



HAM HUM

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No. 12

December 1974



Ak-Sar-Ben Radio Club, Inc. 1974 Annual Meeting and *Christmas Party*

December 13, 1974 - 7:30 P.M.

Briardale Fellowship Hall
Countryside Briardale United Church of Christ
12020 Pacific Street, Omaha

ELECTION of officers. Paid Club members will vote on officers for 1975.

**DUES
DUE
BEFORE
MEETING**

GIFT EXCHANGE - Club members and guests (adults) who wish to participate in the exchange of gifts must bring a gift - minimum value \$3.00. Only those who bring gifts will be eligible to participate in the exchange.

DOOR PRIZES - Separate drawing will be held for door prizes from list of paid members.

MOVIES AND SPECIAL FAVORS FOR
JUNIOR OPS

REFRESHMENTS

BRING YOUR FAMILY AND FRIENDS -
GUESTS WELCOME

Best Wishes to you and yours for a very Merry Christmas and a Happy New Year from the Board of Trustees of Ak-Sar-Ben Radio Club, Inc.



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: December 20th

Annual Dues:

Regular member\$7.50
 Regular member and XYL 9.00
 Student member 3.50
 (due and payable each Jan. 1)

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New member initiation fee\$1.00

Quarterly for balance of year:

Regular member\$2.00
 Regular member and XYL 2.45
 Student member 1.00

10-25-74

Northeast Neb. Repeater Assn.

By: Marty Klein, Fremont, Nb.

To: Ham Hum Magazine

Several hams have been wondering about the repeater in Clarkson, Neb.; this little note will hopefully give a few of the details of our newest repeater in the area.

As of Feb. 19, 1974, we have had the call WRØADF. The repeater is located at Clarkson, Neb., approx. 75 miles northwest of the Omaha area. Swing your beam at Fremont and you'll be lined up for Clarkson.

The repeater frequency is 146.28/146.88. The machine is a Standard repeater that has been modified and now uses a VHF Engineering 2 watt transmitter with a 30 watt amplifier. This is fed into a Sinclair duplexer and then 60 feet up to a Phelps/Dodge Comprod. At

present, a tall windmill tower has been purchased and the club is hoping to, in the not too distant future, get the antenna height up to about 100 ft.

The repeater is the result of the Fremont, Norfolk, Columbus, and surrounding towns efforts and planning. Speaking for these hams, I would like to invite and encourage all of the area hams to check in and feel free to use the system. Being a fairly small group, we are trying to get the activity up on the repeater.

For more information on the repeater or membership, feel free to contact me or Vern (WØAYS) for further details.

As a final note, let me thank the Ham Hum for inviting us to plug our repeater in their newsletter.

Marty Klein, WBØHXA
 President, Northeast Neb.
 Repeater Assn.

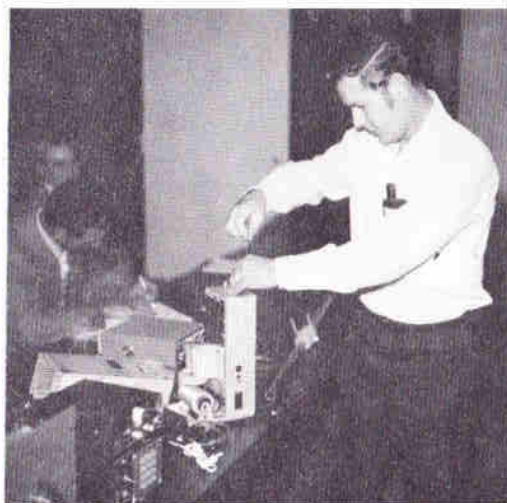
NOVEMBER MEETING

Thanks to all who participated in SHOW and TELL on November 8th. Some very interesting gear was presented and demonstrated. We enjoyed hearing about the various gadgets and appreciated your bringing them. Sorry more Past Presidents are not in attendance at the meeting. You missed a good one, fellows! The pictures tell the story!

Photos by Jon Penner, WBØGQT and WØYZV



Mike Wilczynski, WBØBMV
Speech Compressor



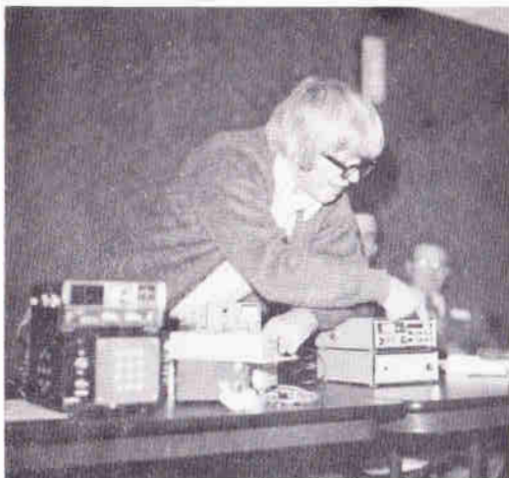
Don Schwalm, WBØHGC
Rollerless ultimate transmatch



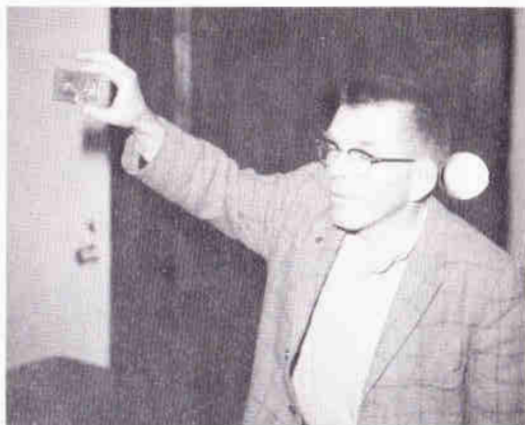
Russ Minks, WAØVEE
12 volt regulated power supply
2 meter rig with AC power supply
Tone pad



Bob Andrus, KØLUG
2 meter broadband dipole



Dick Cunningham, KØHHP
Heathkit 2 meter xcvr with
scanning circuit installed



Al Fleming, WØBNY
Change video to a channel from
2-5 SSTV



John Gebuhr, WBØCMC
Little tunable 2 meter rcvr



Dave Wells, K5QJG
Transmatch
2 meter pip-squeak



Past Presidents (left to right)

- Herbert D. Curry, WØQXR (1948)
- Arthur R. Gaeth, WØFQB (1947)
- Robert C. Lockwood, WAØDHU (1968)
- Dick L. Eilers, WØYZV (1956)
- Russell A. Minks, WAØVEE (1973)

Audience at SHOW AND TELL

REMEMBER WHEN?

There has been a Club Christmas party for as long as anyone can remember. Also as long as anyone can remember, gifts have been exchanged in addition to whatever door prizes were provided by the Club. The first restriction we can remember was "No Surplus." Next, "Must be at least a dollar value." Then finally many years ago we had to go to a "\$2.00 minimum" in order to have a meaningful gift.

Here we are again and inflation is th us. The general observation of last year's gift exchange was that the greater number of gifts were of at least a \$3.00 value. Give what you want as

there is joy in giving, but to avoid disappointment on the other end, keep it to at least \$3.00. As we used to say in our notice of the Christmas party, "Select something you might like yourself; you could draw your own present, you know."

RECENT CONTRIBUTORS

Repeater Fund

- W. D. (Bill) Hewitt, KØIPT
- Damon B. Nuckols, WØUIO
- Mike Wilczynski, WBØBMV

NOMINATIONS FOR 1975

The annual meeting of the Ak-Sar-Ben Radio Club, Inc. will be held on December 13, 7:30 P.M., Briardale Fellowship Hall, Countryside Briardale United Church of Christ, 12020 Pacific Street, at which time officers will be elected for 1975.

The Articles of Incorporation and Bylaws of the Club provide for the election of a President, Vice President and four members of the Executive Council each year. The President and Vice President are elected for a one-year term. The outgoing President remains on the Board of Trustees as Immediate Past President for one additional year. Even though Vernard (Rip) Riportella, WBØGAJ, has moved from Omaha, he is the Immediate Past

President and a substitution, cannot be made. For 1975 the Executive Council will consist of ten instead of eleven local members.

Remaining on the Board for 1975 are: Patrick Scolla, WBØEGR; Lloyd McElhaney, KØDKM; Harry C. Snyder, WØNVE; and James D. Howard, K5TNP/Ø.

Those remaining on the Board together with the new officers and members of the Executive Council to be elected will comprise the Board of Trustees for 1975. The Board will then elect a Secretary and a Treasurer from the Executive Council.

The Nominating Committee will place in nomination at the annual meeting the following:

For President

Marion (Mike) Wilczynski, WBØBMV
Age: 44
Address: 6212 Kansas Avenue
Phone: 571-7932
Wife: LeAnne
Children: Terri, Sally, Kristy
Employment: Hawkins Construction Co.
License: 7-18-1969
Hobbies: Ham radio, fishing

For Vice President

Edward C. Eichler, WBØBCB
Age: 33
Address: 308 West Highway, Valley
Phone: 359-2713
Wife: Jenny
Children: Stephanie, age 4; Paul, 9 mos.
Employment: Eichler Equipment Co.
License: 3-24-1970
Hobbies: Ham radio, hunting, camping

For Executive Council

Robert A. Conley, WNØLYU

Age: 44
Address: 2562 Bauman Avenue
Phone: 451-0707
Wife: Phyllis
Employment: Thermo Division, Yellow Freight
License: 2-15-1974
Hobbies: Ham radio

Lowell W. Jackson, WAØHKT

Age: 36
Address: 11623 Queens Drive
Phone: 571-8325
Wife: Judy
Children: Mike (age 4) and Brian (18 mos.)
Employment: Creighton University
License: 10-11-1963
Hobbies: Ham radio

William A. Leatherwood, WAØZUR

Age: 50
Address: 907 Lemay Drive, Bellevue
Phone: 292-0970
Wife: Betty
Children: Five children; Sarah (age 16) and Jim (age 12) at home
Employment: Army Corps of Engineers (Retired M/SGT-30 years
in military)
License: 1967
Hobbies: Ham radio, model aircraft, fishing

Michael L. McAllister, WBØDXA

Age: 27
Address: 12405 "A" Street
Phone: 334-0871
Wife: Darlene
Children: Carrie (age 4½)
Employment: Kirkham, Michael & Associates
License: 3-2-1971
Hobbies: Ham radio, photography, motorcycles, scuba diving,
camping

BOY SCOUT JAMBOREE-ON-THE-AIR, 19 OCTOBER

The Boy Scout Jamboree-on-the-Air effort supported by the Club was quite a success, despite Murphy showing up as an evil spirit of the woods. Ed, WBØBCB, got the antennas and generator ready and took them to Louisville Lakes State Park, the site of the district camporee and our jamboree QTH. Prexy Mike, WBØBMV, was at the site Saturday morning, and Pat, WBØEGR, came and operated for a while that evening. Primary operators were Dave, K5QJG/Ø, and Steve, WBØGTJ.

Darkness caught us Friday night before we could get the antenna up, but we got everything sorted out, and bright and early Saturday morning we started operating. About 2 microseconds later, Murphy materialized from a nearby campfire and decreed that the LSB mode on the receiver was DEAD. This was particularly clever on his part, since we'd planned to do most of our operating on 40 and 80 SSB and had accordingly put up the 40/80 inverted Vee. So...the vaunted trans-match was swung into action, and we operated 20 SSB all day without changing antennas.

We had a good number of very pleasant contacts, and more important, we had swarms of scouts around the station most of the day, soaking up exposure to ham radio. We let as many of the scouts as we could manage get at least a minute or two mike time, and we also spent lots of time talking to the boys about amateur radio and answering their questions. We have no idea how many actually visited us; we were set up on a picnic table out in the open with lots

of room and no traffic control, hi! Over 300 were registered for the camporee. A number of the boys and a few of the adults were also interested in the code and theory classes coming up and were given the appropriate information.

All in all, we feel that the Jamboree-on-the-Air project was a big success in accomplishing our goal of showing amateur radio to a wide audience of potential hams. We also had a lot of fun. The coincidence of the jamboree with a scout camporee offered a unique chance for a big audience which may not occur next year. Even so, we strongly recommend that the club continue to take advantage of the Jamboree-on-the-Air in years to come, to recruit new hams and to show amateur radio to the public.

de Dave Wells, K5QJG/Ø

CODE AND THEORY CLASSES

Don't forget the Code and Theory Classes each Monday, beginning January 6, 1975 and ending April 14th. Class time: 7:30 P.M. The place: Creighton Prep, 7400 Western Avenue, Omaha. (Use west parking lot.)

There will be two Code and Theory classes conducted concurrently - one for those preparing for novice privilege, and the other for those preparing for general and above privilege.

LETTER OF APPRECIATION

**national
multiple
sclerosis
society**

nebraska-iowa midlands chapter

321 W.O.W. Building Omaha, Nebraska 68101 402 341 7770

Oct. 23, 1974

Ak-Sar-Ben Radio Club
c/o Bob Lockwood
3711 No. 56 St.
Omaha, Nebr. 68104

Dear Ak-Sar-Ben Radio Club Members:

The English language simply does not contain the words whereby I can adequately thank you for the tremendous job you did for this year's Bike-Thon. Speaking for everyone, and especially those young adults crippled by MS, may I extend our very deepest thanks to you.

As you know, staging an event of this kind takes many people, but without a doubt, the most important is your group. We simply could not hold the event without you. Everyone associated with Ak-Sar-Ben Radio Club is to be highly congratulated on your professionalism in the planning stage, and in complete and thorough handling of the traffic route.

I'm sure you will be happy to know that pledges for the Bike-Thon totaled \$8,600.00. For MS patients it means added hope through increased research to find the cause and cure, and extended patient services.

I am enclosing photocopies of the news stories.

Yours truly,



(Miss) Rose Marie Whiteley
Executive Director

RMW:jw
Enc.

cc: copy

<p>Donald J. King Chairman</p> <p>Mr. Richard G. Johnson President</p> <p>Mr. Fred Johnson Vice President</p> <p>Mr. Bob Johnson Secretary</p> <p>Mr. Max Johnson Treasurer</p> <p>Mr. Tom Johnson</p>	<p>Miss H. H. Johnson President</p> <p>Miss M. M. Johnson Vice President</p> <p>Miss J. J. Johnson Secretary</p> <p>Miss K. K. Johnson Treasurer</p> <p>Miss L. L. Johnson</p>	<p>Miss N. N. Johnson President</p> <p>Miss O. O. Johnson Vice President</p> <p>Miss P. P. Johnson Secretary</p> <p>Miss Q. Q. Johnson Treasurer</p> <p>Miss R. R. Johnson</p>
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AREC WEATHER WATCH 30 OCTOBER

AREC members conducted a weather watch operation on 30 October in support of Detachment 1, 3rd Weather Wing, Offutt AFB. The net was activated at the request of LCOL Von, the detachment Commander, based on a severe thunderstorm and tornado watch issued by National Weather Service and an alert established by the Air Force Global Weather Center at Offutt. The Omaha/Bellevue/Offutt area was on the northern edge of the watch area, and based on the other information available to him, the colonel felt it was prudent to request our assistance in closely watching local weather developments. It was obviously the wrong time of year for such a thing, a classic example of the unexpected potentially dangerous situation.

After the request was received, Bill, WAØZUR, quickly took on the job of net call-up and control. John, WBØCMC, got the telephone recall list rolling, and later assumed net control. Dave, K5QJG/Ø, brought up the station at the base weather facility. Over 15 members checked in during the course of the net, until operations were secured (after about 2½ hours) on the recommendation of LCOL Von. Reports flowed in both directions; members reported the weather conditions at their location, and the base weather station passed on information from radar and NWS bulletins.

Operations went very smoothly, thanks to the skills of net control and the reporting stations. LCOL Von, was very happy and enthusiastic about our

support, and many of the other weather personnel gained a better appreciation of what we can do. Best of all, perhaps, no severe weather developed in our immediate area. This in no way, of course, makes the ARL effort any less valuable or successful... if it had come, we would have been ready to help save lives and property, and that's what AREC is for.

de Dave Wells, K5QJG/Ø

IMPORTANT A.R.E.C. ANNOUNCEMENT

There will be a class on survey training at the Red Cross Chapter House, 39th and Dewey Avenue, Omaha, on Thursday evening, January 9, 1975. The class will be conducted by a national representative of the American Red Cross.

It is requested that at least 25 amateurs and 25 CBers attend this class and the Red Cross has asked for the name, address and phone number of each participant prior to January 9th.

There will be a major simulated emergency test following the class.

All A.R.E.C. members who have previously taken survey training are urged to attend as well as those who did not but who want to now. For further information monitor the 2 meter A.R.E.C. Net at 8 P.M. Tuesday evenings on 34/94.

This is a very important event. Let us demonstrate forcefully that we are a public service.

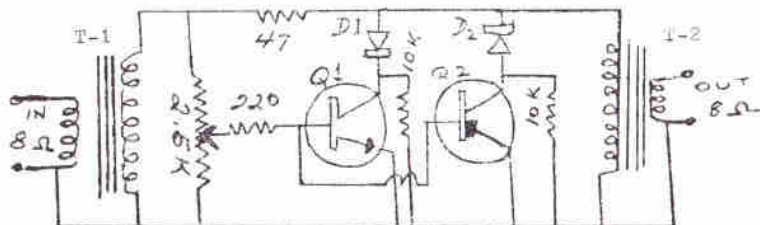
Please notify Bob Lockwood, WAØDHU, at 451-7233 if you wish to take part in this exercise.

AUDIO POWERED TRANSISTORIZED NOISE CLIPPER

By - Clay, W5ZPV

San Antonio Radio Club BULL-ETIN

I am indeed sorry that the entire article could not be included. It was quite interesting, dealing with various types of noise and its causes. Author Clay gives credit for circuit development to Mr. Merle Converse of Southwest Research Institute and Mr. Ray Welty, USAF, Kelly AFB.



- T-1, T-2 : 600-to-8 ohm transformers. (Author notes that 500-to-4 ohm transistor radio output transformers may be used)
- Q-1 : 2N2222 (Motorola HEP 54 may be used)
- Q-2 : 2N2907 (Motorola HEP 51 may be used)
- D-1, D-2 : 1N270

Two transistors, powered by the audio power contained in the receiver output and rectified by the two diodes, will short out positive and negative peaks of the audio signal. The clipped level will depend on the setting of the potentiometer connected to the bases of the transistors. Once a satisfactory clipping level is obtained, very little adjustment of the potentiometer will be required. The author used small 500-4 ohm transistor output transformers for impedance matching requirements. This is considerably less expensive than the conventional 600-8 ohm line matching transformers. Most discarded transistor radios provide an excellent source for these transformers. Mr. Welty points out that this circuit can easily be called at the audio volume control point in your receiver. Author W5ZPV added the matching transformers and installed the device in the line from receiver output to speaker.

MEMBER NEWS

Charlie Michel, KØQVL, has a new QTH: 8720 Charles Street, Omaha, 68114; phone: 391-3782.

The young father, pushing a baby carriage, seemed quite unperturbed by the wails emerging from it.

"Easy now, Albert," he said quietly, "control yourself. Keep calm." Another howl rang out.

"Now, now, Albert," murmured the parent, "keep your temper."

A young mother passing by remarked, "I must congratulate you! You know just how to speak to a baby—calmly, gently." She patted the youngster on the head, and cooed, "What's wrong, Albert?"

"No, no," exclaimed the father, "his name is Johnny. I'm Albert!"

The Kleinknecht Encyclopedia

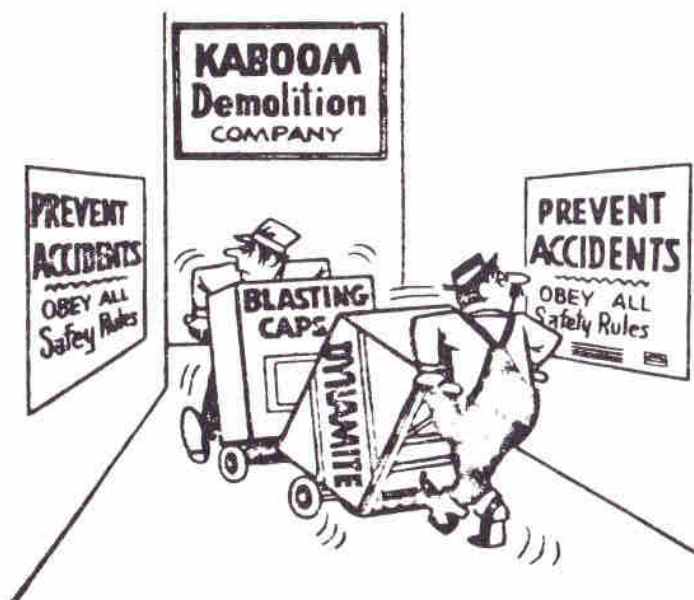
NEW MEMBERS ADDITIONS TO ROSTER

F. W. (Bill) Frost, Jr., WBØMAH
11628 Farnam Street
Omaha, Nebraska 68154
Phone: 334-1752

W. D. (Bill) Hewitt, KOIPT
3450 Sixth Avenue
Council Bluffs, Iowa 51501
Phone: 323-1722

Verne Kaye Ramsey, WØSBZ
6115 Kansas Avenue
Omaha, Nebraska 68104
Phone: 571-7541

Scott D. Woskoff, WBØLYT
2518 South 84th Street
Omaha, Nebraska 68124
Phone: 391-3597



A SOLID STATE CASCODE AMPLIFIER

The circuit described here is one that appears in FIELD EFFECT TRANSISTORS by Leonce J. Sevin, McGraw Hill Co. This circuit is worthy of special note because of the unusually high degree of isolation between input and output.

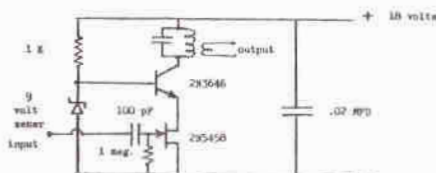
It is no secret that bipolar transistors are particularly poor in respect to input-output isolation. That is the output load impedance has a decided affect on output impedance, and the driver source impedance has a marked affect on output impedance. This is particularly disconcerting in ham radio transmitters, and is responsible for most of the instability problems encountered in the R.F. section.

The cascode amplifier described here offers considerable promise as a

buffer amplifier in transmitters intended for the lower hambands. In addition, the use of the bipolar transistor in conjunction with a FET results in an amplifier stage that has the high input impedance of the FET and the high voltage handling capabilities of the bipolar transistor.

The isolation between input and output of the cascode is enhanced by the relatively small voltage swing in the drain circuit, which minimizes Miller Effect. The common base circuit for the bipolar transistor does its bit to improve isolation by virtue of the isolation properties that exist in this configuration. This configuration, like the grounded grid circuit in vacuum triodes, has the best isolation of the several possible configurations.

de Fresno Skip



TEN METER BEACONS—

For those interested in 10 meters, here is a list of beacons operating from several locations around the world. If you hear one of these beacons, you can be sure that 10 is open to that part of the world. Beacons usually transmit a steady carrier with the call sign given every few minutes as an ID on CW. Also, you might check W1AW when they are on with code practice or bulletins on 28.080 MHz. Times are in QST. If you know of additional beacons or corrections to the list, let us know.

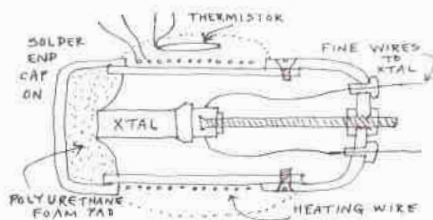
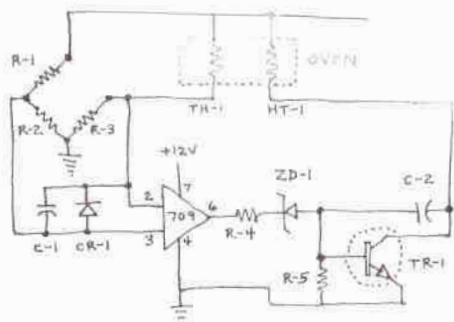
DLØIGI	28.195	ZC4CY	28.180
3B8MS	28.200	VE3RMR	28.175
JA1IGY	28.190	VE3TEN	28.175
GB3SX	28.185	DLØAR	29.000

de HARC Bulletin, Kansas City, MO.
and Ground Wave

HAM HUM

LOW COST, HIGH TOLERANCE TEMPERATURE CONTROLLED CRYSTAL OVEN

R-1	} 150K ½ watt 1% resistors, preferably carbon film		
R-2			
R-3			
R-4	1000 ohm ½ watt	TH-1	Thermistor 100K at 25 deg. C of cigar shape, no bead
R-5	2200 ohm ½ watt		FENWAL GA51P8 (Newark Elec.)
C-1	.22 mfd	HT-1	50 ohm Nikrome wire SWG 42
C-2	.01 mfd		709 op amp (may use 741 with mod)
CR-1	1N4001 silicon diode	Oven	¾ inch copper pipe with end caps
TR-1	2N697 or 2N2219 must have lo saturated collector voltage drop	ZD-1	3.9 volt zener diode



Original article is in Wireless World of June 1970. Oven will switch with .0015 deg. C change and has very steady temperature. For additional information, see original article.

HAM HUM SWAP

FOR SALE: HW-32A 20M USB/LSB XCVR, with HP-23 AC PS, HWA-10 xtal cal, EV mike, and mobile mount — \$105.
Dave Wells, K5QJG/Ø, 291-5346

WANTED: 30 or 40 foot telescoping mast.
John A. Cook, KØWVF, 3419 Mason Street,
Omaha, Nebraska 68105 Phone: 345-5513

FOR SALE: I have an AC power supply for sale. It's a Heathkit HWA-202-1. I've assembled it but never used it. Will sell for \$35.00.
Louis Nelson, WAØDKE, 2922 Avenue C,
Council Bluffs, Iowa 51501 Phone: 323-2525

WANTED: Gud SSB/CW transceiver. Will trade gud condition DX-60B Xmtr, HR-10B Rcvr, and HG-10B VFO or sell for \$200.00.
Call Jon (402) 556-6695

FOR SALE: Vibroplex Champion Bug, 6 months old, perfect condition — \$15.00;
Calrad SR-16 SWR Reflected Power Meter with handle 1-KW, still in box — \$12.50;
Rohn 40-foot telescoping mast, new—never used—with base — \$15.00
(This is a poor man's sky needle.)
Joe Nanos, KØKES, 339-7865

FOR SALE: Regency Monitoradio, 2 meter FM TMR-8-H, with crystals. Make offer.
Charlie Michel, KØQVL, 391-3782

FOR SALE: Drake TR-4 Xcvr with speaker and power supply;
Heath DX-35 Xmtr, Heath VF-1 VFO;
Tempo fmh 2 meter with power supply-charger;
Lafayette HA-600A receiver; Model 15 TTY.
Alan R. Wanek, WBØHBH, 435 University Terrace
Lincoln, Ne. 68508 Phone: 432-4461

Employment Manager: "What was your last job?"
Applicant: "Diamond cutter."
Employment Manager: "In the jewelry business, huh?"
Applicant: "No. I trimmed the lawn at the ball park."

Sunshine Magazine



HAM HUM

Christmas

Dear fellow
"Hams":

Thanks for your
patronage in '74.

Best wishes for
the coming year,
and may you all
have a joyous

Christmas.
al mc millan



*al
wøjjk*

CLOSED

DEC. 22 THROUGH JAN. 2
OPEN JAN. 3



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