

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>

May 2004

ARRL CALLS ON WHITE HOUSE TO WITHDRAW SUPPORT FOR BPL

ARRL President Jim Haynie, W5JBP, has appealed to President and fellow Texan George W. Bush to withdraw his support for broadband over power line (BPL) technology and focus on "more suitable technologies" such as wireless broadband. The League this week also issued a call for members to support Haynie's request. In an April 26 speech at the Minneapolis convention of the American Association of Community Colleges, Bush advocated changing technical standards to encourage BPL deployment in the US. Haynie told Bush that while the League supports universal and affordable broadband access, BPL is the wrong direction to take.

"Power lines were designed to transmit energy," not broadband signals, Haynie said in a fax. "The broadband signals radiate from power lines and cause severe interference to radio reception."

Haynie said test sites throughout the US and elsewhere have amply demonstrated BPL's potential to interfere. "You may have been told otherwise; if so, you were misinformed," he said, directing the president's attention to the

(Continued on page 3)

The next meeting is at
7:00 pm May 14, 2004

The program for this month's meeting will be:

**"Techniques for Chasing and
QSL'ing DXpeditions**

Gary Hilker, K9LJN

*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.

Have you seen this Ham Shack yet?

This shack belongs to Tim, KC9DNN, and KC9EWJ, Colleen Peterson. It features a home-



made hutch, an Yaesu FT-895 with an matching antenna tuner, Radio Shack 25 amp switching power supply, MFJ straight key, Koss

(Continued on page 5)

Please be aware of the many activities starting this month that need
Amateur Radio operators for event communications.

If you can please volunteer for this events.

Go to <http://www.angelfire.com/tv2/skywarn/> for more information.

Presidents Log May 2004

Summer activities are on the way! And we are finally seeing some warmer temperatures to encourage us into thinking that summer will really come.

The events coming up in the near future starts with the May's RARA meeting on the 14th. It seems like the 14th is very late in the month to have the meeting, but that is where the second Friday falls. The program will be Gary Hilker, K9LJN, talking about "Techniques for Chasing and QSL'ing DXpeditions. For those that like to talk to as many countries as possible, this will be informative and entertaining.

In June, we will have the *Breakfast In The Park on Saturday morning, June 12th instead of the regular meeting on June 11th*. So, the meeting will be held along with the breakfast. The location is Alpine Park, Shelter #2. Watch the next Ham Rag for details on starting and ending times. I would imagine we will start serving around 7:30 a.m. and end around 11 a.m. Tom Shouler, N9VJU, is chief cook, and we will use paper plates so a bottle washer is not needed. I am sure that Tom could use some help in setting up and cooking, so please call Tom and volunteer. The business meeting will be short, and then we will talk about Field Day.

For the Breakfast In The Park, we plan to have an attendance raffle, and the prize might be a weather radio.

And speaking of Field Day, Dick Fleming, KC9BCB, is coordinating the teams for the different bands. If you would like to operate on a particular band, call Dick. If someone already has that band, I am sure arrangements can be made to have you join that group. Dick has a map of the area in the

park and is using that as a guide to allocate area for everyone. I mentioned this before, but VHF and UHF should be better this year as Alpine Park is about 50 feet higher in elevation than our previous location at Aldeen. And we will have "real" restrooms, not a port-a-potty!

Our July meeting will be on July 9th, a Friday night as usual at the hospital.

The August meeting is the Picnic, August 8th, again at Alpine Park, Shelter #1.

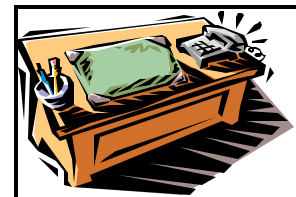
PLEASE NOTE: This is not the same weekend that our regular meeting would be and there will not be a Friday night meeting this month. The times and details will be announced soon.

We need everyone to consider getting the Ham Rag by email (at least the notification, and then download it). Postage costs are supposed to go up again, and from what I heard, by a lot more than they ever have before. The board feels that it will be required that everyone needs to accept this change. If you do not have email, then there may be an extra charge in the future for the Ham Rag as a paper copy. Let the board know what you think.

Thanks to everyone for their help this year in running the club meetings and all the other activities that we have.

See you soon.

Gene - WB9MMM



Dates to Remember:

Breakfast in the Park - June 12

Field Day - June 26 and 27

The annual picnic - August 8

On the Riverfront - Labor Day Weekend

Definitions of a Fire Weather Watch and a Red Flag Warning

If you have noticed lately on either the different weather service's web sites or an icon in the corner of your tv screen and you see a Red Flag Warning has been issued, this is what it is.

A fire weather watch or red flag warning is issued when the combination of dry fuels and weather conditions support extreme fire danger. These products are written for land and fire managers to highlight the increased fire danger.

Each NWS office creates local criteria for fire weather watches and red flag warnings. The criteria for northern Illinois and northwest Indiana include:

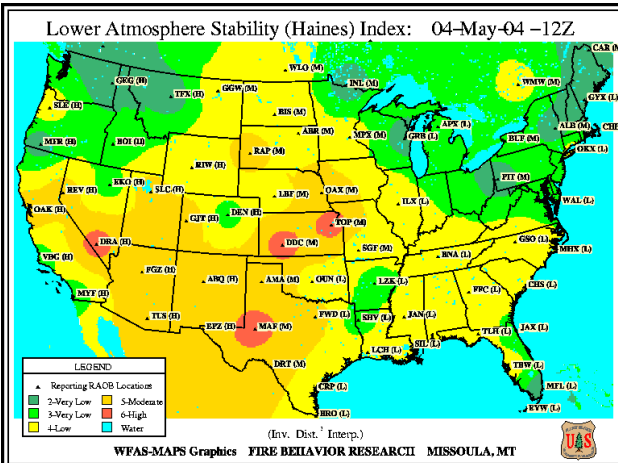
- Sustained 20 foot winds of 20 mph or higher.
- Afternoon relative humidity less than 25%.
- 10 hour fuel moisture at 8% or less for one day.

A fire weather watch is issued up to 72 hours before the above conditions are expected to occur.

A red flag warning is issued when the conditions above are expected to occur or are occurring within the next 24 hours.

For more information on this new alert go to the National Weather Services Chicago office website at <http://www.crh.noaa.gov/lot/firewx.php>.

More on wildland fires can be found at <http://www.nifc.gov/> which is the **National Interagency Fire Center** in Boise, Idaho.



This is a example of one of the maps created by the Fire Behavior Research Center in Missoula, Mt. which the NWS uses to help determine which areas can have dry weather conditions for fires.

(Continued from page 1)

BPL page on the ARRL Web site
<<http://www.arrl.org/bpl>>.

Bush this week told the community colleges gathering that there need to be technical standards to enable new broadband technologies such as high-speed communication over power lines. "Power lines were for electricity; power lines can be used for broadband technology," Bush said. "So the technical standards need to be changed to encourage that."

"Once deployed," the president declared, "BPL has the potential to turn every electrical outlet into a broadband pipeline." Bush also suggested that BPL could supply broadband services to rural dwellers, a prospect that the League and others claim is not economically feasible.

"BPL is sometimes touted as a solution for rural areas," said ARRL CEO David Sumner, K1ZZ. "It is not." Sumner explained that BPL signals carry only a few thousand feet down a power line and then must be repeated. "This requires a lot of hardware and will not be economical in areas with low population densities."

Bush also praised FCC Chairman Michael K. Powell and "his decision to eliminate burdensome regulations on new broadband networks' availability to homes." He also called for opening up more spectrum to make wireless broadband "more accessible, reliable and affordable" and for no taxes on broadband access.

In its BPL Notice of Proposed Rule Making (NPRM) in ET Docket 04-37, the FCC has proposed amending its Part 15 rules to adopt new requirements and measurement guidelines for so-called "Access BPL" systems. The comment deadline is Monday, May 3;

(Continued on page 6)

Rockford Amateur Radio Association

Monthly meeting of the membership

April 9, 2004

St. Anthony Hospital

Members present: See attached sign-in sheet. RARA President Gene Harlan called the meeting to order at 7:00 pm.

Minutes: Scott Allshouse, KB9YRW, read the minutes from the March meeting. Larry Snyder, KOHMN moved to accept the minutes as read, second by Shari Harlan, N9SH motion carried.

Treasurer's Report: Treasurer Carl Cacciatore, W9TQ reported a balance of \$5,574.22 as of March 31, 2004. Chuck Liljegren, WB9UMC moved to accept the report as presented, second by Shari Harlan, N9SH motion carried.

Old Business

President Harlan reported the following:

1. RARA has been reinstated as a SSC, Special Service Club through ARRL.
2. The Field Day Chairman is Dick Fleming, KC9BCB, Dick is asking everyone to come out and support the club and enjoy the day. If you have a specific band you want to work, please let Dick know.
3. The snacks at the meetings have been well received but donations of money will help defray the cost to the club.
4. Please remember to wear a name tag to the meetings.
5. Breakfast in the Park will be June 12, Alpine Park, shelter 2.
6. Field Day will be June 26 and 27, Alpine Park, areas 6 and 7.
7. The annual picnic will be August 8, Alpine Park, shelter 1.
8. Received an email about Radio Equipment being donated to the club, Gene will

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.*

work with the Board of Directors on the distribution of the equipment.

9. There will be a Digital Communication Conference in Des Moines, IA September 10, 11, 12, 2004. Anyone interested in attending this conference please contact President Harlan.
10. Scott Allshouse, KB9YRW has volunteered to be the chairman for On the Waterfront this year. Please keep in mind this is the largest fundraiser for the club and does require participation from the club. Please look at your calendars and get with Scott to let him know what shift you would like to work. Scott will be calling all the members looking for help on this most important project.
11. Rock Valley College send the club a check for \$512.00 for our instructors at the February and March Technician and General classes. We are also looking for instructors for this falls classes, so if you can help please contact President Harlan.
12. Shari Harlan, N9SH reported they have been informed the ISS will be talking with the Christian Life School in September or October. They are also looking for a back up station to be ready to go to the school, Nicholas Lager, KB9SKW and Dan Hunt, KC9ATR will provide back up communication. John Auerswald, KA9SOG, Wayne Hansen, KA9IMX and Bill Peterson WB9MCZ will also help out with this project.

New Business

(Continued on page 6)

SCHEDULED DXPEDITIONS
By K9LJN & W9GD

CALL-SIGN	QTH	WHEN	QSL VIA
JT45D, JU45D, JV45D	MONGOLIA	NOW TO MAY 15	JT2AN
XU7ACE	CAMBODIA	NOW TO MAY 19	ES1FB
XU7ARA	CAMBODIA	NOW TO MAY 19	ES1RA
D4B	CAPE VERDE	NOW TO MAY 31	K1BV
ZM6CL	NEW ZEA- LAND	NOW TO MAY 31	"ZL" BURO
YA8G	AFGHANISTAN	NOW TO JUNE 1	LA4YW
SV0XAN/5	DODECANESE	NOW TO OCT 30	IK2WZD
JW/ CT1BWW	SVALBARD	JUNE 7-14	CT1BWW

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

CALLSIGN	QTH	QSL VIA
3XDQZ/p	GUINEA	F8DQZ
4S7BRG	SRI LANKA	DIRECT
7Q7MM	MALAWI	G3LQP
8Q7QQ	MALDIVES	HB9QQ
9V1YC	SINGAPORE	N5ID
AP2IA	PAKISTAN	DIRECT
C21DL	NAURU	DJ2EH
HF0POL	S. SHETLAND	SQ5TA
HS72B	THAILAND	E20NTS
KH4/KA1GJ	MIDWAY IS.	V73GJ
SU9BN	EGYPT	EA7FTR
TT8PK	CHAD	F4EGP
V8PMD	BRUNEI	G3KHZ
YA8G	AFGHANISTAN	LA4YW
ZK1UFF	S. COOK IS.	LA5UF
ZL7II	CHATHAM IS.	DL5EBE
ZS8MI	MARION IS.	ZS6M

Operating Tips

When the band you are trying to operate is wide open (with S9 plus signals) and the stations are jammed together like sardines, it can be very difficult if not impossible to separate one from another because of all the interference (QRM) and receiver overload. **Don't give up**, here are some of the techniques I use to help this situation:

1. Turn off the receiver **preamp** and **noise blanker**.
2. Select (or adjust to) **fast AGC**.
3. Turn down the **RF gain**.
4. Select one or more of the receiver **attenuations**.
5. Adjust the **IF shift** or **Pass Band Tuning (PBT)** controls.
6. On SSB, select and adjust the **notch filter** to eliminate a carrier on frequency.
7. On CW, select the **first and/or second 250 Hz filter** (you may have to turn on the **pre-amp** to get a readable signal with the second 250 Hz – 455 KHz IF filter activated).
8. On CW, select and adjust the **Audio Peak Function (APF)** to enhance the signal of the station you are trying to contact.

Any one (or a combination) of these receiver features should give you a better chance to manage the QRM, reduce receiver overload and help you hear the station that you are trying to contact.

73 & DX, Gary - K9LJN

(Continued from page 1)

headphones, and Yaesu VX-7R for mobile operations. Antennas include a Diamond D-50X, and 80 M stranded wire dipole.

Most used modes are 6m and 2m SSB and FM repeaters, 70 cm IRLP system and HF/SSB listening.

Tim says he is working on his CW to upgrade to a general class license and working to be a Skywarn weather Spotter.

(Continued from page 3)

reply comments are due by June 1.

In direct response to the Bush speech, the ARRL is asking its members to support Haynie's request for the White House to withdraw its support for BPL technology. "Using power lines to distribute broadband services is a bad idea that should not be encouraged," said Sumner. "It is important for radio amateurs to get the facts across to the White House as well as to our Congressional representatives and senators."

The ARRL Web site provides an information package <<http://www.arrl.org/tis/info/HTML/plc/cta/>>. It explains how members can contact the White House and members of Congress to express their views on BPL deployment.

"Do it now!" Sumner urged. "We need thousands of responses from all parts of the country, right away, if we are to make an impression."

For additional information, visit the ARRL's "Broadband Over Power Line (BPL) and Amateur Radio" page <<http://www.arrl.org/bpl/>>. 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/>>.

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

(Continued from page 4)

ARES: Sue Peters, KA9GNR reported that there were 140 people at the Skywarn training at the airport on March 20th. Sue also reported there was a great turn out for the ARES meeting at the Red Cross building and she now has 45 members on the ARES team.

Sue also talked about the Midwest Emergency Preparedness and Response Convention at the Clock Tower Inn on May 5 and 6th. There will be an ARES booth at the convention and she is looking for help with the booth for the 2 days. If you are able to help please let Sue know. President Harlan talked about the filing deadline for comments regarding BPL, the deadline for comments is Monday May 3rd. Please make your comments about this very serious issue by that date.

Eric Hultgren, N9MCS stated his new machine for the 147.255 repeater will be on the air within the month.

President Harlan welcomed Dick Tidburg, WF9J to the ATN-ATV group.

Wayne Hansen, KA9IMX talked about the Heritage Run on April 25th, the March of Dimes Walk American on May 1st and a new run on July. He is looking for help with all of the events and if you can help, please let him know.

The raffle was 2 multi meters and a 10 meter Radio Shack Mobile, the mobile radio was donated by Tim Peterson, KC9DNN.

Tim Peterson, KC9DNN motioned to adjourn the business meeting, second by Chuck Liljegen WB9UMC, meeting adjourned.

The remainder of the meeting was Skywarn Training presented by Wayne Hansen, KA9IMX.

Respectfully submitted,

Scott Allshouse,
RARA Vice President



FCC Proposes Wide-Ranging Changes to Amateur Service Rules--*Not* Restructuring

NEWINGTON, CT, Apr 15, 2004--The FCC has released an "omnibus" *Notice of Proposed Rule Making (NPRM)* that seeks comments on a wide range of proposed Amateur Service (Part 97) rules changes. **The NPRM is not related to the three amateur licensing restructuring petitions--including one from ARRL--for which the comment period ended April 23** (see "**FCC Invites Comments on Amateur Radio Restructuring Plans**"). The FCC also denied several petitions for rule making aimed at altering portions of the Amateur Radio regulatory landscape and ordered minor changes in Part 97 that become effective June 1. The *NPRM* is a result of a dozen petitions for rule making, some filed more than a year ago and a few dating back as far as 2001. Comments on the proposals put forth in WT Docket 04-140 are due by Tuesday, June 15, with reply comments by Wednesday, June 30. Among other changes, the FCC has recommended adopting the ARRL's "Novice refarming" plan.

"Because the ARRL petition addresses the operating privileges of all classes of licensees on these Amateur Service bands, we believe that the ARRL petition provides a basis for a comprehensive restructuring of operating privileges," the FCC said in its *NPRM*. The FCC is gathering comments on restructuring but has not acted on the matter. "We note that, as proposed, no licensees would lose any spectrum privileges and that General, Advanced, and Amateur Extra Class licensees would gain spectrum for phone emissions, one of the most popular operating modes on the HF bands."

The ARRL referenced its Novice refarming proposal in its recent *Petition for Rule Making*, RM-10867, which, along with three other petitions, remains open for comment until Friday, April 23.

The FCC also has proposed essentially eliminating its rules prohibiting manufacture or marketing of Amateur Radio Service power amplifiers capable of operating between 24 and 35 MHz. Originally put on the books in 1978 to keep high-powered amateur amplifiers out of the hands of CBers, the rules now "impose unnecessary restrictions on manufacturers of Amateur Radio equipment and are inconsistent with the experimental nature of the Amateur Service," the FCC said in its *NPRM*. The Commission noted that its Part 95 rules governing the Citizens Radio Service already prohibit use of external power amplifiers with CB equipment, which must be FCC certificated.

The Commission further proposed amending §97.315, "Certification of external RF power amplifiers," and §97.317, "Standards for certification of external RF power amplifiers," of its amateur rules "to clarify and simplify the exceptions in our rules." The FCC also wants to eliminate §97.3(a)(19), which defines an external RF power amplifier kit, "because of the uncertainty created by this rule."

The FCC additionally proposed a rule change that would make Kenwood's *Sky Command* system legal for operation within the US. The Commission said it believes Kenwood's proposal "will be consistent with our flexible-use policy in the Amateur Service." The proposed amendment to §97.201(b) of the rules would permit auxiliary operation on 2 meters above 144.5 MHz--with the exception of the satellite subband 145.8 to 146.0 MHz--in addition to frequency segments already authorized. The *Sky Command* system permits the user to operate certain Kenwood equipment remotely via a VHF/UHF handheld transceiver.

In response to an ARRL petition, the FCC proposed extending the bands available for spread spectrum experimentation and use to include 222-225 MHz. On its own initiative, it also recommended including 6 and 2 meters for SS operation as well. Current rules limit SS emissions to frequencies above 420 MHz.

"It appears to us that because both of these bands are wider than the 1.25 meter band, these two additional bands may be even more useful for SS experimentation than the 1.25 meter band because more spectrum is available," the FCC said in supporting the addition of 6 and 2 meters on its own initiative. The FCC suggested that restrictions on spread spectrum already in place should be sufficient to prevent any adverse impact of SS operation to other users of 6 and 2 meters.

Other Proposed Rule Changes

Among others, the FCC also has proposed these amendments or modifications to the Amateur Service rules:

- ? prohibit acceptance of more than one application per applicant per vanity call sign in the interest of promoting "equity and fairness."
- ? permit retransmission of communications between a manned spacecraft and its associated Earth stations, including the International Space Station.
- ? allow current amateurs to designate a specific Amateur Radio club to acquire their call sign *in memoriam*.
- ? incorporate a waiver into Part 97 that specifies operating limitations on Colorado and Wyoming amateurs using the 33-cm band (902-928 MHz).
- ? require pre-space notifications for amateur spacecraft be submitted within 30 days after the launch vehicle is determined, but no later than 90 days before the space station is integrated into the launch vehicle.

(Continued on page 8)

(Continued from page 7)

- ? revise §97.115 to add to the existing list of individuals who are not eligible to be third parties any former licensee whose license was not renewed after a hearing, and to clarify that only a station transmitting a RTTY or data emission may be automatically controlled while transmitting third-party communications.
- ? amend §97.111(a) to clarify that amateur stations may, at all times and on all frequencies authorized to the control operator, make transmissions necessary to meet essential communication needs and to facilitate relief actions during an emergency.
- ? eliminate §97.509(a) of the rules, which requires a public announcement of volunteer examiner test locations and times.
- ? amend §97.407(b) to delete the frequency bands and segments specified there and to clarify that during certain emergencies the frequency segments available to Radio Amateur Civil Emergency Service (RACES) stations and amateur stations participating in RACES would be authorized pursuant to Part 214 of the *Code of Federal Regulations*, "[Procedures for Use and Coordination of the Radio Spectrum During a Wartime Emergency](#)".
- ? add to §97.505(a) to provide Element 1 (5 WPM Morse) credit to any applicant holding a Technician license granted after February 14, 1991, and who can document having passed a telegraphy examination element.
- ? eliminate the requirement for Volunteer Examiner Coordinators to submit or forward applications from test sessions within 10 days.
- ? revise the definition of data emission types in §97.3(c) to include image emission types currently being used (A1C and F2C) and to limit image emissions to 500 Hz or less.

FCC Orders

The Commission ordered some changes in Part 97 without requesting or requiring comment. "These non-substantive changes to the Amateur Service rules are not subject to notice and comment under the Administrative Procedure Act," the FCC said.

The FCC ordered the revision of the definition of an "amateur operator" in §97.3(a)(1) to reflect that it is "not the possession of a license document but rather an entry in our Universal Licensing System (ULS) that determines whether a person is an Amateur Radio operator."

The FCC adopted a technical change--in line with a recent amendment to the international *Radio Regulations*--to specify that the mean power of any spurious emission from a new amateur station transmitter or amplifier operating below 30 MHz be at least 43 dB below the mean power of the fundamental emission. The new specification adds 3 dB to the current requirement.

The FCC also amended §97.507(a)(2) of its rules to remove authority for a Technician licensee to prepare a Technician class operator examination.

Petitions Denied

The FCC turned down a petition that would have established distinct CW and phone segments in the 160-meter band. Although a majority of commenters supported the proposal, the Commission said the current voluntary band plan "adequately accommodates the operating interests of all licensees who use the 160-meter band because it was based on input from those who use this spectrum."

Among others, the FCC also turned down petitions that would:

- ? allow an amateur station to broadcast and to transmit music.
- ? impose restrictions on the time, length or transmission frequencies of bulletins or informational transmissions directed at the amateur community.
- ? add to the special event call sign system certain call sign blocks that designate territories and possessions that have no specified mailing addresses. The FCC suggests using self-assigned indicators instead.
- ? require that commercially built amateur equipment be "field repairable."
- ? authorize a service similar to the Family Radio Service in the 420-450 MHz amateur band.
- ? include MCW (modulated CW) in the FCC's definition of a CW emission to permit repeaters to identify using MCW.
- ? issue paper license documents that are color-coded by license class.
- ? permit volunteer examiners to provide instant operating authority to successful first-time amateur applicants.
- ? give examination credit to Novice and Advanced licensees based on length of licensure and merit.

Commenting on the NPRM

The FCC *Notice of Proposed Rule Making* in WT Docket 04-140 is available on the FCC Web site.

Interested parties may comment on the *NPRM* by Tuesday, June 15 (reply comments by Wednesday, June 30), via the FCC Electronic Comment Filing System (ECFS). Click on "Submit a filing." To view filed comments, click on "Search for filed comments." In either case enter the *NPRM* number in the "Proceeding" field as "04-140" (without the quotation marks)

Northern Illinois Volunteer Examiners will be holding the next Amateur Radio exam session in Rockford, IL

**on
Saturday, May 15, 2004.**

**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 til 10:30 AM. We require two ID's with your signature on them (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.

(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.

Contact Information
Randy Scott, W9HL
W9HL@arrl.net
815-877-4328

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.

This issue of the HAMRAG was made possible by their article or photo submissions:
Gary Hilker, K9LJN, Gene Duncan, W9GD, Gene Harlan, WB9MMM, Scott Allshouse, KB9YRW, Randy Scott, W9HL NJDXA, 425DXN, Tim Peterson, KC9DNN, National Weather Service, and ARRL

For Sale

AEA Computer Patch I/F CP-1 (\$?)
Pat Com PC16000 H.F. Transceiver with all features. (\$?)
Astron RS-35A Power Supply
Radio Shack P.S. 2.5A 13.5 v #22-120B (\$5)
Drake TR-3 With PS/Spkr (\$300)
Heath SB-200 Amplifier (\$300)
Radio Shack Video Enhancer/Audio Mixer #15-1961(\$20)
Vanco SWR Meter 1.7-150 Mhz (\$20)
Radio Shack CCR-81 Portable Cassette Tape Rec/Player (\$2.50)
Radio Shack CTR-70 Portable Cassette Tape Rec/Player (\$2.50)
ALLIED A -2569 23 Ch. CB. A real Classic. Prime Cond. (\$5)
Micronta 144/440 SWR & Power Meter 15-60 Watt Cap. (\$10)
All listings are in Prime Condition

The following items are general accessories/average condition.

Turner Bullet Mic., 2- Sony Bullet Mics., Pr. KOSS headphones, 2 Short Lengths coax, (\$ make offer)

The above is being sold to help defray the costs of a local ham who is currently in nursing home care.

Please see or call Bill Peters, WB9MCZ, at 654-9590 for further details.

Moving Sale Complete Antenna and Tower System

Rohn 62 ft. fold over tower
Tower accessories
Hygain TH6
2m Cushcraft beam
9913 coax
Rotor
Call LOUIS ROSSI, N9FBC, at 227-5887
Or see it at 627 Hemlock Lane in Rockford

**Rockford Amateur
Radio Association, Inc.**

P.O. Box 8465, Rockford, IL 61126
Phone: (815) 398-2683
E-Mail: w9axd@arrl.net
Web Site - <http://rara.tripod.com>

Mailing
Address
Goes Here

May 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

