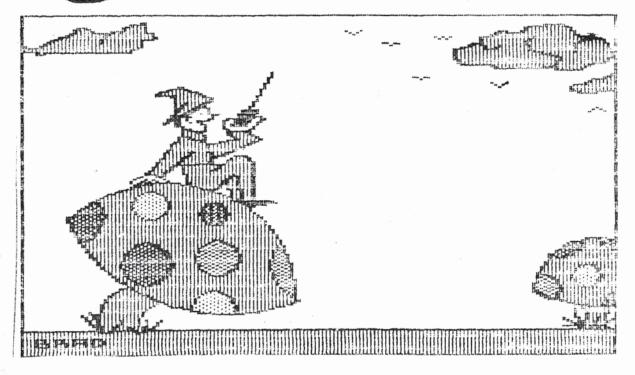


# ROCKFORD AMATEUR RADIO ASSOCIATION



MARCH 1985

RARA MEETING - MARCH 8, 1985 7:00 P.M. - ROCK VALLEY COLLEGE ROOM 222 - CLASS ROOM BUILDING 1



### FRESIDENTS LOG

I would like to thank everyone who participated in awareness day yesterday at North Town Mall, especially John Wacker for putting it all together. Everything went very smooth (except for John forgetting his disk drive and software at home and a special cable that I forgot... (Shari came to the rescue as usual!!)) and lots of people showing interest in what we were doing. I had people tell me they saw the ads (North Town ran a very nice ad for us) and they just wanted to see what haw radio was all about. Also we had some newer hams show up to hopefully meet hams they had talked with on two meters but had never met. We took in dues from new members, demonstrated what we can do, and hopefully made new friends for the club. The highlight of the day for me was when I asked this lady (I think her name was Carol) if she was interested in ham radio after which she told me about five boy scouts that she would like to get started in our classes, and would we have room. We talked for awhile as I reasured her that we would have room in our classes for the scouts. She left after a little while, but only after Carol Holmes and I loaded her up with literature to take home. That afternoon she came back with her husband and announced that they had been talking with people at the scout office and they wanted now to get twelve in the classes!!! I think that's fantastic!!! It's times like that that make the effort worth while, right John?

A neat bit of info from the QST was that the FCC and NASA have QK'd rebroadcasting the shuttle video and audio between licensed anateurs from the NASA contract channel on the Aurora Satellite to the amateur bands. This info comes from an ad (page 156 QST March 85) by P.C. Electronics. They, of course, sell the equipment to do the sending and receiving. They say that they have receiving converters to go with your normal TV starting at \$49. Since we have satellite at our house, I could whip up something to transmit I suppose, but who would see what I send?? Would this be the thing that might spur some activity on 432 mbz ATV??? How about it Gene (AK9N)? Elahost sounds like a challenge doesn't it... I

This months meeting should be real interesting as it is on packet radio. We have 2 or 3 people comming from the Crystal Lake area to inform us all. I understand that they plan to set up 3 stations that will be transmitting to each other so everyone will get to see what's going on. With the interest in computers along with ham radio. I know we will have a good turnout for this one.

Don't forget the walk-a-thons coming up. We already have volunteers but can always use more. Give Shari a call if you can help. Also lots of people signed up for field day ( 4th weekend in June ). If you haven't signed up or would like to head up a team for a particular band give Dale Mather or Frank Hirsch a call.

See you at the meeting!

### MORE BULLETIN BOARDS

In my last contribution, I gave you some details on modems. This time, I will tell you some of my ramblings thru Chicago bulletin boards with the idea that either someone may become interested enough to set one up in the Rockford area, or I can help direct someone who would like to investigate these. All BBS noted work on at least 300 baud with other rates available on some.

First, you owners of the Orphan (TI' s99/4), may find the TIBB in Oak Park to be useful (312-848-896). This BBS is the "Worlds First TI 99/4 Bulletin Board" or so their banner reads. There is a news letter, message section. II users meeting information, and users group information. Their news letter is lengthy, and the messages contain items for sale. The only problem I have found so far is that after about 15 minutes usage, a message keeps coming up to log off and allow others to use the board. It appears that the BB is set up to fill 1 screen at a time with what appears to be a home cursor sequence at the beginning of each page. A second bulletin board I have used is the University Conference Information Net (312-942-0089). This BBS is unusual in that messages are tied together much as one would add branches to a tree. That is, one or more messages may be attached to another. Hence, messages can be left and linked to its logical parent so that a tree of messages or comments is left. There are 3 basic commands to first time users. Read-for reading a message. Browse-for looking at all messages, and Index-for looking at all messages linked to a message. To get help with these and other commands type "read help". There are a maximum number of messages that can be stored, then they are deleted with all messages tied to the parent erased too. This form of BBS is unusual and seems like it could lead to conversations between users. A third BBS that I have used is an RCP/M (Remote CP/M) system. This BBS is a functioning CP/M system, that allows one to access disks much as one would on a normal CP/M system. Many of the commands are the same, such as 'type' and 'dir'. There are several of these BBS in the Chicago area and one in McHenry. These will often have CP/M programs that are normally found in the SIG/M and CP/MUG libraries. These programs may be downloaded via the program MODEM? COM which is both of these libraries. One may also look at a limited number of lines in a program to see if the program is useful and worth downloading to your system. Being able to download these programs is one solution to not having easy access to these libraries. The Logan Square CP/M system. Was a message system called MINIRRBS which is brought up by typing in the program's mame. Once running, the program gives the user a list of commands available. Because of the large number of programs available, programs have been grouped by type, and are rotated on a one week schedule.

So there you have a quick review of some BBS and what they offer to the user. One suggestion in using any BBS, as soon as you receive a list of commands and the codes used to execute these commands, write the list down on a piece of paper. This can save money and time required to print out the list every time. In general, I keep a notebook of all BBS that I access with a list of the commands and notes on past usage and messages read. This suggestion is particularly good if you are an occasional user or using a number of boards. Good hunting and should you find something particularly interesting, share it with the rest of us.

Mc Henry RCP/M (815-344-4767) Northern Illinois NEC Program Exchange (815-344-0002) Appl. Micro Tech Suport System

### TECH TOPICS

Let's take an opportunity to continue with the subject started last month. That was power supplies, which were not turning out as simple as one might assume. There are various types out there, provided both by the transceiver manufacturers and by independent makers. The prices vary quite a bit for seemingly indentical capability. So what is the difference between them? A short discussion of the parameters important to power supplies is in order here.

The first items to consider are the basics, which are the voltage and the current capability. The transceiver manual will usually state what capability is required. A typical need would be 13.5 volts in the case of a mobile rig, which applies to both FM and most HF rigs these days. This is higher that the 12 volts you might expect since 13.5 is about where a voltage regulator in a car is set to charge the battery. Therefore the radio must be able to operate under those conditions. The current required will generally be about 6 amps for an FM rig or 30 amps for an HF rig. These two parameters are the ones most often advertised for a power supply, and tell the basic story, but there is more to study.

The next parameter to look at is the regulation of the power supply. In short, this tells you whether the voltage made available to your rig stays at the set level. Let's face it, it won't, but can be controlled with limits. Regulation of the output voltage must be controlled under two major conditions. First, your input to the power supply, the 110 volt line you plug into moves around. In fact, you may find variations from 105 to 125 volts on a typical line under certain contitions. This portion of the regulation capability is referred to as line regulation. The other factor is that the load you apply is not steady. In the case of an FM riq you may require about 1.5 amps during receive, and 6 amps during transmitting. This transition is abrupt by nature, and the power supply must maintain the proper voltage all the time. For SSB rigs, the problem is even worse, because the transmit current varies wildly as you talk, since SSB only puts out power relative to your voice input. This aspect of the regulation is referred to as load regulation. The capability of the power supply may be stated as the two portions noted above, or may specified as an overall value. This is one place where the cheaper supplies may not perform as well. The value may be stated as a percentage (1.0% is a typical value by the time everything adds up for a high current supply) or as a voltage (for instance, 100 millivolts).

The last parameter that we should have some concern over recognizes the fact that this direct current voltage we want is derived from an alternating voltage. The unfortunate fact is that some of this alternating voltage may sneak through. This is undesirable, because it may show up as hum on our signals. This is normally referred to as ripple voltage and is usually stated as a voltage. For this sort of supply, S millivolts would be a typical requirement. In a nutshell, the above covers what you need to look at to find if a supply is appropriate. However, there are a couple of additional features sometimes built in, which can be very important. They fall in the category of protection features. The first is current protection. This means that the power supply will sense an overload current, the level of which can often be adjusted, and shut down if necessary. This protects the supply and limits any damage to the rig in case of a problem. The second protection is an overvoltage protection which would also shut down the power supply. This protects the rig from damage if the power supply regulator should fail.

Well, there you are, now you know enough to be dangerous.

73, KB9IW, Steve

### MEET NOCCH, CHUCK

Charming Chuck Henley is N9CCH. He sometimes is known as Crazy Chuck Henley, but he is anything but crazy. Chuck started out in Amateur Radio with the call of 9AVE and operated from Oskaloosa, Iowa. Chuck operated a one KW spark gap station at this time. His equipment was a Thor Darson transformer and a Benwood Rotary Spark Gap. His receiver was a Stromberg Carlson tube receiver. Chuck's antenna was a 4 wire with a 4 wire counterpoise which was in a church tower!

In 1924 something happened to Chuck to change all his Amateur radio activities. Chuck met Iris, and on June 21, 1924. Chuck and Iris were married.

In 1976 Chuck took a novice test and was awarded with the call KA9FYW. Chuck was awarded the call N9CCH in 1977. (How lucky can you get!) Chuck credits Bob, N9AXD, and Gertrude, KB9PC, for their help with stuff needed to pass the test.

Chucks equipment now is a lot different than when he started out. His low band rig is a Kenwood TS830 S with an AT230 tuner. Another low band rig is a Yaesu FT107M with a FT107 power supply. For 2 meters Chuck uses a Kenwood 7850. For 6 meters there is a Yaesu all mode FT690R. On a tower Chuck uses a Mosley TA33 Tri-bander.

Chuck spent 3 years in Japan and learned enough Japanese to really get him into trouble. He can QSO with the JAs well enough to have some fun.

Chuck was vice-president of RARA for 2 years, 1983 and 1984. He was also net control for the Black Hawk Valley 10-10 net. The best thing he likes about the RARA members is that they are so willing to help everyone when the need arises. Chuck had loads of help with his tower and beams from RARA members and wants to thank them all. Thanks goes to Gene, AK9N, Gene, K9IKP, Brad, KA9LTR, Gene, K49BBD, Frank, KS9X, and Gary, K9LJN. Others who supervised were Carol, K19G, and Shari, W89SFT.

Chuck is a well traveled young man. He was telling me some of the projects he worked on for Woodward Governor. Chuck worked on the Grand Coulee Dam which is located across the Columbia River northeast of Spokane, Washington. Another place Chuck also worked on the McNary Dam for 3 years. (He has to tell me where that one is!)

Chuck seems willing to take on anything for RARA in time of need. He can be found working on the RARA picnic, the marathons, and anyplace needed. Chuck also writes for the "Ham Rag." I think if there was a full time position available in RARA. Chuck would like the job.

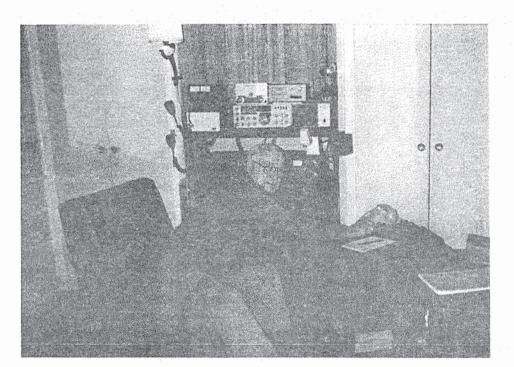
Thanks, Chuck and Iris, for the nice pictures you let me take. Also, Chuck, the coffee and cookies were good, too.

73 to all, and something new will be coming next time.

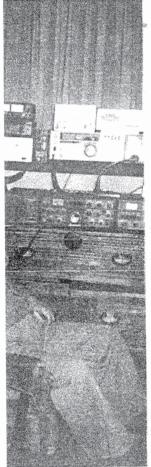
Marvin, KC9WF







## CHERLE E







HS Mir

### HEET W955

When Dennis Eksten was 13 he bought an out-dated copy of the ARRL Handbook from Allied Radio for \$1. That started it all.... First licensed as a Novice, WNSDDL. more than 30 myears ago, he rapidly progressed to Technician and got his General while still a teenager. But alas, W9DDL was rarely heard in those days because his love for amateur radio led him to become a poor electrical engineering student on the campus of the University of Illinois in Urbana. There he operated W9YH, the Synton Amateur Radio Club station on campus. After graduating with a B.S. in Electrical Engineering, Dennis had more time to talk about incentive licensing, but no extra privileges for Extra classlicensees until later. However, Dennis decided he'd better bone up and take the Extra.



Those were the days you had to go into Chicago and pass both a sending and receiving code test of at least 100 perfect characters in a one minute interval. That was the hardest in that the theory for an EE was no problem. One of his local buddies had told him that since Extra was a prestige license, if you passed the code receiving test, the FCC didn't bother with the sending test. Boy was Dennis surprised when the examiner said, "O.K. on the receiving. Now sit down there and send me 20 w.p.m. with that hand key!" In 1976 for a brief period, the FCC allowed Extra class licensees of some tenure to actually pick out a call of their of their own choice. Dennis eagerly sought and received WSSS (W-9 Sweden-Sweden).

Through the years DX has been his main interest. His confirmed DXCC country total now stands at 325. After trying to achieve DXCC Honor Roll status for 17 years, he finally made it a few years ago. Dennis said he never had any other goal in his life take 17 years or even close to that.

Closely tied in with DXing is his love for Sweden and SM contacts. He says he speaks enough Swedish to get himself in trouble (ask him about how he almost got his camera confiscated in Sweden) but it helps in SM contacts. He says he is better known in Sweden than here in that he has had his picture and an article about him in the Swedish amateur radio magazine. He holds all Swedish awards WASM (Worked all SM prefixes), WASM II (Worked all Swedish lan-similar to states), SCA (Worked all communes--similar to countries), and Sverige Diplom (Worked all forsamlongar--similar to townships). He enters the annual SAC (Scandinavian Activity Contest) every year without fail. He usually places 1st of 2nd in W9 land. But in 1978 he was the North American Continental winner on SSB. "That'll probably never happen again," he says as he admiringly looks at the beautiful plaque in the wall of his shack. Dennis is a Life member in the ARRL which he joined more than 30 years ago, and a 20 plus year member of RARA. Other awards in his shack are WAS and WAC.

These days of low sunspot activity Dennis is burning the midnight oil in pursuit of a new aspect of his lifetime hobby....pushing ahead with utilization of microcomputers in amateur radio. He is fasinated with the incredible power of the micro and has programs for determining the optimum frequency hour by hour for any path between two points on the globe, beamchart headings customized to your own QTH, grayline countries (those experiencing sunrise or sunset within a specified time interval of our own sunrise/sunset) as well as sending/receiving RTTY and ASCII. He can even tell you where in the sky to look for the moon on any date in the future (or past) that you specify!

Next to amateur radio, Dennis' second hobby is photography. Last year he was an international winner in the Nikon Photo contest. Dennis says it still seems strange to see his picture of a duck in flight in a glossy book with winners from all over the world. Dennis is employed as Manager of Electrical Engineering at Ipsen Industries.

As to the future, WPSS is eagerly awaiting the changes coming due to the computerization of amateur radio. Hams have been known for pioneering technology, and Dennis is always interested in discussing advancing technology. But, of course, you'll hear him on the 2 meter DX net and when band conditions permit, you now know who that local nut is who keeps shouting "CO Vackra Sverige. Detta ar Wilhelm-nia-Sverige som anroper and lyssnar efter dig...."

de, K9IKP

### FOTECLE

A couple of local hams were heard talking about the pretty snow covered trees, but how nice it was to think about the birds and the coming of green grass. I suppose spring is getting pretty close when people start this sort of chit-chat. Our local snow birds N9CNB and W89OGB will be surprised when they return from the Sunshine State to find we have green grass peaking through.

Our annual auction might was held at our February meeting. Some guys just don't know when to keep their mouth shut at such affairs. In order to get things rolling, a voice is heard to make a bid. Then the room is quiet-no more bids are made and the auctioneer is heard to say "Sold to that \$5.00 bidder!" Woe is me. There was quite a few goodies that went for real bargin prices. Those of you who were not there missed out on a fun evening. Some people tell me that the meeting after the meeting at Sams' Pizza is also very entertaining.

PLEASE NOTE: Gertrude, KBSPC, is net control for the 15 meter CW net on 21.130 MHz each Tuesday night at 9 o'clock. Running a net isn't much fun unless net control gets more than one check in. It certainly doesn't hurt anyone to get a little practice now and then. Why not get on CW and be heard occasionally if only to say hello. Even if you don't need the practice, it's a lot of fun.

Some RARA members have joined the THINK SNOW group this year. WASNIT and daughter Kathy, WBSHMM and WBSSFT, and KBSWD and KASDNO have been heard out doing some cross country skiing at the local parks. Won't be long and they will be wanting to put together a cross country ski trip for RARA.

Know of any new upgrades or new calls in the area? We like to recognize each individual effort made to upgrade, but if you don't let us know we can't get it in print. John Dempster did. John, formerly KA9LYO is now N9EZN.

Our editor and chief asks me to remind you that THIS IS YOUR LAST HAM RAG IF YOUR RARA DUES ARE NOT PAID. RARA dues are due January 1.

Cheerio! N9CCH, Chuck

### CO, CO, de WHITE SWAN SCHOOL

Need some excitment on a Wednesday or Friday afternoon around 3P.M.? Turn your 2 meter rig on to 145.52 or sometimes the 146.01/.61 repeater, and you'll hear some lively chatter coming from White Swan School.

Marvin, KC9WF, recently brought a Kenmood TR7800, a power supply, and a quarter wave antenna mounted on a metal plate borrowed from Chuck, W9JLN, out to my classroom. (Boy, you should have heard the questions fly!) By room is halfway underground; so we had to do some improvising with the antenna. The building engineer at my school Greg Swanson, put wire through 2 holes that are on the plate and hung it upside down from a water pipe right by the windows. At least it's above ground level now! With that we were all set to operate.

To create a few more questions and more interest I have set up an Amateur Radio display in the room. Included in that are: a copy of my license, callbooks, a world map with Amateur call prefixes, Novice class information, and samples of OSL cards. Since I happened to get this set up before our building evaluation, my principal, Sam Natale, was delighted! He's very supportive of my project. Unfortunately none of the evaluators asked any questions about it. Oh, well!

The first time I turned on my rig I was immediately surrounded by my 22 fifth graders. Of course, they all wanted to talk, but they didn't know what to say. (I've found a great way to keep some of them quiet. Hand them a mike! Hi! Hi!) We're still working on their conversational techniques. They tend to ignore what I write down for them; so I try to prompt them as we go along. Some are catching on really fast. Almost all of them have had a chance to talk, but some would rather just listen. So far one boy is really interested in becoming a ham. Watch out, Carol!

We've talked to quite a few of the guys around town and a couple out of town, mostly on 146.52. The kids enjoy getting on the air (no work) and receiving QSL cards. Thanks to Marvin, KC9WF, Al. M9UFH, Chuck, W9JLN, Gene, KA9ROD, Chuck, M9CCH, Darold, MD9COP, John, K9VRL, Al, WB9TPX, Bill, N9DTD, and Bill, KA9RBQ, for taking the time to talk to the kids. Hopefully we'll get a chance to talk to a few more of you one of these days. We usually get on the air every Wednesday and Friday afternoon, but sometimes we aren't able to because of other activities. Keep trying if you don't hear us. We'll be around another time. See you on the air!

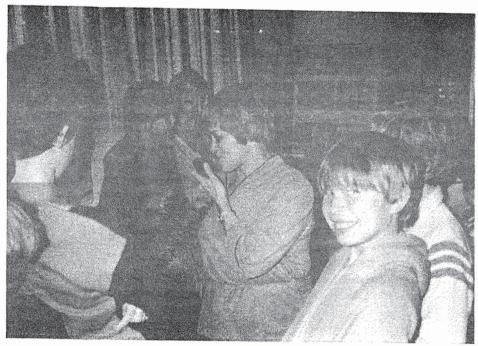
73, Kay, N9DRL

THE SKY

THE

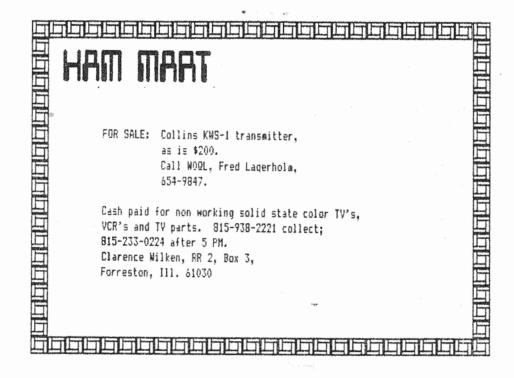
WITH AMATEUR RADIO!





### DSCAR 10

Back in June 1983, amateur radio reached new heights with the launch of AMSAT OSCAR 10 (Orbiting Satellites Carrying Amateur Radio) with much higher orbit than all prior OSCARs. With this all Linds of circular antennas came about, being that (AD 10) antennas are right hand circular we must use the same. The Helix antenna for one is a fine choice but if you get right hand circular polarization you cannot use it for left if the need arises. KLM CUSHCRAFT and few more make a multi purpose antenna for all modes, circular polarity is employed in this entenna using crossed yagi and fed in phase. An optional switch added to the antenna allows remote selection of either right hand or left hand circularity from the operating position. What makes this antenna nice is that you can use it for FM or Sideband. The antenna subsystem on board (DA10) is a 2-meter low gain monopole or high gain 6 element phased array (ZL-special beam) (70 cm. low gain monopole or high gain 3 el. phased array) (24 cm. low gain monopole or high gain helix) All antennas are right-hand circularly polarized (RHCP). (DAIO) is available every day from 8 to 10 hours in the frequency of 145.810 to 145.955 receive on upper sideband, this is the downlink; for the uplink 435.160 to 435.050 the band is inverted. It takes about 30 watts to make the trip. Hope this will be of some help. The next issue we will talk about the evasive Mode (L) in the frequency of 1269.850 to 1269,050--436,020 to 436,950. See you next month.



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