

HAM RAG

Affiliated with ARRL

NET meets each Monday at 9:00 P.M. local time on 28.7 megahertz



APRIL ISSUE 1974



step
"UP"

TO
RARA

APRIL MEETING PROGRAM

OPEN HOUSE

RARA invites all members and non-members to come out to our next meeting. WE WELCOME ANYONE INTERESTED IN HAM RADIO!

The film, THE WIDE WORLD OF HAM RADIO will be shown. There will also be time for everyone to get acquainted.

SEE YOU THERE! Friday, April 19. 7:00
Rock Valley College, Classroom Building 1 Room 222

ROCKFORD AMATEUR RADIO ASSOCIATION, INC.
P. O. Box 1744, Rockford, Illinois 61110

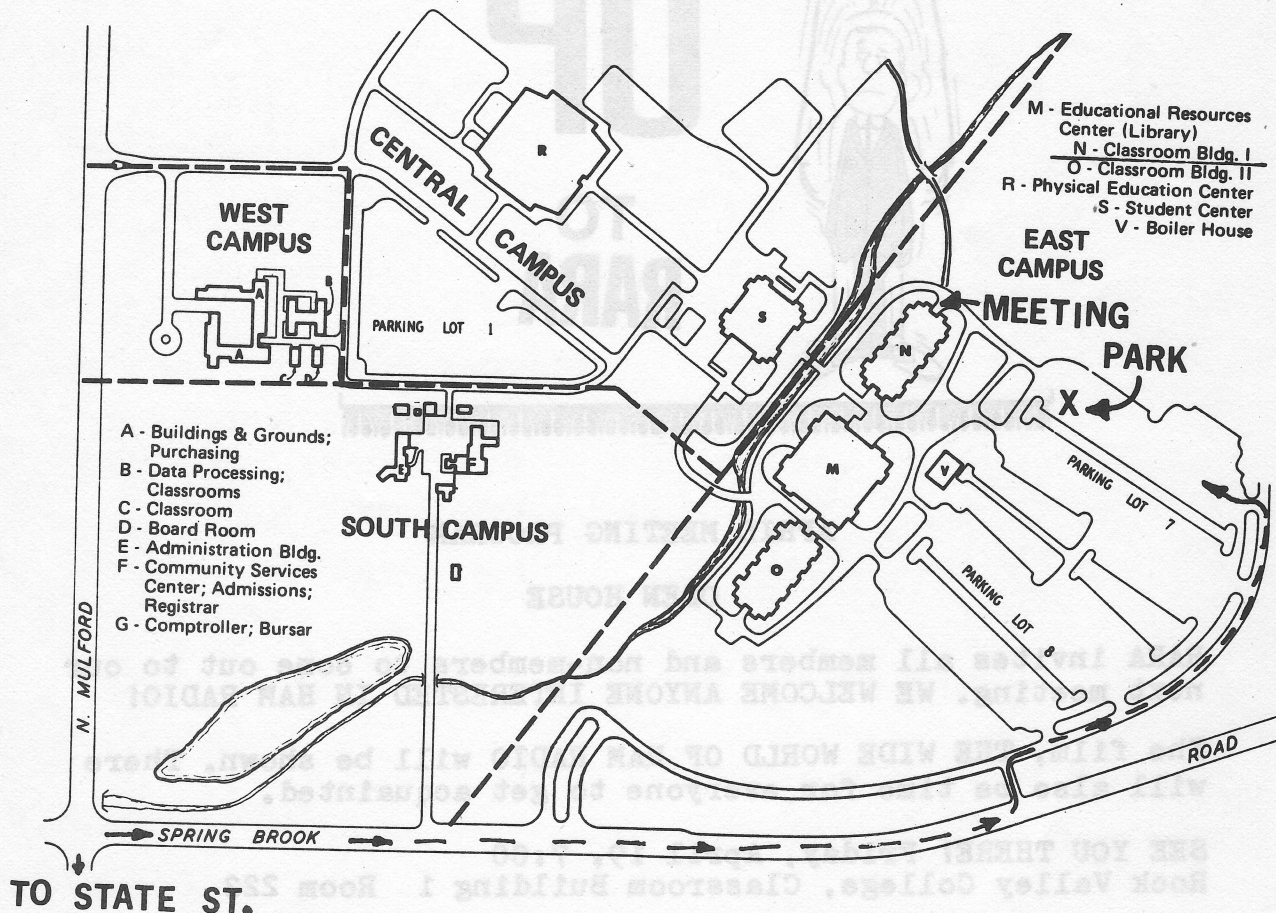
1974 BOARD OF DIRECTORS

Mike Souhrada, WB9IOG	1-874-4646	Gene Harlan, WN9MM	398-2683
Dick Connors, WB9IED	877-7722	Earl Davis, WB9KOR	633-4225
Bill Ridgway, WB9KOS	877-2315	John Wacker, WN9IST	399-1695
Clyde Aspling, WB9KOT	1-874-2330	Al Lund, W9PAE	398-2699

Your suggestions and criticisms are invited - phone any time.

IMPORTANT MEETING DATE NOTICE!

Due to Good Friday, our RARA meeting will be changed to Friday, April 19. This change is for this meeting only. May meeting will resume our regular second Friday of the month schedule. REMEMBER: Third Friday of the month-April only.



HOW TO GET TO OUR MEETINGS-OR CAN'T USE THAT EXCUSE



PRESIDENT'S LOG

As this issue is being sent to all hams in Winnebago County as an invitation to join R.A.R.A., I would like to direct my comments to those that are not members now. As a club we are interested in all hams in the area.

I feel that our meetings are very informative with a variety of subjects. For instance, in January, Bud Kopp, K9KG, gave us a talk on a low frequency converter and a lightning detector. February was on antenna tunners with Paul Johnson, W9BNO, Jim Clark, W9BAV, Maury Nelson, W9FL, and Dave Larsen, WB9HPV. We saw several different types that they had put together. In March we relaxed a bit and saw a movie on the Alaskan earthquake and Bill Ridgeway, WB9KOS, showed us how to quiet our florescent lights and motors to eliminate static in our radios (bet there was a run on .05 capacitors after that one!!).

Meetings for the rest of the year are set up tentatively as follows:

May: Oscar and how to use him- Ray Lenburg, WB9ILH

June: Frequency counters- how to build your own- Bud Kopp, W9KG

June 22, 23 : Field day

July: Picnic

August: Hamfest

September: VHF

October: Novice Nite and election of officers

November: RTTY- I've always wonderd what makes it work!! Jim Clark, W9BAV & Vito Fiore, K9UCM

December: Christmas party

Of course after the meetings we have coffee and donuts with our eyeball QSO's. I hope I've wetted your appetite enough that we will start seeing you at our next meeting. Myself and the rest of the club members would like to meet you!!!

Personal notes: It took great pains to wait till the bottom of the page to tell everyone that I passed my general!!!!!! I guess the third times a charm!! Now all I have to do is be patient for another 8 to 9 weeks----- I wonder if the State of Illinois would mind if I pasted a B over my N on my license plates????

73

De

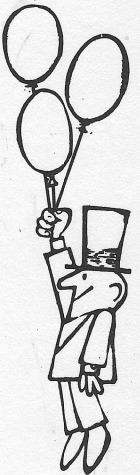
Gene

W()9MMM

An exciting new world

Congratulations are in order for Gene, WN9MMM (soon to be WB9MMM) who passed his General recently. We're sure he'll enjoy the exciting new world of the General bands!

Rag Staff





NOTICE!

The article appearing in this issue of the Ham Rag written by Bill Ridgway WB9KOS is the first of a series of such an article. This series of articles will be resumés of our members. Volunteers are hoped for so that we may have one or two such articles per issue. Should there be a dearth of volunteers a plan for drafting individuals to contribute their article will go into effect!

Those who wish to volunteer may contact Paul Dean WB9HGZ 317 Shaw ST. Tel. 397-6363, Steve Donaldson WB9JAV 408 Parkside Dr. Tel. 399-1306 or Al Lund W9PAE 1806 Springbrook Ave. Tel. 398-2699.

These articles should help us know each other better and solidify our membership.

73 de W9PAE



R A R A PERSONALITY PROFILE

BILL RIDGWAY, WB9KOS, age 66, XYL Margie, QTH near Forest Hills CC. Three grown children, eight grandchildren, all living away from Rockford. Mechanical Engineering graduate, University of Illinois. Retired 1969 from Ingersoll after 39 years as engineer and traveling salesman. Still retained as consultant, mainly on aluminum processing machinery.

First licensed 1920 as 9AKU in Freeport. Temporarily inactive after 1928 to concentrate on school, earning a living, and raising a family. Never lost interest in Ham Radio; reactivated after retirement. Holds General ticket. Active now on 40-20-15-10 and 2FM. Hasn't missed a 10-meter Monday net since first reporting in October, 1972. Listens a lot, never sends CQ, but will answer anyone who calls him. Interested in electronic and mechanical construction and rag-chewing, CW or SSB. RARA Secretary last year, and currently a Director.

Equipment includes Heathkit SB303, 401, 200, and HW202. Has inverted V on 40, TH6 beam, and ground plane whip on 2M. Can use 2M in car, but seldom does. Also has machine shop and electronic laboratory.



REMINDER!

HAMFEST COMMITTEE MEMBERS: Remember the change in our meeting date. Our next meeting will be Wednesday, Apr. 17. Same location: Fairview Bowling Alley meeting room.

WB9HGZ

Our compliments and three cheers to (1) WN9MMM Gene, who will be WB9 when his General ticket arrives, hopefully before summer. (2) WB9IOG Mike, for 10th place (Illinois) in the recent ARRL 160M. contest and (3) W9LVT/6 Pete Grillo, for 2nd place (Los Angeles) in the same contest. I had the pleasure to run into Pete March 9 on 14.280. He enjoys reading the HAMRAG and is glad to talk to a Rockford ham occasionally. K9UCM Vito, is back in front of his classes at Rockbottom U. after a spell of illness and W9VTL Ray, escaping from RMH, after several days, is at home feeling better and recuperating. W9MAP Ernie, who spends a part of the year at his Rockford QTH, has returned from several weeks of "fun in the sun" Florida.

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In that last nasty snowstorm almost all Rockford area Hams suffered low band antenna damage. It ranged from minor to disaster; some stations are still entirely off the air. And did you see the tribander at Red Cross? Its a 3 element vertical-horizontal and needs much TLC from an antenna party. WB9KOS Bill will tell you that Radio Corporation of America is one FB outfit. Bill was desperately in need of at least a schematic for a very fine old boat anchor, war surplus RCA receiver. RCA came up, gratuitously, with a complete manual, which, at the time of manufacture, was not available even to the then users of the equipment. For this fine gentleman from RCA, we wish happiness and good health to age 104, and then only a sprained ankle while exiting from Raquel Welch's back bedroom window. Have you paid your 1974 RARA dues? If you do not or cannot attend Club meetings, PLEASE MAIL your \$5.00 to John Wacker WN9IST, 1412 Comanche Dr. Rockford 61107.

de
WB9HHH

Listen for WB9LEF Duane, new on 2M. as soon as xtals for his GE rig come in the mail. K9VJJ Paul demonstrated 2M. ham radio to two science classes at St. James school with yours truly on the other end. A right angle coax connector with a metal curtain rod sticking in the hole made a FB antenna. Public access TV, channel 6 on Rockford Cablevision is coming in a few months. The RARA Board should plan a program to publicize ham radio and RARA, using the very attractive RVC station WB9KUR built by WB9KOS Bill and K9UCM Vito. The regular monthly meeting of the Dekalb County Amateur Repeater Club .13/.73 will be held at the Rockford Chapter Red Cross on North Church on Wednesday, April 10th. It is open access; all are invited. Lets have a good turnout!

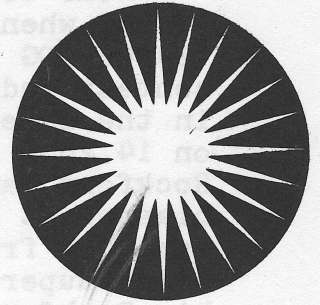
At this OM's shack there is the distinct odor of DXCC, 93 countries, 80 confirmed by QSLs. Some of the fairly rare ones: VR1 Canton Is., VQ9 Seychelles, ZF1 Grand Cayman Is., GC3 Jersey Is., ST2 Sudan, .5T5 Mauritania, 3V8 Tunisia, KC4 South Pole. Sun spot cycle reports are very discouraging. In March CQ Mag an author says the current cycle may be 13 rather than the usual 11 years and may not bottom out until 1977. Sure hope he's as wrong as John Mitchell. Seems to me 20M. has been zilch here lately. And at a time, the equinox, when the band usually perks up for a few weeks. Oh well, in the meantime, we will listen to Red, Lee, Ray, Bill, Paul, Jim, Bno, Claude, Maurie, Bud and many more good friends on the 2M. ricebox.

COMING ATTRACTIONS!

We have just received a letter from Pete Grillo, W6RTT (ex W9LVT). It is a short history of his Ham career and some information about his recent move. As we received it a little late for publication in this month's Ham Rag, we will have the first part in the May issue. The conclusion, and some clarifications about life in W6-land will follow in the June issue. Be looking for it!



OSCAR



Are you listening to Oscar ?

Oscar 6, the amateur orbiting satellite, not a new swede ham just recently moved to Rockford. I am sure you will find Oscar 6 much more interesting! You can pick up Oscar on its downlink passband of 29.45 to 29.55 MHz in the ten meter band. To pick up it's signal you should know at what time it makes an orbital pass within our range here in Rockford. This information is available from data published monthly in CQ magazine and other sources. Remember- the times given are in GMT ! It takes about five minutes for the satellite to be heard in this latitude after the equatorial passing times given in the published data referred to earlier.

Signals in the Rockford area have been picked up on dipoles, verticals and beams. I have a tri-band beam and as the evening pass is from south to north, I turn my beam south of east to pick up it's first signals. As it progresses to the north I adjust the beam slightly to follow the orbit and can generally keep it "in sight" for about twenty minutes or more. I use my Drake R-4B receiver equipped with a 29.5 crystal for receiving. I have not, as yet, procured a transmitter for the uplink passband of Oscar which is 145.90 to 145.95 MHz.

Use of an amateur satellite opens up a whole new challenge to the hams of Rockford and I am a little surprised that someone has'nt picked up the ball and ran with it. It is entirely possible that in the near future this may be the way to go as a progression from spark to AM to SSB, etc. Oscar 7 should soon be in orbit and with added power over Oscar 6.

A program regarding the amateur satellites will be a feature of the May 10 meeting of the Rockford Amateur Radio Association.

WB9ILH





ANTENNA'S

One of the most important parts of a Amateur Radio Station is the antenna. Even with the best rig and equipment, it is nothing without a good antenna. With a good antenna and a couple of watts, you can get all over the place. The antenna really determines the performance of the rig it self. So a good system is a must.

The least expensive and relatively easy antenna system to put up is the dipole. Usually it is $\frac{1}{2}$ wave-length, and fed in the middle. Most dipoles are put up at a height of 25 feet or more, but it depends on your circumstances. The formula: Length in feet equals $468/\text{freq. (Mc.)}$ is used to determine the length of the dipole. For example, a dipole for 7000khz (7Mc.) is approximately 66.9 ft. (66 ft. 11 in.) long. An example of a dipole is shown below.

An inverted-vee, another antenna used quite often, is simply a dipole, with the ends brought down at a 45° angle. They are usually used where space is a factor.

The vertical antenna is a fine antenna for omni-directional work. Its height varies, but the average for a vertical for 10-80 meters is usually 22 feet. Most verticals are manufactured and cost around \$60.00. It is an excellent antenna to put up when space is a factor since it only takes up a couple of feet. A vertical works best with a good grounding system and one should be put in when possible.

The two other antenna's, the beam and the Quad have similar characteristics. They are used more often on 20, 15 and 10 meters, where they are excellent for DX work. They are directional, which enables the operator to point the antenna towards the area he wants his signal to go to. They are usually not used on 40 and 80 meters because of their huge size, but they are made.

These are the main antenna systems used, so take your pick and the best of luck.

73's and CU on the air
Jim WB9KZQ

Dipole Antenna for 7000 KHZ

33ft + $\frac{5}{8}$ in.

33ft + $\frac{5}{8}$ in.

Ground Inner Lead

Inverted Vee

40 ft

Vertical Antenna (Hy-Gain 18 AVT)

80 meter Coil

25 ft high

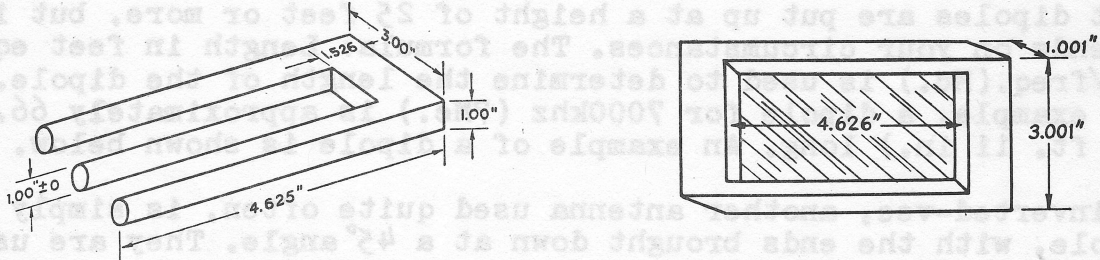
20 meter coil

15 meter coil

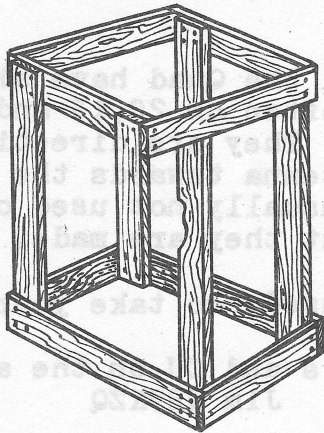
10 Meter coil

HAM RAG APRIL SPECIAL

Here is a super special new design of mobile power supply transformer core! Using this core, noise fields from the vibrator or transistor power oscillator cancel. Thus, hash and noise from mobile power supplies are eliminated! Dimensions may seem somewhat close tolerance, but this is critical for proper operation. Depending on windings, this core can be used in mobile supplies up to 2.5KV. To the right of the core drawing is a shield which can be used to provide an additional 60db of noise reduction. This shield must be well grounded to be effective.



This core will probably revolutionize mobile power supply design. Once your friends hear about it, they'll probably want one too. If you want to make extras and ship them to friends, here is a drawing of a shipping crate suggested for use in shipping the transformer. This crate affords maximum protection for delicate parts.



I cannot claim the design as original, but good luck in building it! 73,

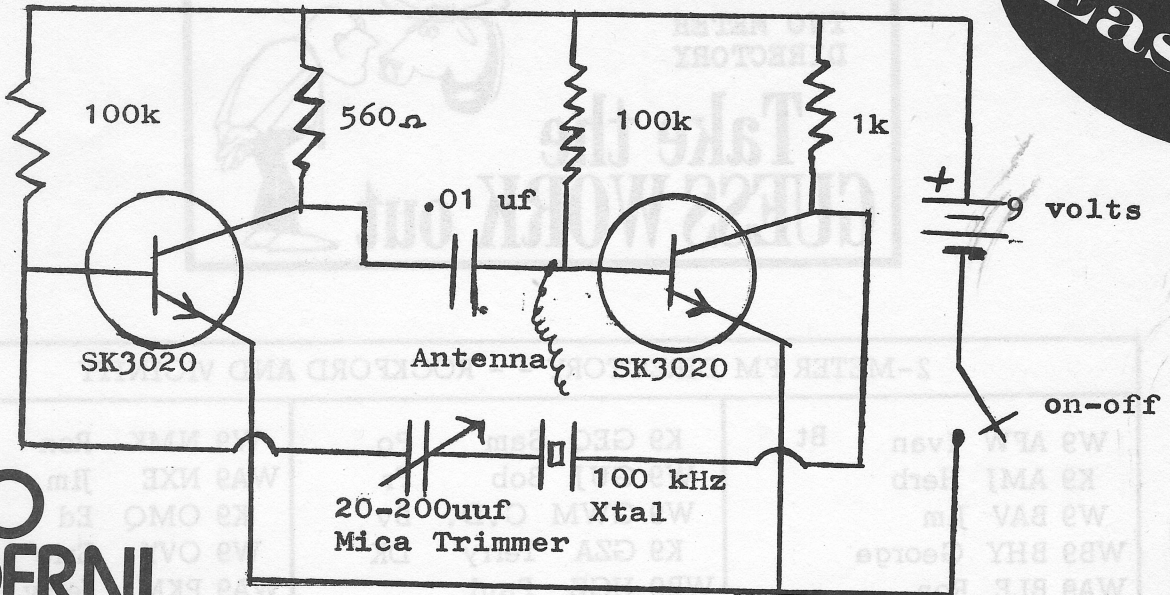
WB9HGZ

THE "OTHER SERVICE"



"Using CB as a hobby—ME?"

Easy!



GO MODERN!

For those of you who like to be "Right on the money," here's the thing for you! This simple calibrator puts out harmonics every 100 kHz up to about 30MHz. Antenna need only be a short piece of hookup wire. All resistors are 1/2watt.

Register-Republic, Rockford Wed., Feb. 27, 1974

Dear Abby

Ham corrects wrong signal

DEAR ABBY: A woman wrote that she heard strange voices coming from her turned-off radio and traced it to her neighbor — a ham radio operator. Your reply was an insult to more than 285,000 radio amateurs in the U.S.A. She should first contact the ham, and if he is indeed a licensed ham operator, he has had to pass strict examinations which require him to know enough to keep a good, non-interfering signal on the air. If he's at fault, he would appreciate being told, so he can promptly remedy the situation.

There are thousands of nonlicensed law-breakers operating radios on another service who often cause interference, for which we hams are blamed. Our record for

self-policing and helping in emergencies is too often overshadowed by annoying interference from someone who is not a licensed ham.

An questions you or your readers have about amateur radio can be answered by writing to The American Radio Relay League, 255 Main St., Newington, Conn. 06111.

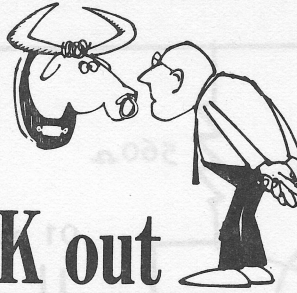
WA4BDW IN BIRMINGHAM

DEAR "WA": Sorry my advice about hams' wasn't kosher. I appreciate your setting me straight.

DID YOU READ THE DEAR ABBY COLUMN REPRINTED IN THE FEBRUARY ISSUE OF HAM RAG? EVIDENTLY WA4BDW SAW THE ARTICLE IN HIS LOCAL NEWSPAPER AND DECIDED IT WASN'T CORRECT.

TWO METER
DIRECTORY

Take the
GUESS WORK out



2-METER FM DIRECTORY -- ROCKFORD AND VICINITY

W9 AFW Ivan Bt	K9 GEQ Sam Po	W9 NMK Ron Bt
K9 AMJ Herb	W9 GUJ Bob Fr	WA9 NXE Jim St
W9 BAV Jim	W9 GWM C.D. Bv	K9 OMQ Ed
WB9 BHY George	K9 GZA Terry DK	W9 OVY Eric
WA9 BLE Ron	WB9 HGZ Paul	WA9 PKM Jerry
WA9 BLI Fred Bv	WB9 HHH Ralph	K9 PZZ John
WA9 BNK Jim	WB9 HJE Marion Ab	K9 QYY Jay
W9 BNO Paul	WB9 HNJ Art	W9 RQY Bob Fr
W9 BQC Don	W9 HRF Jim Bv	K9 SAN Chuck Du
WA9 BWK Dale	W9 HVF Bob	W9 UFH Al
W9 BYZ Lovell Ge	WB9 IED Dick	WA9 UNA Roy Ma
WB9 CHU Bud	K9 IKP Dick Po	WA9 UTG Van Bv
WB9 CEK Bob Bt	WB9 ILH Ray	K9 UWN Jack
W9 CPD Larry Bv	WA9 IYK Bill	W9 VBU Bill Bv
K9 DCG Bob Bv	WA9 IZK Hal Bt	K9 VFU Dennis
W9 DDL Dennis	WB9 JAV Steve	K9 VJE Stu
VE 3 DYK Shel	W7 JGD Don	K9 VJJ Paul
WB9 EBY Ray	WA9 JFM Gary Mi	K9 VRL John FG
WB9 EEH Dave	WB9 KOS Bill	W9 VTL Ray
W9 EIP Chuck Fr	WB9 KUR RVColl.	W9 VZ Claude
K9 EOR Ralph Bt	WA9 KVJ Jim DK	WA9 WVY Lee
WA9 EQM Tiny	WB9 KZQ Jim	WA9 WXV Lloyd
WB9 ETH Jim	K9 KZS Andy	WA9 YSB Doug Bt
K9 EYI Mike	K9 LKA Larry Bv	K9 YTO Gene Fr
W9 EZQ Vern	WA9 LKF Bob Sy	WA8 ZYX Randy Bv
W9 FL Maury	WA9 LRZ Howie	
W9 FNT Dick	W9 MAP Ernie	
W9 FX Red		

Deepest apologies to those we missed!

Locations Outside of Rockford

Ab = Albany Wis
Bt = Beloit
Bv = Belvidere
DK = Dekalb
DU = Durand

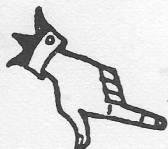
Fr = Freeport
FG = Franklin Grove
Ge = Genoa
Ma = Marengo
Mi = Milton Wis

Po = Polo
St = Sterling
Sy = Sycamore

Our thanks to Bill Ridgeway, WB9KOS, for compiling this directory. It should prove helpful to the beginner as well as the old hand on two

PSSST!!

Do we have
something for you!



BEL-ROCK HAMFEST



SUNDAY AUGUST 25

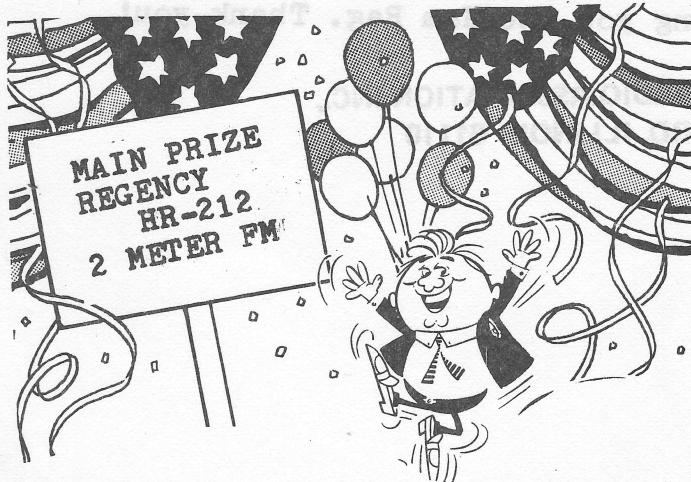
Sponsored By:

Big Thunder A.R.C.

Rockford Amateur Radio Association Inc.

PLACE: BOONE COUNTY
FAIR GROUNDS

NORTH OF BELVIDERE, ILLINOIS ON HIGHWAY 76



FREE COFFEE AND DONUTS 9:30 - 10 :00 A.M.

REFRESHMENTS AVAILABLE: SANDWICHES, COFFEE, MILK, AND POP

TICKETS: \$2.00 AT THE DOOR, ADVANCE TICKETS \$1.50

TALK-IN FREQUENCY 146.94

Caveat Emptor?

Bargain Day\$

HAM ADS: Free service to Hams. Deadline for copy is two weeks before RARA meeting. To place an ad call Paul, WB9HGZ, 397-6363 or Steve, WB9JAV at 399-1306.

FOR SALE: Hy Gain 14AVQ (10-40 Trap Verticle) \$19
Call Dennis W9DDL 877-6768

FOR SALE: Heathkit AT-1 Transmitter (80,40,20,10 meters)
35 Watts input Best Offer
Call Mark WN9NFE 397-6808

FOR SALE: Three-page list of Ham equipment available at next RARA meeting. Mrs. Debnam cleaning out shack of late husband.

FOR SALE: Goodies, parts, tubes, vertical antenna, 3000v. xfmr.
Other assorted pieces of gear, and old QST's.
Charles Mosher
2228 11th St.
397-2265

REMEMBER: If you have not paid your 1974 dues, **THIS IS YOUR LAST ISSUE OF HAM RAG!** Please send in or bring your \$5 to the next meeting and we'll be glad to continue sending you the Ham Rag. Thank you!

**ROCKFORD AMATEUR RADIO ASSOCIATION INC.,
P.O. BOX 1744, ROCKFORD, ILLINOIS 61110**



FIRST CLASS