

# HAM HUM

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June 1976

#### NEXT MEETING

WHEN:

FRIDAY, June 11, 1976

TIME:

7:30 P.M.

WHERE:

COMMUNICATIONS WORKERS OF AMERICA

1920 South 44th Street, Omaha, NE

(Ground floor entrance - plenty of parking.)

PROGRAM:

T. RON LUSTER, Chief Instructor at Radio Engineering Institute, will speak on the use of test equipment, basic VTVM, signal generator, and scope. Also, how to get measurements and what measurements should mean to you in determining both quality of operation and for trouble shooting.

This will be followed by a question and answer period so remember the question you have long wondered about. Here's your chance to get the answer.

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VISITORS WELCOME — REFRESHMENTS — EYEBALL QSOs

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

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was taken.

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AK-SAR-BEN AMATEUR RADIO CLUB, INC.

Published by

#### Deadline for July issue is June 18th

New member initiation fee Quarterly for balance of ye	\$1.00
Regular member	\$2.00
Regular member and XYL	
Student member	

#### APPRECIATION NOTE

Student member . . . . . . . . . . . . . . . 3.50

(due and payable each Jan, 1)

I wish to express my appreciation and gratitude to the Ak-Sar-Ben Amateur Radio Club, Inc.; Bob, WAØDHU: Steve, WAØGQG; Irene, WNØMPC; Lyman, WØAUH; Phil, WØSX; and John, WBØCMC, for all the help and understanding they gave to me, thus making it possible to pass my test for General.

> Tom Mulick, WNØKFZ \*\*\*\*\*\*\*\*

#### RECENT CONTRIBUTORS

Ham Hum Postage Hollis S. Banning Joseph M. McNulty

Repeater 34/94 Melvin D. Amick, WBØRTD William L. Gravell

Thanks to each of you! \*\*\*\*\*\*

## 1976 MIDWEST DIVISION CONVENTION

The 1976 ARRL Midwest Division Convention will have as its Saturday banquet speaker Mr. Armond Noble, W6AJY. He is the publisher of "World Radio News," the monthly newspaper on amateur radio, published in Sacramento, California,

Mr. Noble will stimulate you with his question-"Which direction will you take amateur radio?" We are sure this will be the icing on the cake that is presented to the Midwest Division on October 8, 9, and 10 this year.

"World Radio News" will also have an exhibitor's booth where you can meet Armond personally.

Next month's Ham Hum will have registration blanks included. Ple support your convention and pre-register. \*\*\*\*\*\*\*\*

Mention Convention

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## MAY MEETING By-Tom Thiessen, KØPQR

The May meeting was held on the '4th at the National Guard Armory. his was the last meeting of the winter season to be held at the Armory. As last year, future summer meetings will be held at Communication Workers of America Union Hall just south of 44th and Center Streets. Again as we close the winter meetings, we wish to thank the personnel of the National Guard for use of their fine facility.

The meeting was called to order by President Ed. First order of business was the unanimous election of the following new members: Scott WBØSJE, William Gravell (no call), Bob WBØFZZ, Larry WNØSMR, Mike WBØSMC, Bill WØHWM, Joel WBØSIF, and Robert Wichman (no call). Congrats to all!

With obvious pride in his voice, President Ed announced that the Club had received an award from the Veterans of Foreign Wars outstanding volunteer work performed during and after the May 6, 1975 tornado. Then he laid the biggie on us! The Club has been selected as a citation winner in the 1976 awards program presented by the National Center for Voluntary Action. This citation again was for activities surrounding the May 6th tornado. The Club learned of the award through a letter received from George Romney, Chairman of the National Center for Voluntary Action. The citation was officially presented at an awards luncheon held Wednesday, May 19th, at the Omaha Holiday Inn. As Club Secretary, I believe I can speak for the entire membership, plus the outstate amateurs who helped earn these awards, in stating that they are deeply appreciated.

President Ed announced that friend Gary Keithley has stepped forward with his welding talents, and volunteered to rebuild the Club antenna trailer. Any members who were unfortunate enough to witness the close of last year's Field Day know how badly this is needed. Gary says he needs some help with the carpenter work. How about it guys? Anyone have some basic woodworking skills?

Program at the May meeting was presented by Eugene B. (Gene) Shaw of the Public Works Department, City of Omaha, Mr. Shaw gave a slide presentation that he has prepared on the Omaha tornado. I have seen some slick, professional slide presentations before, but this has to be one of the best. It certainly brought back some chilling memories for all of us. I wonder if we could convince Gene Shaw to join the Public Relations Committee! Thank you, Mr. and Mrs. Shaw, for attending our Club meeting and providing a most entertaining and enjoyable evening.

See you all next month. Don't forget the new meeting place.

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### MENTION CONVENTION



#### **AWARDS**

At the last meeting, President Ed Eichler told members about various citations the Club has received for the many projects in 1975. more particularly our activities as the result of the tornado. As he indicated, we were invited to attend a meeting of the Omaha Volunteer organization, a part of United Community Services, as we were nominated for a possible award. President Ed and several other Club members attended this meeting at which time Ed was suitably decorated with a ribbon indicating "Nominee" and all nominees received a Certificate of Recognition for volunteer service.

Since the Ak-Sar-Ben Amateur Radio Club, Inc. was selected for the award as the outstanding volunteer of our class, President Ed accepted a plaque in behalf of the Club.

In the picture above, the Certificate sur of Recognition is shown in the lower cit. Page 4 HAM HUM

right-hand corner below the "Nominee" ribbon and plaque is in upper right.

The Omaha Volunteers who are affiliated with the National organization of Volunteers called specific attention to and presented to President Ed The National Volunteer Award Citation 1975. This award is one of 83 in the United States for 1975 and carries with it the possibility of being selected as one of the top six in the nation.

The meeting was most inspiring as there were a number of outstanding volunteer awards given in various categories and the listing of activities and tremendous time spent individuals in helping others was most impressive.

It is good to be recognized and I am sure all Club members appreciate the citations received. As was pointed out UM June 1976 in the reading of our activities at this meeting, we had planned for and practiced emergency communications and since the tornado have had further practice and planning so as to be ready r the next emergency whatever or whenever it may be.

As we listened to the awards being presented to our Club, we could not help but think back and remember all the assistance given to us by hams and others from a 150 mile radius of Omaha.



ROMAN L. HRUSKA UNITED STATES SENATE

May 13, 1976

Mr. Edward G. Eichler, President Aksarben Amateur Radio Club Omaha, Nebraska 68102

Dear Mr. Eickler:

It has been brought to my attention that the Aksarben Amateur Radio Club has been selected to receive a citation in the 1975 National Volunteer Awards Program. My heartiest congratulations.

Volunteers are the backbone of this country. Groups like yours keep America running. The spirit of charity has been instilled in our system by individuals and groups unselfishly giving of their time.

Your accomplishments are in the best traditions of this American ideal. Good luck to you in the final competition next week.

With kind regards,

Sincerely,

Roman L. Hrus

U. S. Senator Nebraska

RLH: rms

#### FIELD DAY 1976

WHEN: Saturday and Sunday, June 26 and 27

(Begins at noon on Saturday and runs through Sunday afternoon.)

WHERE: BOYS TOWN - ENTRANCE on 144th & PACIFIC STREETS, Omah

(Look for windmill and grove of trees.)

The area is nicely shaded and good for horseshoes, badminton, volleyball or other family activities. Breakfast early Sunday morning and pot luck picnic Sunday afternoon.

Field Day Co-Chairmen are Ray — wi Kydney, WAØWOT, and Rick who Stansbury, WAØROP. They are Li making a lot of plans for an this y

outstanding Field Day. Contact them at 453-2845 or 572-1483 and offer your assistance for a lot of fun and good DXing on Field Day.

Prizes for best Field Day operators

– winners will be determined by those
who participate in Field Day.

Lincoln is out to take first place this year. Let's compete with them!

EDOM ODLIV

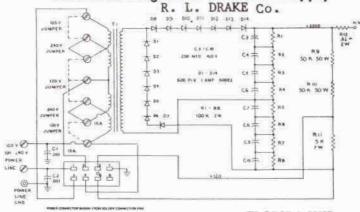
# FROM 9DUV

In the last issue of Ham Hum, Jan Sinram (XYL of WBØBOR) wanted old tubes. I have one old tube I had in 1922 and with it and batteries (Burgess) I got eastern coast regular but hate to let go of it.

(Ed. Note: This is a Van Dyke radio tube VX199-4 prong. You are right, Hollis, this is too valuable of an antique for our purpose at the Convention. Hang right on to it! Thanks for your comments and for your contribution to Ham Hum.)

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Schematic Diagram L-4PS Power Supply



FLORIDA SKIP

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HAM HUM

#### ADDITIONS TO ROSTER

Scott Allen, WBØSJE 1335 South 134th Street Omaha, Nebraska 68144 ne: 333-3353

William L. Gravell 2914 Bonnie Street Omaha, Nebraska 68147 Phone: 731-1918

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Michael C. (Mike) McPherson, WBØSMC 3209 Blue Ridge Drive Omaha, Nebraska 68147 Phone: 733-7680

William E. Olson, WØHWM 5319 Ida Street Omaha, Nebraska 68152 Phone: 572-7991

Joel T. Schneider, WBØSIF R. R. #3 LaPlatte Omaha, Nebraska 68123 Phone: 291-3978

Robert L. Wichman 904 South 25th Street aha, Nebraska 68105 Phone: 341-1340

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# MENTION CONVENTION

#### ARRL BULLETIN

ATTENTION all ARRL Affiliated Clubs: Amateurs of North America are asked to watch for transatlantic propagation on frequencies above 21 MHz during the spring and summer season of 1976. The North Altantic path was active on 21 and 28 MHz several times in summer, 1974 and 75, but the full potential of the E-layer mode was not realized because of lack of activity in many areas. There is no 50-MHz band in Europe, but crossband work to 21 or 28 MHz may be possible when the frequencies are open. A cw beacon near 50.1 MHz may be operated in France, but official permission has not been given. The chance of 2-meter transatlantic work seems remote, but tests and monitoring are encouraged. The European band is 144 to 146 MHz. Early daylight hours have been most productive on 28 MHz but evening work has been reported. European beacon stations between 28.16 and 28.195 MHz provide reliable evidence band conditions, particularly DLØIGI, 28.195, and GB3SX, 28.18 MHz. Please report any reception or two-way work to W1HDQ, ARRL Headquarters.

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#### HAM SLICES ---

When KN was officially adopted by the ARRL as a CW abbreviation, it was defined to mean "others keep out no breakers wanted." How odd it is that no equivalent designator is available for use during phone QSOs, where breakers are much more frequent (and obnoxious)!

de WØHKF

in GROUND WAVE

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# OBLIQUITIES OF JUDGEMENT HEARD ON TWO METER FM

By W2DNY in "The Gazorche" via "QST/WR2ABS"

Obliquities of judgement ensue from extrapolation (?). It is infelicitous to proffer as unequivocal a dogmatic judgement. There, now that that's clear, let's go on. I'm talking about stating as fact what is only opinion. Or, worse yet, repeating what someone else erringly said.

How many times have you heard, whenever the repeater squelch is opened and mostly noise is heard, "Sounds like the Rochester repeater is getting into our machine again." For starters, a repeater on standard channels can not get into any other repeater on standard channels. The Rochester repeater transmits on 146.88 MHz; what you are hearing in all probability, is a weak 146.28 MHz signal that is not quite making the machine. Granted, it might be a Rochester station working through the Rochester repeater. It's still a 146.28 signal that you're hearing and not a repeater signal. It might also be a 146.31 MHz signal from the Syracuse repeater. This "31" interference does not open our machine's squelch, but is heard as splatter on weak signals.

How about, "You sound like you're off frequency, OM." This invariably is followed by, "Have you any way of checking your frequency? I don't." Or by, "When did you check your frequency last?" How can one tell frequency just by listening? Our machine has a broad band receiver and I can get into it from my base station, approximately 20 air miles away,

anywhere from 146,265 to 146,30 MHz. That's -15 KHz to +20 KHz. I've often operated plus or minus 10 KHz for test purposes and no one was wiser. A weak signal could sound off frequency. Let's face it, trying make the machine with a HT using a "rubber-ducky" from inside a car or from down in your basement is a no-no, especially with the antenna at an angle or even horizontal, and may sound off frequency. Incidentally, I've measured the gain of a "ducky" and got a figure of minus 6 db over a quarter-wave. That's why I call it a "rubber ducky attenuator" instead of a rubber ducky antenna. The same situation applies to a piece of wire "stuck into the back of the set." All you can say is that you sound noisy and/or distorted, but certainly not on or off frequency. Some stations over-deviate and may squelch-clip your receiver and distort. Try asking him to back off from the mike instead of saying he sounds off frequency.

Then there are those who, after being told that they are full quieting, using 1 watt will ask, "let me flip up to 10 watts (or whatever his hi-power is) and tell me how it sounds." If one is full quieting with 1 watt or 1/10 of a watt, 10 watts or 100 watts or 1000 watts can't sound any better. Full quieting is the best there is.

How many times have you heard someone say, "Wait 'til I turn my beam towards you, you're kinda noisy." Remember, you're not listering to his signal, but to the repeate signal. Head your beam towards the repeater and "lock on."

I've heard every kind of interference on 2 meters but inter-mod (intermodulation). Inter-mod inter-

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ference is rare. I haven't heard any in the last 40 years. Most every other type of interference is common, e.g., adjacent channel, harmonic, overload, shock excite, metal to metal contact ing etc. to mention only a few

shock excite, metal to metal contact ing, etc., to mention only a few, and it's called inter-mod by many. Inter-mod may come about as follows: If you have a bad joint (constituting a non-linear conductor) anywhere in your rf system (from antenna to detector) and an interfering signal is also present at this junction (with enough amplitude) to result in a modulation product matching the pass-band, this may be heard as inter-modulation interference. With this many prerequisite variables, little wonder that it is rare.

Another fallacy is accusing the other station of being noisy into the machine when it is you that are receiving the machine noisily. One should be especially careful when a mobile is talking to a base. The base knows if he should be full quieting into the machine, and probably is, but the mobile may not.

Just as bad is accusing one of having low deviation if your receiver is wide-band. A narrow band station (plus or minus 5 KHz) will and should sound low on deviation if you're using a wideband receiver (plus or minus 15 KHz).

Most of these anomalies would not exist if we would not rely on the repeater to do all the heavy work. Most of the time our equipment is not ing it's fair share of the work. Commercial mobile antennas (Larsen, ASP, Hy-Gain, etc.) are intended to be pruned. This can make all the difference in the world. Get your VSWR down, down, down. Is your June 1976

transmitter putting out at optimum or just putting out? How about receiver sensitivity? Do you need a preamp? Each of us should do more to get the most out of 2 meter FM.

de RA RA Rag

ANTENNA INSTALLATION — The club has been granted permission to install a two-meter station at the National Weather Service at the Grand Island Airport. Plans are in progress to use one of the two Hy-gain antennas that belong to the club. The weather service has asked for the installation to provide a link with Omaha through the Lincoln repeater. The goal is to have the installation complete and in use by April 1.

de Grand Island, NE Radio Society

# MENTION CONVENTION



"Who put the spray starch where Rover's flea repellent used to be?"

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#### **GUEST EDITORIAL**

#### TUNER-UPPERS AND DUMMY LOADS By Art Monsees, K4QG

Several of my radio amateur friends are getting all steamed up about the tuner-uppers on our net frequencies. This, generally, is most in evidence just before the start of one of our scheduled nets. As a result, a terrific little tempest has been brewing about these unscrupulous individuals...and, unfortunately, these culprits are difficult to identify unless they openly admit their parts! Yet, on the other hand, this apparent malice and supposed wilful interference might be a matter of interpretation. In some cases, what may appear to be intentional interference may. reality, be unintentional on the part of the tuner-upper! The tuner-upper might, inadvertently, tune up his equipment, not realizing that his transceiver has been resting on a net frequency and was the cause of interference.

Many of our amateurs still do not use dummy loads for tune-up purposes. This, of course, is not in accordance with the latest state of the art. Of course, the initiated realize that unmodulated and unidentified carriers are in direct violation of Regulations 97.93 and 97.123, respectively, of the Federal Communications Commission.

And to get right down to it, it would be so easy to tune the output power of the transceiver into a dummy load. The operator could take his time in tuning, making final adjustments, even striving for proper waveform pattern. To me, there is a certain Page 10

amount of satisfaction in knowing that my equipment is operating properly and that no interference to my fellow amateur is being generated by my station during initial tune-up.

In the first place, a dummy ly need not be unduly expensive a... really should be a part of each station's complement of equipment. All radio amateurs, worthy of the name, should use dummy loads during initial tune-ups. The ARRL Handbook describes the construction of inexpensive and easy-to-build dummy loads.

For Heaven's sake, fellows, let's solve this problem among ourselves. Let's use more dummy loads and strive for less dummies on our net frequencies.

de Florida Skip

MORE EDITORIAL — The second meeting in February generated some interesting conversation. One subject was the use of "QRZ THE FREQUENCY" on 2-meters. It is also showing up on the HF bands! I expounded a bit, with the thrust of my comment being that "if it works, what's wrong with it?"

I still feel that way because Amateur Radio is a volunteer thing. We're all Amateur Radio Ops because we want to be. The incorrect use of a CW signal on a voice band is really an insignificant thing when one looks at "the big picture." Those in traffic nets must of necessity be more preciming their use of the various communitions signals; but even on phone traffic nets one hears "Q" signals used, but with the correct meaning. Even though I condone the use of "QRZ THE

in (Continued at bottom of next page)
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# HAM HUM SWAP

FOR SALE: Drake Line T4X and R4A; AC3 Power Supply and Speaker.

Perfect shape - \$625.00.

TA33 Beam, damaged reflector element. Still in use - \$50.00.

W2AU Balun - \$7.50.

Jay McAleer, phone 339-3448

WANTED: Novice crystals - Radio Engineering Amateur Radio Club.

Contact WBØCMC; phone 553-6414 or 341-7964

FOR SALE: Drake TR4C, Noise Blanker, AC4, MS4, and MN2000 (Total list

\$1065.00), 6 mos. old-\$700.00.

Changing QTH, must sell. John Draus, WØEKB

Office: 422-0500; Home: 571-4207

FOR SALE: Heath DX-100. Ideal CW/AM rig - works. Call WØAUH after

June 14th for details and price.

Lyman Longstreth, WAØAUH, 6127 Pinkney St.,

Omaha, NE 68104; phone 553-6810

#### (Continued from Page 10)

FREQUENCY" as a rather small thing, I still have a question:

"WHAT EVER HAPPENED TO

The letters "CQ" are an invitation from one amateur to another, whoever he may be, to become engaged in conversation. Those letters mean the same on CW as on voice or RTTY—and I suppose on facsimile.

I therefore most humbly suggest that we as Amateur Radio Operators follow the example of many successful orts teams: "Return to basics."

One may call "CQ FIFTY-TWO,"
or "CQ NINETY-FOUR." The particular frequency to which the caller will
be listening can be stated. That will be
especially helpful to those who have
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scanners and really do want to talk with someone — if they know what frequency to use.

End of sermon, de Art, W5KR, Editor

de "OFF RESONANCE"

You may have heard about the sailor traveling home on a bus in his uniform and he sat down by a local citizen. The citizen said "In the Navy, eh." The sailor said "Yep, I have been around the world." The citizen said "You must know a lot about Geography." The sailor said "We stopped there once but I had the duty and couldn't go ashore."

de K6MEP Keyer

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