

# HAM HUN

AK-SAR-BEN  
RADIO CLUB  
INC.

WØEQU

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# Ham Hum

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

EDITORS  
Al McMillan, WØJJK  
Dick Eilers, WØYZV

## NEXT MEETING JULY 8

The next meeting of the Ak-Sar-Ben Radio Club, Inc. will be held at the 4-H Building at Ak-Sar-Ben Field on July 8th at 8:00 P.M. After a short business meeting the program will consist of a discussion of the new long distance dialing by a representative of the Telephone Company. As you have been informed, your telephone number will change in September of this year to an all numbers, leaving out the letter exchanges. At the time of this writing we do not have the name of the representative but we hope to have it in time to get it in before we go to press. John Droscher has been working on this program for some time and it should prove of great interest. So do come and bring any questions you may have with you as this is the opportunity to get first-hand information.

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## POT LUCK SUPPER

Unfortunately this editor was not able to attend the pot luck supper so the reports have come from hearsay. It seems that on occasion it is necessary to let the occupation interfere with the hobby which was the situation last month. Those I have talked to, however, have told me that it was a very good meeting and they enjoyed it very much. Also that they had plenty to eat and saw a lot of friends at the meeting. Hope you all enjoyed it as much as these that I have talked to.

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We heard a rumor the other day that the 10 meter mobile bunch are about to converge on the Zesto Ice Cream Parlor. Whoever started this rum suggested that Lou, WØVLI, might know something about it. Maybe we can find out at the next meeting.

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## NEW MAJOR

The Air Force has found out something we knew all along - they found out that our (st president, Dave Hollander, was still a captain and hastened to make him a major. So come to the next meeting and see what a new major looks like. I understand he has a pair of oak-leaves now to wear on his sport shirts. Don't expect anything from him, however, as it is our understanding he has already used up any increase in pay that comes with this new rank buying drinks for those on the base and no doubt there is none left for us civilians. Pearl says that what he hasn't used up she'll take care of anyway. Our congratulations to you, Dave!

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## SHORT ISSUE

Due to the summer doldrums we do not have our ham of the month this month. It will be continued in the next issue.

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## NEED A LOG?

There will be available at the next club meeting a limited number of logs for the fixed (tion at 50¢ each and for the mobile station at 25¢ each. These are 50-page logs, spiral bound cover front and back.

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## HAM MAGS

Bring your notice of QST and CQ renewal and the Club secretary will renew it for you. It costs you the same price and the Club gets a little handling fee which adds just that much to the treasury.

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I am definitely interested in civil defense communications (or just emergency communications). I am willing to help where ever I might be needed.

My present equipment consists of a KWMI (fixed). I am hoping to acquire six meter beam in the not too distant future.

Bob Fielder, KØVFB  
521 N. Monroe St.  
Papillion, Nebr.

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FOR SALE: Alprodco 30 ft. telescoping pole - \$4.00; Hy-Gain 80-10 M. trap doublet - \$7.50.

KØBHT - TE 1175

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Dear Editor:

Would appreciate if you would put the following ad in Ham Hum. If there is any charge please send me the bill.

For Sale: 14-AV Vertical \$15 and Vibroplex "Blue Racer" (Standard) \$15.

Bill Pascale, KØRIG  
3634 South 24th Street  
OR 3659

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Our thanks to the Convair-Pomona Ham Club Paper "The Modulator" for

#### IDEAS de W6QLB

A couple of months ago the "What's New" column discussed a small, transistorized, signal generator probe. From the number of comments and phone calls received it was evident that there are unbelievers in our midst. It really is a little hard to believe that a couple of chunks of semi-conductor can replace that fancy high priced receiver alignment and troubleshooting gear you already own but here are the facts.

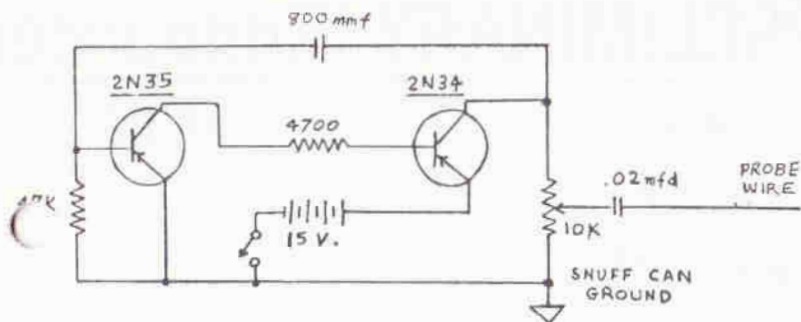
Signal injection testing is an old and honorable method of receiver troubleshooting, as is a method to be discussed later, signal tracing. Using the signal injection method of testing, one hooks up a signal generator (audio, IF, or RF) and working backward from the audio stage seeks out the troubled circuit. The method works well but 90% of the required time is spent setting and resetting the signal generator to the right frequency and relocating test leads.

With the advent of the transistor, modern science now comes to the rescue. The gadget described at the top of page 5, while slightly different from the commercial model described in past issues, is the same sort of

thing in a form that you can build. It has no formal name but it could be called a "signal squirt gun" because it has only one outlet and it has a "trigger" (on-off switch to you). Of course, for utility, it also has an attenuator.

As for theory of operation, here goes a try. The "gadget" makes an audio tone (exact frequency is unimportant) (please relax) that is rich in harmonic content. In fact it is so rich in harmonics that it puts out useable ones up above the BC band. Like people, radio and audio circuits "hear" and little else. If you stick the probe into an audio stage you will get audio. If you place it on an IF grid you will get 50 kc, 85 kc, 262 kc, 455 kc, or whatever you want (if the stage is good). If you place it on the antenna terminals you will receive whatever frequency the receiver is tuned to. Of course, RF signals are modulated by the audio tone but after all, that is what you want, isn't it.

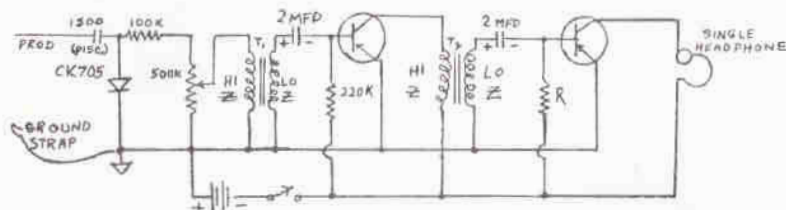
The "gadget" can be built in a snuff can (that should stop you) and the probe can be made from piano wire clad with spaghetti except for the very tip. If you use the right kind of piano wire it will fit into a "tip jack." GO MAN, GO.....



There are times when the "signal injection" form of troubleshooting isn't the best way. At these times we usually turn to it's counterpart, "signal tracing." Here, some form of demodulator is used to probe for the existing signal as it winds its way through a receiver. Signal tracing is usually chosen when the serviceman suspects trouble towards the RF end of the set rather than the AF end. With signal tracing it is customary to work from the antenna connector forward rather than from the speaker backward.

Another transistorized

"gadget" (shown below) can serve as a counterpart for the "signal squirt gun" just described. This unit can also be built into a snuff can (by now you should have a source of them) or it may be built into a round "probe-like" shape for handling convenience. This time it is best to use a ground connection in the form of a piece of "braid" with an alligator clip on the end. The "prod" can be made of piano wire covered with plastic sleeving out to the tip (leave the tip bare, of course).

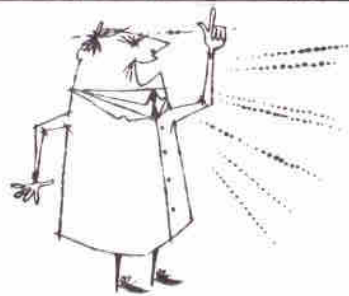


Input condenser = 1500 mmfd  
 disc ceramic (600 volts or higher)  
 Transistors = GE 2N107 or  
 RAYTHEON CK722  
 Battery = 2.69 volt (Mallory  
 TR-132)  
 T1 & T2 = Interstage transistor  
 transformers UTC # SO-3 or Argoone  
 # AR-129.

NOTE: The base resistor for the final stage is chosen after the unit is built and ready for test. Its exact value will be in the range from 100K to 330K and will depend somewhat on the type of headphones used. Select the value that will give the best compromise between overall gain and minimum distortion.

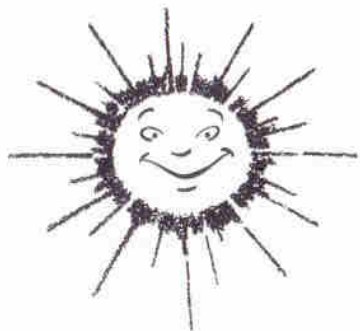
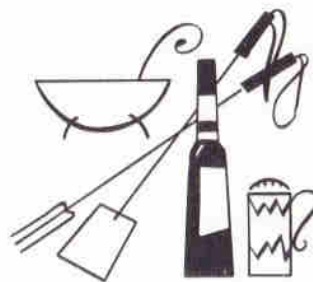
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# PRELIMINARY Announcement - SEPTEMBER PICNIC



As there will be no Midwest Convention this year, we are expanding our regular annual picnic hoping that we will get quite a number of the out-of-town fellows in for a get-together and hamfest. So, mark the date on the calendar and give the information to your club members and plan to be here.

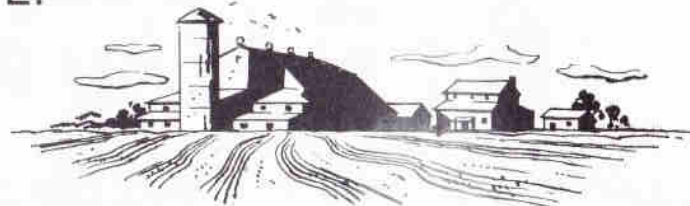
We furnish prizes, food, soft drinks and entertainment.



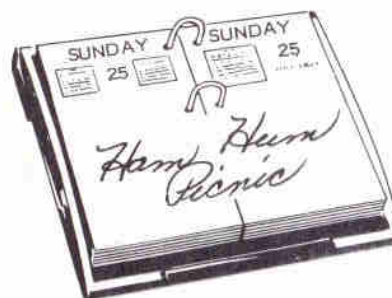
Mac, WQYVV, positively guarantees good weather. More details later.

## HERE'S THE DOPE:

PLACE:



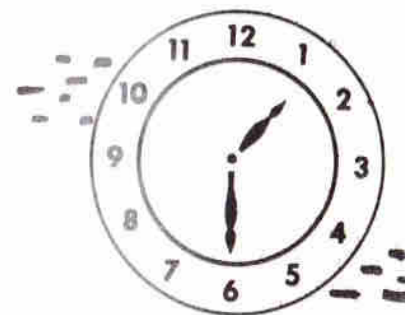
Dr. Ewing's BEAVERBROOK FARMS.  
(same place as last two years)



DATE: SEPTEMBER **25th**

TIME:

**1:30PM**



RICE:

Pre-registration price by September 15th - \$1.25.  
(Children below five free)

After September 15th - \$1.50.



Above is a picture of my rig that I'm offering for sale, which includes:

HQ 110 Receiver

Globe Scout TX 65B

Heath VF-1 VFO

D 104 Mike

1 Set Hy-Gain Trap (for all band Doublet)

Console - With fold down desk top and Aux 12" speaker. Console has a built-in 8" speaker.

I'm transferring overseas in the very near future and will accept any reasonable offer on this excellent outfit.

73's

Sgt. Don Pendry  
BE 2615 or BE 2100 Ext. 22170  
Room 310

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After almost 3 yrs. absence WØFQB/Ø appeared on 50 mcs with a Gonset G 50 using a temporary 1/4 verticle in his front room, and his first contact was with WØEQU/Ø at Field Day site, which is also a first as far as 50 mc. activity by FQB is concerned.

Art WØFQB

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Dear Editor:

OFFICIAL STATES CONFIRMED ON 6 METER PHONE FOR WØCQX IS 7.

Have built a "rock stable" VFO for 6, consisting of 9mc. vfo mixed with 41 mc. 3rd overtone oscillator for 50 mc. output. Am getting 20 volts of 50 mc. output thru the 6AK5 buffer amplifier.

ED. G.

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## DX News

Mac, YVV, got his long awaited XW8 card and also a KC6 Eastern Carolines confirmed. One day while mobiling the new Nebr. Interstate Mac was calling a local on schedule but the local didn't appear so Mac took a look below 25500 KC and heard a YN station in Nicaragua calling him. They had a very nice rag chew and the YN reported that Mac had the best mobile signal he had heard.

Bob Downing has been hearing some South American DX on 20 meters CW.

Larry KCK called your editor and told him that he had worked KG6ICD, Marcus Island on June 20 at 0658, frequency 14303 SSB. He was tuning 5 to 10KC down.

Danny at present HK0AA is back in business, 14293 SSB. It looks like the American boys would give the DX boys a break and not light on the transmitting frequency with rag chews CQ's and all the other junk. Tune first, boys. Danny is looking 5 to 10 KC low.

I just took a look at the Sweep Stakes report in the magazine and Nebraska is only presented by two stations doesn't look like the boys are doing very much in contests.

73,

Jerry

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### California Hams Use Two Meters Repeater Station In Mts. (De METRO MODULATOR - Toronto and OLF, Lockport, N.Y.)

Amateurs in the Los Angeles, California area are making use of a repeater station for DX contacts on 144 Mcs.

The repeater station is located on a mountain top overlooking the Los Angeles area and is in continual operation for the use of all of Los Angeles' many two meter enthusiasts. The station is owned and operated by a husband and wife team, both licensed amateurs who happen to have ideal mountain QTH.

The repeater consists of a receiver and transmitter operating on separate frequencies. A Los Angeles station for example, has only to call CQ on the receiver frequency and his CQ is heard and rebroadcast on the transmitter of the repeater station on a slightly different frequency. A station wishing to answer the CQ will come back on the repeater station's receiver frequency and have his transmission rebroadcast back to Los Angeles on the repeater's transmitter.

The repeater has a special licence from the FCC and will automatically identify itself by tone modulated code every ten minutes. Of course such a "party line" setup requires co-operation of all its users. It is said, however, that little



trouble is experienced in the sharing of the repeater and roundtables of ten to twenty stations are not uncommon.

It is claimed that the repeater station makes possible extended coverage for many miles both north and south of Los Angeles. The husband and wife that operate the repeater are rated as "tope" by local amateurs.

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**OFFICIAL BULLETIN NR 755  
FROM ARRL HEADQUARTERS  
WEST HARTFORD, CONN.  
JUNE 6, 1960: TO ALL RADIO  
AMATEURS BT**

The 1960 ARRL International DX Competition held over four week ends in February and March found many stations active. The following is a list of the highest claimed single op CW entries VP1JH 1,501,480 W3ECR 913,320 W3GRF 832,608 W8FGX 829,224 W4YHD 763,544 K2DCA 749,664 W3ALB 734,064 W3BES 745,875 KP4A00701,136 Others claiming over 600,000 W3DHM, W2AYJ, K2DGT, W1JYH and W9WNV. High multi op scores W3AOH 1,211,418 and W3MSK 1,204,641. High claimed single op phone scores include VP2DX 506,250 W1ONK 423,990 W3DHM 318,150 KP4AIU 279,488 W1PDF 276,774 ON4OC 244,288 W3ALB 222,855 W9EWC 216,656. Others claiming over 150,000 K2GXI, VP3HAG, YN4CB,

W2OKM, W9NZM, and W8NXF. High multi op phone includes W8NGO 238,572 and GB2SM 178,059. More high claimed scores in August QST. AR

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Dear Gang -

Thanks so much for sending Ham Hum enjoy it very much - will have a Eyeball QSP sometime this fall or winter - Have been on air with new call for sometime - WA6HWB - W6YW still going strong - 2 meters - KWMI. Hope to QSO some of the gang. Will send along some pictures soon. Again many thanks and my very best 73 to everyone.

Kindest personal regards,  
Harry R. Smith

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**OFFICIAL BULLETIN NR 756  
FROM ARRL HEADQUARTERS  
WEST HARTFORD, CONN.  
JUNE 16, 1960 TO ALL RADIO  
AMATEURS BT**

During the next few months FCC Field Offices will adopt new amateur exam procedure with separate answer sheet. Applicant will black in appropriate square to show his choice on the answer sheet which can then be mechanically graded. Diagram questions will become multiple choice also. See July QST for detailed story. AR

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# Dear Mabel,

(from Florida Skip)

Dear Mabel,

Is there any way to get my husband to cut down on his hamming? Every spare minute he gets is spent on the air or working on the rig.

Crystal Diode

Dear Crystal,

I will not answer this question for three reasons: (1) Hams are nice people and should be encouraged, (2) If your husband wasn't hamming in his spare time, being a man, he might be doing something worse. (3) If I knew an answer to this one I might try it myself.

Mabel

Dear Mabel,

My wife has never been what you would call real bright, but in recent weeks she is goofier than ever. What should I do with her?

Wondering

Dear Wondering,

Now you stop that, Clyde, I know your writing.

Mabel

Dear Gladys and Mabel,

I am interested in low-distortion modulation for clipped speech. I have found that most inexpensive modulation transformers have a rather poor low-

frequency response and when they are hit with a square wave in the range of 300-1000 cycles the results are not good. It isn't detrimental as far as unclipped speech is concerned, but does defeat the purpose of clipped speech since the modulation transformer alters the wave form and introduces sharp peaks with low energy content. I know I could buy a transformer with excellent low-frequency response but with the power I'm running it would be pretty expensive. What do think of using a negative-feedback system instead?

Technician

Dear Technician,

Uh, would you mind repeating the question?

Mabel

Dear Mabel,

My wife and her mother insist that I'm going to the opera with them. They are wearing formal dresses but I don't own a tux or dinner jacket. What should I wear?

Guy Wire

Dear Guy,

Your foam padded headset.

Mabel

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OMAHA, NEBRASKA

NEXT MEETING  
AK-SAR-BEN 4-H BUILDING  
AK-SAR-BEN FIELD  
JULY 8, 1960  
8:00 P. M. SHARP