



H A M H U M

AK-SAR-BEN
RADIO CLUB
INC.

WØEQU

September 1956 P.O. Box 626 Omaha 1, Nebr. Vol. VI No. 9

KØBHQ

23 Evans St. Omaha 4, Nebr

PSE QSL TO 1624 N. 35 — OMAHA 10, NEBR.

WØZCP

MI & THX PER _____ ON _____
UR SIGS HR. IN OMAHA WERE _____
RIG HERE: RCVR, _____ ANT _____
XMTS _____



OMAHA 12, NEBR.

2521 4th St.



OMAHA 6, NEBRASKA, U.S.A.
1218 South 78th Ave.

WØYZV

OMAHA, NEBRASKA

U.S.A.



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OAKLAND, IOWA
322 MAYES STREET

WØYDV

RADIO AT _____ CONFIRMING QSO _____
CST UR _____ 100 WIGS WST _____
KING 500-3-200W. INF. RCVR: 5X-100 _____
JOHN W. FERREL _____

KØBSV

Ham Hum

Published by
AK-SAR-BEN RADIO CLUB INC.
Post Office Box 626
Omaha 1, Nebraska

Editor---Art Stadler WØQMD

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. News and information of interest to amateur radio is gladly accepted. All items must be received at least two weeks prior to the second Friday of each month for inclusion in the current month issue. Submit all correspondence to P. O. Box 626, Omaha, Nebr.

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Dick Eilers, WØYZV, President
Bob Stratbucker, WØHZE, Vice Pres.
Curt Hicks, KØAMM, Secretary
Dick Nystrom, WØUKQ, Treasurer

Ak-Sar-Ben Radio Club memberships are open to all persons having an interest in amateur radio and its activities. Dues are 50¢ per month or \$5.00 per year when paid in advance. Students rate is 25¢ per month or \$2.50 per year. Initiation fee \$1.00. Special rate for OM-XYL, \$6.50 payable annually. Meetings are held on the second Friday of each month.

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* Dick Nystrom, WØUKQ, Treasurer
* Curt Hicks, KØAMM, Secretary
Art Stadler, WØQMD, Past President

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EDITORIAL

From time to time there is varied discussion about the purpose, activity, and the programs of our Club.

Each person that enters these discussions has a good point in his suggestions and recommendations. Their ideas are factual, sincere, and, for sure, must be offered in a constructive manner, for the ideas presented are those that they would like to have executed. There have been sour notes of disapproval of some of our programs from the newcomers in the HAM fraternity; some of the "high power" boys have indicated, on occasion, that Club activities are not of sufficient interest for them, yet there is still that tried and true group that agree that while not all programs are of maximum interest to them, they enjoy the variation in programming, and get a broader overall benefit from the meeting presentations.

Putting it bluntly...the officers of your Club agree with the contentions of every member! It is just doggone rough trying to vary the programs and Club activities that will satisfy every member at the same time.

Let's take a minute to survey the situation and then perhaps you can give us your mental and physical support in solving this never ending problem.

First, we have to consider that in the Ak-Sar-Ben Radio Club we have approximately 125 members. Some of the members are newcomers to the hobby and their interests are no doubt wrapped up in learning the fundamentals, improving their code speed, and those matters of a technical nature within their scope of comprehension, the second group are those that have been active or interested in the hobby for a long time and are interested in amateur radio in the broad sense. These might include the experimenter or the technician group. The third and last classification includes those that have been real old timers, many of whom are running high power and have obtained the ultimate of gear plus a very broad knowledge of the whole deal.

Trying to arouse the enthusiasm of the entire group is no cinch! When your Board of Trustees gather in meeting each month to handle the business of the organization, at least 60% of

each meeting is devoted to programs for the forthcoming meetings in an attempt to vary the subjects, meet the wishes of the majority, and yet provide a program that is in keeping with the mutual interests of all concerned.

Reports have it that we cater to the "high power" crowd. If that is true, then we have been sadly missing the boat for the operators of the power houses have been conspicuous by their absence at too many meetings.

In one discussion we heard that a number of members are dropping because they do not get enough technical training at the Club meetings. This would be regrettable, for we need in ARC every Ham in this area.

Far be it, that the officers of ARC are infallible! We undoubtedly have made many errors and will make many more, but you can be assured that from each error that we have made, we have learned a lesson, recorded in our GG book for future reference in the hope that we do not make that same mistake the second time.

If you have an idea for a program, if you have access to equipment or persons that would lend to the interests of

our Club as a whole, then please come forward! You're the man we are looking for, and your suggestions will be measured, and given maximum attention, for it is the membership that your officers are attempting to serve.

Let's take one factor into consideration. ARC is your Club... You are the Club...You elect the officers...and through them you run the Club! To me...and only one man's opinion...We need a strong organization...an organization that will enable the Amateur Radio Operators of this area to fulfill their obligation of community service in a business-like, organized manner. Individually we are weak...collectively we can be strong and live up to the reputation developed by Amateur groups throughout the country.

Don't you get some satisfaction out of meeting with the other fellow once a month to swap chit-chat, dunk your donut in his coffee, or in other words, enjoy the sociability of your fellow hobbyist? Program or no program, the friendship and personal acquaintances gathered through Ham radio are priceless.

So...if you have a gripe, put it on the line to those that can

do something about the situation rather than stewing in your juice, and nothing happens. We have one of the best Clubs in the country and every one of us want to make it even stronger. We need the support of every member...can we count on you?

Listen!
Look!
Talk!
Argue!
Think!
then **VOTE**

How Sharp are You?

Many of the fellows around here were well intrigued by the problem which recently appeared in QST magazine. This problem required solving for a circuit which was used to control two lamps mounted in one box by two switches in another box. There were only two conductors between the two boxes and either or both of the lights could be turned on by operating the appropriate switch. The novel feature, which requires thought, is the use of but two conductors.

This reminds me of the time old Ed, just can't remember his call, popped one on me. I guess Ed had worked for the local street car company at one time. Those of you who were driving automobiles a few years back, in Omaha, will well remember the spine-chilling clanging of the bells on the big yellow monsters as they approached every motorist on

the streets. Those bells mounted up front of the cars were operated very simply with but one conductor. No ground return. I do remember Ed saying that they were built long before the days of radio, so there was no radio control.

I will give Ed a ring on the phone before the next issue of this fish wrapper goes to press and have the answer for you. Meanwhile "How was this accomplished, with but one conductor?"



"When do you expect your wife back?"

The Missing Black Board

At the last meeting I was horrified when I walked to the front of the room to say a few words about telegraph printing devices, better known as Teletype, and discovered that there was no black board. Later, that was complicated by the fact that I had but one cigarette in the pack. Hi

One point which I would like to make now, a point which is rather difficult to describe without a picture, is the similarity of CW and teletype signals. The one basic difference in the two types of transmission is that while the hand key connected to the CW transmitter is open between letters, the contacts of the teletype keyboard are closed. We would transmit then, a series of opens of the contacts via teletype while with CW we transmit a series of closes of the key contacts.

Figure one shows the difference between the letters "A" and "B" as sent by teletype and CW.

Since the contacts of a teletype keyboard are closed when there is no sending, the contacts are opened momentarily

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at the beginning of each letter sent. The contacts are closed again at the end of each letter. They remain closed for a short interval between letters even if the letters are sent one following the other.

Radio teletype signals, when heard with the BFO on, consists of two tones. One tone represents the closed contact condition and the other tone the open contact condition. The tones will be approximately 850 cycles apart in frequency.

The extra equipment needed to receive radio teletype signals in addition to the receiver, consists of a filter arrangement to separate the two frequencies and to rectify the tones into direct current. The direct current is used to operate the receiving magnets of the teletype machine.

We will try, from time to time, to publish more info. on RTTY and include some simple circuits which may be easily built. RTTY is another of many types of transmission used by amateurs and will prove a very interesting project for any one interested in home made equipment.

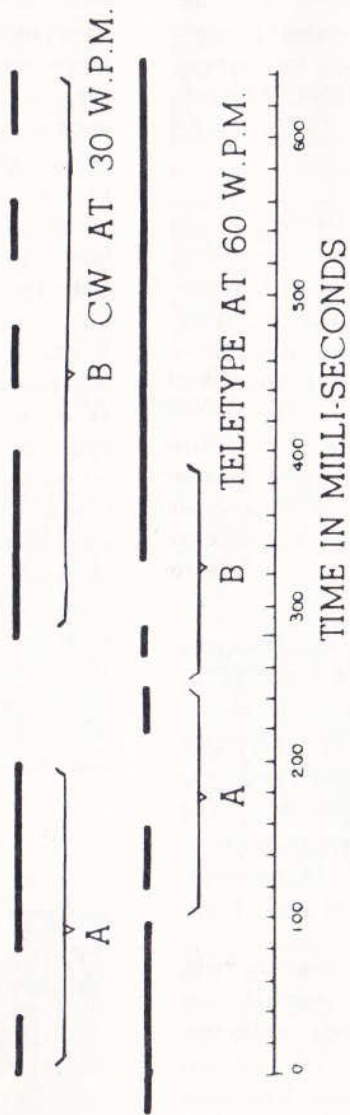


FIG 1

New Tubes announced

Nine miniature television receiving tubes have been announced by the General Electric Company. They are types: 6BN4, 3BN4, 2BN4, 5BK7-A, 4BC8, 6BC8, 6CF6, 3CE5 and 4CE5.

6BN4, 3BN4, 2BN4--a 7-pin medium-mu triode developed by G.E. for use as a radio-frequency amplifier in VHF television tuners. The 6BN4 heater is rated 6.3 volts and 200 milliamperes. The 3BN4 (heater 2.8 volts, 450 milliamperes) and the 2BN4 (heater 2.1 volts, 600 milliamperes) are designed for series-connected circuits.

5BK7-A-- a 600-milliamperere heater version of the 6BK7-A cascode amplifier, developed by G.E. for VHF television receiver tuners employing series-connected circuitry. The 5BK7-A has a heater warm-up characteristic of 11 seconds. Heater voltage is 4.7 volts.

4BC8--a 9-pin medium-mu twin triode designed primarily for use as a cascode radio-frequency amplifier. The 4.2-volt heater version also has been added to G.E.'s line of 600-milliamperere series-string circuits.

6CF6--a 7-pin sharp-cutoff pentode designed for use as a gain-controlled intermediate-frequency amplifier added to the G.E. line of 300-milliamperere heater tubes. The 6CF6, identical to the 6CB6 except for the plate-current cutoff characteristic, features high transconductance and low interelectrode capacitances.

3CE5, 4CE5--a 7-pin sharp cutoff pentode designed for use as a wide-band radio-frequency amplifier added to G.E.'s series-string line of television tubes. The tube features high transconductance, low interelectrode capacitance, and a controlled heater warm-up characteristic of 11 seconds. The 3CE5 heater is rated at 3.15 volts and 600-milliamperes; the 4CE5 heater at 4.2 volts and 450 milliamperes.



"Our department is much too busy to take vacations this summer. But I've hit upon what I consider to be a happy compromise!"

That long white Envelope

After a long, long wait, it finally arrived! When that long white envelope with the F.C.C. return address arrived, Curt, KØAMM, and Dotty, KØBRZ, were both wondering which one was the proud possessor of a pretty pink ticket. It was with a sigh of relief when that envelope revealed the brand,

spank'in new novice ticket for son Paul. So...you will now be hearing the third fist from the Hicks household, for Paul is now KNØGZJ. With a DL and 6 states already in his log, Paul is setting a fast pace for the rest of the family! Good going Paul, and we'll be looking for you on the bands.

Did you notice the change in date for the September meeting? For this month only we are meeting on the first Friday of the month instead of the second. The meeting date is Friday, September 7th...4-H Building, Ak-Sar-Ben Field...8:00 P.M.

Plans are under way for a real Hot program in the very near future. If you want to learn how to silk screen your panels, make printed circuits the easy way, then watch for the announcement of this outstanding demonstration.

FMW reports that his new address is 1121 Axtell St., Clovis, New Mexico. Orval is employed at Doc and Tom's Radio and TV Lab. Tom is K5COQ with a KW on 75, 40, 20, and 10, so it's likely we will be hearing from Orv from that QTH. FMW says that he misses the QSO's and ragchews with the Nebraska gang, for he has temporarily left his rig in the old home state. FMW supposes he will be a W5 or K5 in the near future but hopes that he will be able to work someone other than WØTIP when that does happen. Be hearin' ya,

Ain't It The Truth

When you're working 10 meters and the fellow on the other end gives you a signal report of Q5-S1, try checking the final band switch position. It's kinda funny, but you will find that the rig loads a lot better and the signal reports are much improved when the switch is in the 10 meter position instead of on 15! Ain't it the truth, Curt?

Charlie Boegel, CVU, at Cedar Rapids, Iowa, has just completed a new sky wire system that sounds like a real set up! The two 60 foot self supporting towers are now installed with a Telrex Xmas tree on the top of one of them. The "tree" consists of 2 meter, 10 meter, 15 meter, and 20 meter, 1956 model Telrex beams, all wide spaced, with 26 foot booms! Wow! With that KWS-1 and the 75A-4, we should be hearing plenty from CVU. Send us the pictures, Chas, we would all like to see that "lashup".

Don't forget! The Omaha-Douglas County C.D. Net meets every Monday night at 9:00 P.M. on 29,500.
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September Program

Are you having trouble lining up your receiver? Are you getting reports of over modulation? Is there distortion in your audio amplifier? If you can answer yes to any of these questions, then you will want to be sure to attend the September meeting.

The program for September 7th will be a discussion on and a demonstration of the use of oscilloscopes as applicable to ham use.

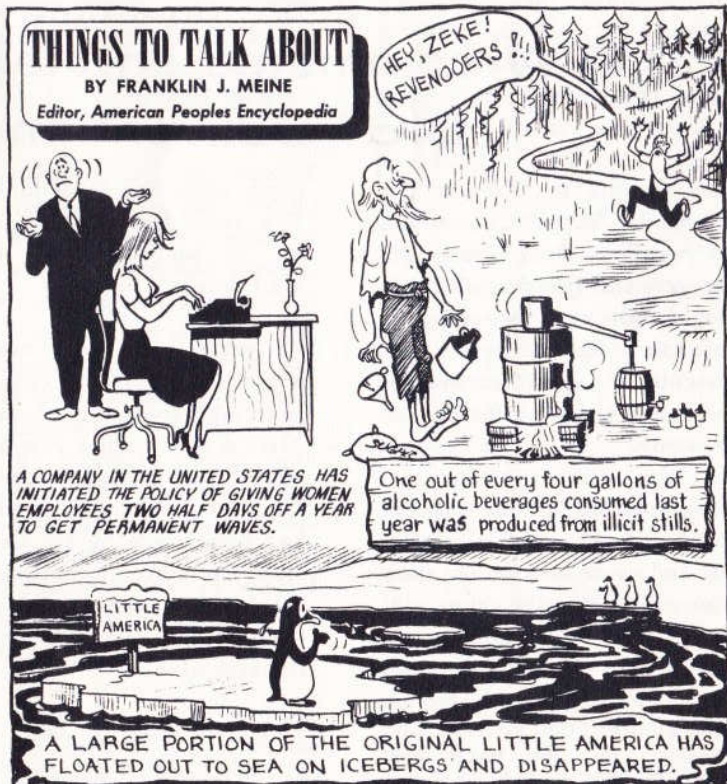
Using a \$1000 Tek-tronic long persistence scope for the demonstration, you will see it in use as a measuring device in capacitor and resistor discharge circuits. You can learn how to use a scope in checking your modulation, for at this meeting the scope will be used to check the modulation of a Viking Ranger. A discussion on sinusoidal and trapizoidal wave forms should prove very interesting.

If you want the right way to check your audio amplifiers, then see the scope used in conjunction with a square wave generator, for that purpose.

This program promises to be one of our best so bring your note pad along for future reference.

We are holding QSL cards for KNØGJN, WØCOG, and KNØEAL. Please pick them up at the September meeting.

Is your QST or CQ subscription about to expire? Better take a look and if it is, let the Club Secretary renew it for you.



QST...QST...QST...QST

By special arrangement with the Collins Radio Company, the Ak-Sar-Ben Radio Club and World Radio are jointly sponsoring a display and demonstration of the latest developments in receiving and transmitting equipment.

A 29 foot trailer which houses this equipment will be located on the World Radio Lab. parking lot for 2 days...September 18th and 19th. The public is invited to this display of outstanding

equipment and to hear it in operation.

Coffee and doughnuts will be served on both days, so be sure to get over and meet the gang. As an additional incentive, an attendance prize will be awarded each day.

This is an outstanding display that you will want to be sure to see, so mark your calendar now...September 18th and 19th.

W Ø D W comments on the "BIG" Convention

After reading the "report" of IOS on the "Big" Convention, and recalling Tom Fifer's report on the Houston Convention, I wonder if we were at the same places. People attend conventions for different reasons - and leave with differing impressions.

I am reminded of the fable of the 3 blind men who visited the zoo and were asked on their return to describe the elephant they "saw". One described the animal as much like a quite large snake, though warm and without scales. The second found the pachyderm resembling a tree with a smooth bark like a birch, even with 12

roots spreading into the earth. The third found Jumbo like a rat or an o'possum, though much larger.

We arrived in San Francisco about 6 P.M. July 5, 1956 after motoring from Grand Island. After a right turn a few blocks off the Bay Bridge, we drove to the hotel where reservations had been made by the Convention Committee, confirmed by the hotel, 3 weeks in advance. (This plan worked well at Houston also.)

That evening - day before opening - no signs of ham in the Whitcomb. At 10 A.M., July 6, 1956, registration began

on the mezzanine as scheduled. Though some of the local committees had "bugged out", General Chairman, W6WB, had two groups of Chamber of Commerce girls ready to handle registrations. Being pre-registered, I was all fixed up in about 10 minutes. The programs were delayed about an hour, however.

This was before noon 7/6/56. I still can't figure how Frank arrived in the afternoon, "kicked around the hotel about 2 hours", finally went out, located the "gorgeous suite", then "upon reaching the registration desk" --found them--"going out to lunch". I saw some of them do that perhaps 3 hours earlier.

After registering, we visited with an old Texas pal, W5NW, with W7CCC, and a number of W6's and W7's we had worked. When the programs arrived, the XYL took off on a cable car to catch the boat for a trip around the bay. Hoping to make the scheduled 12:45 P.M. trip to EIMAC's plant, was delayed with lunch, so took the 1:45 P.M. second section. Was back into town with time to eat a bite and we rushed to the opening meeting at the auditorium at 7 P.M.

This went off as scheduled and we were back at the Whitcomb as the music was tuning up. Here at the dance we met a

number of fellows we had known for many years, but had never met face to face. As a surprise, an old G.I. ham, WØKYU, showed up. He moved to Oxnard last December. About midnite, adjourned to bed.

Next A.M., Sat. 7/7/56, just made it to the auditorium in time to catch Norm McLaughlin, W6GEG, on grounded grid. Ducked out, dashed upstairs and caught W6EFT's talk at the RTTY meeting. This ended, back to the auditorium for W6POH on "Int. Geophysical Year", then lunch. All this time XYL was out on ladies conducted tour. (9:45 A.M. to 4 P.M.)

I passed Andros on beams, having heard him at Estes Park, did some surplus shopping returning to the auditorium at 1:45 to hear "By" Goodman on--xmsm lines, looked in on the VHF meeting for some interesting talks, but passed "the story of DX" - not interested. I met with "Beep" WØBP, transferred some RTTY gear he had picked up for me in Denver. Then with the WYL went to the "Top of the Mark" for cocktails.

At 7:30 P.M. waited briefly for doors to open for the banquet.

HAM HUMDINGERS

HAM HUM will publish free of charge for non-commercial amateurs your HAM wants, swaps, or items for sale. All ads should be limited to 25 words or less and must arrive 2 weeks prior to the second Friday of each month for inclusion in the current issue. Send ads to HAM-HUMDINGERS c/o Box 626, Omaha.

FOR SALE: BC 654,500 watt power supply, parts for 813 final with band-switching exciter. Best offer takes it all. WØUIQ, Chas. Winburn, 4251 Florence Blvd. KE 6489

FOUND - An empty chair at our last meeting. Same may be claimed by owner by attending next meeting and paying for this ad.

BIG CONVENTION

(Cont'd from page 14)

registrants, a time (money) limited "social hour", etc., etc. The well planned, well run conventions I have attended were West Gulf, Dallas, 1948, and Dakota, Nicollet Hotel, Minneapolis, 1952.

I recommend that Omaha "put in" for the next national convention and elect Tom Fifer Gen. Chm., and Frank Cooper, WØIOS, executive assistant. If I am alive and can get there, I promise to attend, and gripe no more than usual. Frank and

WANTED: A pair of 110 volt selsyns. Must be in good working condition. KØAMM, RE 0299

FOR SALE: Complete rotary system with covered Prop Pitch motor, 100 ft. shielded control cable, selsyn indicators, step down Xformers, etc. Complete - \$50.00. Also - wired Heath Q Multiplier - \$5.00. WØCQX, WE - 3665, 2340 So. 34 St.

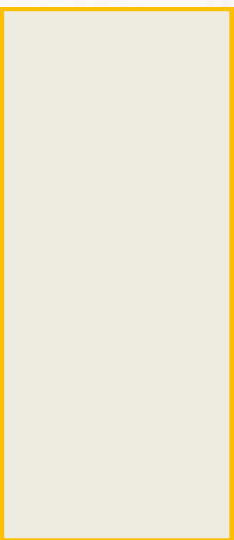
Tom are hams - and my friends - They'll do what they can with what they have. Nuf sed.

WELCOME

A hearty welcome to the membership of ARC goes to KØDBU, Bob Burt of 8109 Grant St., Omaha. That is a mighty good looking billfold, Bob, and especially with the membership card in it.

AK-SAR-BEN RADIO CLUB INC.
P. O. BOX 626
OMAHA, NEBRASKA

NEXT MEETING
AK-SAR-BEN 4-H BUILDING
AK-SAR-BEN FIELD
FRIDAY - SEPTEMBER 7TH
8: 00 P. M.



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