



# HAM HUM

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



Vol. XXVII  
No. 8

August 1977

## NEXT MEETING

WHEN: FRIDAY, AUGUST 12, 1977

TIME: 7:30 P.M.

PLACE: C.W.A. LOCAL 7400  
1920 South 44th Street  
Omaha, Nebraska

PROGRAM: Newington, Connecticut is a place well known to radio amateurs. Our speaker has first-hand knowledge of the town and what is happening there.

Gerald L. (Jerry) Hall, K1TD, Associate Technical Editor for "QST," will let us know what the American Radio Relay League is doing for all amateurs.

If you want to hear or be heard, be present.

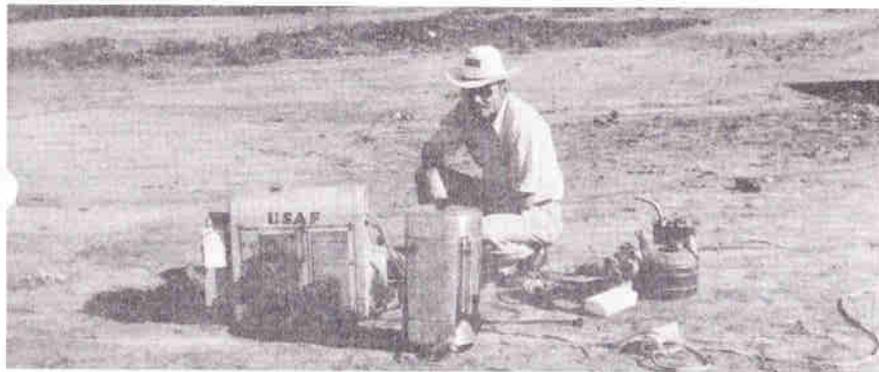
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VISITORS WELCOME — REFRESHMENTS — EYEBALL QSOs

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FIELD DAY 1977

(see inside)



**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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 Student member . . . . . 3.50  
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 Associate Editor: John Snyder, WØWRT  
 Phone HOME: 556-1538  
 BUSINESS: 397-3000 - EX 3761

**Deadline for September issue is August 19th**

New member initiation fee . . . . . \$1.00  
**Quarterly for balance of year:**  
 Regular member . . . . . \$2.00  
 Regular member and XYL . . . . . 2.45  
 Student member . . . . . 1.00

**1977 KANSAS-NEBRASKA  
 AMATEUR RADIO CLUB  
 HAMFEST & FLEA MARKET**

August 13 and 14, Cloud County Community College (modern, air-conditioned facilities), Concordia, Kansas. For information and motel reservations contact WØTLG, WØZIT, P. O. Box 462, Concordia, KS 66901. (President Bob, WBØLYU, and Secretary Tom, KØPQR, have detailed information.)

\*\*\*\*\*

**NOTE OF THANKS**

Many thanks to Club members who sent me cards and letters during my recent hospital confinement.

Phil Trainer, WBØWYE

\*\*\*\*\*

**ADDITIONS TO ROSTER**

Caltabiano, James F. WØCSJ  
 2311 North 102nd Street  
 Omaha, Nebraska 68134  
 Phone: 397-1878

Hamilton, David B. WØDLN  
 4805 North 107th Street  
 Omaha, Nebraska 68134  
 Phone: 493-1390

Norton, Walter R.  
 3003 Paddock Plaza—#104  
 Omaha, Nebraska 68124  
 Phone: 391-8636

Persson, Scott Edward WØQC  
 4719 Valley Street  
 Omaha, Nebraska 68106  
 Phone: 556-9648

\*\*\*\*\*

## THE PREZ SEZ

This past month has been a very active one for most of us. Along with the Club projects, several of our members have also made the quarterly trip to the FCC Field Office for upgrading. And as can be heard on the local repeaters, results were good. Jon Taute has upgraded from general to extra class and Jon is only 15 years old. This in itself speaks well of both Jon and Club Code and Theory Classes. Also, Scot, WBOWOT upgraded to Tech on Tuesday and then went to Kansas City on Thursday and passed the General code test. That is what is known as persistence! Gerry, WBOPPF and Lou, KØLST both upgraded to General. I am sure that more of you also went up the ladder another notch so let us know about it.

The HF station at the JCC is moving forward with vigor. We should have all of the equipment for the beams and wires and will be putting them up shortly. It is hoped it will be on the air by the end of August, giving the Club a station to be proud of.

We have also been active on the local severe weather nets and I am sure we all will be glad when the weather decides to stabilize in our area and we can forget the watches for another year. Also, Dick, WBØTMU assisted in a Marine emergency on 20 meters this past month. Nice job, Dick! I am sure those involved were grateful for your assistance.

The annual CB Jamboree was held again at Peony Park and the Club set up a station (thanks to Doug, KØBOY). We signed up over 30 new students for our classes. And just as we were starting to remove the gear, the

August 1977

sirens went off for the severe weather. So Steve, WBØZCR and I set the two meter rig up on the stage and the storm's progress was passed along to some very concerned people (several hundred) who were attending the Jamboree. They marveled at the ease with which we were able to talk back and forth and how well the net was conducted. This has to send some of them home thinking along the amateur radio lines, so we may hear from them also by the time the classes start.

In closing, a special thanks to Chuck, WBØNVL and Harold, WAØ-ORC for getting things in order for the Jamboree. I think that the film moving up to amateur radio was the biggest selling factor we had. It was short, about ten minutes, but very well put together and shows all the aspects of amateur radio. And thanks to all of you who helped out.

Don't think I can say anything more about "Action Cam" at the last meeting. Your interest and comments said it all. Thanks Wayne and crew for a fine program!

CU at the meeting, 73

Bob, WBØLYU

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## IT HAPPENED IN AUGUST

**August 28, 1922**—The first "commercial" in radio broadcasting was heard over station WEAJ in New York. The sponsor: Queensboro Realty Co. of Jackson Heights, N. Y. Cost: \$100 for 10 minutes of air time.

**August 7, 1928**—The American dollar bill began to shrink—appearing in a size one-third smaller than bills issued previously by the Treasury.

—Service

## LADIES ONLY

Well, school has been out for several weeks now and I know many of you have had out of town guests as has been my case. I have had my granddaughter and daughter from Missouri for the past three weeks. Like old times having kids run through the house! This along with gardening, home canning and QSLing (sending cards) has really kept me hustling this summer. Undoubtedly most of you gals find yourselves in the same happy circumstances.

Thanks to all of you for the phone calls and cards relative to "Random Thoughts" and "What you like Most about Amateur Radio." Will work them in future articles.

With the advent of hot weather it curtails one's radio activities and for myself I find the most enjoyable time is quite early in the morning. This way am able to keep most of my NET appointments. The general conclusion from talking with some of you gals, you are also working along the same line this summer. Undoubtedly we are all looking forward to cooler weather which makes for more enjoyable radioing and study time. This brings up an important point — our next CLASSES for beginners and others will definitely be held in October as announced by President BOB in the last issue of HAM HUM. This is GOOD NEWS as far as I am concerned and I certainly hope we have the largest attendance of GALS in the HISTORY of the AK-SAR-BEN AMATEUR RADIO CLUB CLASSES. Again I cannot help but repeat how fortunate we are to have these FINE CLASSES AND PROGRAMS promoted and held

by our FINE CLUB and if you catch me repeating myself along these lines — IT'S INTENTIONAL — I JUST THINK THEY ARE SUPER!

From all reports and conversations I have heard, we again had outstanding FIELD DAY this year with many fine QSO's on most bands. The gang did another excellent job and we certainly owe a vote of thanks and gratitude to Lloyd, KØDKM, Chairman and his fine crew. WELL DONE FELLOWS!

With reference to a very interesting article, I refer you to the Novice Page in July's World Radio. The column is by Armond Brattland, K6EA. Armond says in his article relative to sending code: "At times one hears QSOs that seem to break down into strings of "dits," and I don't mean only on the Novice Bands! Perhaps this is caused by too little practice off the air, or just a bit of nervous anxiety causing one to grope for words?"

This problem of making mistakes on the air is one we all have at times, but one good remedy is to practice off the air. Hook up the code practice oscillator to your recorder and "tell the recorder" about the weather, your QTH and whatever you feel fits into an interesting QSO. Then, when you play it back, imagine it's coming from a "stranger." (After you leave it on that tape for several days it takes very little imagination to do this.) What you learn about such "stranger" and his operating habits might surprise you. After a few sessions of this you will be able to discuss most any subject with very few mistakes.

I feel that this is very timely advice and brings out the point of the value of practice and in this case of sending

code which ultimately will result in your QSO saying "You have a good fist!" — meaning you send good, clear, readable code.

88's —

Irene, WBØMPC

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## RECENT CONTRIBUTORS

### Ham Hum Postage

Larry L. Abbott, KØJXN

### Repeater 22/82

Robert H. Fricke, WØPOL

### Repeater 34/94

Robert H. Fricke, WØPOL

Amy Hohensee, WBØUQI

### (Repeater 34/94 continued)

Charles A. Michel, KØQVL

Floyd H. Schadendorf, WBØLXP

Hugh L. Tinley, KØGHK

Kenneth W. Walker, WBØPDJ

### Repeater 40/00

Amy Hohensee, WBØUQI

Lowell W. Jackson, WAØHKT

Charles A. Michel, KØQVL

Floyd H. Schadendorf, WBØLXP

Hugh L. Tinley, KØGHK

Kenneth W. Walker, WBØPDJ

### RTTY 1070

Amy Hohensee, WBØUQI

\*\*\*\*\*

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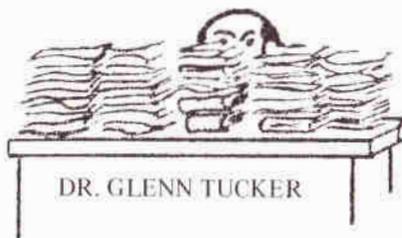
Ray Kydney, WAØWOT

HOURS: Monday — 10:00 AM — 7:00 PM

Tuesday thru Friday — 10:00 AM — 5:30 PM

Saturday — 10:00 AM — 4:30 PM

FROM THE DESK OF:



July 9, (GMT), 1977

Lou Ouren-KØLST

Dear Lou, I patiently waited until you finished your conversation with the other guy (WB4YUJ?) afraid the band might quit on me. Fortunately, it didn't.

I have undertaken a special project, and I hope it gains wide acceptance. (I have written to ARRL about it.) I am going to try to WAS on old-timer calls—i.e. W9xx or KØxxx etc. Why? I believe that we newcomers to hamming owe a great debt to you old-timers (and I'm a grandfather myself). You are the ones who made amateur radio what it is today. You are the ones who established traditions, provided the technological improvements and innovations. You are the ones who fought to keep the amateur bands, and when they gave you worthless bands, developed the

equipment to utilize them. You old-timers (not in age, necessarily) provided the self-policing that allowed hamming to exist today. (How long would amateur radio exist if hams acted like CBers?)

This personal contest is much more difficult than any WAS awards I believe, especially for novices. In over 250 QSOs, you are the 22nd one letter call and the 11th state. Do you realize how few of you there were and are? This program would help us newcomers realize how so few of you could do so much. I also believe that a contest such as this would also help you old-timers pass along the traditions, techniques, and the spirit of hamming to us newcomers, and with the present great influx of newcomers, many more such contacts are needed between us newcomers and old-timers. The only way such contacts can be increased is to make the old-timers sought after. Let us newcomers show them the appreciation they deserve.

Thanks for your time in QSOing with a "young" novice and putting up with his code.

Tnx and 73s.  
Glenn, WD4DAH  
Rte. 3, Box 667  
Lake Park, GA 31636

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### CORRECTION IN ARTICLE ON AZIMUTHS AND DISTANCES FROM OMAHA, NEBRASKA, IN JULY ISSUE HAM HUM

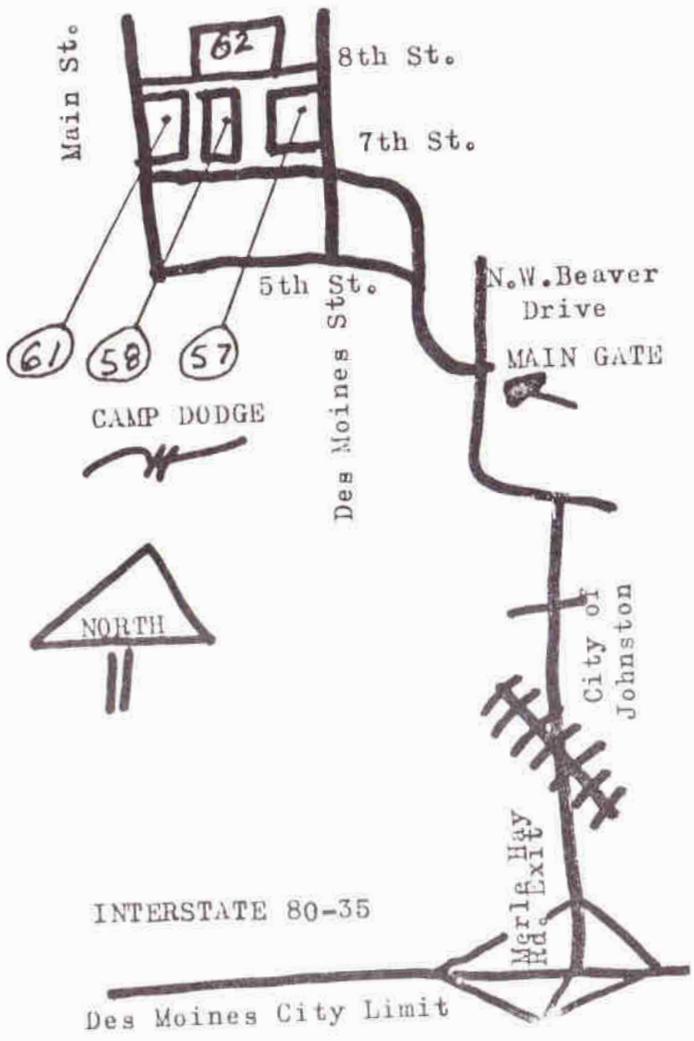
An error was made in the figures for HONOLULU. The line for HONOLULU should read as follows:

HONOLULU                    21.3 -157.8   268.      53.   3814.   3314.   6138.

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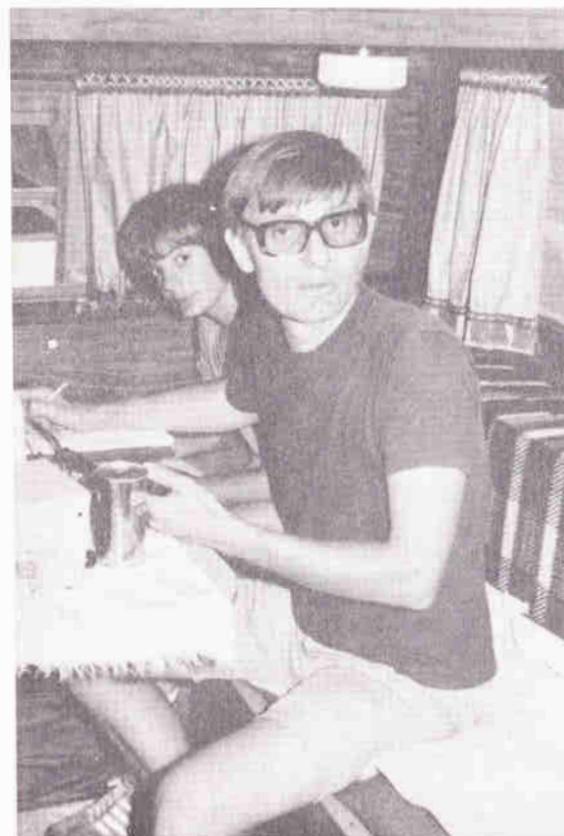
# 1977 HAWKEYE HAM & COMPUTERFEST

Sponsored by Des Moines Radio Amateur Association, August 20 and 21, at Camp Dodge, Des Moines, Iowa.  
Here's where we'll be -

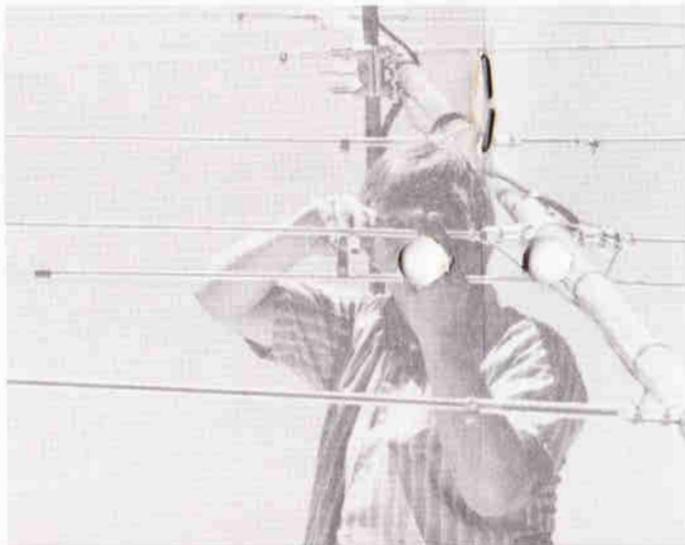
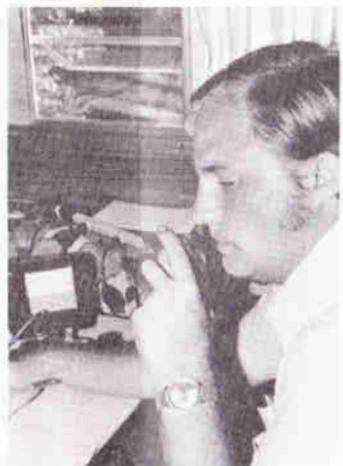


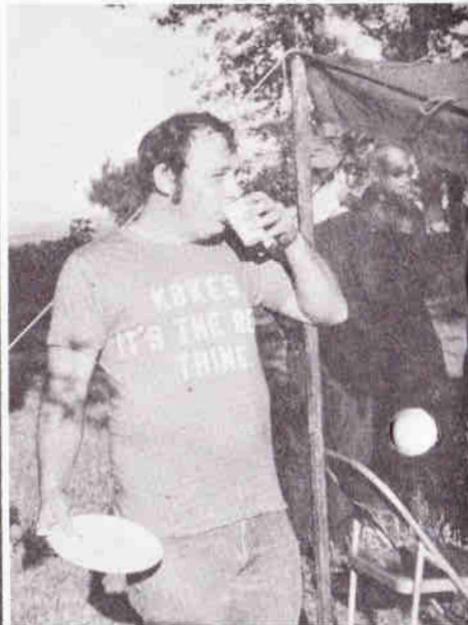
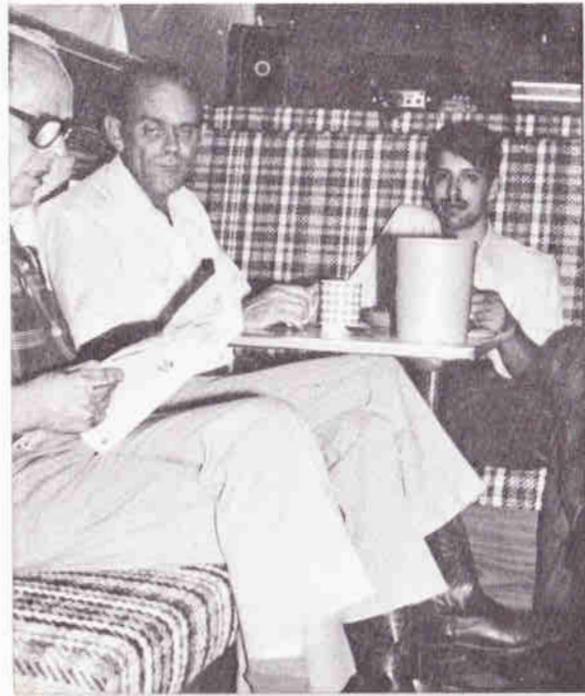
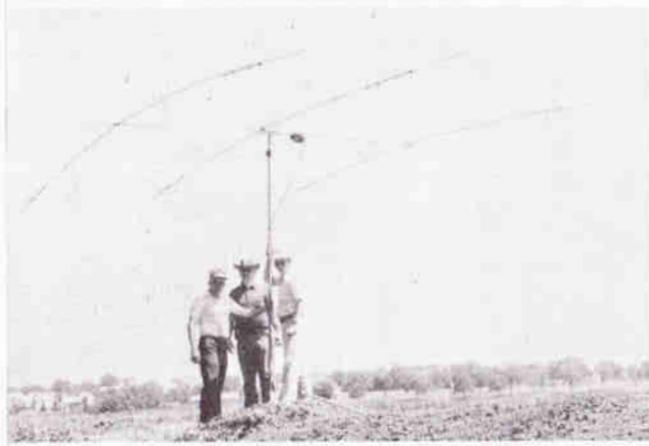


FIELD DAY 1977



Photos by  
Jon Penner, WBØGQT  
and  
Dick Eilers, WØYZV





## KNOW THYSELF

A big thank you to all of those people who returned the new membership application and survey, either by mail or handing them in at the last meeting.

In order to make the file of information on emergency equipment complete, if you haven't sent yours in yet, please do so by this upcoming meeting.

Also, if you upgrade or add emergency equipment, please indicate the change through P. O. Box 291. Changes in address or phone number are obviously important and should also be made known.

This information will afford a look at the makeup of the Club members, their interests, hobbies and emergency capabilities.

Again, please bring your new information sheet to the next meeting or mail it in. This will help get the ball rolling on our self examination, and ease the work of tracking down those that are not returned by then.

de WBØQGV

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## BITS & NYBBLES

How do you make a computer do anything? For a computer (or a micro-computer) to perform any function it must have a completely detailed, step by step, list of instructions to follow. This list of instructions (program) must be in a language the MPU (MicroProcessing Unit) can understand. Since the MPU is a digital processing unit it only understands the presence or absence of a voltage in a specific time period. For example:



A regular clock pulse of period T1 & T2 and duration of T1 is on one line. On another line a single voltage pulse may be present during one of these clock pulses. If so, then the MPU would know that this specific "Bit" was set.

## BROADWAY TWO-WAY RADIO

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MIDLAND

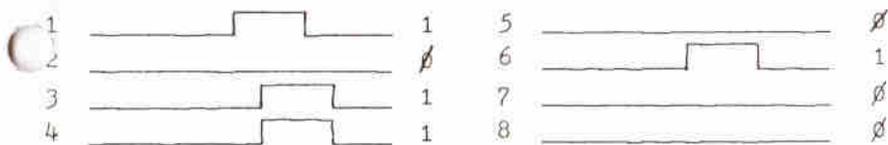
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C. Porter Rinn, WBØOGA

Electronically a Bit refers to the presence or absence of a voltage pulse. It is represented by a 0 for no pulse or a 1 for a pulse. Let us examine 8 lines (the data bus) of data coming into the MPU which, during a single clock period, have the indicated voltage profiles:



The information on this data bus can be represented as 10110100 where a 1 indicates a pulse is present and a 0 indicates a pulse is absent. Most Micro-processors have eight data lines and sixteen address lines. Bigger computers may have many more of each.

In order to tell the (micro) computer to do something we have to specify the precise sequence of voltage pulses during the correct clocking periods. Compact and accurate methods of reproducibly doing this without reference to the electronics have been developed. Collectively these methods are known as programming. While the representation of the contents of the data and address lines in binary is a great improvement over voltage pulses, it is still ungainly. We do not think well in binary. The binary nomenclature can be conveniently condensed into either octal (base 8) or hexadecimal (base 16) notation by regarding sets of three or four sequential binary digits as single octal or hexadecimal integers. (SEE FIGURE 1.) The octal or hexadecimal representation is a great condensation of the binary description of the voltage pulses, but is still a one to one representation.

FIGURE 1:

<u>BINARY</u>	<u>OCTAL</u>	<u>HEX.</u>	<u>DECIMAL</u>
0000	00	0	00
0001	01	1	1
0010	02	2	2
0011	03	3	3
0100	04	4	4
0101	05	5	5
0110	06	6	6
0111	07	7	7
1000	10	8	8
1001	11	9	9
1010	12	A	10
1011	13	B	11
1100	14	C	12
1101	15	D	13
1110	16	E	14
1111	17	F	15
10000	20	10	16

Art. by Elliot Wheeler  
de HARC

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HAM HUM

## THE WORD "HAM"

Frank S. Dyba, W0USU, sent a copy of "DOTS and DASHES," the official publication of the Morse Telegraph Club, Inc., and called my attention to an article which goes along with the use of the word "ham." The original article by Walter H. Candler comes from the March 1935 issue of R9 magazine.

In talking about copying telegraph code on a typewriter by the "seek-and-ye-shall-find" typing, the following paragraph makes reference to "ham":

*When the first "plug" operator lugged a typewriter into a telegraph office and tried to copy messages on it by literally "hammering" them out with two fingers, some facile old pen artist glanced at him dubiously and sarcastically dubbed him "ham." And that has been the name of inefficient operators ever since.*

It has been somewhat agreed we do not really know the origin of the word "ham," particularly insofar as amateur radio is concerned, but this bit of lore can be put in with the rest of the unknown information regarding this subject.

In the article Mr. Candler talks of a most extraordinary code feat of modern times that might be shocking to some of us who are struggling with a mere 13 words a minute.

*The most extraordinary code feat of modern times, I think, was that performed by Theodore R. McElroy, a press operator on the Boston Traveller. He dropped in at the radio operator's tournament here in Chicago in August, 1922*

*and copied on his "mill" 56½ w.p.m. for 5 minutes. The material was taken from the Congressional Record, which added to the difficulty of reading, and transmitted in Continental code by a Wheatstone automatic transmitter – every word spelled out. Radio operators from all over the world participated, but McElroy, a Morse operator won the Radio Championship of the World, which he held for 13 years. Just to prove to the astounded judges and spectators that he was, in fact, a Morse operator, he copied Morse code from the Wheatstone at a speed of 70 w.p.m. for 5 minutes, perfect copy, everything spelled out.*

Incidentally, this editor enjoyed looking through the magazine as it went into a number of articles on the history of the telegraph and whereas it is well known there are two telegraph codes, I ran into a third one – The Phillips Code. So upon further conversation with Frank, I not only learned The Phillips Code was a form of shorthand for telegraph operators which he not only explained to me but loaned me the book. To quote from the book, The Phillips Code is "A Thoroughly Tested Method of Steno-Telegraphy Arranged for Use In Word and Radio Communication. Adaptable to Teletype, Teletypewriter and Telemeter Communication Services"

Frank has the book. If you have interest, give him a call. The book also has the Morse for Japanese, Arabic, Turkish, Greek and Russian, just in case you can talk Greek or one of the others.

# HAM HUM SWAP

NO CHARGE FOR SWAP ADS (NON-COMMERCIAL) SUBJECT TO SPACE LIMITATION. MUST BE SUBMITTED IN WRITING TO P.O. BOX 291. SEE COPY DEADLINE PAGE 2.

FOR SALE: Midland Model 13-500 2 Meter Xcvr (with touch tone pad). Has the following channels: 16-76, 34-94, 94-94, 04-64, 52-52, 22-82, 46-46, 40-00, 25-85, 28-88 - \$150.00.  
Contact Jerry Coufal; phone 493-7275

FOR SALE: Hy-Gain High Tower; Hornet Triband Beam; AR22 Rotator; Home Brew amp, single; 4-400 and 2 spare tubes; 3000V Power Supply; one big junk box.  
Harold F. Jacobs, KØJBC; phone 453-9910

FOR SALE Hy-Gain 2BDQ Doublet Antenna 40-80 Meter;  
& Regency 12 CH. 2 Meter Xcvr (mobile).  
WANTED: Drake L-4B Linear Amplifier.  
Bernie Chap, WBØEYT, 2811 Bonnie St.,  
Omaha, NE 68147; phone 731-0128

FOR GIVE AWAY: We have QST & Ham Radio & some CQ magazines, starting from 1963 up to the present, that we will part with very economically. FREE, come and take all of them. Will not split, already boxed up.  
Bob Andrus, KØLUG,  
4116 N. 100th St., Omaha, NE 68134

FOR SALE: FM-27B Clegg 2 meter rig - \$240.00;  
Drake TR4 Transceiver with noise blanker, AC-4 AC Power Supply, RV-4 VFO - package price \$500.00.  
Charles B. Juvenal, KØKKL, 6923 "B" Street,  
Omaha, Nebraska 68106; phone: 393-2650

FOR SALE: 2 Vibroplex Keyers; one, single contact square weight (vintage 1920's); the other a more modern two contact bug.  
These were used by U.P.R.R. telegraphers, man and wife. To see them or make offer, contact Dick Eilers, WØYZV, home phone 397-3999.

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AMATEUR RADIO EQUIPMENT

Inc.



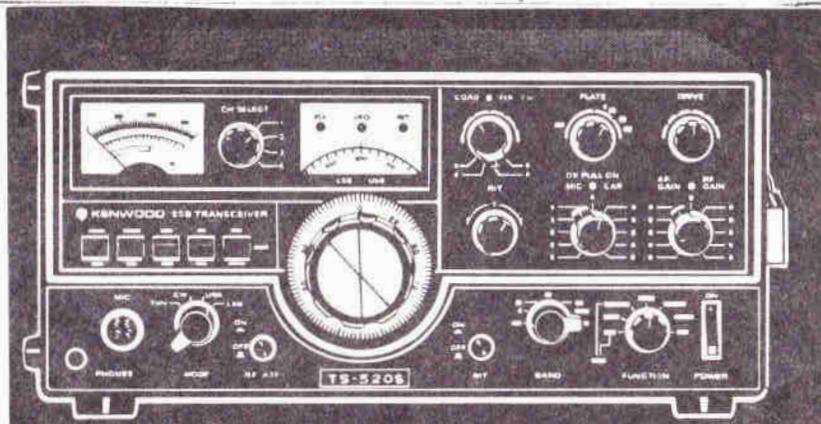
AL - W0JJK

# "SUPER SATURDAY"

IT'S BEEN A "SUPER SAVINGS DAY" FOR MANY FELLOWS ON RECENT SATURDAYS AT H.I. !! THEY SAVED LOTS OF MONEY -- LIKE \$200 OFF A NEW HF RIG; AND A NEW 2 METER RIG FOR UNDER \$170 !

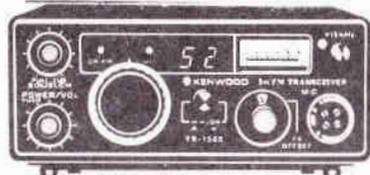


HERE ARE THE RULES, EFFECTIVE 7/23/77 FOR SUPER SATURDAY: YOU MUST VISIT THE STORE-NO PHONE INFO GIVEN; QUANTITIES ARE LIMITED; ALL SPECIALS ARE AT CASH PRICES (5% MORE ON A CREDIT CARD); NO TRADE-INS ACCEPTED. . BIG-BIG SAVINGS ! !



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