



HAM HUM

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What's Up?

Amateur radio gear, and just about everything else imported from Japan, is due to see a significant price increase during the month of July.

The retail price of imported merchandise is tied directly to the currency exchange rate at any given time. Lately, the Japanese Yen has been gaining ground against the U.S. dollar. An increase of approximately 27% in the last 12 months will obviously have some effect on the cost of Japanese manufactured amateur equipment, but how much will be "absorbed" by the manufacturers or the government can only be guessed.

Announced price increases in other Japanese - manufactured consumer electronic and electromechanical items may be of interest. Japanese built autos are currently expected to rise at least 4.5% in price - with tv's, VCRs and most consumer electronic gear going up anywhere from 14 to 33% based upon exchange rates on the day increases are announced. Best "guesstimates" are that ham gear and peripherals made in Japan will rise between 15 and 25%. In simpler terms, a transceiver whose list price is \$1000 (before any discounting) could go as high as \$1200.

Will this poorer exchange rate herald a large return of domestic American companies to the amateur equipment market? Not very likely, according to most experts who point to Taiwan and Korea as prime alternate sources for lower cost production of any type of electronic gear.

Also, the Japanese government is taking action to try to reverse the exchange rate trend.

A Floppy Primer

With the advent of the personal computer, a new industry was formed. This industry was concerned with mass data storage. Several individuals in the mid 70's surveyed the microcomputer pioneers and saw the need for storing computer data in an efficient format. Most manufacturers offer data storage for the personal computer in the form of cassette tape. Cassette tape was all right for the hobbyist, but it could never survive in a business environment.

Cassette tape has two serious drawbacks to being the ideal solution for data storage. First, the transfer rate (placing data on tape) was too slow. Second, tape is a serial device. If you wish to locate a piece of data on a cassette tape, you would have to start the tape at the beginning and play the tape until your data was found. If the data were at the end of the tape, there was a serious time delay.

Inventors surveyed storage techniques used by the mainframe computer group. There, disc storage was used exclusively because of the ability to select data at random. However, the cost of the large disc drives was prohibitive. Just about the time the first microcomputers were offered to the general public, IBM has offered an 8 inch floppy diskette for storage. The main attraction of the floppy was low cost.

Early inventors such as Allan Shugart worked on a new size diskette which is known as the minifloppy. The minifloppy became the de facto standard of personal microcomputers. The minifloppy diskette

Continued on Page 3



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Ak-Sar-Ben Amateur Radio Club, Inc.

All articles or inquiries should be address to:

Editor, **HAM HUM**
4026 Nebraska Avenue
Omaha, Nebraska 68111

President:
Jim Sanford, NØAIH
Phone: 571-2704

Editor:
Mitch Gagne, NØAZF
Phone: 633-5040

Assistant Editor:
Dave Hamilton, NØCLW
Phone: 493-1390

Circulation Manager:
Bob Sanford, NØGFH
Phone: 571-2704

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PREZ SEZ

It's my turn to organize the monthly program. I have been trying to come-up with an informative presentation on HF. But, for various reasons, my ideas just are not coming together. So, the July program will be on meteor burst communications. Meteor burst is a communications mode that utalizes the ionized trail caused by a dust particle entering the Earths atmosphere. With the proper equipment, we can bounce radio signals off these trails. With the aid of a few slides, I'll explain how it works.

We received a very nice letter from the Multiple Sclerosis Society thanking all participants for their support of the MS150 bike tour. I echo their gratitude.

The picnic and softball game has been rescheduled. Joint committees of AARC and IARC are seeking permission to use the facilities at Camp Ashland. An August date is planned. More on this next month.

Twenty-two people attended the first session of the summer novice classes. Assisting WA9ASD with this effort are NOFZK (CW instructor), KAOVYR (electrical fundamentals), and KAOVYS (antenna theory and propagation). Thank you all for your dedication.

A special thanks also goes to the Lincoln Communications Society for the June program.

The boat ride and dinner will be on August 29. The Spirit Of Bellevue will leave Hayworth Park (Just south of the Bellevue bridge in Bellevue) on-time, so be on the dock no later than 7:00 pm. While advance registrations are not required, space is limited to the first 150 people. Those people wanting to reserve space can do so by signing-up at the July or August club meeting. The fee is \$7.50 per person. The dinner is pot-luck. If your LAST NAME begins with the letter.....

A thru J - bring a large meat dish or casserole;
K thru L - bring a dessert;
M thru Z - bring a salad.

Each person is responsible for bringing their own paper plates, cups, and utensils. A cash bar is provided on the boat, and you can bring

Continued...

Prez Says (continued)

your own tea or pop. Live piano music will be provided. Lincoln, Bellevue, Fremont, or Council Bluffs Club members wishing to join us on the boat ride can arrange for a block of reservations by contacting Jim Peterson WBOQGV at (b) 393-5630 or (h) 558-0643. Block reservations will need to be confirmed with advance payment.

Jim Peterson is also looking for communicators to assist with the Roy Feltman Softball Tournament. Dates are July 12 and 13. About 200 teams will compete in this annual event. For more information, contact Jim.

DE NOAIIH

Floppy (continued)

is only five and one quarter inches in diameter.

The disc is simply a round sheet of mylar (plastic) that has been treated with an iron oxide coating. Information is recorded on the disc in the same manner that information is recorded on an audio tape. There is a read-write head that moves radially along the disc and records information on concentric tracks. You should note that each track is discrete. A phonograph record contains grooves that spiral inward from the outer edge to the center. The phonograph record is actually one long groove where as the diskette contains many discrete grooves.

The outer most track on the disc is called track 0. As you move inward toward the center of the disc, the tracks become progressively higher in number. The read/write head can only be on one track at any instant of time. The earliest drives has only 35 tracks (numbered 0 thru 34). As more manufacturers joined in, 40 tracks became the standard. Today you can purchase drives of 35, 40, 77 and 80 tracks. If the drive is 35 or 40 tracks, the head is rated at 48 tracks per inch (tpi). The 80 tracks drives have heads that are rated at 96 tpi.

Each track is further divided into units called sectors. To add to the confusion there is a term known as

density. You will see terms such as single density or double density. If the drive is single density, the track will be divided into 10 sectors (numbered 0 to 9). A double density drive will divide the track into 18 sectors. Each sector will contain 256 bytes of data.

Let us examine how much data can be placed on an 80 track, double density diskette. we simply multiply 80 x 18 x 256 to obtain 368.64 kilobytes of data. since a normal typewritten page contains approximately 2 kilobytes of data, this disk will hold approximately 184 pages of typewritten text. If the drive were double sided (information recorded on both sides of the diskette) than the disc could hold 368 pages of information. Thats a lot of storage for a disc that costs approxomately \$2.50.

Tnx The Electron April 84 & Steve Simcic the Author.

Name Tags & Other Stuff

New member-or-new call letters? You probably need a new name tag. If you would like to order one (or two) just call Ellen, WBOHWF at 345-5566. The cost is \$6.00 each. Club Shirts, jackets and hats may be ordered from Duke, WDOEWH. He can be reached at 455-5402. Ham Hum is also available on cassette tapes. This is a free service provided by the club. There is no charge for the tapes. Call Charlie on Charles, K0QVL for this service.

Hunt Results

The June transmitter hunt was held on Sunday, June 15 at 3 pm. John WBOCMC, hid the transmitter on top of a high dirt pile next to Ak-Sar-Ben Race Track.

The results were:

1. WBOWOT-KM0Y
w/Japanese visitors 1hr-20min
2. N0GPD-KA0VYR + 1 2hr-50min

Vidio coverage was provided by WBOCMC and was broadcast on the ARES net (146.34/94-8pm-CDT) that evening. The next hunt will be Sunday July 13 at 3pm. The starting point will be UNO parking lot X. WBOWOT will be hiding the transmitter. Begining hunters are welcome. DE Bill WA9ASD

On Line . . .

Scott Persson WBOQPP (SYSOP)

Last month we discussed the basics of Up and Downloading and as a result, I have seen many more download attempts. The number of uploads is very low but I suspect that this will pick up in the months ahead. As I have said in the system bulletins, if you are hesitant about trying an Up or Download, leave me a Comment To The SYSOP to set up a time so I can be there to help you through the procedure. Once you have stepped through it, it's not nearly as horrifying as you may think!

MAIL CALL:

This month's topic centers on the Message Subsystem (a fancy name for a really simple function). The Message Subsystem is just an electronic message service where you can read, enter and delete messages to other users on the system.

You enter the Message Subsystem by selecting "M" from the Main Menu. You will then see the message "Enter Selection (?=Message Menu):". Note that you always know what menu you are currently in. To look at the Message Subsystem Menu, type "?" and press RETURN.

THE MAILBOX:

The first thing you can do is enter a message to another user. By selecting "E" to Enter a message, you are first asked for the subject of the message [Subject:]. The subject of a message is simply what the message is about. You will then be asked for the name of the person that the message is directed to [To (RETURN=All)]. Please use either the person's FULL name or his CALL SIGN ONLY, but NOT BOTH. The RETURN=All means that if you press RETURN without entering a name, the system assumes that the message is directed to everyone and will print "ALL" for you.

You are now ready to enter the message text. The rules are simple: you have 14 lines with 34 characters per line. If your message is longer than that, divide it into two or more pieces and enter several messages with the Subjects being something like FIELD DAY 1, FIELD DAY 2, etc. To end your message, press RETURN on an empty line.

So now the message is entered. Has it been saved? NO! You have only entered the message into the message buffer. You now have the options of listing the message to your screen to view it, editing any line in the message if you made a mistake, adding more lines to the message (if less than 14 are already entered), saving the message to disk or aborting the message. Decisions, decisions!

If you made no mistakes, select "S" for Save and the message will be saved to disk. You will be told what number the message was given in the system and then be returned to the "Enter Selection (?=Message Menu):" prompt. If you want to abort the message, type "Q" for Quit and you will be returned to the same prompt with no message being saved. It will be as if nothing happened.

If you made a mistake and wish to correct it, type "E" for edit. You will be asked which line you want to edit. Enter the line number. The system will print the line you requested and tell you that "RETURN=No Change". This means that pressing RETURN as the first character in that line will not change the line at all. To change the line, you will have to retype the entire line. After you edit the line, you might want to view the message text again to see if it reads correctly. To view the message text again, type "L" for List. The text will be sent to you again so you can see if things are correct. If there are less than 14 lines in your message, you might want to add more lines. To do this, type "A" for Add. You will then see the prompt numbered with the next available line. Continue to enter your text and press RETURN on an empty line to end the message just as you did before. That summarizes the options available to you when you are entering a message into the system.

READING THE MAIL:

Once we are back at the "Enter Selection (?=Message Menu):" prompt, there are several functions available for examining messages left on the system. The first function is "Q" for Quick Scan. This function allows you to see the message number and subject of any or all messages on the system. For more detailed information on a message, use "S" for Summary. This function will show you the message "header" which includes the message number, the date and time the message was sent, who sent the message, who the message is

On Line (continued)

to and what the message is about.

The last function is "R" for Read a message. This function gives you the message header as described above plus the actual message text. If you want to read a range of messages (you entered 1-8 when asked for a message number, for example) you will be prompted "Next (Y/N)?" after each message. This gives you time to read the message fully before it scrolls off your screen. Entering "N" here would return you to the "Enter Selection (?=Message Menu):" prompt.

THE TRASH CAN:

After a message has been read by the person to whom it was addressed, you might want to delete it from the system. As of now, the only person who can delete (kill) a message is the person who left it. The person the message was sent to can't. This will be changed in the future. However, to kill a message, enter "K" for Kill. You will be asked for a message number. Enter the number of the message you wish to kill. You will be sent the message header and asked "Confirm Kill (Y/N)". When you are sure that you have the right message, type "Y" and the message will be deleted. If you type "N", the message will remain unchanged. The system will not allow you to kill a message left by someone else.

NEITHER SNOW NOR RAIN...

The Message Subsystem (Mail) can be a fun thing to use. You can post for sale ads, want ads, leave notes to other users, exchange clever ideas, address changes, post items of general interest or just comment on the weather. Whatever you choose to use the Message Subsystem for, it will never cost you the price of a stamp!

Next month, we will find out exactly what text files, in addition to the system Bulletins, are available for viewing on the system and how YOU can be involved in adding information to these files. So until next month, see you OnLine!

MEMBERSHIP UPDATES

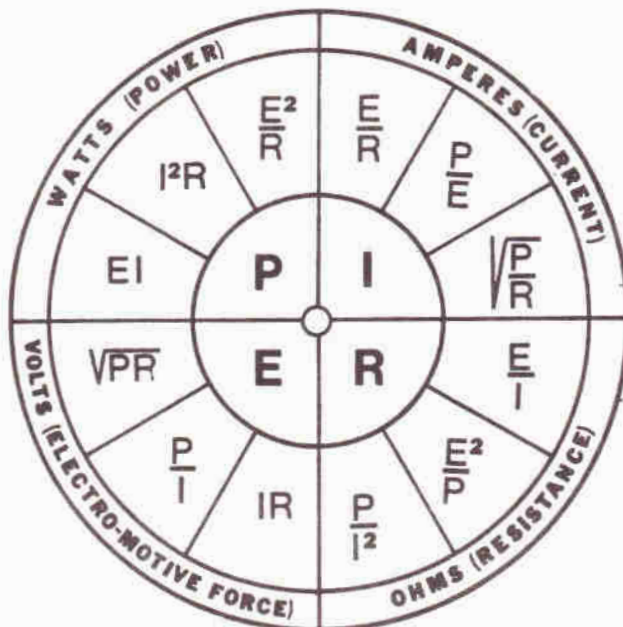
REINSTATED MEMBER

Joseph M. McNulty W0UIX
810 so. 58
Omaha, NE. 68106
553-0116

NEW MEMBERS

Gordon L. Davis N0FZK
310 Hwy 275 West, Lot 16
Valley, NE. 68064

Anthony J. Schmidt II N3BHP
7700 Lakeview St.
Ralston, NE. 68127



Minutes of the Board

The June meeting of the Board of Trustees was held on June 3, 1986, at the American Red Cross. Meeting was called to order at 7:07 pm by Jim N0AIH. Members present were: N0AIH Jim, WA9ASD Bill, K0BOY Doug, WB0QPP Scott, KC0R Larry, N5DZZ Jim, N0BTN Greg, WD0HWF Ellen.

Jim-AIH- distributed an organization guide for use by the Club President and also an organization guide for the auction. Both were discussed.

Insurance was discussed and policy proposals reviewed. Proposals considered were from the Marcotte Agency and Roh-Sanders Insurance Agency. Discussion occurred concerning the value of items owned by the Club, type of insurance that was necessary, and annual premium. Doug moved that we insure the generator and trailer for \$1,000; the antenna trailer be self insured; and (1) liability coverage to protect the clubs assests in the event of a claim for injury or death of a Club member or non-club member while the injured person is attending a Club sponsored event. Limits of liability are \$500,000. (2) Liability coverage to protect the Club's assests in the event of a claim for injury or death of any party while a Club member is towing a club-owned trailer with a privately owned vehicle. The provisions of this policy are only in effect in the event the amount of the claim exceeds the limits of liability of the policy in effect for the privately owned vehicle. Limits of liability are \$500,000. Seconded by Scott-QPP. Motion passed 7-1.

Bill-ASD moved that we approve the expenditure of \$275.00 for the insurance package presented by Roh-Sanders Insurance Agency. Scott-QPP seconded the motion. Passed 7-1.
Committee Reports

Equipment Committee (Doug)

Both trailers have been updated and numerous repairs completed. They have been checked and are in excellent condition. We are still searching for an appropriate storage place.

Auction Committee (Jim-DZZ)

The Club auction realized a profit of \$819.97. The financial report was presented and discussed. Doug moved to approve the report. Seconded by Bill. Passed.

Profit or (Loss) summary

A. Door Prize	\$ (1.15)
B. Food and Beverage	94.86
C. Equipment Auction	726.26
Net Profit	819.97

Special Events Committee (Jim-QGV)

Arrangements have been made for the river cruise to be held on Friday, August 29. Jim-QGV- moved that we sign a contract with the cruise operators for a 7:00 pm cruise. Cost to be \$7.50 per person with payment in advance. Seconded by Doug. Passed.

The following special events operations were reported:

Jim-QGV- received a request for radio operators on June 14 to provide communication for BRAN from Ashland to Dodge Park. Operators participating in this event are also invited to a pork roast on June 13.

On July 12 and 13 operators will be needed to provide communication for a softball tournament

On July 28 radio oiperators are requested to help the U.P. Drum and Bugle Organization run the Drums Across the Midlands competition at UNO.

A request has been made to Channel 3 to provide Dopler radar information on the 440 Mhz weather transmitter. Channel 3 is currently investigating the possibility of purchasing the necessary equipment.

Finance Committee (Greg)

The first quarter expenditure statement was presented and discussed. Doug moved to approve the statement. Jim-QGV- seconded. Passed.

The May 1986 financial statement was presented by Greg. Scott moved to table the statement. Seconded by Doug. Tabled.

Board continued...

Bills to be paid:

Jim-QGV- moved to reimburse WA9ASD \$150.00 for the purchase of three file cabinets. Seconded by Scott. Passed.

Scott moved to approve payment of bills totaling \$11.42. Seconded by Doug. Passed.

Bill moved to allocate up to \$300 for Field Day expenses. Seconded by Jim -QGV. Passed.

Motion was made to approve the following lifetime memberships:

Linda True....Spouse
Mitch Gagne....N0AZF
June Gagne.....KA0RYM
Dick Jugal.....K0DQ
Marlene Jugal..Spouse

Motion seconded by Jim-QGV. Passed.

The purchase of an additional printer for Ham Hum publications was discussed. Motion made to table by Jim-QGV. Seconded by Doug. Tabled.

Bill reported the start of a new novice class to be held at the JCC. Class will meet at 7:00 pm starting June 16 each Monday through August 24th.

The meeting adjourned at 10:10 pm.

Respectfully submitted

Larry Bock KC0R Secretary

Novice Expansion Proposed

FCC proposes expanding privileges available to Amateur Novice and Technician class operators (PR Docket 86-161). On 04/18/86, the Commission proposed to expand the present 28.1 - 28.2 Mhz. Novice-Technician band to 28.1 - 28.5 Mhz. with telegraphy use therein (A1A) limited to International Morse. J3E telephony (single sideband, suppressed carrier only) use by both classes would be permitted from 28.3 to 28.5 Mhz. All operation in the 28 Mhz. band by Novice and Technician licensees would be limited to 200 watts peak envelope power (PEP). Also proposed to be made available to Novice and Technician class operators are the 220-225 and the 1246-1260 Mhz. bands with Novice station power limited to 25 and 5 watts, PEP, respectively. FCC's notice did not give any indication whether these were input or output powers. current rule section 97.67 which is titled "maximum transmitting power" does not make any input/output power distinction except in the current Novice subbands and for the beacon operation (see FCC's Report and Order PR docket no. 85-23. adopted 02/26/86). The current limitation of use by U.S. Amateur licensees of the 220-225 Mhz. band to ITV Region 2 only, would not be changed. Sections 97.85, 97.86 and

97.87 would be amended to require that "No Amateur station at which the control operator or station licensee holds only Novice class privileges shall be in ..." (repeater operation 97.85 (i)); (auxiliary operation 97.86(e)); or, (beacon operation 97.87(f)). Comments on the proposal may be filed on or before July 16, 1986, and reply comments on or before August 20, 1986. Identify the docket number and send comments to: the Secretary, FCC, Washington D.C. 20554. One copy will receive as much consideration as the formal requirement for an original and six, or the original and eleven which assures a copy for each Commissioner.

Tnx World Radio July, 1986

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* *Next Program* *

* *Meteor Burst* *

* *Communication* *

* *Techniques* *

* * * * *

Minutes of the Meeting

June 1986 General Membership Meeting

The meeting was called to order at 7:40pm by Jay Nichols KB8TR. Introductions proceeded around the room followed by the pledge of allegiance.

There were no minutes taken at the May meeting so none were approved.

Greg Zimmerman NØBTN gave the Treasurer's report which indicated \$3570.03 in the checking account. The report was approved.

Jim Faulkenberry N5DZZ gave the Auction Committee report. The most successful auction in club history netted \$819.97 for the club.

Bill True WA9ASD gave the Education Committee report. Novice classes will begin June 16 and run through August on Monday nights at the Jewish Community Center at 333 South 132nd Street. The text used will be "Tune in the World".

Vern Wirka WBØGQM, the Nebraska Section Manager, reported on the proposed Novice Enhancement. A straw poll at the meeting indicated a 3 to 1 support of the proposal.

Jay KB8TR gave the Repeater Committee report which indicated that the 34-94 repeater was down and was replaced by Doug Halbert's backup repeater. The new computer controller will be installed on 34-94 when the primary repeater is put back into service.

Jim Peterson WBØQGV gave the Special Events Committee report. On Friday August 29, there will be a river boat cruise on the "Spirit Of Brownville" for \$7.50 per person or \$15.00 per couple. All should be at the Bellevue dock by 7 pm. Payment should be made in advance to the club. Catering will be pot luck with more details in HAM HUM. All area radio clubs are invited to this 3 hour cruise. BRAN (Bike Ride Across Nebraska) needs operators on June 14. The event was covered by ATV. The Roy Feldman Softball Tournament will be held on July 12-13. Drums Across The Midlands" will take place July 28. July 19-20 will see the Bike Ride Across Iowa take place while July 18-20 are the dates for the Cornhusker State Games in Lincoln.

Scott Persson WBØQPP reported that the club's Bulletin Board at 289-4658 has received over 650 calls since March 15. Activity is averaging 7 calls per day.

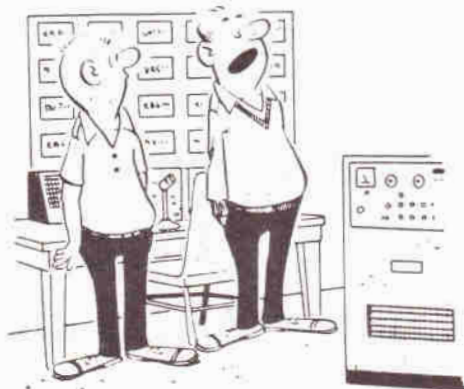
Bill WA9ASD reported on the upcoming transmitter hunt on June 14 at 3pm at UNO lot "X" on 146.52MHz. The CW net Thursday nights at 8pm on 21.125MHz needs check-ins.

Gordon Davis NØFZK was approved as a new member.

A break was taken at 8:25pm and the program on VHF/UHF DXing was presented by KØNG, WBØDGF, KAØABA and KCØQR from the Lincoln Communications Society in Lincoln. Thanks to the Lincoln crew for a fine program!

Respectfully Submitted,

Scott Persson WBØQPP



"Built it myself—just the basic tools: pliers, money, soldering iron, money, screwdriver, money..."



"Congratulations! You've made the down payment —now that wasn't so difficult, was it?"

Coming Attractions

JULY

8	RSCB Meeting C.B. IA. 7:30 pm	WAØZQG
9	Lincoln ARC meeting 7:30 pm	146.25/85
10	Bellevue ARC meeting 7:30 pm	146.81/21
10	CW net 21.125 Mhz. 8 pm	WA9ASD
11	Ak-Sar-Ben ARC meeting Red-X 7:30 pm	NØAIH
12-13	IARU HF Championship	CQ 5/86 p63
13	Transmitter Hunt UNO parking lot X 3pm	WA9ASD
17	CW net 21.125 Mhz. 8pm	WA9ASD
18-20	Nebraska State Games-Lincoln NE. (operators needed)	WDØHRG
19-20	Hanfest Des Moines IA.	KAØVYP
19-20	CQ WPX VHF contest	CQ 5/86 p63
19-20	Bike Ride Across Iowa-C.B.IA. (operators needed)	WBØQGV
24	SWIARC meeting Red-X C.B. IA.	146.22/82
24	CW net 21.125 Mhz 8pm	WA9ASD
25	Pioneer ARC (Fremont) meeting. Library 7 pm	146.07/67
31	CW net 21.125 Mhz. 8 pm	WA9ASD

AUGUST

5	Ak-Sar-Ben ARC board meeting Red-X 7 pm	NØAIH
7	CW net 21.125 Mhz. 8 pm	WA9ASD
8	Ak-Sar-Ben ARC meeting Red-X 7:30 pm	NØAIH
10	Transmitter Hunt UNO parking lot X 3:00 pm	WA9ASD
12	RSCB meeting C.B. IA.	WAØZQG
13	Lincoln ARC meeting 7:30 pm	146.25/85
14	Bellevue ARC meeting Sarpy Cty. Courthouse 7:30 pm	147.81/21
14	CW net 21.125 Mhz. 8 pm	WA9ASD
21	CW net 21.125 Mhz. 8 pm	WA9ASD
22	Pioneer ARC meeting Fremont Library 7 pm	146.07/67
28	SWIARC meeting Red-X C.B. IA. 7:30 pm	146.22/82
28	CW net 21.125 Mhz. 8 pm	WA9ASD
29	Ak-Sar-Ben ARC 3rd annual river cruise. Hayworth Park Bellevue NE. (All area clubs invited). See Prez Sez this issue.	

RAGBRI (Register's Annual Great Bike Ride Across Iowa) needs volunteer radio operators for various shifts (name your own) in Council Bluffs, IA. on July 19. Handhelds a must! Call Jim WBØQGV 558-0643 - Steve WBØVNF - or Terry KSØL (via 146.22/82).

Beacons • Beacons • Beacons • Beacons • Beacons

28.200	KF4M	St. Petersburg FL	75W Ground Plane
28.208	WA1IOB	Marlboro MA	75W Vertical
28.210	K4KMZ	Elizabethtown KY	20W Vertical
28.2175	WB9VMY	Oklahoma City OK	4W Ground Plane
28.222	W9UXO	Chicago IL	10W Ground Plane
28.2525	WF4JHS	Thomasville GA	7W Vertical
28.287	W8OMV	Ashville NC	5W Ground plane
28.296	W3VD	Laurel MD	1.5W Vertical Dipole
28.888	W6IRT	North Hollywood CA	5W Ground Plane

Listening for 10 meter beacons is one way to determine 10 meter band conditions. When working around the shack, leave your receiver on one of the beacons in the geographical area that you are interested in, and listen for the beacon signal.

1986 BOARD OF TRUSTEES

PRESIDENT

Jim Sanford NOAIIH
9718 Jaynes Street
Omaha, Nebraska 68134
(h) 571-2704
(b) 633-5428

VICE PRESIDENT

Jay Nichols KB8TR
1635 Peterson Drive
Omaha, Nebraska 68130
(h) 333-9412
(b) 393-6644

TREASURER

Greg Zimmerman NOBIN
4912 South 157th Street
Omaha, Nebraska 68135
(h) 895-5219
(b) 399-1453

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(h) 426-9549
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4805 North 107th Street
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(h) 493-1390
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BOARD MEMBER

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5503 Blondo Street
Omaha, Nebraska 68104
(h) 556-2586
(b) 556-5654

BOARD MEMBER

Education Committee
Bill True WA9ASD
4717 North 80th Street
Omaha, Nebraska 68134
(h) 571-8516
(b) 633-5282

BOARD MEMBER

Equipment Committee
Doug Halbert KOBOY
7109 South 79th Street
Omaha, Nebraska 68128
(h) 331-1433
(b) 331-4500 ext 236

BOARD MEMBER

Auction/door prize
Jim Faulkenberry
5318 North 97th Avenue
Omaha, Nebraska 68134
(h) 571-5092

BOARD MEMBER

Special Events Committee
Jim Peterson WBOQGV
5208 Cass Street
Omaha, Nebraska 68132
(h) 558-0643
(b) 393-5630

BOARD MEMBER

Scott Persson WBOQPP
412 South 212 Street
Elkhorn, Nebraska 68022
(h) 289-5426
(b) 342-7600 ext 4237

EXECUTIVE SECRETARY

Ellen Morrissey WBOHWF
2102 South 38th Avenue
Omaha Nebraska 68105
(h) 345-5566

Next Meeting July 11 — Red Cross, 7:30 p.m.
Deadline for August Ham Hum . . . July 18

THE WANT ADS

TRADE:

Large stock of new tubes used in Collins, Drake etc. Want Icom IC-2AT.
Call Ron WAØMQM 556-4914

FREE:

to old equipment collector. Heathkit OS1 Oscilloscope and TC2 tube tester
in mint condition. Also, old electronic books
Call Glenn WAØFMY 571-6230

FOR SALE:

Sony vidio camera - B/W - with 50mm lens and zoom lens. All cables included.
Great way to begin ATV.
Call Steve WBØUNF 323-3664

JULY-1986



from

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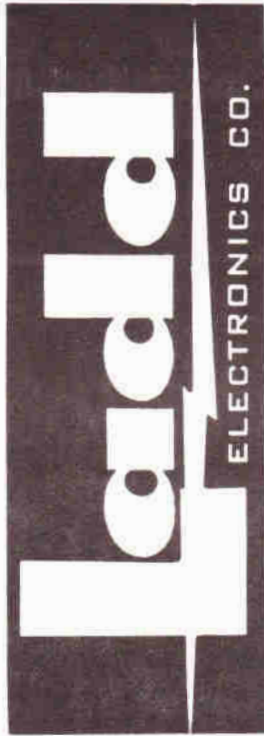
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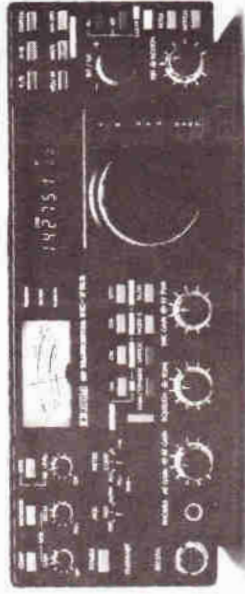
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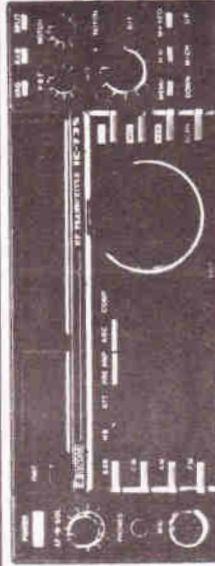


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