



# HAM HUM

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



Vol. XXV  
No. 8

August 1975

## NEXT MEETING

WHEN: FRIDAY, AUGUST 8, 1975

TIME: 7:30 P.M.

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

PROGRAM: ALAN H. MCMILLAN, WØJJK, will attempt to explain a Smith Chart, how to use it and how it can help you.

(Ed. Note: Upon questioning Al about this subject, his main answer to any question I asked was "That's what I'll tell you when you get there." He did indicate a desire that members and guests would not stay away, and in knowing Al I am sure he will not avoid the use of common language. Your Program Committee felt exposure to information of this type regarding our hobby can be helpful even though you may not personally wish to enter into the full study of antennas. We are sure you will find it interesting. The only answer I could get at all from Al was "A Smith Chart is a nomograph to determine antenna systems characteristics.")

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.



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 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

July 10, 1975

July 8, 1975

AK-SAR-BEN RADIO CLUB, Inc.  
 Post Office Box 291  
 Omaha, Nebraska 68101  
 Dick Eilers, WØYZV, Editor

Ak-Sar-Ben Amateur Radio Club, Inc.  
 P. O. Box 291  
 Downtown Station  
 Omaha, Nebraska 68101

Dear Dick:

Your Special Tornado Issue was super BUT that's what "HAM RADIO" is all about.

I listened to the AK-SAR-BEN Radio Club Tornado Net and want to say it was well run and did a marvelous job of furnishing emergency communication and running Health and Welfare Traffic.

I want to express my personal appreciation and also the thanks of the ARRL for a job well done.

In my book the AK-SAR-BEN is one of the top HAM Clubs in the Mid-West Division.

73 es BCU  
 Paul Grauer, WØFIR  
 Mid-West ARRL Director  
 \*\*\*\*\*

Att: "Ham Hum" Editor

Dear Members of the Ak-Sar-Ben Amateur Radio Club:

On behalf of the Carter Lake Water Ski Club I would like to express my thanks for the great job you did in helping us with our communications for the water ski show we put on on Sunday, July 6th.

Timing is so important in putting on a show of this nature and communications are essential to timing. We never could have done without you.

Our thanks for a job well done.

Best Regards,  
 Howard Silberg, President  
 \*\*\*\*\*

## GENERAL MEETING

11 JULY 1975

By—Bill, WAØZUR

The President called the meeting to order. The members affirmed the Pledge of Allegiance.

New members are WAØGQG, Steve; WAØTIF, John; WBØEQV, Bill.

A rather intense discussion of the expenses involved in the purchase, maintenance, and operation of the repeaters proved enlightening. Few members were aware that dedicated telephone lines are so expensive. Relatively few realized that the equipment in Council Bluffs does not belong to the Club — we just support it.

The Treasurer announced that a total of \$408.00 has been donated to the repeater fund since 1 January. The 22/82 repeater was credited with \$101.50 and the 34/94 repeater with \$306.50. Telephone lines alone have cost \$332.08 as of 30 June. Expected telephone expense for the remainder of the year totals \$268.44 — IF the bills do not go up.

You know whether you are carrying your share of the load. It's easier if all users of the repeaters will help.

Frank, WØGOJ, drew block diagrams of the two repeater systems and explained the operation of the associated equipment. The autopatch on 22/82 as well as the link systems was explained.

Slides, some of which were taken by Frank, WAØIWF, and some taken by KØJIU, Leo, were shown. These pictures were worth thousands of words in explaining why the repeaters are sometimes inoperative. Few people

expressed a desire to go up the water tower in Council Bluffs, especially in the winter. A question and answer period followed the slide presentation.

Our appreciation is extended to Jim, WØYCP; Frank, WØGOJ; Leo, KØJIU; Marty, WAØGEH; Frank, WAØIWF, and any others who assisted in the presentation of a most interesting program.

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## AREC ON CONVERSATIONS TV SHOW

By—Bob Lockwood, WAØDHU

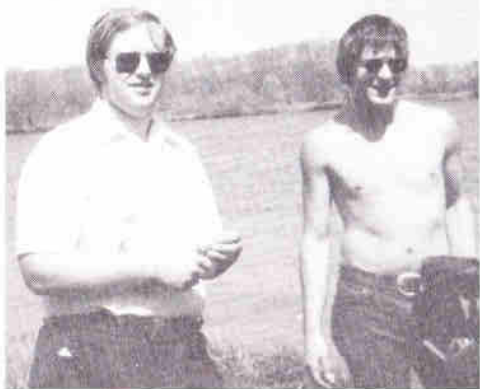
On the Channel 3 Conversations Show at 11:30 A.M. on July 18th, Bob Lockwood, WAØDHU, and John Gebuhr, WBØCMC, talked to Joni Baillon about amateur radio, its purpose, qualification, what motivates one to become a Ham, equipment used, a history of the Ak-Sar-Ben Radio Club and AREC.

A demonstration of our two-meter capability was given. Contact was made with WBØBCB, Ed, who was in the middle of a cornfield near Fremont, and with WØYDV, John in Omaha. Purpose of the demonstration was to establish the fact that for local communications we can go anywhere, anytime to supply communications; also, that ours is well-disciplined communications.

The May 6th tornado was discussed and the part we played in it. Training and readiness were also discussed.

All in all we are thankful for the privilege of the opportunity to appear before the general public to explain our dedication to public service.

\*\*\*\*\*



Photos of May transmitter hunt. Winner was Randy Curtis, WBØDDZ. Site along the Missouri.

\*\*\*\*\*

## AREC PICNIC

By—Bob Lockwood, WAØDHU

DATE: Sunday, August 24, 1975  
TIME: 12:00 NOON  
WHERE: DeSoto Bend

All are invited. Make this a real family treat. Bring your own main dish plus side dish for potluck. Concession stand will also be operating. WAØROP, Rick will bring boat for those who want to water ski or just enjoy a boat ride. All children riding boat must be accompanied by parents. All personnel on boat must wear life jackets.

Even though this is called an AREC picnic, all are invited to come. Let's have a nice crowd and even more fun.

Note: A collection will be taken up to defray cost of gas for the boat.

\*\*\*\*\*

## FORMER MEMBER NEWS

Hi: It's been ten years since I received my last issue of Ham Hum. A lot of water has gone under the bridge. I'm married (three harmonics), finished college, and got my advanced ticket — in about that order. I heard KØCIA on 20 cw one nite chasing dx but little else except I did hear a rumor that VLI traded in his car a few years ago. I met Tom Ladd out here.

Enclosed is bux. Please put me back on your mailing list.

73,  
Mike Trimble (ex-KØAVB)  
5154 Roeder Road  
San Jose, CA 95111  
(405) 227-6330 evenings

P. S. I read the mail on 14230 n almost daily.

(Ed. Note: Good to hear from you, Mike, and thanks for generous contribution.)

\*\*\*\*\*



## HELP NEEDED!!

**EVENT:** 1975 Omaha Open Water Ski Tournament

**WHEN:** Saturday, Aug. 30, 7A.M. — 6 P.M.  
Sunday, Aug. 31, 7 A.M. — ?

**WHERE:** Carter Lake Water Ski Club  
5th & Ave. Q, Carter Lake, Ia.

We have been asked by the Carter Lake Water Ski Club to take care of communications needs for their tournament. We are going to need twelve (12) operators minimum for each day of the event. We will have operators stationed in boats, and on shore, handling communications for the tournament directors, judges, contestants, and other misc. needs.

Our communications will be run on 146.52 Mhz Simplex. There will be 12V. batteries and 110V. A.C. available for our use. We are going to need radios, magna-mount antennas and ops.

A practice exercise for this event was held in July. If you weren't able to be there or listen in on 52, you don't know how much fun you missed. If you want to join in the fun on the 30th and/or 31st, or if you have any questions or equipment to donate, please call  
Rick Stansbury, WAØROP 572-1483

73's  
De WAØROP

P.S. There will be a party Saturday night for all who help, plus their XYL or YL.

\*\*\*\*\*

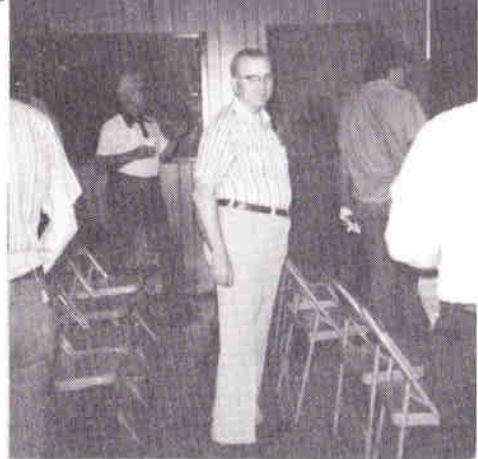
## HAM OF THE MONTH

Lloyd L. "Butch" Burks, WBØNGD, is our Ham of the Month as pictured at his station by our roving photographer, Jon, WBØGQT.

Butch works at Griffin Pipe Co. as a lab technician. He built all of his Heath equipment. Some of his gear includes; SB-401 xmtr, SB-303 rcvr, HW-22 40 meter monobander, SB-200 ear, HW-202 2 meter xcvr, and the Heath console. Butch's main interests in amateur radio include operating both 2 meters and the low bands, mostly 20 and 40. He also likes to build electronic gadgets.

\*\*\*\*\*





JUNE MEETING PHOTOS  
By Jon Penner, WBØGQT



## NOTES FROM READERS

7-9-1975

Ak-Sar-Ben Radio Club  
Aha, Nebraska

Greetings:

May I commend you for your special Tornado issue of Ham Hum. Your excellent planning and outstanding teamwork is a great credit to amateur radio. At a time when stress exists in our hobby, it is very refreshing to see amateurs engage in true public service.

Your activity during the storm period makes me proud to be an amateur. Further, we are proud to enclose this year's donation to your repeater fund.

Thank you. Kindest personal regards.

Bill Hendrix, WØFCE  
Comm. Systems Associates  
520 West 5th Street  
Cameron, MO 64429

(Ed. Note: Sincere thanks for your kind comments and your generous check.)

\*\*\*

July 10, 1975

Hi:

Received June Supplement Ham Hum, Tornado issue. I do hope that QST will reprint it in its entirety. This covers the program of what Amateurs should do in preparation for emergencies, and how it works. It is a guideline for all Amateurs to study August 1975

and follow in preparation for their own possible participation in emergencies.

Best Regards,  
Dayton L. Phifer, WØVEA  
East Tryon Route  
North Platte, NE 69101  
\*\*\*\*\*

## MEMBER NEWS

Jon Taute has recently received his general and his call changes from WNØMNK to WBØMNK - thanks to Ak-Sar-Ben's Code and Theory Course.

Jon K. Taute, WBØMNK

P.S. I am also new coffee and donut man.

(Ed. Note: Congratulations on your general, Jon!)

\*\*\*

My novice license received today (July 17, 1975) - WNØPYQ. I hope to upgrade the license within a year.

Mal Crabill

(Ed. Note: Congrats to you too, Mal!)

\*\*\*

Floyd H. Schadendorf now has an advanced class license and a change in call from WNØLXP to WBØLXP.

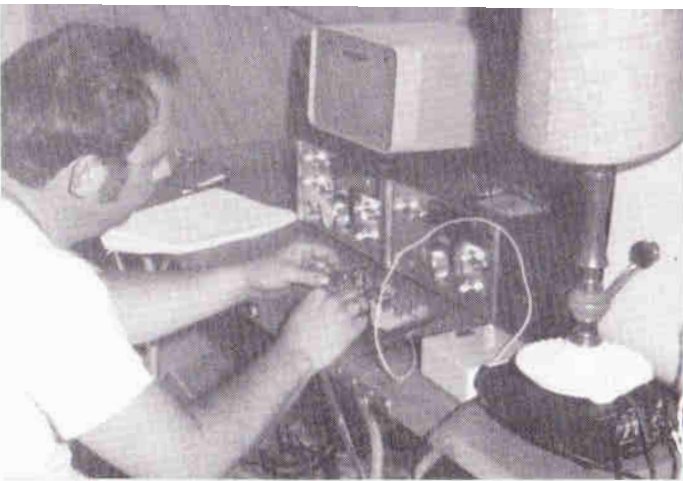
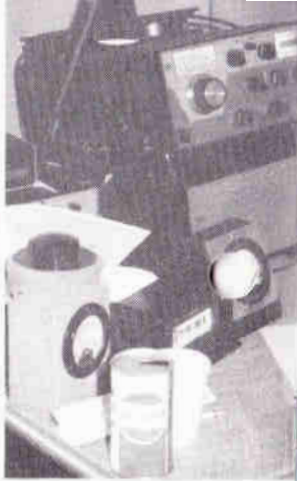
Congratulations, Floyd!

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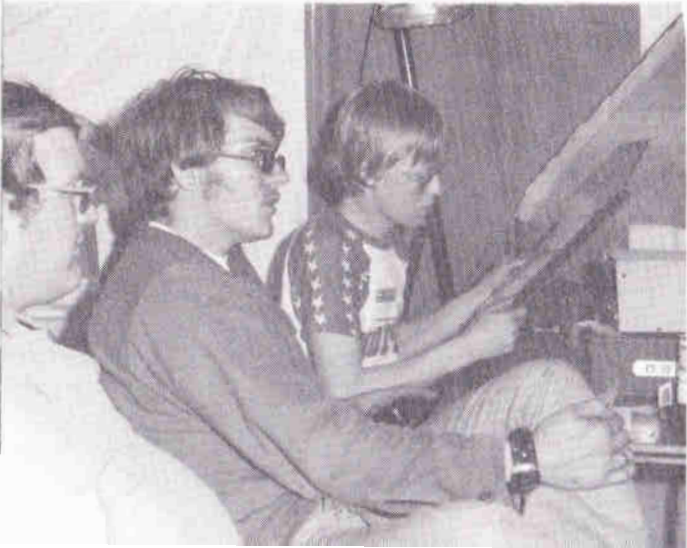
Husband: A curious animal who buys his football tickets in June and his wife's Christmas present on December 24.

\*\*\*\*\*  
Service

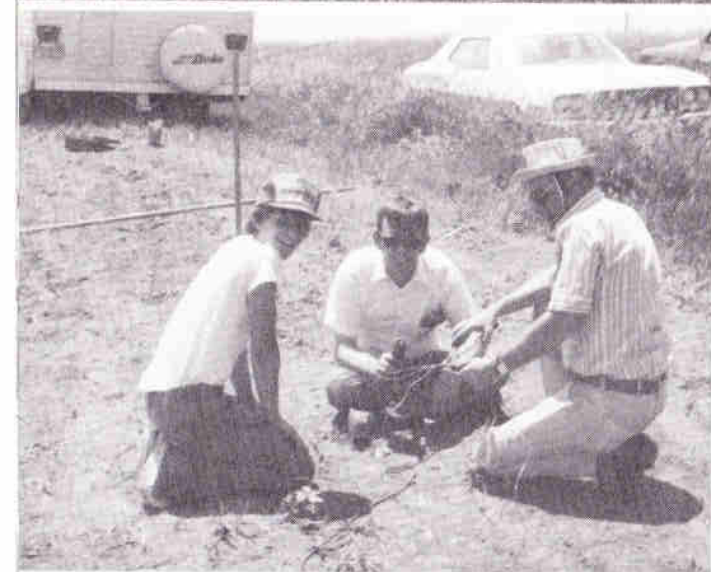
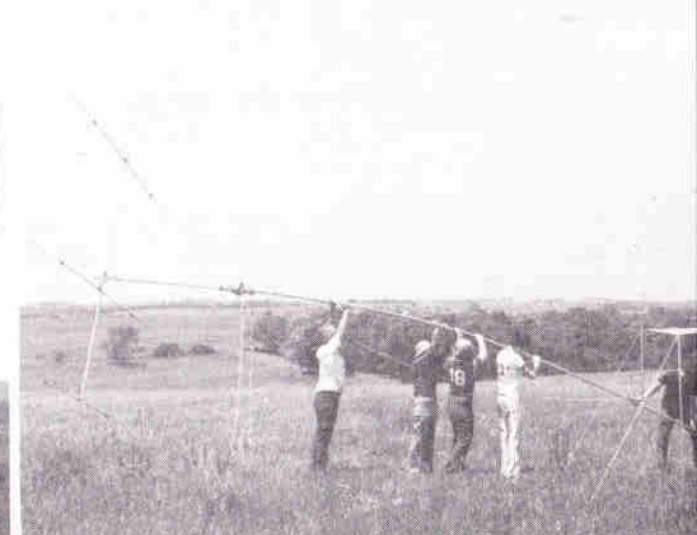




FIELD DAY 1975  
Photos by Russ Minks, WAØVEE







14 July 1975

Editor  
Ham Hum

The following might serve to remind some of our friends of the requirements of the FCC.

Many operators are exceeding, although not violating, FCC Regulations, Section 97.87, Station identification, which is quoted in part.

#### 97.87 Station identification

(a) An amateur station shall be identified by the transmission of its call sign at the beginning and end of each single transmission or exchange of transmissions and at intervals not to exceed 10 minutes during any single transmission or exchange of transmissions of more than 10 minutes duration. Additionally, at the end of an exchange of telegraphy (other than teleprinter) or telephone transmissions between amateur stations, the call sign (or the generally accepted network identifier) shall be given for the station, or for at least one of the group of stations, with which communications are established.

(a) (2) When identifying by telephony, immediately after the call

sign, transmit the word "portable" or "mobile," as appropriate, followed by the number of the call sign area in which the station is being operated.

Comment: In effect, these paragraphs do not require an operator to identify the station to whom he is talking as "portable" or mobile." We can save air time on the repeater by cutting down on the number of "idents" and make them properly when required.

Bill, WAØZUR  
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### NEW ROSTER COMMENTS

Have you noticed? The new membership list contains an alphabetized listing of calls in the back. A much needed improvement. Thanks to Dick, WØYZV, and his most helpful people.

Bill Leatherwood, WAØZUR  
\* \* \*

I wish to commend those responsible for the outstanding construction of our ARC membership roster dated June 1975.

Art Gaeth, WØFQB  
\*\*\*\*\*

### QST FM BIBLIOGRAPHY — By Dick, KØIDJ (Continued from May Ham Hum)

#### 1971

- Blakeslee, "Receiving FM," in 4 parts, January thru April.  
DeMaw, "An FM Pip-Squeak for 2 Meters," (an xmtr), March.  
Tech. Topics, "The RCA 2N5995 and 2N5996," March.  
Hattaway & Belcher, "A State-of-the-Art 2-Meter Preamplifier," April.  
"An FM Listener's Potpourri," May.  
Schleicher, "Putting a 'Spark Plug' on 2 Meters," June.  
Blakeslee, "Converting the GE MTS Progress Line Xcvr for Amateur Service," June.  
H & K, "Using the Touch-Tone Pad," June.



DeMaw, "The 2-Meter FM Pip-Squeak," (a rcvr), July.  
Bertini, "A Tunable 440-MHz FM Receiver," July.  
Hervey, "Repeater-Frequency Standardization," (Tech. Corresp.), July.  
DeMaw, "FM Pip-Squeak MK II," August.  
Clement, "Using the Motorola TU-110 Series Transmitters on 420 MHz," September.  
McCoy, "Low-Cost Hardware for 2-Meter FM Recept.," September.  
Blakeslee, "AC-Operated Regulated DC Power Supplies for Transistorized Rigs," November.  
DeMaw, "Some Thoughts about 220-MHz Operation," December.

## 1972

McMullen, "An Easy Road to 220 MHz," January.  
Lowols, "The Simulator--A new Approach to Repeater Inputs," January.  
Rinaudo, "A 144-MHz Amplifier Using the 8874," January.  
Fury, "A Simple Sweep Generator for FM Receiver Alignment," January.  
H & K, "Mounting a 2-Meter 5/8 Wavelength Antenna on a VW Fastback," January.  
DeMaw, "A New Face for the Carfone FM Rig," February.  
McCoy, "Converting the Pip-Squeak to 220 MHz," February.  
Myers, "A Dual-Voltage Medium-Current Power Supply for Repeaters," March.  
Blakeslee, "Double Standards," (FM Freq. Standard), April.  
McMullen, "The Line Sampler," April.  
G & G, "A 10-Element Yagi for 220 MHz," April.  
DeMaw & Wilson, "A High-Perform. Tunable FM Rcvr," April.  
Knadie, "A Strip-Line KW Amp. for 432 MHz," 2 pts, April and May.  
DeMaw, "Some Practical Aspects of VXO Design," May.  
Hejhall, "Some 2-Meter Solid-state RF Power Amp. Cts," May.  
Mason, "Towards a National Plan for 2-Mtr. FM Channels," May.  
McMullen, "450 cc of New Front End for Your FM Receiver," (220-MHz), June.  
Blakeslee, "Notes on the Am. Strn. Cntr.," (counts to 250 MHz), June.  
Tech. Topics, "Time, IC Controlled," (Rptr. Timer), June.  
Moler, "Taking Out the 2-Meter Garbage," June.  
"ARRL Proposed Band Plans for 220 and 420 MHz," June.  
DeMaw, "Repeater Preamp," July.  
Bilodeau, "A Homemade Duplexer for 2-Meter Rptrs," July.  
DeMaw, "Pip-Squeak Gets Smaller," September.



## 1973

- Bertini & Van Hooft, "Frequency Synthesis—A Practical Approach to 2 meters," June, July, September (Feedback).  
New Apparatus, "Monolithic Filters for the FM-Rcvr. Builder," May.  
Davitt, "An FM Adapter for 2 Meter AM Xmtrs," July.  
Tech. Topics, "Freq. Stability & the MK-II Pip-Squeak," January.  
Tech. Topics, "An Efficient 2M Amp," Feb, June (Feedback).  
Richardson, "KW Amp for 6 & 2 meters," June.  
FM Rptr. News, "Band Plans," July.  
Dorbuck, "Calculating Vertical Pattern of Repeater Antennas," April.  
Hints & Kinks, "Tensioning Device for VHF Tuning Mech," August.  
Cupp & Oneske, "The Rochester VHF Vonverters," August.

## RECENT EQUIPMENT

- Inoue FDFM-2, November, 1969.  
Lafayette 99-35313L FM Receiver, March, 1970.  
Allied A-2587 FM Receiver, March, 1970.  
Varitronics-Inoue IC-2F FM Transceiver, January, 1971.  
Johnson 504 and 540 2-Meter Transceivers, June, 1971.  
Regency Electronics HR-2 Transceiver, August, 1971.  
Drake ML-2 Marker Luxury FM Transceiver, September, 1971.  
Simpson Model A FM Transceiver, October, 1971.  
Hallicrafters HC-100 2-Meter FM Transceiver, November, 1971.  
Gladding 25 FM Transceiver, December, 1971.  
Sonar 2307 Transistorized Portable Radiotelephone, March, 1972.  
The Comcraft CTR-144 2-Meter Transceiver, May, 1972.  
Inuoe Icom IC-21 2M FM Transceiver, February, 1973.  
Standards' Model 5R-C146 FM Transceiver, March, 1973.  
Clegg FM-27B Transceiver, May, 1973.  
Henry Radio Tempo CL-146 & CL-220 FM Xcvrs, May, 1973.  
Regency Electronics HR2S & HR2MS FM Scvrs, June, 1973.  
Heath HA-202 2M FM Amplifier, August, 1973.  
UHF FM Transceivers, September, 1973.  
GLB Electronics Model 400B Channelyzer, October, 1973.  
SBE Linear Systems SB450 UHF/FM Transceiver, November, 1973.

## NOTE:

For additional information about FM and repeaters see The Radio Amateur's Handbook 72 edition Ch. 10 Portable and emergency equipment and Ch. 14 FM and Repeaters. In the 3rd edition of the VHF Manual June 72 see Ch. FM-Theory and Techniques, Ch. 11 FM Transmitters, receivers and accessories, Ch. 12 Repeaters Theory And Practice. Also see ARRL's Repeater book.

de PHD News, No. Missouri

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## HAM HUM SWAP

- FOR SALE:** Hammarlund HQ129X general coverage rcvr, built in xtal calibrator, in excellent condx - \$95.00.  
Vibroplex "champion bug" one year old - \$17.50.  
Joe, KØKES; phone 339-7865 evenings.
- WANTED:** Cheap 2 mtr fm rig with AC supply.  
Joe, KØKES; phone 339-7865 evenings.
- FOR SALE:** Drake 3-C Receiver; Q-Mult. Speaker; Drake 2-NT Transmitter; Hy-Gain 18AVQ Ver. Antenna.  
Don McMullen, WNØMUC; phone 895-2178
- TRADE:** Have new Collins 30L1 - \$750.00; new 312B-4 - \$350.00; all equipment bought 1975. Trade for nice TS520 101E or Drake.  
Dr. Coy Bird, Route 5, Box 101 Dial St., Kannapolis, N. C. 28081
- FOR SALE:** Heath HA-201 2 meter RM amp; Antenna rotor-base only T.V.type for parts; WRL Galaxie P.S.-for parts. Make offer. Need money for Amp. Thanks!  
Charles Michel, KØQVL; 8720 Charles Street, Omaha, NE 68114; phone 391-3782.
- FOR SALE:** Larsen antennas: 6M 2M 440 mobile; 2M 440 groundplane 5/8 (base); magnetic and gutter mounts also available. (Business freqs too.)  
John Gebuhr, WBØCMC; phone 553-6414
- FOR SALE:** Cartrivision color video tape recorder (same as sold by Olson Radio) - \$200.00;  
TV camera for recorder (works fb for slo scan) - \$130.00. Also have video tapes manuals and spare parts for cartrivision system.  
Mike Trimble (ex-KØAVE), 5154 Roeder Rd.,  
San Jose, CA 95111; evenings (408) 227-6330

\*\*\*\*\*

A gangling young man went to the county clerk's office and asked for marriage license.

"Where's the bride elect?" asked the clerk.

"What d'ya mean bride elect?" said the young man. "There was no election. She appointed herself."

*Good Reading for Everyone*

\*\*\*\*\*



# Hobby Industry

Kenwood's  
QR-666... world  
listening at its best

\$ 295.00



This superb new solid state communications receiver represents the last word in state-of-the-art technology.



KENWOOD HAS REVERSED THE TREND!!! NOW THERE IS A GENERAL COVERAGE RECEIVER OF GOOD QUALITY--- AT A LOW, REASONABLE PRICE.

THE QR-666 IS A FULLY SOLID-STATE COMMUNICATIONS RECEIVER. IT RECEIVES AM/CW/SSB SIGNALS THROUGHOUT THE RANGE OF 170kHz \* TO 30MHz. (\*except 410/525kHz). IT WILL OPERATE FROM EITHER; 100/117/220/240VAC, 50/60Hz. (15 watts) OR 12VDC (13 watts) external power, OR 12VDC INTERNAL BATTERY POWER (8 'D' batteries not included). IT IS ATTRACTIVELY PACKAGED IN A CABINET THAT IS (WHD) 14 1/2 x 6 1/2 x 12 1/2". NET weight is 16 1/2 LB.

OPERATING FEATURES INCLUDE: BANDSPREAD DIAL (HAMBAND 80/10M CALIBRATION); 500kHz CALIBRATOR; USB/LSB VARIABLE BFO; AM NOISE LIMITER; ANT. TRIMMER; HEADPHONE JACK; SO-239 Ant. connector; 2' TELESCOPING WHIP; BUILT-IN SPEAKER. THE CIRCUITRY HAS A TUNED RF STAGE, DOUBLE CONVERSION 18/30MHz AND SINGLE CONVERSION BELOW, TWO MECHANICAL FILTERS, PLUS PANEL SELECT CERAMIC FILTER. AVERAGE SENSITIVITY (10DB S/N) IS: (AM-2.63uv) (SSB-1.76uv) Provisions for FM adaptor (88/108MHz) available in the future

HOBBY INDUSTRY, 16TH & AVE. 'G', Council Bluffs, Ia. 51501  
MAIL TO BOX 864, PH. 323-0142, NOON/5PM, TUES/SAT.

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THURS..NOON TO 8 PM & SAT..9 AM TO 5 PM.