



HAM HUM

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(Due and Payable each January 1.)

New member initiation fee ... \$ 1.00
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NEXT MEETING

WHEN: FRIDAY, JULY 10, 1981

TIME: 7:30 P.M.

WHERE: DOUGLAS/SARPY COUNTY CHAPTER
AMERICAN RED CROSS
38TH AND DEWEY AVENUE
OMAHA, NE 68105

PROGRAM: AL MC MILLAN, WØJJK, HI, COUNCIL BLUFFS,
IOWA WOULD LIKE TO KEEP US IN THE DARK
ABOUT THE PROGRAM ENTITLED "GOT A
MATCH."

PREZ SEZ

I am sorry I couldn't be with you at the last meeting, but as you know I was needed elsewhere. I understand it was a very good meeting. Thanks to Tom KØPQR for filling in for me.

Our thanks to Terry Tavener for the fine slide and talk show about how our phones will be in the not too distant future. Also, thanks to Brian WBØAJI for his update on LB31.

Don't forget the picnic at Maybry Park August 23! Everyone can come and bring the kids. This is one of the family functions the Club has, so let's all turn out and make it the

BIGGEST ever. This is one that is fun to get involved in.

The program this month sounds really great. AL WØJJK will give a technical talk as only he can.

That's it for this month. See you at the meeting and don't forget the picnic.

73's
de Jim WBØJPN

"It is the greatest of all mistakes to do nothing because you can do only a little; do what you can."

Sydney Smith

NOTES FROM THE BOARD OF TRUSTEES MEETING held on June 5, 1981 at the American Red Cross Building at 19:30 hours.

Members present: President Jim Wilson, WBØJPN; Tom Thiessen, KØPQR; Walt Brown, KAØDMB; Mitch Gagne, NØAZF; Mike Bruening, NØAON; Dick Fehrman, KAØAAB; Chuck Hoffman, WBØNVL; Charlie Rodgers, WØQQN; and Ellen Morrissey, WBØHWF.

Absent were: Ed Hofmann, WDØHBY and Dick Jugel, KØDG.

Discussion of our June 27-28 Field Day and of the annual picnic to be held in August.

Meeting adjourned at 21:20 hours.

Club Secretary:
Ellen, WBØHWF

Dear Friend:

At the recent annual awards banquet of the Omaha Jaycees, we gave recognition to individuals and organizations who in many significant ways contributed to a successful 1980-81 Omaha Jaycee year.

I am very pleased to enclose a certificate recognizing you as an important supporter of our organization and our activities. On behalf of the Omaha Jaycees Board of Directors and members, I thank you very much.

Sincerely,
William J. Shepard, Jr.

HERE ARE JUST A FEW OF THE WAYS YOUR CLUB CAN HELP YOU

Jackets & Caps	Walt KAØDMB
Name Tags	Edie WDØGHA
RFI	Frank WAØIWF
	Tom KØPQR
	Dave NØCLW
Technical Help	John WBØCMC (not before 10 AM)
Tower Climbers	Mitch NØAZF
	Scott WBØWOT
	Jim NØAIH
ARES	Jerry WBØPPF
Contests	Mike NØAON
QSL	Charlie WØQQN
	Alma XYL of WØQQN
Programs	Dick KØDG
Courtesy	Charlie KØQVL
Novice Help	Charlie WØQQN
	Chuck KAØEBD
Manpower	Jim WBØQGV
	Chuck WBØNVL
Advertisement	Tom KØPQR
Coffee Lady (at the meetings)	Aileene XYL of NØCKH

COMMITTEES

Education	Bob WAØDHU
	Ellen WBØHWF
	Lloyd KØDKM
Instructors	Bob WAØDHU
	Chuck KAØEBD
	Charlie WØQQN
	Jim NØAIH
Subs	Frank WAØIWF
	Dave NØCLW
	Jim WBØQGV
Auction	Jim NØAIH
Field Day	Frank WAØIWF
	Dave NØCLW
Equipment	Scott WBØWOT
	Jim NØAIH
Finance	Dick KAØAAB
	Walt KAØDMB
	Lysle NØCKH

Finance

Silent Key Plaque

Repeater

Roster (notify of any changes)

Historian

Ham Shack

Paul WDØHRK

Sam WDØBVH

Lloyd KØDKM

Lou WØVLI

John WBØCMC

Ed WDØHBY

Scott WBØWOY

Wayne WBØHEW

John WØWRT

Ellen WBØHWF

Jon WBØQGT

Lou WØVLI

Mitch NØAZF

Tom KØPQR

Dave NØCLW

LOU CUTLER, WØVLI, shows one of his several ground and air communications pictures from his pictorial history review of early Omaha.

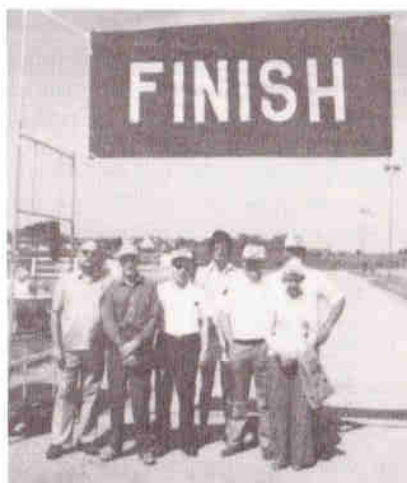


RECENT ACTIVITIES

13 mile marathon for the Midlands Community Hospital Health Run on June 7, 1981 in Papillion.

Check Pointers from left to right are Lysle Renne, NØAZG; Samuel, Kaplan; WDØBVH; Scott Persson, WBØQPP; Jerry O'Harrow, WBØPPF who was Net Control; Jim Sanford, NØAIH; and Ellen Morrissey, WBØHWF.

(Picture submitted by Ellen WBØHWF.)



MINUTES OF THE GENERAL MEMBERSHIP MEETING held June 12, 1981 at the Red Cross Building at 38th & Dewey Ave., Omaha, Nebraska

The meeting was called to order at 19:30 hours by Vice President Tom Thiessen, KØPQR due to absence of Jim Wilson, WBØJPN, President. After the Pledge of Allegiance each member arose and identified by their name and call.

Due to the absence of Treasurer, Dick Fehrman, KAØAAB there was no Treasurer's Report read.

One guest — Max Malzkuhn, WB3GOT

New membership certificates were handed out and then the Certificates of Appreciation for working at the 1981 Auction were given out.

The Education Committee, Bob Lockwood, WAØDHU had a report that the Fall Code and Theory classes are starting to form. At this time we do not know where they will be held.

Walt Brown, KAØDMB reports that the Silent Key plaque has now been plated and is moving right along. Walt also has more jackets and caps for sale. Chuck Hoffman, WBØNVL has some Club decals. Charlie Peaker KAØEBD, reports that the picnic will be August 23, at Maybry Park, same as last year.

Brian Zdan, WBØAJI, informed us of the latest information on the LB 32. Dave Hamilton, NØCLW and his group are just about all ready for Field Day.

The decoders are here now and can be picked up from Tom Thiessen, KØPQR. Tom also read several articles from the **HR Report**.

Motion and second that the business meeting be closed.

Program for the evening

Mr. Terry Tavener, Manager, Facility Engineering from the Northwestern Bell Telephone gave an interesting talk-slide program on what the phone communications, to suit our personal needs, in the not too distant future, seems unbelievable. New ways we'll be using the phone from the car to home or to the office were exciting. He had a captive group and we enjoyed it very much.

Doughnuts and coffee followed.

Program concluded at 21:50 hours.

Club Secretary,
Ellen, WBØHWF

A BIG THANK YOU

Ward H. Justus, WØLAA wishes to thank the many generous ones for all the magazines on radio.

TELETYPE BITS

In order to avoid interfering with the Nebraska City repeater on 146.10-146.70 MHz, we have moved our teletype activity to 145.650 MHz until further notice.

Procedure is as important on teletype as it is on other modes and it is also just as simple. Courtesy dictates the following common sense guidelines:

- Before beginning a transmission, identify either by voice or CW. FCC rules require this and it is only necessary to give your own call.
- Many teletypers are on autostart so transmit at least ten seconds of steady mark tone to allow all machines to start up.
- Upon beginning RTTY, please transmit two Carriage Returns (CR), two Line Feeds (LF), and a few Letters (LTRS) keys. This not only gets the receiving machines ready to print but it also sets the transmission apart from any CW ID garble and/ or previous text.

- Try to "frame" the transmission with your calls.

eg. NØABC DE WØXYZ

message

NØABC DE WØXYZ AR

This makes it very easy to see at a glance who is talking to whom.

- Q signals are okay and quite useful so don't be afraid to use them, but as with anything, don't go to extremes!
- Above all, **courtesy** is the foremost rule of thumb. Always check to see if the frequency is in use before diving in. To stations already engaged in voice work, an RTTY signal

popped down on frequency is quite annoying, not to mention illegal.

There are always the cute games of feeding everyone's paper out in the wee hours or hitting about twenty bells at 3 am. These are fine if everyone is in the mood for them, but usually have no place in everyday RTTY and are not very funny. As with other modes, if common sense and operation practice say it is alright, do it. If not — don't!

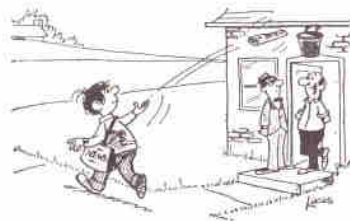
For more information on RTTY net procedure, break-in operation, and RTTY traffic handling, consult "Specialized Communications Systems" by the League. Next month, circumstance and Murphy notwithstanding, I hope to brief everyone on the new RTTY repeater and give a general outline of RTTY net procedure for emergency operations.

de Scott WØQPP

RECENT CONTRIBUTORS

34/94 REPEATER

Lawrence F. Caccamo WØNMN
Jay C. McAleer WAØLLQ
David N. Smith K3CRF



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WOMENS AUXILIARY CHATTER

Another meeting was thoroughly enjoyed and a few new faces joined us. We met May 27th and had a wonderful time! Since there was no business before us, we went right into the program.

We wish to thank Mary Goetz, one of our members, for sharing her gorgeous Paradise Jewelry with us. The presentation was extremely interesting: the demonstration of the use of scarves and jewelry with the assistance of Dalene WBØTTK as the model, the many games which were fun, and the prizes which were numerous. One game really kept us on our toes remembering names, which meant that if you forgot a name — You Lost!

Everyone had an enjoyable time and several parties were booked.

We are all looking forward to the next meeting, June 24th at the Red Cross Building at 7:30, when the program will be given by a demonstrator of Mary Kay Cosmetics. Her name is Debbie Livdahl.

The delicious refreshments were served by Joanne Whitney and Kay Wilson and were four different "flavors" of bars. Don't forget to share your recipes!

Kay Wilson

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CONCRETE—ENCASED GROUNDING ELECTRODES

While the principle of concrete-encasement for improvement of grounding electrode performance is looked on as novel in the U.S.A., engineers in other parts of the world have made use of it for some time.

Concrete piles, with steel reinforcing rods, were recognized as one of the basic types of useful grounding electrodes by J.D. Humphries in a paper presented to IEEE in Great Britain, in 1957.

H.G. Ufer performed extensive studies of concrete-encased grounding electrodes utilizing the re-bars of concrete foundations, principally in remote desert regions. Ufers application became the basis of the National Electrical Codes recognition of 20 foot (or more) lengths of copper rods in concrete footings as auxiliary grounding electrodes. (1981 NEC Art. 250-81 (c)).

There is nothing complicated or mysterious about concrete as an encapsulation for metal grounding electrodes. Concrete is a material of intermediate conductivity, as is the earth, neither a good conductor nor a good insulator. Its conductance is, like earth, due to the electrolyte of water-soluble conductive chemical compounds and water. Completely dry concrete, like completely dry earth, has very high resistance. Concrete does, however, appear to hold its water better than the more porous earth, and even to draw moisture from the surrounding earth. It appears that, by this characteristic, Ufer's installations in the desert retained ample conductivity even in desert sand.

In discussions of this grounding method, one persistent question concerns the possible corrosion of rebar due to grounding currents and/or the interconnection of the rebar and other grounded parts of the structure. There is much evidence that no dangerous corrosion occurs. First, the anchor bolts of steel structures, being in the concrete to a depth of 1 to 3 feet, have been acting as grounding electrodes wherever they exist with no record of dangerous deterioration. One company noted that when a separate conventional grounding system was installed and tested before attachment to the building its resistance was excessive, but that of the building alone with conventional anchor bolts was adequately low, meeting their requirements.

Regarding deterioration of the concrete, there has been only one comment which is germane, and even that one favors the bonding of anchor bolts to the rebar. An electrolytic installation experienced continuous heavy current in the grounding system from leakage of the cells and cooling system. Deterioration of the concrete between the anchor bolts and rebar structure occurred, indicating heavy current concentration and drying out of that portion of the footings. It has been evident that the major ground current path in unbounded footings has been from the anchor bolts outward through the concrete to the rebar cage, thence through it and outward over the whole face of the concrete. There was no sign of deterioration of the concrete of the rebar structure, which was subjected to the same total current as that around the anchor bolts. It is apparent that a bond between anchor bolts and the rebar cage would have prevented the concrete deterioration.

Finally, the considerable use of only the concrete footings of high voltage transmission line towers as grounding electrodes, with no record of footing failures from lightning or fault incident, is a lasting testimonial

to the efficiency and durability of this system. True, the resistance at many locations is such that additional electrodes are required, but this is due to soil conditions which would require more electrodes.

In conclusion, there appears every reason, including economy, to make use of an asset which has been on hand, but hidden for as many years as we have had concrete foundations — and no good reason to continue avoiding its use.

DE NØAIH

HAM HUM SWAP

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500 ma-transmit
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