

# Ham Rag

Rockford Amateur Radio Association

June, 1984

ROLAND OLSON  
9659 Atwood Road

Directions: 3 miles east of Roscoe on Burr Oak Road, South  $\frac{1}{2}$  mile on Atwood Road.

Facilities: 127-acre preserve. Playground equipment, polo field, horse arena (electricity, announcers stand), bridle trails, water, toilets.

Stags: 15 tables, 90 people. Electricity (plug-in only)

NOTE: Open at 7:00 AM - closed at 10:00 PM.  
All reservations subject to GENERAL USE REGULATION ORDINANCE.



**Location Change: RARA Meeting, May  
11, 1984 Harlem Community Center,  
7:00 p.m.**

# Potpourri

Well, if you missed the May RARA meeting, it is your loss. Ken Farver, KB9I, of Woodstock gave a very informative talk that evening on HF rigs and terms such as phase noise, noise floor levels occurring in various transceivers. He also pointed out improvements made in recent years by most manufacturers. We hope he will be able to favor us by coming again sometime and we thank him very much.

The truth is out! It is now known for sure that the lock on the shack door at Gerry's, is on the inside. Thanks to Gary, K9LJN who dropped in on KU9S recently.

You can't get places if you don't move. Gene, WB9MMM, has changed jobs and we are sure he has made a good choice. He is not connected with ARACHNID, Inc. and we wish him good luck and success in his new position.

Tim Neece, KA9OYT, has upgraded to general class. We all know that he would do it and we will hear him now on the low bands. Congratclations Tim.

If you haven't done it yet, You better mark your calendar. Our RARA picnic is August 12th at the Towering Pines shelterhouse at Hononegah Forest Preserve. Again it is \$5.00 per family and the usual roast pig by you know who. Dale, KB9WD, and Joanne, KA9DNQ, as in the past have favored us with the main course. Bring a dish to pass and enjoy this annual event.

It's always a growing up feeling when going from grammer school to high school. It calls for a celebration when graduating from high school. Shawn Harlan, KA9BXA, the son of Gene and Sheri Harlan graduated from Guilford this June, meeting that Plateau in education. Congratulations and good luck on the ladder.

**UPGRADES ARE:** KA9OYT to General, KA9OYS to Tech, Congratulations!!!

N9DTD, Bill son of N9DRL & KC9WF graduated from FVC in May.

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

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**OFFICERS**

President	Bob Davidson	WA9NTT
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Sec'y	Kay Becker	N9DRL
Treasurer	Brad Ambro	KA9LTR

877-6274
633-6524
397-3169
398-1648

**DIRECTORS**

Frank Hirsch	KS9X	397-6966
David Bond	N9DRQ	877-3751
Gary Hilker	N9LJN	654-3282
Ron Zimmer	N9DPP	654-7526

**HAM RAG Editor**

Sharon Harlan	WB9SFT	398-2683
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**Circulation Manager**

Alice Davidson		877-6274
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# Field Day

The 1984 ARRL-RARA FIELD DAY will be at the Roland Olson Forest Preserve outside of Roscoe on the week end of June 23-24.

Field Day is a test of the following abilities: to set up in an emergency condition; to show operating proficiency in contest or adverse conditions; to give a demonstration of amateur radio to the public.

The team captains for this year are; 75 meters, N9DPP; 40 meters, WB9SFT and KU9S; 20 meters KT9P and KS9X; 10 and 15 meters KB9PC; 6 and 2 meters, N9DRL and KC9WF; novice KA9OYS and KA9OYT. Please contact team captains if you can operate or help in any way. If you cannot operate you can still help setting up or tearing down.

You can help by working W9AXD for contest points. All contacts must be simplex, no repeater contacts permitted. Schedules for local contacts are as follows:

9:00 p.m. Sat. 0200z, 146.52

8:30 p.m. Sat. 0130z, 28.7

9:00 p.m. Sat. 0200z, 21.370

After 6 meter net 50.4

8:00 a.m. Sun. 1300z, 28.7, 50.4

8:30 a.m. Sun. 1330z, 146.52

8:30 a.m. Sun. 1330z, 21.370

9:00 a.m. Sun. 1400z, 28.7

If you have access to tents, RV's or campers please contact Gary or myself, K9IKP. The club will supply coffee and soft drinks, emergency generator, log sheets, dupe sheets. Team captains and members of the teams will supply food for their own teams. Please bring ice---we will need a lot of it. Milk cartons with water frozen in them will help.

Operators should furnish the following items marked with their calls for identification: CW-key-memory keyer, hear sets, rain gear, extra clothing, dice for soft drinks and food, lights, flashlights, bug spray, circulating fan (if hot), anything extra to overcome Murphy's Law. All contacts must be logged with call, time and report.

Starting time will be 1800 UTC-1:00 P.M. Saturday. All transmitters should be 150 W output or less. Our class is A-club group. All logs should be in GMT, UTC time and LEDIGIBLE. DUP SHEETS WILL BE FURNISHED so that stations won't be worked more than once per mode on a band. We will also receive - transmit messages to ARRL for extra points. Look at the May issue of QST and become familiar with the Field Day rules.

Gene, K9IKP and Gary

# Next EARS meeting: JULY 29, 1984, 7:00 p.m. - Riverside Community Church, 6816 North Second. Program will be a Civil War Soldier.

On Sunday, September 16, there will be a picnic at Rock Cut State Park. This will be an excellent time to see the people that you have talked to so frequently on the air but seldom see face to face.

E.A.R.S. will supply the pop and charcoal. Please bring a dish to pass, your own meat and table setting. *If you would like to bring your FAVORITE beverage, please, feel free.*

We will meet at the park around 11:00 a.m. Our selected are will be the picnic shelter located just South of the dam. If an alternate site must be used, someone will be around on the repeater to give directions.

**THIS WILL BE A FUN DAY FOR EVERYONE!!!  
MARK YOUR CALENDAR NOW...**

See you there,

**Kevin Puckett  
N9EGF**

## **K9KZS/SK**

Evert "Andy" Anderson died April 21, 1984 in SwedishAmerican Hospital after a three month illness. Andy was born September 16, 1915 in Sioux Falls, SD. He lived in Rockford 57 years coming from Beresford, SD. He married Laura Mae Schumacher in Rockford, May 2, 1941. Andy was employed for more than 30 years as an architectural supervisor by Allen Patton, Bradley & Bradley, Inc. and Larson & Darby Inc. He retired in 1981 before that he was associated with his father and brother Andrew Anderson & Sons, Building Contractors. As well as an active ham he was involved in various organizations and church. Before his illness Andy had breakfast every Saturday rorning in Roscoe. He will surely be missed.

# Good Bye, Russ/WD9FVI

At a Friday meeting of RARA, Russ Murray, WD9FVI announced that he would be leaving the Rockford area for Bloomington, IL. It's his job that takes him there. Their gain and our loss!

Russ was first licensed in 1977 and in 1980 upgraded to technician. Russ has been active in the RARA club by being a class instructor from 1978 thru 1983. Russ was also co-chairman for Field Day. In 1982 he was co-chairman with Don Rastede, N9AWZ, and in 1983 he was co-chairman with Frank Hirsch, K59X.

Russ remembers how good Frank, K59X was with code when he was an instructor. Other that Russ remembered as students are: Larry/KA9BQR, Louis/KA9ESH, Art Malone, Gertrude/KB9PC, Shawn Harlan/KA9BXA, Lars Larson/KA9HHT, Wayne King/N9AYT, Brad/KA9LTR, and Bill Becker/N9DTD. This is just a sample of people that Russ came in contact with.

For low band rig, Russ has a Tempo-one and uses a dipole for 40 and 15 meters. It's funny, but on the rig was the call WB9JAU. That call belongs to Mike Oberg who sold the rig to one guy, and Russ ended up buying it. Mike is a good friend of mine; so I noticed things like that.

As can be seen by the photos, Ronm Russ's son likes ham radio, too. Russ will have his hands full when Ron wants to be a novice. (Maybe that's what Russ looks like without a beard!)

Russ will be missed by the RARA club members. But I know he will make new ham friends in Bloomington.

Now that the grass is green and the weather is warm, maybe I can get my KLM 34XA fixed. Kay is after me to get some things done around the house. I pick up my new (used) motorcycle Monday; so I'll have plenty to do this summer.

I had lots of fun taking pictures in the ham shacks this year and really enjoyed writing the articles. But most of all, I hope the club members enjoyed it. I will enjoy this summer off and hope all others do too. So 73 and 88 for now. See you this fall.

Marvin, KC9WF

## Secretary's Log

Bob, WA9NTT opened our May meeting with 26 present, shortly after 7. Both secretary's and treasurer's reports were approved.

Paul K9VJJ mentioned that Father Moran, 9N1MM will be in Rockford in September. It would be nice if we could have him come to a club meeting. Bob mentioned that we already have our program for September.

The June meeting will be a Field Day meeting. Gary, K9LJN, said that help will be needed for setting up and tearing down on Field Day. If you can't help operate, perhaps you can help with that. We need your support!

The Ham Radio on the Road Committee has 2 activities coming up soon. One is on May 19th and the other is on June 7th. Both are Boy Scout activities and will be demonstrations. Shari, WB9SFT will contact people to help.

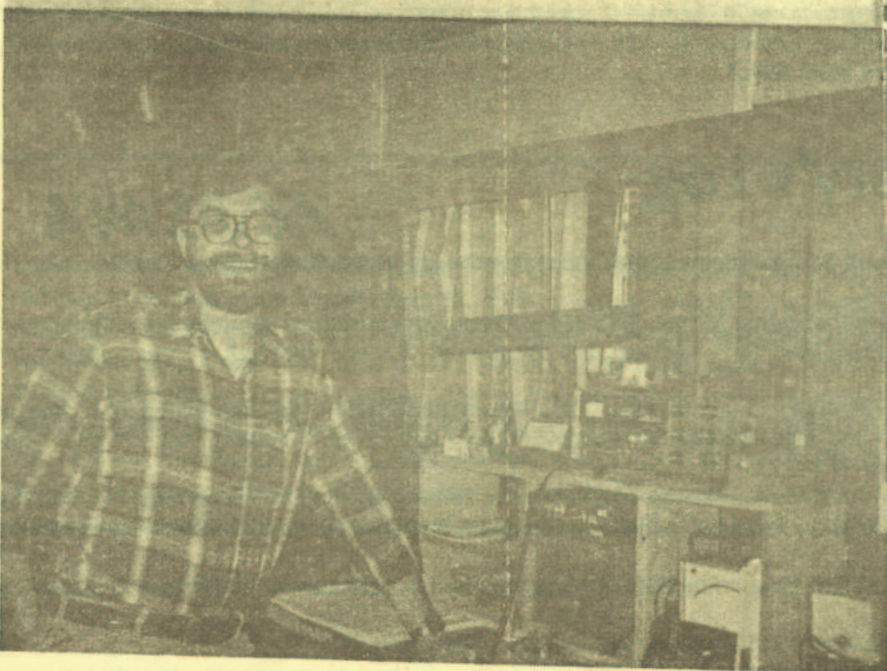
One June 3rd there will be an auction of K9TAA's equipment. Unfortunately this is the same day as the Princeton Hamfest.

Carol, K19G needs Elmers for the present novice class. Any offers???

Our program was presented by Ken Farver, KB9I of Woodstock. He gave up more results from testing of various radios. During the program he tested Pete's N9CWQ, rig. Very interesting! Thanks for coming, Ken!

I sure hope we see a lot of you at the June meeting and at Field Day. If not, see you in the fall.

73, Kay, N9DRL



Photos an  
Marvin,

layout by  
09WF



# AIR FORCE MARS

USAF MARS has been in existence for over 35 years, during which time it has been active and successful in communication support. USAF MARS affiliate members are licensed Amateur Radio Operators, who must meet Air Force established criteria for membership. These Air Force requirements ask a lot of the volunteer -- So why do they want to join? -- There are many personal reasons for joining; however the main incentives are:

**PUBLIC SERVICE:** The Amateur Radio Operator has been strongly identified over the years with the use of his/her special skills and talents in support of the public. Many "HAMS" gravitate towards Civil Defense, Civil Air Patrol, AREC, and others. Others choose MARS as a means of satisfying their desire to make use of their special skills.

**PATRIOTISM** - Many affiliate members strongly identify with the military aspects of MARS and a feeling of being associated with a military mission and contributing to the welfare of the preparedness of the nation.

**DISCIPLINE** - Amateur Radio is a hobby that provides unlimited flexibility of choice. Most of these interest areas are loosely organized with participation techniques and style left up to the individual operator. Some Amateur operators are looking to participate in more regulated and disciplined radio nets with structured lines of organization and very specific operating rules. USAF MARS represents the ultimate in the area of interest.

**GROUP IDENTIFICATION** - Many volunteers have a drive to belong to and identify with a group of their peers having common motivations, interest and experience.

To join Air Force MARS, the Amateur Radio Operator must satisfy the obvious requirements of possession of a license from the FCC. In addition the applicant must:

1. Be 14 years of age or older. The age rule is imposed to insure that the member is mature enough to recognize his/her responsibility with regard to performance in emergency situations and acceptance and delivery of traffic.
2. Agree to operate under the rules and regulation of USAF MARS.
3. Possess a radio or radio capable of operating in certain MARS frequencies. This can be a demanding requirement, since many Amateur equipment lines do not readily perform on the designated MARS frequencies. Costly equipment modification or additions are often necessary to satisfy this stipulation. Information to convert most amateur radio is available from the technical department.

Upon acceptance, the Air Force MARS member is assigned to a specific program element. But only after completion of a training program designed to equip him/her with the essential tools of the assignment. This is accomplished by participation in a region HF training net to insure a high level of training.

Upon successful completion of their training program, new members are given certificate for completing training and are assigned to a specific primary MARS program. These are, Base Station Support, Region HF operation, and local VHF operations. Those personnel assigned to military Base Support Teams receive additional on-the-job training on specific equipment and in-station procedures at a military unit station.

Each USAF MARS member must maintain a minimum of 12 hours participation per calendar quarter in their primary assignment. Secondary assignments are also available to provide members the opportunity to function in many specialized areas of MARS. The secondary areas are:

1. **MARS Technical Service (MTS).** This interesting area is designed to attract the technical oriented MARS member. The designer, experimenter and builder gravitate towards this aspect of MARS.
2. **Frequency Monitoring (FYMON).** A small but effective group of highly specialized and specially equipped members are assigned on a secondary basis as frequency monitors. These personnel are charged with self-policing of the MARS frequencies.
3. **Overseas Phone Patch.** Another secondary MARS function to which members can be assigned is overseas phone patching. Obviously, "Phone Patchers" must have exceptional "long haul" radios and antenna capabilities and considerable time available to support an effort of this nature.
4. **Transcontinental Radioteletype net (TCON RATT).** The TCON RATT net operates seven days a week and consists of mostly affiliate members. Interact with Air Force voice nets exists through the Air Force East Coast (AIR) and West Coast (AGA6TR) Gateway stations.
5. **Transcontinental CW Net (TCON CW).** The TCON CW net is exclusively an affiliate net, managed by an affiliate. The net operates at speeds averaging 15 wpm but will either speed up or slow down to the speed of the stations that enter the net.

USAF MARS is a complex structure of military personnel and affiliate members who work together in harmony to provide the Air Force with a highly effective single thread HF emergency communications capability in support of several USAF and Major Air Command Operations plans. This combination of military and affiliate stations provides this capability on a ready and cost effective basis. In this the volunteer affiliate member plays a dominant role.

The frequencies used in Region 3 MARS are:

- 7305 KHZ (Daytime)
- 4517 KHZ (Evening-Summer)
- 3308 KHZ (Evening-Winter)
- 142.15 MHZ (Input/143.45 MHZ Outout VHF Repeater)
- 143.95 MHZ VHF Simplex
- All VHF operations are FM

For further information you can contact: Frank R. Baker Jr. WB9OGD/AFA30T, 11993 South Gate Road, Roscoe, Illinois 61073, 815/623-2008.



# MICRO/DIGITAL CORNER

Again, Doc, N9AWZ, came through with information for this column. The first is an address for SIG/M which stands for Special Interest Group for Microcomputers.

SIG/M  
Box 97  
Iselin, N.J. 08830

A catalog costs \$2.00 for a listing of currently available software and is available through the mail or from CACHE (Chicago A'ea Computer Hobbists and Experimenters). There are programs available on 8" disks from SIG/M and a wide variety on 5 1/4" from CACHE. Doc is willing to act as a middle man for CACHE. His address is

Don Rastede, N9AWZ  
121 Washington, Blvd.  
Apartment 1  
Oak Park, Illinois 60302

Another address of interest for some of you would be:

CP/MUG - (CP/M Users Group)  
1651 Third Avenue  
New York, New York 10028

Their catalog is \$10.00 for a few volumes (disks) of library programs. There is some overlap with the SIG/M volumes, Some of the recent SIG/M volumes include material for the CP/M-86 operating system as well as CP/M-80. Both can be printed from either system but will run only on the targeted operating system.

Don also has given us this listing of bulletin boards.

PHONE	LOCATION	NOTES
815/838-1020	Lockport, IL	24 hrs. day
312/942-0089	Chicago	Code
312/537-7063	Glen Ellyn	Rogers Park
312/973-2227	Chicago	
312/475-4884	Chicago	Gamemaster
312/326-4392	Chicago	CP/M
312/338-8827	Chicago	CP/M
312/359-8080	Paletine	RCP/M

Doc is not making any implication about the quality of any of the above bulletin boards!!

I hope everyone has a good summer. I imagine the computers will gather some dust with the advent of good weather. If you have any ideas for articles for this column, please drop me a line at out new address; **5931 Alma Drive, Rockford, Illinois 61108**. See you all in the fall!

73,  
Gene, WB9MMM

# Tech Topics - June 1984

In the spring and through the summer one of the things that grows in many of our yards is a curious mass of steel and aluminum known as an antenna system. A question to be asked is "can true happiness be found if I dump my phased verticals and buy a beam?"

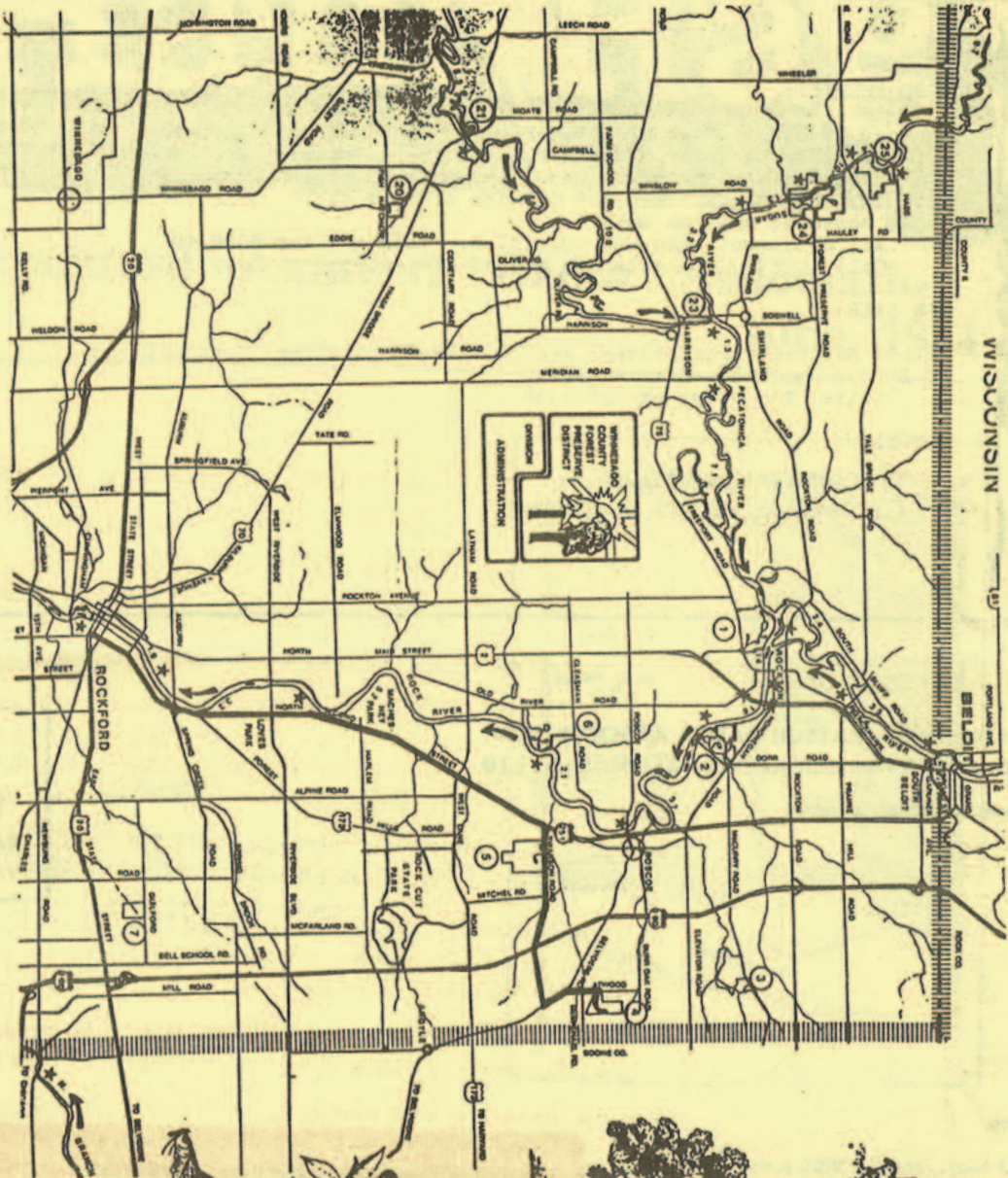
The answer to the question is yes, of course. But the next problem is what options do I have in these masses of aluminum? The options vary in size, performance, and price. Of course, choosing one of the bigger antennas drives one to more expense in the tower and rotor holding it up.

The size and price parts of this are easy to discuss. Antennas available for the most popular (and practical) high frequency bands covered by rotatable beams range from 10 or 15 pound flyweights up to 70 or 80 pound heavyweights. These cover 20, 15, 10, and sometimes 6 meters, on a single band basis or in combination. Size varies from those with 10 foot booms to around 30 feet on the more common beams. Elements may be loaded and thus shortened, even on 10 meters, but full size elements for 20 meters are quite naturally about 32 feet long. Extreme examples of these beams may be larger yet. Let's face it, you can buy a beam with larger overall dimensions than many houses! Prices follow the sizes, and range from under \$100 to over \$1000 for commonly available amateur beams.

The types of beams commonly used are triband (10-15-20M) and monoband ones, with the triband units more prevalent. Advantages of the tribanders are many, giving you three bands in one antenna while using up less space, costing less total money, and requiring a simpler support system. The disadvantages are largely due to the fact that the tribanders are compromises. The gains are not optimum for each band due to multiple use of elements, traps and interaction with the elements of other bands. Also, the front to back ratio for each band will suffer somewhat if compared to the monoband beams. Finally, the antenna can obviously be installed at only one level, causing different angles of radiation for each band and again a compromise in performance. The question that need to be answered is "Do the benefits outweigh the disadvantages?" If you are an avid DXer, craving the last db. of signal strength, you need the monobander at the proper height for each band. However, if your DXing is casual to serious, or if your ham activity tends to include stateside contact then the tribander at a practical height can serve you well. The larger triband beams will get you a little more gain, often some additional bandwidth, and better front to back ratio. In fact, some of the newer broadband designs seem to approach the performance of the single band beams. But a very adequate showing, particularly for more casual hamming can be had with the small units, at a very nice saving considering antenna, tower and rotator required. There are just as many happy hams around this city with Mini-Quads and "junior" tribanders as there are with the big units. This is largely due to the fact that any sort of antenna that gives you directional capability and some gain is a welcome improvement over dipoles and vertical antennas.

Now how about the monobanders? They usually have more elements, hence more gain. That is accomplished by lower bandwidth in most cases so beware of claims of utopia. A monobander, by definition works on only one band, so you better have either a favorite band, or more than one antenna. This explains why the avid DXers tend to have them, installing them at the optimum height for each band to get the best angle of radiation for DXing.

So what is a practical for most of us? One of the triband juniors, preferably a broadband version, installed at 40 to 50 feet high. Let your space, and your budget, be your guide.



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Kenwood TS-830s; external speaker SP230; Yeasu FT227R 2Meter;  
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100' long wire; Rohn tower 25-30'; HY-gain 10,15,20M antenna;  
12 volt power supply; (3) 50' section of coax cable; 50' rotor cable  
radio console; antenna mask.

All equipment like-new condition. Take all for \$900.00  
Call WD9FVF, Jim Ambruoso at 987-6741 during the day.

## FOR SALE:

HW-100 Heathkit transceiver; Heathkit HR-20 receiver; Heathkit  
HX-20 transmitter. Make an offer  
Call: Tim Gragg at 398-9354

## WANTED:

VFO for Kenwood TS820S  
Call: Marvin, KC9WF, at 397-3169

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## NETS:

28.7 Mhz. Monday 9:00 p.m.

50.4 Mhz. Nightly 9:00 p.m.

146.01/.61 Mhz. Monday 8:00 p.m.

**BLACK HAWK VALLEY**  
**TEN TEN INTERNATIONAL**

28.925 Mhz. Wednesday 9:00 p.m.

21.130 Mhz. Thursday 9:00 p.m.