HAM HUM

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

November 1972

Vol. XXII
No. 11

NOTE LOCATION

NEXT MEETING

WHERE: FITZGERALD FRIENDSHIP ROOM
COMMERCIAL FEDERAL SAVINGS
AND LOAN ASSOCIATION
4724 South 24th Street, Omaha
(Free parking in rear off 25th Street)

WHEN: FRIDAY – NOVEMBER 10, 1972

TIME: 8:00 P.M.

WHAT: PAST PRESIDENTS' NIGHT

REFRESHMENTS – EYEBALL QSOs

VISITORS WELCOME

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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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DOUGLAS COUNTY TWO METER AREC NET

By—Bob Lockwood, WAØDHU

WAØGEH, Martin J. Griffin, has been officially appointed Net Manager of the Douglas County 2 Meter AREC Net. Since he took over as NCS, his ideas have made the net interesting and informative for all.

One such activity was sprung on the net members when he requested mobiles to go to various locations around the area where he had messages on page 288 of the phone book in the telephone booths. It took 40 minutes to cover the area.

One problem developed, however; the NCS requested a mobile to go to 24th and Burt to pick up a message in the phone book there. No one was in the area. KØQVL had a monitor receiver in his car but no transmitter so he went to the booth and found no message. He called me and told me of the situation. I informed NCS. KØQVL, Chuck, told us there was a *new* phone book there. WAØGEH, Marty, put the message in an *old* book. Apparently the telephone company had installed a new book shortly after WAØGEH left.

It is activities like this that give the net the promise of being very interesting – one that the guys will be anxious to support.

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RECENT CONTRIBUTORS

Repeater Fund

Chuck Sudds, KØTVD
Jack Prall, WØODL
Mike Wilczynski, WBØBMV
John D. Snyder, WØWRT

****

WANTED

6 meter beam, 5 or 6 element. Hy-Gain or Telrex preferred.

Chuck Sudds, KØTVD
3222 Pacific Street
Omaha, Ne. 68105
Phone: 345-4679

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OCTOBER MEETING REPORT

By—Bob Andrus, KØLUG

We moved our meeting place to the south side of Omaha and perhaps this was one reason more people (Hams) didn't show up for our October meeting – couldn't find the parking lot, Hi!

The program, which was the adult version of show and tell, was well received by all who were there. Marty Griffin, WAØGEH, started off with his conversion of a GE process line FM transceiver. Anyone could tell from the work that went into this conversion that he had spent well over the 200 hours he mentioned. A very nice piece of gear for the FM mode with a few side attachments to help other Hams get on frequency!

Bob Lockwood, WAØDHU, came up with a novel Power Supply that works with his TR-22 transceiver. It is so popular that another member has already put another one together for his TR-22. Mike Wilczynski, WBØBMV, is the fellow and he is just as proud of his as Bob.

Bob Andrus, KØLUG, had his Plectron receiver that was converted from a receiver only over to a transceiver for the local repeater frequency. This receiver, by the way, is made out at Overton, Nebraska.

Charles Michel, KØQVL, came up with a different species of electronic gadgetry in the form of a digital read-out unit. A lot of work went into the wiring of his gadget with good results.

Milo Nechvatal, WBØBWX, has been working on a receiver that operates down below the broadcast band in the 180 Khz region. Most equipment doesn't have this band on the receiver dial, let alone trying to receive there.

Jim Droege, WØYCP, brought along the latest change to the repeater receiver equipment in the form of the standby receiver. His short talk was very informative (as it usually is) and as he brings something to show each time, he has full attention from the members.

Russ Minks, WAØVEE, thought that if an old receiver could work well using tube types, that it could work much better with transistors. He was right too as we found out from his demonstration of the old, but also new, receiver that he showed.

Vern Riportella, WBØGAJ, is one of those guys who is just that much above most of us when it comes to electronics. The digital computer gadgets he showed at the meeting gave us a small measure of this fact. His work at Offutt Air Force Base keeps him up on the latest computers and digital read-out equipment.

Cecil DeWitt, WØRMB, was not to be be outdone with gadgets. He had what some person might call a muffler for a receiver. As most of us know, it is an attenuator. As Cecil describes this unit, it cuts the input to the receiver in stages and can be put to good use in tuning up most any receiver; not to be used for the transmitter since it will only stand about a ½ watt of power.

Considering the number of people per gadget, we did very well at the October meeting in showing once more that it doesn't take a *name* to make a meeting when we have such good talent right here in our own Club. See you all at the next Club meeting!

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1972 ARMED FORCES DAY COMMUNICATION TESTS RESULTS

The annual Armed Forces Day Communication Tests, sponsored by the Department of the Army, Navy and Air Force, held this year on 20 May 1972, once again proved to be a highly successful event.

The Military radio stations WAR (Army), NSS (Navy), NØNNN (Navy) and AIR (Air Force) located in the Washington, D.C. area and NPG (Navy) in the San Francisco area conducted the communication tests. The tests included military-amateur crossband operations and receiving contests for both continuous wave (CW) and radioteletypewriter (RTTY) modes of operations. The Navy aircraft, using the call sign NSSAM, scheduled to fly over various cities, was cancelled. However, amateur radio station K4BSS operating on board a Navy aircraft conducted operations on the 80, 40, 20 and 15 meter amateur bands. A total of 213 air to ground QSO's were made during the more than eight hour flight.

CROSSBAND RESULTS

WAR, NSS, NPG, NØNNN and AIR had a combined total of 9,272 QSO's during the twelve hours and forty-five minutes devoted to the military-to-amateur crossband portion of the communication tests. Commemorative QSL cards have been mailed to all participants that could be identified in the Winter 1971-72 and Spring 1972 supplement of the "Radio Amateur Callbook Magazine." Any amateur who has not received a QSL card confirming his contact should request confirmation, listing his call sign, the station worked, Military and Amateur frequencies and time. The request should be addressed to the appropriate radio station; or to Armed Forces Day Tests, Chief, Navy-Marine Co MARS, 4401 Massachusetts Avenue, N.W., Washington D.C. 20390, Mail Stop 394.

CW RECEIVING CONTEST RESULTS

There were 351 acceptable entries for the 25 words per minute CW broadcast message originated by the Secretary of Defense. A Certificate of Merit has been mailed to the stations/individuals.

RTTY RECEIVING CONTEST RESULTS

There were 376 acceptable entries for the 60 word per minute broadcast message originated by the Secretary of Defense. A Certificate of Merit has been mailed to the stations/individuals.

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WANTED TO BUY

Ham – M Rotor
20 element collinear for 2 meters

Ray Kydney, WAØWOT
6746 Florence Blvd.
Omaha, Ne. 68112
Phone: 453-2845

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FOR SALE

HR-10B w/cal

Peter Mahowald, WBØGOM
3347 S. 114 Ave.
Omaha, Ne. 68144
Phone: 334-0818

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A fine article by Rev. G. Wayne Heck, WB9HJM, appears in the September 29, 1972 issue of AC-ARTS, Inc., of Fort Wayne, Indiana. WB9HJM was a member of the Ak-Sar-Ben Radio Club while in the Omaha area. Excerpts from his article are quoted here for your interest.

... From Ft. Wayne to Omaha most of the 2 FM activity is on 94, although there are repeaters springing up all along the way. Now that the cities are covered, many small towns are getting machines of their own. It is entirely possible to go from Ft. Wayne to Omaha and not have to put the mike down, but more than likely you will find a few dead spots.

In the Omaha metro area there are two repeaters: the main one is WØEQU on 34/94; the secondary one is on 22/82 under the call WAØVVD. Not far away in Lincoln is a 16/76 machine on top of a 1500-foot tower! It has coverage in the Omaha area most of the time.

The 34/94 machine is computer-controlled as they say out there; it has circuits to decide which receiver is getting the strongest incoming signal and so forth. It is carrier access; you have the first 15 secs of tape log to give time and call; there's a 3 minute timer on the repeater itself which means the machine has to go off the air once every three minutes and you have to let it drop out to activate the log and sign out. Sort of tricky for the newcomer! This repeater has two receivers at the present time; one on the east side of Council Bluffs and one on the top of the tallest building ...wntown. The transmitter is located on the third floor of the Red Cross building downtown. With antennas just above rooftop, its 250 watts can be heard as far as York, NE., about 85 miles.

The Ak-Sar-Ben (spell it backwards!) Radio Club sponsors the repeater. This is the only sizeable club in the area, having about 120 members with an average attendance of about 60-70 members at meetings. There is a membership fee for the club of 50¢ a month, but there is no fee for the repeater! The repeater was built and is maintained by three or four of the members of the Club on their own time and expense. Major items are purchased from the Club treasury. However, anyone who wants to contribute to the repeater committee's work is more than welcome to do so!

While I was in Omaha, my average day consisted of talking to someone from each of the US call areas! And every once in a while we'd let someone with a Ø call get into the action! Most of the conversation was about the repeater; most everyone had some criticism, but no one ever got turned off unless he out-talked the timer! We had an open repeater that anyone could use and say what he pleased (within FCC limits, of course). And there wasn't a time that you couldn't get on the air and have someone to talk to.

The other repeater on 22/82 was built and run by the same guys who built and ran the 34/94 machine in Omaha, only it was located in Council Bluffs. Lower in power, it still was superior in the audio department and was used once contact had been made on 34/94 if both had rocks for it. It also was free and open. It was the

major auto-patch repeater in the area, but if you wanted to use the patch, you had to pay a monthly fee under the rule that the guys who built the machine can suffer but Ma Bell needs money! In fact, some of the guys in the area had converted Drake's TR-22 to use an external auto-patch plugged into a jack near the earphone jack, and for the first month of operation, everyone had to call over the patch!

2 FM really is fun when you get into an area like Omaha. I enjoyed every minute of operation out there, even though we had our lids; like the guy who continually cried out "QRZ CQ QRZ CQ ANYONE HEAR ME ON THE OMAHA MACHINE? QRZ OMAHA . . . . " and you get the idea. But we also had the best side of everyone too; several members were blind or visually impaired, so the Club got some parts and built these guys two-meter rigs so they could monitor the RPT all day. We also helped the city when a phone cable was accidentally cut. We were assigned to certain intersections with white handkerchiefs tied to our antennas – if anyone needed emergency help they could come to us. And of course, many messages were handled via RPT during the disaster that hit Rapid City, a neighbor to the north.

Having travelled across this country and used many repeaters, I've come to some conclusions of my own that I think are worth sharing, even if just for the sake of discussion:

1) A repeater should be open to anyone who wants to use it. It may sometimes border on CB (horrors!), but amateur operators still are above most of the CB practices;
2) Persons who use the RPT should be continually informed as to the cost of operating the machine, and they should be expected to help every once in a while. Some guys have no morals, but then some are quite generous – let's face it, very few repeaters die of malnutrition!
3) The major topic of conversation is usually how bad the repeater is working! So what? If the guy complaining thought he could do any better, he would! Let him complain – after a while no one will listen anymore;
4) Let the RPT be a project of a few who really want to be gung-ho with the thing! The idea of a RPT is to give other guys more operating range; if one or two want to take on the project, let them do it! Let's not get so many guys involved in making policies for a RPT that no one knows what's going on!
5) Let's seek out the handicapped amateurs in the area and give them 2m FM rigs to monitor the channel;
6) Let's tell the newspaper *everything* we do, especially through the RPT.
7) Let's get as many guys in Fort Wayne as possible to get rocks for the machine.

Above all, one of the things you hear most often as you travel across country with 2 FM is friendliness. Even if the guy is a clod about the way he is using your machine, he'll remember you more if you go out of your way to help him in whatever way you can.

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MOTOROLA MODEL NUMBERS

More and more hams are enjoying 2 meter FM and many are using or thinking of using low priced Motorola used equipment. The following info may help clarify the meaning of the model nomenclature.

T43CMT-1130A

1st character (T) (Housing)
B=Base
D=Dash mount
H=Portable (max. portability)
M=Monitor rec.
P=Portable
R=Railroad
T=Trunk mount
U=Universal mount

2nd character (4) (RF out)
0=Rec. only
1=less than 75W
2=.75 – 3.9W
3=4 – 15W
4=16 – 40W
5=41 – 69W
6=70 – 100W
7=101 – 134W

3rd character (3) (Freq.)

0=Below 25 MHz
1=25 – 54 "
2=72 – 76 "
3=144 – 174 "
4=450 – 470 "

4th character (C) (Rec)
A=Sensicon "A"
B=Unified chassis (450M)
C=Mocom
D=Portable
G=Sensicon "G"
H=Motrac
L=Motran

5th character (M) (Xmtr)
A=30 – 60W "A" transmitter
B=Unified chassis (450)
C=Lo + UHF portable
E=High band portable
G=Mobile + AC utility "G" xmtr
H=Motrac
L=Motran
M=Dispatcher

6th character (T) (Power)

B=117V. AC
C=Battery (dry)
D=Dynomotor
M=Transistorizes w/int. bat
N=No power supply
T=Fully transistorized
V=Vibrator

7th character (1) Squelch)
1=Carrier
Dual (PL)

8th character (1) (Chan. Sp)
0=Wide band
1=Split channel

9th character (3) (# of freqs)
0=1 trans & rec
3=2 " " "
7=4 " " "

10th character (0) (Power)
0=12 volts
1=6/12 volts
4=6 volts

In the example at the top of the page, T43CMT-1130, this would be a trunk mount, power between 16 & 40 watts, between 144 & 174 MHz, Mocom receiver, Dispatcher transmitter, fully transistorized power supply, carrier squelch, narrow (split) band, 2 freq using 12 volts. This may help those that are new at the game of trying to figure out what a mobile unit really is.

de SCC

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FOR SALE

Transmitter, Globe Scout, 75W CW, 60W AM, perfect condition $15.00
Receiver, BC-224, perfect condition 10.00
The above combination would be a good package to start a Novice station.
Oscilloscope, 5", Dumont 208-B, perfect condition $25.00
Transmitter, TCS-8, 100W CW, 1.5 to 12 mHz (needs minor repair) 5.00
Power Supply, for above xmtr., has following transformers 5.00
NYT 323 (1320 VCT, 5 VCT, 6 VCT)
Kenyon T-377 (Two 6V, Two 6 VCT and one 5 VCT)
CNA 30498 (700 VCT, 6 VCT, 5V)
Transmitter, ART 13B, condition unknown 1.00
Receiver, ARC-3, needs power supply 2.00
Receiver, TCS-5, 1.5 to 12 mHz, needs power supply and minor repair . . . 1.00
Transmitter & Receiver, 6 Mtr., Home Brew, condition unknown 2.00
Q-5'er, Home Brew, perfect condition (use with BC-244 to improve selectivity) 2.00
Signal Generator, Superior 650-A, perfect condition 5.00
Miscellaneous
Speakers, 12", 8" and 6", some perfect, some patched . . . . . 50¢ to $2.00 ea.
Tubes, Receiving & Transmitting, many kinds . . . . . 25¢ to $1.00 ea.
Condensers, Variable, many sizes, new and used . . . . . 50¢ to $1.00 ea.

Harv Headley, KØBPW
3330 Monroe Street
Omaha, Nebraska 68107
Phone: 731-9529

****

FOR SALE

Gonset GSB-201 Mk III 2000 watt Linear Amplifier in A-1 condition – $295.00

Harold F. Layher, WAØPCC
8409 North 31st Street
Omaha, Nebraska 68112
Phone: 455-0311

****

TRADE

Trade Blonder-Tongue TC-IC solid state TV camera, 110 AC, for Duo-Bander and AC or DC, or oth gear.

WØBNF, Glen Byars
P. O. Box 105
Kearney, Nebraska 68847

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NEW MEETING PLACE

By—Russ Minks, WAØVEE

We had our first meeting at Commercial Federal Savings and Loan Association (4724 South 24th Street) in their Fitzgerald Friendship Room. For those of you who did not make the meeting, it is a lovely place; there is a kitchen as well as all the other necessary facilities. The Fitzgerald Friendship Room is a nice large room and is beautifully furnished. There is plenty of parking and it is easy to find. You can get off the Interstate two blocks west of 24th on "L" Street, go east to 25th Street and then south to the parking lot, just south of the Polish Home.

Since it is so nice and so easy to get to, I hope we can meet there regularly as it is large enough to allow our membership to expand without getting crowded for sometime to come.

The meeting was very interesting. A report on the new solid state receiver for the repeater by Jim Droege; a report on the AREC 2 Meter Net by Bob Lockwood.

WNØBCB's chip was drawn at the attendance drawing, but he was not present.

This was Show and Tell night and there were a lot of interesting pieces of equipment shown as well as some very interesting explanations and discussions. Then, too, that very good coffee, as always, and some donuts, plus a lot of interesting eyeball QSOs.

Hope to see you all next meeting.

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November 4, 1845—The uniform election day was first established.

November 9, 1911—A patent for a neon tube advertising sign was first applied for by George Claude.

November 30, 1782—The United States Government made the first treaty with a nation with which it had been at war, the United Kingdom.

Service

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WANTED

I'm looking for a "Q" multiplier, such as the Heath HD-11 or GD-125. If anyone has one, let me know.

Danny Richardson
Cambridge, NE 69022

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FCC ACTIVITY

By Bill Grenfell – W4GF

It is pretty obvious that there is a lot left unwritten in FCC rule Section 97.103 regarding amateur station log keeping, particularly for net and round table operation. Several people have suggested some further guidance as to what is considered to be in compliance would be helpful.

In a round table or net operation, some operators are logging the call, and the time in and out, of each *other* station which enters and leaves the group. This detail is not necessary. The log is of the operator's *own* station *only*; therefore, only his own station's time of entering and leaving the group *need be* entered in his station log. The beginning of his first transmission and the end of his last transmission to the group are what is needed to accurately include his station's transmissions.

Some operators include more time than this, such as the time from when he begins listening to the group to when he stops listening. While not strictly accurate, this does commit the log keeper to responsibility for a time block including all of his transmissions to the group, so such a practice should not significantly detract from the FCC's purpose in requiring a log for its examination.

Paragraph 97.103 (c) requires logging the "call sign of the station called . . . ." Again, the rule lacks sufficient detail to answer the problem of adequate logging when the operator is participating in a net or round table. Should you log the calls of all the stations that you hear participating? Notice the rule says *station* called, so listing just one of the participating stations would be technically correct. If it is a controlled net, the net control station would be the logical choice. If the net, round table, or group has a name, logging that as well as the NCS would be helpful information altho not specifically required. If the group has no NCS, the station following you, i.e., the station you call to transmit next, is the logical call sign to log if you wish to list only one. The rule on transmitting station identification (97.87 (a) substantiates this in permitting giving the call sign "for at least one of the group of stations . . . ." as adequate for identification purposes. Of course if you want to log all the calls of the group, there is nothing in the rule which says you may not do this; and in the case of the NCS it seems to be a personal necessity!

In a traffic net where two stations are sent off the net frequency for a two-way exchange of informal remarks or one or more formal messages, I believe that exchange should be treated as an entirely separate log entry, even though it may show as a piece of time included in the single preceding line entry of operation on the net frequency for the total net session time. Perhaps three separate entries would better portray exactly what took place in such a situation. Since I do not recall any official FCC interpretation of situations I have presented in the preceding two sentences, it can be taken only as an experienced opinion as to how I would probably answer a question on the subject.

Usually, an amateur station log is useful to the FCC in substantiating a monitored transmission which was in

violation of a rule. If accurately kept, the log can also serve as convincing evidence to a station operator that he was not on the air at the time of an alleged violation. It is easy to mistake (ll sign on 'phone, and bootlegging o calls is still going on. So keep a good, accurate log!

de Auto-Call

****

HONEY SUNDAY NOV. 19

Helps the Retarded

****

DO YOUR THING

Council Bluffs

Sirs: – I recently read a poem I believe will help "bridge the generation gap." I'd like to share it with all the people with a "gap" of their own.

I do my thing, and you do your thing.

I am not in this world to live up to your expectations

And you are not in this world to live up to mine.

You are you and I am I

And if by chance we find each other, it's beautiful.

–Frederick S. Perls

I hope this "hits home" with a few people. It is not only aimed at parents who don't understand their rebellious children, but also to those same (dren who believe their parents are overbearing and tend to live in the past.

Debra Hansen

(Submitted by Russ Minks, WAØVEE)

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TRANSCEIVER BIAS REGULATOR

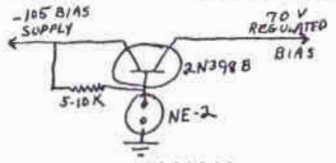
Robert Patten, W4OZF

The primary voltage for a mobile power supply will vary between about 11 and 14 volts depending on automobile engine speed. This will cause a variation of 20 to 30 volts in the bias supply. Bias voltage on the grid of a TV sweep tube in the typical transceiver should be about -55 volts for Class AB-1 operation but, with these large swings in bias voltage, the final can be running anywhere from Class A to Class C. Class A operation shows good linearity but has very low efficiency; Class C has good efficiency but is non-linear.

With the simple regulator shown, bias voltage is held within about 2 volts for a swing of 10 volts in the supply. Better regulation could be obtained by increasing the resistance of R_1, but this would result in a lower regulated voltage and, if supply voltage was excessively low, the neon lamp might not fire at all, offering no improvement in regulation.

R_1 should be selected to pass 4 ma. through the lamp; R_1 – EIN-70. The entire regulator is light enough to be self-supported by its own leads. After the regulator is installed, idling current and S meter zero must be reset. Since the regulator is built into the transceiver, no further adjustment need be made when changing from a mobile supply to an AC powered supply.

de Florida Skip



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de WØJJK

DEAR OM:

I AM PLEASED TO ANNOUNCE THE OPENING (*) OF (H.I), DEVOTED ESPECIALLY TO SERVING THE "HAM".

(H.I) IS THE ONLY STORE IN IOWA AND NEBRASKA CATERING TO THE PARTICULAR NEEDS OF THE "HAM", WITH STOCK AND EXPERIENCE TO PROVIDE WHAT THE "HAM" WANTS.

(H.I) WILL GROW WITH THE "HAM" AND DO ALL POSSIBLE TO BE RESPONSIVE TO YOUR NEEDS. AND, ESPECIALLY, OFFER FRIENDLY, PERSONAL HELP IN SOLVING YOUR EQUIPMENT NEEDS.

A NEW "(H.I) – SAVINGS PLAN" IS BEING FORMULATED TO "SAVE YOU MONEY" –– ASK ABOUT IT!

AFTER 25 YEARS OF HAM EXPERIENCE – OVER 20 OF THEM SELLING HAM PRODUCTS; I BELIEVE THAT I AM IN THE POSITION OF BEING ABLE TO SERVE YOU WELL.

PLEASE DROP IN AND SAY HELLO–I WON'T OBJECT IF YOU BUY ANYTHING AT THE SAME TIME–(HI)!

73, Alan McMillan

AL McMILLAN, WØJJK

(*) We expect to open for store sales by Nov. 10, 72

HOURS: Tues.-Wed., Fri. – Noon/5 P.M.
Thurs.-Noon/8 P.M. – Sat.- 9 A.M./5 P.M.

1530 Ave. "G" Council Bluffs, Iowa 51501