

December, 1975

Vol 2, No 12

Season's Greetings from

The Iowa City Amateur Radio Club

and The University Of Iowa Amateur Radio Club and

The University of Iowa Amateur Radio Club 4900 Engineering Building Iowa City, Iowa 52242

The Iowa City Amateur Radio Club meets the second Wednesday of each month in the community room in the basement of the First National Bank of Iowa City at Towncrest, 1117 William Street. The meeting begins at 7:30 PM CDT.

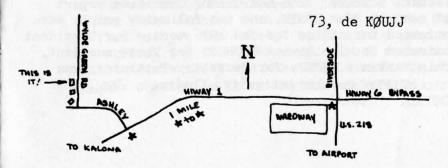
Editor of the RAG: Michael L. Nowack WBØHOG 403 Amhurst Street Iowa City, Iowa 52240 PREXY'S PAGE de KØUJJ

Well, the year is drawing to a close and elections are coming up--at the December meeting. Participation in the elections by every club member is encouraged.

I should like to take this opportunity to thank the club for the support given me during my tenure as president, and to offer my strong support for future administrations. My association with the other club officers and members during the past year has been most gratifying.

As outgoing president, I would like to take it upon myself to sponsor the "Social Hour" following the December meeting. All members, their spouses, guests and visitors to the club are invited. This event will be held at my home at 1207 Wylde Green Road—if you don't know where that is, see the map at the bottom of this page. Highlites of the evening will include tours of the "fabulous" KØUJJ Ham Shack. All drinks and refreshments will be provided, so just bring yourselves and have a good time.

See you all December 10 at the meeting and social hour.



The November meeting of the Iowa City ARC was brought to order by Mike WBØHOG in absence of our President, Craig KØUJJ. Per tradition, members and guests introduced themselves. It was noted that many members of the local REACT group were present along with the Johnson county Civil Defense Director, Wayne Walters. The subject of another transmitter hunt was brought up and tabled for consideration at a later date. The dates for the local Pediatrics Christmas parties were announced along with the names of those who are going to help. The Santa Claus talk-in was also discussed and WØLFF offered his services as the 'jolly old gent'. Wayne Walters offered some hard candy for our use in this project. Possible changes in the FCC licensing proceedure were annouced. The main benifit to the ham will be 'instant licensing and up-grading' at FCC examination points. A motion was made and passed to allocate \$20 to the hospital party to buy supplies and gifts. Mike appointed Ed WBOOUP and Lucas WNOQFQ to look into providing Novice classes this winter, perhaps in cooperation with the WØIO club. Mike announced that the club would sponsor a 'Worked All States Contest' to run from 1 January thru 29 February, 1976. All modes and bands are allowed, but all contacts must be made from the same fixed station location. Logs are to be submitted to KØSVW by 7 March and the winner will be the first one to work all states, or the station working the most states by the end of the contest period. The prize will be a club certificate. The contest is open to all club members. The new repeater club officers. elected in October were announced. They are: President. Paul KØRLT; Vice-president, Steve KØSVW; Secretary-Treasurer, Mike WBØHOG; Member-at-large to the Council. Max WØLFF. The rustee, Craig KØUJJ was not up for re-election as his term runs for the term of the license, 5 years. The Nominating Committee report was read by Jack WOMIE, and the following people were nominated for office for the 1976 term. For President nominated is Mike Nowack WBØHOG; for Vice-president. Craig Fastenow KØUJJ, for Secretary-Treasurer, Max Otto WØLFF; and for Activities Chairman, Jan Smith WNØPXH. (continued)

IN CASE YOU MISSED IT.....continued

Additional nominations from the floor were asked for but non were offered by members. The nominations will again be opened at the December meeting, followed by the actual balloting. The meeting was then adjourned, and everyone enjoyed refreshments. The program was then presented by our guest, Wayne Walters, Johnson County CD Director. Survival in the snow was the topic of his talk and a film on the subject was presented. Following this, Mike announced a social hour at the Annex and all were invited to attend.

Ed, WBOUP

The next meeting of the Iowa City Amateur Radio Club will be held on Wednesday, December 10, 1975 at 7:30 PM CST in the Comunity Room at the drive-in branch of the First National Bank at Towncrest, 1117 William Street, Iowa City. All members, their guests and all interested parties are invited to attend. Election of officers for the coming year will be the main topic of the business meeting. Only paid up members will be allowed to take part in the elections, so be sure your dues are current so that you may participate. The program will be on the subject of DX-ing and the art of QSL-ing to be presented by Steve, KØSVW. A social hour will follow the meeting at the home of the out-going President, Craig KØUJJ. (See Prexy's Page.) All are invited to attend this also. SEE YOU THERE!

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

The recently formed Eastern Iowa DX Association participated in the Phone and CW sections of the CQ World Wide DX Contest and the members, besides entering individually, will submit a club aggregate entry in the contest. Early reports indicate 900K + points in the Phone section with the totals for the CW portion not yet tabulated. Looks like a good showing for a first try for this group. Local members include Steve KØSVW and Mike WBØHOG with the other members located in Cedar Rapids and Waterloo.

ARRL NATIONAL continued....

As many of you are aware, I spent the past summer in the Washington DC area and was fortunate to attend and participate in this year's National Convention. I was very impressed and would like to share some thoughts with you. The convention was held in Reston, Virginia, at the Sheraton Hotel complex on 12 to 14 September. Amateurs from all over the world gathered, many league officials were present, many manufacturers showed their goodies and many educational forums were presented.

Prior to the convention I had attended meetings of the National Capitol DX Association and the Potomac Valley Radio Club and was invited to give the last presentation of the DX forums on Saturday. So I was to have an active part as well as to enjoy being a spectator.

I approached the convention site and was given guidance over a portable two meter repeater which was given the special call of KR4QST and was on 146.34-146.94 MHz. The ARRL had a special events station in operation using KQ4ST. Friday night I was the guest of Ray Johnson, K4DXO and Dr. Ted Cohen, W4UMF, both of the National Capitol DX Association at their hospitality. Here I was to meet many prominent East coast contesters, DX chasers and league officials. I spoke with Harry Daniels (W2TUK) league president, Ellen (WlYL) and Bob White (WlCW) of the YL and DXCC programs, Lynn Lamb (W3BWZ) of the DX advisory committee, Lew McCoy (WIICP) author of many QST articles, and enjoyed meeting many of the top East coast DXers. There was abundant liquid refreshment and it was well after midnight before I (was?) poured into the rack.

Saturday, the convention really got rolling. I spent the entire day listening to the various DX forums chaired by Ray, K4DXO. The day started off with a bang. As Ray was just getting started, a young lady (planted in the audience unknown to Ray) stood up and yelled "Break-break-Is all you guys ever think about is radios?" and promptly removed (tore off) her blouse and streaked through the standing room only crowd! (continued)

Needless to say, the hall went up for grabs as this was quite a shock for the rather conservative ARRL and especially at 0900 hours.

My talk went well. I showed some slides and and spoke of my DX-peditions to the Pacific. There were many other activities going on; the Quarter Century Wireless Association was there, the Medical Amateur Radio Council was there, etc. There were many fine technical forums; ie AMSAT, RTTY, RFI, antennas, FM, MARS, VHF, UHF, and so on.

Saturday night found Di and me joining many of our hosts at the convention banquet. FCC Commissioner Robert E. Lee was the master of ceremonies and the main speaker was Air Force General Sadler of the USAF MARS programs. After the banquet, Owen Gariot (W5LFL) one of the Skylab III astronauts, spoke of his experiences of 59 1/2 days in space. I was unable to participate in Sunday's activities as I was committed to leave for Boston.

In summary, I felt the 1975 ARRL Convention was a great success and very stimulating to me personally. The friends I made in the National Capitol DX Association showed Di and me a great time. I urge all of you to attend a National Convention if you are ever in the position to do so.

Steve KØSVW

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

A bi-monthly schedule with Fred WAØHFW is kept by Mike WBØHOG and other Iowa City amateurs and all those interested are invited to sit in. For times and frequencies, see Mike. Fred, we are sure, would like to hear from you.

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A new Novice has surfaced in Iowa City, James Leaven a new member of the ICARC received the call WNØRJA and has been heard in Iowa City on the 80 meter band. Welcome to the wonderfull world of ham radio. (Jim, you may remember, is the fellow who walked away with the prize of a Wilson 2 meter xcver at the CVARC hamfest in October)

I was told it would be a traumatic experience. I was warned it would take time and patience. I was even told "everyone goes through this". But.... I was still not prepared!

I pounded away at the key until I felt sure I knew the code but when the big day in July came, there were still sweaty palms that slid off the key at the wrong time and a memory that went totally blank! When that part of the agony was over, the OM brought out a little book and said, "everything you need to know is right here in very simple terms". So I read for four whole weeks and understood nothing. Still Mike said, "don't worry, it's easy". Well, I filled in the little blanks and kept waiting for the hard part----by that time I was answering number 20 and done!!

With a long summer at home and nothing to do, I drug out the code tapes for practice just to keep busy. Gee--I got up to the tape marked 11 wpm RANDOM. Boy--was I good!! I was ready to work anybody on the bands.

Well, the ticket came the other day, five weeks sooner than I expected. With the rig tuned up on 80 meters, Mike said "call KØSVW cause your all set". Panic set in---I could not remember my own name let alone the call letters.

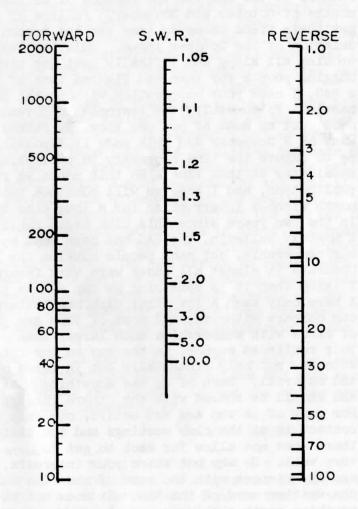
It has been a few weeks now and it seems to be getting easier each time. When I hear those WN's come through my pen just races across the paper. But then I hear a WB and I know he is sitting there able to send perfect code and listening to all my errors and that same panic returns. Maybe some day I will be able to send CQ CQ CQ de WNØQQX all the way through without a mistake. Boy that seems a long way off!!!

de WNØQQX

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

Murphy strikes again! Seems a certain XYL in the area took her Novice exam this summer and after many weeks of waiting has still not received her license. Some body must know something though as she keeps getting mail addressed to WNOQIG. If you remember Viv, that postman you kicked said he'd get even!

SWR - FORWARD-REFLECTED POWER NOMOGRAPH



Here is a little nomograph courtesy of Dave, KØLUM and is a handy little graph to have in the shack. Since many of us don't know how to calculate how much power is being reflected with a given SWR, simply lay a straight edge on the center column at the point corresponding to the SWR reading, with the left end going through the power level of the transmitter output and the read in the right column the reflected power.

First of all, I would like to apologize to all the readers of the RAG for the absence of an issue in the months of October and November. Failure of people to get their items to me on time was the reason for the deletion of the October issue. This has been a major problem all along and I finally just got tired of bugging people for them and figured that if you want a RAG, I need your cooperation without all that hastle. Fortunately, the response in November was good, but as some of you may know, my father passed away on 2 November and this made it impossible for me to devote the time necessary to publishing this newsletter at that time. So this month we resume publication, and I hope we will continue this each month without interruption for a long time to come. In the two years since this club began publishing a monthly bulletin, the RAG has been read by not only our membership, but many people outside the IC area. Comments in almost all cases were very favorably and I think that it is something we can all be proud of. I have only seen a few other club newsletters that can compare withours, and most of them are products of clubs with memberships much larger than ours. Your continued support is the key to our future success, not only financially but in terms of time and material. Each of us has something that can be and should be shared with the others through the RAG. For many of us who are not active, our only personal contact is at the club meetings and the limited time there does not allow for each to get to know the other very well. So why not share your interests, knowlege, and experiences with the rest of the club through the written word of the RAG. It does not have to be anything earth-shaking or revolutionary to be of interest to others, just a small piece of you.

With this issue of the RAG, I end my service as it's editor. My replacement will be announced at the next club meeting. I am giving this job up because I feel that it is time for some one else to step from the ranks help support the club. My 16 months tenure has been not without it's rewards. I have been very proud of each of the issues and have the deep

EDITOR.....continued

personal satisfaction of knowing I did my share to promote the club and ham radio in general. I would hope that my successor will get the support from each and every one of you that he will need. I will do my share, how about you? The time he will be devoting to the job is considerable, as I well know, and if each of us give him just a few minutes of our time each month, his burden will be much lighter.

I would like to thank all those who have helped and supported me during my term as editor. I could not have done it with out thier contributions of time and material. I hope that this newsletter has been a thing that each member has looked forward to getting each month (well, almost each month) and that it has been useful. The attendance at our meetings, I think, is a barometer of the effect the RAG has had. Our average monthly attendance is about 35 compared to 12 or so prior to the rejuvination that occurred in January, 1974. The RAG serves to remind each of us that a club meeting is approaching, and contains information as to what will be happening at the meeting. For those who cannot attend regularly, it keeps them in touch and in the mainstream of the club.

So, I will say 73 for now and I will be looking forward to receiving my issue of the RAG each month along with the rest of you....see you at the next club meeting, December, 10.

de Mike WBØHOG

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

Another of our regular club supporters is not long for the area, as Steve KØSVW reports that he will be taking a position with a radiology group in Duluth, MN on or about July 1, 1976. All, we are sure will be sorry to loose Steve and his family from the group, but are happy for him in his new job. He is already making plans for a super antenna system for the land of perpetual winter. Don't forget to put warning lights on those towers, Steve, so that Santa doesn't run into them.

BRAINTEASER OF THE MONTH

.....de WBØHOG

This month we are going to play a little word game. Below are six words that have to do with electronics or ham radio, but the letters of each are all mixed up. Unscramble each one to make a word, amd then use the letters of each that are double underlined to form a surprise message of the form at the very end.

1.	CITXREE	=	_		_	_					
2.	CORTLFERE	=	_	_							
3.	PCCAATROI	=			_		Ī	_		_	_
4.	RMIMRET	=	_			_		=		W	
5.	GAIY	=		_		_	_	Ī	-		
6.	TASM	=	=	_		_					

Surprise Message:

Answer will appear in the next RAG.

The answer to the last (September) Brainteaser is 12 miles per hour, not 12.5 as a quick look might indicate. You must average the speed over time not distance. HI The only person furnishing a correct answer to the puzzle was Art Wendler WAØUPO from clear down in Arizona.

HAM RADIO'S HIERARCHY Humor de WBØHOG

Gives policy to God

The League Official-Leaps tall buildings in a single bound Is more powerful than a locomotive Is faster than a speeding bullet Walks on water

The Traffic Man-

Leaps short buildings in a single bound Is more powerful than a switch engine Is just as fast as a speeding bullet Walks on water when the sea is calm Talks to God

The Contest ManLeaps short buildings with a running start
and favorable winds
Is almost as powerful as a locomotive
Is faster than a speeding B-B

Is faster than a speeding B-B Walks on water in swimming pools only Talks to God by special request

The Rag ChewerClears a small hut with a single bound
Looses a race with a locomotive
Can fire a speeding bullet
Can swim well in water
Is occasionally addressed by God

The Novice-

Runs into buildings
Recognizes locomotives 3 out of 4 times
Frequently wets himself with a water pistol
Dog paddles down stream
Mumbles only to animals

The DX'erLifts tall buildings to walk under them
Kicks locomotives of the tracks
Catches speeding bullets in his teeth
Freezes water with a single glance
He is GOD

Again a report on some of the activities from the low end of two meters. More and more people are becoming interested in 2 meter SSB and alas there is no longer such a shortage of commercially built 2 meter equipment. We are now seeing a great multitude of new units on the market, and for those of you who may not be familiar with some of it, here is a quick rundown on some of the more popular rigs.

We can begin the whole thing with the Echo 2 transceiver, a KLM product. 12 volts DC, no AC supply. Ten watts out PEP 6 watts out CW with no AM or FM capabilities. 23 channels (sound familiar?) with RIT and VXO provisions. Also squelch and it uses crystals which cover 230 KHz each. It will operate, with the proper crystals, 144-148 MHz. It is compact, a bit larger than 2 meter FM rigs. Mine is an excellent unit, and I have heard nothing but good things about them. It lists for \$389 but can be had for \$325.

KØSVW sports the Multi-2000, a synthesized PLL rig with CW, SSB, WBFM, NBFM. Until recently, the super 2 meter box. Capable of 1 or 10 watts output, it can operate FM simplex or + or - 600 KHz offset for repeater use. It has built-in AC and DC power supplies, squelch and 3 crystal controlled channels and is a bit larger than the more common 2 meter fm boxes and lists for \$795. This was THE rig for 2 meter work, offering just about everything you need for beginning operation on 2. But now.... they (ITC) have upgraded it, and you can get....

The Multi-5000 -- all of the above good things but many new improvements. Seems hard to improve on a rig like that, but they did! The 5000 sports an output of EIGHTY WATTS, or, seemingly from the ads, anything between there and 0. AM is now in the rig as well as LSB (most activity is USB). Improved sensitivity and a new AGC circuit are also new as is the VOX feature and adjustable mic gain and deviation. Also it is 95 cubic inches smaller than the 2000. The list price is quoted as being the same as the 2000 at \$695 but then another ad lists the 2000 as being \$795, so you figure it out.

Also available are some other new comers, the Yaesu FT-221. Just out, it sports FM, CW, and AM (continued)

with PLL circuits, plug in boards, complete VFO coverage and 88 crystal controlled channels. Output power is 12 W SSB, 14 W FM es CW and 2.5 W AM. No price is given in the ads but a guess might be \$700. They also have a new super 6 meter rig out for those of us who are luckey enough to live outside of a channel 2 area.

Kenwood has a new TS-700A, SSB, FM, AM, CW rig out that has + or - 600 KHz spacing on FM for repeaters, VFO, 44 crystal controlled channels, built in AC and DC supplies. No price listed again but also in the \$700 range probably.

So... if you are contemplating a new 2 meter rig, these are worth looking into. A lot of money, yes, but a lot of radio. Everything in one box, which is an advantage, but also a disadvantage as they are generally larger than the FM only boxes, something to concider if you are planning mobile operation with it. I personally prefer a separate SSB and FM station for various reasons. If one goes down, you still have the other as well as the more convenient size of the 'normal' FM transceiver. This is only a personal opinion, and should not be taken without your own thoughts entering into the matter. In summary. where two years ago, it was darned hard to find any commercial 2 meter SSB rigs, you now have a decent choice, for a price of course. The rigs aren't cheap but it would be hard to improve on the Multi-5000 if you want or need the best. Again, I have the Echo and KØSVW has the Multi-2000 if you have any questions on these two boxes.

KØCKX and I were chewing the fat on 144.110 a few nights ago, when we heard George, WØDEN break in. He has been absent from VHF for a number of months, but it was very nice to have him back on again, and we hope he stays active. I talked with WØOHU in Rochester, MN last night and he mentioned setting up a time and day of the week when most of the 2 meter SSB/CW friends in the area might be able to get together. I understand from Ed that this was done in the past in C. R. a few years back and this seemed to increase activity a bit. We are now looking at Tuesday nights (continued)

for a midwest rag chew night. He also said that there are quite a few boys on 432 MHz in the area; KØDAS in Marion, some in Waterloo, Minneapolis, Chicago, etc. I expect to have 432 receive capability in a couple of weeks with a Janel converter ahead of my FT-200 HF rig. Transmit is still in question.

T There is plenty of VHF activity, be it FM or SSB or CW. Like to see more of you on both of these modes.

73 til next time Bob WAØDXZ.

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CONTEST CORNER MOSVW

With great pleasure, I would like to announce a club sponsored 'Worked All States" contest to be held beginning on 1 January and continuing through 29 February, 1976. All club members are eligible to enter and the prize will be a club certificate to the first station to work all states or the station with the highest states worked total at the end of the contest period. You may use any mode, frequency, or power level your license class permits, but all contacts must be made from the same fixed station location. Submit a list of dates, times and calls of the stations you have worked to me by 7 March, 1976. This is a fine oportunity for some of the new Novices in the club to earn an operating award. And don't forget that if you work all states in 1976, the ARRL has a special Bi-centennial certificate for you. I uderstand it is a very handsom piece of wallpaper and would look very nice on the shack wall. Other operating events coming up are the ARRL 10 meter contest to run 13 through 14 December, 1975. Keep your ears open on this one as it may be a chance to pick up some new states on 10. Also coming is Straight Key night on the 31st of this month (local time) and is a fur event to get into. January 3 and 4 is VHF Sweepstakes and will be of great interest to the VHF nuts in the crowd. Well thats all of the up coming events in the next month.

I would now like to announce the results of the last two meter hidden transmitter hunt. The Fox was WBØHOG and family who hid behind a large hillside on (continued)

CONTEST CORNER.....continued

Black Springs Cr just east off of Rocky Shore Drive. Only four teams participated in the event, and all but one found Mike in good time. First on the scene was the team of KOOBU and son in a time of 25 minutes and elapsed mileage of 11 miles. Second was KØUJJ with WNØPYI and WBØHUR who came in with 62 minutes and 15 miles. (Incidentally, this team passed within 50 yards of the fox only about 15 minutes into the hunt, took a reading and went madly racing off in the wrong direction screaming wildly "We gotcha now!" and weren't to be heard from again for another 45 minutes.) Next into the chute was the team of KØSVW + WNØPXH + WNØQFQ. They came in with a time of 91 minutes and 18 miles. Not finishing due to a time problem was the team of WBOOUP and WAOWNW who were heard to mutter as they circled the Physics Building in downtown Iowa City for the 64 time, 'Wait till next time'. The next hunt will be in the early spring and since KOOBU and family will have left the area by then the fox will have to be appointed at that time. See you then....

73 til next mont, Steve KØSVW

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

Chuck, KOOBU and family will be leaving their old home here in Iowa City to take up residence in Davenport as he has taken a new job and they have made a bid on a house there. They say they hope to be all moved by the end of the year. Sorry to see you leave us Chuck, we will miss the whistle of you 2 meter box on cold mornings. Lotsa luck.

I suppose some people miss my part of the RAG, and some of you probably do. But if you missed it for the last two issues, there is a good reason (at least I think it is). I wasn't here. So at the next meeting, I'll try to catch up for lost time.

As some of you probably know, I've been out in the western part of Iowa helping to install a new TV transmitter for IEBN(that's Iowa Educational Broadcasting Network for those who resist turning the dial on their TV set to Channel 12). Doing something like this can be a lesson on futility and humility. I'll tell you, putting a TV station together, hoping that the menagerie of pipes and wires and racks and etc., holds together at least long enough to do the proof of performance and doesn't blow itself to hell can get to be a nervewracking experiance. A lot can go wrong-o fast. It's something else to push a button and-ka-BANG!-the pile driver circuit breaker slides up and makes contact and makes the floor jump about 3 inches and ZZZAPP-PP!25,000 volts at 10 Amps hits the klystrons. It's one thing to walk up to the transmitter while it is running full tilt and after you've been standing there google-eyed for 15 to 20 minutes, your eyes roving in wonderment, you just then notice the little red warning sticker that says "Cantion: X-radiation". It's another thing to be sitting there, minding your own business, not a care in the world, watching Ernie make a jerk out of Bert on "Sesame Street," and all of a sudden there's you no longer have to worry about the X-ray warning on the transmitter, at least not for the present time; and after finding that you blew a 350 amp fuse on the main fuse panel, you don't have a spare in the place. It's another thing to be hooking up your SuperDooper WhizBang Remote Control; and you stand back to admire your work; and when you test your fire detector then and only until then do you realize that instead of a simple relay closure. your detector puts DC on the control head, and you have a grandstand seat to watch abou So take heart, fellow hams, it may sound like the Day of Reckoning.but it's just another a erage.nothing-neverhappens-around-here day. (yawn)