last April's Notice of Inquiry on BPL.

The NPRM emphasizes that under the proposed rules, operators of Access BPL systems would be responsible for eliminating any harmful interference that may occur. The FCC says it believes current Part 15 emission limits for carrier current systems --in conjunction with certain additional requirements specific to Access BPL--"will be adequate to ensure that existing radio operations are protected against harmful interference."

Sumner suggested that, with licensed services and government users taking up large portions of the HF spectrum, protecting all licensed HF users could prove to be a nightmare for BPL providers. He noted, too, that while the FCC maintains that licensed services must be protected, the proposed rules place the burden of initiating corrective action on the shoulders of the licensed services. "And as a practical matter, the FCC's proposed rules offer no protection at all to mobile and portable stations," he added.

Sumner also said the ARRL would continue to combat the "misconception" that BPL systems are viable as a "last mile" broadband technology for rural dwellers. "In low-density areas, the economics just don't work," he said.

The NPRM is available on the FCC Web site in Microsoft Word format or as an Adobe PDF file http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-29A1.pdf.

Interested parties may file detailed comments on the NPRM via the main FCC's Electronic Comment Filing System (ECFS) <http://www.fcc.gov/cgb/ecfs/>. The comment deadline is 45 days after the NPRM has been published in The Federal Register, and that is not expected to happen for another week or two. The FCC also is accepting brief comments on the NPRM via its ECFS Express page <http://gullfoss2.fcc.gov/ecfs/Upload/>.

Additional information about BPL and Amateur Radio is on the ARRL Web site <http://www.arrl.org/tis/info/HTML/plc/>. To support the League's efforts in this area, visit the ARRL's secure BPL Web site <https://www.arrl.org/forms/development/donations/bpl/>.

DXCC GAME PLAN

There are many aspects of amateur radio, but chasing DX is number one with me. In my quest for the 5BDXCC award (working 100 countries on five different frequency bands), while running 100 watts to either a multi-band dipole at seventeen feet or a ground mounted vertical, it didn't take me long to find out that I was not going to muscle my way through the pile-ups.

Each of us develops operating techniques that get us through the pile-ups on one day, but don't seem to work the next. Why is this? There can be many reasons, such as: ionospheric conditions; split frequency operation techniques; it isn't the correct time of day for optimum propagation between the DX station and the Midwest; QRM; operating tendencies of the DX station; and perhaps (most importantly of all) our own operating techniques need to be reviewed.

How many times have you been in a split frequency pile-up when someone throws out their callsign right on top of the weak DX station and completely covers him up. In our zeal to contact that rare DX station, we sometimes forget to listen carefully before we transmit. Let me emphasize that one very important word:

LISTEN!

Lets look at a typical CW pile-up on 20 Meters where the DX station is giving out a contest style exchange (K9LJN 599 BK). Now take a couple of minutes to carefully listen to the DX station and pile-up. Once this is done, you should be able to develop a **game plan** after identifying the following characteristics about the DX station, his operating tendencies, and that of the pile-up.

1. His callsign?
2. Is he picking up stations quickly or is there a long time delay?
3. Is he listening UP or DOWN (5 KHz, 10 KHz)?
4. What is his CW speed?
5. Now try and find the stations he is contacting (assuming split frequency). Are they all on one frequency? Are they being worked in a incremental 500 Hz UP pattern? Are they being worked in a incremental 500 Hz DOWN pattern? Is it a random selection (no pattern)?
6. Is he going by districts (0 through 9)?
7. What is the correct time for optimum propagation to the DX station's part of the world? (If his signal strength is S1 and he is only working European stations, our chances are slim.)
8. What is his QSL information (via Manager, Direct or Buro)?

After carefully listening, we now have the following information about the DX station: his callsign is 5X5GK; his QTH is Uganda in the East Central portion of Africa; he is picking up stations quickly; he says he is listening up 1 KHz; his code speed is 20 WPM; he is actually working stations UP 5-10 KHZ and incrementally 500 Hz UP from the previous contact; he is not going by districts; it is 1PM CST/1900 UTC (optimum for us), his signal strength is S7 and he is working many stations from the Midwest; his QSL Manager is DJ5RT.

Now for our **game plan**. Turn your beam (if you have one) to 65 degrees, set the CW keyer to 20 WPM (he probably will not copy if you send 35 WPM), set you XMIT VFO 500 Hz above the last station he worked and wait until he sends 5X5GK UP 1. Send K9LJN once, he picks up K8CW. Zero-beat K8CW and then go up 500 Hz, wait for 5X5GK UP 1, send K9LJN once, he picks up NA9J (darn, Jack beat me again). Zero-beat NA9J and then go up 500 Hz, wait for 5X5GK UP 1, send K9LJN once. **Hey he came back to me!** We exchange 599 signal reports and the QSO is completed. (Don't forget to enter the QSO in your logbook.)

It is very exhilarating to work a new country. It is also very satisfying to figure out the proper operating technique (**game plan**) to make a contact in a large pile-up using low power and a mediocre antenna system. These same techniques also work on SSB. Remember to listen carefully, use QSK (for CW) and keep your calls short, otherwise you might not hear the DX station coming back to you.

This **game plan** system might take you a little while to get used to, but it is very efficient in getting through the pile-ups. Try the **game plan** system. It's fast, it's courteous and it works!

73 es DX, Gary – K9LJN

Bogus ARRL.net messages circulating via e-mail

(Mar 3, 2004) -- Several members have notified ARRL that they have received e-mail messages alleging to be from the ARRL E-Mail Forwarding Service, "The ARRL.net team" or some variation.

The messages, which often carry a subject line along the lines of "Warning about your e-mail account," indicate that the recipient's ARRL E-Mail Forwarding Service <call sign>@arrl.net address will be closed within three days because of an alleged violation of acceptable practices. These messages are false and did not come from The ARRL Forwarding Service.

They are the result of one of the variants on a number of viruses now permeating the Internet. A file usually is attached to these messages. As always, **do not open** any attachments that you cannot identify. Opening the file could result in your computer being infected by a virus. This is only one of the several virus-laden messages currently propagating across the Internet. The ARRL advises its members to be cautious in opening any message and/or attachment, even if it appears to be from someone you know. All of these viruses use e-mail addresses from the address book of an infected computer to falsify the "From:" address in the header to make it appear that the message is from someone the recipient knows.



This issue of the HAMRAG was made possible by their article or photo submissions:

Gary Hilker, K9LJN, Gene Duncan, W9GD, ARRL,
Sue Peters, KA9GNR, Gene Harlan, WB9MMM, Scott
Allshouse, KB9YRW, ARNewsline™

THE NEXT AMATEUR RADIO EXAM SESSION IS MARCH 20, 2004

**Location of testing has been Changed
New Location is:**

**Saint Anthony Medical Center
5666 E. State Street Rockford, IL.
Saint Francis Room**

*Enter at the main entrance turn right at the
desk walk to end of hall.*

*The St. Francis Room is the corner room on
the right.*

Check-in is from 9AM till 11AM. We require two signature ID's (one must be a photo ID).

If you are a licensed amateur radio operator bring your original current license and a copy.

If you are using a CSCE for an element credit bring the original and a copy.

Copiers available at site. (We need to see the originals & keep a photocopy of each document used for element credit.)

The test fee for 2004 is \$12.00.

Walk-ins welcome.

THE BPL FIGHT: A WIN IN 4X4-LAND

Even though the BPL outlook looks a bit grim here in the United States, there has been a big win over in Israel. Hagal International says that equipment for the networking of computers over the AC power mains being sold in the country was found to be causing interference to High Frequency spectrum users.

As a result, Israel's Ministry of Communications requested an explanation from the distributor of this equipment on how to remedy the problem. The distributor did one better. The company replied that it had discontinued the sales of the interfering devices. (Hagal International)

**Rockford Amateur
Radio Association, Inc.**

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E-Mail: w9axd@arrl.net
Web Site - <http://rara.tripod.com>

**Its Time to
Renew Your
Dues for 2004
This is your last
Newsletter**

Mailing
Address
Goes Here

March 2004

ROCKFORD AMATEUR RADIO
ASSOCIATION MEMBERSHIP
APPLICATION

Single \$30.00 Family \$35.00
Senior \$15.00 Senior Family \$20.00
Student \$15.00 HamRag Only \$10.00

NAME _____ CALL SIGN _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
HOME PHONE _____
WORK PHONE _____
EMAIL _____
RENEWAL _____ NEW _____ RETIRED _____
RADIO INTEREST _____
OTHER INTERESTS _____
SUGGESTIONS _____

RETURN COMPLETED FORM TO:
ROCKFORD AMATEUR RADIO ASSOCIATION
P.O. BOX 8465
ROCKFORD, ILLINOIS 61126

