



# HAM HUM

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AK-SAR-BEN RADIO CLUB, INC. - Omaha, Nebr. 68101  
Post Office Box 291 - Downtown Station



May 1975

Vol. XXV  
No. 5

## NEXT MEETING

WHEN: FRIDAY - MAY 9, 1975

TIME: 7:30 P.M.

WHERE: COMMUNICATIONS WORKERS OF AMERICA  
1920 South 44th Street, Omaha, NE  
(Ground floor entrance—plenty of parking.)

PROGRAM: FRANK M. WOLCZAK, WAØIWF, will give a slide presentation and talk on local area repeaters. (Here's your opportunity to get to know the inside story of your repeaters, who maintains them, their value to the Omaha area, etc.)

Frequency measuring equipment will be available at the meeting to check individual transceivers.

\* \* \*

REFRESHMENTS - EYEBALL QSOs - VISITORS WELCOME

**HAM HUM** is the official organ of the Ak-Sar-Ben Radio Club, Inc., of Omaha, Nebraska, mailed monthly to all members and to others upon request.



Next copy deadline: May 23rd

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 Regular member and XYL . . . . . 9.00  
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New member initiation fee . . . . . \$1.00  
**Quarterly for balance of year:**  
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 Regular member and XYL . . . . . 2.45  
 Student member . . . . . 1.00

**"ARTS"**

Amateur Radio Telegraph Society or "ARTS" was organized to defend the amateur frequencies and to perpetuate the use of CW on them. It is nonprofit and it is the only organization devoted to the interests of the CW operator. If you use CW, you should belong. Membership fee is \$1.00 per year. Address is:

"ARTS", P. O. Box 1553,  
 Silver City, NM 88061  
 From KØKKP  
 \*\*\*\*\*

**MORE RESPONSIBILITY FOR LOCAL AREC**

We have taken the responsibility for Sarpy County AREC. Your EC has been appointed to assume this responsibility. We are now called Douglas-Sarpy County AREC.

Bob, WAØDHU  
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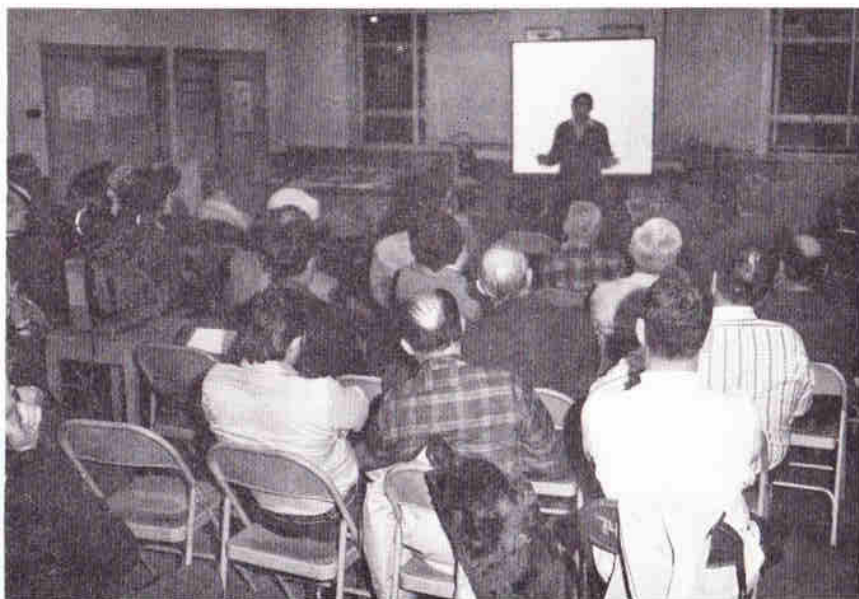
**APRIL MEETING - WEATHER**

By—Ed Eichler, WBØBCB

"Severe lightning, heavy rains, destructive winds, and large, heavy hail are often advanced men for the most violent storms on earth - the tornado." (Spotters guide for identifying and reporting severe local storms.)

Lt. Col. Vernon Von, Commander of the 3rd Weather Wing, Offutt Air Force Base, and Mr. John Hancock, Chief Forecaster, presented a 45 minute program to the Radio Club explaining the function of the 3rd Weather Wing in relationship to military and civilian agencies (which includes our Club) and natural weather - severe weather.

Most of our local severe weather occurs during spring. Lt. Col. Von



identified different cloud formations, such as virga, the roll cloud, the shelf-shaped accessory cloud and the rain column of a thunderstorm which may appear as a tornado from a distance but which is not a tornado. Special attention was given to cumulus cloud formations that are well organized and rotary in motion about a vertical axis. These cloud formations consisting of violent rotating columns of air usually become tornadoes when they reach the ground. The funnel cloud may or may not be visible but is recognizable by the rotating cloud of debris or dust near the ground. The tornado winds may sound like a siren distant train whistle.

Lt. Col. Von stressed the importance of reporting funnel clouds,

heavy hail, destructive winds or thunderstorms with frequent lightning. The location, direction and speed at which the storm is moving should also be reported.

Amateur radio operators can be effective observers if we know how to properly identify severe weather and report what we see accurately to the respective agencies. Being a volunteer public servant is serious business which can affect the lives of many.

Exposure to training sessions such as that presented by Lt. Col. Von and Mr. Hancock must be an ongoing learning process. Our sincere thanks to them for their most informative and interesting presentation. A question and answer period followed.

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## AUCTION

The 1975 Ak-Sar-Ben Radio Club auction is now history. We had over 200 items to sell and 185 buyers ready to purchase these items. The bidding started at 2:00 P.M. and continued until 6:45 P.M.

The reaction of those in attendance has made it almost a sure thing that from now on our auctions will be held on Sundays. Ed, WBØBCB, deserves a "well done" for making the arrangements for the nice room at the Holiday Inn. Comments regarding the location were all good.

Most all items brought fair prices and the quality of items offered this

year was very good. Hope Bill Goll, WNØMTT, will invite Club members over to his QTH for a demonstration of his new radar machine when he gets it going. Hi Hi Hi.

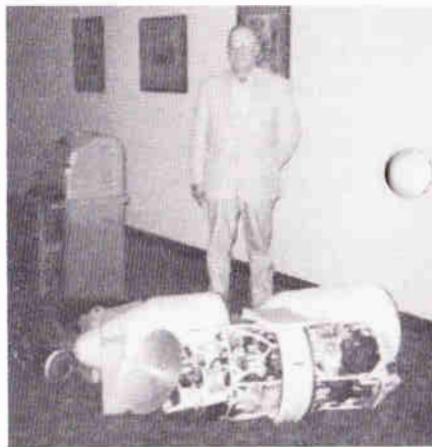
Sincere thanks to all Club members who helped out at the auction. Needless to say this made the whole event go smoothly. A special thanks to auctioneers Robert E. Buman, WØPPT, and Jerry Denholm who did a terrific job.

Again thanks to all for your help and support.

Bob WNØLYU



Photos by Jon Penner







## CODE AND THEORY CLASSES

By—Bob Lockwood, WAØDHU

The 1975 Code and Theory Classes are now history with our last class held on Monday, April 7th. This year was again a very successful year for the

classes with 35 students present at the last advanced class and 20 at the last novice class.

The following people completed the novice section of the Code and Theory Class with good attendance:

Bill Norton  
John Tomaszkieurg  
John Kruse  
Michael Neabon  
John Utterback  
Clifford Durrett  
Michael Phillips  
Hubud Jarboe  
Bennett Kutler

Dave Kovar  
James R. Faulhaber  
Rich Faulhaber  
Elmer L. Johnstonie  
Gerald W. O'Harrow  
Jeff McGenty  
Jean Kiser  
Jeff Kanzman

The following people completed the general and above section of the Code and Theory classes with good attendance:

Marge Kelly  
Clarke Elliot  
Don Teusaw  
Don Henderson  
\*Ben Utterback  
Jim Peterson  
\*Jerry Miller  
John Raleigh, Jr.  
Ron Hester  
Samuel Kaplan  
\*\*Stan Cunningham  
Irene Mulick  
Tom Mulick  
Earl Halterman  
Bill Goll

Tom Mahoney  
Leroy McGee  
Jerry McKay  
Harold Witzit  
Don Sudduth  
Frank Rabb  
\*Don Taute  
\*Jon Taute  
Bill Forbis  
Jill Ramsey  
Doug Ramsey  
Jim Hawkins  
Mike Wilczynski  
LeRoy Hilt  
\*Bob Conley

\* These people passed general on April 10th

\*\* These people passed advanced on April 10th

Those who didn't make it this time are boning up for the July test schedule.

The instructor staff for the 1975 classes included KØKKL, Chuck; KØDKM, Lloyd and WBØHPP, Hilton

## RECENT CONTRIBUTORS

### Repeater Fund

- Bob Beals, KØDBW  
\*Bill Besore, WBØCQV  
\*Eric Hines  
Charlie Michel, KØQVL  
Ralph Miller, KØRAI  
George Moore  
\*Hilton Norton, WBØHPP  
Dan C. Pettengill, WBØBXC  
W. Earl Sorensen, WAØTMC  
Jon Taute, WNØMNK

### Autopatch

Dan C. Pettengill, WBØBXC

\*Proceeds from auction donated to  
Repeater Fund. Thanks to all!

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## GUESS WHO?

Once upon a time there were four men who belonged to the same club. Their names were Joe Somebody, George Anybody, Jack Everybody and Sam Nobody. Everybody thought that he would like to go to the meeting, but he figured that Somebody wouldn't be friendly to Anybody, so Nobody went. Everybody was asked to assist on a project, but he thought surely Anybody would want to assist, and at least Somebody would do it, but Nobody helped out. Whenever there was a job to do, Everybody agreed with Anybody that Somebody would do it, but Nobody did. These four men died and went to their reward. Guess who got all the rewards? You're right - Nobody did.

Via

Russ Minks, WAØVEE

\*\*\*\*\*

who taught the novice class; those who taught the advanced class include WNØLYU, Bob; WBØGQT, Jon and WAØDHU, Bob. The staff had a well-planned schedule of study for the classes with many demonstrations. Even though two cancelled nights due to weather conditions occurred, the schedules proved to be flexible enough to cope with the problem.

The biggest credit for the success of the classes this year proved to be the student body. These people braved very adverse weather. They also put up with having to listen to the instructors for 15 weeks. Hi! Hi! All in all these people showed a keen desire to learn. They will truly be a real asset to amateur radio. It was a sheer joy to work with these people, to help them achieve their goals.

Our thanks to Creighton Prep for allowing us to once again hold our classes at the school. We realize the significance of how the use of the facility enhanced the success of the classes. We sincerely thank Creighton Prep for the use of this facility.

A very sincere thank you also to the instructor staff for a job well done. Also backing from the Board of Trustees and the membership of the Ak-Sar-Ben Radio Club, Inc. was much appreciated. The 1975 Code and Theory Classes were a big success, thanks to a combined effort of many people working together.

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## MEMBER NEWS

I was in Denver, Colorado for a week for a medical checkup. I intended to do some haming but I was kept so busy, I made no contacts.

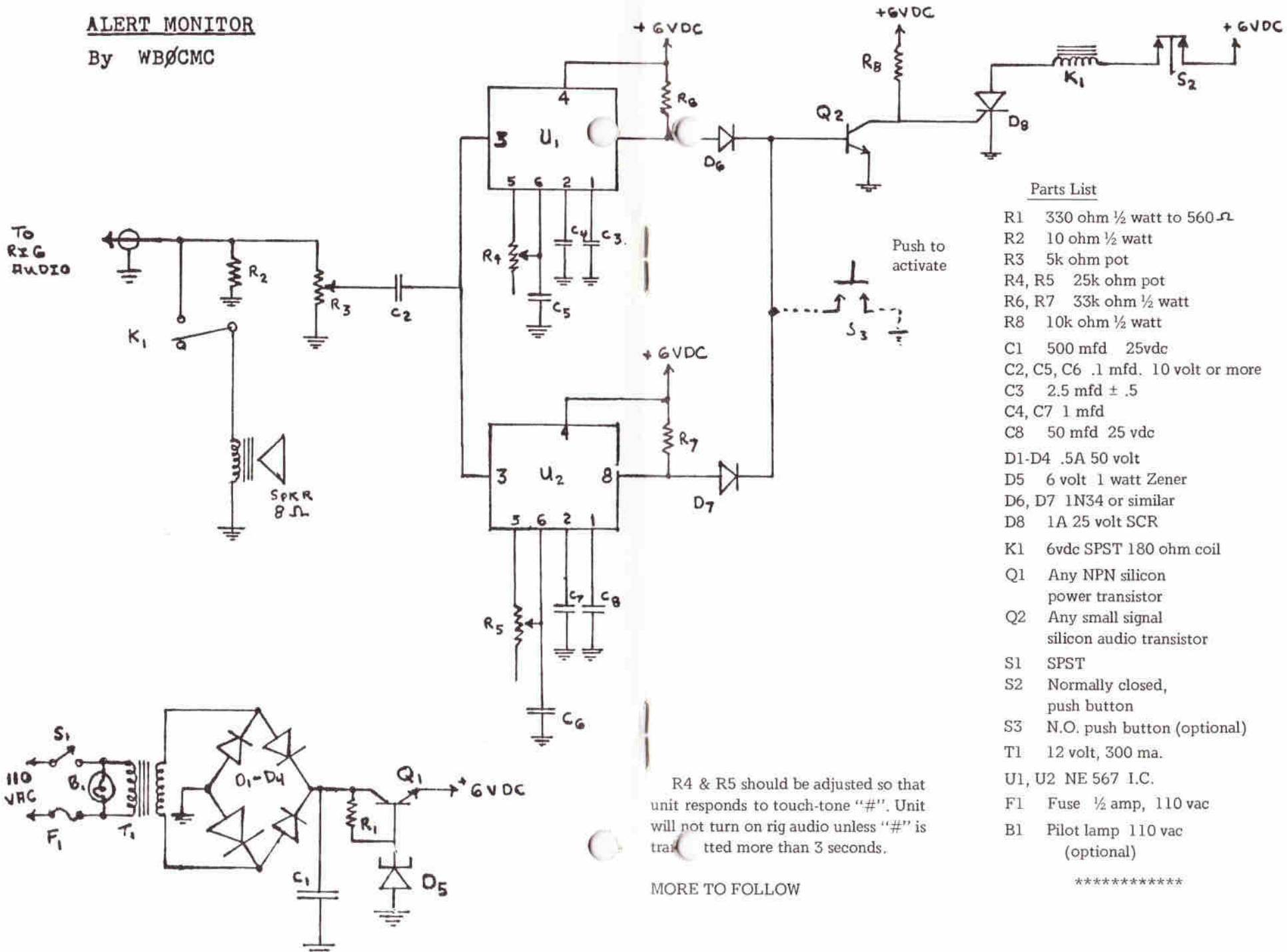
Charlie, KØQVL/Ø

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# ALERT MONITOR

By WBØCMC



### Parts List

- R1 330 ohm ½ watt to 560-Ω
- R2 10 ohm ½ watt
- R3 5k ohm pot
- R4, R5 25k ohm pot
- R6, R7 33k ohm ½ watt
- R8 10k ohm ½ watt
- C1 500 mfd. 25vdc
- C2, C5, C6 .1 mfd. 10 volt or more
- C3 2.5 mfd ± .5
- C4, C7 1 mfd
- C8 50 mfd 25 vdc
- D1-D4 .5A 50 volt
- D5 6 volt 1 watt Zener
- D6, D7 1N34 or similar
- D8 1A 25 volt SCR
- K1 6vdc SPST 180 ohm coil
- Q1 Any NPN silicon power transistor
- Q2 Any small signal silicon audio transistor
- S1 SPST
- S2 Normally closed, push button
- S3 N.O. push button (optional)
- T1 12 volt, 300 ma.
- U1, U2 NE 567 I.C.
- F1 Fuse ½ amp, 110 vac
- B1 Pilot lamp 110 vac (optional)

R4 & R5 should be adjusted so that unit responds to touch-tone "#". Unit will not turn on rig audio unless "#" is transmitted more than 3 seconds.

MORE TO FOLLOW

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## STORM WATCH – APRIL 27, 1975 DOUGLAS-SARPY COUNTY AREC

At 12:30 P.M. CDT, April 27, a tornado watch was issued for the Omaha area. Bob, WAØDHU, contacted officials at Base Weather Station, Third Weather Wing, regarding the watch. They requested the AREC weather watch net be activated. At 12:40 P.M. the net call-up was initiated. WBØCMC, John and WØOXT, Gary assumed NCS. WAØZUR, Bill promptly went to Base Weather to man that station.

Among the mobiles included: K5QJG/Ø (also assisted WAØZUR at Base Weather), WBØMAH, KØPQR, WAØDDZ, WØRMB, WBØNPS, WAØSMN, WBØBCB, WAØRXF, WBØIKL, KØDNV, WØKCK, WAØILV, WBØPOC, WAØUZX, WØCES/Ø and WØYDV.

Among base stations included: WAØROP, WA7VIL, WBØMTS, WØCES, WBØMFL, KØDKM, KØQVL, WAØDHU, WAØHKT, WØHKL, WØAPU, WBØDRS, WBØFTU, WAØAUH, WAØPCC, KØGHK, WØYZV, KØRAI, WBØDXA, WØMGW, WBØSPS, WA2BXY, WAØRQA, WAØGEH, WAØMYF, WØWQT, WBØNCW, WBØIEN, WØPDP, WBØHBS, WBØDLM, WBØGDE, WØODL, WBØLNI, WAØODH, WBØHXA, WBØJOB, WAØFPB and WAØUGV.

The Lincoln ARC also had a simultaneous weather watch net on the Lincoln repeater 16/76. They fed valuable information to Offutt Base Weather and Offutt supplied valuable radar observations to the Lincoln net. Cooperation between the two nets was very good. Lincoln even offered to

send mobile units to the Omaha area if needed. We thank the 16/76 gang for their efforts during the watch.

The Omaha net went very smoothly with 61 check-ins and with WBØCMC and WØOXT at the helm and WAØZUR at Offutt. Mobiles were dispatched to locations requested by Offutt and gave superb reports from these areas. Base stations checked into the net and gave good reports from their specific locations. Many stations stood ready to go mobile if needed.

Two major cells affected the Omaha area. The first was about 1:00 P.M. and the other about 4:00 P.M. with no severe weather reported. One funnel possibility was monitored on public service radio and the area was promptly checked out with no damage. Another possible funnel sighting was monitored on the React Net at 40th and Dodge with no damage in the area.

All in all we had a well-organized net and a job well done by everyone. There are a few areas we could work on for even more efficiency: (1) Unless specifically called to give a report, station should only report high winds, large or heavy hail, heavy rain, very frequent lightning and sudden temperature change; (2) We should learn to use the pro words suggested in the chart supplied by Offutt; (3) When checking in, give location, state if you are mobile, report severe conditions they exist, state QRU if conditions are not severe, monitor net and keep informed, and be ready to give report from your area if specifically called upon to do so.

Yes, the net was highly successful. Lt. Colonel Von at Offutt summed it up nicely when he stated that he deeply appreciated the effort of net members to comply with requests from Base Weather for reports from specific areas. The reports were complete and valuable. He was elated with the liaison between Omaha and Lincoln nets with the result of extremely accurate reports from across Central and Eastern Nebraska. He was especially moved by the net discipline. As he put it — a very efficient operation.

Our thanks to everyone who was involved for their devotion to the job at hand and for a superb job. This is what Amateur Radio Emergency Corps is all about.

By — Bob Lockwood, WAØDHU  
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## THANKS FOR REPEATER FROM FORMER OMAHAN

4/27/75

I have just returned from a week long business trip to Omaha and would like to make a few comments on 2 meters.

I have not operated 2 meters before, so when a friend of mine, K5WIQ, heard I was flying up and so would not have my trusty mobile rig, he offered me the use of his TR-22 for the trip. From all I had read about 2 meters, I wasn't attracted for, if you believe all you read, the one thing you couldn't do on 2 is talk, and I'm an inveterate ragchewer. However, I thought I'd give it a try and I'm glad I did. I had a ball!

I set up shop on the 15th floor of the Continental Towers, and in 4 days  
May 1975

had 41 contacts. It didn't take long to get the hang of the operating procedure and really, it didn't seem to be much different from what courteous operation would be on 75 SSB in a large ragchew or on a net. I even came across three people I used to talk to on 10 and 6 fifteen or twenty years ago when I lived in Omaha. To those who run your repeater, thanks!

Dick Reimund, W5TVF  
(Ex-WØLFM)  
Booker Texas  
\*\*\*\*\*

## NEW MEMBERS ADDITIONS TO ROSTER

Erich J. Bahr, WØHRK  
3101 South Second Street  
Omaha, Nebraska 68108  
Phone: 346-6928

James B. Kerkhoff, WBØMMC  
7821 Pasadena Avenue  
Omaha, Nebraska 68124  
Phone: 397-5451

James P. Murphy  
17400 West Dodge Road, No. 4  
Omaha, Nebraska 68118  
Phone: 289-2024

James R. Peterson  
5208 Cass Street  
Omaha, Nebraska 68132  
Phone: 558-0643

Eugene John Podany, WAØZWS  
5617 North Oaks Blvd.  
Omaha, Nebraska 68134  
Phone: 571-3199

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## ANTENNA PARTY

- WHEN: Saturday, May 17th (Rain date—Saturday, May 24th)
- WHERE: 17th and Whitmore (7000 North)
- PURPOSE: TO ERECT AND CHECK OUT ALL EQUIPMENT TO BE USED  
FIELD DAY

LET'S get everything together so we know what we have and where it is at when YOU need it.

"Harp" WBØMWB

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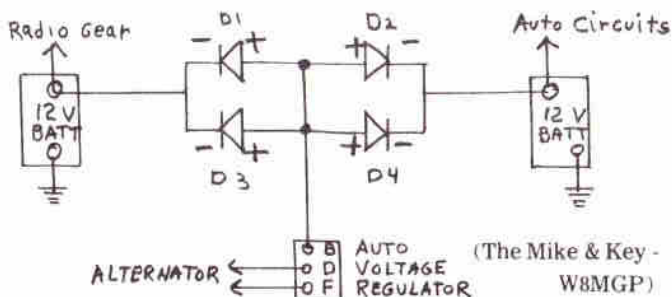
## SOLID STATE BATTERY ISOLATOR

If you would like to install a second battery in your car to operate radio equipment and not worry about having enough current to operate your starter, consider the following device.

Your car's alternator will charge both batteries, but operating your radio gear too long will only discharge the one, leaving the regular car battery fully charged for instant use. Cost? About \$8.00.

D1, 2, 3, 4 — stud mount silicon diodes, 60 piv at 25 amps or more. Mount with usual insulating washers on heat sink.

(from 'SARA SLIP'  
Carbondale, Illinois)



\*\*\*\*\*



## QST FM BIBLIOGRAPHY / Dick, KØIDJ

### QST FM CLASSICS

- Noble, "Freq. Modulation Fundamentals," August, 1939.  
Grammer & Goodman, "Wide-Band FM in Amateur Communication  
January and February, 1940.  
Crowning, "FM Limiter Performance," September, 1940.  
Hierath, "Noise Reflection in FM," December, 1940.

### BIBLIOGRAPHY 1946

- Grammer, "A New FM Detector Circuit," January.  
Brannin, "4.3-Mc FM/AM IF and Audio Amplifier," March.  
H & K, "Reducing No-Carrier Noise in FM Receivers," March.  
Tilton, "A New Approach to FM Reception," September.  
Tech. Topics, "Amateur FM," October.  
Shuart, "Narrow-Band FM with Crystal Control," November.

### 1947

- Babkes, "A New Phase-Modulation Circuit for Narrow-Band  
FM Transmission," January.  
Tech. Topics, "L.F.-N.F.M.," February.  
Tech. Topics, "N.F.M. Reception," March (Feedback, August).  
Bishop, "Narrow-Band FM for Voice Communication," May.  
Geist, "FM on Two Meters," June.  
Goodman, "Low-Frequency N.F.M.," July.  
Harrington & Bartell, "Better NFM Reception with AM  
Receivers," November.

### 1948

- Allen, "An Answer to N.F.M. Reception," February.  
Ellis, "A Small Reactance Modulator for N.F.M.," February.  
Rockwell, "A Balanced-Modulator N.F.M. Exciter," April  
(Feedback, June).  
Dinter, "FM Reception with the Wilcox F-3," (surplus) April.  
Lipman, "The Simple Approach to Narrow-Band FM," May.  
Harrington & Hadlock, "Improving FM Transmission Tech.,"  
November (Feedback, January 1949).

### 1949

- World Above 50, "Simple System for 2-Meter N.F.M.," January.  
H & K, "Simple N.F.M. for 75-Meter Phone," November.

### 1955

- Gross, "You Can't Beat FM!," (a transmitter), March.

**1959**

White, "A Complete Civil Defense System at Low Cost,"  
(for 10 meters), March.

**1960**

Agaard, "Two-Meter FM for Noise-Free Local Communications,  
(surplus commercial mobile & fixed station gear), July.  
Tech. Corresp., "Frequency vs. Amplitude Mod.," October.

**1961**

Hadlock, "Wide-Band FM Gear for 220 Mc," March.

**1963**

Tech. Corresp., "Micro-Band FM," July.  
H & K, "Wide-Band RM Receiver--The Easy Way," November.

**1966**

Blakeslee, "Practical Tripler Circuits," (146-440 MHz), March.  
Hess, "Varactor Converter for 50 to 532," March.

**1968**

Poland, "Converting Wide-Band FM Equip. for 420-MHz  
Service," August.

**1969**

Stevens, "A 500-Watt FM and CW Xmtr for 220 MHz," May.  
Kowols, "Interference Prevention for VHF Repeaters," July.  
Danz, "Squelch Circuits," September.  
Cobb & O'Brien, "Amateur FM and Repeaters," October.

**1970**

Tilton, "A Rugged 2-Meter Repeater Antenna," January.  
Tilton, "A Trap-Tilter Duplexer for 2-Meter Reprts," March.  
Hall, "A Digital Morse-Code Message Generator," June.  
Tilton, "VHF Mobile Whips," June.  
Shriner, "A Combination Wattmtr., Voltmtr, & Field-Strength Meter  
for VHF," October.  
Bratton, "An Electronic Whistle for FM Xmtrs," November.  
Schleicher, "Phone Patching--One Year Later," (autopatch) November.

de PHD News, Missouri

— TO BE CONTINUED LATER —

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# HAM HUM SWAP

**WANTED:** Would be interested in buying clean, older model Tektronix scope having bandwidth of at least 10 MHz. Either single or dual trace. John Snyder, WØWRT, 3221 South 45th Street, Omaha, Nebraska 68106; phone 556-1538.

**FOR SALE:** Drake Line R4A receiver, T4X transmitter, power supply and matching speaker. Price \$675.00.  
Jay McAleer, WAØLLQ, 839 South Polk Street, Papillion, Nebraska 68046; phone 339-3448

**WANTED:** Manual for a Clegg Thor 6 Transceiver.  
Bill Frost, WBØMAH, 11628 Farnam Street, Omaha, Nebraska 68154; phone: 334-1752

**FOR SALE:** Regency HR2B with 94 Xtals—\$170.00;  
34, 16, 76, 22, 82, 28, 88 — \$4.00 each.  
Jim Belt, WAØJH, 1006 North 76th Street, Omaha, Nebraska 68114; phone 397-5720.

**WANTED:** I'm looking for a leather HT carrying case for my Tempo FMH. A Motorola case should fit.  
John Snyder, WØWRT; home 556-1538 or work 397-3000, Ext. 3542.

**FOR SALE:** Heath SB-401 Xmtr with Xtal Pak—\$190.00;  
National NC300 Rcvr with Xtal Cal—\$100.00; or both for \$275.00.  
Don Novotny, WBØDRS; phone 572-8395

**WANTED:** I am looking for some large capacitance capacitors and a choke for a 12 volt power supply. I want the power supply to deliver a large amount of amperes, possible up to 8 amperes.  
I have a 13.7 volt 12 amp secondary tap on a transformer of mine. The capacitor, an electrolytic, from 10,000 to 15,000 Mf at 25V and a choke rating for 12V and anywhere from 5 to 10 henrys.  
Thomas A. Bejot, WBØHRG  
356 North Oak Street, Ainsworth, Nebraska 69210  
\*\*\*\*\*





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