

Ham Rag

Rockford Amateur Radio Association

MARCH 1984



President's Log

We have slipped into the new year in fairly fine fashion. In fact, the Awards Banquet makes a rather nice way to start the RARA year. Once again, we Thank all those who attended and who helped make it happen with their extra work.

Last month brought our usual Auction and in spite of all the "Clowning Around" it went well. Now to understand that last comment, you really had to be there. Here's hoping it will be covered later by photos. At any rate, Thanks to Frank WB9OGD for being our "Wheeler Dealer" again. For a night that was as foggy as it was, we had a good show of hopeful buyers and sellers. Now, I don't wish this on anyone else, but I am curious about something. When I arrived, I parked next to a car already there. By the time I left, all but one of two cars were gone. And - I had a Parking Ticket - for parking over the line. So even tho it was a foggy night and also Friday night when there isn't a lot going on at the school....they still patrol the parking lot. I interpret my ticket as a warning, but mention it to you now to remind you to be careful in the lot Parking as well as watching your speed.

I guess while I'm putting in some reminders, it wouldn't hurt to say - check the expiration date on your license. Mine is now due and with the new 10-year license terms beginning it will be easy to forget. In case you were not aware - new first time licenses, renewals or modified ones will come back with a ten year term.

Also, if you are inclined to join the A.R.R.L., or renew your membership, remember you can do it through the club. That gets you dollars off and benefits the club also. We encourage you to belong to the League for yourself, as well as helping the club's affiliation.

You won't want to miss our March meeting. Without a doubt, the flight of W5LFL - aboard the Space Shuttle Columbia will bring a new dimension to Satellite and Oscar Communications. Art Lang, KR9K from the Chicago area will be our speaker. Come and learn something new. Nearly 10,000 hams around the world have used the amateur satellites. It will be nice to be able to get some first hand information.

Mark your calendars - Awareness Day date has been changed to March 31. Jim, WD9FVF is asking for help. Let him know if you can be there. Last year was great - lets repeat it this year.

Hope to see you all at the March meeting...R.V.C., Bldg 1, Room 222, at 7:00 P.M.

73, Bob, WA9NTT

/DIGITAL CORNER

This month's article is by Don Rastede again. I had to write at least this much myself as I have a word processor program now!! I'm having a ball finding all the features that it has. Next month I am going to cover a few new integrated circuits that are on the market. See you then...

Gene, WB9MMM

PUBLIC DOMAIN PROGRAMS Or - YES, VIRGINIA THERE IS A SANTA CLAUS

Have you ever spent untold hours developing and debugging a program only to find out that you are "reinventing the wheel"? What is more frustrating is to find out that the wheel cost nothing, zip, or even less. I presume that your attention has now been whetted especially by the last sentence. Sure, we have all seen programs that appear in various magazines. We may have even entered a few into our machines and debugged the "running" programs. We also realize that these programs cost us very little outside of our time to obtain and enter. These programs lie in what is called The Public Domain. Typically but not universally, these programs have no copyrights (outside the magazines), and can be used and distributed as one sees fit - preferably at no profit to the copier. In addition to magazines there is a wealth of information, programs, and groups that can provide cheap help to your problem solving. Clubs have been formed to collect and distribute software. Most notably, SIG/M (Special Interest Group for Microcomputers a branch of the Amateur Computer Club of New Jersey) and CP/Mug (CP/M User's Group). These two groups distribute "volumes" of programs for CP/M systems ranging from languages to systems level programs (such as modem drivers) to application programs and packages. Both groups distribute software for the CP/M operating system on floppies. They use the standard 8" SSSD (1 BM) format. They also use the North Star 5 1/4" format and a limited number of other 5 1/4" formats. The address of both groups is at the end of this article. They charge a nominal \$1 fee to cover the cost of copying the volumes, and volumes may be sent for or copied at selected club meetings that support one or both of these groups. The volumes typically contain 180K of programs, documentation etc. That is a lot for \$1 in my book. I wish I could find such bargains at all the hamfests I go to. As usual, the quality varies widely. "Yee pay's yer money and yee takes yer chances".

There are also Bulletin Board Services alias BBS. These are groups or individuals who dedicate a computer, storage and hook-up via telephone line to the improvement and advancement of computer users. Their access varies from very limited because of special log-on's required to allowing anyone access to anything. In a recent article, it was noted that open access is causing problems in limited areas by users abusing the service. (Sounds like the problems with some repeaters). There are a lot of BBS's spread from one end of the country to the other. However, they require that you own or have access to a modem and a program known as a driver to interface the modem to your computer. I have yet to use one of these, but they do seem worthwhile to check out. The types of programs available as well as availability varies tremendously. In the future I will publish a list of some of the "local" BBS's. As a note on volume 70 of SIG/M or volume ___ of CP/MUG libraries there is an excellent modem program written by Ward Christiansen an old-timer in the realm of computerdom. This solves the driver program problem if your computer runs under CP/M. If it does not then

you will have to find one some place else or write one. Not all BBS's are devoted to or have programs useful exclusively to CP/M systems. There are ones that are strictly for Apples, Atari's, even interest groups such as writers. I have yet to see a "complete" list with all the boards is the US, however I am sure it would be impressive and there would be a few for hams on the list.

Finally, in the magazine **Microsystems** on a monthly basis there appears a column called "In The Public Domain". This column highlights CP/MUG and SIG/M volumes, new releases, and programs. At last count, there are over 143 volumes, new releases, and programs on Packet Radio, and volume 26 contains some programs of general interest to ham. Also, on volume 41 of the CP/MUG library there are some programs for hams. Most of these programs are written in either 8080/Z80 assembler or BASIC (like E-BASIC). I have of copy of these and will make copies for anyone who provides me with a properly formatted 8" disk. I will do like wise for any other volumes that I have in my library.

73's amd Happy Computing
Doc, N9AWZ

G E I D	H P	J A	K R	L Q	P D	W J	K	HPLE
B I Y	S H	L F	I B	U S	G F	F S	U F	HTKI
H H H	D S	R Y	A C	J D	Z P	S P	A J	COMPUKRE
I G S	U G	H U	F T	F H	B L	F F	A J	TANDY
N N A	I N	A H	R T	S S	P G	L R	F T	TEXAS INSTRUMENTS
A L C	D C	B N	B H	N S	F F	L S	F S	VIC
V H U	T K	U H	J P	E C	A S	R Q	A A	IBM
Q M D	H N	F I	E M	W	D E	L F	L E	ZENITH
D V B	D E	A H	A P	C Z	L F	I S	A P	KHYFRU
W I U	S Y	E R	U G	U M	F L	L S	L F	OSBORN
H U J	H D	R A	J P	S X	C R	C S	J Q	SOFTWARE
P P P	S N	U I	V O	S X	U S	F F	S F	HARDWARE
H T N	V H	L S	I R	J M	J A	S C	P R	RANUOM
T Y P	Q T	D O	N C	U B	B H	U F	S E	BASIC
L L T	B P	U B	A B	J R	S R	S P	R V	LOGO
N G H	Z U	E H	H U	J K	O L	K E	L F	FILIT
E X L	P P	I L	A T	P C	J Q	J P	A J	PHSCHL
Z A F	S T	N F	H G	H J	S N	L S	F S	FORTH
T O H	F S	A H	A C	D C	J D	P V	A T	FORTRAN
W C E	S Z	F Z	G W	N S	G F	F S	F U	COBOL

MEET TIM & JOHN NEESE KA9OYT & KA9OYS

This is a story about a couple of novices that are members of the RARA Club. Tim, KA9OYT, is the son, and John, KA9OYS, is the father. John and Tim live at 7642 Buffalo Grove Road.

It seems that Chuck Mosher, W9JLN, knows John's partner in business, and Chuck got John and Tim aimed in the right direction - straight to the RARA radio classes. Tim was 13 years old when he got his novice license.

The first station Tim and John had was Johnson Ranger Transmitter and a National Receiver. Today the rig is a Yaesu FT101B. A Denton Super tuner and a Micronta Field Strength/SWR meter keep the station in tune. Tim made a home brew timer so he knows when to ID on the air.

Tim is a 9th grade student at North Love Christian School and maintains a "B" average. Tim also works part time at the school to help him in bucks. After high school, Tim will be heading for the Milwaukee School of Engineering and will study electronic engineering. Well, if this isn't just what Wayne Green would love to hear about.

John told me that this ham radio business all started when he was young and had a short wave radio he built himself. Later on he gave Tim a C.B. radio, but that didn't work out because of the bad language on C.B. Their loss, our gain!

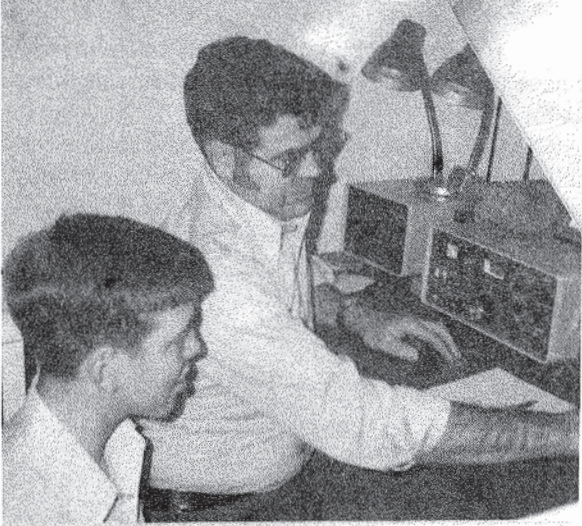
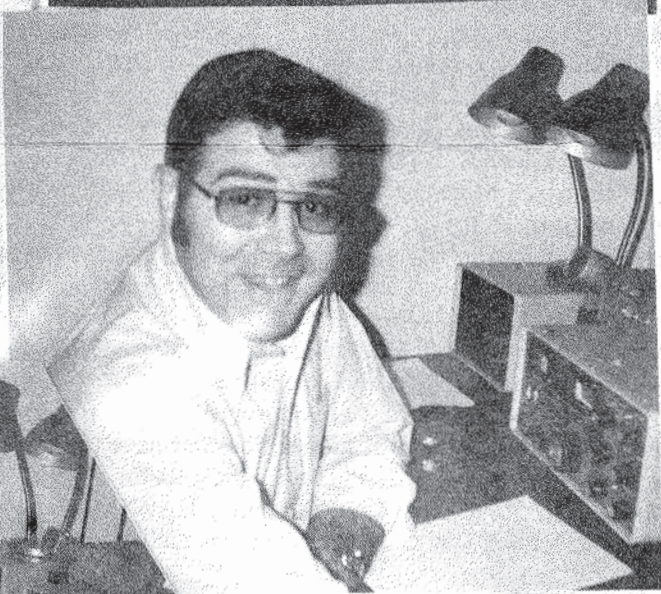
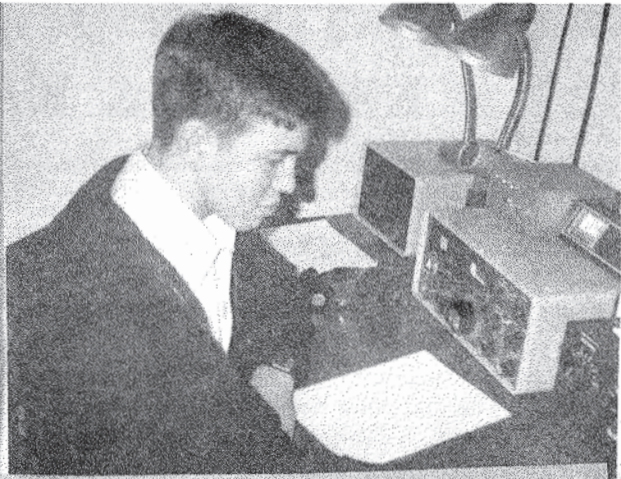
The antenna system Tim and John have is unique. Not much can be seen by the neighbors. They have a 40 and 80 meter dipole hidden under the overhang of the house.

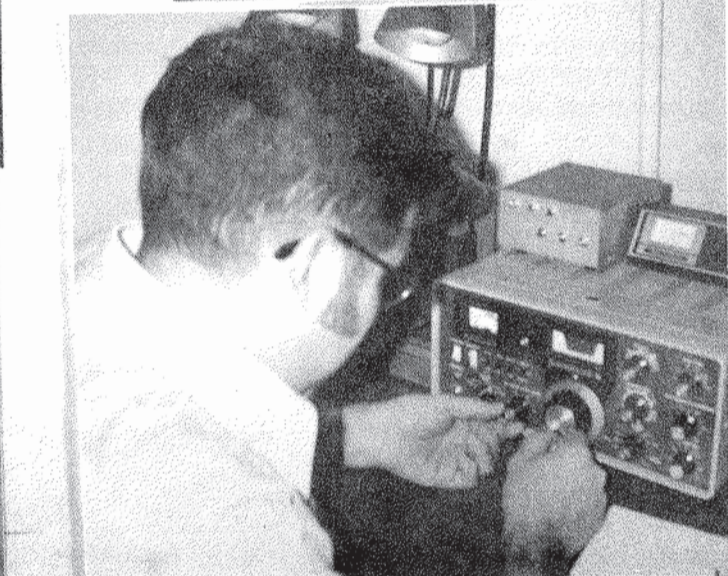
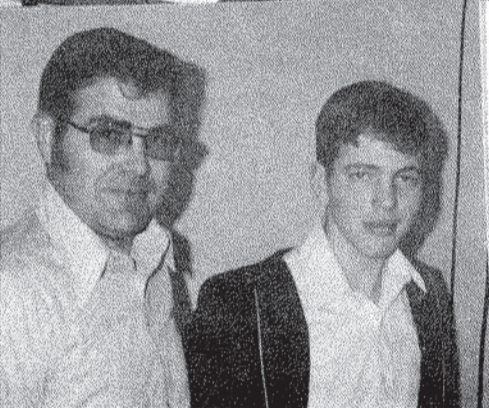
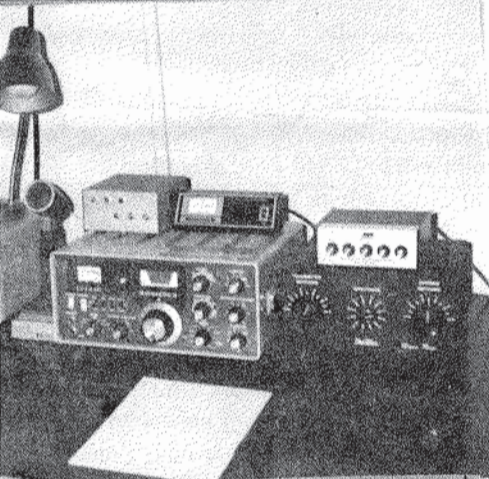
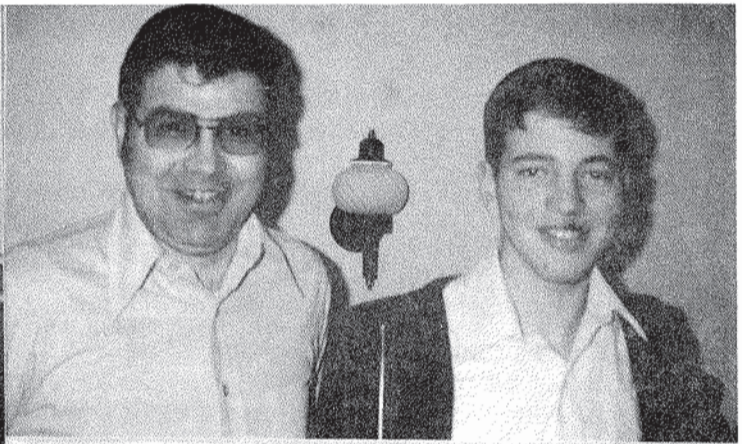
The 40 meter fits the front of the house, but the legs of the 80 meter make a turn and go along the side of the house. A 15 meter dipole is located just above the peak of the roof. It's all a neat looking package that should not bring them problems with neighbors.

I hope these pictures and article are seen and read by future hams. Tim and John's activities in ham radio show that a great amount of money does not have to be spent to have a good ham radio station. I know Tim gets many hours in on the radio and gets lot of enjoyment from it.

Last year Tim, KA9OYT, and Chuck Cushing, KA90CAN, ran the 10 and 15 meter CW novice frequencies for the RARA Field Day activities. That was really nice to see and I hope to see Tim at Field Day for 1984.

Next month's article will be a special treat. A YL!!





Notice

Novice and General Classes:

Get acquainted night March 13, 1984

Harlem Community Center, 900 Roosevelt Road, Rockford, Illinois

7 to 9 p.m. Classes start the night of March 20, 1984. 6 to 9 p.m. at the Harlem Community Center. Books will be available at Canterbury Books, located at the Edgebrook Shopping Center. Books needed for the Novice class are AMECO NOVICE THEORY ARR! LICENSE MANUAL, code tapes will be available at class.

Books needed for the General Class are: SHRADER'S AMATEUR RADIO THEORY AND PRACTICE AND THE LICENSE MANUAL.

Cost is \$15.00 plus text books and tape.

If you are (licensed/prospective amateur) interested in a class (upgrade/novice) please fill out the following and send it to either KI9G or AK9N, or call them before the 13th of March.

Name

Address

City, State, Zip

Call..... Telephone

Interested in: Novice Technician/General

KI9G
Carol Holmes
3010 Lotus Lane
Rockford, Illinois 61111
633-3249

AK9N
Gene Melton
923 Otto Road
Rockford, Illinois 61111
654-0675

THIS AND THAT

Are your Dues Paid?? This is that last issue of the "Ham Rag" you will receive if your 1984 Dues are not paid.

"Ears" Dues are due also. The Auto Patch Code will change March 15th. "Ears" treasurer is WB9MMM and he will be most happy to receive your 1984 dues. Send them to Gene or to the PO Box which is 4291, Rockford 61110.

In last months "Ham Rag" the cover photo of Frank was by K19G. The awards banquet photos were by K19G, KC9AP, and AK9N. Layout was by K19G.

Another AWARENESS DAY is fast approaching. This year the event will be March 31 at the North Town Shopping Center. The Chairman for the event is Jim, WD9FVF. Anyone willing to participate give Jim a call. You will not regret participating in this one.

Secretary's Log

"Who'll give me a \$1? \$2? How about \$3?" If you were at the RAR meeting on Feb. 10, 1984, you heard the familiar sounds of an auction. Frank, WB9OGD, was the auctioneer again this year. He definitely was the most colorful person there in his clown costume. (I doubt he'll make the best dressed list this year!) Many people were lucky enough to buy some real treasures. Thanks to all who brought items for the sale.

Welcome to John/KA9QZT, Tim/KA9PVM, and Dave/WB9EIE. Hope we see you again! It's always nice to see new faces.

We are working on getting special service club status for RARA. We meet many of the qualifications already. One important thing we need to know is what club members are ARRL members. You could all help by letting one of the officers know if you haven't indicated it on the sign up sheet. By the way, if you haven't paid your dues for 1984, please do so before the end of March.

Awareness Day will be held on April 7, 1984 at North Town Shopping Center. If anyone is interested in helping that day, contact Jim, WD9FVF. He is chairman again and would like a lot of willing bodies.

Shari, WB9SFT, announced that starting with the April issue, she will need the "Ham Rag" articles by the 15th of the month. Sure hope a certain person can get his article done then. See you at the RARA meeting in March, I hope!

TECH TOPICS - MARCH 1984

As I set at the chair down in the shack and behave like a Net Control Station, there is one subject that seems to come up all together so often. That subject is that of television interference (TVI), computer interference, etc. It's something we all have to tolerate on occasion, just because we have selected this hobby, and one that plagues us if it is happening to one of our neighbors. Of course, if it stays in our own homes, we quite often just ignore it. I wonder if sometimes we couldn't learn a little bit by attacking our own problems. I also wonder if we are aware of some of the resources available to us.

Anyway, lets look at some of the very simple things that can be done in situations like these. An example of what can happen can be illustrated by this scene. You own a computer that has cause no problems to your radio (or your TV if that is near the computer) until you started buying peripherals. Now you knew that when the printer started running all heck would break out. After all, all those little solenoids in there pounding have got to create some noise on the radio. But when it is just sitting there doing nothing, it should cause no problem, right? Wrong, on a number of counts, so how do you fix it? Let's go through a number of points, which would apply to many types of equipment, and might be appropriate to check here, or if you have hum (or unwanted signals) on the portable stereo, the scanner, etc.

1) Check if the thing is grounded, or if the offending items should be grounded, attached to each other, or both. Too many devices these days operate on simple power packs that plug into an outlet with a two wire plug. This gives you a transformer isolated power supply, great for safety from line voltages, but with no ground. Thus, the chassis of the device (lets say a computer) is not grounded. That in itself is not condemning, but may negate the effectiveness of whatever shielding is built into the device. Attempting to shield the lines will not help much here until your attach one of the chassis to a ground (like the ground terminal of an outlet). This may be done in many cases by attaching a wire to the center terminal holding the outlet cover.

2) In cases of interference by ham gear, similar checks of the ham gear is in order. Most of us operate without a real ground in the shack. Bringing one in, either from the classical water pipe ground, a ground rod, or from the outlet, may help here. The point is to get all the equipment at a common ground potential, and as real a ground as possible. A good ground strap that is of braided wire (the shield of RG-8 for instance) connecting the equipment together is in order. Solid wire, even of decent size, is not good because of skin effect at radio frequencies. Here too, as noted in many texts, you should make sure that the appropriate low pass filters (we are assuming HF operation) are in place. The classic Drake Company filters are the standards here-look for them at hamfest. This may be even more important with the new wide band tuned rigs, as the additional rejection of harmonics inherent in the final tuning stage doesn't happen here.

3) Another quick fix applies to stereo RF pickup, TVI pickup coming in the power lines, or any other place that the RF is induced on a long piece of interconnect wire. Winding the interconnect wire or the power cord through a toroid ferrite core for a number of turns will make the wire look like radio frequency choke. This simple attack many times gets rid of the offending signal pickup, and at least aids you in determining that pickup on that lead is not the problem if it doesn't work. Keep the toroid as close as possible to the susceptible equipment when doing this. The cores may be found advertised by Amidon Associates in the ad section of the ham radio magazines. Get one big enough to thread the cord through.

The above may not cure all your problems, but is a start. When things get more complicated, the fix may require circuit modifications. By the way, the local nets are a place to ask for suggestions in curing problems like these if you're stumped, and RAR does have a TVI aid "committee" lead by Larry, KS9B. More on this subject another time.

Steve, KB9IW

POTPOURI

The Harlans have their tower up at their new QTH and did it like true hams. It wouldn't do to wait for spring to roll around, so they did it in mid-winter. Yes, 70 feet up is higher than a lot of others in the area. Of course some people are lucky to begin with situated on a higher elevation. Why is it that some hams claim they get just as good results with the antenna about rooftop level? Let us say maybe they think they do. Anyway, we are envious of those that have a high and efficient antenna. It's much more important than running gallons of power. We know a linear comes in handy at times but really isn't required much of the time for good results Congratulations Gene and Sheri!

Why doesn't someone check up? Which side of the door do you suppose the lock is really on? Gerry, KU9S, Sez it is on the inside to keep everybody out. Nobody really knows for sure, but maybe the lock is on the outside, so his XYL can keep him in there with all the racket. Maybe someone will drop in there and get the true story.

Some people have money to spend at hamfests. A lot of hams from area went to the one at Arlington race track last January and spent some money. One guy was Floyd, K9CUQ, who bought a Kenwood TS 7950 2 meter rig. He asked Santa to bring him one but Mr Claus ran out of radios or lost his way. A nice addition to your shack Floyd. Happy ragchewing!

Some people just don't know when to keep their mouth shut. Maybe the reason why the R.A.R.A. auction night was such a success was due to people like N9CCH. He thought he would be smart by making a bid to get the price up higher, only to hear the auctioneer say "SOLD". Anyone want to buy a preamp?

Steve, KB9IW has had an article accepted by **Ham Radio Magazine**. Congratulations! WB90GD is home and recovering nicely from surgery. Frank spent a week in Rockford Memorial. The Kiwanis International Foundation Board is giving \$15,300 to Courage Handi-Ham System of Golden Valley, Minnesota; for the production of promotional brochures on how to involve the handicapped in Ham Radio Operations. Isn't that terrific!

Cheers, N9CCH

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

OFFICERS		DIRECTORS				
President	Bob Davidson	WA9NTT	877-6274	Frank Hirsch	KS9X	397-6966
V. Pres.	Chuck Henley	N9CCH	633-6524	David Bond	N9DRQ	877-3751
Sec'y	Kay Becker	N9DRL	397-3169	Gary Hilker	N9LJN	654-3282
Treasurer	Brad Ambro	KA9LTR	398-1648	Ron Zimmer	N9DPP	654-7526
HAM RAG Editor	Sharon Harlan	WB9SFT	398-2683			
Circulation Manager	Alice Davidson		877-6274			

Ham Mart

FOR SALE

Hygain Thunderbird Jr. 10-15-20 meter beam Ham 4 rotor. Kenwood 830S with external speaker. Kenwood MC50 mike. Call Jim Ambruoso, WD9FVF at 654-3620 for price.

1 Knight Kit VFO V44 \$35.00. Call Matt at 962-4040.

Collins 32s-1 transmitter; Collins 75s-3 receiver; Power supply 516F-2; speaker sm-2. \$425.00 for package. Call Bob at 877-6274.

FOR SALE

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

ADDRESS CORRECTION REQUESTED

Bulk Rate
U. S. Postage

PAID

Rockford, Ill.
Permit No. 230

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.