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PREXY'S PAGE
DE KØUJJ

We have just completed a most successful hidden transmitter hunt, with 7 groups competing. A good turnout! Right now the thought is to have another one toward the end of May. Probably about the 25th. Everybody lookout... I WILL be there for this one!!!

Next month is the Collins trip, which should be most interesting. Those of you who read the Des Moines Register may have noticed the front page article in the Tuesday, March 25th edition about the Collins Radio Station, concerned with lives of fishermen being saved by a Collins operator monitoring their distress call. This is the same station we will be visiting. The meeting place is the Coralville Liquor Store--Hy-Vee--Drug Fair parking lot at 7 sharp, Wednesday, April 9.

I will close this month's remarks with this printing of a bulletin received at KØUJJ from w1AW:

Hr Official Bulletin NR 527 from ARRL Headquarters CK 153 Newington Ct March 20, 1975 To All Radio Amateurs --In an order adopted March 11, 1975, and released March 18, the Federal Communications Commission has made several new prefixes available for use in the Amateur Radio Service. The prefix blocks N1 through NØ, AA1 through ALØ, and NA1 through NZØ will be available for assignment to Amateur Stations after the effective date of April 25, 1975. Call signs with a single letter as the suffix also will be available for the first time to U. S. Amateur Stations. Call signs with the letter X as the first letter after the call area designator continue to be assigned only to stations in the experimental

(continued)

IN CASE YOU MISSED IT ...

The regular March meeting was called to order by Pres. Craig KØUJJ and everyone welcomed; everyone present introduced themselves. Craig made some announcements, including that the social hour after the meeting would be held at Maxwell's; there were a few new licenses within the club; and that for the 2-meter hunt coming up on Sunday the 23rd of March, all contestants are to meet at 2:00 pm in the parking lot of the Hilton Motel in Coralville. The minutes and the treasurer's reports were read and accepted as read. Steve KØSVW mentioned that he has been asked to rewrite the ICARC constitution; he will submit a draft of this to the membership, and eventually will publish the new consitution in the Rag. Steve also mentioned that the ARRL DX contest was winding up this weekend (the 15th & 16th), and that the ICARC WAS contest is going strong, with Mike WNONCX in the lead. He also explained that the 2-meter hidden-transmitter hunt taking place on the 23rd will be at 146.52 on the 2-meter band. Chuck KØOBU complimented the IC Repeater on its quality, especially in comparison with others he has had experience with. Fred WAØHFW said that the plans for the June Field Day are progressing, and more information will be forthcoming in the Rag. Mike WNONCX brought up a corollary to our fight over the difference between mobile and portable operation, and cited the latest update of the FCC Regulations on logbooks - you must enter any portable operation, but don't have to enter your mobile operations. He also said that the Novice classes are going well and that two persons have passed the code test already. For the April meeting, which will be a visit to Collins Radio in CR, he stated that we will meet at the Coralville Liquor Store and leave from there at 7:00 pm on Wednesday, April 9. Also, Mike mentioned that all ICARC members are invited to attend the April meeting of the Cedar Valley Radio Club, as the ARRL midwest director will be on their program. Mike proposed a motion that the club purchase one code tape for the purpose of sending the code test to the Novices, and the motion was seconded and passed - the secretary-treasurer will disburse the \$3.00 for this purchase. There was some discussion about how to supply

the refreshments for the monthly meetings; it was informally resolved that one or two members would volunteer each month to bring something to eat for the following month. Mike WBØHOG announced that as editor of the Rag, he is going to enforce the request that all contributions to the Rag be submitted to him by the 20th of the month preceding publication. Also Mike said that there are two new 2-meter machines in Cedar Rapids now. Steve KØSVW reinforced the importance of knowing in advance who is going to attend the April meeting at Collins. He also mentioned that we are inviting the Cedar Valley Amateur Radio Club to visit our meeting in May this year, and that in exchange for this, we will be invited to attend one of their fall meetings. The meeting then took a refreshment break. Afterwards, the President called for a discussion on the FCC Docket 20282 and asked Dave KOLUM to lead the discussion. Dave read the comments he has received so far on the Docket; then there was a very active discussion on all aspects of the Docket, during which Dave took note of the members' opinions. The meeting was then adjourned.

de Jacquie WNØLWX

PREXY'S PAGE, continued

Radio Service. This FCC action sets the stage for special call signs using the AA through AL prefix block during the 1976 Bicentennial year. Details on the Bicentennial call signs have not yet been released.

AR

So it looks like we may soon be hearing new call letter prefixes on the bands. And I wonder who will be the lucky chaps who get calls like WØA? It will be interesting to follow.

With that, I am QRU and will QRT for this month. See you all at Collins.....

73, de KØUJJ

IMPORTANT MEETING NOTICE

The Iowa City Amateur Radio Club will not hold a regular business meeting in April but will conduct a field trip to Collins Radio in Cedar Rapids on the regular meeting night. All members are invited to attend what should be a most interesting trip. We will see the famous Collins Communications center and also will see some of their production facilities. Those who are interested must contact Mike Valdez at 626-2506 and indicate so as Collins is a security area and all attending will be issued badges before entering. These badges are made up several days in advance so your name must be on this list by Friday April 4. The date of the trip is the second Wednesday of April, the 9th. Those going will meet at the Liquor store-Hy-Vee-Drug Fair parking lot at 7 PM. We will then condense into as few cars as possible for the trip. The return time will be around 11 PM. See you there?

* * * S T R A Y * * *

A recent rumor indicates that WAØPUJ, KØSVW and KØOBU participated in an Easter Egg Hunt as a prelude to the TX hunt. We hope they faired better there!!

Dan, WBØMED is looking for someone with some experience at winding transformers. How about some help somebody.

Mike, WNONCX is the proud new father of a 37 lb new SB-401.

FOR SALE: Collins 51J3 receiver \$350. Dave Christ, RR3 Box 76, Iowa City, 351-7717

FOR SALE: Tempo FMH 2 meter HT with 94-94, 52-52, 28-88, 22-82, 16-76, 34-94, flexible antenna, ni-cads, case charger. \$195 Dave Christ, RR3 Box 76, Iowa City, 351-7717.

UNIVERSITY OF IONA AMATEUR RADIO CLUB * WOO Newsletter

The UTARC met March 21, 1975 at 3:30 in room 4900 Engineering Bldg. Nine members were present.

Mike Nowack offered the club a page in the "River City Radio Rag", which we can use for minutes of meetings, newsletters, etc. All club members will receive the local club paper. This makes the paper "official" and will be printed sooner.

The club discussed what we should ask Student Senate for at the budget meeting coming up soon. We decided on a tool kit, an airconditioner, and some crystals for 2 meters, in addition to usual operating expenses.

Merritt Jones reported that he has handled over 70 written messages and 20 phone patches this semester, and countless phoned-in messages to Des Moines, Ames, and Cedar Rapids.

A recruiting and publicity committee was formed. Those appointed to this committee are Jay Kahn, Gary Godfrey, and Bill Claypool. They will meet Fri. Mar. 28 at 3:30 in the shack.

A club survey has been sent out to all members for the ARRL annual report, and to decide on a club policy concerning the restructuring docket. You should be receiving these surveys soon. Details concerning restructuring are in the shack and also in February QST.

Other topics of discussion include purchasing a 2-meter antenna and the possibility of having an informal event such as a picnic or something since some members can't always make meetings during the week. These topics and restructuring will be discussed at the next meeting, which will be April 4, 1975, in 4900 Engineering Bldg. at 3:30.

73, Bill Claypool Secy-Treas. UIARC

FD Report

With the transmitter hunt over and the ICARC WAS contest nearly complete. our thoughts should be turning to FD. Occasional glimpses of spring should be sparking heightened interest. Both groups have picked their sites and have generators located. One area of concern is locating suitable towers. Mike, WBØHOG was overheard saying that he could climb anything less than 5 feet off the ground. Anyone with ideas should contact their respective team leaders. Transcievers do not seem to be a problem. The teams would appreciate input en natural power sources. Several ideas have been already suggested. More??? Some "gain type" antenna designs for the lower bands are needed. At this writing no team has met to discuss strategy or organization. With all this talk of "secret weapons" during the recent TX hunt we should anticipate seme real effort during FD preparations. Team A could be at a distinct disadventage with the dynamic due of Ed, WBØOUP and Jim, KØIEI on Team B. Or does the presence of Steve, KØSVW and Chuck, KØOBU nullify this potential advantaga??? No new team designations have been suggested. Are there any thoughts slong these lines?

Since there will be no formal meeting in April, the groups should get moving. FD is fast approaching and preparations should be shifting into high gear.

de Fred, WAØHFW

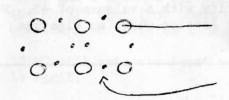
SEMICONDUCTOR DIODE OPERATION

When discussing materials in terms of electron flow, three general classifications arise, conductors, semiconductors, and insulators. Two semiconductor materials commonly used in making diodes are silicon (Si) and germanium (Ge). Let's take a look on a molecular level at what determines a material's conductive properties. If we develop some concept of the material's structure, it will help us to understand exactly what happens in a semiconductor device.

As you know, an atom consists of a positive nucleus and negative electrons circling around it. It is only loosely bound outer electrons (called valance electrons) that concern us. Only these electrons can form bonds between other atoms or leave the atom and form a flow of current. Two factors govern whether a material will be a good conductor or not:

- 1. The atoms must be arranged in an organized structure (crystal lattice) held together by loosely sharing each other's valence electrons (called covalent bonds).
- 2. These electrons must be loose enough and in great enough numbers to shift positions and exchange places with each other.

The organized system allows for rapid shifting of the mobile sea of electrons.



a conductor atom - with inner electrons

mobile sea of valence electrons

Si has a valence of +4 (I.E., 4 electrons can form covalent bonds or be given away). In a Si crystal all of the 4 electrons of each Si atom are in the proper position to form bonds with each other. This tight bonding inhibits electron shifting (flow) and the material is therefore a very poor conductor.

.0:0:0.

Si crystal lattice.

Each atom has four bonded valence electrons.

If we add to the Si crystal a new type of atom with a +5 valence, the new atom would not form bonds as well as Si, and the extra electron would be free to shift in the lattice structure. The newly added material is called an impurity, and it impairs greater conductivity upon the Si structure. Because we have added extra electrons to the Si, it is now more negative and therefore called N-material (N for negative). Examples of N-type impurities are phosphorous, arsenic, and antimony.

(-) · 0 : 0 : 0 ·

N-type material

extra electrons free for shifting about

Suppose we now add an impurity with a valence of +3. We would create a space in the lattice where an electron should have been.

(+) .0:0:0:0.

P-type material

deficit of electrons

Cont Pge 13

OUR NEW LOOK de YE OLD EDITOR

You may detect a new look to our front cover this month if you read the fine print at the bottom. The RAG, with the approval of the officers has a new regular contributor. We would like to welcome the University of Iowa Amateur Radio Club, joining us to bring to you the latest news of all the amateur activity in the Iowa City area. Each month the gang at WOIO will have a page in the RAG to publish the latest happenings at their club, and in addition, each of their members will receive a copy of this newsletter. This will have the added benifit to each of the clubs of lowering their operating costs. For the Iowa City group, we will now be able to take advantage of lower printing costs at the university copy centers. For the University Club, this means that they will no longer be publishing a bulletin of their own, but will be supporting a joint publication. Here is to a long and successful association.

* * * * S T R A Y * * * *

Marion Lister, ZLIBKL, now holds a license for the island of Kermedec and is awaiting transportation to that isolated spot. She should be active from there soon.

DLTRT has a license for operation from 3V8, Tunisia and should open from there on about 27 March and will operate from there until 2 April. QSL to DLTRT

1S5MC will activate Spratly Island beginning on or about 14 April.

The Cocos will be activated on or about 22 April by HB9AQM/TT9 for approximately one week.

Easter Island will be on the air courtessy of Wayne Warden W9MR for 7 days in mid April. QSL via INDXA, Box 125, Simpsonville, MD. 21150

DX items in this newsletter are from the Southern California DX Association Bulletin.

Mike WBØHOG and Dave KØLUM have completed work on the computer generated address labels for the RAG and they should be in use with either this issue or the next. This should help to make it easier to mail them each month.

Steve, KØSVW and Mike, WNØNCX have finished the rough draft of the proposed new constitution and presented it to the club officers. It is now being typed and will be published to the membership soon.

WØFIR, Paul Grauer the Midwest Division Director of the ARRL will be the guest speaker of the Cedar Valley ARC at their April 17 meeting. Iowa City amateurs are welcome to attend.

Al Braley, WØGET recently returned from an extended trip to the South Pacific. We will be interested in hearing about it.

Jean Gagnon, WOOEF and family will be leaving the Iowa City area soon to take up new residence in North Carolina where Jean will take on new duties at the University in Chapel Hill.

Chester, 9GlAK (ex-XV5AC) plans to operate from the country of Chad TT8 in late March and to then move on to the Central African Republic TI8 later in the summer.

Erik Sjoland, SMØAGD plans to activate the island radio country of Fernando-Poo around the 27th of March and continue thru the WPX contest and on till the 3rd of April. He will be signing the call 3ClAGD and the QSL manager is SM3CXS. Sounds like a good catch.

The Northern Florida DX gang will operate from the Turks/Caicos Islands beginning on 25 March using VP5CW and VP5WW

Paul Jagnow, KØRLT, was born, raised and went to school thru his first year of high school in Dubuque, Iowa. He them moved to Iowa City and was graduated from City High. Seeing a good thing in the University, Paul attended the University of Iowa where he earned his Masters Degree in Electrical Engineering in 1969.

Paul received his Novice license in 1958 and went on to the General Class ticket in 1959.

Paul and Andrea were married in December of 1967 and presently reside at 1516 Tracy Lane in Iowa City.

Paul is active on 75 thru 2 meters with a Yaesue FT-101B and a FT-2FB Paul works at the U of I Physics Department as a design engineer.

* * * * S T R A Y * * * *

From the 20 January newsletter from the Midwest Division Director we have some very interesting figures regarding the number of amateurs in the US and of those, what percentage are ARRL members. As of the end of the year, there are 271,868 licensed amateurs in the US and its possessions. Of those, 31.77% are ARRL members or in numbers, 86,374. The number of ARRL members in the US and its possessions is up over 1973 by 2.0% with the Midwest division showing a 0.3% increase. The only division to show a loss was the Hudson which lost 0.8%. The number of amateurs in the US by call district is as follows:

First	19,284
Second	31.938
Third	19,637
Fourth	38,479
Fifth	25,334
Sixth	38,621
Seventh	20,152
Eighth	26,943
Nineth	24,686
Tenth	24,353
кнб	1,378
KL7	1,063
	271,868

CONTEST CORNER de KØSVW

The ICARC worked all states contest ends 31 March 1975. Contestants should submit their entries to me by the 10th of April and the results will be published in next month's RAG.

The second ICARC 2 meter transmitter hunt was held on Palm Sunday at 1400 local. Despite cold weather, seven teams met at the Hilton Inn in eager anticipation. Paul, KØRLT and Andrea were hiding in a U of I parking lot just off of Myrtle Street near Riverside Drive. A team with little experience showed us all how it is done and our congratulations go to Ed Miltner, WBØOUP, Jim, KØIEI, and Bill Bonney Jr. for their winning entry. The teams and their respective times are:

1)	Miltner, Jim, Bonney	Ohr	42min
2)	Al Jagnow		47min
3)	Nowack, Cooper et all	lhr	02min
	Van Orden, Nelson	lhr	27min
	Regennitter and XYL	lhr	37min
6)	Towle, Johnson (not quite	lhr	42min
	last)		
7)	Walker and XYL et all	lhr	50min

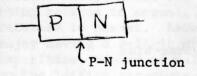
A good time was had by all and we challange Jim, Ed, and Bill to organize the next one soon and make it bigger and better!

ARRL Field Day is coming up soon (the last weekend in June). If you are interested, contact the Field Day Chairman, Fred WAØHFW and get on one of the two teams that will be out this year representing the ICARC.

Congratulations to Mike, WBØHOG for his effort in the ARRL phone test. Mike worked approximately 200 DX QSO's in 72 different countries. His entry stands a chance for recognition as a high band Iowa entrant.

73 Steve

This space is called a hole. This hole, lacking a negative electron, seems positive. When an adjacent electron moves in to fill the hole, the space previously occupied by that electron is now a hole. In effect the hole has moved, and it is by this process that we speak of holes moving. Because the holes make electron shifting and transfer possible, this material, called P-material (P for positive) is similar to a conductor. Examples of impurities used to make P-type materials are boron, aluminum, and indium. Impurities can only be added to the Si crystal in small amounts (ppm [parts per million]: one impurity atom to one million Si atoms) or the organized Si lattice will be destroyed. During the growth of a Si crystal, first 5-material is added, followed immediately by 3-material. This gives us a layer of N-material joined to a layer of P-material. The process of adding these impurities to the Si crystal is called doping, and the point at which N & P material join is called the P-N junction.

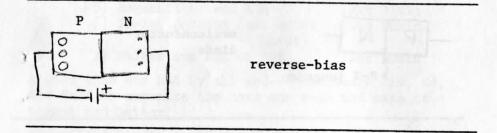


semiconductor diode

We see so far that the structure of N-material is such that it likes to have extra electrons in it. Likewise the P-material's structure favors a deficit of electrons (holes). Electrons from the N side migrate across the junction, repelled by the net negative force of the N-material and attracted by the net positive force of the P-material. Similarly holes migrate to the N-material. Electrons cannot travel very far into the P-material because they would lose the negative repelling force of the N-material. Remember that the impurities are present only in very small amounts. Holes are also limited in their migration in the N-material for the same reasons. This migration creates an electrostatic force at the P-N junction, which is called the junction potential.

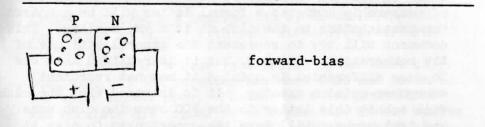
The junction potential for Ge is about 0.2 volts and for Si is about 0.6 volts. This means, for conduction to take place we must have a voltage at least equalling the junction potential of the diode we are using. Up to this point we have not applied any external voltages to our diode.

When we connect a voltage source so that the positive terminal is connected to the N-material, we find that no current flows in the circuit.



The diode is said to be reverse-biased (opposed to current flow). The positive terminal of the battery has pulled all the N-material's free electrons to one side, and the holes have been shifted to the other side. In the center of the diode we have a lattice structure, with some organizational disruption due to the added impurities, and lacking in mobile electrons and holes. As soon as we connect the battery, we instantly form this center region having the characteristics of a very poor conductor. All the electrons in this region are in bonds and inhibit current flow. The circuit is essentially an open one.

If we connect a voltage source to our diode so that the positive terminal is connected to the P-material, we find that a large current can flow in the circuit.



The positive terminal of the battery attracts the electrons and the negative terminal attracts the holes; however, both are caused to mix. Each material experiences an excess of mobile electrons and holes. The diode is still organized in a lattice structure, but it also has free electrons and holes shifting throughout, allowing for electron transfer (current), i.e., a conductor. The diode is said to be forward-biased (favoring current flow). When the power source is removed, everything returns to normal, and the junction potential is returned to normal. Remember, the P- and N-materials enjoy having a deficit or excess of electrons due to the impurities, number of valence electrons and its effect on the lattice structure. The more impurities we add, the more spaces are present in the lattice structure for electrons to shift and allow a current to flow. We must add enough impurities to allow for a large current flow, yet not too many to disrupt the organized crystal lattice structure.

Key concepts to remember: 1) crystal lattice, 2) impurities, 3) doping, 4) P-type material, 5) N-type material, 6) P-N junction, 7) junction potential, 8) reverse-bias, 9) forward-bias.

by Daniel Rosen WBØMED

REPORT OF THE DOCKET 20282 COMMITTEE

After discussion among the committee members, examination of written comments received, and consideration of membership comments a formal letter will be prepared for presentation to the club at it's May meeting. This document will try to represent the general attitude of the membership as a whole, but it is realized that due to some differences in opinion it may not represent everyones opinion exactly. It is intended that the club will submit this letter to the FCC over the club name and that members will have the opportunity to sign it as members of the club. This of course, will not preclude someone from filing his or her own comments.

The following points will be made:

1) the restructuring is favored by the club, but some changes should be made.

2) the communicator class should be implemented but with reduced frequency priviledges and less power. Communicators should be allowed limited access to repeaters and should not be segregated away from the general amateur population.

3) the two branch route to the Extra class is OK, but the frquency division point should be at 50.0 MHz.

4) the power limitations should be re-examined.
Novice and Communicator levels are too high. The
1 to 2 KW level on VHF should be allowed to the
Experimenter and Extra classes for EME, meteor
scatter etc.

These are the major points of difference with the proposal. More member input is desired. Please contact Paul Jagnow, KØRLT or Dave Christ, KØLUM.

73, Dave KØLUM

* * * S T R A Y * * *

Each club member will receive a copy of the new proposed club constitution. Please read it over and be prepared to discuss it at a future club meeting. A vote will take place after the discussion on whether or not to adopt it. This will be your permanent copy, so hang on to it!

The Cedar Rapids repeater, WRØAEH has recently, (November) been converted to an all new, solid state system designed and implimented by Al Groff, KØVQM. The system is unique with many state-of-the-art refinements.

The mode of access is selected by the control stations. If the repeater has been idle and is in the voice access mode, the user must key trnsmitter and modulate his signal to be repeated. If the system is in the tone burst mode, a 200 millisecond, 2 KHz tone must be transmitted by the user to bring up the repeater. Once the system has been properly accessed in either of these modes, it enters the carrier access mode where it will remain until no signal has been received for 15 or more seconds

Fast drop-out is the other unique function incorporated into the system. When the input signal to the repeater goes away, this is immediately sensed by the control logic which in turn drops the transmitter. The delay between the removal of the input carrier and the turning off of the transmitter is only a few milliseconds. The repeater operates in this mode at all times except after the initial accessing transmission, when the machine will exhibit a normal squelch tail. This is deemed desireable to enable fringe area stations and transient users to detect whether or not they are accessing the machine. Once the system has been properely accessed and it rverts to the carrier access mode, it also assumes the no squelch tail configuration until it has again been idle for the required period of time.

A new twist has been added to the time-out function in that a high pitched tone will be transmitted for a few seconds immediately prior to the time-out. Upon removal of the input signal, the timer will be reset and the repeater will come back on the air and identify itself, thus signaling that it is again ready for use.

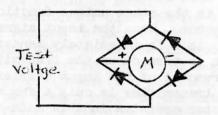
WRØAEH as now configured provides 40 watts of solid state communications power to the Cedar Rapids area on 146.16-146.76 MHz. A job well done to Al and the Cedar Valley Amateur Radio Club. (continued)

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BRAINTEASER OF THE MONTH de WBØHOG

Do you like number puzzles? Well here is a good one for you to try on for size. There are eleven different ways to write the number 100 as a mixed number using each of the ten digits once and only once. One of the ways is the number 91 5742/638 (the integer 91 plus the improper fraction 5742/638). Can you find any or all of the other ten ways? Of the remaining ten, nine also have 2 digits in the integer portion of the number while one has only one. Come on you bums, lets hear those pencils going.

Answer next month in the RAG. Here is the answer to last month's puzzle:



* * * * S T R A Y * * * *

Will give away: one seven element home brew 2 meter yagi - see Steve KØSVW at 338-7255.

Jack, WØMIE could use soom help and suggestions on planning the club picnics for later this summer. How about some volunteers?

Jim, KØIEI recently joined our group and has already been an 2 meters and participated in a hidden transmitter hunt. He works as an engineer at KIIN. Welcome Jim.

Paul, KØRLT has ordered a new Wilson handie-talkie and would like to sell his Trio TR2200, 1 watt 2 meter portable.

Rumor has it that Dave, KØLUM is hard at work studying for his Advanced exam.

* * * * S T R A Y * * * *

LATE FLASH————The high winds and icing conditions in the area have then their toll among the amateur ranks. Dave, KØIUM lost his pair of KLM 2 meter beams. To add injury to insult, the cross arm went thru the roof of his home and let some water into the living-room and basement. The 100 foot tower is still standing but looks mighty bare.

Our thanks to Paul Jagnow, KØRLT for the help on the homebrew RF attenuators. They seemed to have worked well in the hunt. Too bad some of the operators didn't work equally well.

KØSVW received his DXCC certificate from the ARRL and now is ready to send in for his first endorsement of 20.

Jack Holtsmark, WNOCX is being heard regularly on 40 M cw and is already eyeing that WAS award.

Chuck Walker, KØOBU of the 2 meter whistler fame is sporting a new FPM-300

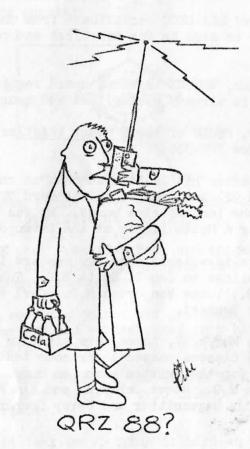
Mike WBØHOG after his limited success at chasing DX (DXCC worked 92) has ordered an outboard VFO for his Tempo from the land of rice boxes. He was also seen drewling over a Heath linear at the Davenport fest.

We would like to welcome some new members into the ICARC. Greetings to Jan D. Smith M.D., Tuhin K. Chadhuri M.D., Lucas Van Orden M.D., Carl W. Sagart, and James C. Bennett.

On Thursday, March 27, three more students in the ICARC Novice classes passed their code tests and are now waiting for the written exams to come. They are Jan D. Smith M.D., Steve DeBruyn, and Kim Smallwood. They join Judy Regennitter and Jerry Cooper in the long wait.

Another casuality of the ice and wind storm of last week was the antenna installation at the club station at the Veterans Hospital. The TH3 and tower were both a total loss and it is reported that there is little chance that they will be replaced.

It is rumored that the University club is looking for some 2 meter beams to complete their antenna setup. Can anyone help them out, should be some available here in Iowa City.



REPEATER NEWS (continued)

The Iowa Repeater Council in its February 1975 meeting established official band plans for 6, 2, 1-1/4, and 3/4 meters. The reccommended 'first repeater' pairs are; 449.50-444.50 MHz, 222.34-223.94 MHz. The national simplex frequencies; 52.525 MHz, 146.52 MHz, 223.50 MHz, and 446.00MHz.

I would also like to welcome Ed Miltner, WBØOUP to the 2 meter family of Iowa City. He is sporting a new Advanced ticket and Wilson handie-talkie.

Here is an update to the list of repeaters in Eastern Iowa which appeared in the RAG recently:

Cedar Rapids	WRØATD	146.40-147.00 147.87-147.27 449.90-444.90	Now on Planned Planned
Omaha - C. B.	WRØACE WRØABA	146.10.146.70 220 MHz RPTR 146.04-147.30	RTTY Planned Now on
Davenport	? WR9AC¥	52.70-52.525 449.50-444.50	Planned (freq temp)
Des Moines	**************************************	149.50-444.50 149.20-444.20 149.00-444.00	Auto-Patch, Planned
Souix City	?	146.04-146.64 146.22-146.82 147.81-147.21	QRP QRP Planned
Waterloo	WRØAFA	448.75-443.75	Planned