



HAM HUM

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No. 1

January 1967

NEXT MEETING FRIDAY - JANUARY 13, 1967

The next meeting of the Ak-Sar-Ben Radio Club, Inc. will be held at the 4-H Building, Ak-Sar-Ben Field, at 8:00 P.M. on January 13, 1967.

The program will include a demonstration of a 10.2 G Hz transmitter and receiver. This uncommon Ham band equipment is part of a Northwestern Bell Telephone Company training aid.

This may be the first rig of its kind to operate on amateur frequencies in Omaha. If there have been others, we would certainly like to know.

There will be an explanation of the equipment and the unique characteristics of these frequencies. John Orr, WØPHW, who is with the Telephone Company will show you how very simple these transmitters are. The receiver, a bit more complex, was put on the Ham bands in only a few hours.

Let's go Hi-Band. Attend the January meeting and make your schedule for next month's contacts.

THANKS

Harold and I wish to thank the XYL's for their lovely cakes and help at the Christmas Party. I know we enjoyed the party and we hope that you all did too. And thank you Dick Eilers for your part in it.

Thanks again.

Harold & Eva McClenahan

WAØDGA

ON "HERTZ"

No, we don't mean we are renting a car. But it seems we have a new term now meaning "cycle." I don't know who decides these things, but it looks like we had better get in the habit of using the term "hertz" - kilohertz, megahertz, gigahertz, etc.

We wonder just how far this new one is going to go. We might look rather strange going down to the shop on our motorhertz to get a new tire for Junior Op's bihertz. Just be sure to keep the new Christmas trihertz away from the bottom of the stairs so you won't trip over it in the morning!

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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THE FIFERS OF SAGINAW



ex WØWR
TOM **TIM** **BIG" T" POLLY**
MARCIA **LORRAINE** **ANNE**
JEANNE **TED** **JOE**
K8BKF

(Editor's Note: Thought some of you might be interested in this Christmas card. Tom was on the editorial staff of Ham Hum back in the days of its beginning.)

AK-SAR-BEN RADIO CLUB ANNUAL MEETING AND CHRISTMAS PARTY

The Ak-Sar-Ben Radio Club held its Annual Meeting and Christmas party at the Cafeteria of the World Insurance Company on Friday evening, December 9. Prior to the festivities, candidates for Club officers and board members were elected.

The following new officers were elected for 1967:

Ervan D. Heinz, WAØEEM,
President
John D. Snyder, WØWRT,
Vice President

Executive Council:

Edward Kilton, KØEYR
Robert C. Lockwood, WAØDHU
Jay C. McAleer, WAØLLQ
David C. Moses, WAØGED

These newly elected officers, together with the following, constitute the Board of Trustees for 1967:

Byron J. Smith, Sr., WAØICK,
Immediate Past President
John W. Orr, WØPHW
Royce E. Johnson, WAØKIL
Harold E. McClenahan, Jr.,
WAØDGA



In recognition of his service during 1966, outgoing President Byron J. Smith, Sr., WAØICK, receives plaque from Dick L. Eilers, WØYZV.



1967 President Ervan D. Heinz, WAQEEM, (left) receives gavel from outgoing President Byron J. Smith, Sr., WAQICK.



John D. Snyder, WQWRT
Vice President



Robert C. Lockwood,
WAQDHU



David C. Moses
WAQGED



Edward Kilton, KQEYR

Jay C. McAleer, WAQLLQ



The Treasurer was on hand to collect dues from members for the past year and to renew membership for the coming year, Bud Smith, WAQICK, was presented with a plaque commemorating his year as President of the Ak-Sar-Ben Radio Club.

For entertainment, the Past President of the Society of American Magicians, John Bowery of London, England, gave a performance of slight-of-hand that was enjoyed by all members, guests and their families. A film was shown for the kiddies. After Christmas gifts were exchanged, refreshments of cake, ice cream, coffee and pop were served.

A special thanks to the World Insurance Company for the use of their Cafeteria and facilities. Also, we would like to thank Dick Eilers, WQYZV, for providing treats for the kiddies.

73,

David C. Moses
WAQGED

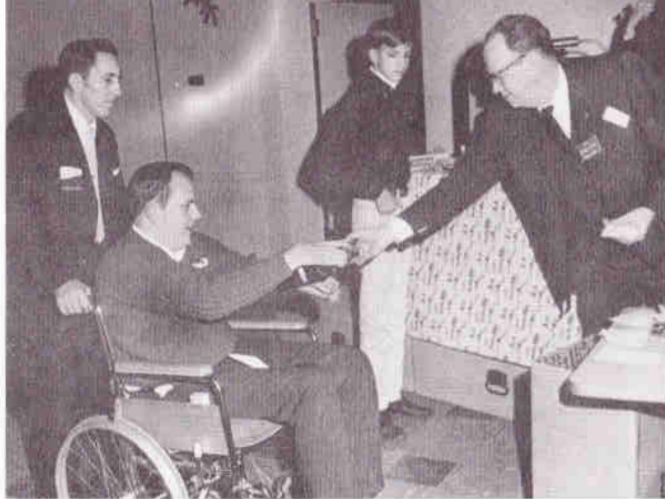


Treasurer John W. Orr, WQPHW, stands up while collecting 1967 dues.

Additional photos of annual
meeting-Christmas party







WANTED

3" scope, small, not fancy.
Heath IM-30 Transistor Testor
or equal.

Two meter amplifier - can be
home brew if clean.

Dick Simonsen,
WQCHV
2020 North 58th
Lincoln, Nebr.

Amateur Operators wishing to
Amateur Radio Emergency Corps
contact:

WAØLLQ, Jay C. McAleer
839 South Polk Street
Papillion, Nebraska 68046

NOTES FROM THE BOARD

The 1967 Board of Trustees met at the home of President Erv Heinz, WAØEEM, on December 28, 1966 at which meeting the following action was taken:

Dick L. Eilers, WØYZV, was selected by the Board to fill the

unexpired term of Ervan D. Heinz, WAØEEM. This selection will be submitted to the members for their approval at the January meeting.

John W. Orr, WØPHW, elected Treasurer.

Royce E. Johnson, WAØKIL, was elected Secretary.

Committee Appointments

Publications:	Dick Eilers and John Snyder
Community and Public Relations:	Dave Moses
Technical:	Robert Lockwood
Program:	Jay McAleer
Inter-Government and Civil Defense:	Ed Kilton
Mobile:	Harold McClenahan
Awards:	Dick Eilers, Erv Heinz, and John Snyder
Refreshment:	Dave Moses, Harold McClenahan, and John Orr
Membership:	Jay McAleer
Audit:	Dick Eilers, Erv Heinz, and Ed Donze

Past Presidents of the Club

1945 - N. P. Nelson	1956 - Dick Eilers
1946 - John Leeder	1957 - Curt Hicks
1947 - Art Gaeth	1958 - Ed Gutmann
1948 - Herb Curry	1959 - Dave Hollander
1949 - Elmer Stein	1960 - Max McKinney
1950 - Doc Becker	1961 - John Droscher
1951 - Earle Olson	1962 - Royal Enders
1952 - John Orr	1963 - Joseph F. Berounsky
1953 - Ray Strange	1964 - Louis A. Cutler
1954 - Frank Cooper	1965 - Edmond E. Donze
1955 - Art Stadler	1966 - Byron J. Smith, Sr.

LET US STRENGTHEN THE AK-SAR-BEN RADIO CLUB!

Have you asked yourself, "What can I do to put new life into our ham radio club?" Groups like ours are in constant need of renewal from within. "But what can I do?" It is up to the rank-and-file members "us," to realize that continual renewal of our organization is one of our objectives. Do your part by attending meetings regularly - make it a matter of principle to attend meetings regularly. You can't participate unless you are physically present. Be more than a "joiner" or "dues-payer." If you think a group is worth joining, then it deserves your personal, intelligent, active and continuing support. Don't stay away from meetings just because they are not run the way you think they should be. You can improve them by working with your fellow hams and by encouraging others to do the same.

Remember, you have little right to grumble about meetings if you don't bother to attend them. Let us work together to help ourselves do a better job to strengthen the Ak-Sar-Ben Radio Club.

Erv Heinz, WAQEEM
President

Watch for auction in April. Announcement later.

OFFICIAL BULLETIN NR 92 FROM ARRL HEADQUARTERS NEWINGTON CONN DEC 22 1966 TO ALL RADIO AMATEURS BT

All amateurs in the ARRL Field Organization are urged to take part in the annual Novice Roundup to be held February 4 through February 19, 1967. The leading Novice in each section will be awarded a certificate of achievement. Page 55 of January QST has all the details on how to participate. Send a postal card or radiogram to ARRL for free contest forms and a map of the United States. Address your requests to the ARRL Communications Department, 225 Main Street, Newington, Connecticut 06111. Be sure to include your zip code with your address AR

12/22/66

Greetings from the "Windy City";

In the process of moving from Minneapolis to Des Plaines (Chicago) Illinois. Hope that you will continue to keep me on the Ham Hum mailing list for I sure enjoy keeping up with the Omaha info and news of the Ham Fraternity. New QTH after 1/4/67 will be: 525 Kinkaid Court, Des Plaines, Illinois.

Regret having to lose DX credit for 305 confirmed but will enjoy starting on the 4th DXCC.

My very best wishes to Dick Eilers, Al McMillan, John Orr and again, thanks for Ham Hum!

73,

Art Stadler, WQJMD

HAM PLATES

As the first of the year rolls around, we are reminded that it's "ham license plate" time again. Nebraska amateurs have had their call on their car license plates since 1956. They are quite commonplace today, but how many newly licensed amateurs realize their purpose and how they came about. There is an interesting story behind the Nebraska ham plates. Going back through past issues of Ham Hum and talking to active amateurs of that time explains their purpose, how they came about and who was instrumental in introducing the ham plate legislation.

Their purpose is to establish a system of designation to readily identify amateur radio mobile vehicles and operators for emergency or Civil Defense communications. Another reason is recognition by and an indication to the public of the far reaching interest in amateur radio and its contributions as a public service. These would include emergency communications carried on during floods, fires, blizzards, etc. and the help they provide during community drives such as, "Miracle Mile", "The Heart Fund", "Cerebral Palsy", etc.

In January of 1953, the Nebraska SCM asked the Ak-Sar-Ben Radio Club to initiate action for introduction of the bill in the 1953 Legislature. A license plate committee was formed and with the efforts and contributions of time and money by many amateurs, LB29 was introduced early in January by Senators George Syas and Herbert Duis. At a hearing

before the Public Works Committee, Dave Ablowich, W0DW of Grand Island, was the spokesman for the amateurs. Although the bill failed to pass, he acquainted the legislators with amateur radio, its public service and the bill's merit.

In January of 1955, a few days before the deadline to introduce legislation, a meeting was held in Grand Island which was attended by both out-state and Omaha amateurs. At that time, it was felt it was almost too late to accomplish anything judging by the results of the previous effort in 1953. Time was short, but during the next few days, Dr. Robert Stratbucker, W0HZE of Omaha spent some time at the Capitol meeting with our State Officials. Through Bob's zealous efforts, Legislator George Haufmeister of Imperial was convinced that the bill had merit and LB464 (unchanged from old LB29) was introduced by Senators Otto of Kearney, Bohensky of Palmer and Nelson of O'Neill. It passed with very little opposition.

There were many unsung heroes of the cause, but to list a few of the amateurs who were instrumental in getting the bill to the legislature includes Omaha amateurs Art Stadler, W0QMD...Al McMillan, W0JJK...Earle Olsen, W0JKE... Herb Curry, W0QXR... Art Gaeth, W0FQB...Dick Eilers, W0YZV...John Orr, W0PHW...Larry Caccamo, W0NMN...and out-state amateurs Harold Rice, W0KFY of Palmer...Red Campbell, W0CBH of North Platte...and Francis Johnson, W0JDJ of Lincoln.....there were many others. Some of the prominent of-

ficials who helped were Charles Tvrdik, Sam Klaver, William Moulton, and William Dean Noyes.

In January of 1956, the new ham plates became available to Nebraska amateurs. The original fee was \$2.50. As since been lowered. The procedure for securing ham plates is not much more involved than for regular plates. The only other item involved is your original (not a duplicate) copy of your amateur license. A check with Mr. W.J. Fenton of the South Omaha County Treasurer's office provided the following helpful information.

You must have four items...your motor vehicle tax statement, car registration, amateur license and of course, money...cash, check or money order. If you apply in person at the Douglas County Courthouse, first pay your motor vehicle tax at the County Treasurer's office before proceeding to the License Bureau. If you appear very early (the first two or three days in January) or late (the last week in February), you will have to contend with standing in long lines. To avoid the rush, the best time is the last three weeks in January. In the past, one could avoid waiting in line by asking to see Mr. Fleming who handled the matter of ham plates, however, this may not be the case today as all the clerks are now familiar (or should be) with them. The price of regular plates or the 1967 stickers is \$9.00. If you are in the city limits, you must pay an additional \$8.00 wheel tax. The price of the ham plates is an additional \$1.00 no matter if you are getting new ham plates in exchange for regular plates or just the 1967

sticker for your present ham plates. If you are applying for new ham plates instead of the stickers, your ham plate will be mailed to you from Lincoln within approximately a month. Ham plates can be applied for at four locations in Douglas County... the County Courthouse, South Omaha, the Crossroads and the Florence County Treasurer's office. As with regular plates, ham plates can be applied for through the mail. Needless to say, it saves time, a special trip, confusion and waiting in line. This year there is no extra charge for mailing. Of course, your license must be included with your motor vehicle tax statement and your car registration. Some amateurs are afraid to run the risk of losing this precious document in the mails, but there are many doing it and so far, no trouble has been encountered.

A final word...with ham plates mounted fore and aft of our cars, we become a moving advertisement of amateur radio. The manner in which we drive our cars in today's congested traffic reflects our image upon the public. Let's keep it a good one.

73

David C. Moses

WAØGED

**OFFICIAL BULLETIN NR 90
FROM ARRL HEADQUARTERS
NEWINGTON CONN DEC 8 1966
TO ALL RADIO AMATEURS BT**

Attention VHFers. The long continued moonbounce efforts of VK3ATN paid off on November 28

when a 6 minute QSO was completed with K2MWA/2, the Crawford Hill VHF Radio Club. The distance was 10,300 miles on 144 Mc., almost double the previous record, and set a new moonbounce distance record, regardless of band. Antennas were a large stacked rhomic at VK3ATN and a 60 foot dish at K2MWA/2. Further information will appear in January and February QST AR

ARRL OVS: Pse pass news of above around on v.h.f. Tnx and 73. -- F.E.H.

December 16, 1966

Ak-Sar-Ben Radio Club, Inc.
P. O. Box 291, Downtown Station
Omaha 1, Nebraska
Hi:

The VHF Gang met at Dennis Mason's (KØBYK) home for organization discussions and demonstrations on equipment. Nine licensed hams, and the XYLs enjoyed an evening together. Organization papers were signed for an AREC Net, and possibly an ARRL affiliation, to help provide practice and drills for use during an emergency, plus keeping a rig on 2 meters monitoring a frequency, for local contacts, testing and emergency calling.

Considerable interest was shown in developing the gear for extra range of coverage beyond local limits. Next meeting at the home of Dayton Phifer, WØVEA, January 13th, 1967.

Trouble-shooting that old intermittent, or fuzzy signal, or spurious

radiation (TVI, BCI, etc), is a real chore; after you have tried everything else, check and double-check solder joints, they will go bad. In commercial gear as well as homebrew, even printed circuits. The easiest way is to sort of guess probable location, examine the joints with a magnifying glass, and even then you will miss some of them. But put the solder gun on a suspected joint, and see that old rosin boil out. After all, when all else fails, you have everything to gain, nothing to lose.

Pity for the poor guy who had just told the gang he had his rig all TVI cleaned up, and from the background you heard his XYL ask, "What makes all those bars on the TV?"

73,
Dayton Phifer, WØVEA

**OFFICIAL BULLETIN NR 93
FROM ARRL HEADQUARTERS
NEWINGTON CONN DEC 29 1966
TO ALL RADIO AMATEURS BT**

All amateurs are invited to participate in the 1967 ARRL International DX Competition, the first and third weekends of February and March. Major rules changes include dropping of the c.w. quota, Hawaii and Alaska reverting to DX status and a change in multipliers for DX stations from call areas to states and provinces, as noted on page in January QST. When requesting the new convenient logging sheets please be sure and include your zip code along with your address AR

THE OLD TIMER GIVES THE YOUNG SQUIRT SOME ADVICE ON SWR

By Bob Elmer, K3ZPQ

The Old Timer was slowly tuning over the two meter band when he came upon a familiar voice. It was the Young Squirt, talking about his SWR. He paused to listen.

---"Yeah, Joe, I finally got that eight element beam up. My SWR is high and I'm worried about it. It reads about 2 to 1 and I can't seem to get it down. I tried different ways of tuning up the transmitter but 2 to 1 is the lowest I can get. I'm using some new RG58/U cable--- 100 feet of it. Do you know what I can do to get a better SWR? What say, Joe. WA3--- to WB2---."

"Hello WA3---, this is WB2--- Willie, you're an S9 on my meter even with that high SWR. When you get it down to about 1 to 1 you ought to be 10 or 20 over at least. I had the same trouble with my SWR on two meters but the fellow at the store told me that the length of the line was important, so I kept cutting off a little at a time until I got the lowest reading. That RG58/U cable is OK. I have about 100 feet of it going up to my 220 beam and it works fine. A fellow in our club gave a talk on antennas one night and said that at every half wavelength along the line the impedance would be the same as the impedance where it was connected to the antenna system. I just measured it off in half wavelengths and cut it

at the right place. I thought I had made a mistake in the balun measurements but I guess I didn't, because I get a SWR of 1.1 to 1. What do you think of that, Willie? WB2 to WA3---."

The Old Timer shuddered and turned off the receiver. "Maybe it would be better for these young squirts if they didn't have any SWR bridges," he muttered to himself. "They just don't seem to understand." He thought back forty years to the 300 MHz transmitter he had built with the first DeForest "H" tube and using Lecher wires and a ruler to measure the wavelength. This was before the SWR bridge was "invented" and standing waves on open wire lines were checked by a 0-1 M.A. meter and silicon detector with pickup wires held close to the line.

The Old Timer shook his head as if to clear his mind and picked up his pen and started to write.

"WA3--- Dear Willie," he wrote, "I was eavesdropping on you and your friend Joe tonight talking about your problems with SWR and your new antennas. There seems to be a lot of misunderstanding about this subject and I thought you might like to get a few things straight.

"First of all, you shouldn't be too much concerned if your SWR is 2 to 1. If this were 1 to 1 and every-
thing else remained the same the

loss in the line would be decreased by less than .5 db and this difference couldn't even be noticed at some distance away. Near-perfect matching is not nearly so important as other factors of the antenna and line system.

"Let me say also that you cannot affect the SWR by any tuning of your transmitter or any changing of length of your line. The SWR is determined solely by how good an impedance match you have between the line and the antenna system. This doesn't mean that you can't change the reading on the SWR meter. You can get very erroneous readings on it. More about this a little later on.

"Although SWR is generally thought of in terms of relative reflected current, it is really nothing more than the ratio of the impedance of the antenna system to the impedance of the transmission line. A co-axial line of RG58/U which has a characteristic impedance of 53.5 ohms (regardless of its length) could be connected to an antenna system that presented an impedance of 100 ohms and the SWR would be about 2 to 1, and this would be true regardless of anything you did at the transmitter end. This seems like an awful mismatch, but as mentioned before, it actually would not be noticeable to a listener.

"The advice given your friend Joe at the ham store was good, but perhaps misunderstood. Trimming the line for length is done when there is some mismatch at the antenna end and you want to obtain a resonant condition and proper loading. To repeat--this does not

affect the SWR. Nothing can be done at the transmitter end to change this.

"As far as the member of Joe's club saying that at every half wavelength along the line the impedance would be the same as the terminating impedance, I don't think he was quite far enough. In Joe's system the line is very long in terms of wavelength and with the losses in that 58 RG/U cable the line may, in effect, be self-terminating. With such a condition, an SWR bridge at the transmitter would probably read pretty much the same if the line were shorted at the antenna end or even if the antenna were disconnected from the line altogether.

"You should use your SWR bridge at the antenna end to properly adjust the match before raising your antenna. (It is indispensable here). At the station end--forget it--use the meter for relative forward gain.

"But what I was trying to lead up to is this. Instead of worrying about SWR, be concerned about the power loss in the transmission line. RG58/U cable has a loss of about 8 db at 144 MHz and a loss of approximately 10 db at 220 MHz. This means that in your particular system you are losing 83% of your power in the line and Joe is losing 90% of his power in his 220 MHz line.

"Consider the low loss quality of open-wire line. The attenuation loss is almost negligible for the lengths you use, being around .21 db at 144 MHz and .25 db at 220 MHz. This means that if you fellows would replace that RG58/U with a carefully installed open line,

you would get about six times the power in your antenna and Joe would have ten times what he has now. You can check the Radio Amateur's Handbook on this data.

“What strikes me as being st horrible is that although transmitter power loss can be made up to some extent by increasing power, you will never recover the received signal that is lost in the cable.”

The Old Timer put down his pen and wondered how he had ever gotten so wound up. Maybe it was because he had to get certain things off his chest about that old old SWR.

de Pack Rats - Phila. Pa.

Dear Ed.

Just a note to say thanks for sending Ham Hum along each month. Still enjoy reading all about Omaha. Amazing how many new hams are mentioned in the magazine. Just don't know most of them anymore.

Nothing new here on Ham bands. Same old stuff and not too many new ones coming thru. Have been very inactive but manage to work WQYZK almost every Sunday.

Good luck and Happy New Year.

DE

K3MVP

Frank W. Cooper

Pittsburgh, Pa.

The simplest way to better your lot is to do a lot better.

ARE YOU AN ACTIVE MEMBER?

Are you an active member
The kind that would be missed?
Or are you just contented
That your name is on the list?

Do you attend the meetings
And mingle with the flock?
Or do you stay at home
To criticize and knock?

Do you take an active part
To help the work along?
Or are you satisfied
To only just belong?

When the business sessions come 'round
Do you pretend to be sick?
And leave the work to just a few
Then talk about the "Clique"?

Think it over, member,
You know right from wrong.
Are you an active member
Or do you just belong?

AI, WA2TAQ
via ARNS

When you make a mountain out of a mole hill, don't expect anyone to climb up to admire the view.

He who hammers others is just trying to batter them down to his size.



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