



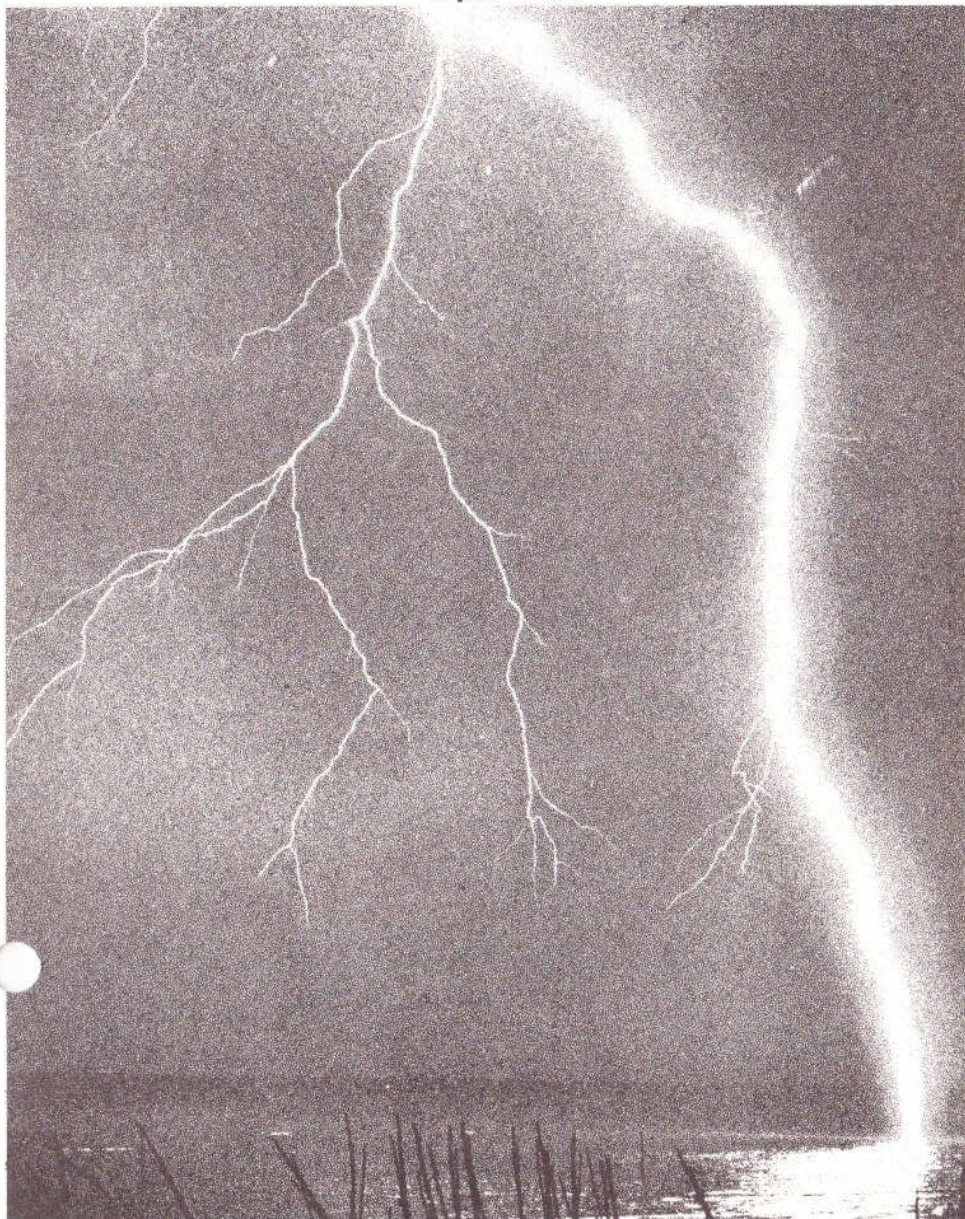
# HAM HUM

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Regular member ..... \$3.00

Regular member and spouse .... \$3.60

Student member ..... \$1.05

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## NEXT MEETING

**WHEN:** Friday, April 13, 1984

**TIME:** 7:30 P.M.

**WHERE:** Heartland Chapter  
American Red Cross  
38th and Dewey Avenue  
Omaha, NE 68105

**PROGRAM:** Severe Weather Watch Procedures —  
Mitch NØAZF and Jim NØAIH.

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## PREZ SEZ

Well, spring is here again and along with all of the nice weather and fresh air, we will probably see some severe weather, so this month's meeting is especially important for all to attend. This month's program topic is all about severe weather watch procedures presented by Mitch Gagne and Jim Sanford. It is important that all who can attend this meeting do so in order to brush up on their weather watch skills.

The new ICOM 720A has been installed in the Red Cross Communications Center. Also, the H89 computer has been built and installed at the Red Cross. \$250.00 has been donated toward purchasing the computer. Those interested in donating to the computer should make out a check to Red Cross Communications Fund, and it is a tax deduction.

While we are on the subject of donations, it's been brought to my attention that the Club is in need of a touch-tone microphone for the National Weather Service radio station. These cost around \$50.00. A donation or a mic. would be greatly appreciated. (Mitch says the weather season is just around the corner — HURRY!)

The E.O.C. project is well under way. The computer has been finished and installed. The equipment is ordered and all should be received by mid-April. Plans are now scheduled to install the hardline at the E.O.C. toward the latter part of April. We are going to need a lot of volunteers to pull this off as the hardline runs are almost 700 feet long. Anyone who is interested in helping out with this project please contact Jim Sanford, 571-2704, or myself, 493-1390.

Some other good news — Brian Zdan, KMØY, and N5DZZ, James Faulkenberry, are going to co-chair our 1984 auction. I expect that they will be announcing the auction date and place at this month's meeting.

Thanks to all who responded to last month's questionnaire regarding the 1985 Midwest Convention. Of those who responded, the results were overwhelmingly unanimous, 93% for 7% against. Paul Grauer was called on March 10 and notified of our acceptance. The tentative dates are September 6, 7 and 8, 1985, and it will be held at the Holiday Inn, 70th and Grover Streets. These dates still have to be approved by the A.R.R.L. Jim Sanford has agreed to be the Convention Chairman and he is forming a planning committee at this time.

See you at the meeting.

73's

Dave — NØCLW

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# MINUTES OF THE GENERAL MEMBERSHIP MEETING

## March 9, 1984, Red Cross Building

### 39th & Dewey, Omaha, Nebraska

The meeting was called to order by President Dave Hamilton, NØCLW at 7:50 P.M. with the reciting of the Pledge of Allegiance.

Two guests were introduced, Gordon Davis, Novice, and Terry Neumann, Novice.

Motion was made and seconded to approve the minutes as published in the Ham Hum.

Treasurer's report was given, motion was made and seconded to approve as read.

New member Elmer Johnstone, WBØTTB was voted into membership.

President Dave informed the members of the problems with the hardline on 34/94 and said that Cable Wave, the firm that installed it, would repair it immediately.

Jim, NØAIH gave a report on the E.O.C. Everything has been received except hardline, VHF & UHF rigs & HF antenna.

Computer is on line at Red Cross Building, all donations will be appreciated; tax deductible if made out to the Red Cross Communication Account.

32 cards were received, 30 for and 2 against holding the Midwest Convention here. Please send in your cards.

Dave, NØCLW read a letter of appreciation from Sally Crowley, for the gift given her by the members.

Dave, NØCLW would like members' reaction to this year's summer outing. He is suggesting a 2-hour boat trip at \$4.95 each, BYOB & beer.

Jim Faulkenberry, N5DZZ and Brian Zdan, KMØY, are auction co-chairmen this year.

Education Chairman Jay, KB8TR displayed the Volunteer Exam forms, and asked for volunteers.

Jay, KB8TR informed Rich, WAØZQG that the 5-year "License Timer" would have to be recalled because of potential problems due to possible malfunctions in the circuits. (Could be the problems are due to a lack of HF contacts by the owner.)

Special Events Chairman Greg, NØBTN gave a report on Groups and Organizations who want the Club to participate, or demonstrate amateur radio; looks like a busy year.

Duke, WDØEWH gave a report on cost of jackets, shirts, and hats; \$33.02, \$11.00, and \$6.00 respectively, all including tax. All jackets are gone for now.

Rich, WAØZQG gave a report on 22/82 repeater and asked for contributions. The repeater will have a radio link to reduce costs by eliminating telephone links between receiving and transmitting sites.

W9ASD, Bill gave a very interesting demonstration and talk on direction finding and the gear involved.

The meeting was adjourned at 9:45 P.M. after an enjoyable evening.

Respectfully submitted  
Virgil Wamsat, KBØBW, Secretary  
\*\*\*\*\*

## DONATIONS

34/94

Jim Wolfe	KAØMHM
G. D. McLaughlin	WAØBMJ
C. W. Chadwick	WØCSS
Charles Michel	KØQVL
O. C. Stanfield	KØJKW
Joseph Connell	WØLHZ
David Ahrendts	KCØXT
Norval Bowen	WAØNPF
Gerald Steiner	KBØYJ
Janice Nelson	KBØYW

40/00

Jim Wolfe	KAØMHM
Mitch Gagne	NØAZF
O. C. Stanfield	KØJKW
David Ahrendts	KCØXT
Janice Nelson	KBØYW
H. Eugene Pace	KØERJ

22/82

Jim Wolfe	KAØMHM
O. C. Stanfield	KØJKW

Ham Hum

Ed Doehling	WØHQE
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## NEW MEMBER

Elmer T. Johnstone, WBØTTB  
12234 T Street.  
Omaha, NE 68137  
895-2838

\*\*\*\*\*



"Seek you de EGGS ...  
... Seek you de EGGS!"

Artist is Bob West, WA8YCD  
de Jon, WBØGQT

\*\*\*\*\*

## SPECIAL EVENTS

May 5, 1984, V.F.W. Post 2704 Loyalty Day Parade — 12:30-2:00 approx.  
June 2, 1984, Miller Park Family Fun Day — 11:00-2:00.

Persons interested in riding in the Comm-Van for the Loyalty Day Parade should contact Greg Zimmerman, NØBTN at 895-5219, evenings.

The Miller Park People would like our Club to set up a demonstration station for this event. Anyone with ideas or an interest in participating call Greg Zimmerman at 895-5219, evenings.

de NØBTN  
Special Events Chairman

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## MESSAGE STORAGE OPERATION (MSO) — PART III

De Dick Uhrmacher, KØVKH, Rapid City, SD

Now that we know where some of the MSO's are, and how to get on their frequency, let's devote some time to learning the "ins and outs" of their command structure.

Although some MSO systems have slight variances from system to system, many of the 20 meter MSO's utilize the command format designed and implemented by the HAL Communications Corporation, and exhibited by the HAL MSO/MPT/DSK systems. As you move from system to system, it is a good idea to obtain hard copy of each system's "Help" feature, which will list each command and a brief explanation of what each command will produce when executed by the MSO.

Let's remember one thing about using MSO's, before we get started: Listen on the MSO frequency before transmitting or activating the MSO! Don't be responsible for ruining someone else's QSO, interfering with their use of another MSO, or their general use of the frequency. The MSO's are there 24 hours a day, and waiting a few minutes for a clear frequency is nothing less than courtesy on everyone's part!

Ask if the frequency is clear, and if so, identify your station and send the appropriate access code with two (2) CR/LF's. It's a good habit to learn! The MSO should immediately reply to you, providing its sign-on response.

With the exception of the access code and the four N's, commands sent to the MSO's must be fully "left justified." This simply means that commands must be received by the MSO on the leftmost margin. As simple as this sounds, I note many aborted attempts to utilize the MSO's caused by remote users who fail to insure that their commands are left-justified. Left justification is easily accomplished by sending at least two (2) carriage return/line feeds (CR/LF) immediately prior to sending the command. Various keys on different types of equipment cause the

(Cont'd top of page 7)

### EOC PROJECT UPDATE

The EOC Committee has scheduled cable installation for April 21. Fifteen Club members are needed for this phase of the work. Persons eager to help should come to the Omaha/Douglas Civic Center around 9:00 a.m. Enter the parking garage on Harney Street and keep to the right (use the lane marked "Private Parking"). Go down to "B" level.

The work will last into late afternoon, so bring lunch money or "brown bag" and a hand-held if you have one.

Jim Sanford, NØAIH

CR/LF to be sent. In some it is the "Return" key; in others the "Enter" key; and in others the "Newline" key. Additionally, it is mandatory that a CR/LF be placed immediately after each command, and the command will not be executed unless this CR/LF is received by the MSO. Placing two CR/LF's prior to each command, and one after, will make execution of the command a sure thing. Two examples follow. In this first example, we will ask the MSO to provide its "Help" command, which will list each command available to the remote user.

1. Activate your transmitter.
2. CR/LF
3. CR/LF
4. .HELP (CR/LF)
5. Turn off your transmitter.

Let's look closely at the above sequence of events. If it is possible, place your transmitter in "Mark Hold" for a couple of seconds when first activating your transmitter. Then send the two CR/LF's followed immediately with the command. Do not allow your transmitter to go off-the-air between this sequence of events, as that will allow noise, QRM, QRN, etc., to creep into the MSO demodulator, and possibly interrupt the left-justification of your command.

Line four (4) has two important items contained in it. Every command to the MSO (with the exception of the access code, and four N's) must be preceded by a period (.). This period causes the command word ("Help" in this case) to become distinctive from all other text received by the MSO. If the period is not received by the MSO, the command word will be ignored. Secondly, note the CR/LF immediately after the command. The command will not be executed unless this CR/LF is received. When you turn off your transmitter after this CR/LF, the MSO should immediately reply with the Help command information.

The second example differs only slightly from the first. At times, propagation conditions will be marginal between your station and the MSO. To assist the MSO demodulator in "getting in the mood," add the line of RY's prior to sending the two CR/LF's, as follows:

1. Turn on your transmitter.
2. RYRYRYRYRYRYRY (Just a few will do the trick.)
3. CR/LF
4. CR/LF
5. .SDIR (CR/LF).
6. Turn off your transmitter.

The MSO should be replying with the directory, which is a listing of the files it presently has stored in its memory.

Next, I think it's time to describe a bit about the real reason that MSO's exist, the ability to store and retrieve files left in the MSO. All of the information presented above, concerning left-justification, CR/LF's, etc., applies to writing and reading messages, with some minor variations. First of all, each message in the MSO has a name, and we call it a "Filename." The Filename is originated by the person who originates the

(Cont'd on page 8)

message and can be up to 16 characters in length. Since a long Filename takes longer to transmit, the shorter the Filename the better.

For example, the Filename ABC:XYZ would indicate that ABC has a file waiting for him, written by XYZ. A more explicit Filename can be used. A file dealing with information concerning ASCII could have a Filename as ASCII INFO. Any descriptive name can be used, however, in the interest of saving on-the-air time, the shorter the better.

After receiving a copy of the Directory from the MSO, the remote operator can easily read one of the files listed. (Some may be Password Protected, but more about that later.) You read a file from an MSO exactly the same way you asked for the Help command except that you add the Filename to the command. For example:

1. Turn your transmitter on.
2. CR/LF
3. CR/LF
4. .READ ABC:XYZ (CR/LF)
5. Turn your transmitter off.

The MSO should now be outputting the file ABC:XYZ to you. Note that the only real difference in this command, as compared to the Help command, is that we have used the Read command, added the Filename, and moved the CR/LF to immediately after the Filename.

But, you say, I'm chomping at the bit to write a message to my friend in St. Louis. Well, everything you've learned so far is directly applicable to the Write command as well. First, pick a Filename that your Missouri friend will recognize. If you are W6YYY, and he's W0UUU, then the Filename UUU:YYY should tip him off in a hurry. Here's the sequence of events:

1. Turn on your transmitter.
2. CR/LF
3. CR/LF
4. .WRITE UUU:YYY (CR/LF)
5. The text of your message goes here. It can be any length necessary to convey your message. Remember, you must identify your station within the time limits prescribed by FCC rules, so limit your message in all cases to less than 10 minutes in length, as the MSO must also comply with those rules!
6. .ENDFILE (CR/LF)
7. Turn off your transmitter.

There's not a lot of difference in writing a file, than reading one. Be sure to place that CR/LF immediately after the Filename, and note that there is a mandatory "space" between the Write command and the start of the



Filename, and line six contains the command that tells the MSO that you're finished writing your message, and to close the file or write to disk.

At this point, the MSO should be responding to you with the file stored message. If for some reason there is no response to your Endfile command, there's a good chance that QRM, QRN, improper command for formatting, etc., has interfered with it, and your message has been received by the MSO, but not written to memory. Don't panic and close the MSO, or ask for the Directory, just re-send the Endfile command again. Turn your transmitter on, send two CR/LF's and .Endfile. If it fails to respond after two or three Endfiles, then something else has happened and there's a good chance that your message has been lost. Your only recourse in this case is to start the Write sequence over again.

In wrapping up this session, you must always remember to close the MSO. Remember, there is usually more than one MSO on each frequency, and if more than one is left open, each will respond to commands given on the frequency, and the resulting chaos is unusable to anyone. (If you should find two MSO's open at the same time, the only recourse is to send the Exit command, which should shut both MSO's off. Then you can re-open the MSO of your choice and utilize it.) Here's the sequence for closing the MSO:

1. Turn on your transmitter.
2. CR/LF
3. CR/LF
4. .EXIT (CR/LF).
5. Turn off your transmitter.

At this point the MSO deactivated message should be issued by the MSO. If the Exit command is not received and acted upon by the MSO the first time, send it again. And finally, if the MSO deactivated message is never received by the remote station, turn on your transmitter and send four N's. This is a second "Off code" and should shut the MSO off. No response is given by the MSO when four N's are utilized, and the four N's should only be used as a last resort to insure that the MSO is closed. Some MSO SYSOPS have the four "N" feature disabled, and only the Exit code will close the MSO.

It should be noted that the remote user may not use imbedded MSO commands in the file text to be stored, nor use the four "N" letter sequence.

That's it for this time. Next issue we'll talk about File Protection, Passwords and other MSO features of interest. Good Luck, and have fun on RTTY!

De KØVKH

Relayed by KAØJRQ

From the Feb. 1984 RTTY Journal

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**FOR SALE:** Tempo 2020 SSB/CW Transceiver, matching Speaker and Tempo RBF1A SWR/WATT Meter. Mint condition. Built-in AC/DC Supply — \$500.00.

Call Duke, WDØEWH, 455-5402.

Will trade for smaller rig, like TS120S or 130S with Mic & Pwr Supply.

**FOR SALE:** Halicrafter HT-46 (5 band SSB/CW Transmitter) — \$115.00.

Heathkit DX-100 — \$75.00. Both with manuals and in good working order.

Terry, WØUVC, home 391-6598, work 391-9041.

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## MIDLANDS ARES NET REPORTS

Feb 12	35 Check-Ins	2 ANCC	11 Counties
Feb 19	34 Check-Ins	2 ANCC	14 Counties
Feb 26	27 Check-Ins	3 ANCC	10 Counties
Mar 12	32 Check-Ins	3 ANCC	9 Counties

Note! The Feb. 19 Net was one of the most check-ins county-wise, for a long time. Midlands ARES has 17 counties to look over and 2 of them have no hams. So Congrats to yourselves for a nice check-in.

de Duke WDØEWH, ARES Net Mgr.

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It is surprising what you will hear on the local repeater. Can you imagine using a 16 lb. sledge to drive a ground rod! Yes, there is an easy way. By the use of 1/2" copper pipe + an adapter from copper to your garden hose. By the use of the copper pipe and water hose you can bore your hole in about 2-3 minutes. Pull the pipe up and down and watch it go out of sight. Remove the pipe and drop in a regular ground rod or other piece of copper pipe or if you are just putting in one, cut off the pipe, just above the ground. Using the torch you can solder a ground wire to the pipe or ground rod or use a clamp. Warning, if you hit rock, then go back to your 16 lb. sledge Hi Hi. 4 grounds were put in for the HY-tower at the Red Cross building in about 15 minutes. KAØRST reports he spent all of 3 minutes on one and he is only a novice. If you want to borrow an adapter that is made up, see WØLFW or WAØKUH, understand their rates are cheap....

de PHD News, Missouri