



HAM HUM

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



Vol. XXIV
No. 8

August 1974

NEXT MEETING

WHEN: FRIDAY - AUGUST 9, 1974

TIME: 8:00 P.M.

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

PROGRAM: KØHHP, Dick Cunningham will discuss the work he carries on with Sigma-1 transceivers with particular reference to the development and modification. Very interesting! Don't miss this one!

VISITORS WELCOME - EYEBALL QSOs - REFRESHMENTS

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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Published by

AK-SAR-BEN RADIO CLUB, INC.
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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

SILENT KEY

In case no one noticed, Silent Keys (July QST) listed W5NT, Charles L. Vanderpool. Though he had not been in Omaha for several years, he spent some time here on different occasions and was well known and liked by many area hams.

de WØJJK
 7-12-1974

MEMBER NEWS

After sitting 16 years on a Tech ticket, Royal Enders, KØLYO, now has a brand new conditional, and will be active on the Ham bands (HF). Local and state station calls will be appreciated. Included is a repeater donation.

KØLYO

**NEW MEMBER
 ADDITION TO ROSTER**

John W. Ferrel, WØYDV
 6401 North 39th Street
 Omaha, Nebraska 68111
 Phone: 455-5451

ROSTER CORRECTION

Change in address for Charles K. Hicks, WAØUMR, from 7528 Maywood, Ralston, to Box 12, Carleton, Nebraska 68326; Phone: (402) 356-4221.

JULY MEETING

The room was almost dark and through the center from front to back there was a thin beam of red light, out the diameter of a thin pencil or a thick knitting needle, whichever side you are on. It was particularly apparent when an aerosol mist was sprayed into it or when some of our local loyal polluters blew smoke into it, and over this beam of light came a voice.

No, we did not spend the entire evening in the dark. Our program was on Lasers—The Light Fantastic. Larry Suder who is employed at North-western Bell Telephone Company as a construction supervisor and who has a BS degree from the University of Nebraska at Lincoln in engineering, told us of the need for additional communication facilities and the possibility of using the laser as a solution to some of these problems. The problem of the telephone companies is basically one of volume for immense number of calls at the same time. By the use of very sophisticated techniques the companies are still keeping up with this volume but with the growth of communications there will be need for considerable additional facility. He brought this out by a slide presentation and had an example of some of the wire in the form of a foot-long chunk of a multiple coaxial cable. It consisted of a bundle of coaxial cables each approximately the size of RG-8U, the whole cable approximately $2\frac{3}{4}$ " in diameter. Each of these pieces of coax were of the low loss variety. He brought out that the telephone company can put more than

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one call in a single pair of wires, many, many more than one call on a coax cable, and multiple many calls on a microwave, and if they can solve the problems of transmitting these calls by way of a laser beam from point to point due to extremely high frequency of the laser, the possible numbers of communication paths is tremendous.

The use of the laser, however, is not without problems. The laboratories are working to solve these problems and feel they are close enough to the solutions that it is in the realm of possibility. The demonstration laser, as he pointed out, was a very low power laser carrying only a single communication path in one direction. It was so low in power, in fact, that it did not even punch a hole in the hands of those less timid souls who tried.

Mr. Suder is part of the Telephone Company's group that does provide lectures on various subjects and we are most appreciative of the Telephone Company and Mr. Suder for his efforts in bringing this story of possible use of laser beams in communication.

Due to the fact Mr. Suder would be on vacation on our normal meeting night, we did have the meeting on an alternate night. We also had the meeting at a different location. As the comics would say on the location, "I have good news and bad news." The good news is we would solve the problem for our wheelchair members in that the Papillion auditorium of Commercial Federal Savings and Loan Association is ground-floor level. The bad news is that the auditorium is a little smaller than the meeting room at the South Omaha Branch of Com-

mercial Federal Savings and Loan Association. This being a July meeting it would be assumed some of our members were on vacation and unable to attend. We did fill almost every available chair. This move was a test on the part of your Board as they would like to solve all of our problems. We will be back at the South Omaha Branch for our next meeting and the Board will continue to deliberate on the meeting room problem. Any input you may have as a member would be appreciated by the Board. Please give your thinking to any Board member.

The meeting adjourned with the usual eyeball sociability over donuts and coffee.

UPDATED COMMS PACT

On June 26, 1974, the American Red Cross and the American Radio Relay League signed an updated communications pact reaffirming the statement of coordination of activities for the public benefit.

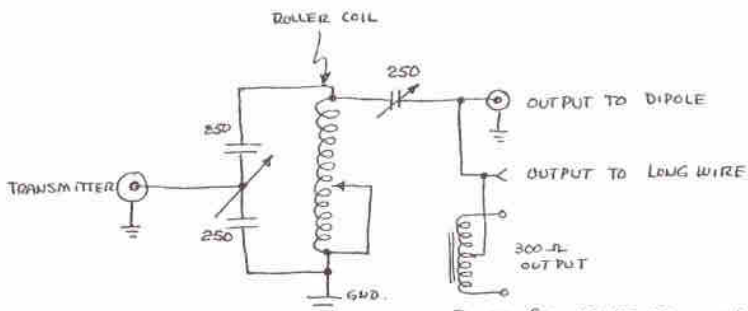
The signing by ARRL President W2TUK and ARC President George M. Eley documents the broad framework within which volunteer Amateur Radio Public Service Corps personnel may coordinate their facilities and equipment with Red Cross for communications in disaster relief. The agreement will be detailed in an upcoming issue of QST.

de Florida Skip

ANTENNA TUNER

Several Hams have asked us about our antenna tuner. This is not our design although we wish it was. Hi.

Antenna tuner for all HF work. Build it yourself and save a bundle.



SEE JULY 1970 QST
FOR THE ORIGINAL ARTICLE.

ROLLER COIL CAN BE FROM OLD
COMMAND TRANSMITTERS. THE
LONGER THE COIL THE BETTER.

This unit will tune any length of wire including the bed springs. We have two such units in operation. (Tuners, not bedsprings, I presume - Ed.)

Bob Andrus
KØLUG

HAM HUM

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1974 MIDWEST DIVISION CONVENTION

The 3900 Club who is sponsoring the 1974 Midwest Division Convention is to be held October 4th, 5th and 6th at the Marina Inn, South Sioux City, Nebraska, is completing the plans and sent us tentative program material.

Events lined up at the moment include; CQWA Meeting; SSTV Demonstration; Fast Scan TV; \$30 Counter-KØNL; Amsat Demonstration - WBØGAJ; Porta-Peater - WAØGEH; Handi-Ham Session; Satellite Locator - WØCY; SCM Meeting; ARRL Forum; Flea Market; Banquet speaker Harry J. Dannals, W2TUK, ARRL President. Registration \$6.00 until October 1st, then \$7.00. Saturday night banquet tickets \$6.00 each. Separate get acquainted dinner OMs and XYLs Friday evening; Ladies program and luncheon Saturday; 3900 luncheon Saturday for OMs. No info or price on the Friday night dinner, Saturday luncheon, or special interest Sunday morning breakfast as yet.

Send your registration and request for banquet ticket to: WØEQN, Cliff Taylor, 3818 - 5th Avenue, Sioux City, Iowa 51106. Also request motel reservations from WØEQN.

HAVE YOU HEARD??? Ed Kilton, WØEYR, and XYL Jean are the proud parents of a son, Kraig Edward, (7 lbs. 15 oz., 21 in. long) born June 27, 1974. Daughter Kelly now has a brother. Congratulations, Kiltons!

MORE ON G.E. PROGRESS LINE MODIFICATIONS:

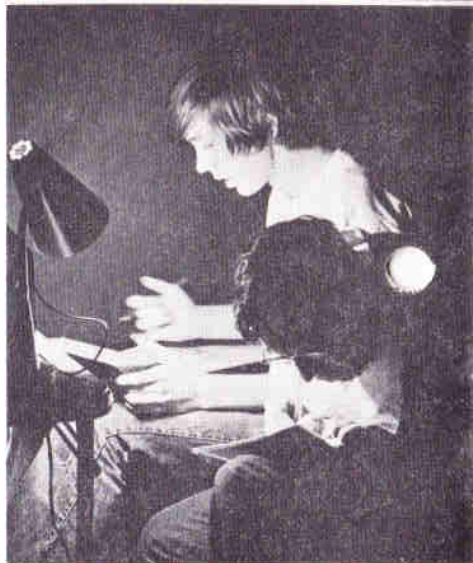
One more change to some of the older 'Prog Line' receiver strips involves changing (T302) the three coil rf plate circuit to the newer two coil version (T332). Remove and discard C307, C306, L302 (the middle tank) shift C310, L303 to middle where they now become C385 and L302. C311 now becomes C398 but remains 18 pf connecting C385/L302 to pin 7 of first mixer. T302/T332 is located between V301-6AK5 rf amp. and V302 - 12AT7 with the trimmers accessible from the top. The trimmer with the red grommet is the one not affected. If there is only one other trimmer you have the later model and no modification is needed. Other changes which may help enhance your 'Prog Line' receiver - the 6AK5 rf amp may be replaced with a 6CY5 and the first mixer (here a heater voltage change needed) changed from 12AT7 to 6DJ8.

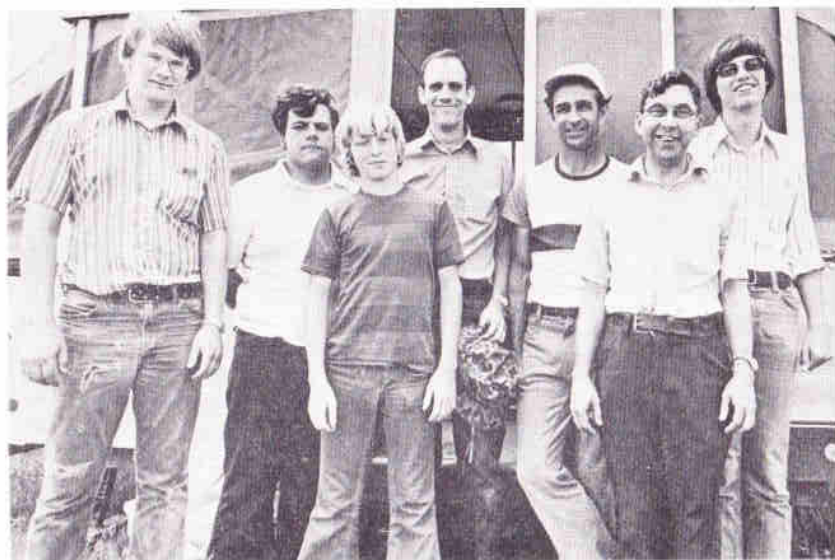
In the "Prog" transmitter if for high split the "U" shaped final tank coil should be changed to 1½ turns at 1 inch diameter, discard any shorting bar. Also a 30 watt (1-6146) transmitter strip may be changed to a 60 watt strip by installation of Kit #38B available from G.E. at Lynchburg, Va. for \$15. The kit has everything needed including second 6146. Transmitters 1st audio 12AU7 may be changed to 12AX7 or 12AT7 to change stage gain to fit conditions. Other changes include second frequency and narrow band conversions. Will have more on these after I try them myself.

Joe Handley, K3LLL

de AUTO-CALL

ADDITIONAL 1974 FIELD
DAY PHOTOS
Courtesy Jim Belt, WAØJIH





CLARKSON ON THE AIR

The 22/82 repeater operated by the Northeast Nebraska Repeater Association at Clarkson, Nebraska is on the air! (WRØADF). With an antenna about 55 feet above the average terrain, the machine can be worked from Lincoln.

de Lincoln RC

FOOD FOR THOUGHT -- If you were employed by the FCC -- and if you had to listen to repeaters to really find out what it is all about -- and if you heard some amateur radio operators bad-mouthing the FCC -- what kind of report would you be inclined to turn in to your boss?

de W5KR -- Brownsville, Tex.

LINCOLN IS NEXT

The Lincoln Repeater Association's 25/85 machine is ready to go when OK'd by the FCC. It will be an open machine with a closed auto patch feature available only to association members.

de Lincoln RC

SALINGER'S SALLIES -- R5MSQ -- had this sign put up in his office: "Please do not discuss your symptoms in the waiting room -- it gets the doctor horribly confused."

de W5KR -- Brownsville, Tex.

AUCTION - PICNIC - EYEBALL QSOs

28TH ANNUAL HAMFEST

AK-SAR-BEN RADIO CLUB, INC.

OMAHA, NEBRASKA

SUNDAY, SEPTEMBER 15, 1974

MISSOURI VALLEY CITY PARK - MISSOURI VALLEY, IOWA
(One-half mile east of I-29 on US Hwy 30, west edge of town)

CONSIGNMENT AUCTION - BRING YOUR HAM GEAR, BOAT ANCHORS, JUNK BOXES,
GADGETS, GOODIES? TERMS: CASH! CONSIGNOR RECEIVES

FULL PAYMENT LESS 10% OF SALE PRICE. CONSIGNOR MAY BID ON HIS MERCHANDISE -
\$1.00 CHARGE FOR BUY-BACK. MERCHANDISE AUCTIONED IN ORDER REGISTERED.

PICNIC AND EYEBALL - BRING YOUR OM, YL, XYL AND HARMONICS.

OPTIONAL - BRING YOUR OWN PICNIC BASKET OR FOOD AND BEVERAGE WILL BE SERVED
BY LADIES AUXILIARY, METHODIST CHURCH. AMPLE ROOM INSIDE OR OUTSIDE. LUNCH
AT YOUR LEISURE.

REGISTRATION OPENS AT 10:00 AM AUCTION BEGINS AT 1:00 PM - COME EARLY

TALK-IN FREQUENCIES: 34/94 PORTA-PEATER 52 SIMPLEX 3900 MHZ

INFORMATION:

HAMFEST
AK-SAR-BEN RADIO CLUB, INC.
P. O. BOX 291
OMAHA, NEBRASKA 68101

NO REGULAR MEETING OF AK-SAR-BEN RADIO CLUB, INC. IN SEPTEMBER

MORE PUBLICITY FOR CITIZEN BAND RADIO

Wilmer G. Morgan, KØHVN

Last year the Citizen Band received much publicity in the news coverage given to the LOST child trapped in an overturned vehicle somewhere in New Mexico. Now with the truckers blocking the highways the band is getting more publicity. The following is extracted from a two column story in TIME MAGAZINE, dated December 3, 1973:

"Since last year, thousands of drivers have bought CB sets; the fad is most popular in the Midwest."

"They often use their radios to avoid inspectors and cops, relay messages home, and call for help in case of accident. Mostly they use CB to gab away the lonely miles . . . CB, they say, helps them to stay alert. It is even replacing the pep pills ("road aspirin") frequently used on long hauls."

"Unlicensed ears. CB is safer and the price is right: the standard set is \$150.00 . . ."

"Although the FCC requires CB licenses (\$20.00 per set) and call numbers, few truckers bother with such details. Their unlicensed EARS or antennas waggle from their cabs picking up signals about 15 miles away. In lieu of call numbers, truckers prefer more personal HANDLES. These nicknames rip through the air waves sounding like the cast of Looney Tunes; Woodpecker tears by in the night with his co-driver Stogie; Number One Nose Picker noses ahead of his good buddy Squirrel. Not to be outhandled, other truckers are known as Popper Stopper, Bootlegger, Mule

Skinner and Silver Fox. Even the handful of women truckers enter the naming game. Granny Go Go, Lovey Dovey, and Truckin' Mama barrel on down the highway with the boys."

With all this type publicity one wonders where the FCC is getting their reading material. Of if they do read such reports as this, what is their reaction . . . when will they take some action?

de Grid Leak, Pueblo, Colorado

DO YOU KNOW?

Do you know the history of WWV and its affiliated stations as the time and frequency standards for world navigation?

March 1923 - first scheduled broadcasts from Washington, D.C.

January 1931 - crystal controlled broadcasts from WWV from College Park, Maryland.

April 1933 - first 20 KW transmitter from Beltsville, Maryland.

January 1943 - WWV relocated at Greenbelt, Maryland.

November 1948 - WWVH commenced transmissions - Maui, Hawaii.

January 1950 - WWV added voice announcements, all previous broadcasts having been by code.

July 1956 - WWVB (KK2XEI) began 60 Khz broadcasts from Boulder Colorado.

April 1960 - WWVL started 20 Khz broadcasts from Sunset, Colorado.

July 1963 - WWVB began high power broadcasts from Fort Collins, Colorado.

August 1963 – WWVL began high power broadcasts from Fort Collins, Colorado.

July 1964 – WWVH added voice nouncements.

December 1966 – WWV relocated to Fort Collins, Colorado.

July 1971 – WWVH relocated to Kauai, Hawaii.

The above information is from official National Bureau of Standards information.

WWV and WWVH transmit 24 hours a day every day of the year on 2.5, 5, 10, 15, 20 and 25 Mhz, except WWVH does not broadcast on 25 Mhz.

Transmitted frequencies are accurate to plus or minus 2 parts in 10 to 10 over 11th power. Atomic frequency standards are used to maintain this accuracy. Time signals are accurate to within 30 milliseconds. "Geoalerts" are broadcast in voice during the 19th minute of each hour on WWV and on the 46th minute of each hour from WWVH.

de Pueblo Grid Leak

"DOCTOR, YOU'RE WANTED IN SURGERY--AGAIN"--

While I was in the hospital following surgery, George, WB4UIW, brought me a 2-meter handie-talkie so that I could help pass the time by working through the local repeater. Two days after surgery, while under sedation for pain but fully alert, I heard a call from a mobile on a crosstown expressway about 10 miles

away, asking for someone near a phone to report an accident to the Shively (a suburb of Louisville) police.

Having a bedside phone but being unable to reach the phone book, I dialed "O" and when the operator answered I asked her to connect me with the Shively police. She asked for my name and the reason for the call. I gave her my name and told her I wished to report an accident on the Watterson Expressway near Shively. The line suddenly went dead. About a minute later, two nurses and an orderly came rushing into my room and up to the bed. They had orders to "see if that patient is stable."

It seems I had been talking to the hospital switchboard operator instead of the telephone company operator, as I thought, and she thought I was off my rocker reporting an accident 10 miles away while lying in a hospital bed. One of the nurses rushed to the window, when she realized I was coherent, looked out and said "Where is the accident?" I explained that the small unit beside me was a 2-way radio and that I had been talking to a mobile operator on the other side of town. She then called the switchboard, reported the patient was not nuts, but a ham radio operator. I was immediately connected with the Shively police and reported the accident. The grapevine quickly carried the story throughout the hospital and the next day my doctor arrived in the room laughing and said it was the most hilarious thing that had happened around there in a long time.

by K4DLA
de RADIO WATCH

PROTECTION CIRCUIT

By—Cecil DeWitt, WØRMB

After one of the local hams had a power supply short out and put 28 volts on two (2) of his rigs, it blew the final transistors in both rigs. I got to thinking of how to prevent this from happening.

Borrowing a circuit from someone, I don't remember where, I found a very simple solution. Connect a Zener diode across the DC line either at the power supply or in the rigs, or both. This Zener diode will never, except when it is protecting equipment, draw current; so it doesn't matter how many are in the circuit.

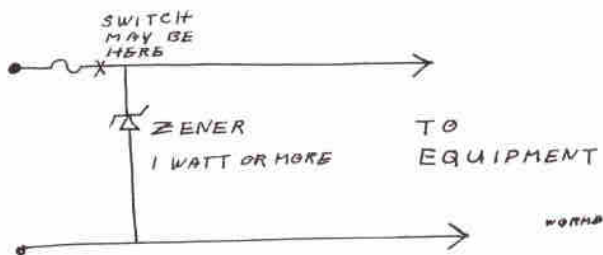
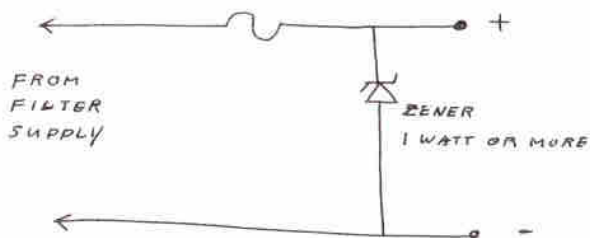
If the power supply voltage should be 12 volts DC, then we connect a Zener of a value voltage greater than this across the line.

If the unit is going to be used in an

auto with a 12 volt system, the auto has a normal charge voltage of 14.4 volts. Therefore, a 15 volt or 16 volt watt Zener would do the protection.

6 VDC = 8	volt Zener @ 1 watt
9 VDC = 10.5	volt Zener @ 1 watt
12 VDC = 16	volt Zener @ 1 watt
18 VDC = 22	volt Zener @ 1 watt
24 VDC = 30	volt Zener @ 1 watt

The Zener diode connected as shown in the drawings also protects equipment in case reverse polarity is applied. The fact that reverse voltage drop across Zener diode is like a voltage drop across a conventional conducting diode, Zener diode will be almost a dead short when incorrect polarity is connected and fuse will blow.



FCC ISSUING CITATIONS

It has come to the attention of amateurs on several nets that the Commission is issuing "pink tickets" for improper operation as to identifying at the correct time.

One of the items is that it is necessary to identify as "Mobile Zero" not just mobile when mobiling. The ARRL is requesting that a station be permitted to say only "mobile" when in their own call area. That is, it should be self-evident that a mobile is in its own area unless identified otherwise.

The second one is not quite clear.

It has been reported that these citations were issued because of the manner in which the station checked INTO a net. That the check-in station didn't give the call sign of the NCS and then his own call sign. A check of the regs leaves one wondering where such an interpretation came from. It is reported that a request for further information has been made.

Perhaps the "pink ticket" came from the way a station checks OUT of a net, a group or a contest. Regulation 97.87(a) is rather explicit. This was to prevent the so-called "tail-ending" that is prevalent in contests. One MUST give the other station's call sign and end with one's own call sign. It is apparent that this applies to any kind of group activity too.

Now what happens when one calls into a net and does give the NCS' call sign and ends with his own and says, "QRU"? After that the check-in station is more or less forgotten and never makes another transmission. The net closes. Is one in fact in violation if one does not give both call signs before leaving the air? It seems so
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redundant (as Bill DeWolfe, WØLVI pointed out) to do this. So we await further info. (It has been pointed out before but needs repeating, that it is best to write to ARRL for info rather than to FCC. ARRL can check without getting us into a situation where further rule making looks desirable.) Of course, if you're anti-League, we may suffer.

(From The Round Table
Denver ARC Bulletin)

RECENT CONTRIBUTORS

Repeater Fund

Royal M. Enders, KØLYO
Richard W. Harper, WBØMWB
Kent A. Sinram, WBØBOR
Charles W. Malewski, WØBAZ

Autopatch Fund

Richard W. Harper, WBØMWB
Paul S. Sherrerd, WBØBKZ
Kent A. Sinram, WBØBOR
Charles W. Malewski, WØBAZ

Sincere thanks to all contributors!

"The Frustrated Secretary"

All I asked him was whether he wanted the carbon copies double spaced too.

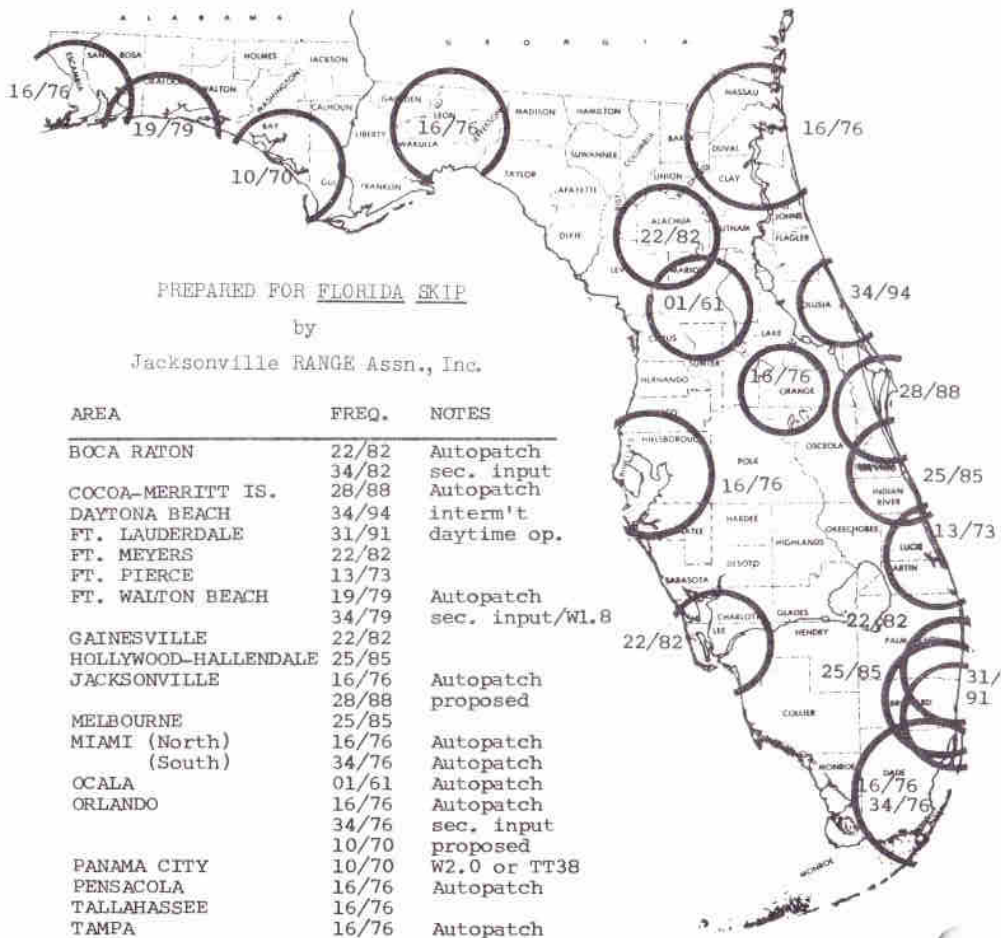
de D.O.D.A. News

Senatorial Candidate: "How did you like my speech on the agriculture problem?"

Farmer: "Not bad, Mister, but a good day's rain would do a lot more good."
— Sunshine Magazine

Florida

2-meter REPEATERS



PREPARED FOR FLORIDA SKIP

by

Jacksonville RANGE Assn., Inc.

AREA	FREQ.	NOTES
BOCA RATON	22/82	Autopatch
	34/82	sec. input
COCOA-MERRITT IS.	28/88	Autopatch
DAYTONA BEACH	34/94	interm't
FT. LAUDERDALE	31/91	daytime op.
FT. MEYERS	22/82	
FT. PIERCE	13/73	
FT. WALTON BEACH	19/79	Autopatch
	34/79	sec. input/w1.8
GAINESVILLE	22/82	
HOLLYWOOD-HALLEDALE	25/85	
JACKSONVILLE	16/76	Autopatch
	28/88	proposed
MELBOURNE	25/85	
MIAMI (North)	16/76	Autopatch
(South)	34/76	Autopatch
OCALA	01/61	Autopatch
ORLANDO	16/76	Autopatch
	34/76	sec. input
	10/70	proposed
PANAMA CITY	10/70	W2.0 or TT38
PENSACOLA	16/76	Autopatch
TALLAHASSEE	16/76	
TAMPA	16/76	Autopatch

(CLIP OUT AND SAVE)

With vacation season here, this should be useful. - W0WR7

HAM HUM SWAP

WANTED: I am considering buying a used Galaxy 3 or 5 for mobile operation or one that has both 12 and 120 volt power supply incorporated in unit.

Wendell K. Wilson, WØOOX, Royal, Nebraska 68773.

FOR SALE: SX-99 Hallicrafters -- \$70.00 -- excellent cond.
Ameco Preamp -- PCL-P -- \$5.00 -- 160m through 6m 14 AVQ -- \$25.00

Contact Jerry Coufal, WBØDEK, 5327 "R" Street,
Phone 731-4482.

GROUCH GROUCH GROUCH

As the association's resident grouch I would like to make yet another complaint about the operations taking place on the repeater.

I'm sure that most of you realize that the repeater is a COMMUNITY resource -- to be shared by ALL. What I'm not so sure about is that all of you realize that you are doing your fellow ham (and club member) a great disservice when you thoughtlessly tie up the machine for long periods of time without a break. I am not adverse to conversation--not in the least. But I really don't think that it is proper for anyone to monopolize the use of the repeater for long periods of time -- especially in a manner where two individuals do not leave a sufficient time for another ham (who may have priority or emergency traffic) to get another word in edgewise. This type of conversation is, I'm afraid, becoming more and more common as people unaccustomed to two-meter repeater operation become more numerous among the users of the repeater.

My ire was aroused this time by a

conversation that took place this past Saturday morning. I turned on my radio at 8:20 at which time the conversation was going strong, and it was still going at five minutes to nine, when I arrived at my destination. During this time, there was one attempt to break into the conversation; this attempt was met with a very petty response.

I am sure that others of you have heard such gabfests on the repeater before -- God knows, we all get carried away and talk on and on and on... for what seems like hours sometimes.

I've done it myself.

But please, remember: The WR6ACF repeater is a community resource, for the use of all amateurs... so PLEASE give the other guys a chance to use it--allow space and time for them to join you in that which makes ham radio the great hobby that it is.

--- WB6CYT

de Squelch Tales, San Diego, Ca.

HAM HUM



Hobby
Industry

BOX 864

1530 AVENUE G, COUNCIL BLUFFS, IOWA 51501

TELEPHONE (712) 323-0142

BIG DISCOUNTS!



JACKPOT DRAWING

VISIT HOBBY INDUSTRY AND ENTER---
NO PURCHASE NECESSARY.

31 NUMBERS IN THE POT--DRAW THE NUMBER
WHICH IS THE SAME AS THE CURRENT
DATE(1 TO 31) AND YOU GET YOUR CHOICE
OF :

PLAN (A) 20% DISCOUNT FROM THE REGULAR
PRICE OF ANY SINGLE ITEM OF NEW
STOCK ON HAND-----

OR

PLAN (B) \$5.00 CASH

RULES

- #1 You must be a licensed Radio Amateur and have your valid license, or photocopy, with you.
- #2 You must choose between plan (A) or (B) before you draw a number.
- #3 If you win and selected plan(A), you must make the purchase the same day, and the balance must be paid the same day in cash--no trades or credit cards will be accepted on this special deal.
- #4 You can draw a number only one time each day.

Offer subject to withdrawal or change without notice.

DRAWINGS START SEPT., 74

If you live too far to drop-in and try your luck on the jackpot, we can ship your gear anywhere ---call or write for a JACKPOT DEAL on the new gear you need.

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